



Sustainability Counts II

State of sustainability reporting in Asia Pacific

Understanding sustainability reporting requirements globally and across Asia Pacific, and insights on the journey to date

6 June 2023

Contents

01	Report highlights	03
02	Global developments in sustainability reporting and assurance	06
03	Sustainability reporting and assurance requirements across Asia Pacific	25
04	The state of sustainability reporting in Asia Pacific: Insights	28
05	Addressing sustainability reporting challenges	59
06	Appendices	66
07	Contacts	82

The contents in Section 2, 3 and the Appendices of this report are based on information available up to May 2023. The content of the study conducted in Section 4 is based on latest sustainability reports and annual reports available until January 2023. A glossary of key terms, acronyms and abbreviations is included in the appendices.



01

Report highlights





Report highlights

PwC's inaugural Sustainability Counts report was [launched in May 2022](#), highlighting the state of sustainability reporting in Asia Pacific. This report is the second edition of Sustainability Counts and provides an update on where the region is a year on.

Emerging global developments of sustainability reporting standards and frameworks

- There has been considerable progress in the sustainability reporting landscape in 2023, including developments of the **“big three” proposals** – the Corporate Sustainability Reporting Directive (CSRD) in Europe, the IFRS Sustainability Disclosure Standards by the International Sustainability Standards Board (ISSB) and the climate proposal by the United States Securities and Exchange Commission (US SEC).
- Other key developments include the **revised Global Reporting Initiative (GRI) Standards 2021** which is more focused on organisations' impacts on the economy, environment and people, and is effective for reporting from 1 January 2023. The final recommendations for the **Task Force on Nature-related Financial Disclosures (TNFD)** are expected in September 2023.
- Companies with exposure to more than one standard should keep themselves abreast of the developments around the **interoperability of these standards**.
- Companies should take practical actions such as **assessing the applicability of the standards and developing a strategic roadmap and operationalisation plan**.
- **Assurance in sustainability reporting has become increasingly important** as many stakeholders want companies' sustainability information that they can rely and trust.
- The International Auditing and Assurance Standards Board is currently working to **develop a new overarching standard for assurance on sustainability reporting** and expects to release an exposure draft in 2023 with final approval of the standard targeted in 2024.

Road to sustainability reporting in Asia Pacific

- There has been a **growing focus on sustainability reporting by regulators** across jurisdictions in Asia Pacific, with sustainability reporting requirements being implemented or planned to be implemented in most of the Asia Pacific jurisdictions studied.
- There is also an **increasing use of the Task Force on Climate-Related Financial Disclosures (TCFD)** for climate reporting, with seven out of 14 Asia Pacific jurisdictions studied that plan to make or has made TCFD reporting mandatory.
- **There are emerging requirements for mandatory assurance in Asia Pacific**, with four jurisdictions mandating some form of assurance requirements.





The state of sustainability reporting in the Asia Pacific

- **The GRI framework**, adopted by **81%** of companies studied, continues to be the **dominant sustainability reporting standard** in the region. Eyes are now on how respective jurisdictions will adopt/prepare for the ISSB, or prepare for CSRD and US SEC requirements.
- **There is a 21% increase** in use of the **TCFD framework** to 57% amongst companies. The disclosures of climate-related risk and opportunities reached 88% in 2022. 89% of companies have also carried out climate scenario analysis.
- **With 80%** of companies studied disclosing their emissions, **measurement of Scope 1 and 2 emissions is reaching maturity**. Besides Japan, most companies across the region will **need to place an added effort for better transparency and accuracy of the measurement of their Scope 3 emissions**.
- Companies in most jurisdictions have environmental, social and governance (ESG) targets, however **setting net zero targets is a challenge as only 51% are disclosing them**. This includes science-based target setting which is validated by the Science Based Targets initiative (SBTi).
- **Sustainability external assurance remains poor** across Asia Pacific with the exception of South Korea and Taiwan. There are also very few companies that seek reasonable assurance and internal assurance as well.

Moving forward - Transparency that drives sustainable success

- Achieving a sustainable tomorrow **starts with the right purpose and strategy in sustainability**.
- This requires an **assessment and selection of the required or appropriate sustainability reporting standards and frameworks** to convey the state of sustainability priorities and ambition. ESG metrics, processes, systems and controls are important building blocks for transparency.
- **Good quality data** is critical for presenting authentic ESG information for it to be decision useful for users of the sustainability reports. In addition, **verification of data** is critical to build trust relating to the data.
- **The integration of ESG into business strategy, risk management processes and performance measurement** through better reporting can drive sustainable success. You'll be able to mitigate ESG risks, bring cost savings and turn ESG risks into new opportunities that generate long-term value creation.





02

Global developments in sustainability reporting and assurance



The sustainability reporting landscape

As the world continues to address wide-ranging sustainability issues, there has been a strong focus on the development of globally consistent, comparable and trusted sustainability reporting standards due to increasing calls for enhanced transparency about sustainability matters from investor, regulators and other stakeholders. We observe significant progress in the 2023 sustainability reporting landscape which includes but is not limited to the following areas:

“Big three” proposals

- Regulators and standard setters in various jurisdictions issued definitive proposals to transform sustainability reporting in 2022. Sustainability reporting is dominated by the “big three” proposals:
 - European Financial Reporting Advisory Group (EFRAG)** – European Sustainability Reporting Standards (ESRS) as part of the CSRD [**Expected to be finalised by end June 2023**]
 - ISSB** – IFRS Sustainability Disclosure Standards [**Expected to be finalised by end June 2023**]
 - US SEC** – The Enhancement and Standardization of Climate-Related Disclosures for Investors (Climate proposal) [**Not yet finalised**]
- All three proposals have aspects that have different focus and potential implications on companies. For example, the proposals by the ISSB and US SEC are focused on financial materiality whereas the ESRS is focused on double materiality (i.e. financial materiality and impact materiality).
- The “big three” proposals are moving rapidly, and at different paces. The CSRD came into force in January 2023, and the ESRS is expected to be adopted in June 2023. The ISSB is expected to issue its inaugural standards by end of Q2 2023.
- The EFRAG and US SEC proposals are subject to regulatory enforcement while the ISSB standards are subject to adoption by individual jurisdiction.



Other developments

- Currently, the GRI Standards are the most widely used standards for sustainability reporting. The revised GRI Standards 2021 are effective for reporting from 1 January 2023, with a revision in materiality approach that is more focused on impact materiality.
- The final recommendations for the TNFD are expected to be published in September 2023.



It is important that companies assess the applicability of these standards and keep up to date with the developments. While the standards and rules are still in the process of finalisation, these are evolving rapidly and companies should start taking practical actions now to plan ahead. For example, companies could perform their assessment early and start developing a strategic roadmap and operationalisation plan.



The “big three” proposals

(1) EFRAG

In April 2021, against the background of the European Green Deal, and with the ultimate goal of reaching climate neutrality by 2050 in the European Union (EU) and the ambitious Sustainable Finance Strategy, the European Commission (EC) published the CSRD. The aim of the CSRD is to bring sustainability reporting on par with financial reporting.

The CSRD was adopted by the European Parliament and the Council of the European Union in November 2022 and published in the Official Journal of the European Union in December 2022.

The CSRD came into effect on 5 January 2023. The European Union Member States are given a period of 18 months to transpose the Directive into their own national laws.

The scope of companies directly impacted by the new requirements is expansive, including EU and non-EU headquartered companies. Sustainability information will initially be subject to limited assurance, transitioning to reasonable assurance at a later stage.

The CSRD will require comprehensive and granular disclosures covering a wide spectrum of sustainability topics (e.g. climate change, biodiversity and ecosystems, workforce, affected communities, business conduct). These disclosure requirements will be detailed in ESRS that are being developed by EFRAG.

The ESRS exposure drafts were published for public consultation on 29 April 2022. In November 2022, EFRAG submitted the draft ESRS to the EC.

Finalisation: The ESRS are expected to be adopted by the EC in June 2023, with the first companies in the CSRD scope applying them starting financial year 2024.

CSRD scope considerations and first-time application period

In summary, application would be required for the following company types:

2025 (on the basis of 2024 reporting)

Companies that are already subject to the Non-Financial Reporting Directive (NFRD)

- Generally, NFRD is applicable to large Public Interest Entities (PIEs) (listed entities, insurance entities and banks) with over 500 employees
- Large is defined as total assets over €20 million or turnover over €40 million
- However, Member States may have designated other entities as a PIE so entities need to consider their own local requirements

2026 (on the basis of 2025 reporting)

Companies that are newly subject to the CSRD (both listed and large)

- Listed companies, large unlisted companies, and parents of large groups
- Large is defined as having at least two of the following: over €20 million total assets, over €40 million turnover, over 250 employees

2027 (on the basis of 2026 reporting)

Listed SMEs

- Listed small and medium-sized enterprises (SMEs) have an option to postpone application by two years.
- Listed small and medium-sized enterprises are defined separately as “small undertaking” and “medium undertaking” but collectively these entities meet two of three criteria: more than €350,000 but less than €20 million in total assets, more than €700,000 but less than €40 million in turnover, and an average of more than 10 employees but less than 250 employees

2029 (on the basis of 2028 reporting)

Non-EU groups

- Companies from non-EU jurisdictions with at least one European subsidiary or branch that meets certain criteria and consolidated turnover exceeding €150 million in the EU during the last two financial years



What reporting standards would an in-scope company apply?

Adding to the complexity, companies scoped into the CSRD will not all apply the same standards. Which of the three types of reporting standards would need to be applied depends on the circumstances:

ESRS: 12 standards had been submitted to the EC and these are expected to be adopted in June 2023.

Non-EU dedicated standards: These are dedicated standards to be applied at a global consolidated level by certain companies in scope in jurisdictions outside the EU.

Simplified standards: These are for use by certain SMEs, small and non-complex institutions, and captive insurance undertakings, as defined in EU regulation.

Early versions of working papers for the simplified standards were discussed at a March 2023 EFRAG sustainability reporting board meeting. The non-EU dedicated standards have yet to be developed, and timing is uncertain. Given the breadth of the potential disclosures, we advise companies not to delay but instead to begin their assessments now by referencing the proposed ESRS.

CSRD affects not only EU listed or large companies. It also imposes sustainability reporting and assurance requirements for many companies based outside of Europe.

It is recommended that companies should assess the scope and applicability of the CSRD early so that they can begin the appropriate planning.



EU Newsletter Sustainability Reporting

Refer to the PwC Newsletter published in June 2023 which provides an update on the sustainability reporting developments in the EU.



(2) ISSB

In response to an urgent demand for transparent financial-related sustainability disclosures by companies, the IFRS Foundation Trustees announced the formation of ISSB at the 26th meeting of the Conference of the Parties to the United Nations Framework Convention on Climate Change, held in Glasgow (COP26) in November 2021. The consolidation of the Climate Disclosure Standards Board (CDSB) and the Value Reporting Foundation (VRF) into the IFRS Foundation was completed in 2022. The ISSB works closely with other international organisations and jurisdictions to enhance compatibility between the ISSB's work and that of ongoing jurisdictional initiatives on sustainability disclosures.

The ISSB aims to develop a comprehensive global baseline of sustainability disclosures designed to meet the information needs of investors. On 31 March 2022, the ISSB published two exposure drafts (EDs) for public consultation – IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information (IFRS S1) and IFRS S2 Climate-related Disclosures (IFRS S2). In February 2023, the ISSB announced that it will issue its first reporting standards at the end of Q2 2023, with the initial IFRS S1 and IFRS S2 becoming effective for annual reporting periods beginning on or after 1 January 2024. Early adoption is permitted but only if an entity applies both IFRS S1 and IFRS S2 at the same time.

ISSB: Plans, scope, and timing

The Trustees of the IFRS Foundation have reached the following views about the strategic direction of a new board:

- Trustees establishing ISSB within IFRS Foundation governance structure
 - Focus on information material to investors' decisions
 - ESG/sustainability scope (prioritising climate)
 - Build on existing standards and frameworks (e.g. TCFD, GRI, Sustainability Accounting Standards Board (SASB))
 - Building blocks approach (working with key jurisdictions) to achieve globally consistent baseline
- Trustees consulted to amend Foundation's Constitution for ISSB to set sustainability standards (comments on the exposure drafts were due 29 July 2022)
- ISSB formation announced at COP26 in November 2021, including the consolidation of VRF and CDSB
- Proposed that all standards are based on TCFD 4-pillar approach
- ISSB issued two exposure drafts (IFRS S1 and IFRS S2) in March 2022
- **Finalisation: Both standards – IFRS S1 and IFRS S2 are expected by end of June 2023**



Strategic direction and main considerations of the ISSB:

- Focus on meeting investors' information needs and disclosures that influence investor decisions
- Building on existing work
- Create a global baseline that enables investors to have access to common information around the world that jurisdictions can adopt and combine with their specific legal and regulatory requirements
- Start with climate and go beyond that to cover other environmental, social and governance matters

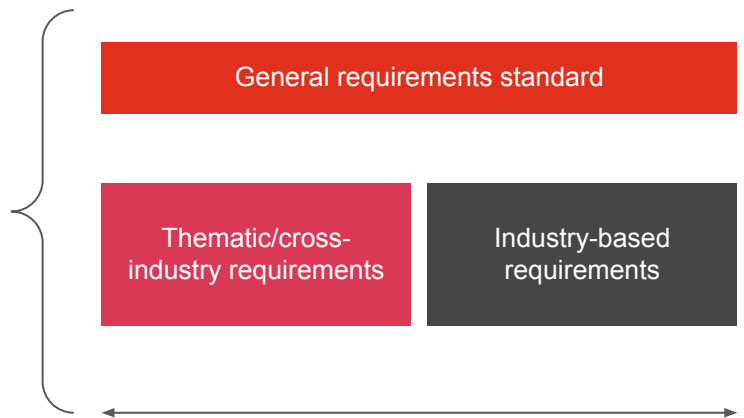


Overall structure of the proposed ISSB standards

Focus on investor audience



Common thread – core content taken from the TCFD structure



Core content used across IFRS Sustainability Disclosure Standards

Global PwC Sustainability Reporting Newsletter

Refer to the PwC Newsletters published in February 2023 and May 2023 which include updates on the developments by ISSB.

February 2023



May 2023





In recent months, the ISSB has made numerous tentative decisions which include but are not limited to the following:

Sources of guidance in identifying disclosures about sustainability-related risks and opportunities

- GRI and ESRS may be referenced in identifying disclosures about sustainability-related risks and opportunities in the absence of a relevant IFRS Sustainability Disclosure Standard
- Metrics for GRI and ESRS may be used

Disclosure on Scope 1, 2 and 3 emissions

- Reporting companies are required to disclose Scope 3 emissions
- Disclosing Scope 2 emissions need to be done using the location-based method

Climate change scenario analysis

- Confirm that companies will be required to use climate-related scenario analysis to assess climate resilience
- ISSB will build on the TCFD guidance and provide application support

Modifying vernacular to clarify key concepts

- ISSB confirmed that its requirements will focus on meeting investors' information needs. However, it has now revised how it defines sustainability, making clear the link between a company's ability to deliver value to its investors and the company's impacts and dependencies on its stakeholders, society and natural resources
- The term "enterprise value" is no longer used as the assessment objective

Proportionality

- Reliefs available in the first annual reporting period in which an entity applies IFRS S1 and S2:
 - Timing of reporting relief
 - Greenhouse Gas (GHG) Protocol relief
 - Disclosure of Scope 3 emissions relief
 - Transition relief in IFRS S1 that would allow an entity to report on only climate-related risks and opportunities in the first year it applies IFRS S1 and IFRS S2. For a company applying this one-year transition relief, the requirements in IFRS S1 would only apply to the extent they relate to the disclosure of climate-related information.

Determining future agenda priorities / projects

- Support connectivity and operability with GRI and EFRAG
- Develop a digital taxonomy that is machine-readable to facilitate digital reporting
- Published a request for information on consultation of agenda priorities in May 2023 to help guide its agenda priorities for the next 2 years. The 4 potential new projects include Biodiversity, ecosystems and ecosystem services, Human capital, Human rights, and an Integrated Reporting (IR) Framework. The consultation is open for comments until 1 September 2023.
- Issued an exposure draft on methodology for enhancing the international applicability of the SASB standards and SASB standards taxonomy updates in May 2023, with comments due by 9 August 2023.



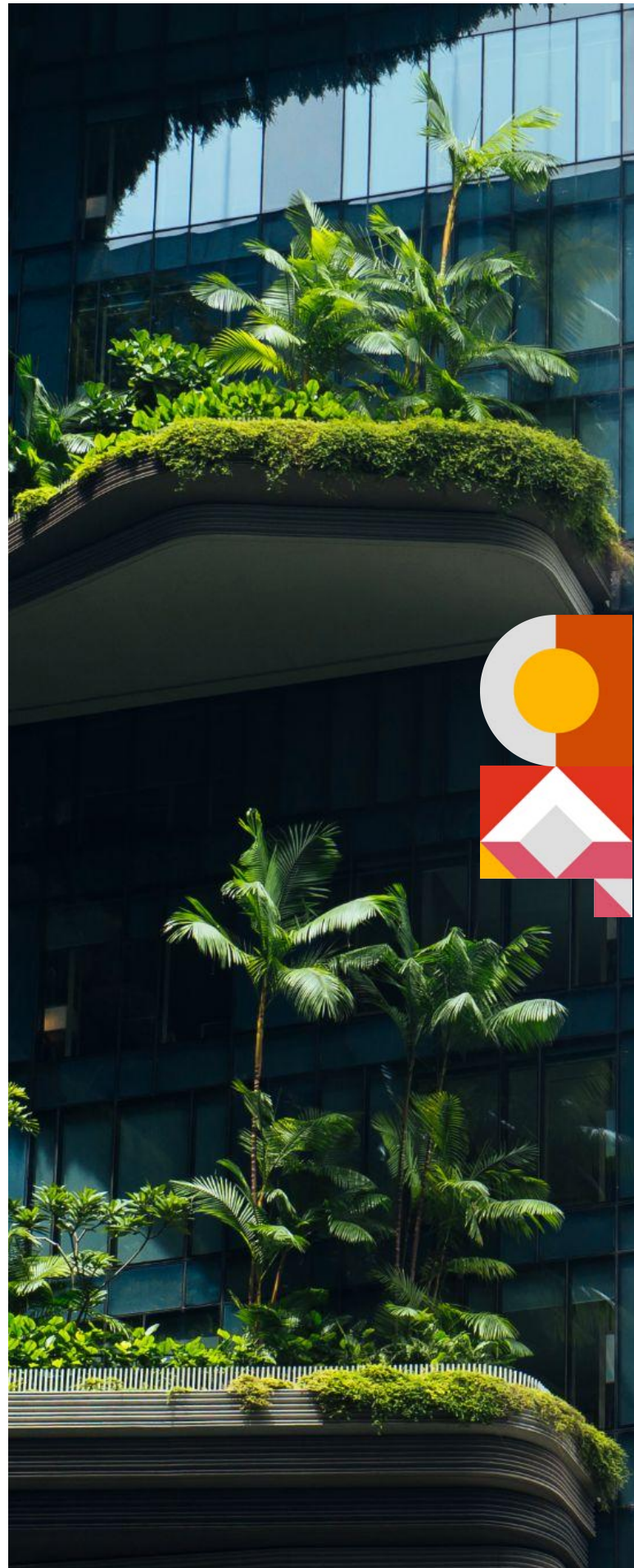
A consistent global baseline will help to increase usefulness and comparability of information for investors and facilitate reciprocity between sustainability reporting standards. Considering that the IFRS Sustainability Disclosure Standards are expected to be issued soon, companies should prepare themselves by understanding the requirements of these standards early.

Companies should closely monitor which jurisdictions adopt the ISSB standards when they are issued and evaluate the implications for their operations in those jurisdictions. Unlike the CSRD and US SEC which are enforceable under the respective EU and US regulations, the ISSB standards are subject to adoption or incorporation by the individual jurisdiction. Singapore, Hong Kong SAR, Japan, Philippines and Africa are examples of jurisdictions/ regions which have indicated their intention on the adoption or incorporation of ISSB standards when these are issued. Careful planning such as developing a roadmap, identifying any capacity constraints early and creating a plan to address gaps will ensure companies are prepared when compliance is required.



(3) US SEC

- On 21 March 2022, the US SEC issued proposed new disclosure requirements to address the need for entities to explain the risks and impact of climate change. As proposed, the new rules would require disclosures in registration statements and periodic reports. Some of the proposed disclosures are based on the disclosure framework developed by the TCFD.
- Companies would also be required to disclose information about carbon emissions. Under the proposed rule, companies would be required to disclose Scope 1 and 2 GHG emissions, and these information would be subject to a phased-in assurance requirement. Scope 3 emissions would need to be disclosed if material or if the company has set a Scope 3 emissions target.
- In addition, registrants would be required to include certain climate-related financial statement metrics and related disclosures in the footnotes to the financial statements. The disclosures would include the financial impacts of severe weather events and other natural conditions and identified climate-related risks on the consolidated financial statements. Disclosure would not be required if the aggregated impact is less than 1% of the total line item for the relevant financial year.
- Nearly all US public companies and foreign private issuers would be in scope of the US SEC rules, with specific disclosures and assurance requirements that may differ depending on filing status or circumstances (e.g. smaller reporting companies would not be required to provide information about Scope 3 GHG emissions).





Based on the US SEC climate proposal released in March 2022, it states that if the rules were to be effective in December 2022, applicability would be as follows for December year end companies:

Registrant type	All proposed disclosures, including GHG emissions metrics: Scope 1, Scope 2, and associated intensity metric			GHG emissions metrics: Scope 3 and associated intensity metric
	Disclosure	Limited assurance (Scope 1 and 2 GHG)	Reasonable assurance (Scope 1 and 2 GHG)	Disclosure
Large accelerated	Fiscal year 2023 (filed in 2024)	Fiscal year 2024 (filed in 2025)	Fiscal year 2026 (filed in 2027)	Fiscal year 2024 (filed in 2025)
Accelerated	Fiscal year 2024 (filed in 2025)	Fiscal year 2025 (filed in 2026)	Fiscal year 2027 (filed in 2028)	Fiscal year 2025 (filed in 2026)
Non-accelerated	Fiscal year 2024 (filed in 2025)	Exempted		Fiscal year 2025 (filed in 2026)
Smaller reporting company	Fiscal year 2025 (filed in 2026)			Exempted

Finalisation: As of May 2023, the US SEC's climate proposal requirements are yet to be finalised.

Notably, the proposal includes footnote disclosures which would be subject to the financial statement audit and management's internal control over financial reporting as well as disclosures outside the financial statements, including a greenhouse gas attestation requirement for accelerated and large accelerated filers.

Considering that the proposed requirements are expansive including the key requirement to include climate-related disclosures in the financial statements, companies' efforts to understand and start to operationalize the requirements would be important. For example, companies impacted by the US SEC proposal should form a cross functional team and begin dissecting the proposed requirements before the rules are finalised.





Comparison of the “big three” proposals

These “big three” proposals would each require expansive sustainability disclosures — although their proposed scopes and other details vary. The proposals from EFRAG, ISSB and US SEC draw on the TCFD framework to varying extents. There are also several key differences among the three proposals which include but are not limited to the following:

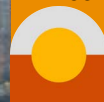
	EFRAG (expected to be finalised by end June 2023)	ISSB (expected to be finalised by end June 2023)	US SEC (to be finalised)
Enforceability	Standards are developed by EFRAG and regulated by CSRD	Standards are subjected to jurisdictional adoption	Authoritative regulatory disclosure requirements proposed by US SEC
Scope	Broad range of listed and private EU companies or groups, and non-EU companies or groups with significant operations in the EU	Subject to jurisdictional adoption	Nearly all US SEC registrants, including foreign private issuers
Topics in scope	Proposed standards span a broad list of environmental, social and governance topics, including one dedicated to climate disclosures	Proposed standards address climate and other sustainability risks; Additional thematic standards are expected in the future	Proposed rule addresses climate-related risks; A rule addressing human capital is expected in the future
Industry-specific disclosures	Sector-specific standards are in development	Industry-based climate metrics based on the SASB's Standards would be required*	Industry-specific disclosures are not required
Materiality	Multi-stakeholder focused (based on double materiality)	Investor focused	Investor focused - a one percent bright-line threshold would be applied for financial statement footnote quantitative disclosures
GHG emissions reporting	Scope 1, 2 and 3 are required	Scope 1, 2 and 3 are required	Scope 1 and 2 are required. Scope 3 is required if material or included in the registrant's reduction target/ goal (smaller reporting companies exempted)
Location of information	Disclosure would be included within a dedicated section of the management report	Disclosure would be included as part of general purpose financial reporting – such as in management commentary, but with flexibility on location	Disclosure would be included in a separate section of the annual report or registration statement - a financial statement footnote would include disclosure of the impact of severe weather and transition-related activities
Assurance	Sustainability information would initially be subject to limited assurance, transitioning to reasonable assurance at an unspecified date	Sustainability information would be subject to assurance based on the rules of the jurisdictions adopting the standards	Scope 1 and 2 GHG emissions (subject to limited assurance, followed by reasonable assurance); Footnote disclosure (subject to assurance through the financial statement audit and internal control over financial reporting attestation requirements)
Timing of application	Timing would be phased by type of entity starting from 2024 (filing in 2025)	Timing will depend on how standards are implemented in each jurisdiction	Timing would be phased by type of filer

* This proposed guidance from the exposure drafts has been a topic of discussion in ISSB redeliberations.



These “big three” proposals would each require expansive sustainability disclosures even though their proposed scopes and other details vary. Given the geographic reach of the proposals and their potential to encompass a broad spectrum of value chain contributors, most companies are expected to be impacted in some way.

By assessing the applicability and understanding the requirements of the different proposals early, preparers can gear up to meet the various reporting requirements by developing the appropriate reporting strategy and action plans. Understanding and evaluating sustainability reporting requirements should not be limited to the “big three” proposals but should include a canvas of requirements in all jurisdictions in which the company operates.

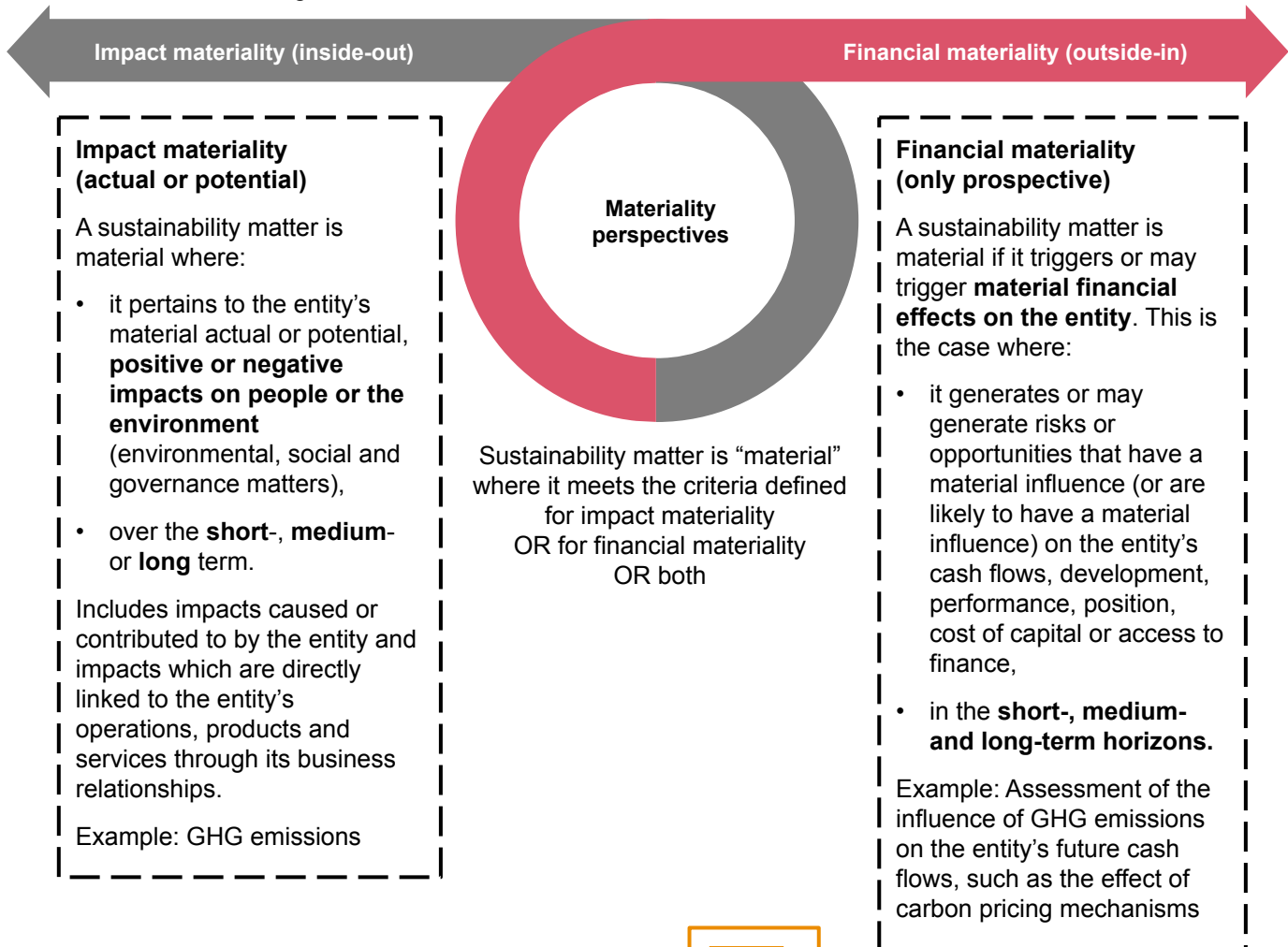




Key evolving areas

Materiality matters

The respective proposals and standards have different focus on materiality. The IFRS Sustainability Disclosure Standards and US SEC's climate proposal are focused on financial, while the GRI is focused on impact, and the ESRS is focused on double materiality (impact materiality and financial materiality). These definitions and concepts are summarised in the diagram below:



Given the differences in materiality, companies should evaluate the impact for transitioning from impact materiality to financial materiality, vice versa or both, depending on the standards that are applicable to them.

While there are differences in the materiality definitions and concepts, there is also an overlap between these proposals and standards, especially considering that they are assessing materiality related to the impacts of sustainability issues in the short, medium and long term. Some of these issues are intertwined – for example, an issue that negatively affects local communities or the planet can damage a company's reputation, resulting in adverse financial impact.





Interoperability is key

The ISSB is working closely with other international organisations and jurisdictions to support the incorporation of the global baseline into jurisdictional requirements and ensuring that it is compatible with requirements aimed at broader stakeholder groups.

Some of the initiatives by the ISSB to achieve interoperability include:

- The IFRS Foundation and the GRI signed a Memorandum of Understanding in March 2022.
- In April 2022, the ISSB announced the formation of a working group of jurisdictional representatives which include the European Commission, EFRAG, US SEC, UK Financial Conduct Authority, Ministry of Finance (MOF) of the People's Republic of China and Japan Financial Services Agency (FSA).
- In November 2022, ISSB announced at the 27th meeting of the Conference of the Parties to the United Nations Framework Convention on Climate Change, held in Egypt (COP27) that it is working with the European Commission and EFRAG towards a shared objective of maximising interoperability of their standards and aligning on key climate disclosures.
- The ISSB has also confirmed a requirement that companies shall consider SASB standards. Companies may consider CDSB materials as a useful reference.

As the IFRS S1 and IFRS S2 and ESRS are coming to their finalisation, the ISSB and EFRAG are focusing on detailed terminology within the standards, to be completed with the finalisation of both sets of standards.

As of May 2023, these are some known commitments or intentions to achieve interoperability of the different standards.



Ensuring interoperability of the sustainability reporting standards is the key towards achieving consistency and comparability among the standards. Companies which have exposure to more than one standard (including the GRI) should keep themselves abreast with the developments around interoperability among these standards. This will assist companies in building up an appropriate roadmap for sustainability reporting strategy and operationalisation.



ISSB with GRI and ESRS

In the 16 February 2023 ISSB meeting, the Board voted to reference the GRI and the ESRS in its sources of guidance in an appendix of IFRS S1 to identify metrics and disclosures if they meet the information needs of investors, in the absence of a specific IFRS Sustainability Disclosure Standard.

GRI with ESRS

GRI is committed to work with EFRAG to provide technical guidance on how current reporters can use their GRI-based reporting practices and processes to comply with the ESRS.

ISSB with TNFD

At the United Nations Biodiversity Conference, the 15th meeting of the Conference of the Parties to the Convention on Biological Diversity (COP15), ISSB signaled its intention to draw on the TNFD's nature-related risk management and disclosure approach.





Assurance on sustainability reporting

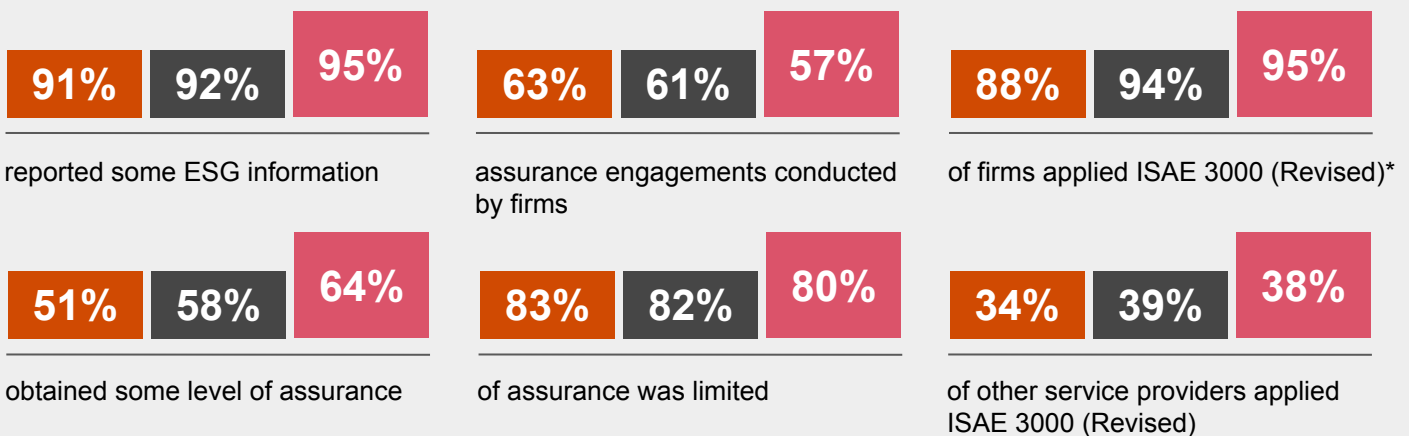
The International Auditing and Assurance Standards Board (IAASB) is currently working to develop a new overarching standard for assurance on sustainability reporting – Proposed International Standard on Sustainability Assurance ISSA 5000, General Requirements for Sustainability Assurance Engagements.

The proposed standard will be principles-based so that it is suitable across all sustainability topics, information disclosed about those topics, and reporting frameworks. It will address both limited and reasonable assurance. The standard will be built upon existing IAASB standards and guidance. The exposure draft is expected to be released in 2023, with the final approval of the standard expected in 2024.

Based on the The State of Play: Sustainability Disclosure & Assurance¹, a report by the International Federation of Accountants (IFAC)'s released in February 2023, 95% of companies reviewed reported some level of sustainability information. There is an increasing trend in the percentage of companies that obtained assurance on their ESG reporting from 51% in 2019 to 64% in 2021. In terms of the level of assurance, 80% of the reports are based on limited assurance in 2021.

Summary of the key findings from the IFAC's report:

Key findings: 2019 | 2020 | 2021



Source: Extracted from the IFAC's report on The State of Play: Sustainability Disclosure & Assurance published in February 2023

* Including national assurance standards such as the AICPA's attestation standards that are at least as robust as ISAE 3000 (Revised), the percentage of Firms that applied ISAE 3000 (Revised), or corresponding national standards, was 96% in 2019, 96% in 2020, and 99% in 2021.

The IFAC report findings above were based on the average results of 1,350 companies across 21 jurisdictions globally. From the study conducted for Asia Pacific jurisdictions in Section 4 that is based on latest reports available until January 2023, we observed that 49% of companies studied had carried out external assurance, which remains low as compared to the global average.

¹<https://www.ifac.org/knowledge-gateway/contributing-global-economy/discussion/state-play-sustainability-assurance>



The importance of ESG information to investors and stakeholders calls for a high level of trust. To build a high degree of credibility, it is imperative that sustainability reports are subject to external assurance. According to PwC's Global Investor Survey 2022², the vast majority (87%) of investors surveyed perceived that company reporting on sustainability performance contains greenwashing. Three-quarters of respondents say their confidence in sustainability reporting would receive the biggest boost if it were assured at the same level as companies' financial statements (i.e. reasonable assurance).

For reporting to be effective, it must be relevant and reliable. Increasing the reliability of reported sustainability information is crucial and companies should track and report sustainability performance with the same rigour and data quality as financial performance. Having external assurance would help to boost the confidence and trust in sustainability reports.

²<https://www.pwc.com/gx/en/issues/esg/global-investor-survey-2022.html>



Views from leaders: Not just a sustainability report

Sustainability reporting is a lot more than reporting operational ESG performance. It is also a strategic assessment tool and communication platform with investors and multi-stakeholders. As there are many reporting standards, ratings and benchmarks, companies should apply standards and benchmarks that help add value to their reporting framework. The process of producing a sustainability report and conducting external assurance can help organisations to raise sustainability awareness, build capabilities, align goals and targets for risks mitigation and adaptation amongst internal and external stakeholders.

Alignment is key. It is important to engage a wider ecosystem of stakeholders to identify critical ESG issues via robust and regular materiality studies to ensure that they are in line with the company's ESG strategic focus areas. City Developments Limited (CDL) started conducting an annual materiality study since 2014, engaging internal and external stakeholders. This has enabled us to concentrate our resources on the top ESG issues and map out strategies and action to turn risks into opportunities. This has not only helped us improve our ESG performance but also enhanced our future-readiness in the ever-changing business environment and meet the rising expectations of regulators, investors, financiers, and key stakeholders.

Sustainability reporting is likened to an annual 'health' check on a company's strength and weakness, for continued improvements to deliver results that will benefit its business and stakeholders. Robust ESG disclosure and sustainability reporting can help companies to communicate effectively with its investors and channel capital for action to build resilience and growth.

For ESG disclosure and sustainability reporting, data is very important as investors and stakeholders are more convinced by quantifiable results that are consistent, comparable and audited. In addition to data, a good report should provide clear articulation of strategic integration of ESG into the company's corporate culture, policies, governance, operations, and most importantly, its growth strategy.

To enhance data integrity and credibility, external assurance of a sustainability report is critical. For companies that are just starting their reporting journey, they can tap onto their internal audit for similar support.

We are living in a time where all countries, economies and businesses must step up in the global race to zero to tackle the climate emergency. The shared North Star for a sustainable planet is net Zero, and this goes beyond borders and sectors. Stepping up on best ESG practices and sustainability reporting will help companies stay on track to achieve the set targets; as what gets measured, gets managed.

Looking ahead, key ESG trends that will become more important include:

- Embracing nature-based solutions to tackle the world's fast-deteriorating biodiversity
- Diversity, equity and inclusion to address rising concern about equity, not just for gender but also race and age
- Supply chain management to ensure a fair and just transition for SME suppliers and vendors to catch up in the race

Corporates should see sustainability as a journey that helps unearth business opportunities and enhance growth opportunities to sharpen business advantage. Technologies and solutions are more available than ever. Companies need to present a strong ESG track record to tap onto increasing sustainable finance and investments and make the quantum leap needed for long-term resilience and growth.

Esther An

Chief Sustainability Officer
City Developments Limited





Developments in other sustainability reporting standards and frameworks

Revision of GRI Standards (effective for reports published on or after 1 January 2023)

The GRI was founded in 1997. The aim was to create the first accountability mechanism to ensure companies adhere to responsible environmental conduct principles. This was then broadened to include social, economic and governance issues. In 2000, the first version of GRI was launched to provide the first global framework for sustainability reporting. In 2016, GRI transitioned from providing guidelines to setting the inaugural global standards for sustainability reporting with a multi-stakeholder audience - the GRI Standards.

To meet the growing demand from stakeholders for transparency, GRI revised its Universal Standards in 2021. The revised Universal Standards represent the most significant update since GRI transitioned from providing guidance to setting standards in 2016. The new GRI standards will be effective for reports published on or after 1 January 2023. The key changes include revisions to address the integration of human rights, a revised approach to materiality with new guidance to determine material topics and removal of core and comprehensive options for reporting in accordance with the GRI Standards.

The updated GRI standards consist of three series of Standards:

- Universal Standards - applies to all organisations
- Sector Standards - applies to specific sectors; and
- Topic Standards - contain disclosures for organisations to report information about its impacts relating to certain topics.

The 2016 GRI standards defined material topics as topics that reflect at least one of the following dimensions – (i) the organisation’s significant economic, environmental and social impacts or (ii) their substantive influence on the assessments and decisions of stakeholders. However, this approach may lead to materiality assessments that are particularly vulnerable to biases based on stakeholder selection. **The 2021 revised standards address this issue and focus on organisations’ impacts on the economy, environment and people.** In the revised standards, ‘material topics’ are defined as topics that represent an organisation’s most significant impacts on the economy, environment and people, including impacts on their human rights. In addition, if a Sector Standard is available that applies to the organisation, the organisation is required to review each topic described in the applicable Sector Standards and determine whether it is a material topic.



More than 10,000 companies around the world use GRI for their sustainability reporting, with 73% of the largest 250 companies in the world reporting on sustainability using GRI³. Companies which use GRI for their sustainability reporting should assess the impact from the changes arising from the revised 2021 GRI standards, especially with the focus on impact materiality.

Given that the GRI standards are widely used, if a company is required to report under other standards in the future (e.g., ESRS, IFRS Sustainability Disclosure Standards and US SEC’s climate proposal), it will need to **focus on interoperability and build a sustainability reporting roadmap and operationalisation plan.**

³<https://www.globalreporting.org/media/wmxlklns/about-gri-brochure-2022.pdf>



TNFD

The TNFD builds on the work of the TCFD and is expected to be delivered as a reporting framework in September 2023. The G20 Environment Ministers and G7 supported the launch of TNFD.

The goal of the TNFD is to provide a framework for organisations to report and act on evolving nature-related risks, to support a shift in global financial flows away from nature-negative outcomes and toward nature positive outcomes.

Although the TNFD framework will adopt the same four-pillar framework as the TCFD, the TNFD will incorporate a broader definition of "nature-related risks and opportunities" into each pillar.

The TNFD's work will build on seven principles: market usability, science-based, nature-related risks, purpose-drive, integrated & adaptive, climate-nature nexus and globally inclusive.

Finalisation: Final recommendations are expected to be published in September 2023.



At the COP15 held in December 2022, the ISSB announced that it will incorporate nature and biodiversity into future standards development where they relate to the information needs of investors, with an initial focus on building the links with the ISSB draft climate standard (including consideration of the work of the TNFD, an existing ISSB knowledge partner).

The TNFD aims to build a risk management and disclosure framework that can be used by organisations of all sizes in all jurisdictions to identify, assess, manage and disclose nature-related dependencies, impacts, risks and opportunities. It is expected that more companies and financial investors will put nature and biodiversity as an integrated part of their investment, risk assessment and strategic planning, considering that the risks of not doing so might outweigh the costs.



PwC's role in delivering a nature positive world

The term "nature positive" has become a call to action across society and business. We are committed to playing our part in delivering a nature positive world. Refer to the QR code for more information.

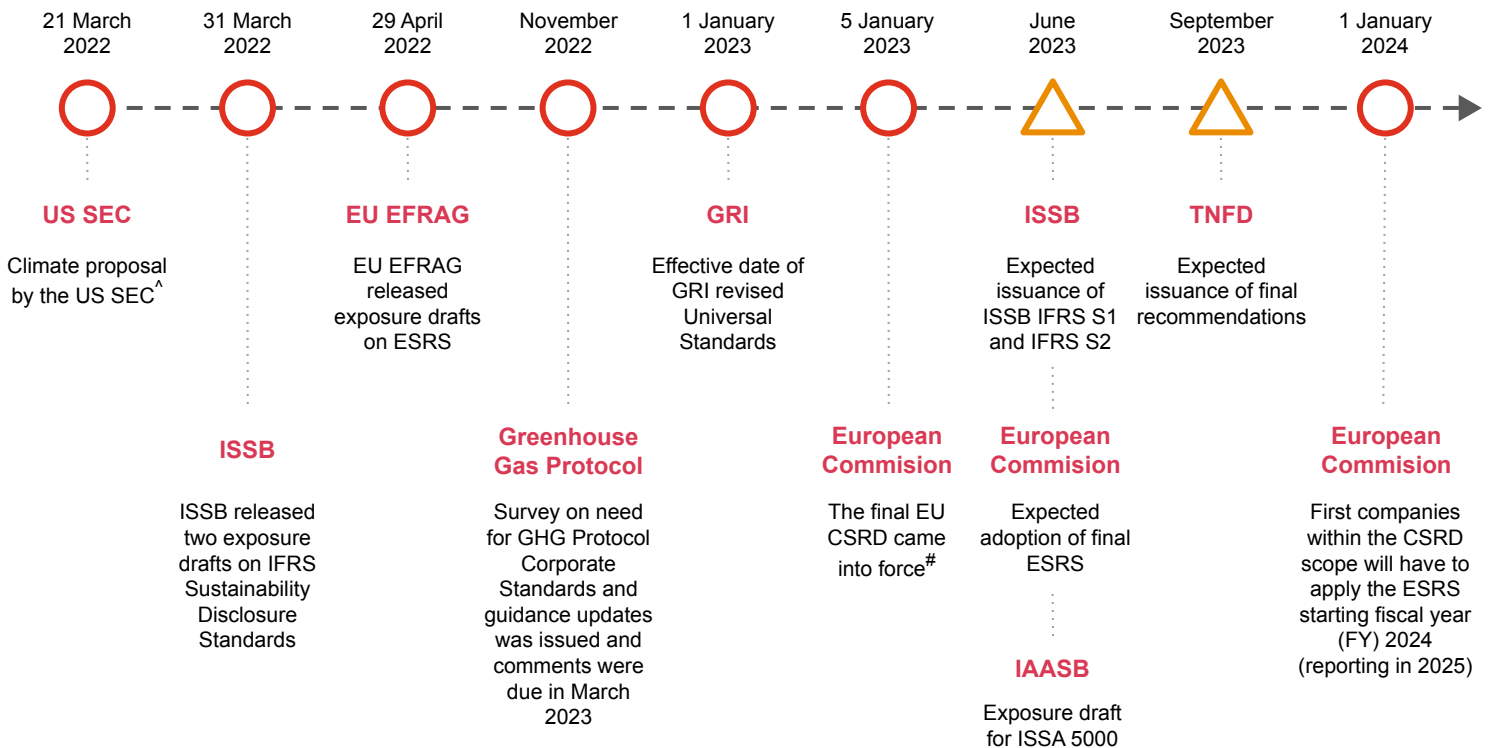




Summary roadmap on reporting and assurance developments

It is expected to be an exciting year in sustainability-related standards. In the roadmap below, we have summarised some of the current and upcoming salient developments in international sustainability reporting standards and frameworks, including jurisdictional developments. A number of major standards, framework and recommendations is expected to be finalised and issued in 2023. Some are with mandatory assurance requirements. Companies need to be prepared and understand how they will be impacted.

The salient developments include but are not limited to the following:



The "big three" proposals:

- US SEC Climate proposal
- IFRS Sustainability Disclosure Standards
- ESRS

Legend:

- Already issued or implemented
- △ Expected timing of issuance or implementation

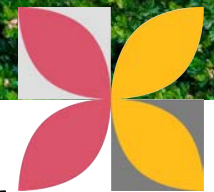
Notes:

- # Mandatory assurance requirements on the entity's sustainability report, initially with limited assurance and later transition to reasonable assurance (Commission decision on feasibility expected by 1 October 2028 at the latest)
- [^] Scope 1 and Scope 2 GHG emissions would be subject to limited assurance in year two and three for large accelerated and accelerated filers, transitioning to reasonable assurance beginning in year four. Footnote disclosure in the financial statements would be subject to assurance through the financial statement audit and internal control over financial reporting attestation requirements.





03



Sustainability reporting and assurance requirements across Asia Pacific



With the fast-paced, ever-changing landscape of sustainability reporting and assurance developments, as well as public commitments to achieve carbon neutrality, there have been an increase in sustainability reporting requirements by regulators across respective jurisdictions in Asia Pacific. Companies should keep themselves updated on both local requirements, as well as global standards. The following table provides an overview and summary of requirements relating to sustainability reporting in Asia Pacific.

	Net zero/ Carbon neutral	Main bodies driving/ promoting sustainability reporting	Sustainability reporting requirements*	TCFD reporting*	Mandatory Assurance requirements? (Yes / No)*	Climate-related Taxonomy
Australia	2050	Australian Securities Exchange (ASX)	Corporate governance principles and recommendations for listed companies follows 'comply or explain' approach	Recommended but not mandatory	No	Developing Green Taxonomy
China	2060	China Securities Regulatory Commission (CSRC) / MOF of the People's Republic of China	Mandatory for listed companies (categorised as key pollutant emission units)	Plan to be mandatory (listed companies)	No	Issued Green Bond Endorsed Projects Catalogue
Hong Kong SAR	2050	Hong Kong Stock Exchange (HKEX) / Hong Kong Institute of Certified Public Accountants	Mandatory for listed companies from 2016 on a 'comply or explain' basis	The HKEX launched a consultation on enhancement of climate disclosure requirements in April 2023. Consultation period is expected to close by 14 July 2023.	No	Plan to develop local green classification framework
India	2070	Securities and Exchange Board of India (SEBI)	Mandatory from FY2022-2023, applicable to top 1,000 listed companies by market capitalisation	Not mandatory	Yes	Developing sustainable finance taxonomy
Indonesia	2060	Financial Services Authority – Otoritas Jasa Keuangan	Mandatory for banking corporations (from 2019) and listed companies (from 2020) in a phased approach	Not mandatory	No	Issued Indonesia Green Taxonomy
Japan	2050	Financial Services Agency	Requirement under Japanese securities laws (within the Annual Securities Report, which is the statutory report to be filed)	Mandatory from fiscal year end of 31 March 2023 or later (listed companies)	No	Issued Basic Guidelines on Climate Transition Finance
Malaysia	As early as 2050	Bursa Malaysia (BM) and Bank Negara Malaysia (BNM)	Mandatory for listed companies from 2016	Mandatory from 2025 for listed companies and 2024 for Financial Institutions (FIs)	No	Issued Climate Change and Principle-based Taxonomy for FIs and Sustainable and Responsible Investment Taxonomy for the Capital Market

* Refer to Appendix for details of the sustainability reporting and assurance requirements.

	Net zero/ Carbon Neutral	Main bodies driving/ promoting sustainability reporting	Sustainability reporting requirements*	TCFD reporting*	Mandatory Assurance requirements? (Yes/No)*	Climate-related Taxonomy
New Zealand	2050	New Zealand Stock Exchange (NZSX), New Zealand Government	Guidance for listed companies via corporate governance codes, ESG guidance note, Climate-related disclosures mandatory for large listed companies and FIs from 2023	Mandatory for large listed companies and FIs from 2023	Yes (Limited assurance on GHG emissions) for large listed companies and FIs from October 2024	None
Philippines	**	Securities and Exchange Commission (SEC) Philippines	Mandatory for listed companies from 2019 reporting period on a 'comply or explain' approach (mandatory to comply from 2022 reporting period)	Not mandatory	No	Development of sustainable finance taxonomy (initiative in the pipeline)
Singapore	2050	Singapore Exchange (SGX), Accounting and Corporate Regulatory Authority (ACRA)	Mandatory for listed companies from 2017 on a 'comply or explain' basis. Mandatory reporting on climate and diversity for listed companies from 2022. All FIs are required to have Environmental Risk Management disclosures (effective June 2022).	Climate reporting is aligned to TCFD framework and is mandatory from 2022 (listed companies) on a 'comply or explain' basis; mandatory from 2023-2024 for specific industries	SGX listed companies are required to subject sustainability reporting process to internal review. External assurance is encouraged.	Published third consultation paper on Green and Transition Taxonomy
South Korea	2050	Financial Services Commission	Governance reports are mandatory for listed companies from 2019. Sustainability reports are mandatory for listed companies from 2025.	Not mandatory	No	Issued K-Taxonomy
Taiwan	2050	Financial Supervisory Commission, Taiwan Stock Exchange (TWSE) and Taipei Exchange	Mandatory requirements for listed and over the counter (OTC) companies are phased in	Mandatory for listed and OTC companies to disclose climate-related information in a dedicated chapter. Additional disclosure requirements for financial services.	Mandatory for food related, chemical, and financial services industries	Published phase 1 (includes manufacturing, construction and transportation industries) Developing phase 2 of Sustainability Taxonomy
Thailand	Carbon neutrality by 2050 and net zero by 2065	Stock Exchange of Thailand (SET), SEC Thailand	Mandatory for listed companies from 2022	Not mandatory	No	Developing Green Taxonomy
Vietnam	2050	MOF Vietnam	Public companies are required to disclose ESG information in annual reports or stand-alone sustainability reports (certain information are not mandatory for FIs)	Not mandatory	No	Developing Green Taxonomy

* Refer to Appendix for details of the sustainability reporting and assurance requirements.

** Philippines has not set a formal net zero or carbon neutral commitment/target although it has made certain reduction pledges.



04

The state of sustainability reporting in Asia Pacific: Insights

Overview

For the second year, PwC worked with the National University of Singapore (NUS), Centre for Governance and Sustainability (CGS) to gather insights on the state of sustainability reporting in Asia Pacific. These can serve as a useful reference as stakeholders anticipate the sustainability reports being issued in 2023.

As our cut-off for the analysis was January 2023, it may not have included the sustainability reporting outcomes that may arise from jurisdiction regulation. For example, Singapore mandatory climate reporting for listed companies, Hong Kong SAR requirement for listed companies to include ESG-related risks in the enterprise risk management assessment, and Japan's revised Corporate Governance Code additionally requires Prime Market listed companies to meet TCFD requirements.

However, the analysis below offers insights into the direction of travel in relation to sustainability reporting progress.

10 salient trends from our analysis

From the analysis conducted, we note the following trends:

- 1. TCFD and climate risks and opportunities** – Compared to the prior year, there has been a gain in momentum of the use of the TCFD framework, including disclosures of climate-related risks and opportunities, and the use of climate scenario analysis, including normative and exploratory pathways.

However, similar to the prior year, while companies have progressed well in starting on the TCFD framework and climate scenario analysis, there continues to be a need for better considerations over managing climate-related risks/opportunities, integration into overall risk management and disclosure of targets of climate-related risks and opportunities.
- 2. Focus on Scope 3 emissions** – While Scope 1 and 2 emissions measurement are reaching maturity, companies need to place more efforts in estimating their Scope 3 emissions. Jurisdictions like Japan do well across disclosure of Scope 1, 2 and 3 emissions.

Larger companies can work with their suppliers, who may be smaller to medium sized companies to encourage them to take up more sustainable practices and also for better transparency and accuracy of Scope 3 emissions.

- 3. State of assurance** – Except for South Korea and Taiwan, sustainability external assurance remains poor. There are also very few reporters that seek reasonable assurance and internal assurance.

As sustainability-related data becomes increasingly important to stakeholders, it is vital that companies obtain both external and internal assurance in line with financial reporting. Trust and transparency over sustainability-related data can be a competitive advantage for companies.

- 4. ESG target setting** – Companies across Asia Pacific are doing better in setting medium and longer-term targets, compared to prior year.
- 5. Net zero target setting** – Most jurisdictions do well when it comes to setting ESG targets, but net zero targets often present challenges. This includes science-based target setting including those which are validated by the SBTi.
- 6. Board and management upskilling** – This remains low across most jurisdictions. Upskilling at leadership level is important for them to discharge their responsibilities in managing material sustainability issues, which include strategy and risk management.
- 7. Linkage between remuneration and sustainability performance** – Given the importance of sustainability issues, we note that most jurisdictions have low sustainability incentive schemes for executives. However, we note that there has been significant improvements in Japan, Malaysia, Singapore and Taiwan, with Australia leading in this area.
- 8. Dominant sustainability reporting standard** – GRI continues to be the dominant sustainability reporting standard. However, companies will need to closely monitor how jurisdictions will adopt new sustainability reporting standards such as the ISSB.
- 9. Use of the SASB** – Compared to prior year, SASB standards application appears to increase due to Australia and India.
- 10. Responding to stakeholders** – Although companies do engage their key stakeholders, they can do better in responding to their concerns and needs. This is consistent with the prior year's findings.



Overview of sustainability reporting study

- Top 50 largest listed companies of each of the selected jurisdictions (14 in scope)
- Analysed against common sustainability reporting attributes based on the principles of GRI and the TCFD
- Based on latest sustainability reports and annual reports available until January 2023
- To provide insights on the status, in anticipation of upcoming sustainability reports

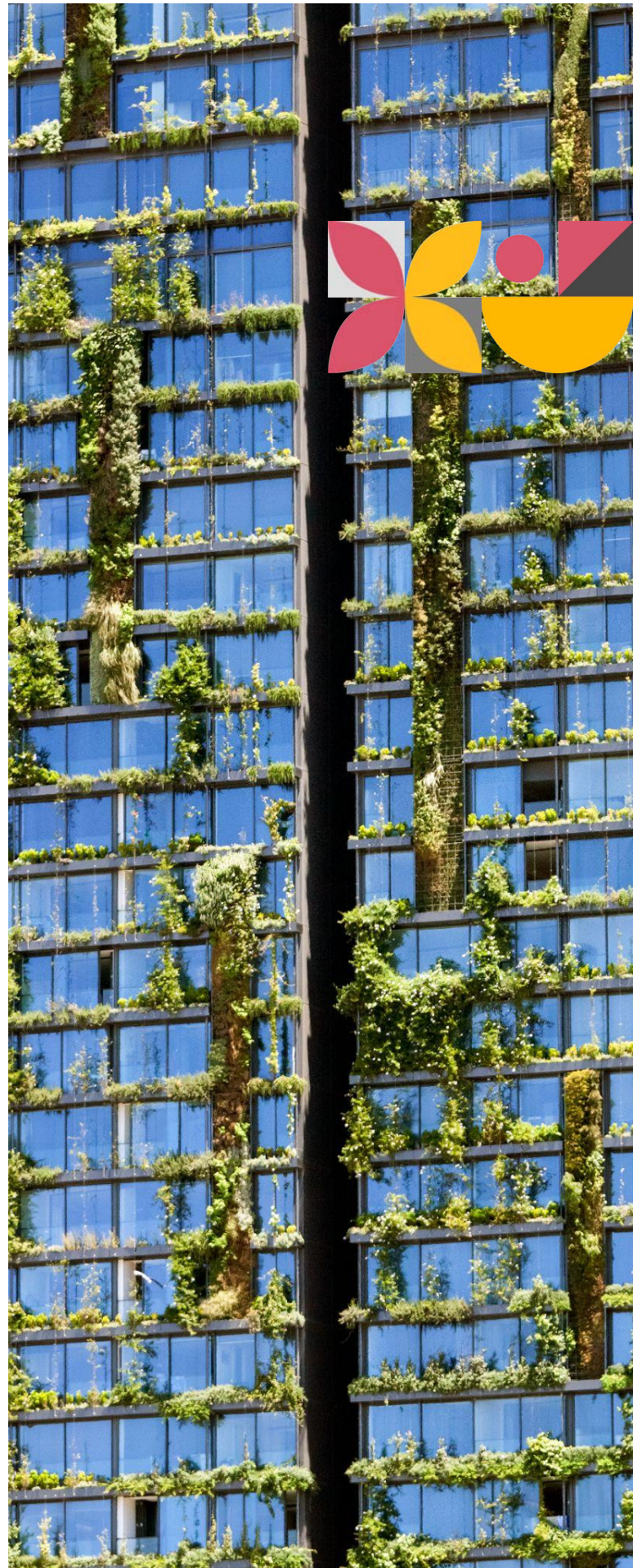
Methodology

Scope of study

This study focuses on the top 50-listed companies by market capitalisation across 14 selected jurisdictions across the Asia Pacific, namely: Australia, China, Hong Kong SAR, India, Indonesia, Japan, Malaysia, New Zealand, Philippines, Singapore, South Korea, Taiwan, Thailand, Vietnam. A total of 700 listed companies were studied, spanning 11 industries: communication services, consumer discretionary, consumer staples, energy, financials, healthcare, industrials, information technology, materials, real estate, and utilities.

The companies are identified as those listed on stock exchanges worldwide, i.e., ASX, Bombay Stock Exchange (BSE), BM, Ho Chi Minh Stock Exchange (HOSE), HKEX, Indonesia Stock Exchange (IDX), Korea Stock Exchange (KRX), NZSX, The Philippine Stock Exchange (PSE), Shanghai Stock Exchange (SSE), Shenzhen Stock Exchange (SZSE), SGX, SET, TWSE, Tokyo Stock Exchange (TSE).

The information reviewed was based on latest sustainability reports and annual reports available until January 2023. Only companies whose sustainability reports are communicated in English are included.



Research framework

The assessment framework used within this study was developed in reference to the GRI and the TCFD. GRI was referenced as it continues to have a high level of adoption. The TCFD was referenced due to the increasing and important focus on climate change. The sustainability reports were then analysed against these attributes which include 5 areas and 20 sub-areas:

Areas	Sub-areas
Materiality and stakeholder engagement	<ol style="list-style-type: none"> 1. Identification of material ESG factors 2. Disclosure of stakeholder engagement channels and response to stakeholder concerns
Sustainability targets	<ol style="list-style-type: none"> 3. Disclosure of targets 4. *Disclosure of net zero targets 5. *Disclosure of net zero targets based on and verified by SBTi
Climate change including managing its risks	<ol style="list-style-type: none"> 6. Identification of climate-related risks/opportunities 7. *Disclosure of process for managing climate-related risks/opportunities 8. Disclosure of integrating climate-related risks into overall risk management 9. Disclosure of targets and/or tracking of climate-related risks and opportunities 10. *Disclosure of climate scenario analysis 11. *Disclosure of Scope 1, Scope 2 and Scope 3 GHG emission 12. *Level of disclosure of Scope 3 GHG emission
Governance and responsibility	<ol style="list-style-type: none"> 13. Disclosure of Board of Directors (BOD) responsibility on sustainability 14. Disclosure of sustainability governance structure 15. Disclosure of BOD/ management with sustainability training 16. Disclosure of remuneration linked to sustainability performance 17. *Disclosure of BOD diversity aspect
Building trust	<ol style="list-style-type: none"> 18. Disclosure of reporting scope 19. Disclosure of assurance over key areas of sustainability reporting 20. *Disclosure of level of external assurance and framework used for external assurance

*This year we included more sub-areas following feedback that these would also be of interest to stakeholders. In the following pages, we analyse the state of sustainability reporting of the respective jurisdictions (based on the top 50 listed companies) against these attributes.



State of sustainability reporting standards and frameworks used

GRI and SDG are the most commonly used standards and frameworks for sustainability reporting among most of the jurisdictions, followed by International Organization for Standardization (ISO) and the TCFD. Climate-related disclosure is becoming more popular and expected to be mandated as part of the sustainability reporting regulations. It is expected that the TCFD will be increasingly adopted by companies.

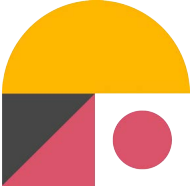
	GRI	SDG	ISO	TCFD	SASB	UNGC	CDP	IIRC
Overall (2021)	75%	76%	66%	36%	18%	23%	17%	20%
Overall (2022)	81%	78%	69%	57%	36%	28%	20%	20%
Australia	80%	80%	56%	86%	48%	34%	12%	8%
Hong Kong SAR	80%	76%	86%	66%	28%	30%	22%	4%
India	84%	86%	64%	58%	50%	60%	50%	66%
Indonesia	80%	86%	78%	10%	18%	12%	12%	4%
Japan	80%	88%	88%	90%	44%	36%	20%	70%
China	76%	60%	70%	36%	8%	18%	8%	0%
Malaysia	84%	92%	78%	60%	18%	12%	22%	24%
New Zealand	44%	50%	48%	56%	12%	2%	30%	18%
Philippines	90%	94%	60%	36%	52%	18%	12%	16%
Singapore	98%	78%	74%	64%	34%	44%	10%	10%
South Korea	100%	82%	66%	92%	88%	48%	34%	20%
Taiwan	96%	92%	76%	90%	84%	36%	32%	20%
Thailand	86%	90%	68%	60%	22%	36%	22%	12%
Vietnam	50%	32%	54%	0%	2%	0%	0%	10%

Note: The overall percentages are based on 13 jurisdictions last year (2021), excluding South Korea.



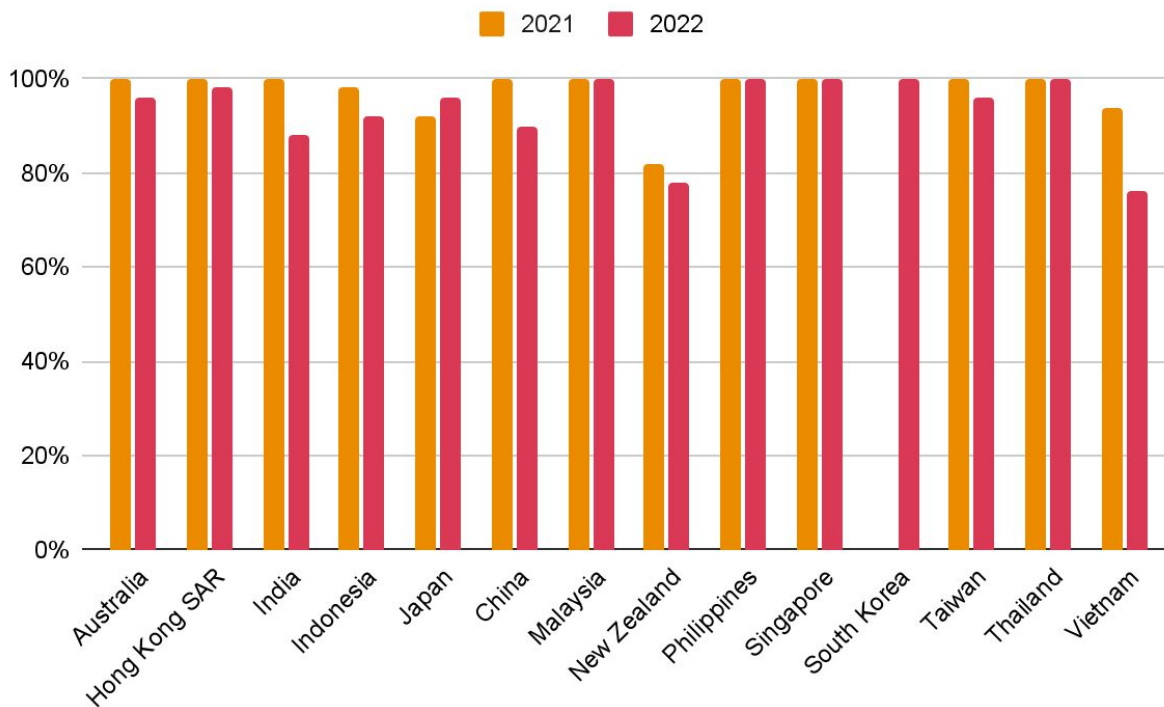
In the following pages, we analyse the state of sustainability reporting within the 14 selected jurisdictions (based on the top 50 listed companies) against the attributes outlined above. **It should be noted that results, to some degree, may be driven by the timing and scope of sustainability reporting regulation implementation in the companies' respective jurisdictions, including the nature and focus of the sustainability reporting requirements and recommendations.**





Materiality and stakeholder engagement

Figure 1: Identification of material ESG factors



Note: 2021 data for South Korea is not available.

Why this matters

Identification of ESG topics that are material to the organisation’s core strategy and long-term value creation helps the organisation in prioritising and channelling its efforts in managing risks and cultivating opportunities associated with these material ESG topics. Disclosure of material ESG factors demonstrates that the organisation understands the key sustainability issues that are most relevant to the stakeholders. Such disclosure also helps investors understand the factors that are material to the risks and opportunities of their investments.

State of practice

- 94% of companies studied disclosed material ESG factors across Asia Pacific.
- It is notable that the disclosure rate for companies listed in South Korea, Malaysia, Philippines, Singapore, and Thailand are 100%.
- In comparison to 2021, other than Japan, Malaysia, Philippines, Singapore and Thailand, there is a slight decrease in percentage of companies identifying material ESG factors.
- The top 5 common material ESG factors in 2022 are: Occupational health and safety, Local community, Training and education, Energy, and Climate change. This remains generally consistent with 2021 with the exception of Climate change, indicating that companies are increasingly paying attention to climate change.



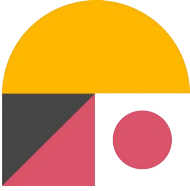
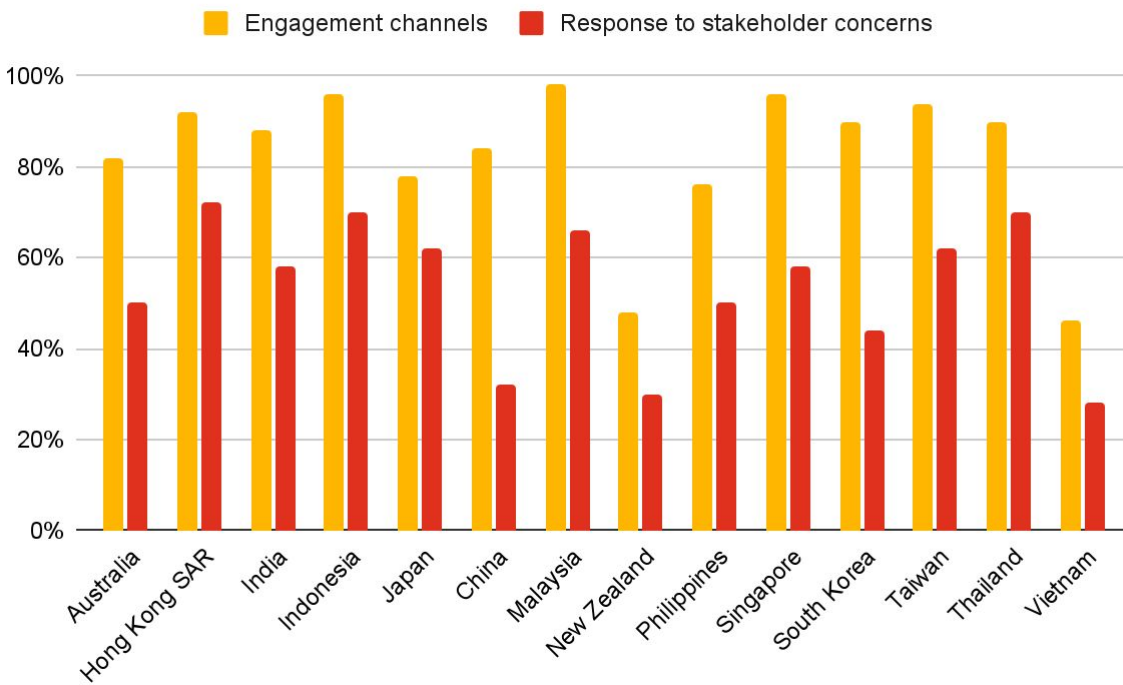


Figure 2: Disclosure of stakeholder engagement channels and response to stakeholder concerns



Why this matters

Stakeholder engagement can provide an organisation with the latest and most relevant sustainability considerations across its value chain. Use of appropriate engagement channels along with a timely response to concerns gives an understanding of how extensively and robustly stakeholders were engaged including their role in identifying an organisation’s impacts on the economy, environment, and people which will subsequently be used in determining the most important ESG topics for an organisation.

State of practice

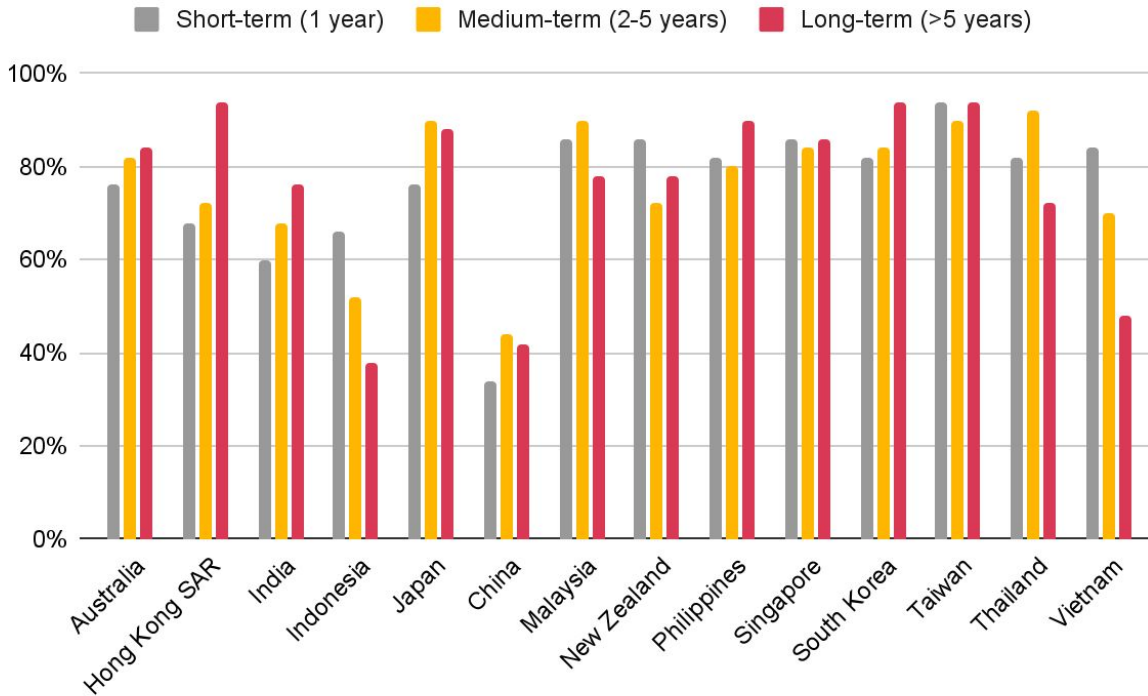
- 83% of companies studied disclosed stakeholders engagement channels.
- Only 54% of companies disclosed ways of addressing stakeholders’ concerns, with the highest found in Hong Kong SAR (72%), Indonesia (70%), and Thailand (70%).





Strategy and targets

Figure 3: Disclosure of ESG targets under different timeframe



Why this matters

Target setting is essential for companies to monitor their progress in responding to the determined material ESG factors and adjust their strategies to take corrective action when necessary.

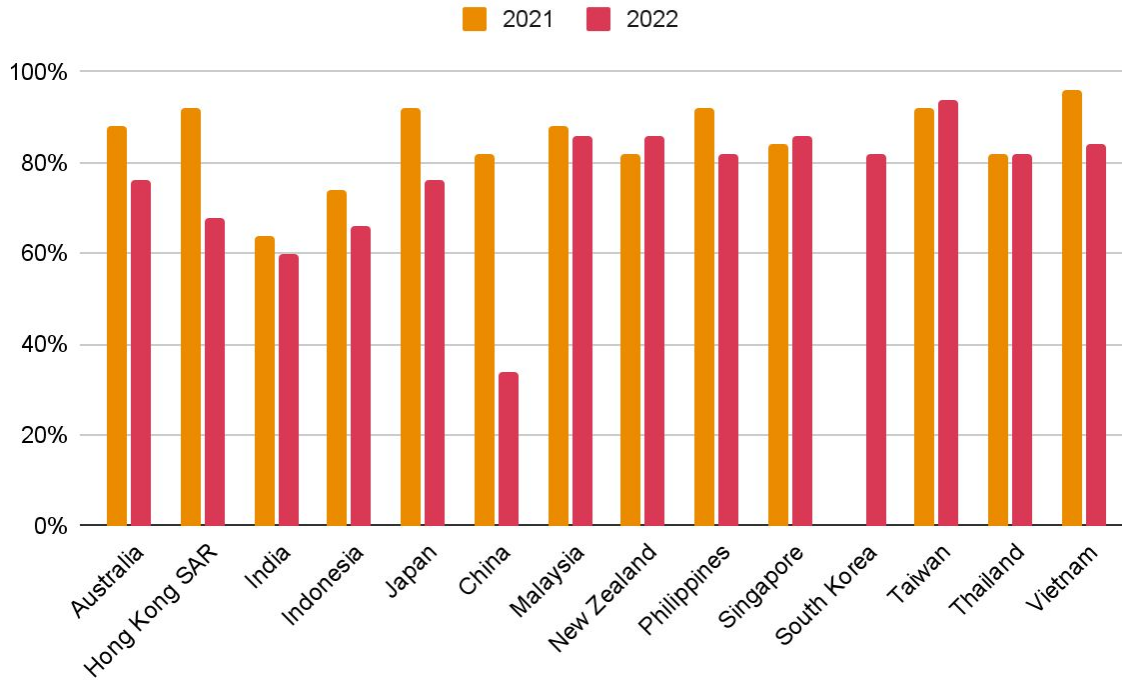
State of practice

- 92% of companies studied disclosed sustainability targets to guide their future development.
- Commonly disclosed ESG targets include adoption of renewable energy, reduction in carbon emissions, reduction in waste, increase in the percentage of female employees, increase in training hours, and improved employment practices.



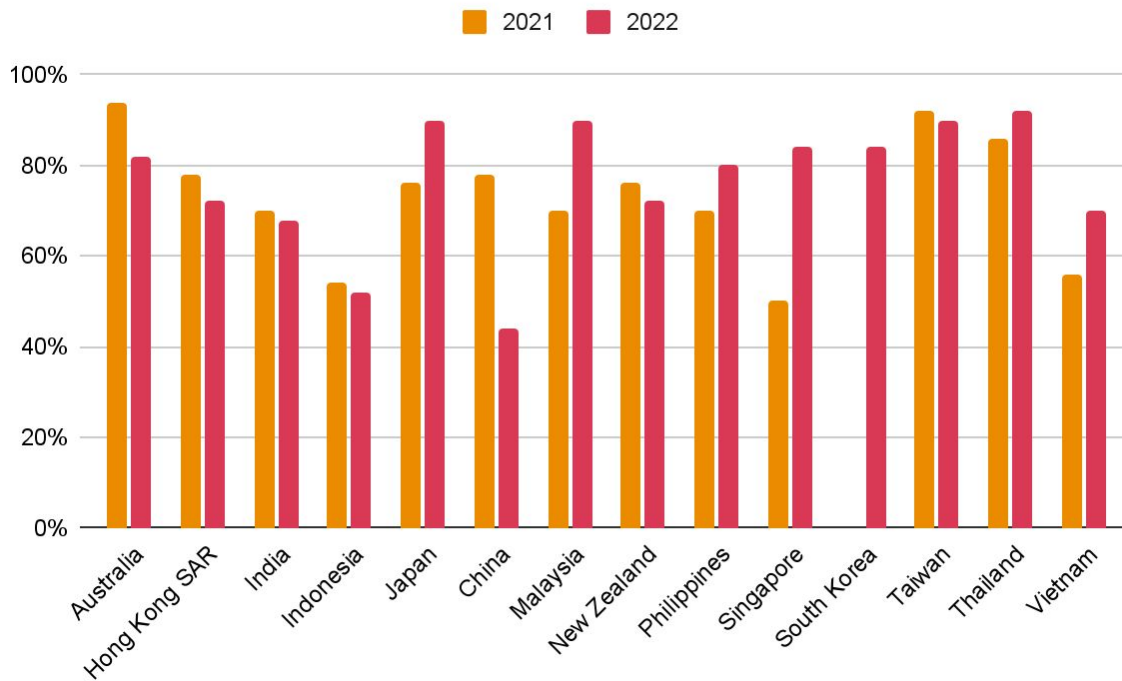


Figure 3a: Disclosure of short term ESG targets (1 year)



Note: 2021 data for South Korea is not available.

Figure 3b: Disclosure of medium term ESG targets (2-5 years)

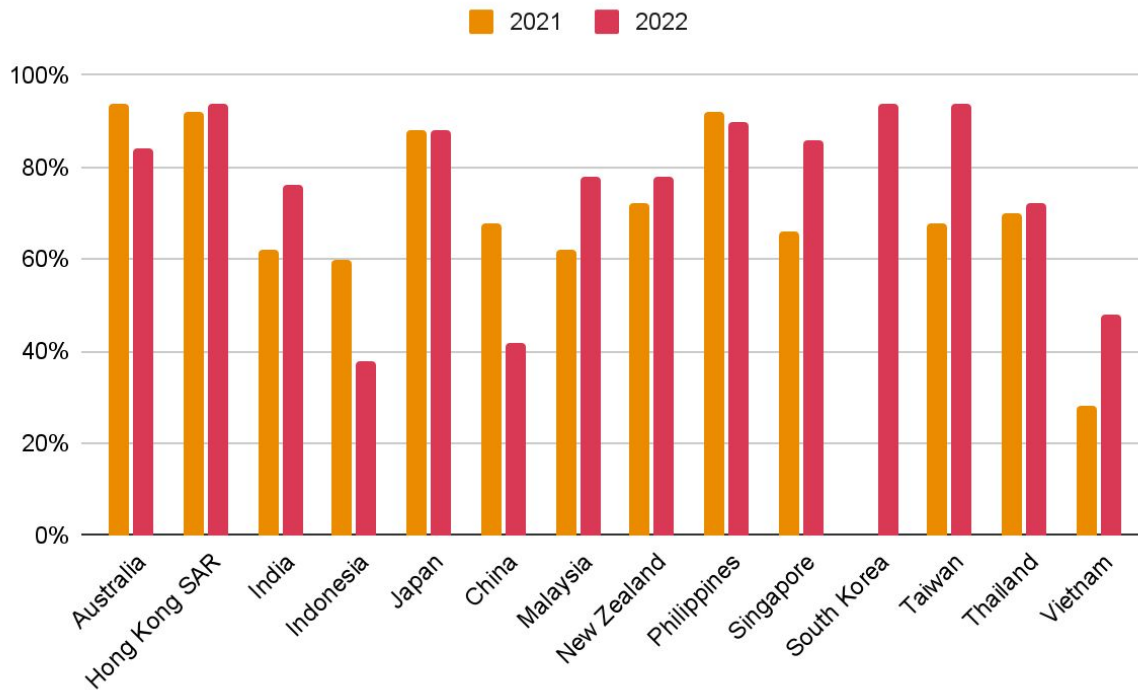


Note: 2021 data for South Korea is not available.





Figure 3c: Disclosure of long term ESG targets (>5 years)



Note: 2021 data for South Korea is not available.

Why this matters

ESG targets should be quantifiable, and time bound to foster accountability and enable the tracking of performance. Both shorter and longer-term targets can help ensure improvements to ESG areas such as emissions, water, health and safety, that are material to an organisation.

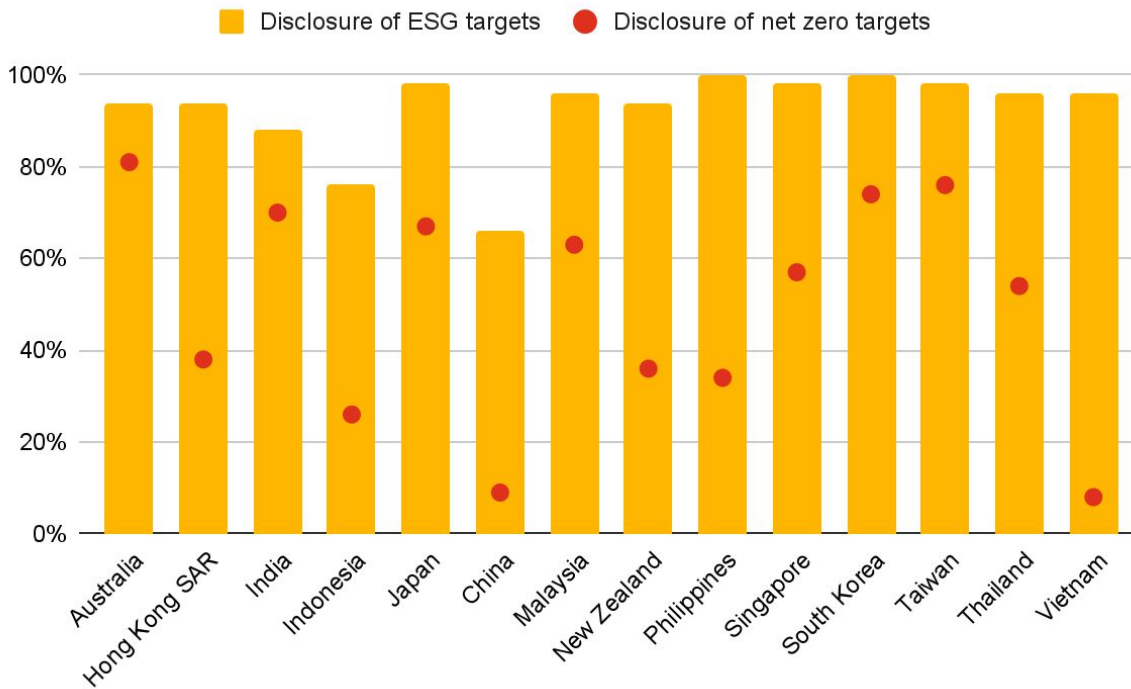
State of practice

- Disclosure of short-term, medium-term and long-term targets are of similar percentage – around 76% for companies studied across Asia Pacific.
- There is a 9% decrease in disclosure of short-term targets, from 85% in 2021 for 13 jurisdictions (650 companies) assessed last year to 76% in 2022 for 14 jurisdictions (700 companies) assessed in 2022.
- As more and more jurisdictions pledged to achieve their carbon emission targets in the second half of the century, more companies disclosed their medium-term (a 3% increase) and long-term targets (a 5% increase) contributing to the national carbon emission targets. A notable increase as compared to a year ago in most jurisdictions.
- Of the long-term targets disclosed, net zero carbon emission, carbon neutrality, 100% adoption of renewable energy and increasing the percentage of female employees are commonly cited.





Figure 4: Disclosure of net zero targets



Note: Base for “disclosure of targets” is all companies; base for “disclosure of net zero targets” is companies which disclosed sustainability targets.

Net zero or carbon neutral commitments by jurisdictions:

Australia	Hong Kong SAR	India	Indonesia	Japan	China	Malaysia	New Zealand	Philippines	Singapore	South Korea	Taiwan	Thailand	Vietnam
2050	2050	2070	2060	2050	2060	As early as 2050	2050	**	2050	2050	2050	Carbon neutrality by 2050 and net zero by 2065	2050

** Philippines has not set a formal net zero or carbon neutral commitment/target although it has made certain reduction pledges.

Why this matters

Net zero refers to the target of reducing greenhouse gas emissions that cause global warming to net zero, requiring a significant decrease across all sectors of the economy. To achieve net zero, companies need to have a complete measurement of their greenhouse gas emissions and thereafter implement plans to decarbonise their operations or portfolio. In developing the decarbonisation plans, companies should also identify and prioritise their climate risks and opportunities presented by the rising temperatures, climate-related policy and emerging technologies.

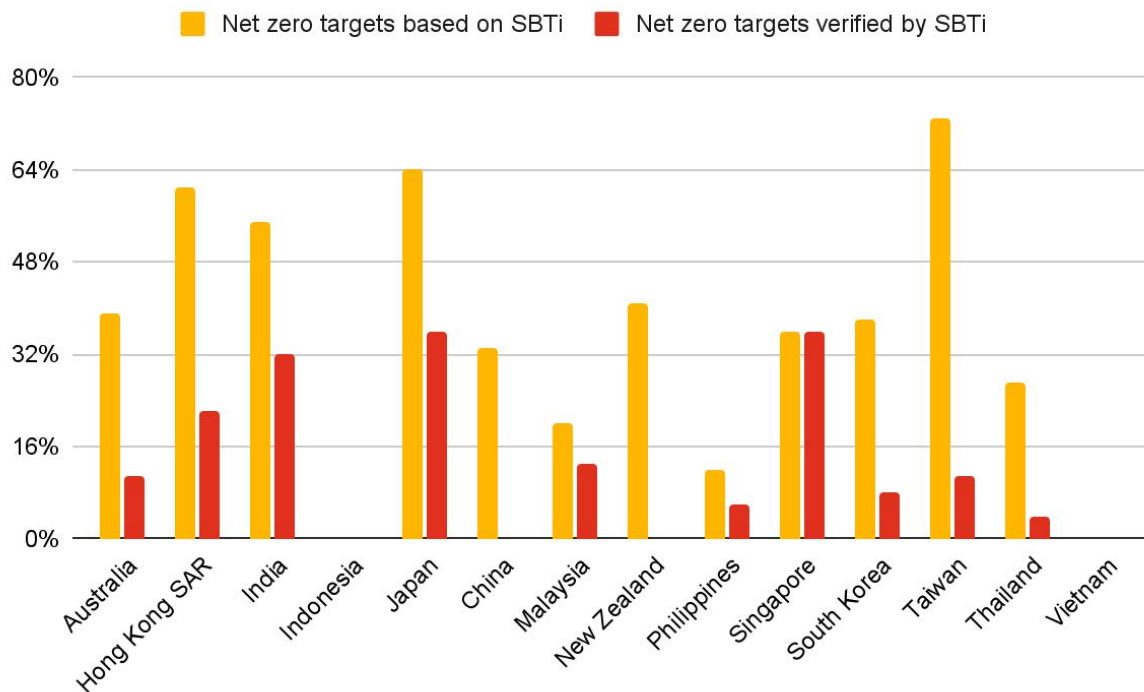
In 2018, the Intergovernmental Panel on Climate Change (IPCC) stated that the world needs to reach net zero by around 2050 to meet the Paris Agreement target to limit global warming to 1.5°C. Organisations are making their net zero commitments at an increasing pace to directly contribute to meeting the Paris goal.

State of practice

- Among companies that have disclosed sustainability targets, 51% of companies disclosed net zero targets.
- Companies listed in Australia (81%), Taiwan (76%), South Korea (74%) and India (70%) are found to show high disclosure rate of net zero targets. Australia, Taiwan and South Korea have pledged to achieve net zero by 2050, while India aims to achieve net zero by 2070.



Figure 5: Disclosure of net zero targets based on and verified by SBTi



Note: Bases for “net zero targets based on SBTi” and “net zero targets verified by SBTi” are companies which disclosed net zero targets.

Why this matters

Companies are increasingly adopting net zero targets. While the number of entities committing to reach net zero emissions has grown rapidly, not all net zero targets are science-based. Two leading frameworks are being recommended in the climate change target setting scene: Science-Based Targets initiative (SBTi) and the Task Force for Climate-related Financial Disclosures (TCFD) framework.

The adoption of these frameworks allows companies across sectors and jurisdictions to set science-based climate targets appropriately. Science-based climate targets provide a pathway for organisations to reduce their emissions and mitigate climate change. They are built upon the latest climate science and address the goals set by the Paris Agreement in 2015 deemed necessary to meet the Paris agreement goals. Science-based climate targets are important to ensure companies are consistent with limiting temperature rise to 1.5 °C.

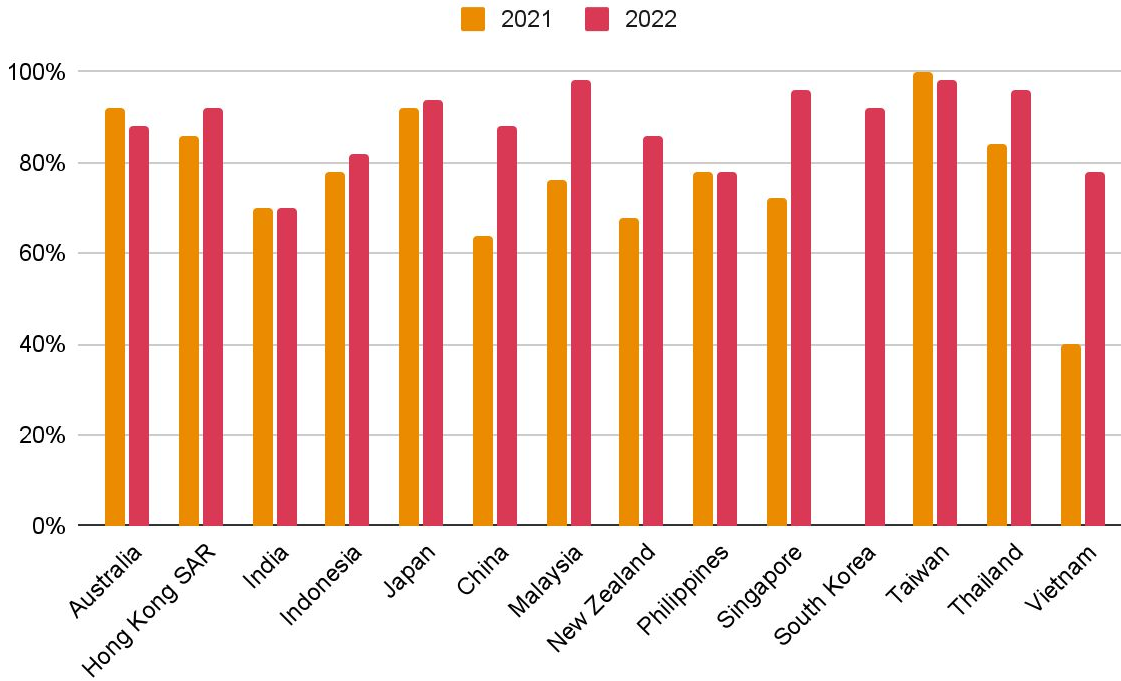
Moreover, having such targets verified by SBTi increases their consistency across organisations and also their reliability as SBTi’s technical experts provide detailed feedback and support. The targets committed by organisations are published on SBTi’s website and this further encourages organisations to meet the set goals.

State of practice

- 42% of companies studied set their net zero targets based on SBTi, while only 16% of these targets are verified by SBTi. There is room for improvement in setting SBTi-based targets and obtaining SBTi verification.
- It is notable that the highest SBTi verification rate comes from Japan and Singapore (36%), followed by India (32%).

Climate change including managing its risks

Figure 6: Identification of climate related risks/opportunities



Note: 2021 data for South Korea is not available.

Why this matters

Asia Pacific accounts for nearly half of global greenhouse gas emissions. 78% of the jurisdictions in the region have submitted updated Nationally Determined Contribution (NDC) commitments, however the latest UN report has shown that collectively, the region is still off track on its path to keep global warming within 1.5 °C. Being one of the most vulnerable regions to climate change impacts, companies in Asia Pacific play a critical role in supporting national and regional emissions sustainability goals.

The TCFD divides climate-related risks into two major categories: 1) transition risks – risks related to the extensive policy, legal, technology, and market changes while transitioning to a low-carbon economy; and 2) physical risks – risks related to the physical impacts of climate change. Despite the challenges brought by climate change, climate change adaptation and mitigation efforts also entail climate-related opportunities for companies that embrace such changes. Identifying climate-related risks and opportunities is fundamental to prioritising climate action as well as investments in adaptation measures.

Disclosures related to climate change have become an increasingly vital part of sustainability reporting and the work of addressing climate-related transition and physical risks. Companies will encounter both challenges and opportunities as they adapt their strategies and business models to reflect increasing regulatory requirements and stakeholder expectations.

State of practice

- In 2022, 88% of companies studied identified climate-related risks and/or opportunities. The disclosure rate for the 13 jurisdictions (except South Korea) is 88% in 2022, a 11% increase from 77% in 2021.
- The more significant increases observed could be a result of the following regulators and / or government announcements in 2021:
 - **China**
In May 2021, China established the new China Climate Change Commission to provide high-level coordination of climate strategy. It also set out the 1+N climate policy frameworks, which highlighted key areas that the government was supporting for carbon neutrality.
 - **Malaysia**
In September 2021, the Government announced through the 12th Malaysia Plan that a legislation on climate change would be formulated to enhance the effectiveness of climate change actions.
 - **Singapore**
In December 2021, the Singapore Exchange announced a requirement for issuers to provide climate-related reporting based on recommendations of the TCFD.
 - **Vietnam**
Prime Minister Pham Minh Chinh announced plans to achieve net-zero emissions by 2050 at COP26. The speech indicates possible opportunities for companies, which may result in an increase of disclosure of climate-related opportunities.
- The top five jurisdictions with companies identifying climate-related risks and/or opportunities are Malaysia (98%), Taiwan (98%), Singapore (96%), Thailand (96%) and Japan (94%).

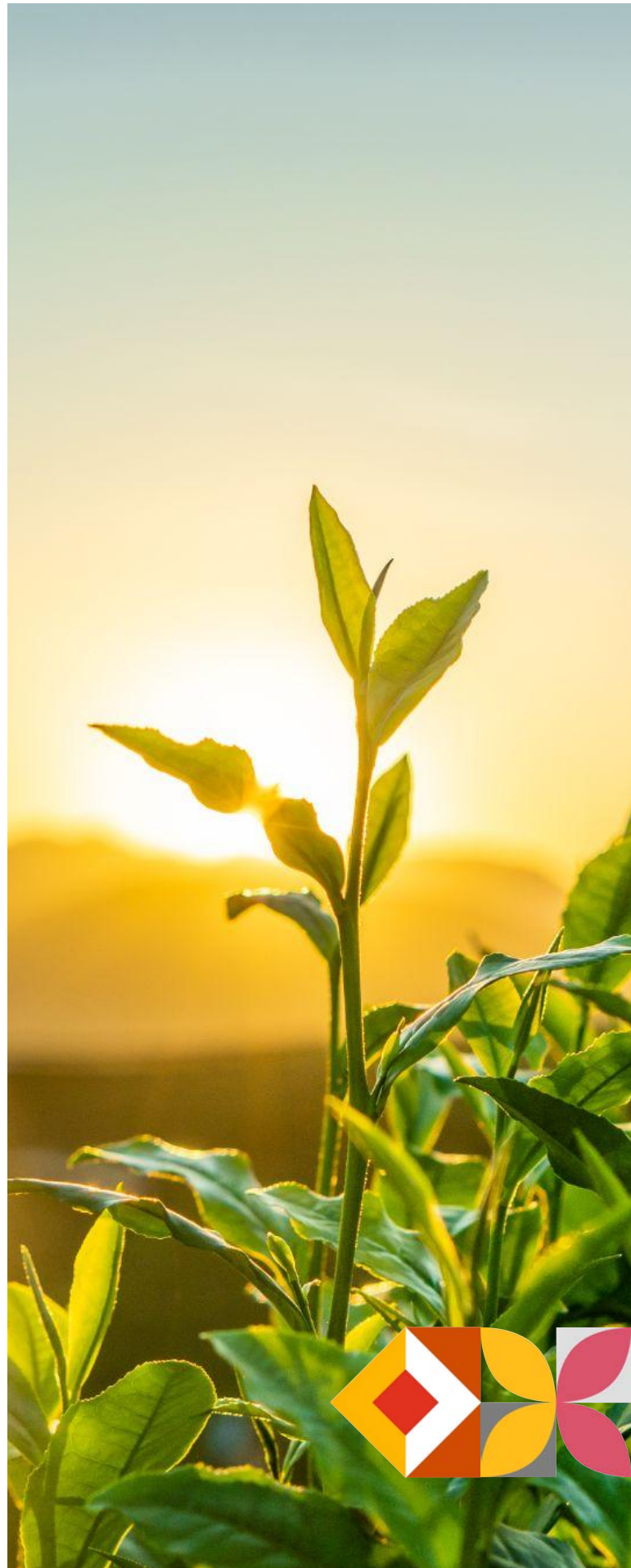
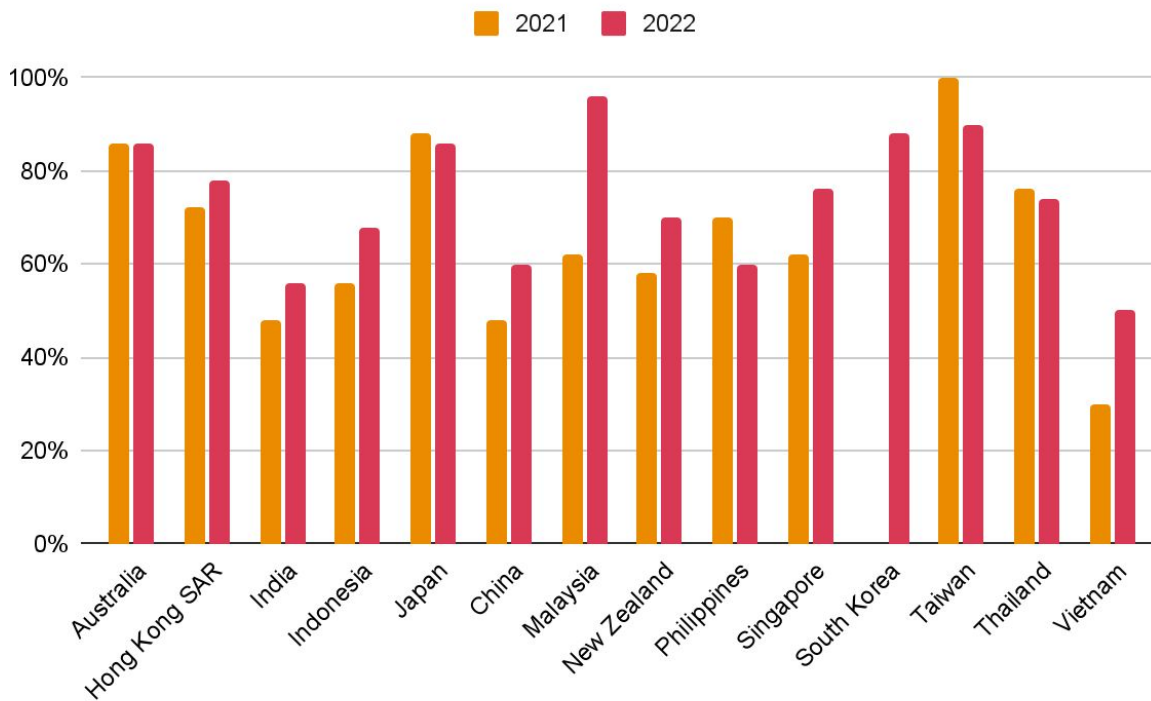


Figure 7: Disclosure of process for managing climate-related risks/opportunities



Note: 2021 data for South Korea is not available.

Why this matters

Generally, companies who have identified climate change as a material topic have also disclosed the details of their climate-related risks or opportunities, and have disclosed their processes for managing climate-related risks. Investors and other stakeholders need to understand how an organisation’s climate-related risks are identified, assessed and managed, and whether those processes are integrated across existing risk management systems. Australia, Japan and Taiwan stand out as jurisdictions that have a higher share of companies that have disclosed both climate-related risks/opportunities and their related processes for managing climate-related risks.

State of practice

- In 2022, 74% of companies studied have disclosed their process of managing climate-related risks and/or opportunities. The disclosure rate for the 13 jurisdictions (except South Korea) was 73% in 2022, a 7% increase from 66% in 2021.
- The more significant increase observed for Malaysia is in line with the increase (from 28% in 2021 to 60% in 2022) observed in organisations adopting the TCFD framework in their reporting. Top 5 jurisdictions with companies disclosing their process managing climate-related risks and/or opportunities are Malaysia (96%), Taiwan (90%), South Korea (88%), Australia (86%) and Japan (86%). These are largely aligned with those which have the higher disclosure rate of identifying climate-related risks and/or opportunities.

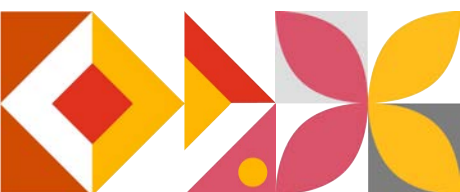
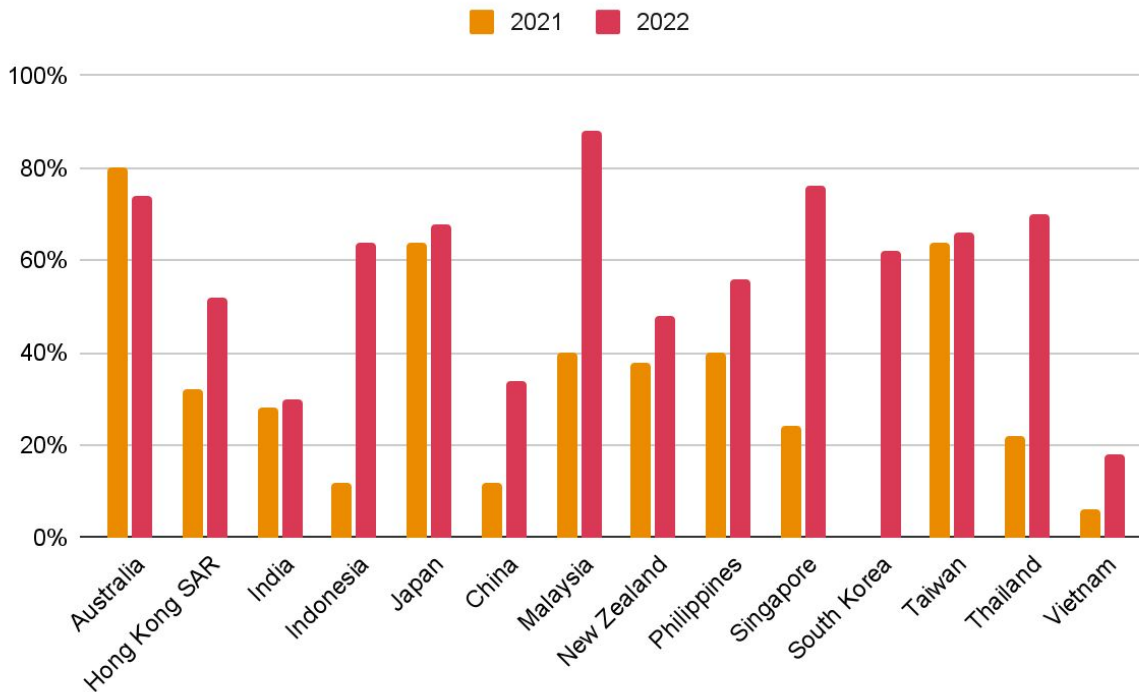


Figure 8: Disclosure of integrating climate-related risks into overall risk management

Note: 2021 data for South Korea is not available.

Why this matters

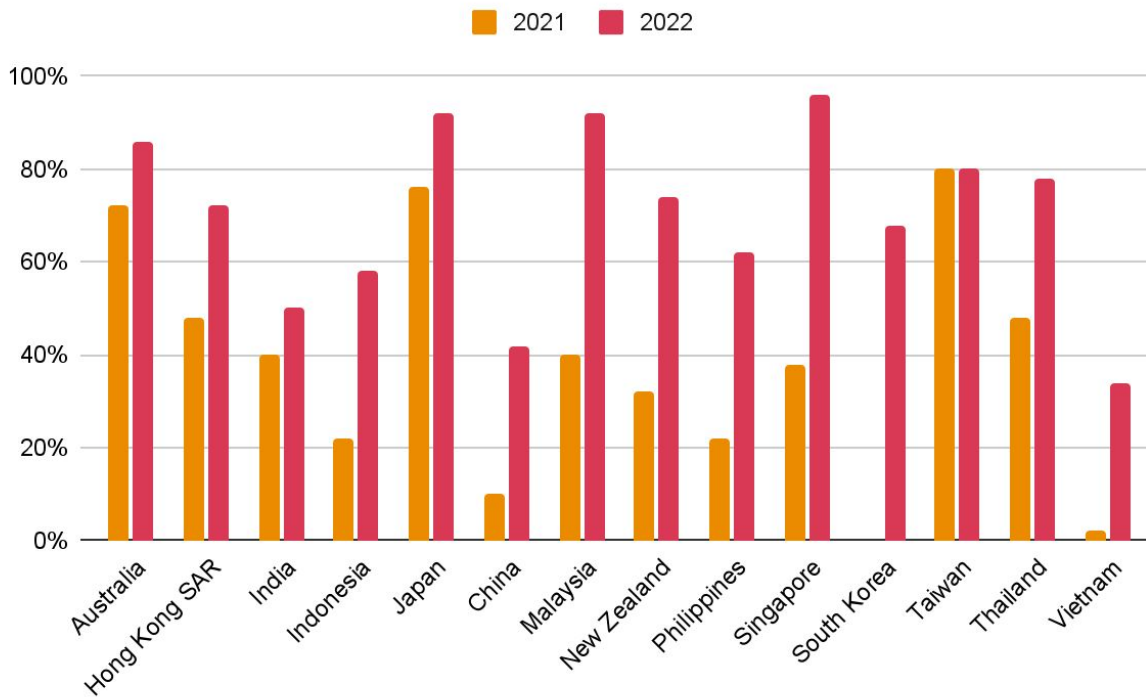
Integrating the climate-related risks into risk management is critical in managing them, whether that entails adaptation or mitigation measures. Such disclosure helps users of climate-related financial disclosures to evaluate organisations' overall risk profile and risk management activities.

State of practice

- In 2022, though more than 70% of companies have disclosed process for managing climate-related risks, only 58% of companies disclose how they integrated climate-related risks into overall risk management.
- It is encouraging to see that the disclosure rate of integrating climate-related risks into overall risk management has largely increased from 36% in 2021 to 58% in 2022 for the 13 jurisdictions (except South Korea).
- Disclosure of integrating climate-related risks into overall risk management is one of the reporting components based on the TCFD framework. The increase of the disclosure rate might result from the increased adoption of the TCFD framework.
- Particularly in Indonesia and Thailand, the adopters of the TCFD framework have increased from 4% in 2021 to 10% in 2022 and from 24% in 2021 to 60% in 2022, respectively.
- Following this trend, it is expected that more and more companies will integrate climate-related risks, including transition risks and physical risks, into their overall risk management.



Figure 9: Disclosure of targets and/or tracking of climate-related risks and opportunities



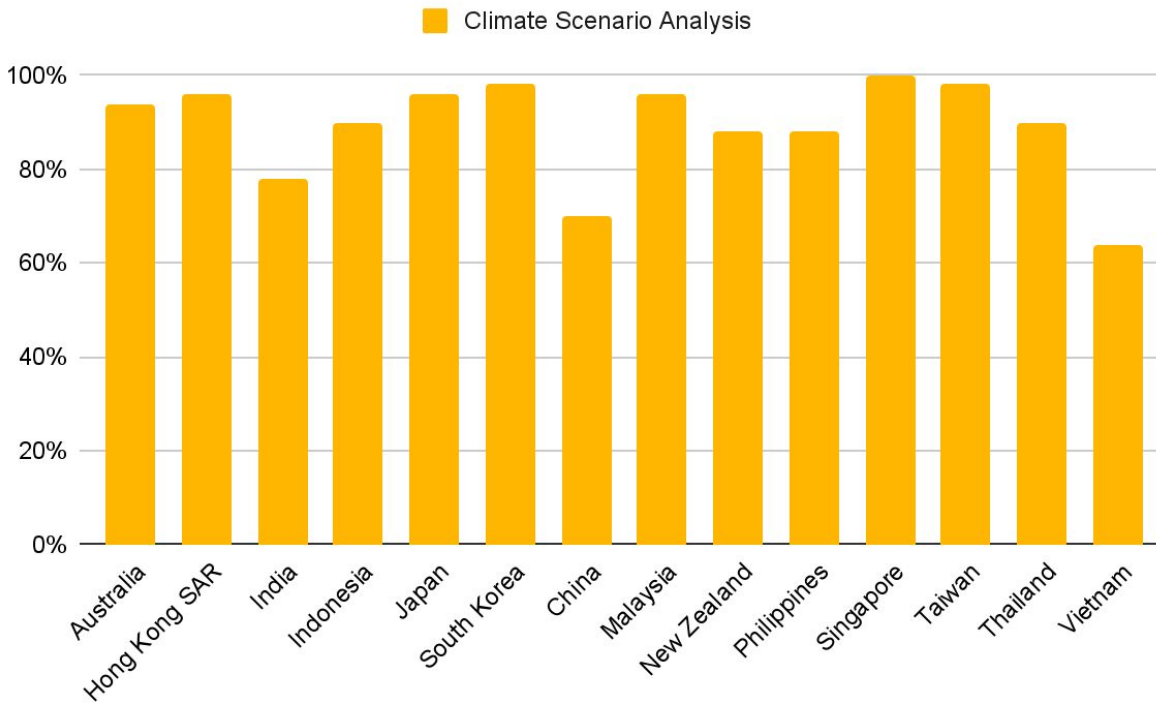
Note: 2021 data for South Korea is not available.

Why this matters

Targets are essential to tracking improvement and progress towards goals such as reductions in carbon intensity or financed emissions. They also allow companies to address identified shortfalls in a timely manner and ensure the achievement of set goals. Disclosing targets also helps to ensure accountability.

State of practice

- Across Asia Pacific, 70% of the companies studied have disclosed targets used to manage climate-related risks and opportunities and performance against targets, a 29% increase from 2021.
- The top 5 jurisdictions with companies that have done so are Singapore (96%), Japan (92%), Malaysia (92%), Australia (86%) and Taiwan (80%).
- Malaysia and Singapore had more than 50% increase in companies disclosing targets used to manage climate-related risks and opportunities and performance against targets, as compared to 2021. This might have resulted from the increased adoption of the TCFD framework.
- Besides net zero targets, commonly mentioned climate-related targets include: 100% renewable energy adoption, energy use reduction, green investment, low-carbon products development.

Figure 10: Disclosure of climate scenario analysis

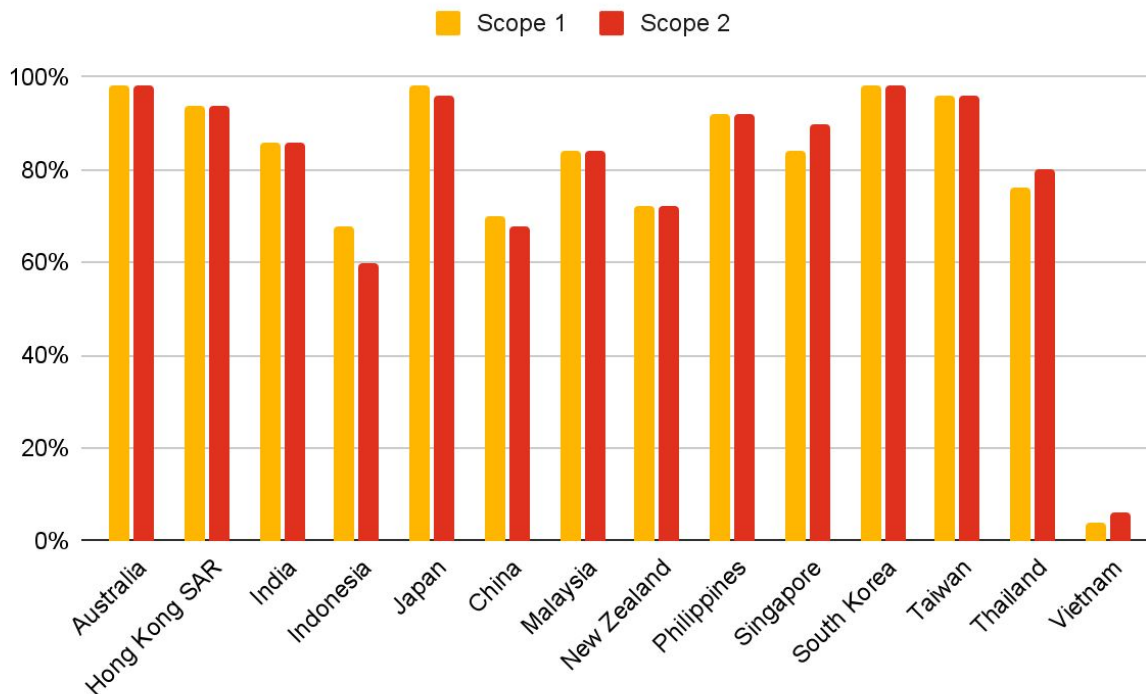
Why this matters

The magnitude of climate change effects is uncertain, which presents challenges for companies to understand how climate change may potentially affect their businesses, strategies, and financial performance. Hence, the TCFD has recommended the use of climate scenarios analysis to develop more flexible and robust strategic plans based on a range of plausible future states. Climate scenario analysis, although nascent, is increasingly useful to help companies and their stakeholders understand how potential climate risks and opportunities evolve and impact their business. These scenarios are dependent on an estimated future population level, economic activity, governance structure, social values, and technological changes.

State of practice

- Across Asia Pacific, 89% of the companies studied have carried out climate scenario analysis.
- 100% of Singapore-listed companies have carried out climate scenario analysis, followed by South Korea-listed companies (98%) and Taiwan-listed companies (98%).
- As climate-related risks are becoming an important component of companies' overall risk management, it is expected that more and more companies will carry out climate scenario analysis to better understand the climate risks, as well as the impact on businesses.

Figure 11: Disclosure of Scope 1 and Scope 2 GHG emission



Why this matters

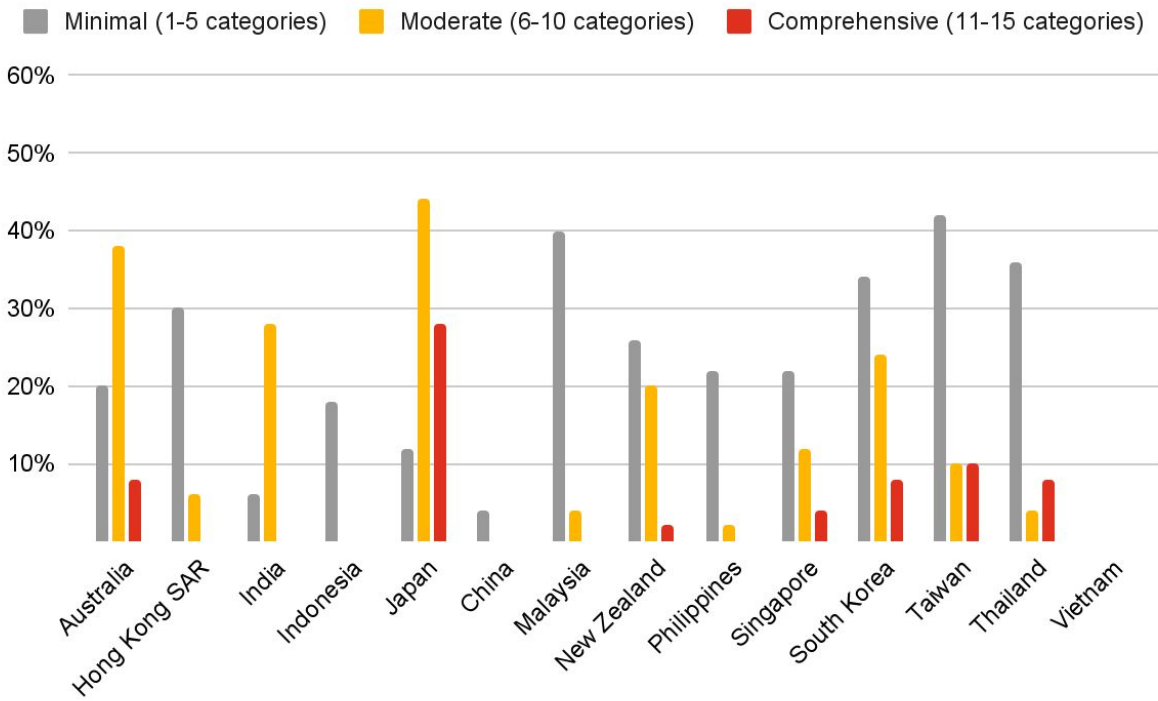
The TCFD has recommended the disclosure of Scope 1, Scope 2 and if appropriate, Scope 3 greenhouse gas emissions and the related risks. Scope 1 covers direct emissions from a company; Scope 2 covers indirect emissions from electricity purchased and used; and Scope 3 covers all other indirect emissions from the value chain. Scope 3 emissions present an opportunity for organisations to influence GHG reductions in their value chain, and they can represent the largest source of emissions. GHG emissions should be calculated in line with the Greenhouse Gas Protocol methodology to allow for aggregation and comparability across organisations and jurisdictions. By understanding the GHG emissions better, organisations can direct their focus to important measures to help pave their transition to net zero.

State of practice

- 80% of the companies studied disclosed Scope 1 and 2 GHG emissions, while 50% of the companies disclosed Scope 3 GHG emissions. This is consistent with the TCFD recommendations.
- More than 50% of assessed companies listed in Japan (88%), South Korea (78%), Australia (76%), Taiwan (74%), New Zealand (64%), India (62%) and Thailand (60%) disclosed Scope 3 GHG emission.
- Comparing across industries, more than 50% of assessed companies in Communication Services industry (51%), Information Technology industry (52%), and Utilities industry (53%) disclosed Scope 3 GHG emissions.
- There is an expected rise in Scope 3 GHG emissions disclosure with the recent ISSB proposed standards for a company to disclose on Scope 1, Scope 2 and Scope 3 GHG emissions.



Figure 12: Level of disclosure of Scope 3 GHG emission



Note: Base for "level of disclosure of Scope 3 GHG emission is companies which disclosed Scope 3 GHG emission.

Why this matters

In October 2022, the ISSB has voted unanimously to require companies to include Scope 3 GHG emissions disclosures during their refinement of the proposed sustainability-related disclosure standards. This new Standard will become effective on 1 January 2024 with early adoption permitted. There will be a one-year temporary exemption for Scope 3 reporting. The GHG Protocol defines 15 categories of Scope 3 emissions, with sources including emissions both upstream and downstream of the organisation's activities. In order to meet the Protocol standards, companies are required to report emissions from all relevant Scope 3 categories.

State of practice

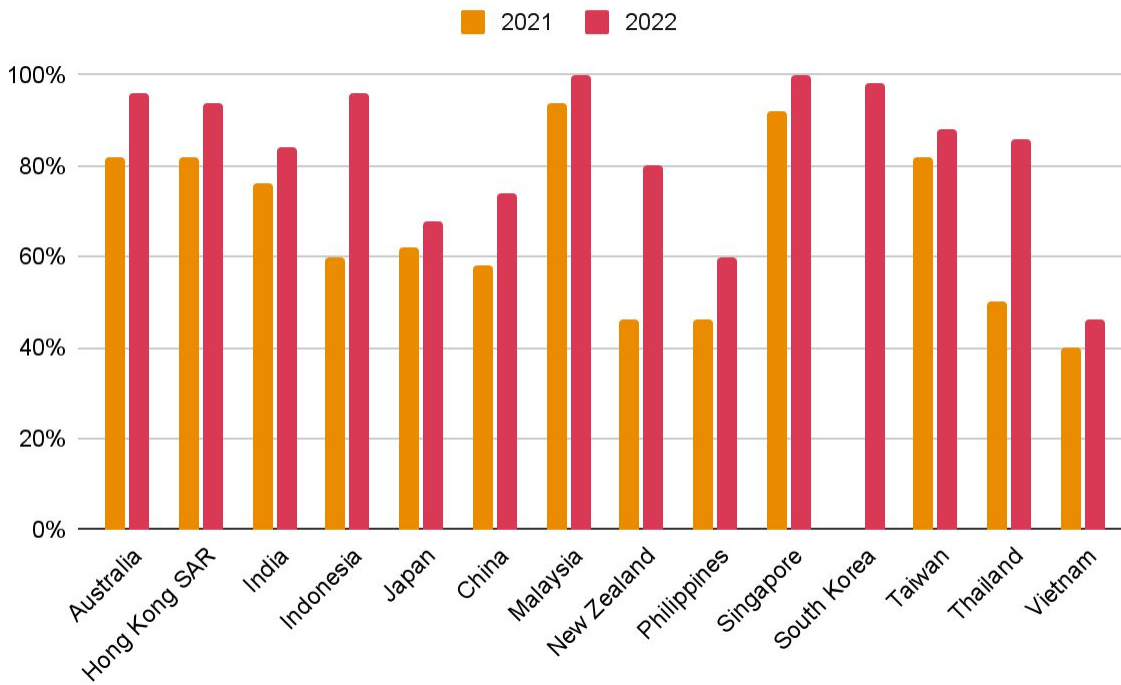
- Among companies that disclosed Scope 3 GHG emission, 22% carried out a minimal level of disclosure of Scope 3 GHG emissions calculation; 14% carried out a moderate level of disclosure, and 5% carried out a comprehensive level of disclosure.
- 18% of companies did not disclose categories contributing to Scope 3 GHG emission, though these companies disclosed overall Scope 3 GHG emission.
- When looking at industries with more than 50% of companies disclosing Scope 3 GHG emissions – namely the Communication Services industry, the Information Technology industry and the Utilities industry – level of disclosure is mostly minimal.





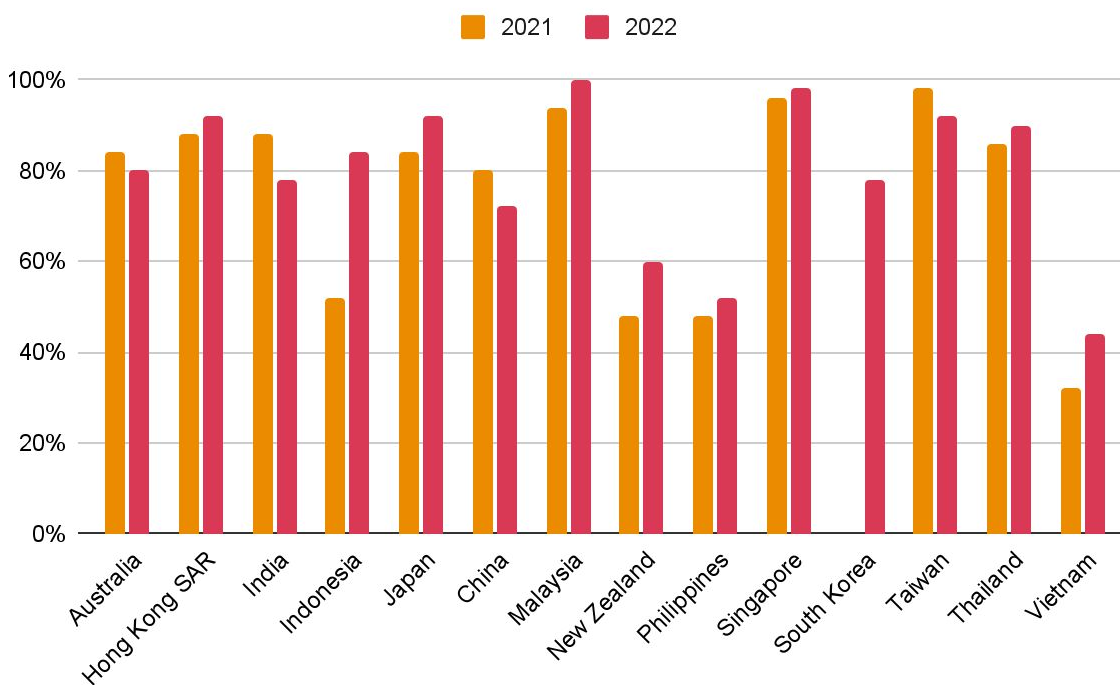
Governance and responsibility

Figure 13: Disclosure of BOD responsibility on sustainability



Note: 2021 data for South Korea is not available.

Figure 14: Disclosure of sustainability governance structure



Note: 2021 data for South Korea is not available.





Why this matters

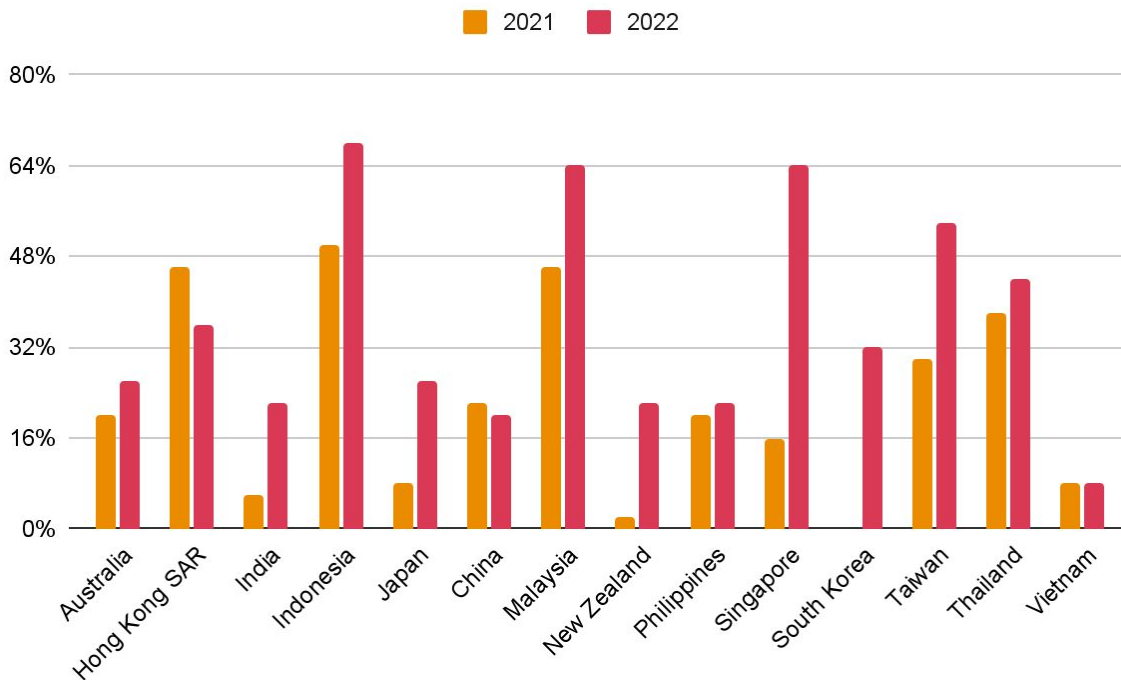
The BOD is key in ensuring oversight of ESG factors and embedding sustainability into the decision making and long-term growth strategy of an organisation. This provides confidence that the necessary resources are allocated to ensure ESG considerations are prioritised throughout the organisation. An appropriate sustainability governance structure is also key to support the Board in their role of overseeing the organisation's sustainability goal and strategies.

State of practice

- In 2022, 84% of the companies studied have disclosed their BOD responsibilities on sustainability. The disclosure rate for the 13 jurisdictions (except South Korea) is 82% in 2022, a 15% increase from 67% in 2021.
- In 2022, 6 jurisdictions have more than 90% of companies studied disclosing the BOD responsibility on sustainability: Malaysia (100%), Singapore (100%), South Korea (98%), Australia (96%), Indonesia (96%) and Hong Kong SAR (94%).
- It is encouraging to see that the disclosure rate of BOD responsibility in all the jurisdictions across the Asia Pacific has increased from 2021 to 2022, with the most evident increase coming from Indonesia, New Zealand and Thailand. Indonesia and Thailand have recently mandated sustainability reporting / ESG performance reporting and published sustainability reporting guides (2021 for Indonesia, 2022 for Thailand). New Zealand's increase in disclosure is aligned with its increase in sustainability reporting maturity. Although the increase cannot be pinpointed to one reason as the requirements of sustainability reporting did not include specific reporting components, such regulation and guidelines could influence increased disclosures.
- Across Asia Pacific, 79% of the companies disclosed their sustainability governance structure.
- The top 5 jurisdictions that have more than 90% of the companies studied disclosed sustainability governance structure: Malaysia (100%), Singapore (98%), Hong Kong SAR (92%), Japan (92%) and Taiwan (92%).
- Indonesia had the largest increase in companies disclosing their sustainability governance structure, from 52% in 2021 to 84% in 2022; followed by New Zealand and Vietnam with a 12% increase, respectively.
- Australia, India, China and Taiwan had a slight decrease (less than 10%) in companies disclosing their sustainability governance structure.



Figure 15: Disclosure of BOD/ management with sustainability training



Note: 2021 data for South Korea is not available.

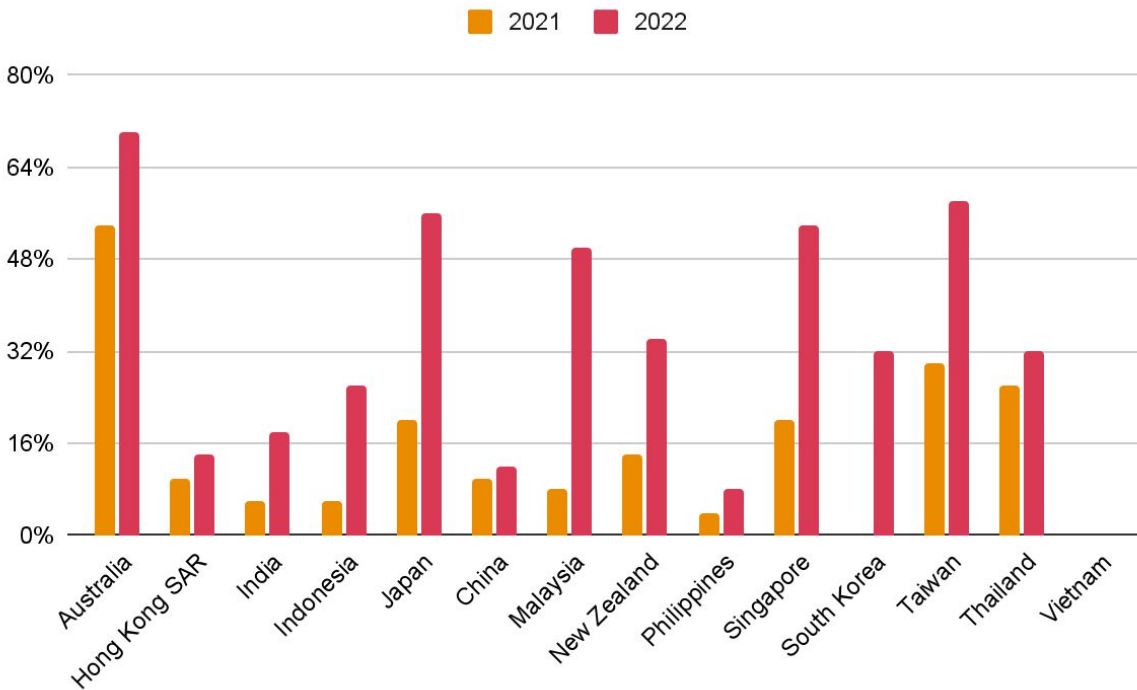
Why this matters

BOD upskilling is essential for them to effectively carry out their roles in overseeing the companies' sustainability progress, direct long-term strategy and corporate governance. In addition, incorporating sustainability into executive performance-related remuneration can be an effective strategy to incentivise top executives to foster alignment of sustainability targets throughout the company.

State of practice

- In 2022, only 36% of the BOD or management of the companies studied have attended or received sustainability training. The disclosure rate for the 13 jurisdictions (except South Korea) is 37% in 2022, a 13% increase from 24% in 2021. There is still room for improvement in sustainability training for BOD or management.
- In 2022, Indonesia (68%), Malaysia (64%), Singapore (64%), Taiwan (54%) and Thailand (44%) have higher than average of companies with BOD or management that have attended or received sustainability training.
- It is notable that there is a huge increase – from 16% in 2021 to 64% in 2022 – for Singapore-listed companies, regarding the disclosure rate of BOD or management that have attended or received sustainability training. This might have resulted from SGX's mandatory requirement that companies are required to provide a confirmation that their directors have attended sustainability training in their sustainability report.

Figure 16: Disclosure of remuneration linked to sustainability performance



Note: 2021 data for South Korea is not available.

Why this matters

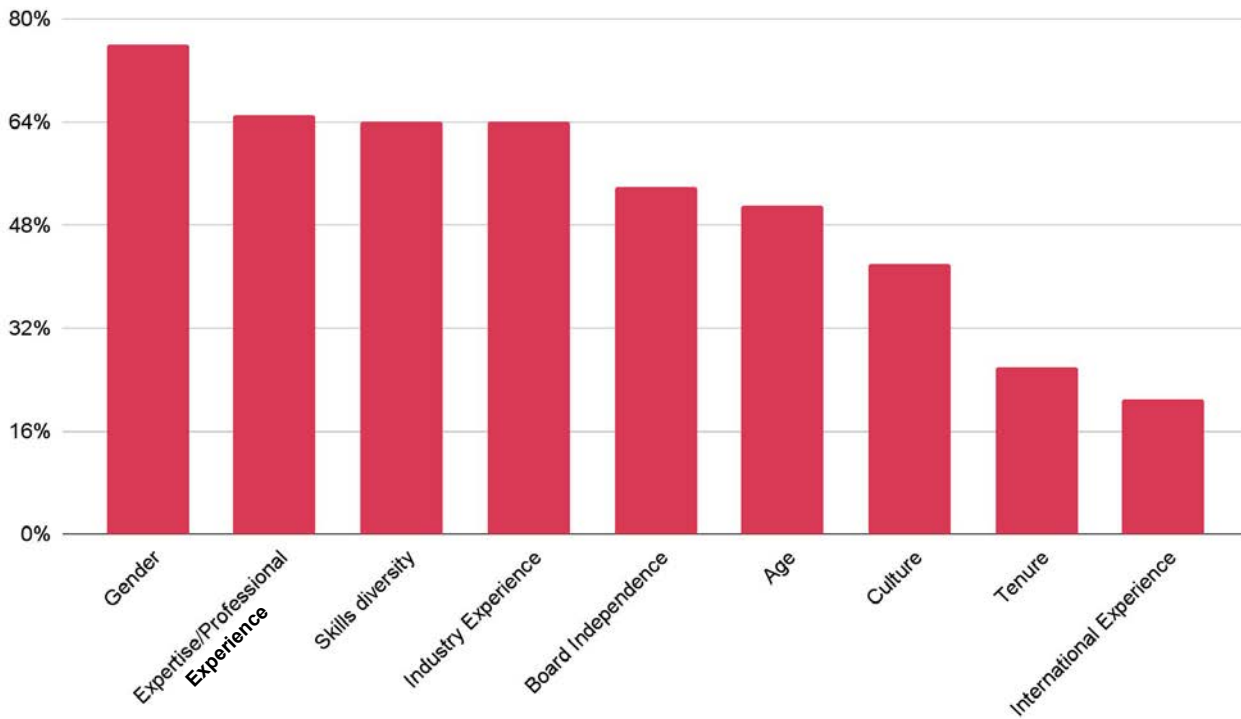
Linkage of ESG performance to executive remuneration aligns sustainability performance and behaviours with sustainability targets.

State of practice

- In 2022, 33% of companies studied have disclosed the linkage of top executive remuneration to their sustainability performance. The disclosure rate for the 13 jurisdictions (except South Korea) is also 33% in 2022, a 17% increase of 16% from 2021. This indicates that more and more companies perceive sustainability as an important component when determining executives' remuneration.
- In 2022, a majority of the companies from Australia (70%), Taiwan (58%), Japan (56%), Singapore (54%) and Malaysia (50%) have linked sustainability performance to their top executive remuneration.
- It is also notable that there is a huge increase – from 8% in 2021 to 50% in 2022 – for Malaysia-listed companies, regarding disclosure of executives' remuneration linked to sustainability performance.



Figure 17: Disclosure of board diversity aspects



Why this matters

A diverse board composition, which provides a wide range of demographics aspects in the boardroom, is found to significantly improve the efficiency of the Board and allow perspectives that are fresh and holistic. While currently there are no mandates to increase diversity on corporate boards in Asia Pacific, it is common in other jurisdictions such as Norway and France where they have laws requiring women to comprise at least 40% of boards at publicly listed companies (PLCs). In addition to gender diversity, this study examines both social diversity and professional diversity, which are equally important. Social diversity spans gender, age, cultural diversity and professional diversity. It also includes expertise, industry experience, board independence, tenure and international experience.

State of practice

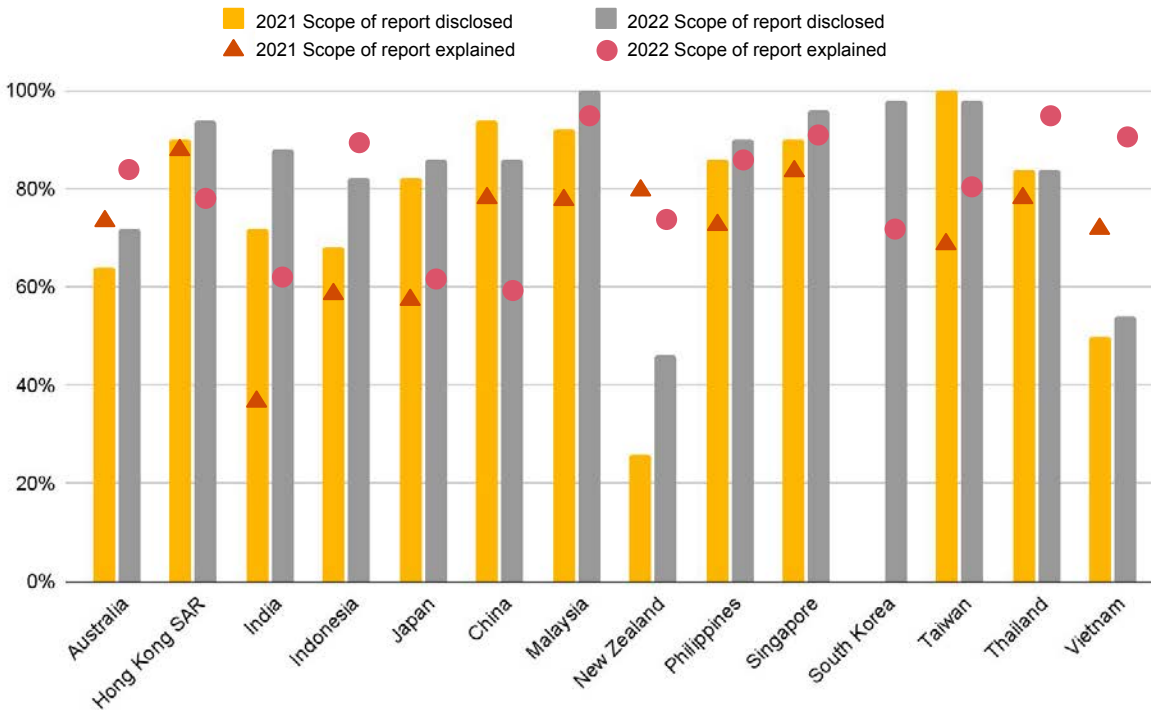
- Across Asia Pacific, 78% of the companies studied disclosed that they maintain at least one aspect of diversity in the board of directors.
- The diversity composition disclosed showed that gender diversity (76%) is highly regarded in the companies studied, followed by expertise/ professional experience (65%), industry experience (64%) and skills (64%).



Building trust

▲ 2021 Scope of report explained

Figure 18: Disclosure of reporting scope



Note: 2021 Data for South Korea is not available; base for "Scope of report disclosed" is all companies; base for "Scope of report explained" is companies which disclosed scope of report.

Why this matters

Disclosure of reporting scope gives transparency over what is included in the sustainability report and highlights any limitations. This includes whether the sustainability reports state the coverage of operating sites, industry activities, industrial assets, and whether the report explains how the scope was decided. Such information is critical given the evolving maturity of sustainability reporting and also to provide better context for readers and stakeholders.

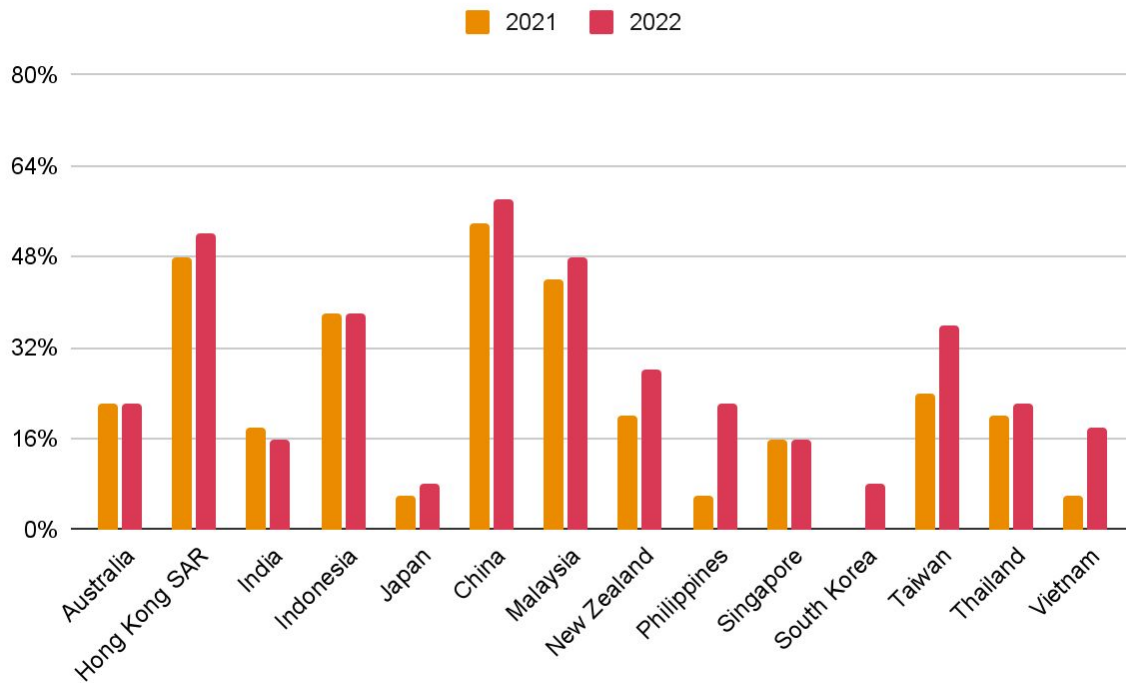
State of practice

- Across Asia Pacific, 84% of the companies studied have disclosed their scope of report. 71% of the companies studied went further to explain their scope of report.
- The top 5 jurisdiction with disclosure of reporting scopes are Malaysia (100%), South Korea (98%), Taiwan (98%), Singapore (96%) and Hong Kong SAR (94%).



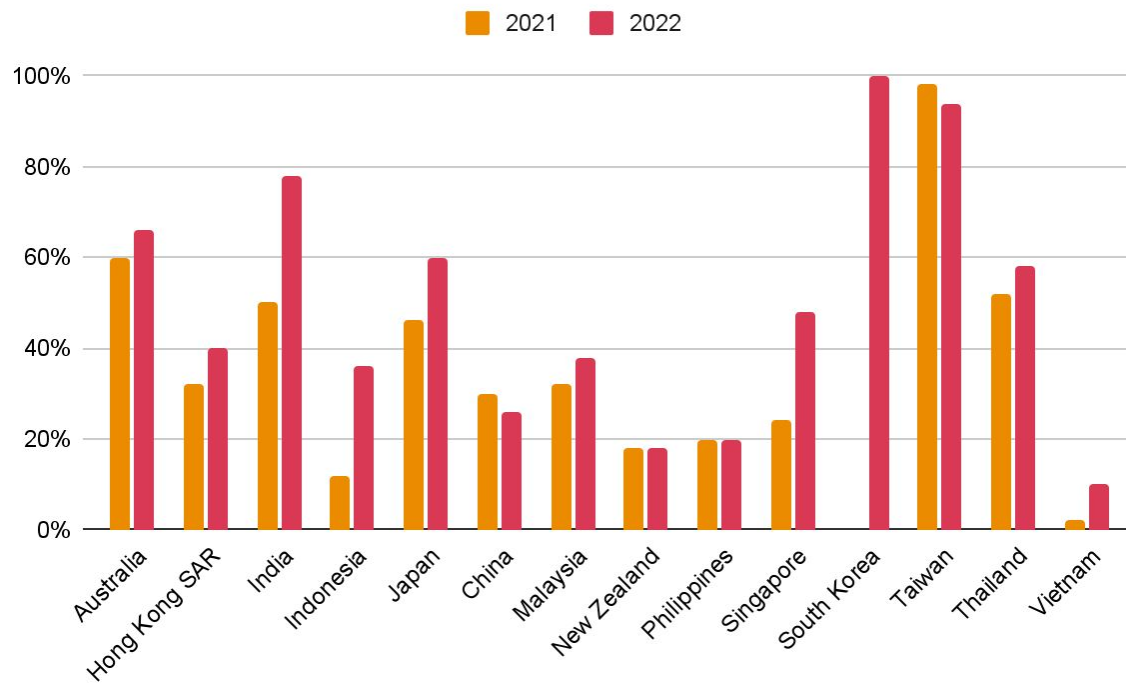


Figure 19: Disclosure of internal review / assurance



Note: 2021 data for South Korea is not available.

Figure 20: Disclosure of external assurance



Note: 2021 data for South Korea is not available.



Why this matters

Sustainability reporting assurance is essential to ensure the accuracy and credibility of the published report which builds trust in ESG disclosures and increases confidence between stakeholders and organisations. Assurance can also prevent risks associated with inaccurate disclosures, which might result in financial and non-financial penalties or sanctions for non-compliance with the disclosure obligations of the respective jurisdiction. It also equips management and shareholders with the confidence in the organisation's performance over the reporting period.

State of practice

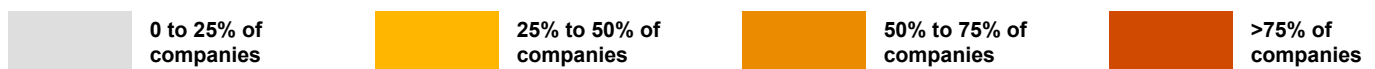
- Internal review / assurance - companies are considered to have internal review / assurance if the report disclosed that it has been internally reviewed and approved by board members, the company's sustainability committee and/or the internal auditors:
 - In 2022, 28% of companies across the Asia Pacific have carried out internal assurance, with China demonstrating the highest internal assurance rate (58%).
 - The internal assurance rate for the 13 jurisdictions (except South Korea) is 30% in 2022, a 5% increase from 25% in 2021.
- External assurance - companies are considered to have external assurance if the report disclosed that it has been assured by an independent assurance provider:
 - In 2022, 49% of companies studied have carried out external assurance, with South Korea having the highest external assurance rate (100%).
 - The external assurance rate for the 13 jurisdictions (except South Korea) is 46% in 2022, a 9% increase from 2021 (37%), indicating that more and more companies seek for external assurance to build their credibility.
 - Although the KRX requirement in sustainability reporting for certain-sized companies will only start from 2025, it is encouraging to see that all South Korea-listed companies in our study went a step further to carry out external assurance on their sustainability reports. This can be understood from a consumer and stakeholders' point of view where sustainable products and businesses are gaining attention and companies are improving their transparency and quality of their sustainability disclosure.





Figure 21: Disclosure of levels of external assurance and frameworks used for external assurance

Disclosure of level of assurance		
Jurisdiction	Lower level of assurance	Higher level of assurance
Overall	69%	10%
Australia	84%	16%
Hong Kong SAR	70%	30%
India	45%	12%
Indonesia	57%	0%
Japan	97%	0%
China	92%	0%
Malaysia	69%	0%
New Zealand	57%	0%
Philippines	91%	0%
Singapore	96%	4%
South Korea	60%	8%
Taiwan	57%	26%
Thailand	73%	3%
Vietnam	57%	29%



Note: Base for "level of assurance" is companies which has been externally assured.

Lower level of assurance includes limited assurance under International Standard on Assurance Engagements 3000 (Revised), Assurance Engagements Other than Audits or Reviews of Historical Financial Information (ISAE 3000), International Standard on Assurance Engagements 3410, Assurance Engagements on Greenhouse Gas Statements (ISAE 3410) or ISO 14064-3:2019 Greenhouse gases — Part 3: Specification with guidance for the verification and validation of greenhouse gas statements (ISO 14064-3) and moderate assurance under AA1000 Assurance Standard (AA1000AS). Here, lower level of assurance provides users with a relatively lower level of confidence. The procedures conducted vary in nature and timing, and are less in extent, than a reasonable or high assurance engagement.

Higher level of assurance includes reasonable assurance under ISAE 3000, ISAE 3410 or ISO 14064-3 and high assurance under AA1000AS. Here, higher level of assurance provides users with a relatively high level of confidence but not absolute level of assurance. This is a level similar to that of a financial statement audit. Such assurance requires different nature and extent of procedures, and requires more detailed understanding of the underlying processes and controls.



Why this matters

For companies that have external assurance, some may opt for different levels of assurance on different aspects of the companies' ESG information. According to PwC's Global Investor Survey 2022, investors value assurance as a way to give them confidence in corporate reporting on sustainability. Top of their list is reasonable assurance, which is the same level as the financial statement audit. There is also an increasing expectation from regulators, such as in the EU and the US, for organisations to obtain "higher level" of assurance.

State of practice

- Across Asia Pacific, the most common assurance level is limited assurance, followed by moderate assurance.
- Commonly used assurance framework includes: ISAE 3000, ISAE 3410, AA1000AS, and ISO 14064-3.





Views from leaders: Going beyond compliance

The sustainability reporting journey at Westports began with our investors' request. We note that stakeholders, including investors, play a key role as one of the driving factors for companies to embark on sustainability measures including sustainability and climate reporting. Many companies have generally embarked on sustainability-related activities such as corporate social responsibility activities, but these were not formally reported. Therefore, when Westports began our own, it was surprising that we had generally aligned to a large number of the Sustainable Development Goals (SDGs).

As a port operator, we are cognisant that Westports is not sheltered from climate change. The TCFD framework is a useful tool to help companies analyse the climate risks and opportunities on their business. Climate scenario analysis can be complex and therefore it is important for companies to be transparent with regards to the assumptions that are included in the calculations. Clear communication and narratives are key to helping stakeholders understand how the analysis might change should a different set of assumptions were applied.

With the various different standards and frameworks available, there is a tendency for sustainability reports to be lengthy. As we see a trend of artificial intelligence (AI) tools analysing sustainability reports, therefore, over and above addressing the GRI requirements, we summarised the salient sustainability metrics at the outset of the sustainability report. We felt that such a summary would allow for better analysis by the AI tools and users of the sustainability report.

Whilst sustainability reporting standards are emerging and maturing, the intermediary layer between the companies and stakeholders is the rating agencies. We do observe that there is generally a strong reliance on ESG ratings. How the ESG rating agencies assess sustainability reporting standards and frameworks (including the quality of the data) for their rating methodology is critical, as investors and other stakeholders may rely on them.

Sustainability reporting and ratings should go beyond compliance aspects, they should be a means to improve the companies' business and operations holistically.

Shamsul Afif Bin Abdul Waris
Special Officer to the Group Managing Director

Chang Kong Meng
Head of Investor Relations
Westports Holdings






05

Addressing sustainability reporting challenges





Views from leaders: Make sustainability reporting a priority and foster a culture which advocates cross-sharing of sustainability-related knowledge and experiences

Sustainability reporting is not just a box-ticking exercise. In assessing and ranking our material ESG issues, it is important to engage our key stakeholders actively to understand their concerns, priorities and expectations on ESG issues as well as their views on our performance. Having transparent disclosures in our sustainability report is useful in helping stakeholders understand our key sustainability risks and monitor our progress against goals and targets.

There is a growing demand by stakeholders for more transparent and comparable reporting on companies' sustainability information. By adopting sustainability standards and frameworks such as GRI, TCFD and SDGs, we ensure our sustainability reporting is in line with internationally recognised standards and frameworks and this also helps facilitate comparison by stakeholders. In response to climate change, we recognised that it is critical to identify climate-related risks and opportunities and the potential impact on our business, strategic and financial planning. We incorporated this analysis into our first TCFD report which was released this year, with a view to ultimately cultivating a capability to address climate issues in the long term and enhance climate resilience as well as calling on all sectors to work together to promote carbon neutrality.

In order to strengthen sustainable development management and benchmark against the international standard, Fosun also joined the UN Global Compact in 2014, fully supporting the ten principles of the UN Global Compact and continuously promoting their close integration with its own ESG strategies and actively engaging its member companies in the implementation of ESG strategies.

One of the key challenges we face is the need to consider and implement different reporting requirements as we have presence in various countries/regions such as China, US, UK, and Europe. Building up ESG capability and upskilling of employees are critical to ensure that employees are kept up to date with the latest local and global sustainability reporting developments. We implemented various sustainability-related initiatives such as launching ESG culture week and organising trainings and seminars to improve our ESG capabilities. We also organised ESG global network sessions with our more advanced counterparts in Europe and UK, and these exchanges helped us understand the latest ESG reporting trends globally and enable cross-sharing opportunities.

As sustainability reporting continues to evolve rapidly with increasing requirements expected ahead, it is crucial for companies to prepare early and put in place plans and actions to address these requirements.

Placing ESG as a priority is important in fostering a culture where people are committed to ESG efforts. We adopt a top-down mechanism with the Board bearing responsibility for ESG. We have also set up an ESG Board Committee and an ESG Executive Committee at the governance and decision-making levels separately to assist the Board in guiding and overseeing the Group's ESG development and implementation. It is also important to ensure the board members and directors are updated timely on ESG trends and developments in sustainability reporting. In addition, we have established an ESG Management Committee and an ESG Working Groups to share best practices and build open communication channels across companies within the Group.

Companies can benefit from opportunities and their commitments to create accountability and transparency in their sustainability reporting. ESG ratings are key considerations by investors when assessing their investment decisions. We ensure we have appropriate disclosures which are substantiated to meet the mainstream ESG rating agencies' expectations. External assurance can also help to further enhance credibility and increase stakeholders' confidence in the reported sustainability information.

Angel Sze

Company Secretary & Head of ESG Management Committee
Fosun International Limited



Sustainability reporting challenges

With the increasing demand for information, companies are constantly challenged with how to achieve a balanced reporting that meets the needs of their various stakeholders. A balanced reporting that will empower management and stakeholders with the information they need to allocate capital and make choices.

Unlike financial reporting, which started its development since hundreds of years ago, ESG reporting is still nascent. Companies are faced with the rapidly changing landscape of ESG reporting with a lot of moving parts as the standards and frameworks as well as laws and regulations surrounding it shapes up. In this chapter, we will discuss the ESG reporting challenges that companies are often presented with and how companies could potentially address them.

Top challenges

Quest for globally aligned reporting standards and interoperability

One of the biggest challenges with ESG reporting is the lack of standardisation. There is no universally accepted standards or framework for reporting, and companies may use different metrics and indicators to report their ESG performance. This lack of consensus has challenged the companies trying to prepare and report on their sustainability performance as well as the investors trying to understand the information and base decisions on it. The result? Companies are reporting more and more information, yet investors are still asking for 'more'.

While consolidation of the frameworks and standards has started in the recent years, the reporting challenges will continue if the standards are not interoperable, or unable to work together. Without interoperability, the shared goal of being able to compare the performance of organisations across borders won't be achieved.

Data collection and validation

Collecting and validating ESG data can be a challenge for companies. Unlike financial data, ESG data collection is much less established and is often not readily available. Companies may need to collect those data from multiple sources including those in the supply chain. Internally, ESG data often resides beyond the typical financial data owners, and they may not be familiar with a regular reporting regime like financial data owners. The internal reporting challenge is exacerbated by the varying level of ESG reporting maturity within the supply chain ecosystem is often one big hurdle for companies to obtain relevant information.

Additionally, validating the accuracy and completeness of those data can be difficult, time-consuming and resource intensive.

Integration with business strategy

ESG reporting should be integrated into a company's overall business strategy to ensure that it aligns with the company's goals and objectives. However, many companies struggle with this integration. This is often a result of tone from the top. When there is no sufficient buy-in or commitment from senior management or those charged with governance, ESG reporting is likely to be viewed as a separate initiative from core business strategy.

PwC's approach





PwC's approach

PwC's framework for designing or refining a sustainability reporting function and embedding into the business the data, controls and systems needed for high-quality, useful information.

Phase 1: Assess		Phase 2: Design		Phase 3: Implement and refine	
<p>Understand ESG reporting ambitions and requirements</p> <ul style="list-style-type: none"> Understand the company's purpose, wider ESG strategy and reporting aspirations and their interconnectivity Identify regulatory and voluntary sustainability reporting requirements <p>Identify and assess impacts, risks and opportunities</p> <ul style="list-style-type: none"> Identify ESG impacts, risks and opportunities Perform an ESG materiality assessment Perform benchmarking Identify the most relevant ESG rating agencies and accreditations 	<p>Assess maturity of current ESG reporting</p> <ul style="list-style-type: none"> Perform a maturity assessment over current ESG reporting, including people, process, technology and controls <p>Define the ESG reporting strategy and roadmap</p> <ul style="list-style-type: none"> Define the company's detailed ESG reporting strategy, including metrics and targets Identify gaps to drive recommendations and create a roadmap 	<p>Design oversight</p> <ul style="list-style-type: none"> Design ESG governance and operating model Align ESG key performance indicators (KPIs) to executive and management incentives Integrate ESG risks into the enterprise risk management framework 	<p>Design ESG reporting policies, processes and controls</p> <ul style="list-style-type: none"> Design and document ESG reporting policies and definitions, including data elements, data sources and topic-level roles and responsibilities Design and document ESG reporting processes and internal controls Design future state technology architecture, including vendor assessment and selection 	<p>Implement</p> <ul style="list-style-type: none"> Test the design of the systems, processes and/or controls Plan and deliver training curriculum to upskill and develop self-sufficiency Report progress against the company's wider ESG strategy and targets as well as comply with existing regulatory requirements 	<p>Refine reporting</p> <ul style="list-style-type: none"> Design a process to refine reporting as stakeholder needs change and regulation evolves





Key considerations to achieving reporting excellence

Selecting appropriate sustainability reporting standards

As the sustainability reporting standards and frameworks are still being developed and rapidly changing, there is no one-size-fits-all solution. We often see that companies take on one “base” reporting standards / frameworks and layering it with industry relevant guidelines or frameworks.

1. Understand the company’s purpose, wider ESG strategy and reporting aspirations and their interconnectivity

Companies could begin with identifying their key stakeholders, both internal and external. Start with what you need to know from a management perspective. Reporting shouldn’t just be for external consumption – it should help to make better decisions internally.

2. Identify regulatory sustainability reporting requirements

The developments in the regulation and policy space are critical considerations which companies need to keep a close eye on as standards and requirements are shifting rapidly. It is important not to be caught out by expectations that are growing fast.

3. Perform benchmarking

Although still rather nascent, many companies have started ESG reporting for a number of years now. Performing a benchmarking exercise against your peers or within your industry could be a good starting point to help companies decide on the most, or few most, suitable standards or frameworks to use.



Data – Unpacking the challenge

Good quality data is imperative to present the information in a useful way to decision makers. The following are steps that companies can take to improve data collection and validation:

1. Identify data gaps and create a roadmap to improve data collection

Frameworks and standards can help companies understand what information investors and other stakeholders are looking for. Standards such as GRI and SASB can help to determine the metrics that may be relevant in the industry that a company operates in.

2. Design and document ESG reporting processes and internal controls

ESG data often sits in various places in the business (areas that may not be subject to the same rigorous processes and controls as what we might see for financial reporting) and is hard to extract in a way that is helpful for real-time reporting. Some of the data might be manually developed or tracked, making it harder to verify.

Companies should begin at the function in which the data is produced. An effective control environment, including underlying processes and internal controls around where information originates and how it is reported, gives management comfort on its accuracy, completeness, and consistency. The rigour of reporting should be similar to financial statements reporting at a standard suitable for independent assurance.

As companies look at the control environment, it is important to establish a governance structure. Boards should understand who at the organisation is responsible for reviewing ESG information and how frequently reviews are conducted. Review of ESG disclosures typically occurs only during the annual preparation of sustainability report. Implementing regular periodic ESG data collection and review will help companies to identify missing ESG information early to enable them to retrieve the necessary data.



3. Design the data-to-reporting process, including data collection system

Companies may need to consolidate data from across various departments or at a global level. Unlike financial reporting, the use of IT systems to consolidate non-financial data is less common in organisations. A significant number of companies rely mainly on manual consolidation through spreadsheets which increases risks of inaccurate reporting. Collecting and verifying information is hard. Companies need to think about systems, not reports. To improve the efficiency and accuracy of the consolidation process, some organisations may choose to modify their existing IT systems, but that comes with an investment of money, time, and resources. As ESG reporting becomes more established, companies may consider implementing IT systems to help data collection, monitoring, and reporting. The investment and effort that goes into financial reporting and assurance is significant, and a similar level of rigour and assurance will be expected for non-financial information. It will help to start early on that journey.

Integrate ESG into the business strategy and risk management framework

The integration of ESG into business strategy, risk management processes and performance measurement through better reporting can bring cost savings, generate long-term value creation and inform investment decisions regarding technology, workforce planning, supply chain and asset acquisition or divestment, among others.

Companies can take the following three steps to improve integration:

1. Design the governance structure over ESG, including ESG reporting

Talented staff, capable of adapting to and driving significant change, will be pivotal to securing the sustained outcomes needed to inspire stakeholder trusts. PwC's report on empowered Chief Sustainability Officers (CSOs) showed that companies that scored an A- ESG rating or higher had an executive with at least some sustainability responsibility.

Companies can leverage their existing management-level disclosure committee in charge of financial reporting who has a long history of data stewardship. This cross-functional team which usually comprise individuals from operations, legal, internal audit, finance, and other business groups understands the importance of reporting to stakeholders including investors. They can help the company determine whether disclosures are accurate and complete to convey the company's messaging and are truly investor-grade. They can also achieve true integration of financial and non-financial reporting to unlock greater insights.

Companies need to instil discipline and rhythm of period-end reporting cycle as an oversight and performance monitoring tool, linking up strategy and reporting.

2. Align ESG KPIs to executive and management incentives

Companies can further embed the change by incentivising people to drive ESG behaviours. PwC's 2021 global investor survey showed that 68% of investors agree ESG performance measurements and targets should be included in executive pay arrangements.

As boards work to integrate ESG concerns into discussions of company strategy, many are also considering how to create the right incentives for achievement of ESG-related goals. Some companies are using a dozen or more different types of ESG metrics in their compensation plans. Which metrics are right for the company's executive team will depend on a number of factors including link between ESG goal and company strategy and scope of responsibility for metric within the organisation. Read more about what the board of directors need to know about aligning ESG KPIs to executive and management incentives in PwC's March 2022 report on ["Purpose driven leadership: the evolving role of ESG metrics in executive compensation plans"](#).

3. Plan and deliver training curriculum to upskill and develop self-sufficiency

In the rapidly changing landscape of sustainability, companies need to build internal agility to keep up with the changes. As ESG touches most aspects of the operations within an organisation, ESG knowledge needs to permeate within the entire organisation, starting with a board-level understanding of how the company can produce investor-grade ESG disclosures.





Views from leaders: Vital to link sustainability reporting strategy with business strategy, whilst maintaining open and regular stakeholder engagement

It's important for companies to understand key stakeholders' expectations and take practical actions to address their needs and concerns in a timely manner. For us, this includes embedding sustainability considerations in our business strategies and balancing the business, environment, and society impacts. This would allow for greater alignment and clarity in telling a convincing company's sustainability story.

With our investors' growing interest in more comprehensive disclosures based on TCFD, we took actions to incorporate the TCFD recommendations in our sustainability reporting to address our stakeholders' requirements. In implementing a sustainability framework such as TCFD which is new to us, one of the key challenges is the need to understand the various disclosure requirements, perform gap analysis, develop new analysis, and gather required data to comply with the requirements within a short timeframe. Engaging people with appropriate expertise and experience is critical and has helped us in expediting the implementation process.

Sustainability report is more than just a report. It is a medium for companies to convey their strategies and progress. It's important to pay attention to stakeholders' views, engage in open and regular communication and take practical steps to address their expectations and concerns promptly. A transparent and comprehensive sustainability report helps both stakeholders and management make informed business decisions. It can also result in numerous benefits such as securing new financing and lowering finance costs.

To expedite your sustainability reporting journey, benchmark against global players or peers and learn from more advanced countries and companies. You don't need to start from scratch, and it is an effective approach to keep track of the constantly evolving sustainability reporting climate.

In tackling more challenging reporting areas, we can seek appropriate assistance from the relevant experts to help accelerate the process and ensure effective and timely adoption of the sustainability standards and frameworks. Leveraging on digital tools available in the market is also useful.

With the various ongoing developments in sustainability reporting by different regulators and organisations, greater alignment and interoperability in the sustainability reporting standards is important. It will be good to have a common set of standards to aid preparers.

Antonius Ardian Bermana,
Chief of Risk, Strategy and Sustainability
PT Semen Indonesia (Persero)

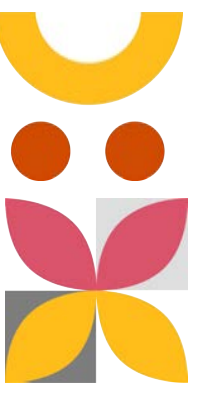




06

Appendices

- Sustainability reporting requirements across Asia Pacific
- Glossary of key terms, acronyms and abbreviations
- PwC sustainability-related thought leadership publications



Sustainability reporting requirements across Asia Pacific (Present and upcoming)

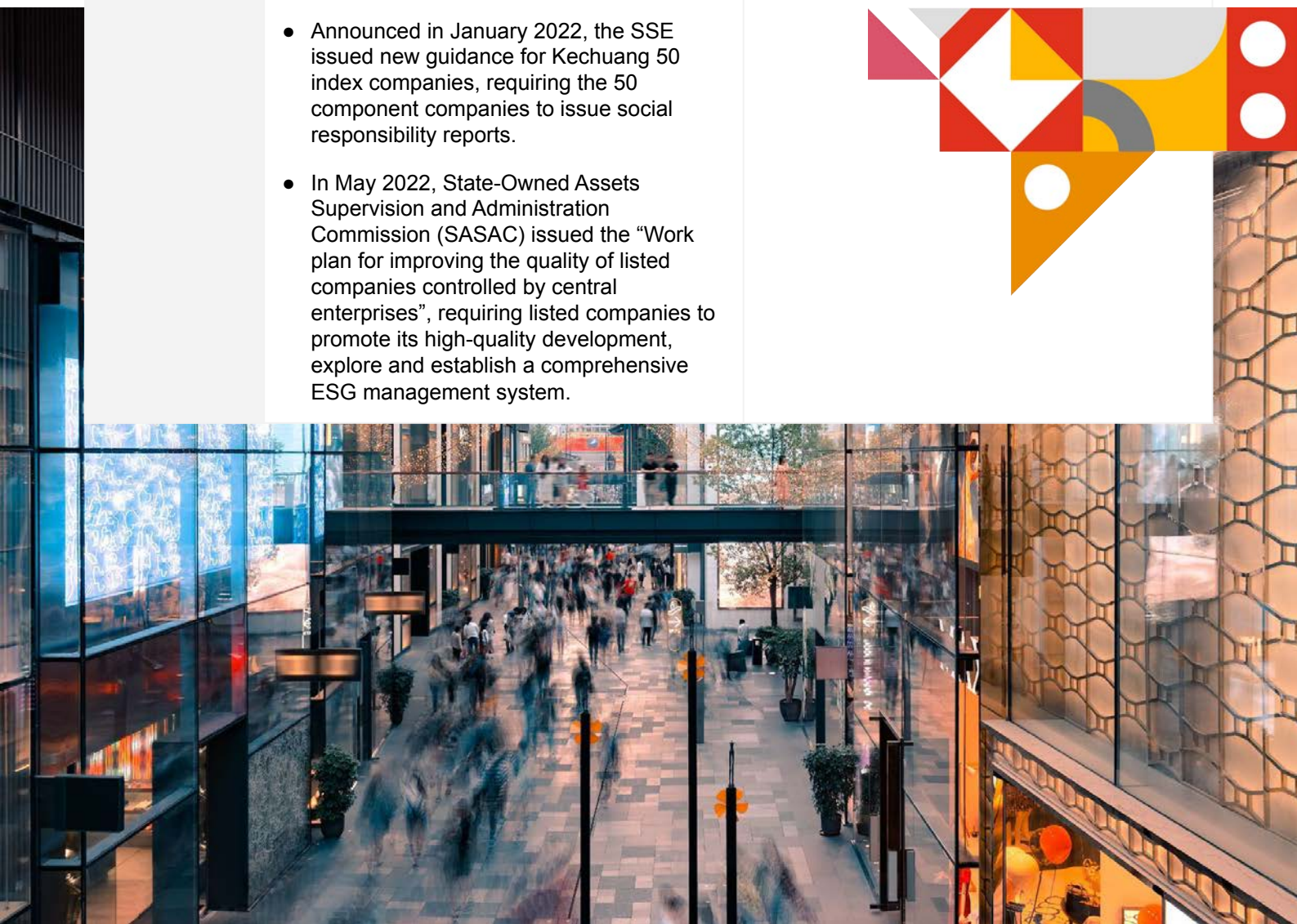
While many jurisdictions in Asia Pacific have no prescribed standard for sustainability reporting, we noted that many companies are currently using GRI for sustainability reporting. We also observed that many jurisdictions are placing more focus on climate and social issues and there has been increasing use of the TCFD framework for climate reporting.

Jurisdiction	Present	Upcoming
Australia	<ul style="list-style-type: none"> • There is currently no mandatory sustainability reporting. • However, corporate governance codes recommend disclosure of environmental and social risks for PLCs. Basis of corporate governance principles and recommendations follows 'if not, why not' approach. • Australian legal requirements require certain entities to disclose non-financial information related to specific federal acts, such as the Modern Slavery Act, the Workplace Gender Equality Act, or the National Greenhouse and Energy Reporting Act. • Australian Sustainable Finance Initiative (supported by Australian Prudential Regulation Authority (APRA) and Australian Securities & Investments Commission (ASIC)) issued the Australian Sustainable Finance Roadmap in 2020, listing out 37 recommendations across different timeframes. • APRA released its final Prudential Practice Guide CPG 229 (Climate Change Financial Risks) for banks, insurers, and superannuation trustees on managing the financial risks associated with climate change. 	<ul style="list-style-type: none"> • Reforms announced in December 2022, which will establish a federal Environmental Protection Agency (EPA) and will impose legally binding standards across all environmental decisions. Draft legislation is planned to be completed by middle of 2023, ready for introduction to parliament before the end of the year. • A climate-related financial disclosure consultation paper was issued in December 2022, which may require certain listed entities with size thresholds currently being consulted on, in addition to large FIs, to make such disclosures as early as FY 2024-2025. Climate-related reporting will be in alignment with the TCFD framework. • APRA is in the process of updating its prudential guidance on Investment Governance for Superannuation Funds to include ESG considerations.



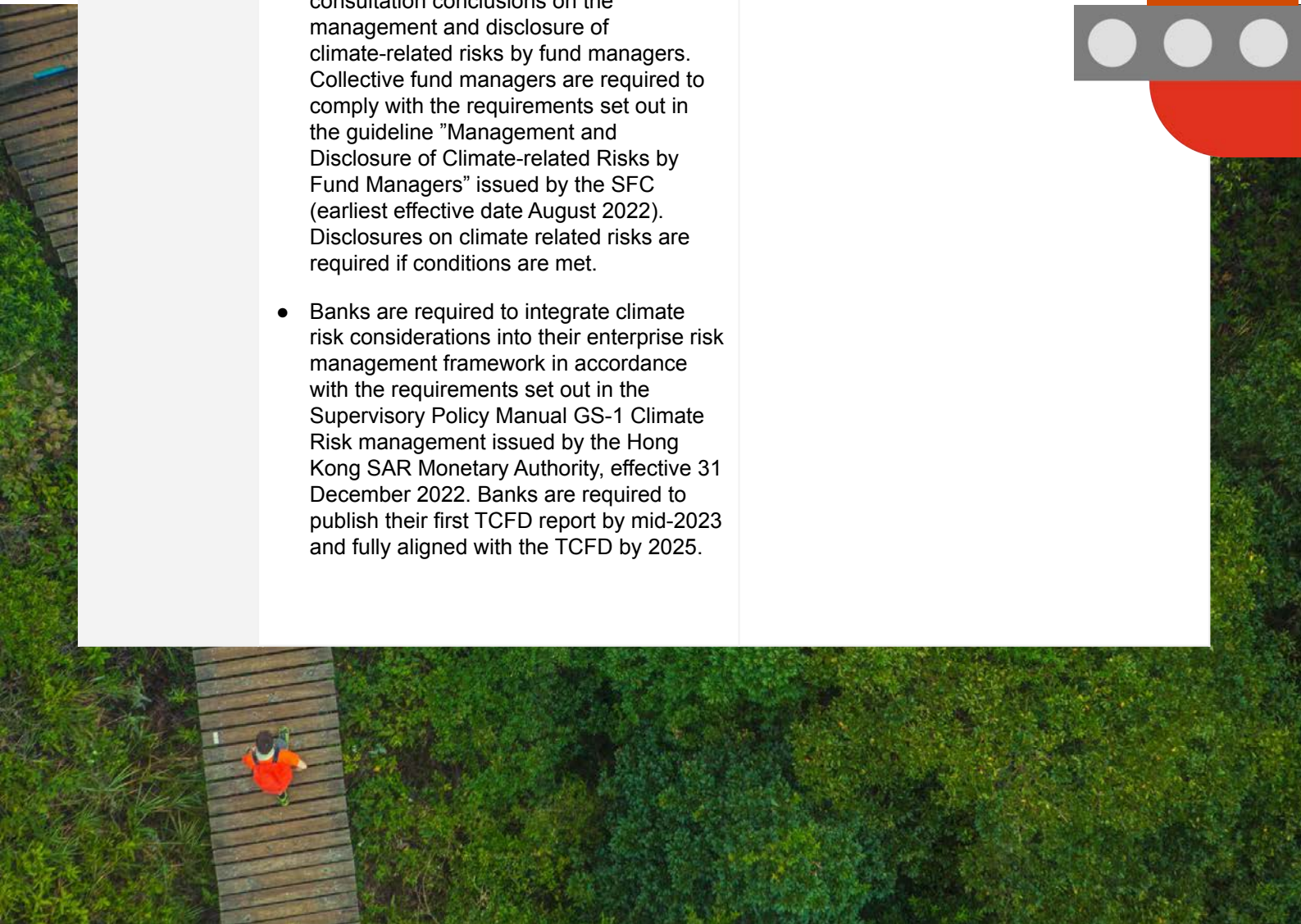
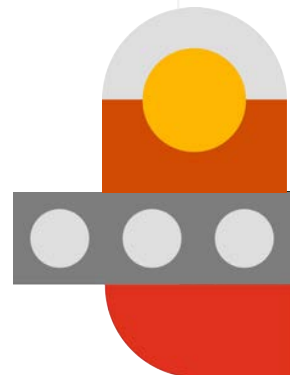


Jurisdiction	Present	Upcoming
China	<ul style="list-style-type: none">• CSRC announced new guidelines in June 2021 for PLCs to add 'Environmental and Social Responsibility' sections in their half year and annual reports.• CSRC encourages companies to voluntarily report their carbon emissions, carbon reduction measures, impacts on biodiversity, risk posed by social issues, poverty alleviation and rural revitalisation.• In December 2021, the Ministry of Ecology and Environment of China released the "Measures on the Management of Environmental Information Disclosure for Companies" regulation which has come into force on 8 February 2022. The measures apply to key pollutant emission sources / corporates and companies with requirements for clean production audit.• Some local authorities, such as those in Shanghai and Shenzhen, have also issued guidance on corporate sustainable development and social responsibility.• Announced in January 2022, the SSE issued new guidance for Kechuang 50 index companies, requiring the 50 component companies to issue social responsibility reports.• In May 2022, State-Owned Assets Supervision and Administration Commission (SASAC) issued the "Work plan for improving the quality of listed companies controlled by central enterprises", requiring listed companies to promote its high-quality development, explore and establish a comprehensive ESG management system.	<ul style="list-style-type: none">• The MOF of the People's Republic of China is a member of the ISSB's Jurisdictional Working Group, along with the US SEC, European Commission, EFRAG, Japan FSA, Sustainability Standards Board of Japan (SSBJ), United Kingdom Financial Conduct Authority (FCA) and United Kingdom Financial Reporting Council (FRC), and has provided significant input to the ISSB's standard-setting process. MOF of the People's Republic of China is also a member of Sustainability Standards Advisory Group alongside standard-setters of other jurisdictions.





Jurisdiction	Present	Upcoming
Hong Kong SAR	<ul style="list-style-type: none">● HKEX listing rules include the ESG Reporting Guide. There are two levels of disclosure obligations: (a) mandatory disclosures requirements; and (b) "comply or explain" provisions.● The largest update, effective for financial years commencing on or after 1 July 2020, requires companies to disclose additional ESG information.● HKEX requires listed companies to include ESG-related risks in the enterprise risk management assessment with effect from 1 January 2022.● The strategic framework for the development of green finance in Hong Kong SAR was first announced in 2018. In 2019, the Securities and Futures Commission (SFC) completed and published Results of the "Survey on Integrating ESG factors and Climate Risks in Asset management".● In August 2021, SFC published the consultation conclusions on the management and disclosure of climate-related risks by fund managers. Collective fund managers are required to comply with the requirements set out in the guideline "Management and Disclosure of Climate-related Risks by Fund Managers" issued by the SFC (earliest effective date August 2022). Disclosures on climate related risks are required if conditions are met.● Banks are required to integrate climate risk considerations into their enterprise risk management framework in accordance with the requirements set out in the Supervisory Policy Manual GS-1 Climate Risk management issued by the Hong Kong SAR Monetary Authority, effective 31 December 2022. Banks are required to publish their first TCFD report by mid-2023 and fully aligned with the TCFD by 2025.	<ul style="list-style-type: none">● HKEX launched a consultation on enhancement of climate-related disclosures under the ESG framework in April 2023. HKEX proposes to mandate all issuers to make climate-related disclosures in their ESG reports, and introduces new climate-related disclosures that are aligned with the ISSB Climate Standard. The consultation period is expected to close by 14 July 2023.



Jurisdiction	Present	Upcoming
India	<ul style="list-style-type: none"> ● Requirement to prepare Business Responsibility and Sustainability Report (BRSR) in respect of reporting on ESG for top 1,000 listed entities by market capitalisation from year ended 31 March 2023. ● IR may be adopted on a voluntary basis by the top 500 companies, which are required to prepare a BRSR. 	<ul style="list-style-type: none"> ● Some key mandates per SEBI board meeting in March 2023 are as follows: <ul style="list-style-type: none"> - Reasonable assurance on limited set of KPIs (called the BRSR Core) for the top 150 listed entities (by market capitalisation) from FY 2023-24 which shall be gradually extended to top 1000 listed entities by FY 2026-27. - ESG disclosures and assurance for BRSR core will be introduced for value chain of listed companies, with certain specified thresholds. - Disclosure and assurance for value chain will be applicable for top 250 listed companies (by market capitalisation) on a comply or explain basis from FY 2024-25 and FY 2025-26 respectively. - Identified parameters (that have an Indian context) to be considered by ESG rating providers for ESG ratings, aiding them in adopting a comprehensive and contextual approach. - ESG Rating Providers shall offer a separate category of ESG rating (i.e. Core ESG Rating) based on assurance parameters under BRSR Core. - Mandated certain measures for ESG schemes (ESG dedicated mutual funds) which include 3rd party assurance and certification by Board of Asset Management Company on compliance with objective of ESG scheme, enhanced disclosures on voting decisions on ESG, fund management commentary and case study etc. ● The Reserve Bank of India (RBI) has developed a discussion paper that paves the way for a framework (aligned with the TCFD) that requires regulated entities to disclose how climate risk is incorporated in their governance mechanism, strategy, risk management, and metrics and targets. ● RBI has released a notification “Framework for acceptance of Green Deposits”.

Jurisdiction	Present	Upcoming
Indonesia	<ul style="list-style-type: none"> ● Otoritas Jasa Keuangan (OJK) requires FIs and PLCs to publish sustainability reporting through POJK 51/POJK.03/2017, gradually starting 2019. ● Sustainability reporting is mandatory in the following phased manner: <ul style="list-style-type: none"> - Financial service institutions (large banks and foreign banks) (from 2019) - Financial service institutions (smaller banks, other non-bank financial service institutions, and listed companies) (from 2020) - Large credit unions and securities companies, public listed companies with medium-scale assets (from 2022) - Smaller credit unions, pawnbrokers, guarantee institutions and Islamic guarantee institutions, securities companies that do not administer customers' securities account, and public listed companies with small-scale assets, (from 2024) - Pension fund (from 2025) ● There are eight principles of sustainable finance in Indonesia stipulated by OJK, such as Responsible Investment, Management of Environmental and Social Risks, Informative Communications, Development of Priority Sectors, Sustainable Business Strategy and Practice, Governance, Inclusive, and Coordination and Collaboration. ● Guidance of sustainability reports are stipulated under SEOJK 16/SEOJK.04/2021 to guide companies in reporting their ESG performance. ● Besides sustainability reporting, banks are required to publish Sustainable Finance Action Plan, that includes their short-term plan (one year) and long-term plan (five year) annually. 	<ul style="list-style-type: none"> ● IDX became a TCFD supporter in June 2021 as part of its ambition to support sustainability in Indonesia's capital market.



Jurisdiction	Present	Upcoming
--------------	---------	----------

Japan

- The Revised Corporate Governance Code requires after 4 April 2022:
 - All companies listed on the TSE for general requirements.
 - Companies listed on Prime and Standard Markets for additional requirements under a comply or explain approach.
 - Japan's revised Corporate Governance Code additionally requires companies listed on Prime Market to meet the TCFD requirements after 4 April 2022.
 - Companies listed on the Prime Market to enhance the quality and quantity of disclosures based on the TCFD recommendations or an equivalent framework.
- The Japan FSA published the finalised amendments to the "Cabinet Office Order on Disclosure of Corporate Affairs" and other relevant and applicable cabinet office orders after public consultation on 31 January 2023. The amendment requires mainly listed companies in Japan with a fiscal year end of 31 March 2023 or later to additionally disclose corporate initiatives regarding sustainability in their Annual Securities Report.
- SSBJ under the Financial Accounting Standards Foundation (FASF) was established to contribute to both the development of the international and domestic sustainability disclosure standards and has submitted comments on the Exposure Draft of the IFRS Sustainability Disclosure Standard issued by the ISSB.
- The Disclosure Working Group (DWG) at Japan FSA published the DWG report with the future roadmap on 27 December 2022, and has planned to accelerate the disclosure enhancement based on its roadmap.





Jurisdiction	Present	Upcoming
Malaysia	<ul style="list-style-type: none">ESG reporting is required as a listing rule i.e., to disclose narrative statements of the management of material economic, environmental, and social risks and opportunities in annual reports.BM issued Sustainability Reporting Guide in 2015 (first edition), 2018 (second edition) and 2022 (third edition).The Malaysian Code on Corporate Governance was updated in 2021. One of the key updates includes guidance to strengthen board oversight and the integration of sustainability considerations in the strategy and operations of companies.In 2021, BNM released the Climate Change and Principle based Taxonomy (CCPT) to encourage the adoption of ESG principles in FIs.In June 2022, the Joint Committee on Climate Change (JC3) released the TCFD Application Guide for FIs.In September 2022, BM enhanced its sustainability reporting framework with requirement for climate change reporting for companies on Main and ACE markets, with implementation in a phased manner beginning financial year ending on or after 31 December 2023.Securities Commission Malaysia (SC) unveiled the Principles-Based Sustainable and Responsible Investment Taxonomy for the Malaysian Capital Market (SRI Taxonomy) in December 2022. It is aligned with the ASEAN Taxonomy for Sustainable Finance, Version 1 (ASEAN Taxonomy), released in November 2021.	<ul style="list-style-type: none">SC 5-year Capital Market Masterplan 3 (2021) reinforces its commitment to climate action.SC and BNM are assessing companies' readiness to meet the technical screening criteria under the Version 2 of the Asean Taxonomy for Sustainability Financing released in March 2023, which is set to take effect in early 2024.BM is working in collaboration with London Stock Exchange Group to develop a Centralised Sustainability Reporting Platform in 2023. This will help companies to disclose standardised common ESG data in a way that conforms to established global standards.The JC3 will continue to pursue these priorities in 2023:<ul style="list-style-type: none">Expand the use cases for the application of the Climate Change and Principle-based Taxonomy.Align the TCFD Application Guide for FIs with the ISSB disclosure requirements upon its finalisation.Develop a climate change training curriculum for FIs.BNM policy document on Climate Risk Management and Scenario Analysis (CRMSA) requires FIs to make climate-related disclosures aligned with TCFD together with financial reports for financial year beginning 1 January 2024.





Jurisdiction	Present	Upcoming
New Zealand	<ul style="list-style-type: none">• PLCs provide recommendations via an ESG guidance note through the New Zealand's Exchange corporate governance code to provide non-financial disclosures relating to environmental, economic, and social sustainability factors and practices.• TCFD reporting for large listed issuers and FIs to be mandatory for reporting years from 2023. This includes a requirement for external assurance on the GHG emissions component from 27 October 2024.• Large-listed companies, large registered banks, licensed insurers, credit unions, building societies and managers of investment schemes and some Crown FIs are required to report on the External Reporting Board (XRB)'s climate-related disclosures. The mandatory reporting regime takes effect for accounting periods that start on or after 1 January 2023.	<ul style="list-style-type: none">• Disclosures relating to greenhouse gas emissions (which includes Scope 1, 2 and 3 emissions) will be required to have independent assurance for accounting periods ending on or after 27 October 2024.
Philippines	<ul style="list-style-type: none">• PLCs are required to report on their contributions to sustainability topics either through a sustainability report that adheres to internationally recognised sustainability reporting frameworks and standards or SEC Philippines's reporting template. These reports should be submitted together with the companies' annual report.• The Sustainability Reporting Framework prescribed by the SEC Philippines is built on globally accepted standards and frameworks, particularly GRI Sustainability Reporting Standards, IIRC Integrated Reporting Framework, the SASB Sustainability Accounting Standards, and the TCFD recommendations.• The SEC Philippines followed a "comply and explain" approach from the 2019 reporting period. However, beginning 2023 (2022 reporting period), all PLCs are mandated to comply with the Sustainability Reporting Guidelines set by the regulator.	<ul style="list-style-type: none">• The SEC Philippines is also seeking to introduce voluntary and eventually mandatory reporting for non-listed companies.• The Bangko Sentra ng Pilipinas (BSP) has the following initiatives in the pipeline which include upcoming regulations covering the following areas:<ul style="list-style-type: none">- Conduct of climate risk stress testing by banks- Amendments to Disclosure Requirements under Circular No. 1085- Enhancements of prudential reports for data collection and surveillance analysis- Incentivised lending or financing of green or sustainable projects or activities- Development of sustainable finance taxonomy• The SEC Philippines is also preparing to adopt the IFRS Sustainability Disclosure Standards that are being developed by the ISSB, but the timeline and guidelines are under review and not yet finalised.





Jurisdiction	Present	Upcoming
Singapore	<ul style="list-style-type: none">• All companies listed on the SGX are required to comply with sustainability reporting on a 'comply or explain' basis (effective from 2017).• Mandatory climate and diversity reporting for Singapore listed companies (effective from 2022). Climate reporting is aligned to the TCFD framework. SGX recommends a list of 27 core ESG metrics for issuers to use as a starting point for sustainability reporting. Issuers are required to subject sustainability reporting process to internal review. Issuers have to disclose their board diversity policy and details such as diversity targets, plans, timelines and progress. All directors must go through prescribed sustainability training courses.• In September 2022, Monetary Authority of Singapore (MAS) and SGX launched the ESGenome Disclosure Portal to streamline sustainability reporting and enhance investor access to ESG data.• MAS requires all FIs in Singapore to have Environmental Risk Management disclosures (effective June 2022).• Nova!, part of the National Artificial Intelligence Programme in Finance, is aimed at helping FIs harness AI to generate insights on financial risk. In the initial phase, the programme will focus on enhancing the FIs' ability to assess companies' environmental impact and identify emerging environmental risks.	<ul style="list-style-type: none">• SGX has indicated its intention to work towards aligning its reporting requirements with the ISSB standards after they are finalised.• The Green Finance Industry Taskforce (GFIT) convened by MAS is developing a taxonomy to help FIs in Singapore by identifying activities that can be considered green or transitioning towards green. On 15 February 2023, the GFIT launched its final public consultation on a green and transition taxonomy for Singapore-based FIs. The third consultation builds on GFIT's two earlier rounds of consultations in January 2021 and May 2022. GFIT will publish the final taxonomy, which will take into account feedback from all three public consultations, by 1H 2023.• Sustainability Reporting Advisory Committee is working on developing a roadmap for implementation of sustainability reporting for Singapore-incorporated companies, beyond SGX-listed companies.



Jurisdiction	Present	Upcoming
South Korea	<ul style="list-style-type: none"> ● Disclosure of ESG-related matters is carried out through: <ul style="list-style-type: none"> – Korea Exchange Governance Reports (mandatory for large listed companies) – Environmental Information Reports (mandatory for large listed companies) – Sustainability Reports (voluntary) ● According to the Framework Act on Green Growth, companies which are subject to the national greenhouse gas target management system, are required to issue a report which includes disclosure of GHG emissions and energy volume on a regular basis. ● Disclosure of the Governance report has been mandatory for listed corporations on the securities market from 2019. ● In December 2021, the Ministry of Environment announced the Korean Green Classification System (K-Taxonomy) Guidelines. 	<ul style="list-style-type: none"> ● On 14 January 2021, the Financial Services Commission announced its plan to implement the third phase of the disclosure of the Sustainability Report. ● From 2025, ESG disclosures will become mandatory for companies with at least KRW 2 trillion in total assets. From 2030, mandatory ESG disclosures will be extended to all Korea Composite Stock Price Index (KOSPI) listed companies. ● The Korea Sustainability Standards Board is established in 2022 and its role is to prepare for the establishment of domestic sustainability disclosure standards and to contribute to the process of establishing international sustainability disclosure standards.





Jurisdiction	Present	Upcoming
Taiwan	<ul style="list-style-type: none">Taiwan Stock Exchange Corporation Rules require listed and OTC companies to prepare Sustainability Reports (ESG reports) referring to the latest GRI Standards published by GRI.There are sector-specific ESG disclosures and external assurance for listed food-related industry, chemical industry and financial services industries in ESG reports.Regulations governing ESG-related disclosures in annual reports are updated to require more specific and quantitative data.Taiwan Stock Exchange launched a new ESG disclosure platform for listed companies to make their disclosures and for investors and other interested parties to access the ESG information at the company or industry level.	<ul style="list-style-type: none">Corporate Governance 3.0 – Sustainable Development Roadmap, for reports issued in 2023 relating to the 2022 year, the threshold for ESG reporting is reduced from capital stock no less than NT\$5 billion to NT\$2 billion. Third-party assurance is also mandatory for certain industries.In addition to existing ESG reporting requirements, the inclusion of ESG disclosures with reference to the TCFD and SASB have also been added from 2023.Mandatory for bank and insurance industries to disclose climate-related financial information from 2023.Financial Supervisory Commission launched a phased plan requiring listed and OTC companies and their subsidiaries to complete Greenhouse Gas (GHG) inventories by 2027 and obtain verification by 2029.In March 2023, the Financial Supervisory Commission announced the Sustainable Development Action Plan (2023-2025).
Thailand	<ul style="list-style-type: none">The SEC Thailand Corporate Governance Code requires sustainability reporting with choices of framework, however GRI is common following SET guidance.In 2022, it is mandatory for all PLCs to report their ESG performance via Form 56-1 One Report (effective from the financial period ended 31 December 2021). The submission must be within three months as from the end of the financial report.	<ul style="list-style-type: none">On 17 November 2021, SET announced its support for the TCFD.SET has provided knowledge about the impact of climate change on business by conducting a series of TCFD and SDGs workshops which aim to promote a better understanding of how to address the economic risks and opportunities resulting from climate change and raise the bar in line with the TCFD international best practice of climate disclosures.
Vietnam	<ul style="list-style-type: none">The MOF of Vietnam requires public companies to publicly disclose social and environmental impacts and governance in their annual reports or stand-alone sustainability reports (certain information are not mandatory for FIs).Public companies are encouraged to apply the globally accepted reporting and disclosure standards in preparing their sustainability reports.	<ul style="list-style-type: none">In Decree 06/2022/ND-CP, the government has laid out a roadmap to build a national carbon market and has provided a framework for reporting on GHG emissions to build a database of GHG inventory.



Glossary of key terms, acronyms and abbreviations

Abbreviation	Definition
ACRA	Accounting and Corporate Regulatory Authority
AI	Artificial intelligence
APRA	Australian Prudential Regulation Authority
ASIC	Australian Securities & Investments Commission
ASX	Australian Securities Exchange
BM	Bursa Malaysia
BNM	Bank Negara Malaysia
BOD	Board of Directors
BRSR	Business Responsibility and Sustainability Report
BSE	Bombay Stock Exchange
BSP	Bangko Sentra ng Pilipinas
CCPT	Climate Change and Principle based Taxonomy
CDL	City Developments Limited
CDSB	Climate Disclosure Standards Board
CGS	Centre for Governance and Sustainability
COP	Conference of the Parties
COP15	United Nations Biodiversity Conference, the 15th meeting of the Conference of the Parties to the Convention on Biological Diversity
COP26	The 26th meeting of the Conference of the Parties to the United Nations Framework Convention on Climate Change, held in Glasgow
COP27	The 27th meeting of the Conference of the Parties to the United Nations Framework Convention on Climate Change, held in Egypt
CRMSA	Climate Risk Management and Scenario Analysis
CSRC	China Securities Regulatory Commission
CSRD	Corporate Sustainability Reporting Directive
DWG	Disclosure Working Group
EC	European Commission
ED	Exposure draft
EFRAG	European Financial Reporting Advisory Group
EPA	Environmental Protection Agency
ESG	Environmental, social and governance
ESRS	European Sustainability Reporting Standards
EU	European Union
FASF	Financial Accounting Standards Foundation
FCA	Financial Conduct Authority
FI	Financial Institution
FRC	Financial Reporting Council
FSA	Financial Services Agency
FY	Fiscal year
GFIT	Green Finance Industry Taskforce
GHG	Greenhouse Gas
GRI	Global Reporting Initiative
HKEX	Hong Kong Stock Exchange
HOSE	Ho Chi Minh Stock Exchange

Glossary of key terms, acronyms and abbreviations (continued)

Abbreviation	Definition
IDX	Indonesia Stock Exchange
IFAC	International Federation of Accountants
IFRS	International Financial Reporting Standards
IFRS S1	IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information
IFRS S2	IFRS S2 Climate-related Disclosures
IR	Integrated Reporting
ISO	International Organization for Standardization
ISSB	International Sustainability Standards Board
JC3	Joint Committee on Climate Change
KOSPI	Korea Composite Stock Price Index
KPI	Key performance indicator
KRX	Korea Stock Exchange
MAS	Monetary Authority of Singapore
MOF	Ministry of Finance
NFRD	Non-Financial Reporting Directive
NUS	National University of Singapore
NZSX	New Zealand Stock Exchange
OJK	Otoritas Jasa Keuangan
OTC	Over the counter
PIE	Public Interest Entities
PLC	Publicly listed company
PSE	The Philippine Stock Exchange
RBI	The Reserve Bank of India
SASAC	State-Owned Assets Supervision and Administration Commission
SASB	Sustainability Accounting Standards Board
SBTi	Science Based Targets initiative
SC	Securities Commission Malaysia
SDG	Sustainable Development Goal
SEBI	Securities and Exchange Board of India
SEC	Securities and Exchange Commission
SET	Stock Exchange of Thailand
SFC	Securities and Futures Commission
SGX	Singapore Exchange
SME	Small and medium-sized enterprise
SSBJ	Sustainability Standards Board of Japan
SSE	Shanghai Stock Exchange
SZSE	Shenzhen Stock Exchange
TCFD	Task Force on Climate-related Financial Disclosures
TNFD	Task Force on Nature-related Financial Disclosures
TSE	Tokyo Stock Exchange
TWSE	Taiwan Stock Exchange
US SEC	United States Securities and Exchange Commission
VRF	Value Reporting Foundation
XRB	External Reporting Board



PwC sustainability-related thought leadership publications



01 [Managing nature risks: From understanding to action](#)



04 [Green taxes and incentives can help businesses achieve ESG goals](#)



02 [Accelerating Business Action on Climate Change Adaptation](#)



05 [When the going gets tough, can Asia Pacific CEOs get ESG going?](#)



03 [PwC's Global Investor Survey 2022 - The ESG execution gap: What investors think of companies' sustainability efforts](#)



06 [ESG and Sustainability in 2023 - what you need to know](#)



About PwC

With offices in 152 jurisdictions and almost 328,000 people, we are among the leading professional services networks in the world. We help organisations and individuals create the value they are looking for, by delivering quality in Assurance, Tax and Advisory services.

We are a community of solvers combining human ingenuity, experience and technology innovation to deliver sustained outcomes and build trust. It all adds up to The New Equation.



About Centre for Governance and Sustainability, NUS Business School

The Centre for Governance and Sustainability (CGS) was established by the National University of Singapore (NUS) Business School in 2010. It aims to spearhead relevant and high-impact research on corporate governance and corporate sustainability issues that are pertinent to institutions, government bodies and businesses in Singapore and the Asia-Pacific. Spearheading thought leadership, CGS conducts public lectures, industry roundtables, and academic conferences on topics related to governance and sustainability. CGS is the national assessor for the corporate sustainability and corporate governance performance of listed companies in Singapore. In tandem with growing demands from consumers and investors that financial returns are achieved with integrity, backed with environmental and social considerations, CGS has a slew of research focusing on sustainability reporting in Asia Pacific, sustainable banking, nature reporting, and climate reporting in ASEAN. More information about CGS can be accessed at <https://bschool.nus.edu.sg/cgs/>.

For more than 50 years, NUS Business School has offered a rigorous, relevant and rewarding business education to outstanding students from across the world. Founded in the same year that Singapore gained independence, NUS Business School stands today among the world's leading business schools. It is distinctive for offering the best of global business knowledge with deep Asian insights, preparing students to lead Asian businesses to international success and to help global businesses succeed in Asia. The School attracts a diversity of smart and talented students to our broad portfolio of academic programs, including BBA, MBA, Executive MBA, MSc and PhD programs in addition to our customised and open enrolment Executive Education courses. Admission to NUS Business School is highly competitive, and we are proud of the exceptional quality of our students. For more information, please visit <https://bschool.nus.edu.sg/>.

Contacts

Lead authors

Fang Eu-Lin

Partner, Sustainability and Climate Change Practice Leader
Asia Pacific Centre for Sustainability Excellence Lead
PwC Singapore
eu-lin.fang@pwc.com

Professor Lawrence Loh

Director, Centre for Governance and Sustainability (CGS)
NUS Business School
National University of Singapore
bizlohyk@nus.edu.sg

Authors and CGS Research Project Team

Lim Lay Hsiah

Senior Manager, Assurance
PwC Singapore
lay.hsiah.lim@pwc.com

Indrie Tjahjadi

Senior Manager, Assurance
PwC Singapore
indrie.m.tjahjadi@pwc.com

Huang Minjun

Research Associate
CGS, NUS Business School
National University of Singapore
h.minjun@nus.edu.sg

Soon Wan Yi, Sabrina

Research Associate
CGS, NUS Business School
National University of Singapore
sabrina.soon@nus.edu.sg

Verity Thoi

Business Development Lead
CGS, NUS Business School
National University of Singapore
verity.thoi@nus.edu.sg

ESG leaders

Ivy Kuo

PwC Asia Pacific ESG Leader
ivy.ws.kuo@cn.pwc.com

Jon Chadwick

Partner, Sustainability Leader
PwC Australia
jon.d.chadwick@pwc.com

Amy Cai

Partner, ESG Managing Partner
PwC China
amy.cai@cn.pwc.com

Sambitosh Mohapatra

Partner, ESG Leader
PwC India
sambitosh.mohapatra@pwc.com

Yuliana Sudjonno

Partner, ESG Leader
PwC Indonesia
yuliana.sudjonno@pwc.com

Julian Smith

Partner, ESG Leader
PwC Indonesia
smith.julian@pwc.com

Toshiya Banno

Partner, Sustainability Centre of Excellence Executive Lead
PwC Japan
toshiya.banno@pwc.com

Yuki Isogai

Partner, Sustainability Centre of Excellence Lead
PwC Japan
yuki.isogai@pwc.com

Andrew Chan

Partner, Sustainability & Climate Change Leader
PwC Malaysia
andrew.wk.chan@pwc.com

Annabell Chartres

Partner, Sustainability & Climate Change Leader
PwC New Zealand
annabell.l.chartres@pwc.com

Alexander Cabrera

Partner, ESG Leader
PwC Philippines
alex.cabrera@pwc.com

Fang Eu-Lin

Partner, Sustainability & Climate Change Practice Leader
Asia Pacific Centre for Sustainability Excellence Lead
PwC Singapore
eu-lin.fang@pwc.com

Parul Munshi

Partner, Sustainability Leader, South East Asia Consulting
parul.v.munshi@pwc.com

Steven Kang

Partner, ESG Platform Leader
Samil PricewaterhouseCoopers, South Korea
steven.c.kang@pwc.com

Eliza Li

Leader of Sustainability and Climate Change Services
PwC Taiwan
eliza.li@pwc.com

Kulawal Supesuntorn

ESG Leader
PwC Thailand
kulawal.supesuntorn@pwc.com

Chris Suradejvibul

Partner, Sustainability and Climate Change
PwC Thailand
chris.suradejvibul@pwc.com

Dinh Thi Quynh Van

Partner, ESG Leader
PwC Vietnam
dinh.thi.quynh.van@pwc.com

Nguyen Hoang Nam

Partner, ESG Leader
PwC Vietnam
nguyen.hoang.nam@pwc.com



© 2023 PricewaterhouseCoopers. All rights reserved.

PwC refers to the PwC network and/or one or more of its member firms, each of which is a separate legal entity.

Please see www.pwc.com/structure for further details. This content is for general information purposes only, and should not be used as a substitute for consultation with professional advisors. The content of Section 2, 3 and the Appendices of this report is based on information available up till May 2023. The content of the study conducted in Section 4 is based on latest sustainability reports and annual reports available until January 2023.