Impact of climate change on financial statements

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Background

The impact of climate change on the financial statements is a high-profile issue. Investors and regulators are increasingly looking for evidence of how the entity has incorporated environmental, social and governance (ESG) matters and in particular climate-related risk factors when making estimates and judgements in the preparation of the financial statements. Climate-related risk could include both transition impacts, for example additional costs incurred by the entity as a result of transitioning to a low-carbon economy, or physical impacts, such as damage to assets as a result of fires and flooding.

The accounting standards have an overarching requirement to disclose information that users need for them to understand the impact of particular transactions, events and conditions on the entity's financial position and financial performance. Therefore, in light of the current focus on, and impact of, climate change, entities should ensure that they have assessed the impact of climate change on measurement of assets and liabilities, and what disclosures are necessary in this context for the financial statements to comply with SFRS(I)s. SFRS(I) 1-1 (112)(c)

This appendix discusses how climate change could affect certain measurements and therefore the related disclosures in the financial statements. It also outlines some of the relevant considerations when making estimates and judgements and drafting the relevant disclosures to satisfy the current SFRS(I) requirements. We have provided signposts throughout the main publication as reminders for readers to refer to this guidance where necessary.

For further guidance and illustrations, entities may refer to PwC's guidance:
Impact of ESG matters on IFRS financial statements

Entities may also refer to ISCA's technical bulletin:
Addressing Climate-Related Risks in Financial Statements and Audits of such Financial Statements

Impact of climate change on financial statements

IASB guidance and possible future developments

In 2020, IFRS Foundation issued educational material which contains a non-exhaustive list of examples regarding how climate risk might affect the measurement and disclosure requirements of various standards and the various paragraphs of those standards that might be referenced in determining how to incorporate such risks. In light of the new International Sustainaibility Standards Board (ISSB)'s standards, this educational material was republished in July 2023, to remind stakeholders of the long-standing requirement in IFRS accouning standards to report on the effects of climate-related matters in the financial statements when those effects are material. While the material does not add or change the requirements in the standards, it is useful guidance that users and preparers might benefit from when preparing and assessing IFRS financial statements.

In March 2023, the IASB added to its work plan a project to explore targeted actions to improve the reporting of the effects of climate-related risks in the financial statements. This was done following the IASB's Third Agenda Consultation where stakeholders raised concerns about deficiencies in the reporting of climate-related risks relating to:

IASB Update March 2023

(a) the inconsistent application of requirements in accounting standards, and

(b) insufficient information disclosed about climate-related risks.

As part of the project, IASB published an Exposure Draft in July 2024 that proposes eight illustrative examples on how an entity applies the requirements in IFRS Accounting Standards to report the effects of climate-related and other uncertainties in its financial statements. The Exposure Draft includes examples for materiality judgements, disclosure of assumptions, disclosures about credit risk, disaggregated information and decommissioning and restoration provisions. While the examples mostly focus on climate-related uncertainties, the principles and requirements illustrated apply equally to other types of uncertainties.

The IASB expects that these illustrative examples will help to improve the reporting of the effects of climate-related and other uncertainties in the financial statements, which includes strengthening the connections between an entity's general purpose financial reports.

While materials accompanying IFRS Accounting Standards such as this illustrative example has no effective date or transition requirements, the IASB expects entities to be entitled to sufficient time to implement any changes to the information disclosed in their financial statements. Determining how much time is sufficient is a matter of judgment that depends on entity's particular facts and circumstances.

The Exposure Draft is open for comments until 28 November 2024.

For details of the Exposure Draft, please refer to the following link:
Exposure Draft: Climate-related and Other Uncertainties in the Financial Statements

Impact of climate change on financial statements

United States SEC developments

On 6 March 2024, the Securities and Exchange Commission (SEC) adopted final rules designed to enhance public company disclosures related to the risks and impacts of climate-related matters. The rules will require disclosures about climate-related risks that are reasonably likely to have a material impact on a company's business strategy, results of operations, or financial condition. This includes disclosures relating to climate-related risks and risk management as well as the board and management's governance of such risks. In addition, the rules include requirements to disclose the financial effects of severe weather events and other natural conditions in the audited financial statements. Larger registrants will also be required to disclose information about greenhouse gas emissions, which will be subject to a phased-in assurance requirement. This differs in several aspects from the initial proposal in March 2022, most significantly in changes to the financial statement footnote disclosures as well as reductions to the scope of and number of registrants subject to the greenhouse gas emission disclosures.

The Enhancement and Standardisation of Climate-Related Disclosures for Investors

The rules will require disclosures in registration statements and periodic reports, such as Form 10-K for domestic issuers and Form 20-F for foreign private issuers. Disclosures will be required prospectively, with information for prior periods required only to the extent it was previously disclosed in an SEC filing, which may help ease the transition. The final rules leverage some concepts from the disclosure framework developed by the Task Force on Climate-related Financial Disclosures (TCFD), which is also the basis of other new mandatory reporting requirements in the US and globally. However, the rules differ in many ways from other new regulations and standards, such as the European Union's Corporate Sustainability Reporting Directive, the IFRS Sustainability Disclosure Standards, and the California climate disclosure laws. In addition, there are no equivalency provisions in the rules to allow disclosures prepared under another framework to satisfy SEC's reporting requirements. While the earliest effective dates of these new rules start in 2025, with additional delays for smaller companies and greenhouse gas emission disclosures, it is strongly recommended that registrants start preparations for adoption given the volume of information required.

On 4 April 2024, the SEC stayed its climate disclosure rules to "facilitate the orderly judicial resolution" of pending legal challenges. Given ongoing interest from investors, and the overlapping nature of many of the sustainability reporting requirements worldwide, companies are encouraged to think holistically about the range of their sustainability reporting obligations. Systems, processes, and controls should be developed that position a company to produce high-quality data in support of any current or emerging sustainability reporting responsibilities. Doing so will also position registrants for compliance with the SEC rules should the stay be lifted and the rules become effective

For further guidance and illustrations, entities may refer to PwC's guidance:
SEC adopts climate-related disclosure rules
Navigating the SEC climate-related disclosure requirements

IFRS Sustainability Disclosure Standards

In June 2023, the International Sustainability Standards Board (ISSB) released its first two sustainability disclosure standards:

(a) IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information (**General Requirements** standards), and IFRS S1

(b) IFRS S2 Climate-related Disclosures (**Climate** standard). IFRS S2

IFRS S1 and IFRS S2 are effective for annual reporting periods beginning on or after 1 January 2024, with early adoption permitted. This is subject to the adoption of the standards by local jurisdictions.

The disclosure standards require that:

(a) the disclosures are prepared:

  (i) at the same time as annual financial statements (subject to transition relief)

  (ii) for the same reporting entity as financial statements, and

(b) to the extent possible, assumptions used to prepare the reporting are on the same basis as the financial statements.

The IFRS Sustainability Disclosure Standards are structured using the Task Force on Climate- related Financial Disclosures (TCFD framework) four-pillar approach, which covers governance, strategy, risk management, and metrics and targets.

For further details on the requirements of IFRS S1 and IFRS S2, entities may refer to PwC's guidance:
In depth IFRS Sustainability Disclosure Standards – guidance, insights and where to begin

Impact of climate change on financial statements

European Sustainability Reporting Standards (ESRS)

On 31 July 2023, the European Commission (EC) adopted the final delegated act of the European Sustainability Reporting Standards (ESRS). The delegated act includes the 12 finalised ESRS, made up of two cross-cutting standards, which apply to all sustainability matters, and ten topical standards covering a wide range of environmental, social and governance matters.

The sustainability statements will be in a dedicated section of the management report. The assurance requirement is initially for limited assurance, with a planned transition to reasonable assurance over the coming years.

The Corporate Sustainability Reporting Directive (CSRD) was driven, in part, by the European Green Deal, a December 2019 European Commission package of policy initiatives designed to achieve climate neutrality by 2050 and protect Europe's natural habitat. It was adopted by the European Parliament and the Council of the European Union in November 2022 and came into effect on 5 January 2023. EU Member States have until early July 2024 (18 months from the effective date) to incorporate its provisions into national law.

The CSRD requires comprehensive and granular disclosures covering the entire spectrum of sustainability topics (e.g. climate change, biodiversity and ecosystems, working conditions, human rights, business ethics). The CSRD applies to many companies operating in the EU, estimated to be nearly 50,000 companies in total. Companies without direct reporting obligations under the CSRD may also be asked for information by customers, suppliers, investors, or lenders because of the requirements for entities within its scope to disclose information about their value chain, or because they are subsidiaries of EU companies with reporting obligations.

The CSRD applies to financial years starting on or after 1 January 2024 for entities that are already subject to reporting under the Non-Financial Reporting Directive (NFRD) plus issuers that meet the definition of a large undertaking and have more than 500 employees. Other entities such as listed small and medium-sized enterprises (SMEs) will have a later first-time application date.

On 2 May 2024, the IFRS Foundation and European Financial Reporting Advisory Group (EFRAG) jointly published interoperability guidance on climate-related disclosures for sustainability reporting. It illustrates where there is a high level of alignment of climate-related disclosures between IFRS Sustainability Disclosure Standards and ESRS. It also notes areas with incremental disclosures and choices preparers need to make to enable interoperability.

For more details on ESRS and CSRD, refer to our PwC publication:
Worldwide impact of CSRD – are you ready?
Publication of four major documents to support the implementation of ESRS
EFRAG and ISSB jointly publish interoperability guidance

Impact of climate change on financial statements

Comparison of the “big three” sustainability disclosure frameworks

With a global network of reporting requirements that encompass a broad spectrum of value chain contributors, it is likely that most entities will find themselves impacted by one or more of the disclosure regimes. An SEC registrant that has a subsidiary listed in the EU and a subsidiary in a jurisdiction that requires ISSB reporting, for example, may be subject to the requirements in all three sustainability framework. Understanding the similarities and differences will help entities develop the requisite reporting strategy, data gathering processes, and related controls, providing for a streamlined process and effective deployment of resources.

By understanding the requirements of the different proposals, preparers can develop the appropriate reporting strategy, one designed to capture the right data the first time. The following pages present a comparison of some of the key features of the “big three” sustainability disclosure framework.

For the comparison of the key provisions among the three sustainability framework, refer to PwC’s publication in the link:
Navigating the ESG landscape

Impact of climate change on financial statements

Theme	EC	ISSB	SEC
Topics in scope	Standards span a broad list of environmental, social, and governance topics, including one dedicated to climate disclosures.	Standards address climate and other sustainability risks. Additional thematic standards are expected in the future.	Final rules address climate-related risks and the financial effects of severe weather events and other natural conditions.
Industry standards	Ten sector-specific standards have been announced and are in development.	A company is required to “refer to and consider” the applicability of the disclosure topics in the SASB standards.	Industry-specific disclosures are not required.
Location of disclosures	Disclosure would be included within a dedicated section of the management report. No financial statement footnote disclosure would be required.	Disclosure would be included as part of general purpose financial reporting — such as in management commentary. No financial statement footnote disclosure would currently be required.	Disclosure would be included in a separate section of the annual report or registration statement, or other relevant sections. Financial statement footnote disclosure includes the impact of severe weather events and other natural conditions.
Materiality	Materiality would be assessed based on “double materiality,” consisting of “financial materiality” (an outside in perspective) and “impact materiality” (an inside out perspective).	Materiality would be assessed based on factors that could reasonably be expected to influence decisions that the primary users make based on that information.	Materiality would be assessed based on the definition of materiality in existing Securities Laws / Supreme Court precedent. A 1% bright-line and de minimis thresholds would be applied for financial statement footnote quantitative disclosures.

Impact of climate change on financial statements

Theme	EC	ISSB	SEC
Time horizons for specific disclosures	Time horizons of short, medium, and long term are prescribed, although the entity may adapt the periods; the definition of long term in the climate standard may be applied differently.	Time horizons for disclosure of risks and opportunities over the short, medium, and long term are not defined.	Time horizons for disclosure of risks and opportunities over the short term (i.e., 12 months) and long term (i.e., more than 12 months).
Targets and transition plans	Disclosure of material Greenhouse Gas (GHG) emissions reduction targets would be required in five-year rolling periods, including target values for at least 2030 and, if available, 2050. Disclosure about the transition plan's compatibility with the Paris Agreement (or updated international agreement on climate change) would also be required.	Disclosure of material climate-related targets set by the company, including how such targets were informed by the "latest international agreement on climate change" (currently the Paris Agreement). Such targets or goals would include those set in response to regulatory requirements or climate-related treaty or law.	Disclosure of climate-related targets or goals reasonably likely to materially affect the company's business, results of operations, or financial condition. Disclosure of a transition plan would be required if the company adopted a plan to manage a material transition risk.
Use of scenario analysis	The use of scenario analysis would be required to assess resilience. Explanation is required of whether and how scenario analysis is consistent with the Paris Agreement and limiting climate change to 1.5°C.	The use of scenario analysis would be required to assess resilience. Disclosure of whether a scenario aligns with the "latest international agreement on climate change" would be required.	Disclosure would be required if scenario analysis is used and it identifies a climate risk that is, or is reasonably likely to be, material on its business, results of operations, or financial condition. Does not require consideration of specific scenarios.

Impact of climate change on financial statements

Theme	EC	ISSB	SEC
GHG Protocol	Consideration of the GHG Protocol is required. The environmental footprint methods proposed by the EC or the framework for GHG accounting stipulated in International Organisation for Standardisation (ISO) 14064 may also be considered.	Use of the GHG Protocol would be required, unless a different method is required by a jurisdictional authority or exchange.	Use of the GHG Protocol is not required. Disclosure of the protocol or standard used for measurement and references the GHG Protocol, the U.S. Environmental Protection Agency, ISO 14064-1, or other standards is required.
GHG emissions organisational boundaries	Emissions of the parent and consolidated subsidiaries would follow the organisational boundaries of the consolidated financial statements. Emissions of associates, joint ventures, and other unconsolidated arrangements would be presented based on operational control.	Emissions would be reported using either a control or equity share approach (consistent with optionality described in the GHG Protocol).	Disclosure of the organizational boundaries, the method used to determine them, and a brief explanation if they are materially different than the scope of entities and operations included in the consolidated financial statements.

Impact of climate change on financial statements

Theme	EC	ISSB	SEC
Scope 1 and scope 2 GHG emissions	Disclosure of gross scope 1 and scope 2 emissions for the parent and consolidated subsidiaries as well as entities over which it has operational control. The percentage of scope 1 emissions under regulated emission trading schemes would be separately disclosed. Scope 2 emissions would be separately disclosed using both the location-based and market-based methods. No requirement to disaggregate emissions by type of GHG.	Disclosure of gross scope 1 and scope 2 GHG emissions for the consolidated group and separately for the investees excluded from consolidation, such as its associates and joint ventures. Scope 2 emissions would be disclosed using the location-based method. No requirement to disaggregate emissions by type of GHG.	Disclosure of gross scope 1 and scope 2 GHG emissions for large accelerated and accelerated filers. Scope 2 emissions would be disclosed using either the location-based or market-based method (or a combination). Disclosures of emissions related to an individual constituent gas, if material, is required.
Scope 3 GHG emissions	Scope 3 emissions would be disclosed in total for the parent and consolidated subsidiaries as well as entities over which it has operational control, including significant scope 3 categories Scope 3 emissions would include scope 1, scope 2, and scope 3 emissions of associates, joint ventures, and unconsolidated subsidiaries in its value chain over which it does not have operational control	Scope 3 emissions would be disclosed in total, including component categories	No requirements to disclose scope 3 emissions. Even though the SEC does not require the disclosure of scope 3 emissions, material targets based on GHG emissions, including scope 3, would still require disclosure.

Impact of climate change on financial statements

Theme	EC	ISSB	SEC
GHG emissions intensity	Disclosure of total GHG emissions per net revenue would be required.	No requirement to disclose GHG emissions intensity.	No requirement to disclose GHG emissions intensity.
Assurance, excluding GHG emissions	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.	Footnote disclosure would be subject to assurance through the financial statement audit and internal control over financial reporting attestation requirements. Outside of the footnotes, only the disclosure of material scope 1 and scope 2 GHG emissions would be subject to required assurance.
Assurance on GHG emissions	GHG emissions would be subject to the same assurance as other sustainability information.	GHG emissions would be subject to assurance based on the rules of the jurisdictions adopting the standards.	GHG emissions would be subject to limited assurance for fiscal years beginning in 2029 for large accelerated filers and 2031 for certain accelerated filers; large accelerated filers will transition to reasonable assurance for fiscal years beginning in 2033.

Impact of climate change on financial statements

Theme	EC	ISSB	SEC
Timing of application	Timing is established by the CSRD and would be phased by type of entity. Disclosure requirements would be applicable in 2024 (filing in 2025) for a “large undertaking,” as defined, that has securities listed on an EU-regulated market and more than 500 employees.	Timing will depend on how standards are implemented in each jurisdiction. Disclosure requirements of IFRS S2 are effective for annual reporting periods beginning on or after 1 January 2024, with early adoption permitted. In the first year of reporting, entities are permitted to apply IFRS S1 only to the extent it relates to the disclosure of climate-related information	Timing is phased by type of filer, with disclosure requirements applicable for fiscal years beginning in 2025 for large accelerated filers.
Comparative information	Comparative information would not be required in the first year of adoption, but required thereafter.	Comparative information would not be required in the first year of adoption, but required thereafter.	Comparative information is only required for information previously included in an SEC filing.

PwC is pleased to present the inaugural edition of our Sustainability reporting guide (SRG). This guide serves as a compendium of the reporting requirements under the sustainability frameworks expected to have the broadest impact globally, including:

(a) European Sustainability Reporting Standards (ESRS) adopted by the European Commission (EC) for purposes of compliance with the Corporate Sustainability Reporting Directive (CSRD) in the European Union (EU)

(b) IFRS® Sustainability Disclosure Standards issued by the International Sustainability Standards Board (ISSB)

(c) Climate disclosure rules issued by the United States (US) Securities and Exchange Commission (SEC).

To access the publication, please refer to:

PwC's Sustainability reporting guide

Developments in Singapore

In 2021, the Singapore Government released the Singapore Green Plan 2030, a whole-of-nation movement to advance Singapore's national agenda on sustainable development and tackling climate change. The Green Plan charts ambitious and concrete targets, strengthening Singapore's commitments under the United Nation's 2030 Sustainable Development Agenda and Paris Agreement, and positions Singapore to achieve its long-term net zero emissions aspiration as soon as viable.

In December 2021, Singapore Exchange Regulation (SGX RegCo) introduced a new enhanced reporting regime for a phased approach to mandatory climate reporting based on the TCFD recommendations for SGX-listed entities as follows:

For Financial Year Commencing	Baseline Reporting Practice	Year Report is Published
Between 1 Jan 2022 and 31 Dec 2022	Climate reporting is mandatory for all issuers on a 'comply or explain basis'.	2023
Between 1 Jan 2023 and 31 Dec 2023	Climate reporting is mandatory for issuers in (a) financial industry; (b) agriculture, food and forest products industry; and (c) energy industry. For other issuers, climate reporting on a 'comply or explain' basis.	2024
Between 1 Jan 2024 and 31 Dec 2024	Climate reporting is mandatory for issuers in (a) financial industry; (b) agriculture, food and forest products industry; (c) energy industry; (d) materials and buildings industry; and (e) transportation industry. For other issuers, climate reporting on a 'comply or explain' basis.	2025

In June 2022, the Accounting and Corporate Regulatory Authority (ACRA) and SGX RegCo set up a Sustainability Reporting Advisory Committee (SRAC) to develop a roadmap for wider implementation of sustainability reporting for Singapore-incorporated companies, beyond SGX-listed companies in response to a call to provide greater transparency and assurance on ESG-related information. SRAC will also provide inputs on the suitability of international sustainability reporting standards for implementation in Singapore.

As part of the enhanced SGX rules, all board directors of equity issuers listed on SGX are required to attend an accredited sustainability training course.

Impact of climate change on financial statements

In July 2022, SGX RegCo announced its intention to prepare to incorporate ISSB standards into the listing rules as mandatory disclosure requirements for listed entities when they are issued. These are part of efforts to ensure that climate-related information is available, comparable and trusted to tackle the issue of greenwashing.

In September 2022, MAS and SGX launched a digital disclosure portal, ESGenome, to support companies in ESG disclosure process. ESGenome helps to streamline sustainability reporting and enhance investor access to ESG data. ESGenome is one of the initiatives under Project Greenprint which is a collection of initiatives that aims to harness technology and data to enable a more transparent, trusted and efficient ESG ecosystem to enable green and sustainable finance.

On 25 October 2022, Deputy Prime Minister and Minister for Finance Lawrence Wong outlined Singapore's national strategy to develop hydrogen as a major decarbonisation pathway, to support Singapore's international climate commitment to achieve net zero emissions by 2050.

Singapore is on a transformative journey to become a City in Nature. This journey includes steadfast commitment to achieving climate goals through the Singapore Green Plan 2030. Additionally, Singapore works with a vibrant network of climate actors to develop innovative solutions in decarbonisation and climate adaptation. Singapore will continue to foster regional and global collaboration to realise its shared climate vision together.

The 29th Conference of the Parties (COP29) is held in November 2024 in Baku, Azerbaijan. The COP29 Presidency's aim is to enhance ambition and enable action in solidarity for a green world. For more information, visit Singapore's COP29 pavillion here. Singapore's virtual COP29 pavilion.

Impact of climate change on financial statements

On 28 February 2024, ACRA and SGX Regco provided details of mandatory climate reporting and assurance requirements for listed issuers and large non-listed companies (NLCos) based on the recommendations by the SRAC. From the financial year commencing on or after 1 January 2025, listed issuers will be required to report and file annual climate-related disclosures (CRD), using requirements aligned with the International Sustainability Standards Board (ISSB) standards. Following which from the financial year commencing on or after 1 January 2027, large NLCos (defined as those with annual revenue of at least $1 billion and total assets of at least $500 million for 2 financial years immediately preceding the current financial year) will be required to do the same. ACRA will review the experience of listed issuers and large NLCos before introducing reporting requirements for other companies. The implementation timeline for mandatory CRD is summarised in the table below:

Timeline for requirements	Listed Issuers	Large NLCos
CRD including Scope 1 and 2 GHG emissions	Financial year commencing on or after 1 January 2025	Financial year commencing on or after 1 January 2027
CRD for Scope 3 GHG emissions	Financial year commencing on or after 1 January 2026	No earlier than 2029
External limited assurance on Scope 1 and 2 GHG emissions	Financial year commencing on or after 1 January 2027	Financial year commencing on or after 1 January 2029

Large NLCos with parent companies that are reporting CRD are exempted from the requirements under the following circumstances:

- The parent company reports CRD using ISSB-aligned local reporting standards or equivalent standards (e.g. European Sustainability Reporting Standards) and the Large NLCo's activities are included within the parent company's report, which is available for public use; or
- A large NLCo whose parent company reports CRD using other international standards and frameworks (e.g. Global Reporting Initiative Standards, Task Force on Climate-related Financial Disclosures Recommendations), will be exempted from reporting and filing CRD with ACRA for a transitional period of 3 years. ACRA will review whether to extend the transitional period, depending on global developments relating to the sustainability reporting space.

Impact of climate change on financial statements

Following that on 23 September 2024, SGX RegCo announced the enhancement of the climate reporting rules by incorporating the IFRS Sustainability Disclosure Standards (IFRS SDS) issued by ISSB into the sustainability reporting regime.

Beginning from the financial year commencing on or after 1 January 2025, SGX RegCo will require issuers to start reporting Scope 1 and Scope 2 GHG emissions. Climate-related disclosures must also start incorporating the requirements in the IFRS Sustainability Disclosure Standards issued by the ISSB. SGX RegCo will review the issuers' experience and readiness before establishing the implementation roadmap for reporting Scope 3 GHG emissions. The current plan is to prioritise larger issuers by market capitalisation with the intention that they report Scope 3 GHG emissions from the financial year commencing on or after 1 January 2026.

To provide time for issuers to focus on these climate-related disclosures in FY 2025, the other primary components of a sustainability report (other than climate-related disclosures) will be mandated from the financial year commencing on or after 1 January 2026.

Issuers that do not conduct external assurance on their sustainability reports must issue their sustainability reports together with their annual reports from the financial year commencing on or after 1 January 2026. Issuers that do conduct external assurance on their sustainability reports will continue to have up to five months after the end of their financial year to issue their sustainability reports. The extra month is aimed as a transitional measure to encourage issuers to conduct external assurance.

For further information on SGX sustainability reporting requirements, Singapore Green Plan 2030 and communications by ACRA and SGX RegCo, please refer to:

Singapore Green Plan 2030

Climate reporting to help companies ride the green transition

SGX RegCo to start incorporating IFRS Sustainability Disclosure Standards into climate reporting rules

Impact of climate-related risk on the financial statements

Consistency is important

SFRS(I) 1-1 (112)

The ISSB standards specifically require consistency of the disclosures and assumptions used in preparing the financial statements and sustainability disclosures. However, even before these standards become mandatory, entities should ensure their disclosures of critical estimates and other relevant information in the financial statements are consistent with the non-financial information disclosed elsewhere (for example, in the company's sustainability report) in relation to:

(a) climate-related matters

(b) the impact and consideration of climate-related risk, and

(c) any material disclosure in relation to significant judgements and estimates of uncertainty arising as a result of climate-related risk.

Questions often arise about whether an entity's financial statements are 'Paris aligned'. This refers to whether they comply with the legally binding instrument that many nations have signed relating to limiting carbon emissions to a level designed to cap global temperature rises. Whether financial statements are 'Paris aligned' is not easy to determine because of the variety of measurement techniques required by IFRS depending on the item being considered in the statement of financial position. Therefore, it might be easier for the recognition and measurement of some items to be more closely aligned to Paris assumptions than others.

In addition to ensuring consistency of the disclosures about climate-related matters and their impact in both financial and non-financial information, entities also need to ensure consistency of the assumptions used in developing estimates for the financial statements, where possible.

For example, where an entity publicly discusses a best estimate about the impact of the Paris Agreement on the entity in a sustainability report and an SFRS(I) standard requires a best estimate approach to be used in measurement (for example, for the purpose of impairment calculations), the entity would need to consider consistency between the estimates used for financial reporting and those disclosed in the sustainability reporting.

Where there are comments in the sustainability report about estimates that haven't been reflected in financial reporting (for example, because the entity is relying on a market participant's assumptions which differ), the entity should consider explaining why such items have been reflected on a different basis in financial reporting.

Material accounting policy information

In an effort to lower emissions and achieve carbon neutrality, many entities are entering into more complex transactions and arrangements for which the accounting continues to evolve. Examples of these include emissions trading schemes and virtual power purchase arrangements. In some cases, these transactions and arrangements are clearly within the scope of an SFRS(I) and in other cases it is less clear. SFRS(I) 1-8 (8) SFRS(I) 1-1 (117) - (121)

In the absence of an SFRS(I) that specifically applies to a transaction, other event or condition, management shall use its judgement in developing and applying an accounting policy that results in relevant and reliable information. SFRS(I) 1-8 (10)

Entities shall disclose accounting policy information if it is material. Information is material if, when considered together with other information included in the financial statements, it can reasonably be expected to influence user's decisions made on the basis of the financial statements. SFRS(I) 1-1 also notes that an accounting policy may be material because of the nature of the entity's operations even if amounts for current and prior periods are not material. Accounting policies developed in accordance with SFRS(I) 1-8 are an example of policies that are expected to be material. SFRS(I) 1-1 (117), (117B)

Entities should therefore not underestimate the importance of disclosing climate-related accounting policies in the notes to the financial statements.

Going concern

SFRS(I) 1-1 requires management to assess an entity's ability to continue as a going concern when preparing financial statements. In assessing whether the going concern basis of preparation is appropriate, management considers all available information about the future, which is at least, but is not limited to, 12 months from the end of the reporting period. If climate-related matters create material uncertainties related to events or conditions that may cast significant doubt on a company's ability to continue as a going concern, an entity should disclose these uncertainties even if the financial statements continue to be prepared on a going concern basis. SFRS(I) 1-1 (25)

Where management has concluded that there are no material uncertainties related to the going concern assumption that require disclosure, but reaching that conclusion involved significant judgement (for example, about the feasibility and effectiveness of any planned mitigation), SFRS(I) 1-1 requires disclosure of that judgement. Entities should also consider the interrelationship with the liquidity risk disclosures discussed in Note 42(c). SFRS(I) 1-1 (122) SFRS(I) 7 (39)

Critical accounting estimates, assumptions and judgements

There is an overarching requirement to disclose sources of estimation uncertainty in SFRS(I) 1-1. If assumptions that an entity makes about the future have a significant risk of resulting in a material adjustment to the carrying amounts of assets and liabilities within the next financial year, the entity is required to disclose information about those assumptions and the nature and carrying amount of those assets and liabilities. The information should help users of the financial statements to understand the judgement applied by management and what might be disclosed will depend on the specific facts and circumstances. If the accounting estimate is highly sensitive to one estimated input, it might be useful to disclose the estimated input and the sensitivity of the accounting estimate to changes of this input. SFRS(I) 1-1 (125)(a) - (b)

The entity may further need to explain the impact of various potential climate scenarios on significant estimates made in preparing the financial report. In addition, entities would typically explain changes made to past assumptions.

SFRS(I) 1-1 also has an overarching disclosure requirement to ensure that the financial statements capture all information that would be considered material and relevant to an understanding of them but is not presented elsewhere in the financial statements. This might be especially relevant for entities whose financial position or performance is particularly affected by climate-related matters.

Trade and other receivables

SFRS(I) 7 Financial Instruments: Disclosures requires information which enables the users to understand the effect of credit risk on the amount, timing and uncertainty of future cash flows. SFRS(I) 7 (35B)

Climate change might affect a lender's exposure to credit losses for its financial assets. The expected credit loss (ECL) model in SFRS(I) 9 Financial Instruments requires the use of reasonable and supportable information that is available without undue cost or effort. Climate change might affect the assumptions that are made by lenders to estimate ECL. It could also affect the risk ratings for individual borrowers or groups of borrowers or their probability of default. In some cases, it could result in moving loans between stages. SFRS(I) 9 (5.5.17)(c)

SFRS(I) 7 requires that entities provide qualitative and quantitative information about the changes in the amount of expected credit losses and the reason for those changes. To the extent that any changes in ECL are the result of changes made to the assumptions about the impact of climate change or other climate-related risks, that fact should be disclosed. SFRS(I) 7 (35I)

Property, plant and equipment and intangible asset useful lives

In addition to impairment, entities may also need to reassess the useful lives and residual values of property, plant and equipment and intangible assets as a result of climate change. For example, climate impacts could result in earlier obsolescence of assets, or legal restrictions might be placed on the use of the assets or lead to inaccessibility of the assets. In the most extreme cases, if assets become inaccessible either as a result of natural climate events or government action, an entity could even lose control of assets permanently.

Entities must consider many factors in determining the useful life of assets, including obsolescence from changes in market demand and other economic factors. This estimation of the useful life of assets is a matter of judgement. Entities should consider disclosing if there are any estimation uncertainties related to the impacts of climate-related risk on the useful lives of assets. An example might be where there are multiple potential outcomes and some of them could significantly shorten the asset's life compared to the scenario with the highest probability used in determining useful life.

SFRS(I) 1-16 (56)
SFRS(I) 1-38 (90)
SFRS(I) 1-1 (125)

Entities may also have new forms of intangibles such as carbon emissions rights and should consider the appropriate disclosure of policies for such schemes (see discussion in 'Material accounting policy information' above).

Property, plant and equipment and intangible asset impairment

Climate-related risk can have a significant impact on impairment of non-financial assets. Climate change could be an indicator of impairment and trigger the need for an impairment test. For example, a decline in demand for products that emit greenhouse gases could indicate that a manufacturing plant might be impaired.

Further, the inputs and assumptions used in both a value in use or fair value less costs of disposal model could be significantly impacted by climate-related risks.

For these reasons, impairment disclosures might need to explain climate-related impacts. Where climate-related risks could have a significant impact on an entity's operations, information about how this has been factored into the recoverable amount calculations would be relevant for the users of the financial statements. In some cases, the conclusion not to adjust an impairment model for climate-related risk might be based on significant judgements or assumptions that entities should also explain in their disclosures.

SFRS(I) 1-36 (130)(f), (132), (134)
SFRS(I) 1-1 (125)

Many companies discuss climate scenarios as part of their narrative reporting. These scenarios might stem from the Paris Agreement, from net zero targets or from the ISSB standards requirements. Such scenario analyses are likely to interact with the disclosures required by SFRS(I) 1-1 or SFRS(I) 1-36 Impairment of Assets. However, the premise of the narrative disclosures is not identical to what SFRS(I) 1-36 requires.

Property, plant and equipment and intangible asset impairment (continued)

For example, SFRS(I) 1-36 requires a sensitivity analysis if a reasonably possible change in assumptions would lead to an impairment. This might include a reasonably possible unfavourable change in an assumption relating to climate change. The ISSB Standards, on the other hand, might require a scenario disclosure that is based on a 1.5 or 2.0° limitation on temperature rise, even though these might not be assumptions that are aligned with a company's best estimate or with market participant assumptions. Entities might consider explaining how the assumptions used for the impairment test under SFRS(I) 1-36 correspond to assumptions used in the narrative reporting on climate change scenarios to help financial statement users understand the linkage.

SFRS(I) 1-36 (134)(f)

Management should consider whether other information, such as climate reporting included in the entity's annual report, is consistent with the audited financial statements. In addition to this, regulators in a number of territories have been clear that they expect entities to explain and reconcile any discrepancies in assumptions used.

Deferred income taxes

Entities should assess the impact of climate-related matters on the estimation of future taxable profits and whether they are sufficient to recover the deferred tax assets. The assumptions used in these estimations should be consistent with those used elsewhere in the financial statements. To the extent that these assumptions are material in understanding the estimates and judgements which have been made in the recognition of the deferred tax assets, these assumptions should be disclosed.

SFRS(I) 1-12 (24), (34)

SFRS(I) 1-1 (122), (125)

Inventories

Inventories could become impaired if their cost is not recoverable and entities must write down such inventories to their net realisable value. Some sectors might experience increased volatility in the market prices of assets as a result of changes in demand patterns for certain commodities, which could expose those inventories to greater risk of impairment.

SFRS(I) 1-2 (28)

In other cases, certain assets might be discontinued from use or production, which could result in an impairment of the parts for those assets. For example, a certain model of combustion engine might be discontinued because it no longer meets emission standards, making the parts used to produce or service that engine obsolete. If the entity has made any significant estimates or judgements in this context, it should disclose them.

SFRS(I) 1-1 (122), (125)

Entities may also have new forms of inventory such as carbon emissions rights and should consider the appropriate disclosure of policies for such schemes (see discussion in 'Material accounting policy information').

Provisions and contingencies

Climate-related risks can have an impact on the disclosure of provisions and contingent liabilities. Actions taken or statements made by the entity could give rise to constructive obligations for which provisions must be recognised, even in the absence of legislation requiring the entity to act. SFRS(I) 1-37 (14)

For example, an entity operates a plant that is heavily dependent on fossil fuels and for which it has recognised a decommissioning provision. The entity's sustainability strategy promises carbon neutrality by 2030. This can realistically only be achieved by substituting the plant with a newer hybrid model plant in the medium term – sooner than originally anticipated. As a result of this plan, the entity must bring forward the timing of the expected cash flows for decommissioning the plant.

In April 2024, the IFRS Interpretations Committee finalised an agenda decision on whether statements announcing committed transition plans would give rise to constructive obligation that requires a provision, and should this corresponding amount on the provision be recognised as an asset or expense. The committee has clarified that while it is not necessary to know the identity of the party the obligation is owed (i.e. may be to the public at large), whether a statement to reduce emissions creates a valid expectation that an entity will fulfill the commitment and thus result in a constructive obligation, depends on the facts and circumstances surrounding it, including any actions the entity has taken that publicly affirm its intention to fulfil the commitment. Management would have to apply judgment to reach a conclusion at each reporting date. SFRS(I) 1-37 (10), (20)

An entity will recognise a provision on a constructive obligation that arose from the commitment only at the target date stated in the committed plan, if there are any unsettled obligations in which a reliable estimate can be made. The corresponding amount to the provision is an expense and not an asset unless it gives rise to, or forms part of the cost of an item that qualifies for recognition as an asset. SFRS(I) 1-37 (14)

Entities must disclose an indication of the uncertainties relating to the amount or timing of any outflow as well as major assumptions made concerning future events. To the extent that climate-related risk impacts the assumptions or uncertainties, entities should explain this in their notes. SFRS(I) 1-37 (85)(b)

In addition, climate-related risks may also affect the aggregation of provisions or contingent liabilities for disclosure purposes. In determining which provisions or contingent liabilities may be aggregated to form a class, it is necessary to consider the similarities and differences of these items. Climate-related risk may be incorporated differently into provisions which were previously aggregated. Entities should therefore consider whether further disaggregation of the classes is required as the impacts of climate-related risk evolve and become better understood. SFRS(I) 1-37 (87)

Impact of climate change on financial statements

Renewable power purchase agreements

As entities plan to reduce their carbon footprint, they are often seeking sources of renewable energy. An entity can demonstrate its support for renewable energy sources in several ways, for example:

- Purchase of renewable energy certificates (RECs) on a stand-alone basis in the market. RECs are created for each megawatt hour of electricity that is generated from a renewable energy resource, and they can be purchased by an entity in the market and then retired by the entity to offset energy usage from non-renewable sources.
- Physical power purchase agreements (physical PPAs) for renewable electricity. The entity takes physical delivery of renewable electricity from a particular generation facility at some point after the generation process.
- Financial settlement of renewable electricity through a virtual power purchase agreement (VPPA), where an entity obtains RECs and financially settles electricity. VPPA is sometimes called a ‘financial power purchase agreement’ or ‘contract for differences’ (CFD).

Accounting for PPAs can be complex and involve multiple accounting standards. For example, due consideration is needed on whether the arrangement gives rise to consolidation or equity accounting, contains a lease, or is in-scope as a financial instrument. This is further complicated by the fact that renewable electricity is a unique product; the timing and volume of renewable electricity production is unpredictable due to its nature-dependency and is not economically storable at scale. It is therefore important for entities to thoroughly evaluate the contractual terms of PPAs to determine the applicability of various standards.

Purchased RECs are typically accounted for as intangible assets, although they may be classified as inventory if the definition is met. Where the RECs are held for resale or consumed in the process of production of inventories (e.g., as an input cost in the manufacturing of a product), they are more likely to meet the definition of inventory. RECs are accounted for at cost on initial recognition. When retired, RECs are derecognised and the relevant costs are expensed in profit or loss as electricity costs or another appropriate line item depending on the accounting policy adopted for income statement presentation.

SFRS(I) 1-2 (6)
SFRS(I) 1-2 (9), SFRS(I) 1-38 (24)
SFRS(I) 1-1 (85)

Management should consider whether their recognition of such agreements in the financial statements are in line with other information, such as climate reporting.

For a detailed discussion on accounting for power purchase agreements, refer to our publication:
Accounting for green/renewable power purchase agreements

Emissions trading schemes

There is no specific accounting standard that deals with accounting for emissions trading schemes. IFRIC 3 Emission Rights was intended to address the accounting in this area, but it was withdrawn in 2005.

The withdrawal of IFRIC 3 means that there are a number of accounting models that entities can use under SFRS(I) 1-8 in accounting for the participation in these schemes. Entities should disclose the accounting policies adopted for: SFRS(I) 1-1 (117), (117B)

(a) recognition

(b) initial measurement

(c) subsequent measurement, and

(d) presentation of the balances.

See the discussion about disclosure of accounting policies in 'Material accounting policy information' above.

Emissions credits granted by a government entity are generally accounted for under SFRS(I) 1-20 as the receipt of a non-monetary asset. However, SFRS(I) 1-20 allows for different accounting policy choices with respect to measurement on initial recognition and the presentation in both the balance sheet and the income statement. Disclosure of the accounting policy for these programs is key to understanding the impact of these programs on the financial statements.

To the extent that entities determine that aspects of their emissions trading schemes meet the definition of financial assets and qualify for derivative or hedge accounting, they should further consider the disclosure requirements of SFRS(I) 7 and SFRS(I) 13.

Management should consider whether their recognition of such arrangement in the financial statements are in line with other information, such as climate reporting.

For a detailed discussion on accounting for emissions trading schemes refer to our publication:
Emissions trading schemes: The opportunities ahead

Impact of climate change on financial statements

Carbon offsets in the voluntary carbon market

With the increasing focus on climate change and carbon emissions, the voluntary carbon market (VCM) is growing. Consistent accounting practices for carbon offsets are relevant for entities participating in the VCM; be it corporates using carbon offsets to achieve emission reduction targets, project developers, or carbon offset traders. However, there are no accounting standards or interpretations that directly address the accounting for carbon offsets and related projects. In the absence of a clear framework, entities participating in the VCM would need to deliberate and disclose appropriate accounting policies for the generation, sale and purchase, and retirement of carbon offsets as applicable.

For a detailed discussion on accounting for carbon offsets refer to our publication:
IFRS Financial reporting considerations for entities participating in the voluntary carbon market

Financial risk management – Market risk

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises three types of risk: currency risk, interest rate risk and other price risk. Other price risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices, whether those changes are caused by: SFRS(I) 7 Appendix A

(a) factors specific to the individual financial statement or its issuer, or

(b) factors affecting all similar financial instruments traded in a market.

Entities must disclose a sensitivity analysis which shows how profit or loss and equity would have been affected by changes in risk variables. SFRS(I) 7 (40)

Climate risk could have a significant impact on market risk, for example, for investments in industries impacted both positively and negatively by climate-related risk. In some cases, it may be necessary to provide additional explanations and disclose a sensitivity analysis that reflects interdependencies between risk variables. For example, if an entity has an interest rate that is floating based on both meeting its climate initiatives and a market benchmark, the entity should consider disclosing how the impact of meeting the climate initiative was incorporated into the sensitivity analysis. SFRS(I) 7 (40), (41)

Financial risk management – Credit risk

SFRS(I) 7 requires that entities disclose concentrations of risk including: SFRS(I) 7 (34)(c), (B8)

(a) how management determines such concentrations

(b) a description of the shared characteristic that identifies each concentration, and

(c) the amount of the risk exposure associated with all financial instruments sharing that characteristic.

Entities might have to change the way in which they are approaching their risk concentration disclosures to take into account climate-related risk. For example, more precision in determining geographic concentration might be necessary to reflect heightened risk in particular areas (such as city versus provincial/state disclosures where a particular city is particularly impacted) or more precision in the industry sector (such as a more precise disaggregation of exposure to different industrial products sectors based on carbon intensity).

Financial risk management – Liquidity risk

Liquidity risk is the risk that an entity will encounter difficulty in meeting obligations associated with financial liabilities that are settled by delivering cash or another financial asset. SFRS(I) 7 Appendix A

Entities are required to disclose a maturity analysis for their financial instruments as well as a description of how they manage the liquidity risk inherent in the maturities. SFRS(I) 7 (39)

Where the impacts of climate change could accelerate the timing or alter the amount of contractual maturities of financial liabilities, for example as a result of clauses in a sustainability linked loan, entities should disclose that information. SFRS(I) 7 (B11D)

When the amount payable is not fixed, the amount disclosed is determined by reference to the conditions existing at the end of the reporting period. For example, when the amount payable varies with changes in an index, the amount disclosed will be based on the index's level at the end of the period. In this case, entities should disclose the risk that the amount payable will increase depending on the index.

As an entity's climate-related risk exposures become more significant, there could also be growing pressure on an entity's debt covenants. In this context, disclosures about key covenants and facts and circumstances, if any, that indicate that the entity might have difficulty complying with the covenants and that non-current liabilities could become repayable within the next 12 months might become increasingly material. Reduced access to funding from investors in carbon-intensive industries could also be a risk that entities need to address and disclose. SFRS(I) 1-1 (135)(a)(ii)

Fair value measurements

SFRS(I) 13 Fair Value Measurement requires disclosure of the inputs used in fair value measurements and, for recurring fair value measurements with significant unobservable inputs, a description of the sensitivity of those measurements to changes in unobservable inputs. SFRS(I) 13 (93)(d), (93)(h)(i)-(ii)

Fair value is a market-based measurement which maximises the use of observable inputs and uses assumptions that market participants would use when pricing the asset or liability. These might include assumptions about climate-related risks.

Fair value measurements using observable (that is, level 1) inputs will already reflect market participant views of climate change impacts. For example, the quoted equity price of an entity in the extractives or agriculture industries will reflect market participant expectations about potential climate risk scenarios.

However, valuation models for items that are not traded in an active market should be reviewed to ensure that they adequately represent market participant assumptions for the particular item being valued.

Inputs and assumptions which might be impacted by climate-related risk include, but are not limited to:

(a) discount rates

(b) the timing and amount of forecasted cash flows (For example, the fair value measurement for an investment property might need to be adjusted to reflect climate impacts on rental income, occupancy rates as well as insurance cost assumptions.)

(c) the highest and best use for certain assets measured at fair value

(d) inflation rates, and

other assumptions that a market participant would consider in the circumstances.

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