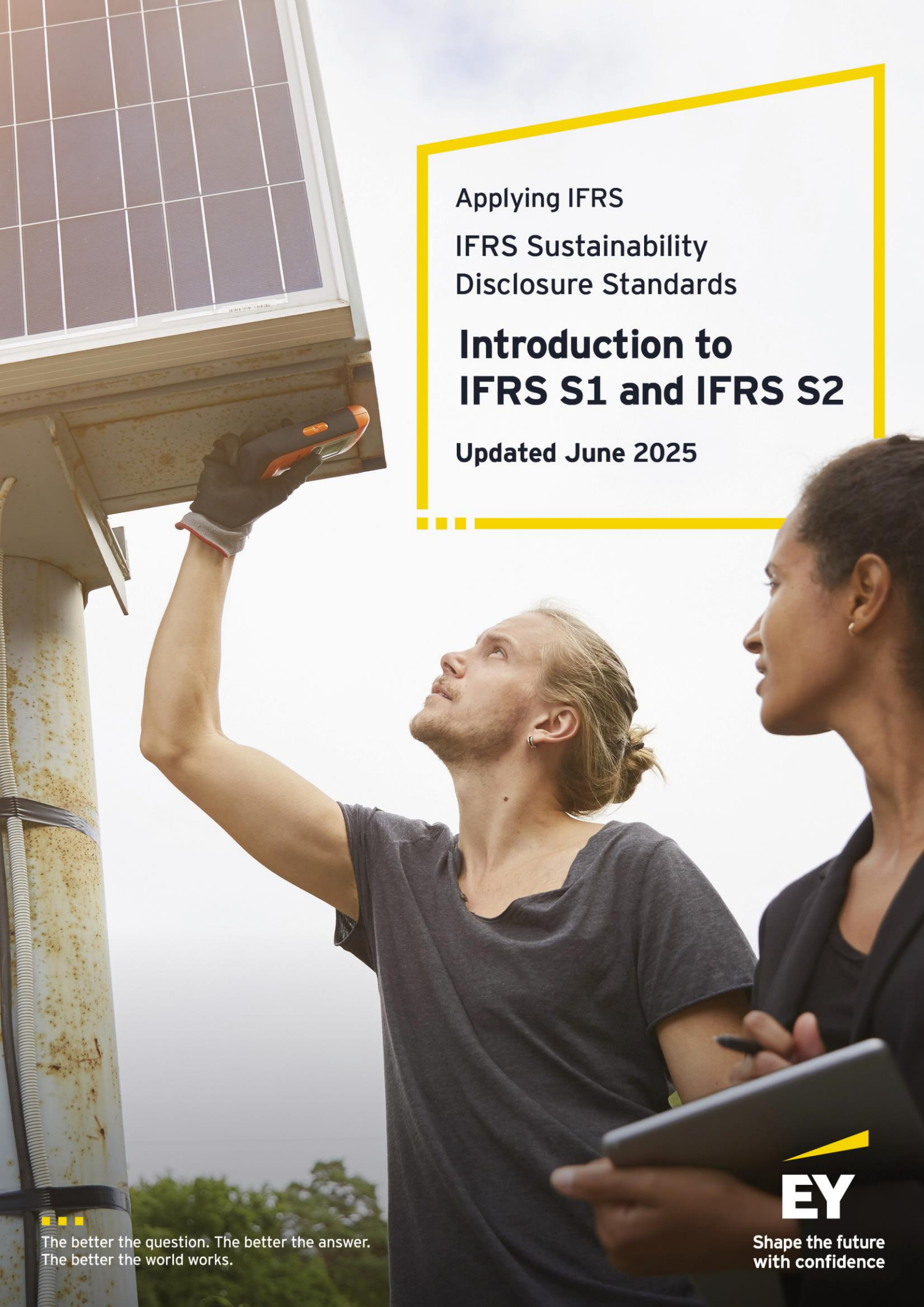




Applying IFRS

IFRS Sustainability
Disclosure Standards

Introduction to IFRS S1 and IFRS S2

Updated June 2025

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Overview

Current landscape

Sustainability reporting has attracted increasing interest from various stakeholders in recent years. A holistic approach to corporate reporting, with key components that include sustainability reporting, financial reporting and assurance has emerged. In response to both the demand for information from the investment community and broader public expectations of the role of businesses in society, a plethora of frameworks, methodologies and metrics for sustainability reporting have been developed.

Currently, there are a number of sustainability-related reporting frameworks, standards and metrics. Some focus on non-financial information and sustainability-related matters, while others focus specifically on climate-related disclosures. The target audience for those frameworks, standards and metrics varies, e.g., investors and wider society. Although information may overlap in certain respects, differences in subject matter and audience give rise to diverging approaches to materiality with either an emphasis on the impact of sustainability matters on an entity, or an entity's impact on the external environment, or both. This diversity in objectives and approaches underlines the urgent need for a global framework to provide greater comparability and reduce the complexity in sustainability reporting.

Background

Stakeholders encouraged the IFRS Foundation to participate in the work towards a coherent and comprehensive corporate-reporting system and the development of a converged, global framework on sustainability-related reporting. This led the Trustees of the IFRS Foundation, through a consultation process, to assess the demand for sustainability reporting at a global level and explore the IFRS Foundation's role in the development of global sustainability standards.¹ The IFRS Foundation received feedback from multiple stakeholder consultations on both the need for it to play a role in sustainability standard setting and on the changes to its constitution. The message was clear - there is a growing demand to improve the global consistency and comparability of sustainability reporting and an urgent need for action.

The IFRS Foundation, which has been responsible for setting global accounting standards for several years, started to deliberate and plan for the establishment of the International Sustainability Standards Board (or the ISSB). In April 2021, in response to demands from global capital markets for the development of standards to provide a comprehensive global baseline of sustainability disclosures, the Trustees of the IFRS Foundation published a proposal to amend the IFRS Foundation's Constitution to accommodate the formation and operation of the ISSB. The establishment of the ISSB was announced by the Trustees of the IFRS Foundation on 3 November 2021, during the Finance Day of the COP26 climate change conference.

The IFRS Foundation set up a Technical Readiness Working Group (TRWG) prior to the establishment of the ISSB, with the objectives of accelerating convergence in global sustainability reporting standards and the technical preparation for the ISSB under the governance of the IFRS Foundation. The TRWG was comprised of representatives from the Taskforce for Climate-related Financial Disclosures (TCFD), the Value Reporting Framework (VRF), the Climate Disclosure Standards Board (CDSB), the World Economic Forum (WEF) and the International Accounting Standards Board (IASB), supported by the International Organization of Securities Commissions (IOSCO) and its Technical Expert Group of securities regulators.² The TRWG's work on

1 [Consultation Paper on Sustainability Reporting](#), September 2020, available on the IFRS Foundation's website.

2 The VRF (which houses the Integrated Reporting Framework and the SASB Standards) and the CDSB have now been consolidated into the ISSB.

general requirements for the disclosure of sustainability-related financial information and the climate-related disclosure resulted in prototype standards titled *General Requirements for Disclosure of Sustainability-related Financial Information Prototype* and *Climate-related Disclosures Prototype* respectively, which were published on the IFRS Foundation's website in November 2021. The prototype standards were not subject to the IFRS Foundation's formal due process or that of any TRWG member.

Issuance of IFRS S1 and IFRS S2

In March 2022, the ISSB published its first two Exposure Drafts on IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information and IFRS S2 Climate-related Disclosures for public comment that ended in July 2022. On 26 June 2023, after a year of deliberations on the feedback on the two Exposure Drafts, the ISSB issued its first two IFRS sustainability disclosure standards (ISSB standards). The standards are aimed to enable users of general purpose financial reports to assess an entity's exposure to, and management of, sustainability-related risks and opportunities over the short, medium and long term, and inform their decisions relating to providing resources to an entity. Moreover, the sustainability-related financial information publication is intended to complement the information in the entity's general purpose financial statements. Under the governance of the IFRS Foundation, the ISSB works closely with the International Accounting Standards Board (the IASB) to ensure connectivity and compatibility between IFRS accounting standards and ISSB standards.

The ISSB standards are comprised of:

- The full text of IFRS S1 plus with five appendices and the full text of IFRS S2 plus with three appendices. The appendices are integral parts of IFRS S1 and IFRS S2 and have the same authority as the main text
- *Illustrative Guidance* and *Illustrative Examples* which accompany ISSB standards but are not part of them, nor are they intended to provide interpretative guidance. However, the examples illustrate aspects of the requirements in ISSB standards and help in their implementation
- The *Basis for Conclusions* which accompanies ISSB standards, but it is not part of them, nor is it intended to provide interpretative guidance. The Basis for Conclusions summarises the considerations of the ISSB in developing ISSB standards
- IFRS S2 is accompanied by Industry-based Guidance on Implementing IFRS S2, which is not intended to create additional requirements. IFRS S2 requires an entity to refer to and consider the applicability of the industry-based disclosure topics defined in the Industry-based Guidance on Implementing IFRS S2, when identifying the climate-related risks and opportunities. Even if an entity concludes not to use the Industry-based Guidance on Implementing IFRS S2, industry specific disclosures are still required by ISSB standards. The disclosure topics identified and defined in the industry-based guidance include climate-related risks and opportunities that are typically associated with particular business models, activities or other common features that characterise participation in an industry. The industry-based guidance also suggests possible ways to measure and disclose information about climate-related risks and opportunities, including metrics and targets.

Interoperability

ISSB standards can be used on a standalone basis or integrated into jurisdictional requirements to serve broader stakeholder or other public policy needs. The ISSB, with fourteen board members from various parts of the world, is committed to formal engagement with jurisdictions that develop their own sustainability reporting requirements. Within the context of interoperability with other jurisdictions, several initiatives have been taken so far, including:

- Forming the Jurisdictional Working Group (JWG) to discuss important strategic matters relating to IFRS S1 and IFRS S2 and jurisdictional initiatives on sustainability reporting
- Establishing the Sustainability Standards Advisory Forum (SSAF) as a formal technical advisory body to the ISSB which is represented by jurisdictional and regional bodies that contribute their technical input and expertise to inform the ISSB's standard-setting work
- Collaborating with Global Reporting Initiative standards (GRI standards)
- Working closely with the European Commission and EFRAG (formerly the European Financial Reporting Advisory Group) to facilitate interoperability. On 2 May 2024, the IFRS Foundation and EFRAG published interoperability guidance on the alignment between ISSB standards and ESRS³
- Developing guidance for jurisdictions on how to adopt ISSB standards into the various jurisdictions⁴

In addition to the ongoing actions of the ISSB to achieve interoperability of ISSB standards with other jurisdictional requirements, IFRS S1 already includes requirements to support this goal. For example, sustainability-related financial information in accordance with ISSB standards is:

- Aimed at meeting the information needs of primary users, i.e., current and potential investors, creditors and other lenders
- Based on a materiality assessment consistent with that used in the application of IFRS accounting standards
- Presented with information disclosed to meet other requirements, such as specific jurisdictional requirements, but must not be obscured by such additional information
- Aligned with TCFD Recommendations on governance, strategy, risk management, and metrics and targets
- Required for short, medium and long-term time horizons without defining those horizons as this would be an entity- or industry-specific determination

The role of IFRS S1 in ISSB standards

IFRS S1 sets out the general requirements for a complete set of sustainability-related financial disclosures and requires an entity to disclose information about all sustainability-related risks and opportunities that could reasonably be expected to affect the entity's prospects. The effect on the entity's prospects refers to the effect on the entity's cash flows and its access to finance or cost of capital over the short, medium or long term.

The information required by IFRS S1 relates to general aspects of how an entity operates, in particular, its governance, strategy, risk management, and metrics and targets associated with sustainability-related risks and opportunities. IFRS S1 refers to these four aspects as the 'core content', meaning information that is essential to users' understanding of how an entity identifies, assesses, prioritises, monitors and manages sustainability-related risks and opportunities. The focus on core content builds on the widely accepted recommendations of the TCFD. IFRS S1 also deals with some general matters such as the requirement for fair presentation of those sustainability-related risks and opportunities and the requirement to provide comparative information.

An entity is required to apply IFRS S1 in conjunction with all the other ISSB standards before it can assert compliance with ISSB standards. The other ISSB standards are intended to set out specific requirements for the

3 [IFRS Foundation and EFRAG publish interoperability guidance](#), May 2024, available on the IFRS Foundation's website.

4 [Inaugural Jurisdictional Guide for the adoption or other use of ISSB Standards](#), May 2024, available on the IFRS Foundation's website.

sustainability-related topics with which they deal. The purpose of IFRS S1 is to establish the basis of application of all topic-based ISSB standards that will be developed by the ISSB in the future, in addition to IFRS S2 which is the first topic-based standard and covers disclosure requirements that are specific to climate. This purpose, in the context of sustainability-related financial disclosures is similar, in some respects, to that of the IASB's *Conceptual Framework*, *IAS 1 Presentation of Financial Statements* and *IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors*, which are applicable to general purpose financial statements prepared in accordance with IFRS accounting standards.⁵

Relationship between IFRS S1 and IFRS S2

IFRS S2 is the first topic-based standard issued by the ISSB and is to be applied in conjunction with IFRS S1. Although in this first phase of their development, IFRS S2 is the ISSB's only topic-based standard, IFRS S1 requires entities to disclose material sustainability-related financial information about all sustainability-related risks and opportunities that could reasonably be expected to affect the entity's prospects. This requirement effectively covers sustainability-related topics beyond climate (subject to the 'climate first' transition relief which allows an entity to provide only climate-related disclosures in its first year of applying IFRS S1 and IFRS S2). IFRS S1 also provides a list of other sources of guidance to help entities identify the relevant sustainability-related risks and opportunities and the material information about them, which includes references to pronouncements of other standard-setting bodies.

Part A of this publication deals with the requirements of IFRS S1 and Part B deals with the requirements of IFRS S2.

Effective date of IFRS S1 and IFRS S2

Both IFRS S1 and IFRS S2 are effective for annual reporting periods beginning on or after 1 January 2024. However, the mandatory application of ISSB standards depends on each jurisdiction's endorsement or regulatory processes and is not linked to the application of IFRS accounting standards. Therefore, an entity applying IFRS accounting standards for financial reporting purposes is not required to also apply ISSB standards, and vice versa.

ISSB's support in implementing IFRS S1 and IFRS S2

The ISSB is committed to supporting the implementation of ISSB standards. The related initiatives include:

- Creating the Transition Implementation Group (TIG) to analyse and publicly discuss any questions that arise during the implementation phase of ISSB standards. The TIG is expected to support implementation in the initial phase of application of ISSB standards and will inform the ISSB to determine if any follow up actions are needed. The members of the TIG include sustainability reporting and financial statement preparers, auditors and other users from a variety of industries and countries, as well as public and private entities. The International Organization of Securities Commissions (IOSCO), the International Auditing and Assurance Standards Board (IAASB) and the International Public Sector Accounting Standards Board (IPSASB) have been assigned as official observers of the TIG. The TIG does not issue authoritative guidance and, therefore, the use of its materials and related discussions are not mandatory for an entity to assert compliance with ISSB standards. Throughout this publication, there are summaries of the discussions that the TIG had up to September 2024.

⁵ IFRS 18 *Presentation and Disclosure in Financial Statements*, which supersedes IAS 1 for reporting periods beginning on or after 1 January 2027 (with earlier application permitted) was issued by the IASB in April 2024.

- Developing educational material to explain and illustrate how an entity might apply some of the requirements in IFRS S1 and IFRS S2. The educational material is not intended to provide interpretative guidance. The ISSB's educational material is not part of ISSB standards and cannot add or change their requirements. The examples included in the educational material focus on particular requirements and therefore are not intended to explain or illustrate how the entity would apply all of the core content requirements in IFRS S1 and IFRS S2.

Use of 'Practical examples'

Extracts from reports presented in this publication as 'Practical examples' are reproduced for illustrative purposes. These extracts illustrate practices that entities have so far developed in sustainability reporting (e.g., reporting under TCFD framework). However, they have not been subject to any review on compliance with ISSB standards, other sustainability-related frameworks or local capital market rules and they are not intended to represent the 'best practice'. Due to the early stage of the implementation phase of ISSB standards, no extracts of reports prepared under the ISSB standards have been reproduced, but suitable extracts may be included in future updates of this publication. The extracts presented as a starting point for an entity to determine what needs to be disclosed under the ISSB standards, but they should also be read in conjunction with the rest of the information provided in the reports from which these extracts were extracted to understand their intended purpose.

What you need to know

- The Trustees of the IFRS Foundation established the ISSB in November 2021.
- The ISSB issued its first two standards, namely IFRS S1 and IFRS S2 in June 2023.
- The ISSB decided to add to its work plan two sustainability-related research projects on: a) biodiversity, ecosystems and ecosystem services, and b) human capital.
- The ISSB standards can be used on a standalone basis or integrated into jurisdictional requirements.
- In applying ISSB standards, IFRS S1 must be applied in conjunction with the other ISSB standards that provide requirements for specific sustainability-related topics (e.g., IFRS S2 for climate-related matters).
- IFRS S1 and IFRS S2 are effective for annual reporting periods beginning on or after 1 January 2024 and include various transition reliefs that are available in the first year of application. Mandatory application of ISSB standards will depend on each jurisdiction's endorsement or regulatory processes.
- The application of IFRS S1 and IFRS S2 is not linked to the application of IFRS accounting standards. Therefore, entities that apply IFRS accounting standards for financial reporting purposes are not required to also apply ISSB standards.
- Part A of this publication deals with the requirements of IFRS S1 and Part B deals with the requirements of IFRS S2.

Part A - Introduction to IFRS S1

1 Introduction to IFRS S1

1.1 The objective of IFRS S1

IFRS S1 sets out the general requirements for the content and presentation of information that an entity needs to provide about sustainability-related risks and opportunities. [IFRS S1.4]. The objective of providing such information is to support users of general purpose financial reports in their decision-making process that relates to providing resources to the entity which prepares the general purpose financial report. [IFRS S1.1]. That is, this information is intended to enable those users to assess the entity's exposure to sustainability-related risks and opportunities over the short, medium and long term, as well as to assess how the entity manages those risks and opportunities in order to inform their decisions in providing resources to that entity.

General purpose financial reports are defined by IFRS S1 as those that provide financial information about an entity that is useful for the users of those reports in making decisions related to providing resources to the entity, and include, but are not restricted to, an entity's general purpose financial statements (or financial statements) and sustainability-related financial disclosures. [IFRS S1 Appendix A]. Information about an entity's sustainability-related risks and opportunities is incorporated in disclosures, referred to as sustainability-related financial disclosures, that constitute a particular form of general purpose financial report and which supplements and complements the information provided in the entity's financial statements.

To further clarify the objective of IFRS S1, there are certain components embedded in the standard as further discussed in the next sections:

- Who does IFRS S1 consider to be the users of general purpose financial statements (see section 1.1.1 below)
- How does IFRS S1 describe the sustainability-related risks and opportunities addressed by ISSB standards (see section 1.1.2 below)

1.1.1 Primary users

The ISSB standards focus on the information needs of primary users in making decisions related to providing resources to an entity, rather than on a broader group of stakeholders.

IFRS S1 defines primary users of general purpose financial reports (primary users) as the "existing and potential investors, lenders and other creditors".⁶ [IFRS S1 Appendix A]. This definition was built on what is stated in paragraph 1.7 of the Conceptual Framework: "General purpose financial reports are not designed to show the value of a reporting entity; instead, they provide information to help existing and potential investors, lenders and other creditors estimate the value of the reporting entity".

According to this definition, ISSB standards focus on the information needs of primary users in making their decisions about providing resources to an entity, rather than the needs of a broader group of stakeholders. The Basis for Conclusions to IFRS S1 states that "Disclosures made in accordance with IFRS Sustainability Disclosure Standards are conceptually and practically complementary to - but not a replacement for - reporting on an entity's significant impacts on people, the environment and the economy". This clearly distinguishes sustainability-related financial information provided in accordance with ISSB standards from the broader, multi-stakeholder perspective adopted by other sustainability-related frameworks that focus on how an entity contributes to sustainable development. [IFRS S1.BC49]. For further discussion on the perspective adopted by other sustainability frameworks, see section 3.2.8 below.

⁶ The terms users of general-purpose financial reports, or primary users, or users are used within the IFRS sustainability disclosure standards to describe the same population.

Although focusing on the information needs of primary users is widely accepted by the market, identifying and assessing the information that would be useful to primary users may not always be straightforward. Primary users need sufficient and relevant information to make their decisions about where and when to provide resources to the entity that prepares the general purpose financial reports, as well as what type of resources to provide. Also, primary users are a diverse group with potentially differing objectives and types of risk exposure and the range of their interests on sustainability matters is rather wide and varies across industries, locations as well as business models and business activities. For further discussion on the identification of information that is useful to primary users, see section 3.2.2 below.

1.1.2 Description of sustainability-related risks and opportunities

1.1.2.A Sustainability is a broad term

The term sustainability is a broad term and applies widely across environmental, social and governance matters and encompasses a wide range of notions. Sustainability is frequently linked to ‘sustainable development’, defined by the United Nations in 1987 as: “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”.⁷ IFRS S1 focuses on requiring disclosures about sustainability-related financial information related to an entity’s governance, strategy, risk management and metrics and targets in relation to those risks and opportunities. Therefore, the relationship of sustainability-related risks and opportunities with the established notions of sustainability and sustainable development, is fundamental to an understanding of the scope of IFRS S1 and ISSB standards in general. [IFRS S1.BC42, IFRS S1.BC43].

1.1.2.B The concept of value

In line with its commitment to leverage from the existing material available from other frameworks and standard-setters, the ISSB based the description of sustainability-related risks and opportunities on the concepts of the Integrated Reporting Framework.⁸ One of the fundamental concepts in the Integrated Reporting Framework is that an entity’s ability to create, preserve and erode value for itself over time (and thus to generate returns for the entity’s investors, lenders and other creditors) is inextricably linked to value that the entity creates, preserves or erodes for others. [IFRS S1.BC46]. In particular, the Integrated Reporting Framework contains the following key points:

⁷ [Sustainability | United Nations](#), available on the United Nations’ website (accessed in September 2024).

⁸ [Integrated Reporting Framework | Integrated Reporting](#), January 2021, available on the IFRS Foundation's website.

Extract from the Integrated Reporting Framework

- 2.2 An integrated report explains how an organization creates, preserves or erodes value over time. Value is not created, preserved or eroded by or within an organization alone. It is:
- Influenced by the external environment
 - Created through relationships with stakeholders
 - Dependent on various resources.
- ...
- 2.6 The ability of an organization to create value for itself is linked to the value it creates for others.
- ...

This concept is also broadly consistent with the IASB's Practice Statement on management commentary.⁹ [IFRS S1.BC47].

The broader concept of value reflects that primary users are interested not just in the value the entity creates for itself, but also in the value that the entity creates for others since that value may ultimately affect, for example, the cash flows generated by the entity, its cost of capital, or the availability of funding. The value concept also clarifies how important longer time horizons are. This is because, although the sources of value may not affect the entity's financial performance in the near term, they may impact its performance, and ultimately its value, as assessed by primary users over time.

1.1.2.C The concept of value in the description of sustainability in IFRS S1

IFRS S1 explains how an entity's ability to create, preserve or erode value is influenced by its interactions within the interdependent system in which it operates. In particular, an entity interacts, directly or indirectly, with its stakeholders, society, the economy and the natural environment throughout its value chain. Such interactions result from an entity's own actions in operating its business model to achieve its strategic purposes, as well as from the influences it receives from the external environment in which it operates. In the context of IFRS S1, these interactions take place within an interdependent system and have a dual meaning. That is, an entity both: a) depends on resources and relationships throughout its value chain to generate cash flows; and b) affects those resources and relationships through its activities and outputs by contributing to the preservation, regeneration and development of those resources and relationships or to their degradation and depletion. [IFRS S1.2, IFRS S1.B2].

Resources and relationships can vary for a number of reasons, and they may take various forms. For example, resources and relationships could be natural (e.g., land, water, minerals, raw materials), manufactured (e.g., machinery, equipment, buildings, infrastructure), intellectual (e.g., patents, copyrights, trademarks), human (e.g., entity's workforce, workers in supply chains), social (e.g., stakeholder relationships, customers, indigenous communities), financial (e.g., cash, investments, access to financial resources). Resources and relationships can be internal (e.g., workforce, know-how, organisational processes) or external (e.g., accessing materials and services or relationships with suppliers, distributors and customers), and they can be recognised as assets in the entity's financial statements or not. Moreover, resources and relationships can be direct or extend throughout the entity's value chain. For example, the entity's supply and distribution channels, the effects of the consumption and disposal of the entity's

⁹ [IASB issues revised Practice Statement on management commentary \(ifrs.org\)](#), IASB, June 2025, available on the IFRS Foundation's website.

products, the entity's sources of finance and its investments (including investments in associates and joint ventures). For further discussion about the concept of value chain, please refer to section 3.3.2 and 3.3.3 below. Understanding an entity's dependencies and impacts (i.e., its dependence on resources and relationships and its impact on those resources and relationships) is important as these may give rise to sustainability-related risks and opportunities. An entity's activities and outputs can affect resources and relationships on which it depends, and the entity itself can be affected by its own impact on the resource or relationship. IFRS S1 provides the following example of the close relationship between the value the entity creates, preserves or erodes for others and the entity's own ability to succeed and achieve its goals: [IFRS S1.B3].

Extract from IFRS S1

B3 For example, if an entity's business model depends on a natural resource-such as water-the entity could both affect and be affected by the quality, availability and affordability of that resource. Specifically, degradation or depletion of that resource-including resulting from the entity's own activities and from other factors-could create a risk of disruption to the entity's operations and affect the entity's business model or strategy and could ultimately negatively affect the entity's financial performance and financial position. In contrast, regeneration and preservation of that resource-including resulting from the entity's own activities and from other factors-could positively affect the entity. Similarly, if an entity operates in a highly competitive market and requires a highly specialised workforce to achieve its strategic purposes, the entity's future success will likely depend on the entity's ability to attract and retain that resource. At the same time, that ability will depend, in part, on the entity's employment practices-such as whether the entity invests in employee training and wellbeing-and the levels of employee satisfaction, engagement and retention. These examples illustrate the close relationship between the value the entity creates, preserves or erodes for others and the entity's own ability to succeed and achieve its goals.

Although an entity's dependencies and impacts may not always be closely related (i.e., an entity can depend on something it does not affect and can affect something it does not depend on), a dependency and an impact may still give rise to sustainability-related risks and opportunities. Illustrations 1-1 and 1-2 below are based on examples provided in the ISSB's educational material on materiality:¹⁰

Illustration 1-1: Resource that the entity is dependent on that it does not affect

Entity A invests in the development of clean technologies which support the transition to a lower-carbon economy. Entity A depends on its access to cash and financial resources to fund its operations by depending on investor appetite to invest in entities whose business models support the transition to a lower-carbon economy. A changing financing environment related to a positive change in investor appetite for Entity A's business model could affect its access to the financial resources on which it depends.

¹⁰ [Sustainability-related risks and opportunities and the disclosure of material information](#), ISSB, November 2024, available on the IFRS Foundation's website.

Illustration 1-2: Resource that the entity affects that it does not depend on

Entity B uses water to operate its business model, and through its water use, its activities could impact local marine species. The species that are most likely to be affected are not currently believed to be endangered. Entity B does not depend on this marine species to operate its business model. However, Entity B's activities may be considered to have the potential to contribute to the degradation or depletion of that water source and endanger particular marine species. If that is the case, these potential impacts could create a risk to Entity B's operations because of its dependency on its legal and social licence to operate (e.g., give rise to regulatory risks or reputational risks).

1.1.2.D Requirement to identify sustainability-related risks and opportunities based on the description of sustainability in IFRS S1

Sustainability-related risks and opportunities about which an entity is expected to provide information are limited to those that could reasonably be expected to affect the entity's prospects.

As described in section 1.1.2.C above, an entity's interactions (i.e., its dependence on resources and relationships and its impact on those resources and relationships by its activities and outputs) may give rise to sustainability-related risks and opportunities. IFRS S1 requires an entity to provide information about those sustainability-related risks and opportunities. However, according to IFRS S1, the sustainability-related risks and opportunities about which an entity is expected to provide information are limited to those that "could reasonably be expected to affect the entity's cash flows, its access to finance or cost of capital over the short, medium or long term". For the purposes of IFRS S1, these sustainability-related risks and opportunities are referred to as "sustainability-related risks and opportunities that could reasonably be expected to affect the entity's prospects". [IFRS S1.3].

The effects of sustainability-related risks and opportunities on an entity's cash flows, its access to finance or cost of capital include: a) the amount, timing and uncertainty of an entity's incoming and outgoing cash flows; b) the entity's ability to obtain funding; and c) the cost incurred by the entity to secure funding for its operations and investments. These effects are assessed over the short, medium and long term to evaluate the potential implications of sustainability-related risks and opportunities for an entity. Short-, medium- and long-term time horizons can vary among entities and depend on many factors (see discussion in section 4.3.1 below). Although an entity assesses whether a sustainability-related risk or opportunity could reasonably be expected to affect its cash flows, its access to finance or cost of capital, this assessment does not require that the risk or opportunity affects all three (though often interrelated in practice. In assessing such effects, an entity considers how its interactions with other market participants may be affected. For example, if an entity has a negative reputation in terms of how it manages a sustainability-related risk, some lenders may avoid being associated with this entity because of the reputational risk that could arise from lending to it. This could result in the entity experiencing constrained access to capital, forcing it to seek capital elsewhere (sometimes on less favourable terms, e.g., higher interest rates, lower borrowing amounts, greater covenant restrictions compared with its peers).

The ISSB standards focus on sustainability-related risks and opportunities that could reasonably be expected to affect an entity's prospects to ensure that entities are not required to identify every possible sustainability-related risk or opportunity that could be identified. That is, although an entity may depend on and affect many resources and relationships throughout its value chain, it will not disclose information about every sustainability-related risk or opportunity. Consider the example of clean air (a resource) on which an entity depends to generate cash flows. The entity could identify a

sustainability-related risk related to the resulting disruption to business continuity if it was unable to access clean air. However, this is a risk that may not be reasonably expected to affect that entity's prospects, nor would identifying this possible, but not reasonably expected, risk likely result in the provision of material information, given that every entity depends on clean air to operate. However, in particular circumstances, an entity may identify a risk related to its access to clean air and, therefore, it may be appropriate to disclose information about that risk arising from its dependence on clean air (e.g., an entity may operate in a region in which the air is of such poor quality that the entity is or could reasonably be expected to be affected because its employees are unable to commute to the workplace or to live in the region).

How we see it

IFRS S1 provides a description of the concepts underlying sustainability-related risks and opportunities, rather than a definition for sustainability. This broad description does not set exact boundaries for the universe of topics covered by sustainability-related financial disclosures so as to reflect the evolving nature of these topics. It follows that the identification of sustainability-related risks and opportunities by an entity may change over time and reassessment of that identification may become necessary (see relevant discussion on reassessing the scope of sustainability-related risks and opportunities in section 1.2.3 below).

1.2 Identifying sustainability-related risks and opportunities

1.2.1 The identification process

To meet the objective of IFRS S1, an entity is required to identify the sustainability-related risks and opportunities that could reasonably be expected to affect its prospects and then to make a materiality assessment to identify and disclose the material information about the identified risks and opportunities. In both identifying sustainability-related risks and opportunities and the material information to be disclosed about them, an entity focuses on the objective of IFRS S1 (see section 1.1 above). As further discussed in section 1.1.1 above, ISSB standards focus on the information needs of primary users (e.g., investors), which distinguishes them from other sustainability-related frameworks that may adopt different perspectives, e.g., a broader or multi-stakeholder perspective or more focus on how an entity contributes to sustainable development.

For the purposes of identifying sustainability-related risks and opportunities, materiality is not an attribute of a risk or opportunity, rather it is an attribute of information about that risk and/or opportunity. This distinction is similar to the concepts applied in the IASB's *Conceptual Framework*.¹¹ Also, the IASB's Practice Statement on management commentary requires an entity to focus on key matters and to provide material information about those key matters.

IFRS S1 does not explicitly require the two steps of: a) identifying the sustainability-related risks and opportunities that could reasonably be expected to affect an entity's prospects; and b) identifying material information about those risks and opportunities, to be performed

11 Paragraph 2.21 of the IASB's *Conceptual Framework* states: "The most efficient and effective process for applying the fundamental qualitative characteristics would usually be...First, identify an economic phenomenon, information about which is capable of being useful to users of the reporting entity's financial information. Second, identify the type of information about that phenomenon that would be most relevant. Third, determine whether that information is available and whether it can provide a faithful representation of the economic phenomenon".

sequentially. In practice, the assessment performed under these two steps is likely to be iterative.

An entity needs to disclose information about the judgements it has made to prepare its sustainability-related financial disclosures that most significantly affect those disclosures. IFRS S1 refers to the process of identifying sustainability-related risks and opportunities that could be reasonably expected to affect the entity's prospects as an example of where judgement is expected to be needed (see further discussion on judgements in section 6.1 below). [IFRS S1.74].

The enhanced description of concepts that underlie sustainability-related risks and opportunities in IFRS S1 (discussed in section 1.1.2 above) is intended to assist entities in identifying them. Moreover, understanding its value chain is important for an entity to identify those sustainability-related risks and opportunities that could reasonably be expected to affect its prospects (for further discussion about determining the value chain, refer to section 3.3.2 and 3.3.3 below). The ISSB further emphasised those concepts and their importance while identifying sustainability-related risks and opportunities in its educational material on materiality, by using the following example shown in Figure 1-1 as a helpful approach to identify sustainability-related risks and opportunities:¹²

Figure 1-1: Example of using underlying concepts to assist in identifying sustainability-related risks and opportunities

Concepts underlying sustainability-related risks and opportunities	Identifying sustainability-related risks and opportunities by using the concepts	Example of a clothing brand company
The value chain	An entity assesses the scope of its value chain and considers its interactions with stakeholders, society, the economy and the natural environment	A clothing brand company considers its interactions with the natural environment in its supply channels
Resources and relationships	The entity considers the resources and relationships throughout its value chain	The clothing brand company considers its use of water in its production process
Dependencies and impacts	The entity identifies the dependencies and impacts it has on resources and relationships	The clothing brand company considers its dependency on high amounts of water to produce its products
Sustainability-related risks and opportunities that could reasonably be expected to affect prospects	The entity identifies sustainability-related risks and opportunities that could reasonably be expected to affect its prospects, which arise from the dependencies and impacts it has on resources and relationships	The clothing brand company identifies a sustainability-related opportunity to use new technology that would reduce the water-intensive processes in its production. This would significantly reduce production costs incurred by the entity

¹² [Sustainability-related risks and opportunities and the disclosure of material information](#), ISSB, November 2024, available on the IFRS Foundation's website.

How we see it

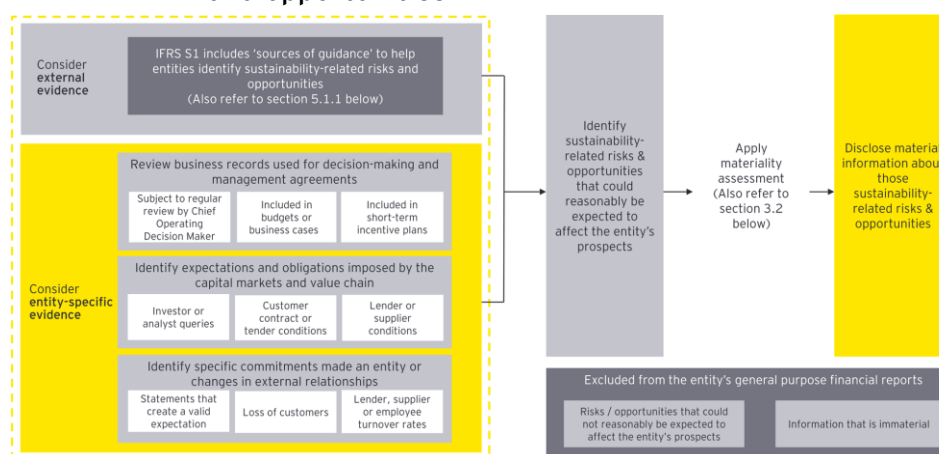
Along with the description of concepts that underlie sustainability-related risks and opportunities (discussed in section 1.1.2 above) and an entity's value chain (discussed in 3.3.2 and 3.3.3 below), all relevant facts and circumstances need to be considered when identifying such risks and opportunities. Those facts and circumstances include both:

- External evidence
- And
- Entity-specific evidence

These sources of evidence are described below.

Figure 1-2 summarises the steps for identifying sustainability-related risks and opportunities and indicates when materiality is assessed.

Figure 1-2: Process for identifying sustainability-related risks and opportunities



External evidence

The sources of external evidence that provide insight into potential sustainability-related risks and opportunities may vary depending on the sector and jurisdiction in which the entity operates. ISSB standards do not require that an entity uses a specific approach or method to identify sustainability-related risks and opportunities. However, IFRS S1 requires entities to consider specific guidance provided in the section 'sources of guidance', which helps entities to identify sustainability-related risks and opportunities that could reasonably be expected to affect their prospects, including those across a range of sustainability-related issues and those that are specific to industries. For further discussion on those sources of guidance, see discussion in section 5.1.1 below.

Entity-specific evidence

An entity should also review evidence that is specific to the entity, to identify potential sustainability-related risks and opportunities. Figure 1-3 below outlines some common sources of entity-specific evidence.

Figure 1-3: Common sources of entity-specific evidence

Sources of entity-specific evidence	Description
Contents of business records used for decision-making and management agreements	Evidence of the existence of a sustainability-related risk or opportunity may be found in various types of business records maintained by an entity. Sustainability-related risks or opportunities may arise from documents used for decision making or agreements such as: ▪ Reports that are regularly reviewed by the Chief Operating Decision Maker of an entity ▪ Budgets or business cases for new investments or reorganisations ▪ Short-term incentive plans or other remuneration or performance management arrangements These sources may be evidence that the risk or opportunity could reasonably be expected to affect the entity's prospects. This is based on the presumption that a sustainability-related risk or opportunity that could not reasonably be expected to affect the entity's prospects would not be expected to be mentioned in agreements and business records used for decision-making.
Expectations and obligations imposed by the capital markets and value chain	Sustainability-related questions from investors and analysts and sustainability-related conditions set by customers, suppliers and lenders may provide insight into the sustainability-related risks and opportunities faced by an entity.

By considering both external evidence and entity-specific evidence, an entity will have identified a pool of potential sustainability-related risks and opportunities. A filter is applied to assess which of those sustainability-related risks and opportunities could reasonably be expected to affect an entity's prospects. This filter requires assessing whether there is a linkage between the sustainability-related risks and opportunities and the entity's future cash flows, access to finance or cost of capital over the short, medium or long term.

In its educational material on materiality, the ISSB highlighted that, in assessing what could reasonably be expected to affect an entity's prospects, the entity should consider an external perspective (i.e., what an external party could reasonably expect). The perspective of primary users is an important consideration for the entity. An entity may conclude that a sustainability-related risk or opportunity could reasonably be expected to affect its prospects based on the expectations of an external party, even though the entity itself may not have that expectation. Therefore, the entity needs to consider matters about which information, if misstated, omitted or obscured, could reasonably be expected to influence a decision by primary users. Illustration 1-3 is based on an example provided in that educational material:¹³

¹³ [Sustainability-related risks and opportunities and the disclosure of material information](#), ISSB, November 2024, available on the IFRS Foundation's website.

Illustration 1-3: Entity determines it could reasonably be expected to be affected by a sustainability-related risk to which it does not believe itself to be exposed

Entity Z is a clothing manufacturer that sources its supplies from a jurisdiction that is known for its effective human rights protections. However, Entity Z's peers source supplies from different jurisdictions and have disclosed risks of human rights violations throughout their value chains in their sustainability-related financial disclosures. In assessing its sustainability-related risks, Entity Z considers both entity-specific factors and external factors, including that:

- Entity Z does not expect the risk of human rights violations throughout its value chain to affect its prospects (entity-specific factor).
- The industry in which Entity Z operates is known to be exposed to risks of human rights violations throughout the value chain (external factor).

Entity Z does not believe itself to be exposed to such risk due to its concentration of suppliers in a jurisdiction that is known for its effective human rights protections. However, Entity Z determines that it could reasonably be expected that it is exposed to the risk of human rights violations in its value chain, because primary users expect this to be a risk for an entity in this industry.

In such circumstances, Entity Z should disclose material information about its exposure to human rights violations. For example, Entity Z could disclose that it is not exposed to the risk of human rights violations throughout its value chain and explain why this is the case. See also section 3.2.2.A below for assessing material information in such circumstances.

How we see it

An entity may assess that a sustainability-related risk or opportunity is not reasonably expected to affect its prospects. We generally believe that information about such a sustainability-related risk or opportunity is not expected to be material and, therefore, would not need to be disclosed in the entity's sustainability-related financial disclosures. However, while making this assessment, an entity may consider that comparable peer entities (such as entities operating in the same industry) have identified that same sustainability-related risk or opportunity as one that could reasonably be expected to affect their prospects. In such case, the entity needs to assess whether the information that this sustainability-related risk or opportunity has been assessed as not reasonably expected to affect its prospects may be, in itself, material information to its primary users. If that information is assessed as material, the entity needs to disclose it. We believe this logic is also aligned with Example K of IFRS Practice Statement 2 *Making Materiality Judgements*, which could be applied by analogy to the ISSB standards.

Frequently asked questions

Question 1-1: Would it be sufficient for entities to rely on their prior or existing sustainability reporting practices when identifying sustainability-related risks and opportunities?

In identifying sustainability-related risks and opportunities that could reasonably be expected to affect their prospects as required by ISSB standards, entities have different perspectives and different existing data sets to refer to. There are entities that have not previously prepared disclosures to comply with any sustainability-reporting framework, nor do they have a mature risk management function for the identification of key risk areas. There are also entities that have well-established prior or existing practices on sustainability reporting that may, or may not, have the same objective as ISSB standards (e.g., focusing on how an entity contributes to sustainable development, rather than the information needs of primary users).

It is expected that entities will use different starting points in identifying sustainability-related risks and opportunities. However, solely basing this process on prior or existing practices applied by the entity is not enough to ensure that an entity has considered all relevant factors in identifying those sustainability-related risks and opportunities to meet the objective of ISSB standards (see discussion about the objective in section 1.1 above). That is, in adopting ISSB standards, an entity needs to conduct a holistic and thorough analysis.

How we see it

Regardless of the starting point of an entity in the identification process of sustainability-related risks and opportunities that could reasonably be expected to affect its prospects, the assessment needs to be based on a fresh holistic analysis of the entity. This is because prior or existing practices applied by the entity in identifying sustainability-related risks and opportunities will not be sufficient to meet the requirements of ISSB standards.

Question 1-2: Can sustainability-related risks result to an entity losing its ability to operate as a 'going concern'?

In identifying the sustainability-related risks and opportunities that could reasonably be expected to affect its prospects, there may be cases that an entity identifies risks that could lead to situations affecting its ability to operate as a 'going concern'. For example, an entity may accidentally cause damage to nature or human beings while conducting its operations which could result to significant reputational damage or put on risk its licence to conduct business and therefore, affect the entity's prospects.

How we see it

It is possible that an entity's operations may accidentally cause damage to nature or people which could result in the entity being exposed to significant reputational damage or put on risk its licence to conduct business. When an entity exercises judgement in identifying sustainability-related risks, the entity should consider the likelihood and magnitude of the risk occurring. In cases such as this, an entity may conclude that the risk represents a sustainability-related risk that could reasonably be expected to affect its prospects because of the magnitude of the consequence of the risk, even though the likelihood of occurrence is low.

Question 1-3: Does an entity need to consider any mitigation activities, in place or planned, when identifying sustainability-related risks that could reasonably be expected to affect its prospects and when disclosing material information about them?

(TIG meeting 19 September 2024 - Agenda paper no. 2, ISSB meeting 20 November 2024 - Agenda paper no. 9C)

In September 2024, the TIG discussed whether an entity needs to consider any mitigation activities, either those that are already in place or those that have been planned, when identifying sustainability-related risks that could reasonably be expected to affect its prospects. The TIG also discussed whether the information about those identified sustainability-related risks needs to be disclosed separately from any relevant mitigation activities (i.e., on a gross basis) or after considering them (i.e., on a net basis).

The TIG noted that an entity's process to identify sustainability-related risks that could reasonably be expected to affect its prospects is a fundamental step to identify the information about those risks that is material to the users and, ultimately, meet the objective of IFRS S1 (see section 1.2 above). Such information is intended to help primary users in making decisions about providing resources to the entity and therefore, the entity needs to consider an external perspective in addition to its own.

With that in mind, the TIG acknowledged that the ISSB standards are not explicit on whether or how an entity needs to consider any mitigation activities when identifying sustainability-related risks that could reasonably be expected to affect its prospects. However, the TIG noted that judgement is expected to be applied when identifying sustainability-related risks which, depending on specific facts and circumstances, may include determining whether and how risk mitigation activities would be a factor for an entity to consider while identifying such risks. An entity should consider establishing a defined methodology or process to assess each sustainability-related risk and risk mitigation activity in a consistent manner. Moreover, the TIG emphasised that caution needs to be exercised when identifying sustainability-related risks 'net' of the effect of risk mitigation activities.

In applying judgement, the TIG highlighted that there are several considerations with respect to the mitigation activities for an entity to carefully think through, for example:

- The 'control' an entity has over a mitigation activity which indicates the entity's ability to manage the risk and how much visibility an entity has on how the mitigation activity progresses
- The effectiveness of a mitigation activity, how an entity assesses the effectiveness, any uncertainty that may exist related to the effectiveness of the mitigation activity once in place
- How much effort the entity puts in place to mitigate the risk or how prominent its mitigation activities are
- The phase of implementation of the mitigation activity (e.g., already put in place and implemented, initial stages of implementing, planning to put in place for a future period) and whether it is a one-time mitigation effort or an ongoing activity
- Whether the mitigation activity relates to a risk that is evolving. Depending on the nature of the risk that is being addressed, the entity's mitigation activities may need to be reassessed over-time to ensure that they are fit for purpose

Depending on its analysis of the various considerations about the risk mitigation activities (such as the ones listed above), an entity needs to determine whether these mitigants could affect the extent to which it is exposed to a risk and whether and how it expects its prospects to be

affected. That is, depending on the specific circumstances, an entity may determine that, due to its mitigation activities, it may, or it may not be exposed to a sustainability-related risk that could reasonably be expected to affect its prospects.

The ISSB standards include various requirements that are either explicit or not explicit in terms of how information about an entity's risk mitigation activities should be disclosed. The TIG emphasised that, ultimately, an entity needs to ensure that primary users have a complete understanding of its thought process, with respect to identification of sustainability-related risks and how these are mitigated, to make their decisions. That is, entities need to identify what information would be useful to its primary users and what disclosures are to be provided based on its materiality assessment by considering whether omitting, misstating or obscuring information about its risk mitigation activities could reasonably be expected to influence the decisions of primary users. Such disclosures need to include information that primary users need to make their own assessment about the effect of mitigation activities.

In its agenda paper, the ISSB staff used some examples that illustrate the issue as well as the considerations involved in the thought process while applying the principles of the ISSB standards. The TIG noted that these examples have been primarily used for illustration purposes, rather than to provide an answer for all scenarios, and emphasised the judgement needed based on the specific facts in each situation. Consider the following illustrations from the TIG agenda paper:

Illustration 1-4: Sustainability-related risk is identified despite of in place or planned risk mitigation activities

Scenario A

An entity operates in an industry that is known for its supply chain activities being concentrated in jurisdictions with high incidences of human rights violations. Its supply chain activities are concentrated in jurisdictions with high incidences of human rights violations. Therefore, it is reasonably expected that entities in this industry are exposed to sustainability-related risks related to human rights violations. However, the entity has implemented risk mitigation activities, to ensure its suppliers operate entirely in one jurisdiction that is known for its effective policies to prevent human rights violations. Thus, due to its mitigation activities the entity determines this risk is not expected to affect its prospects. However, when considering whether it could reasonably be expected to affect its prospects, the entity notes that despite its risk mitigation activities, this risk is so pervasive in its industry, it is a risk that could be reasonably be expected to affect the entity's prospects. The entity therefore identifies this as a sustainability-related risk that could reasonably be expected to affect its prospects, effectively identifying the risk 'before' or despite the effect of its mitigation activities.

Scenario B

An entity's assets are at risk of damage due to increasing severe weather events that it considers to be attributable to climate-related risks, and therefore identifies a sustainability-related risk. The entity plans to mitigate this risk by selling these assets. However, as this risk mitigation activity is only planned and the entity still owns these assets, the entity remains exposed to this sustainability-related risk. The entity therefore identifies this as a sustainability-related risk that could reasonably be expected to affect its prospects. That is, despite planned mitigation activities, the entity identifies a sustainability-related risk.

Illustration 1-5: Sustainability-related risk is not identified due to risk mitigation activities

Scenario A

An entity operates in an industry that is subject to stringent regulations regarding its wastewater treatment. Ten years ago, the entity implemented risk mitigation activities including the introduction of 'best-in-class' equipment to facilitate wastewater treatment. This equipment undergoes mandatory routine maintenance, and the entity conducts daily random tests of water quality. The entity has never experienced any challenges associated with its water quality, and never failed to meet its regulatory obligations related to water quality. The entity considers whether exposure to a risk associated with its wastewater treatment would be one that is reasonably expected to affect its prospects, given the entity has effectively managed this risk for ten years, and that its primary users are aware of the stringent regulatory requirements for wastewater treatment and its approach to mitigate this risk. The entity does not identify this as a sustainability-related risk that could reasonably be expected to affect its prospects due to the effect of the risk mitigation.

Scenario B

An entity operates in the automobile industry and in 2024 20% of its manufactured vehicles were gasoline-powered. The entity operates in only one jurisdiction which has introduced a regulation that will tax the production of gasoline-powered vehicles produced after 2028. Therefore, the entity is, in 2024, exposed to a sustainability-related transition risk. However, by 2025, as part of its risk mitigation strategy, the entity has ended production of gasoline-powered vehicles. Therefore, when considering the sustainability-related risks that the entity is exposed to in 2025, the entity does not identify this as a sustainability-related risk that could reasonably be expected to affect its prospects.

How we see it

We believe that when identifying the sustainability-related risks that could reasonably be expected to affect its prospects, an entity would generally not consider mitigation activities that are in place or are planned to address those risks. However, identifying sustainability-related risks requires judgement to be applied and, in some cases, risk mitigation activities could affect this identification process. When identifying what information is material about sustainability-related risks, mitigation activities are part of the assessment, as such information could affect the decisions that primary users make about providing resources to the entity. In determining what information is material, the entity needs to consider the primary users' perspective in addition to its own.

1.2.2 Use of reasonable and supportable information

1.2.2.A The concept of reasonable and supportable information

Many stakeholders, during the consultation process for the Exposure Draft of IFRS S1, shared their concerns with the ISSB about the range of capabilities and preparedness of entities around the world to apply the requirements of ISSB standards. The cost of investing in and operating the systems and processes necessary to prepare the disclosures required by ISSB standards can be relatively high for some entities. Also, the availability of high-quality external data can be limited in some markets, industries and parts of the value chain, and some entities can struggle to access the skills or expertise needed to prepare the disclosures. [IFRS S1.BC8]. For example, despite the guidance provided in IFRS S1 to assist in the identification of

In identifying sustainability-related risks and opportunities that could reasonably be expected to affect an entity's prospects, only supportable and reasonable information that is available to the entity at the reporting date needs to be used. An entity should not carry out an exhaustive search for this information that would represent 'undue cost or effort'.

sustainability-related risks and opportunities that could reasonably be expected to affect an entity's prospects (discussed in section 1.2.1 above), entities may still find it challenging to make such an assessment and understand how far they should go within their value chain.

These concerns led the ISSB to make decisions about proportionality in the application of ISSB standards to ease the burden of disclosure and assist entities in this application process. One of these decisions was to introduce in IFRS S1 the concept of "all reasonable and supportable information that is available to the entity at the reporting date without undue cost or effort". This concept is not unique to sustainability-related financial disclosures. There are amounts recognised and measured according to IFRS accounting standards by also referring to this concept, but its use is limited to specific circumstances to guide an entity in applying requirements that involve a high level of measurement uncertainty, rather than being used as a broad principle. [IFRS S1.BC9, IFRS S1.BC10, IFRS S1.BC11].

Similarly, this concept only applies to specific requirements of IFRS S1 where judgement is involved. The ISSB believes that the use of this concept is beneficial where entities apply requirements that involve a high level of judgement or uncertainty because it establishes parameters for the type of information to consider, and for the effort required to obtain such information. [IFRS S1.BC15].

1.2.2.B Application of the concept of reasonable and supportable information in IFRS S1

IFRS S1 requires the concept of "all reasonable and supportable information that is available to the entity at the reporting date without undue cost or effort" to be applied: a) in the identification process of sustainability-related risks and opportunities that could reasonably be expected to affect an entity's prospects and b) in the determination of the scope of an entity's value chain (including its breadth and composition) in relation to each of those sustainability-related risks and opportunities. [IFRS S1.B6, IFRS S1.B7]. For further discussion about the determination of the scope of the value chain, see section 3.3.3 below. The ISSB's intention is to avoid situations where entities overstate or understate their reported sustainability-related risks and/or opportunities. [IFRS S1.BC51]. IFRS S1 also requires this concept to be used with respect to the preparation of disclosures about the anticipated financial effects of a sustainability-related risk or opportunity (see discussion in section 4.3.4 below).

IFRS S1 goes on to determine what qualifies as reasonable and supportable information as follows: [IFRS S1.B8, IFRS S1.B9, IFRS S1.B10]

Extract from IFRS S1

Reasonable and supportable information

- B8** Reasonable and supportable information used by an entity in preparing its sustainability-related financial disclosures shall cover factors that are specific to the entity as well as general conditions in the external environment. In some cases—such as in identifying sustainability-related risks and opportunities that could reasonably be expected to affect an entity's prospects—reasonable and supportable information includes information about past events, current conditions and forecasts of future conditions. Other IFRS Sustainability Disclosure Standards may specify what is reasonable and supportable information in specific cases.
- B9** An entity may use various sources of data that may be both internal and external. Possible data sources include the entity's risk management processes; industry and peer group experience; and external ratings, reports and statistics. Information that is used by the entity in preparing its financial statements, operating its business model, setting its strategy and managing its risks and opportunities is considered to be available to the entity without undue cost or effort.
- B10** An entity need not undertake an exhaustive search for information to identify sustainability-related risks and opportunities that could reasonably be expected to affect the entity's prospects. The assessment of what constitutes undue cost or effort depends on the entity's specific circumstances and requires a balanced consideration of the costs and efforts for the entity and the benefits of the resulting information for primary users. That assessment can change over time as circumstances change.

This concept, in itself, does not introduce additional disclosure requirements, nor does it intend to exempt an entity from providing a disclosure. Rather, it is intended to emphasise that relevant and appropriate information is required. Also, it is intended to assist those entities that find it challenging to apply the requirements in ISSB standards and would otherwise be unable to comply fully with them. Entities need to provide only information that is supportable and reasonable and use all information that is available to them at the reporting date, without carrying out an exhaustive search that would represent 'undue cost or effort'. This is determined based on an entity's circumstances (e.g., a less exhaustive search for information is permitted if the cost of obtaining particular information is proportionately higher for the entity than for other entities with more resources). This does not mean that no effort is necessary, especially given the fact that such information relates to a risk or opportunity that could reasonably be expected to affect the entity's prospects. [IFRS S1.BC16, IFRS S1.BC17].

How we see it

In identifying sustainability-related risks and opportunities, an entity needs to consider its specific circumstances when searching for reasonable and supportable information without undue cost or effort. However, we expect that searching for such information will only infrequently involve undue cost or effort. Although an entity is not required to carry out exhaustive search for information, the effort an entity makes in this identification process needs to be commensurate with the processes set up for identifying its sustainability-related risks and opportunities, as discussed in section 1.2.1 above.

1.2.3 Reassessing the scope of sustainability-related risks and opportunities

An entity's sustainability-related risks and opportunities, along with their effects and expectations of those effects on an entity, change over time and in relation to the interdependent system in which an entity operates. The ISSB initially considered requiring entities to reassess the scope of each sustainability-related risk and opportunity throughout their value chain at each reporting date. However, the ISSB decided that primary users would typically benefit from a reassessment only if a significant event or a significant change in circumstances occurs and that doing so at each reporting date was not necessary. However, an entity may choose to reassess the scope of any sustainability-related risk or opportunity throughout its value chain more frequently (e.g., annually). [IFRS S1.B12, IFRS S1.BC45, IFRS S1.BC59, IFRS S1.BC60, IFRS S1.BC61, IFRS S1.BC62].

According to IFRS S1 "a significant event or significant change in circumstances can occur without the entity being involved in that event or change in circumstances, or as a result of a change in what the entity assesses to be important to users of general purpose financial reports". [IFRS S1.B11]. Generally, assessing whether an event or change in circumstances is significant and, therefore, reassessment of the scope of all affected sustainability-related risks and opportunities is required throughout the entity's value chain, is a matter of judgement. [IFRS S1.75(d)]. For further discussion on judgements, see section 6.1 below.

IFRS S1 provides examples of the types of events or changes in circumstances that would be considered significant. They also illustrate that a significant event or significant change in circumstances can occur without the entity being involved in that event or change in circumstances, or as a result of a change in what the entity assesses to be important to primary users. [IFRS S1.B11].

Extract from IFRS S1

- B11** On the occurrence of a significant event or significant change in circumstances, an entity shall reassess the scope of all affected sustainability-related risks and opportunities throughout its value chain. A significant event or significant change in circumstances can occur without the entity being involved in that event or change in circumstances or as a result of a change in what the entity assesses to be important to users of general purpose financial reports. For example, such significant events or significant changes in circumstances might include:
- (a) a significant change in the entity's value chain (for example, a supplier in the entity's value chain makes a change that significantly alters the supplier's greenhouse gas emissions);
 - (b) a significant change in the entity's business model, activities or corporate structure (for example, a merger or acquisition that expands the entity's value chain); and
 - (c) a significant change in an entity's exposure to sustainability-related risks and opportunities (for example, a supplier in the entity's value chain is affected by the introduction of a new regulation that the entity had not anticipated).

While an entity is required to reassess the scope of all affected sustainability-related risks and opportunities arising throughout its value chain when such a significant event or significant change in circumstances occurs, not all sustainability-related risks and opportunities will necessarily be affected. This

is further explained by the example provided in the Basis for Conclusions to IFRS S1. [IFRS S1.BC61].

Illustration 1-6: Reassessing the scope of sustainability-related risks and opportunities

A regulation is introduced for greenhouse gas emissions associated with employee travel that an entity had not anticipated. Because of this regulation, the entity may be required to reassess which categories to include in the measurement of its Scope 3 greenhouse gas emissions. However, this regulation does not affect the entity's other sustainability-related risks and opportunities in its value chain (e.g., the entity's identified risk of water scarcity). Therefore, the entity is not required to reassess the scope of those other sustainability-related risks and opportunities.

It is not necessary to have a change in the entity's value chain to conclude that a significant event or significant change in circumstances has occurred. That is, the scope of a sustainability-related risk or opportunity may change even though the entity's value chain has not changed. [IFRS S1.BC61].

2 Scope

2.1 The scope of IFRS S1

The sustainability-related financial disclosures in accordance with the ISSB standards are provided regardless of which generally accepted accounting principles or practices (GAAP) the entity uses in preparing the related financial statements.

Entities apply IFRS S1 when preparing and reporting sustainability-related financial disclosures in accordance with ISSB standards. The scope of IFRS S1 covers sustainability-related risks and opportunities that could reasonably be expected to affect an entity's prospects (as discussed in section 1.1.2 above). Therefore, any sustainability-related risks and opportunities that could not reasonably be expected to affect an entity's prospects are outside the scope of IFRS S1. *[IFRS S1.5, IFRS S1.6].*

IFRS S1 sets out the general requirements for providing primary users with a complete set of sustainability-related financial disclosures (as discussed in section 1.1 above). This means that IFRS S1 focuses on the overall sustainability-related financial disclosures, while other ISSB standards specify information an entity is required to disclose about specific sustainability-related risks and opportunities (e.g., IFRS S2). *[IFRS S1.7].* In order to comply with the specific requirements set out by other ISSB standards for sustainability-related risks and opportunities related to specific topics that could reasonably be expected to affect an entity's prospects, it is also necessary to take into account the relevant requirements of IFRS S1.

The sustainability-related financial disclosures provided in accordance with the requirements of ISSB standards are part of an entity's general purpose financial reports (as discussed in section 1.1 above). Such disclosures can be applied regardless of which generally accepted accounting principles or practices (GAAP) the entity uses in preparing the related financial statements. *[IFRS S1.8].* IFRS S1 uses definitions and requirements that are consistent, if applicable, with the IASB's Conceptual Framework, IAS 1 and IAS 8. However, its rationale is to introduce a base for decision-useful and comparable reporting of sustainability-related financial information by requiring the application of some established practices from financial reporting, rather than mandating the use of IFRS accounting standards used for the preparation of financial statements. *[IFRS S1.BC5].*

2.2 Application by public sector or entities other than profit-oriented entities

The terminology used in ISSB standards is suitable for profit-oriented entities, including public-sector business entities. However, the ISSB identified interest in ISSB standards from, among others, the public sector, entities other than profit-oriented entities, as well as regulators and other organisations that oversee financial market stability. Considering this interest, the ISSB decided not to preclude not-for-profit activities in the private sector or public sector from applying ISSB standards, but if they do so, IFRS S1 specifies that they may need to amend the descriptions used for particular items of information. *[IFRS S1.9, IFRS S1.BC4].*

3 Conceptual foundations

3.1 Fair presentation of sustainability-related risks and opportunities

Fair presentation of sustainability-related risks and opportunities is achieved when the information provided to primary users meets the fundamental qualitative characteristics set out in IFRS S1. The usefulness of sustainability-related financial information is enhanced by the additional qualitative characteristics also set out in IFRS S1.

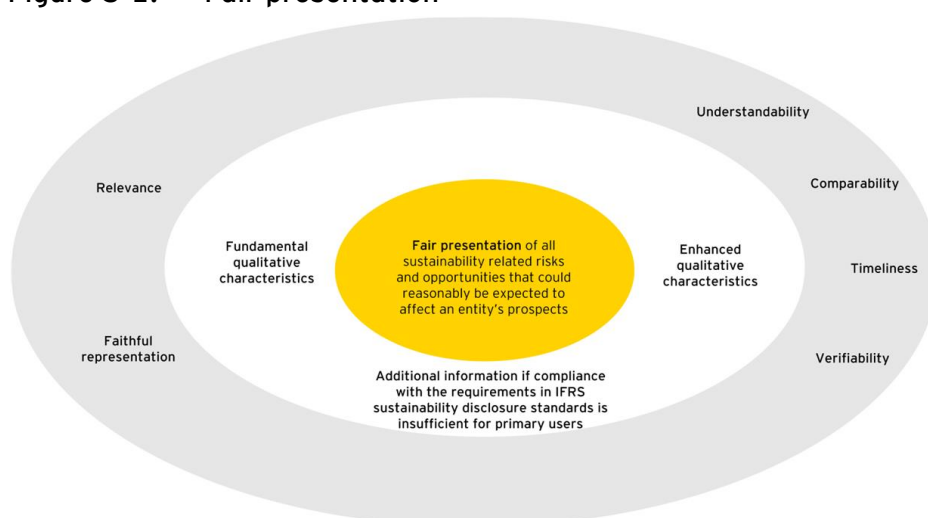
The concept of fair presentation is well-understood in IFRS accounting standards (as described in the IASB's Conceptual Framework and IAS 1) and in other GAAP. IFRS S1 adapted this concept in the context of sustainability-related financial disclosures.

IFRS S1 requires an entity to provide a complete set of sustainability-related financial disclosures that presents fairly all sustainability-related risks and opportunities that could reasonably be expected to affect an entity's prospects. [IFRS S1.11]. Moreover, to meet the objective of IFRS S1, sustainability-related financial disclosures need to include information that is useful to primary users to enable their decision-making relating to providing resources to the entity (see section 1.1 above).

To achieve fair presentation of sustainability-related risks and opportunities and ensure that the information about them is useful, sustainability-related financial information needs to meet the fundamental qualitative characteristics of being relevant and faithfully representing what it purports to represent in accordance with the principles set out in IFRS S1. Along with the fundamental qualitative characteristics, IFRS S1 includes a list of additional qualitative characteristics that enhance the usefulness of sustainability-related financial information. These enhancing qualitative characteristics are: comparability; verifiability; timeliness; and understandability of the sustainability-related financial information. [IFRS S1.10, IFRS S1.13]. The qualitative characteristics are further discussed in section 3.1.1 below.

In addition to meeting the qualitative characteristics mentioned above, to achieve fair presentation, IFRS S1 also requires an entity to disclose additional information if compliance with the specifically applicable requirements in ISSB standards is insufficient to enable primary users to understand the effects of sustainability-related risks and opportunities on the entity's cash flows, its access to finance and cost of capital over the short, medium and long term. [IFRS S1.15, IFRS S1.BC63]. For further discussion on the additional information, see section 3.2.4.A below.

Figure 3-1: Fair presentation



3.1.1 Qualitative characteristics of sustainability-related financial information

While the nature of some of the information required to meet the objective of IFRS S1 differs in some respects from the information provided in financial statements (see further discussion in section 3.2.1 below), the qualitative characteristics have been adapted from the IASB's Conceptual Framework. The IASB's Conceptual Framework describes the objective of, and the concepts that apply to, general purpose financial reports and one of its purposes is to assist the IASB to develop IFRS accounting standards for preparing financial statements based on consistent concepts. Since the sustainability-related financial information is part of the general purpose financial reports, the qualitative characteristics of the IASB's Conceptual Framework also apply to sustainability-related financial disclosures.

[IFRS S1.D1, IFRS S1.D2].

Given that there is no separate conceptual framework directly applicable to ISSB standards, IFRS S1 includes guidance on the qualitative characteristics (both the fundamental and the enhancing ones) of sustainability-related financial information. These qualitative characteristics are intended to assist entities in preparing their sustainability-related financial disclosures by explaining their applicability to sustainability-related financial information (e.g., the fact that information in the form of explanations or forward-looking statements is still verifiable). It is also intended to ensure that information in general purpose financial reports (both in sustainability-related financial disclosures and in financial statements) is useful to users of those reports.

[IFRS S1.BC64, IFRS S1.BC65].

A description for each qualitative characteristic of sustainability-related financial information is included in section 3.1.1.A and 3.1.1.B below, which is based on Appendix D of IFRS S1. *[IFRS S1 Appendix D].*

3.1.1.A Fundamental qualitative characteristics

Relevance

Relevant sustainability-related financial information can make a difference to the decisions made by primary users. Information can make a difference in a decision even if some users choose not to take advantage of it or are already aware of it from other sources. This occurs when the information has predictive value, confirmatory value or both, in particular:

- Sustainability-related financial information with predictive value exists if the information can be used as an input to processes employed by primary users to predict future outcomes. This information does not need to be a prediction or forecast, rather it is employed by primary users in making their own predictions. For example, information about water quality, which can include information about the water being polluted, could inform the expectations of primary users about the ability of an entity to meet local water quality requirements.
- Sustainability-related financial information has confirmatory value if it provides feedback (confirms or changes) about previous evaluations.

These values (predictive and confirmatory) are interrelated; information that has predictive value often also has confirmatory value. For example, information for the current year about greenhouse gas (GHG) emissions, which can be used as the basis for predicting GHG emissions in future years, can also be compared with predictions about GHG emissions for the current year that were made in previous years. The results of those comparisons can help a primary user to correct and improve the processes that were used to make those predictions in previous years.

Moreover, sustainability-related financial information is relevant when it is material to the primary users of a specific reporting entity (materiality is further discussed in section 3.2 below). Because of the specificity of materiality to a particular reporting entity, Appendix D of IFRS S1 considers

materiality to be an entity-specific aspect of relevance. This is because materiality is based on the nature or magnitude, or both, of the sustainability-related financial information for a specific entity. [IFRS S1.D4-D8].

Faithful representation

Sustainability-related financial information represents phenomena in words and numbers. To be useful, other than representing relevant phenomena, the information must also faithfully represent the substance of the phenomena that it purports to represent. Such faithful representation is achieved when the depiction of a sustainability-related risk or opportunity is complete, neutral and accurate. The objective of general purpose financial reports is to maximise those qualities to the extent possible. In particular: [IFRS S1.D9-D15]

- A complete depiction of a sustainability-related risk or opportunity includes all material information necessary for primary users to understand that risk or opportunity.
- A neutral depiction is one without bias in the selection or disclosure of information. The information is neutral if it is not slanted, weighted, emphasised, de-emphasised or otherwise manipulated to make it more likely that primary users will receive that information favourably or unfavourably. Neutral information is relevant (which, by definition, is capable of making a difference in primary users' decisions), rather than without purpose or without influence on behaviour. Some sustainability-related financial information (e.g., targets or plans) is aspirational. A neutral discussion of such matters covers both aspirations and the factors that could prevent an entity from achieving these aspirations. Neutrality is supported by the exercise of prudence, which is the exercise of caution when making judgements under conditions of uncertainty (i.e., that opportunities are not overstated and risks are not understated and vice versa).
- Information can be accurate without being perfectly precise in all respects. The required attainable precision and the factors that make information accurate, depend on the nature of the information and the nature of the matters to which it relates. For example, accuracy requires that:
 - Factual information is free from material error
 - Descriptions are precise
 - Estimates, approximations and forecasts are clearly identified as such
 - No material errors are made in selecting and applying an appropriate process for developing an estimate, approximation or forecast
 - Assertions and inputs used in developing estimates are reasonable and based on information of sufficient quality and quantity
 - Information on judgements about the future faithfully reflects both those judgements and the information on which they are based

The ISSB noted that, according to the IASB's Conceptual Framework, to be a perfectly faithful representation, a depiction would have three characteristics: it would be complete, neutral and free from error. However, considering that entities may not be familiar with the term 'free from error' in the context of sustainability-related financial disclosures, the ISSB decided to use the term 'accurate', instead of 'free from error', to describe a 'complete depiction' of an entity's sustainability-related financial information.

[IFRS S1.BC66].

3.1.1.B Enhancing qualitative characteristics

Comparability

The decisions made by the primary users involve choosing between alternatives (e.g., selling or holding an investment, or investing in one reporting entity or another). Comparability is the characteristic that enables primary users to identify and understand similarities and differences in items. Unlike the other qualitative characteristics, comparability requires at least two items.

Information is more useful if it can also be compared with information provided by the entity in previous periods, as well as information provided by other entities, in particular, those with similar activities or operating within the same industry. Comparability should not be confused with uniformity. Appendix D of IFRS S1 notes that while consistency and comparability are related, the former refers to the use of the same approaches or methods for providing disclosures about the same sustainability-related risks and opportunities from period to period, both by a reporting entity and other entities. That is, consistency helps in achieving comparability, which is the goal. [IFRS S1.D17-D20].

Verifiability

Verifiability helps to give primary users confidence that information is complete, neutral and accurate (see also description for faithful representation above). Information is verifiable if it is possible to corroborate either the information itself or the inputs used to derive it.

Verifiability means that various knowledgeable and independent observers could reach consensus, although not necessarily complete agreement, that a particular depiction is a faithful representation. Quantified information need not be a single point estimate to be verifiable, rather a range of possible amounts and the related probabilities that can also be verified.

Verifiable information is more useful to primary users than information that is not verifiable. It can be enhanced by providing, for example:

- Information that can be corroborated by comparing it with other information available to primary users about: an entity's business, other businesses or the external environment in which the entity operates
- Information that can be supported by assurance providers
- Information about inputs and methods of calculation used to produce estimates or approximations
- Information that has been reviewed and agreed by the entity's board, board committees or equivalent bodies

Some sustainability-related financial information will be presented as explanations or forward-looking information. That information can be supportable, for example, by faithfully representing fact-based strategies, plans and risk analyses. To help primary users decide whether to use such information, a description of the underlying assumptions and methods of producing the information, as well as other factors that provide evidence that the information reflects the actual plans or decisions made by the entity would be necessary. [IFRS S1.D21-D24].

Timeliness

Timeliness means having information available to decision-makers in time to be capable of influencing their decisions. Although older information may be less useful, some may continue to be timely long after the end of a reporting period (e.g., when primary users need to identify and assess trends). [IFRS S1.D25].

Understandability

Information is understandable when it is clear and concise. In particular:
[IFRS S1.D26-D33]

- The level of clarity in disclosures depends on the nature of the information. In some cases, in addition to narrative text, an entity may need to add tables, graphs or diagrams (or even additional text or tables for those additions to avoid obscuring material detail). Clarity can be enhanced by distinguishing information about developments in the reporting period from 'standing' information that remains unchanged, or changes little, from one period to the next (e.g., by separately describing features of an entity's sustainability-related governance and risk management processes that have changed since the previous reporting period). In some cases, information about sustainability-related risks and opportunities may be inherently complex and difficult to present in a manner that is easy to understand. Such information needs to be presented as clearly as possible, rather than being excluded. Excluding such information would render those reports incomplete and potentially misleading.
- Disclosures are concise if they include only material information. Any immaterial information included needs to be provided in a way that avoids obscuring material information (see also section 3.2.4.B below).

Having clear and concise information can be achieved when an entity:

- Avoids generic (i.e., 'boilerplate') information, that is not specific to the entity
- Avoids duplication of information in its general purpose financial reports, including unnecessary duplication of information also provided in the related financial statements

And

- Uses clear language and clearly structured sentences and paragraphs

The completeness, clarity and comparability of sustainability-related financial information all rely on information being presented as a coherent whole. Coherence is also important in meeting the requirements of IFRS S1 about connected information (see relevant discussion in section 3.4 below). For the information to be coherent, an entity needs to:

- Present it in a way that explains the context and the connections between the related items of information. That is, if sustainability-related risks and opportunities located in one part of an entity's general purpose financial reports have implications for information disclosed in other parts, the entity needs to include the information necessary for primary users to assess those implications.
- Provide it in a way that allows primary users to relate information about its sustainability-related risks and opportunities to information in the entity's financial statements.

3.2 Materiality

3.2.1 Definition of materiality

In meeting the objective of IFRS S1, an entity is required to disclose information about its sustainability-related risks and opportunities that could reasonably be expected to affect the entity's prospects (see section 1.2 above). Such information needs to be useful to primary users to make their decisions relating to providing resources to the entity (see section 1.1 above). This occurs when the information disclosed by an entity is material. Materiality is used as a filter for an entity to assess whether information about a sustainability-related risk or opportunity would need to be provided to meet the requirements set out in ISSB standards. [IFRS S1.17, IFRS S1.B13].

IFRS S1 defines materiality as follows: [IFRS S1.18]

Extract from IFRS S1

18 In the context of sustainability-related financial disclosures, information is material if omitting, misstating or obscuring that information could reasonably be expected to influence decisions that primary users of general purpose financial reports make on the basis of those reports, which include financial statements and sustainability-related financial disclosures and which provide information about a specific reporting entity.

The definition of materiality was developed based on the definitions of 'material information' and 'material' in the IASB's Conceptual Framework and IAS 1, respectively. This definition is used in IAS 1 with a specific reference to the financial statements. The materiality assessment in the IASB's Conceptual Framework is not constrained to what is financially material in the financial statements but focuses on the identification of information that is useful to primary users. These primary users are consistent with those of the sustainability-related financial disclosures prepared in accordance with ISSB standards (see section 1.1.1 above). Such a consistency emphasises that the purpose of the materiality assessment is to ensure that the primary users have the information that is relevant to their decision-making and that users do not make their decisions on the basis of just one form of general purpose financial reports published by the entity. [IFRS S1.BC68].

The alignment in the concept and definition of materiality, applicable to both sustainability-related financial information and information in the financial statements, facilitates the connectivity between them (for further discussion on connected information, see section 3.4 below) and it supports the application of ISSB standards, given the broad use of IFRS accounting standards. However, the materiality judgements for sustainability-related financial disclosures will inevitably differ from those for financial statements since they serve their specific objectives and provide different types of information about an entity. In fact, information about sustainability-related risks and opportunities is intended to capture a broader set of information that is not constrained by the definitions of assets, liabilities, equity, income and expenses under IFRS accounting standards, nor the criteria for recognising them. Compared with information included in financial statements, sustainability-related financial information may have different measurement bases or may consider financial implications over longer time periods, including interactions throughout an entity's value chain. It follows that the material information about sustainability-related risks and opportunities that could reasonably be expected to affect the entity's prospects, aim to complement the information provided in the financial statements about the entity's assets, liabilities, equity, income and expenses. [IFRS S1.BC1, IFRS S1.BC69].

Including a specific definition of materiality in IFRS S1 (applicable to all ISSB standards) was a deliberate decision by the ISSB given that ISSB standards are not designed to be applied only with IFRS accounting standards, but any GAAP (see section 2.1 above) that may not share the same definition of materiality. Also, given the variation in how the concept of materiality is interpreted, applied and enforced in various jurisdictions in the context of sustainability-related financial information, a definition of materiality in IFRS S1 was a key decision to make it clear to entities how the materiality concept needs to be applied and assessed under ISSB standards. [IFRS S1.BC71, IFRS S1.BC72].

How we see it

Applying the materiality concept in the context of sustainability-related financial disclosures is relatively new and this is expected to evolve over time. Although this application can be informed by the assessment of materiality in financial statements, more judgement may be needed by an entity given the more qualitative nature of sustainability-related financial disclosures. Therefore, an entity needs to establish the appropriate processes to make materiality judgements based on its specific circumstances.

Understanding the information needs of primary users, based on the types of decisions they make and the expectations on which their decisions depend, contributes to the identification of material sustainability-related financial information.

3.2.2 Identifying material information

As mentioned in section 3.2.1 above, an entity needs to disclose material information about its sustainability-related risks and opportunities such that the information is useful to primary users in making their decisions about providing resources to the entity. However, the identification of such material information requires judgement. IFRS S1 requires an entity to disclose information about the judgements it has made to prepare its sustainability-related financial disclosures that have the most significant effect on those disclosures. An example of making such a judgement is when an entity identifies material information to be included in the sustainability-related financial disclosures. For further discussion on judgements, see section 6.1 below. [IFRS S1.74].

Similar to the process of identifying the sustainability-related risks and opportunities that could reasonably be expected to affect an entity's prospects (discussed in section 1.2 above), the ISSB indicated in IFRS S1, various ways to assist in the identification of material information about those risks and opportunities. In particular, apart from the definition of materiality discussed in section 3.2.1 above, the following sections include:

- Guidance relating to identifying and meeting primary users' information needs (see section 3.2.2.A below)
- Requirements to be applied while identifying material information by considering:
 - The sources of guidance an entity uses in this identification process (see section 3.2.2.B below)
 - Possible future events with uncertain outcomes (see section 3.2.2.C below)
 - Other characteristics of material information (i.e., additional information disclosed by an entity, aggregation and disaggregation of information, interaction with law or regulation, commercially sensitive information) (see section 3.2.4 and 3.2.5 below)

3.2.2.A Information needs of primary users

In identifying the material information to be disclosed, apart from understanding the definition of materiality underpinned in the application of standards (see section 3.2.1 above), an entity needs to understand the types of decisions made by primary users and what it can do to meet those information needs. Materiality judgements involve considerations related to both who the primary users are and what decisions they make based on general purpose financial reports.

IFRS S1 gives an overview of what is involved in the primary users' decisions that relate to providing resources to the entity. These are decisions about: [IFRS S1.B14].

- Buying, selling or holding equity and debt instruments
- Providing or selling loans and other forms of credit

- Exercising rights to vote on, or otherwise influence, the actions of the entity's management that affect the use of the entity's economic resources

These types of decisions depend on primary users' expectations of their returns (e.g., dividends, principal and interest payments or market price increases). Such expectations depend on primary users' assessment of the amount, timing and uncertainty of future net cash inflows to the entity. Also, those expectations depend on the primary users' assessment of the stewardship that the entity's management and its governing body(s) or individual(s) exercises on the entity's economic resources. [IFRS S1.B15].

Having considered the types of decisions that primary users make and the expectations on which their decisions depend, an entity needs to consider both the characteristics of primary users and its own circumstances to determine what could reasonably be expected to influence their decisions made for a specific entity. IFRS S1 describes primary users as those "who have reasonable knowledge of business and economic activities and who review and analyse information diligently. At times, even well-informed and diligent users may need to seek the aid of an adviser to understand sustainability-related financial information". [IFRS S1.B16, IFRS S1.B17].

The information needs and desires of the primary users may differ among them, may be conflicting and could evolve over time. However, it is acknowledged that sustainability-related financial disclosures do not, and cannot, provide all the information that primary users need, such as specialised information needs that are unique to particular users. Instead, sustainability-related financial disclosures aim to meet the common information needs of an entity's primary users. [IFRS S1.B18].

The *Implementation Guidance* to IFRS S1 goes on to explain the approach an entity follows to meet the common information needs of its primary users. In particular, an entity identifies the information needs of one of the three types of primary users e.g., investors (existing and potential), and then those of the two remaining types i.e., lenders and other creditors (existing and potential). The combination of those information needs forms the set of common information needs that the entity aims to meet. There may be information needs shared by all types of primary users or specific to only one or two types. However, using this approach, an entity identifies the common information needs of primary users, without having to identify the information needs that are shared by all types of primary users (i.e., the information needs that the primary users have in common), as this would exclude potential information that meets the needs of only one type of primary users. [IFRS S1.IG5, IFRS S1.IG6].

As further explained in the ISSB's educational material on materiality, an entity assesses the materiality of information based on whether that information could reasonably be expected to influence decisions of primary users. The educational material emphasises that, despite the fact that this assessment is made by the entity itself, it is based on the perspective of primary users and their information needs, and provides the following examples: ¹⁴

- Information that management determines could not reasonably be expected to influence primary users' decisions would not be considered to be material
- Information cannot be assumed to be immaterial simply because users have not asked for it
- Information that an entity assess to have both a low likelihood of occurring and a low impact may still be material if an entity considers that primary users could reasonably be expected to take a different view

¹⁴ [Sustainability-related risks and opportunities and the disclosure of material information](#), ISSB, November 2024, available on the IFRS Foundation's website.

(e.g., if primary users expect that there is a high likelihood or high impact of the risk occurring, information about the risk would need to be provided). See also the discussion in section 3.2.2.C below and Illustration 1-3 in section 1.2.1 above for an example of an entity that determines it could reasonably be expected to be affected by a sustainability-related risk to which it does not believe itself to be exposed.

- In addition to primary users, other parties (e.g., the entity's management, regulators and members of the public) may be interested in sustainability-related financial disclosures and may find this information useful. However, sustainability-related financial disclosures prepared in accordance with ISSB standards are not primarily designed to meet these other parties' information needs and the disclosures are not directed at these other parties.

Apart from the general purpose financial reports, primary users also consider other sources to meet their information needs (e.g., the industry in which an entity operates, the entity's competitors and the state of the economy, the entity's press releases as well as other documents the entity has published). However, the fact that information needed by primary users is publicly available does not relieve an entity from disclosing material information about the sustainability-related risks and opportunities that could reasonably be expected to affect the entity's prospects to comply with ISSB standards. [IFRS S1.IG7].

How we see it

In some cases, significant judgement may be required in determining what meets the primary users' information needs, especially because such needs may evolve over time.

3.2.2.B Sources applied in assessing materiality

The starting point for an entity in identifying material information about a sustainability-related risk or opportunity is to apply the requirements of the ISSB standard that specifically applies to that sustainability-related risk or opportunity (e.g., the requirements in IFRS S2 for climate-related disclosures as discussed in Part B of this publication). However, in the absence of such an ISSB topical standard, the entity applies the requirements specified in the section of IFRS S1 related to the sources of guidance, which is further discussed in section 5.1.2 below. [IFRS S1.B20].

3.2.2.C Possible future events with uncertain outcomes

A materiality assessment is also required for information about possible future events with uncertain outcomes and IFRS S1 includes specific considerations for this assessment. In particular, IFRS S1 states: [IFRS S1.B22]

Extract from IFRS S1

- B22 In some cases, IFRS Sustainability Disclosure Standards require the disclosure of information about possible future events with uncertain outcomes. In judging whether information about such possible future events is material, an entity shall consider:
- (a) the potential effects of the events on the amount, timing and uncertainty of the entity's future cash flows over the short, medium and long term (referred to as 'the possible outcome'); and
 - (b) the range of possible outcomes and the likelihood of the possible outcomes within that range.

If the potential effects of a possible future event are significant and the event is likely to occur, the information about that event is more likely to be

material. However, information about low-probability and high-impact outcomes still needs to be considered as these may be material either individually or in combination with information about other low-probability and high-impact outcomes. For example, an entity is exposed to several sustainability-related risks that could individually cause the same type of disruption to the entity (e.g., disruption to its supply chain). Information about an individual source of risk is not material because disruption caused from that source is highly unlikely to occur. However, information about the aggregate risk (i.e., the risk of supply chain disruption from all sources) may be material. [IFRS S1.B23].

Moreover, if a possible future event is expected to affect an entity's cash flows, but only many years in the future, information about that event is usually less likely to be considered material than information about a possible future event with similar effects that are expected to occur sooner. However, in some circumstances, primary users' decisions could reasonably be expected to be influenced by information, regardless of the magnitude of the potential effects of the future event or the timing of that event (e.g., if information about a particular sustainability-related risk or opportunity is highly scrutinised by primary users of an entity's general purpose financial reports). [IFRS S1.B24].

Frequently asked questions

Question 3-1: Do the ISSB standards require an entity to consider the time value of money (e.g., using a discounted cashflow model) when making judgements about whether information is material?

IFRS S1 does not explicitly require an entity to use discounting techniques or cash flow models to quantify amounts when identifying which information about sustainability-related risks and opportunities is material to disclose. Entities are also not prohibited from using a mechanism to distinguish between the financial effect that is expected to occur in the short term compared to the long term. However, there is no specific requirement in the ISSB standards to do so.

However, the time value of money is relevant to the entity's materiality assessment. This is acknowledged in IFRS S1 by contrasting the expected effects on cash flows "many years in the future" with similar effects that are expected to "occur sooner". That is, the likelihood of the event occurring in both scenarios is comparable, but it is the timing of the occurrence of the event that is different. IFRS S1 goes on to explain that information about the former scenario is, usually, less likely to be considered material than the latter scenario (see discussion in this section above).

As explained in IFRS S1, in its materiality assessment, an entity needs to consider both quantitative and qualitative factors. Information could be material "regardless of the magnitude of the of the potential effects of the future event or the timing of that event" (see discussion at this section above and at section 3.2.3 below). Although the timing of cashflows is an important consideration, along with other quantitative factors, qualitative factors are equally important. Therefore, omitting such information, purely due to considering the time value of money, may lead to primary users missing material information.

3.2.3 Quantitative and qualitative factors in materiality judgements

Identifying material information about an entity's sustainability-related risks and opportunities that could reasonably be expected to affect its prospects requires judgement (see discussion in 3.2.2 above). An entity's materiality judgements focus on the objective of IFRS S1, which is to provide information that meets the needs of primary users (discussed in section 1.1 above). Therefore, there are various factors to consider when making these judgements, such as:

- The nature of the sustainability-related risk or opportunity.
- The nature of the entity's operations, assets, and liabilities (e.g., whether the majority of the entity's assets and liabilities are long-lived or short-lived).
- The growth prospects for the entity, the growth prospects of the industry in which the entity operates (e.g., high growth, stable, in decline) and the relationship between those two and the extent of the entity's exposure to the sustainability-related risk or opportunity. For example, whether an entity's exposure to a sustainability-related risk increases, remains constant or reduces relative to the prospects of the entity.

As further discussed in section 3.2.1 above, information is material if "omitting, misstating or obscuring that information could reasonably be expected to influence decisions that the primary users of general purpose financial reports make on the basis of those reports, which provide information about a specific reporting entity". Appendix D of IFRS S1 describes materiality as an entity-specific aspect of relevance which is assessed in the context of an entity's sustainability-related financial disclosures and is based on the nature or magnitude of the item to which the information relates, or both. Materiality judgements are specific to an entity and IFRS S1 does not specify any thresholds for materiality or predetermine what would be material in a particular situation. In identifying such information, an entity needs to assess whether this information, individually or in combination with other information, is material in the context of the entity's sustainability-related financial disclosures taken as a whole. This assessment requires the consideration of both quantitative and qualitative factors (e.g., the magnitude and the nature of the effect of a sustainability-related risk or opportunity on the entity). [IFRS S1.B19, IFRS S1.B21, IFRS S1.D8].

3.2.3.A Making quantitative assessments

An entity assesses whether the effect of a sustainability-related risk or opportunity is of such a size that information about it could reasonably be expected to influence primary users' decisions about providing resources to the entity. In doing so, an entity generally considers the size of such effect against other related measures to assess whether information about that sustainability-related risk or opportunity is quantitatively material (e.g., impact on cash flows, amount of resource consumption, return on investment or market share). Identifying measures against which an entity makes a quantitative materiality assessment is a matter of judgement. This judgement depends on the measures related to the sustainability-related risk or opportunity and the information that is relevant to the primary users. For example, when considering the materiality of information about a sustainability-related risk affecting a group of employees, an entity may consider the number of employees affected relative to the total number of employees. Also, when considering the materiality of information about a particular category of Scope 3 GHG emissions, an entity may consider the size of those emissions relative to other aspects of the entity's GHG footprint (e.g., GHG emissions associated with other categories of Scope 3 GHG emissions, or the entity's total Scope 3 GHG emissions).

Making materiality judgements by using quantitative factors is a relative concept and, generally, can be readily understood and applied when preparing financial statements. For example, an asset with a cost (and fair value) of CU100 may be material to an entity that has total net assets of CU500. However, the same asset may be immaterial to a different entity that has total net assets of CU10,000 (assuming that any loss on the asset would have an immaterial impact on the entity's profit or loss and/or equity). The amounts considered for this assessment (i.e., the entity's total net assets or profit or loss) must relate to the same reporting period. However, when preparing sustainability-related disclosures, such an assessment may not be straightforward, for example:

- When the sustainability-related risk or opportunity arises, the items subject to that risk or opportunity considered in the assessment (e.g., the asset) may not yet exist or their value (e.g., the value of the asset or the total net assets or profit or loss) when exposed to that risk or opportunity may be different from their current value/carrying amount.
- The level of uncertainty about the occurrence of a sustainability-related risk or opportunity and the magnitude of its impact on the entity's prospects is likely to increase as the time horizon extends (see further discussion in section 3.2.2.C above).
- When considering the components of the assessment, these may be considered in their 'current state' or their 'expected future state'. In particular:
 - 'Current state' refers to the components based on the entity's measurement in the current reporting period, even though their exposure to the sustainability-related risk or opportunity is expected in the future.
 - 'Expected future state' refers to the components based on the entity's forecasted measurements at the time of the expected exposure to the sustainability-related risk or opportunity.

Figure 3-2: Current versus expected future state

Current state	Expected future state
Materiality judgements based on the 'current state' use more observable or objective measures. This could reduce the degree of judgement and the significant estimation uncertainty (that would otherwise be required for forecasted measurements), especially if the risk exposure extends over a prolonged period of time and there is a likelihood that the entity's measurements change over that time period. Using the 'current state' may make the materiality judgements: a) easier to apply, and b) more useful, in case of concerns of the primary users that the forecasted measurements may not present fairly the sustainability-risks or opportunities that could	Materiality judgements based on the 'expected future state' places the judgement in the context of the entity's expected situation at the time the entity is expected to be exposed to the sustainability-related risk or opportunity. Using the 'expected future state' may be more appropriate when an entity has no assets or operations exposed to sustainability-related risks or opportunities in the current period, but it expects to have such assets or operations in the future. In that case, the entity may conclude that its exposure to the future sustainability-related risk or opportunity is material information, even though the sustainability-related risk or opportunity does not materially affect the entity in the current reporting period. However, the perceived relevance of this information needs to be balanced against any concerns about the

reasonably be expected to affect the entity's prospects. For example, an entity assesses that an asset is exposed to a climate-related risk which, if it eventuates, could result in the asset being fully impaired. To determine whether information about that risk is quantitatively material, the entity bases its assessment on its financial statements for the current reporting period.	reliability and verifiability of that information. For example, an entity is constructing a new production facility that is expected to be fully operational in 3 years. Once the facility is operational, the entity expects its revenues to increase significantly. The entity considers that the new production facility will be exposed to a climate-related risk. In determining whether information about that risk is quantitatively material, the entity considers what the value of that facility may be when the risk may arise.
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How we see it

An entity needs to exercise judgement to identify the material information to be included in its sustainability-related financial disclosures. In many cases, entities make this judgement based on the 'current state' of the item to which the assessed information relates. We do not believe that making this judgement based on the 'expected future state' of such an item would be appropriate when the respective information about that item in its 'current state' would be material. In meeting the requirements of IFRS S1 with respect to the disclosure of such judgements (see further discussion in section 6.1. below), the context and assumptions used in the entity's assessment need to be disclosed. This includes disclosures about an entity's assessment on:

- Whether the entity uses the 'current state' of items being assessed and qualitative information about how its strategy and business model are expected to evolve over the time in relation to the exposure to the sustainability-related risk or opportunity.
- Whether the entity uses the 'expected future state' of items and an explanation about how the future state assumptions reconcile with the entity's measurements in the current period.

3.2.3.B Making qualitative assessments

The IASB's Practice Statement 2 *Making Materiality Judgements* explains that qualitative factors are "characteristics of an entity's transactions, other events or conditions, or of their context, that, if present, make information more likely to influence the decisions of the primary users of the entity's financial statements". The mere presence of a qualitative factor is not what necessarily makes the information material, but the presence of that qualitative factor is likely to increase the interest of primary users in that information and potentially make it material. Some information required by ISSB standards, by its nature, is likely to be material because of the presence of a qualitative factor. For example, information about how an entity structures its governance function to manage the topic of climate risk is likely to be material for all entities exposed to a climate-related risk that could reasonably be expected to affect their prospects.

Qualitative factors can include entity-specific factors (such as the involvement of a related party of the entity) and external factors (such as the geography, industry sector and markets in which the entity operates). The ISSB's educational material on materiality, introduces some examples of entity-specific and external qualitative factors:¹⁵

- Entity-specific qualitative factors include:
 - The nature of the risk or opportunity
 - The extent to which the entity's business model and strategy depend on particular resources or relationships (e.g., relationships with important suppliers or customers)
 - Unexpected variation or change in trends (e.g., a quantitatively immaterial amount may be assessed as material because of an unexpected variation compared to the prior-period amount provided in sustainability-related financial disclosures)
- External qualitative factors (which could remain constant or change over time) include:
 - The entity's geographical location
 - The entity's industry or sector. Entities operating in the same industry or region may all be affected by similar external qualitative factors
 - The state of the economy or economies in which the entity operates
- As discussed in section 1.2.1 above, lack of exposure to a risk or opportunity could reasonably be expected to influence primary users' decisions. That is, if an entity is not exposed to a risk or opportunity to which others in its industry are exposed, information about the lack of exposure to that particular risk or opportunity could be material.

3.2.3.C Combining quantitative and qualitative assessments

Materiality of information is assessed by considering both quantitative and qualitative factors with no specific hierarchy. An entity could identify information as material based on one or more quantitative or qualitative factors. In fact, the more factors that apply to a particular sustainability-related risk or opportunity, or the more significant the possible effect of those factors, the more likely it is that information about that risk or opportunity is material.

In its educational material on materiality, the ISSB noted that it would not be appropriate for the entity to rely only on numerical guidelines or to apply the same quantitative threshold for all materiality judgements. The presence of a qualitative factor is likely to lower the threshold for a quantitative assessment (i.e., the more significant the qualitative factors, the more likely it is that lower quantitative thresholds will apply, and, therefore, the more likely that the information is material). It may also be the case that, despite the presence of qualitative factors, information is not material because the effect of the factor is so small that it could not reasonably be expected to influence primary users' decisions. However, an entity is not required to model the effects of qualitative or quantitative factors on its future cash flows to make materiality judgements.

An entity may decide to first assess specific information using quantitative factors, or to first assess specific information using qualitative factors. Assessing materiality using quantitative factors first could be an efficient approach if an entity concludes the information is material solely based on its size. That is, if the information is material based on this quantitative threshold, it will not need to assess that information using other factors. Typically, in the context of financial statements, qualitative factors are

¹⁵ [Sustainability-related risks and opportunities and the disclosure of material information](#), ISSB, November 2024, available on the IFRS Foundation's website.

considered if an item is not assessed to be quantitatively material. The same reasoning applies in the context of sustainability-related financial disclosures that represent or relate to amounts. Moreover, quantitative factors can be used to assess both the materiality of information of a quantitative nature (e.g., GHG emissions), but also information of a qualitative nature (e.g., narrative information about an entity's governance arrangements, its strategy and decision making, or its resilience to a specific risk).

On the other hand, assessing materiality using qualitative factors first could be an efficient approach if an entity concludes the information is material solely based on the interest primary users have in the topic. If this information is material based on a qualitative threshold, the entity will not need to assess that information using other factors.

3.2.4 Additional information disclosed by an entity

3.2.4.A Additional information provided when the requirements of ISSB standards are not sufficient

Under certain circumstances, an entity may need to provide information that is additional to the information provided to comply with the specifically applicable requirements in an ISSB standard. In particular, when compliance with the requirements of an ISSB standard that specifically applies to an entity's circumstances is not sufficient for primary users to understand the effects of sustainability-related risks and opportunities on the entity's cash flows, its access to finance and cost of capital over the short, medium and long term, the entity needs to disclose additional information. [IFRS S1.B26].

How we see it

Sometimes compliance with the specific requirements of ISSB standards is not sufficient and, therefore, additional information would be needed to support primary users in making their decisions about providing resources to an entity. Such additional information would constitute material information and be required by IFRS S1 (see discussion about the definition of materiality in section 3.2.1 above).

3.2.4.B Requirements for not obscuring material information

Generally, if information is not material, there is no need to disclose such information that is otherwise required by an ISSB standard, even if the specific ISSB standard contains a list of specific requirements or describes them as minimum requirements. [IFRS S1.B25]. Moreover, sustainability-related financial information required by ISSB standards needs to be clearly identified and distinguished from other information provided by the entity that is additional to what is required by ISSB standards (see relevant discussion about location of information in section 5.2 below). However, when such information is included, an entity needs to ensure that material information is not obscured.

Because IFRS S1 uses a definition of material information that is consistent with IAS 1, the ISSB also decided to include guidance in IFRS S1 with respect to the concept of obscuring material information building on similar requirements in IAS 1. That is, information may be obscured when it is communicated in a way that would have a similar effect for primary users to omitting or misstating that information. [IFRS S1.B27, IFRS S1.BC73].

IFRS S1 provides examples of circumstances that may result in material information being obscured: [IFRS S1.B27]

Extract from IFRS S1

- B27** An entity shall identify its sustainability-related financial disclosures clearly and distinguish them from other information provided by the entity (see paragraph 62). An entity shall not obscure material information. Information is obscured if it is communicated in a way that would have a similar effect for primary users to omitting or misstating that information. Examples of circumstances that might result in material information being obscured include:
- (a) material information is not clearly distinguished from additional information that is not material;
 - (b) material information is disclosed in the sustainability-related financial disclosures, but the language used is vague or unclear;
 - (c) material information about a sustainability-related risk or opportunity is scattered throughout the sustainability-related financial disclosures;
 - (d) items of information that are dissimilar are inappropriately aggregated;
 - (e) items of information that are similar are inappropriately disaggregated; and
 - (f) the understandability of the sustainability-related financial disclosures is reduced as a result of material information being hidden by immaterial information to the extent that a primary user is unable to determine what information is material.

Material information required by ISSB standards must be presented prominently and be distinguishable from immaterial information (e.g., provided to comply with law, regulation or other requirements), to avoid being obscuring. Potential ways for achieving this distinction could be, for example, when the information required by ISSB standards is:

[IFRS S1.BC74]

- Extracted by primary users by using digital tagging
- Presented together with immaterial information in a single report but is distinguished from it by using appropriate formatting (e.g., using boxes or shading to emphasise or make the distinction clear)
- Presented separately so that it is clearly distinguished from immaterial information (e.g., splitting the report into parts)

3.2.4.C Interaction with law or regulation

Frequently, entities may need to comply with law or regulation enforced in the jurisdictions they operate that specifies disclosure requirements on sustainability-related information. In such circumstances, the entity is permitted to include in its sustainability-related financial disclosures, information to meet legal or regulatory requirements, even if that information is not considered material under ISSB standards. Information to meet legal or regulatory requirements may be included in the same location as information required by ISSB standards, as discussed in section 5.2.1 below. However, the entity needs to ensure that such information does not obscure material information, as discussed in section 3.2.4.B above.

[IFRS S1.B31].

Material sustainability-related financial information is disclosed, even if law or regulation permits the entity not to disclose such information. However, an entity need not disclose information otherwise required by an ISSB standard if law or regulation prohibits the entity from disclosing that

information. However, if such material information is omitted for that reason, an entity needs to identify the type of information not disclosed and explain the source of the restriction. [IFRS S1.B32, IFRS S1.B33].

3.2.5 Other characteristics of material information

3.2.5.A Aggregation and disaggregation

Building on the principles of aggregation and disaggregation in IAS 1, IFRS S1 requires an entity to consider all facts and circumstances to determine how to aggregate and disaggregate information in its sustainability-related financial disclosures. [IFRS S1.B29]. The ISSB considered that the concepts of aggregation and disaggregation embedded in IAS 1 in relation to the information provided in the financial statements are equally important for sustainability-related financial disclosures. This is to ensure that primary users are provided with information at appropriately aggregated and disaggregated levels.

To avoid reducing the understandability of sustainability-related financial disclosures, an entity needs to ensure that material information is not obscured by immaterial information or material items of information that are dissimilar to each other are not aggregated. [IFRS S1.B29]. In general, information cannot be aggregated if doing so would obscure information that is material. Items of information that are eligible for being aggregated have shared characteristics, rather than those that do not have shared characteristics. For example, disaggregating information by geographical location or in consideration of the geopolitical environment may be necessary to ensure that material information is not obscured when reporting about the use of water drawn from abundant sources and water drawn from water-stressed areas. [IFRS S1.B30].

The following example is based on the ISSB's *Educational material: Nature and social aspects of climate-related risks and opportunities* that was published in December 2023.¹⁶

¹⁶ [Educational material: Nature and social aspects of climate-related risks and opportunities](#), ISSB, December 2023, available on the IFRS Foundation's website.

Example 1- Disclosing disaggregated information about a climate-related risk (nature aspect)

Example 1 illustrates how an entity might apply paragraph 13(b) of IFRS S2 and the principles of aggregation and disaggregation in paragraphs B29-B30 of IFRS S1 to disclose information about where in its business model and value chain a climate-related risk is concentrated. The example is not intended to illustrate all of the information the entity might need to disclose when it applies these paragraphs.

...

Fact pattern

The entity operates in the agricultural products industry. It grows wheat itself in two regions: Region 1 and Region 2. The entity also buys wheat from a supplier who grows the crop in Region 1. The entity mills the wheat and sells it to customers.

The entity's business model depends on water because growing wheat relies on rainfall and on irrigation from other water sources. Region 1 currently has high baseline water stress and the entity expects the water stress to become worse over the medium term.

The entity identifies water scarcity as a climate-related risk to which it is exposed. Climate change drives water scarcity in Region 1 through increasing temperatures and changing precipitation patterns. As a result, there is likely to be a significant reduction in the water available in this region. Water scarcity can affect the entity's prospects because, for example, reduced water availability can disrupt its own wheat production and can increase the price it pays to purchase the crop from its supplier.

Application of IFRS S2

In accordance with paragraph 10 of IFRS S2, the entity discloses information that enables users of general purpose financial reports to understand water scarcity in Region 1 as a climate-related risk that the entity has determined could reasonably be expected to affect its prospects.

Water scarcity is a location-specific risk. Therefore, the entity decides that disclosing information about the amount of wheat exposed to this risk by region will provide material information to users of general purpose financial reports. Accordingly, applying paragraph 13(b) of IFRS S2 and the principles of aggregation and disaggregation in paragraphs B29-B30 of IFRS S1, the entity disaggregates its total amount of wheat (grown and purchased, in metric tonnes) between the region that has high baseline water stress (Region 1) and the region that does not (Region 2). Table 1 illustrates this disaggregation.

Table 1: Disaggregation of crop by region (in metric tonnes)

	Region with high baseline water stress (Region 1)			Other region (Region 2)		
	<i>grown</i>	<i>purchased</i>	<i>total</i>	<i>grown</i>	<i>purchased</i>	<i>total</i>
Total						
E = C + D	A	B	C = A + B	D	—	D

...

Omitting commercially sensitive information from sustainability-related financial disclosures is intentionally narrow and is not intended to permit broad non-disclosure of information.

3.2.5.B Commercially sensitive information

While IFRS S1 was being developed, stakeholders were concerned about disclosing information that could be considered commercially sensitive. The concerns related to the potential impact on an entity's competitive advantage by revealing details about its strategy and planned actions through the disclosures required by ISSB standards. The concerns were mainly focused on disclosing commercially sensitive information about opportunities, rather than risks, as these could affect an entity's competitiveness in the market or otherwise be commercially harmful. [IFRS S1.BC76, IFRS S1.BC77].

Considering these concerns, the ISSB introduced in IFRS S1 a targeted exemption by permitting an entity, in limited circumstances, to omit from its sustainability-related financial disclosures information about a sustainability-related opportunity. Such an omission is permitted even if information is otherwise required by an ISSB standard, and the information is material. [IFRS S1.B34].

The exemption is intentionally narrow and applies only to the disclosure of information about opportunities, and it is not permitted to be applied for non-disclosure of information about risks. Also, the exemption is not intended to permit broad non-disclosure of information about opportunities. [IFRS S1.BC79, IFRS S1.B37]. Rather, an entity qualifies for the exemption if, and only if: [IFRS S1.B35, IFRS S1.BC80, IFRS S1.BC81, IFRS S1.BC83]

- Information about the sustainability-related opportunity is not already publicly available. That is, the exemption does not apply to information that is already publicly available (e.g., continuous disclosure notices, investor presentations, briefings to analysts, or other publicly available documents) as it is unlikely that such disclosure will harm an entity's advantage in pursuing the opportunity.
- Disclosure of the information could reasonably be expected to prejudice seriously the economic benefits the entity would otherwise be able to realise in pursuing the opportunity.
- The entity has determined that it is impossible to disclose that information in a manner that would enable the entity to meet the objectives of the disclosure requirements without seriously prejudicing the economic benefits the entity would otherwise be able to realise in pursuing the opportunity. For example, an entity needs to first consider whether it is possible to disclose the information about the opportunity at a sufficiently aggregated level to resolve its concerns about commercial sensitivity, before applying the exemption. However, if it does so, an entity needs to ensure that aggregation does not obscure material information (as discussed in section 3.2.5.A above).

IFRS S1 requires additional disclosures when this exemption is applied. In particular, if an entity elects to use the exemption for each item of information omitted, the entity needs to: [IFRS S1.B36]

- Disclose the fact that it has used the exemption to make users aware that information has been excluded for reasons of commercial sensitivity
And
- Reassess, at each reporting date, whether the information qualifies for the exemption and, if the entity is no longer eligible for the exemption, disclose that information at that reporting date

3.2.6 Reassessment of material information

The individual circumstances of an entity and/or the external environment may change and, therefore, the sustainability-related risks and opportunities that users reflect to make their decisions can also change over time. Accordingly, the material sustainability-related financial information disclosed by an entity may change from one reporting period to another due to changes in circumstances and assumptions to reflect the evolving information needs of primary users (see section 3.2.2.A above). For example, the entity's circumstances may change because it has expanded its operations into new jurisdictions, and, therefore, its materiality judgements will need to take into account its operations in these new jurisdictions. This means that some types of information included in an entity's sustainability-related financial disclosures for prior periods may no longer be material. Conversely, some types of information not previously disclosed may become material. For example, an unexpected change in an entity's external environment (e.g., the emergence of a new technology) may mean that additional information about a sustainability-related risk or opportunity becomes material. This dynamic nature of materiality led the ISSB to the decision of requiring entities to reassess their materiality judgements at each reporting date to take account of changes in circumstances and assumptions. [IFRS S1.B28].

In its education material on materiality, the ISSB provides examples where an entity makes materiality judgements at each reporting date based on its assessment at that time of the information that could reasonably be expected to influence primary users' decisions. For example:¹⁷

- An entity previously assessed and concluded information about a sustainability-related risk was not material. However, at the current reporting date, the entity assesses and concludes that the sustainability-related risk could reasonably be expected to affect its prospects and would now be required to provide material information about that matter.
- An entity has information about a sustainability-related risk that it has assessed and concluded is effectively managed. However, the entity concludes that primary users may take a different view and information about the risk may be material.
- An entity has information about a sustainability-related risk that it has assessed and concluded is effectively managed. However, the entity concludes that primary users may not be aware of the entity's mitigation activities and information about the risk may be material.
- An entity has information about a sustainability-related risk that primary users have not identified as a concern. However, that information may still be material if the information could reasonably be expected to influence primary users' decisions (e.g., information that would resolve primary users' misunderstanding about whether the entity is exposed to a sustainability-related risk).
- An entity has announced an intention to meet a sustainability-related target related to a sustainability-related risk or opportunity. However, the entity has not yet developed a plan to achieve this target, and that information may be material.

Moreover, the educational material on materiality emphasised the fact that an entity identifies sustainability-related risks and opportunities and provides material information about them based on facts and circumstances at the reporting date, including providing information that is forward-looking. If an entity is exposed to a sustainability-related risk or opportunity that may have consequences in the long term, the entity would disclose information, if

¹⁷ [Sustainability-related risks and opportunities and the disclosure of material information](#), ISSB, November 2024, available on the IFRS Foundation's website.

material, about this sustainability-related risk or opportunity. For example, if at the reporting date an entity anticipates it will be subject to a potential change in climate-related legislation in the future, information about this long-term risk may be material, even though the consequences of that change in legislation would only crystallise in the future.

3.2.7 Example approach for identifying material information

In its educational material on materiality, the ISSB provides an example of a four-step process approach that an entity may find helpful to follow when identifying and disclosing material information about sustainability-related risks and opportunities that could reasonably be expected to affect its prospects. This process is described in the educational material on materiality as a guide to help an entity efficiently and effectively apply judgement and is similar to the 'four-step materiality process' explained in IFRS Practice Statement 2 Making Materiality Judgements.

Figure 3-3: Example of a four-step materiality process

STEP	ACTION		OUTPUT
1	Identify information about sustainability-related risks and opportunities that has the potential to be material	Refer to section 3.2.2.B for sources applied in assessing materiality and section 3.2.4.A for any additional information provided when the requirements of ISSB standards are not sufficient	A set of potentially material information
2	Assess whether the potentially material information identified in Step 1 is, in fact, material	Refer to section 3.2.1 for the definition of materiality and 3.2.2.A for understanding the information needs of primary users. Also, refer to section 3.2.2.C for considering possible future events with uncertain outcomes and section 3.2.3 for considering quantitative and qualitative factors in materiality judgements. Refer also to section 3.2.6 for reassessment of material information	A preliminary set of material information
3	Organise the information within the draft sustainability-related financial disclosures	Refer to section 3.2.5.A for aggregating and disaggregating information, section 3.2.4.B for not obscuring material information, section 3.2.4.C for interaction with law or regulation and section 3.2.5.B for requirements about commercially sensitive information	Draft sustainability-related financial disclosures
4	Review the draft sustainability-related financial disclosures	See below	Final sustainability-related financial disclosures

As indicated in Figure 3.3 above, in Step 1, an entity identifies information about its sustainability-related risks and opportunities that primary users may need to understand to make decisions about providing resources to the entity. The output of this step is a set of potentially material information. In Step 2, the entity assesses whether the potentially material information identified in Step 1 is indeed material for its primary users. This assessment requires the entity to apply judgement, taking into consideration its facts and circumstances. The output of Step 2 is a preliminary set of material information. In Step 3, the entity organises the preliminary set of material information into the draft sustainability-related financial disclosures (the output of Step 3) in a way that communicates information clearly and concisely to primary users.

In Step 4, which is the final step, the entity assesses whether information is material both individually and in combination with other information in the context of its whole sustainability-related financial disclosures (e.g., the information may not be material on its own, but it may be material when considered in combination with other information in the complete set of sustainability-related financial disclosures). Using the draft sustainability-related financial disclosures from Step 3, the entity prepares its sustainability-related financial disclosures by 'stepping back' to consider its sustainability-related financial disclosures as a whole. The review conducted in Step 4 may lead an entity to reconsider its assessment in Step 2 and to reassess some information presented in its draft sustainability-related financial disclosures. For example, an entity may review whether:

- All relevant relationships between different items of information have been identified (e.g., in considering the requirements for connected information, which are further discussed in section 3.4 below). Identifying new relationships between information may lead to that information being identified as material for the first time. This review may lead to additional information being provided in the sustainability-related financial disclosures.
- Items of information that are individually immaterial, when considered together, could reasonably be expected to influence primary users' decisions. This review may lead to greater aggregation or disaggregation of information.
- The information in the sustainability-related financial disclosures is communicated in an effective and understandable way, and organised to avoid obscuring material information. This review may lead to removing immaterial information to avoid obscuring material information.
- The sustainability-related financial disclosures provide a fair presentation of the entity's sustainability-related risks and opportunities. This review may lead to information being reorganised within the sustainability-related financial disclosures.

The output of Step 4 is the final sustainability-related financial disclosures.

3.2.8 Interoperability considerations

Overall, the ISSB's intention is to establish a comprehensive global baseline of sustainability-related financial disclosures that meet the information needs of primary users in relation to sustainability-related risks and opportunities. This global baseline is intended to serve as a comprehensive foundation of disclosure requirements, for which jurisdictions will be able to add any necessary incremental disclosure requirements to this common baseline. To achieve this, interoperability with jurisdictional requirements is imperative. The more compatible ISSB standards are with the law or regulation in the jurisdictions in which entities operate (including law or regulation that specifies the documents, formats and structures for disclosing information), the more likely it is to achieve comparable, cost-effective and decision-useful sustainability-related financial disclosures that are designed to meet the needs of primary users. [IFRS S1.BC27, IFRS S1.BC28].

However, applying ISSB standards as global baseline along with other jurisdictional sustainability-related frameworks could be challenging. Not all sustainability-related frameworks share the same definition of materiality that is used in ISSB standards (discussed in section 3.2.1 above). There are similarities in the language used when referring to assessing material information in the context of the short, medium and long-term effects of sustainability issues. However, in practice, determining what is 'material' depends on the issue, the context, the time frame and the stakeholder. For example, the key difference between the GRI standards, the European Sustainability Reporting Standards (ESRS) and ISSB standards is the audience (i.e., ISSB standards focus on primary users, whereas GRI and ESRS have a broader set of 'users' of the information).

Lack of interoperability could be costly for entities and risks undermining the provision of clear and consistent information to primary users. Primary users need to be able to clearly identify which information is relevant to them and which information is relevant to a broader set of stakeholders, so that material information for primary users is not obscured. [IFRS S1.BC31]. Also, understanding the similarities and differences between ISSB standards and the requirements of other sustainability frameworks will avoid duplication of information in entity's general purpose financial report, consistent with what IFRS S1 requires (see relevant discussion in section 3.4.3 below).

In supporting the interoperability among ISSB standards and the other frameworks, the ISSB:

- Included in IFRS S1 clarifications on concepts and terminologies (e.g., an extensive description of sustainability and its connection with the value of an entity as discussed in section 1.1.2 above), as well as specific definitions (e.g., materiality as discussed in section 3.2.1 above), to explain their use by ISSB standards compared with other jurisdictional initiatives and sustainability reporting frameworks
- Included a list of sources of guidance as part of the identification process of sustainability-related risks and opportunities that could reasonably be expected to affect an entity's prospects and the identification of material information about those risks and opportunities (as discussed in section 3.2.2.B above) contributes to the interoperability with other sustainability-related frameworks and the reduction of the burden for entities already using or are mandated to comply with those other frameworks
- Permits entities to include information disclosed to meet other requirements (e.g., specific jurisdictional requirements) as long as it does not obscure the material information provided in complying with ISSB standards (as discussed in section 3.2.4.B above)

Moreover, the IFRS Foundation proceeded with the following:

- Published in May 2024, the Inaugural Jurisdictional Guide for the adoption or other use of the ISSB Standards. As a growing number of jurisdictions are moving forward with their plans to adopt or otherwise use ISSB standards, this guide aims to set the basis for the development of jurisdictional profiles that describe jurisdictional approaches. Also, the guide aims to enable market participants and regulators to understand jurisdictional progress towards delivering globally consistent and comparable sustainability-related information for capital markets¹⁸
- Collaborated with EFRAG and together published *interoperability guidance* on the alignment between ISSB standards and the ESRS, in May 2024. The guidance material focuses on climate-related disclosures, so it mainly covers the requirements in IFRS S2 and, where relevant, the requirements of IFRS S1. For further information, refer to our publication, *IFRS Sustainability Developments: Interoperability guidance published on ESRS and ISSB standards*¹⁹
- Published in September 2024 'Voluntarily applying ISSB Standards - A guide for preparers'.²⁰ This guide aims to support preparers as they start to apply ISSB standards voluntarily and help them communicate their progress to primary users. The guide highlights the two elements of ISSB standards that are designed to support implementation for preparers. These are: a) transition reliefs so that preparers can use a phased-in approach to the requirements (see discussion at section 9 and Part B of this publication) and b) proportionality mechanisms that provide measures to address the range of capabilities and circumstances of entities (see discussion at Part B of this publication).

18 [Inaugural Jurisdictional Guide for the adoption or other use of ISSB Standards](#), May 2024, available on the IFRS Foundation's website.

19 [IFRS Sustainability Developments: Interoperability guidance published on ESRS and ISSB standards](#), EY Global, May 2024, available on ey.com/IFRS.

20 [Voluntarily applying ISSB Standards-A guide for preparers](#), September 2024, available on the IFRS Foundation's website.

How we see it

The interoperability guidance published by the IFRS Foundation and EFRAG will be useful for entities that want to claim compliance with both ISSB standards and ESRS. In particular, multi-national entities that may need to comply with both sets of standards if they have both reporting entities in jurisdictions that require compliance with ESRS, and reporting entities in jurisdictions that require compliance with ISSB standards. Entities starting with either set of standards should be aware of key differences between them and reflect these in their disclosures accordingly, to the extent they are applicable and material to the entity. However, entities should ensure that information required to be disclosed under ISSB standards is clearly identifiable alongside information required to be disclosed under ESRS. Entities should keep in mind that the guidance must be read in conjunction with the relevant standards in order to meet the requirements of either set of standards.

3.3 Reporting entity

3.3.1 Definition of a reporting entity

IFRS S1 defines reporting entity as an entity that is required, or chooses, to prepare general purpose financial statements. [IFRS S1 Appendix A]. The entity that is required to disclose sustainability-related financial information is the same as the one that prepares the related financial statements. [IFRS S1.20]. For example, when the entity applies IFRS accounting standards, the consolidated financial statements provide information about the parent and its subsidiaries as a single reporting entity. The reporting entity's sustainability-related financial disclosures focus on the sustainability-related risks and opportunities that enable primary users to assess the effects of those risks and opportunities on the entity's prospects (i.e., the effects on the prospects of the parent and its subsidiaries, in the case of information presented in consolidated financial statements). [IFRS S1.B38].

Requiring the same reporting entity for both financial statements and sustainability-related financial disclosures is one of the decisions the ISSB made for the purposes of enabling information disclosed in the financial statements to be connected with sustainability-related financial information (as discussed in section 3.4 below). [IFRS S1.BC85].

3.3.2 Breadth of reporting and the concept of the value chain

The reporting entity is required to disclose information about sustainability-related risks and opportunities throughout its value chain (see section 1.2 above). This means that the reporting entity is required to identify the sustainability-related risks and opportunities that could reasonably be expected to affect its prospects and determine the scope of its value chain, including its breadth and composition, in relation to each of those sustainability-related risks and opportunities.

The value chain is also mentioned in the section of IFRS S1 on the 'core content' of information under the strategy pillar; an entity is required to disclose the current and anticipated effects of sustainability-related risks and opportunities that could reasonably be expected to affect its prospects throughout its business model and value chain and describe where these risks and opportunities are concentrated (see section 4.3.4 below).

IFRS S1 defines the value chain as follows: [IFRS S1 Appendix A]

Although the reporting entity that prepares sustainability-related financial disclosures and the related financial statements is the same, the sustainability-related financial disclosures are not constrained by what is recognised in the financial statements.

Appendix A

Defined terms

value chain	The full range of interactions, resources and relationships related to a reporting entity's business model and the external environment in which it operates. A value chain encompasses the interactions, resources and relationships an entity uses and depends on to create its products or services from conception to delivery, consumption and end-of-life, including interactions, resources and relationships in the entity's operations, such as human resources; those along its supply, marketing and distribution channels, such as materials and service sourcing, and product and service sale and delivery; and the financing, geographical, geopolitical and regulatory environments in which the entity operates.
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As explained in the definition above, an entity's value chain refers to its interactions, resources and relationships (including those along its supply, marketing and distribution channels), as well as the financing, geographical, geopolitical and regulatory environments in which the entity operates. As further explained in section 1.1.2.C above, resources and relationships can be direct or extend throughout the entity's value chain (e.g., the entity's supply and distribution channels, the effects of the consumption and disposal of the entity's products, the entity's sources of finance and its investments, including investments in associates and joint ventures). For example, an entity may interact directly with the natural environment through its use of timber or minerals as a raw material to create its products and therefore, depend on this resource to generate cash flows. However, it may be the case that an entity interacts indirectly with the natural environment through its suppliers if they use timber or minerals as a raw material to create a product the entity uses. That is, if the entity's business partners throughout its value chain face sustainability-related risks and opportunities, the entity could be exposed to related consequences of its own. [IFRS S1.B4, IFRS S1.B5].

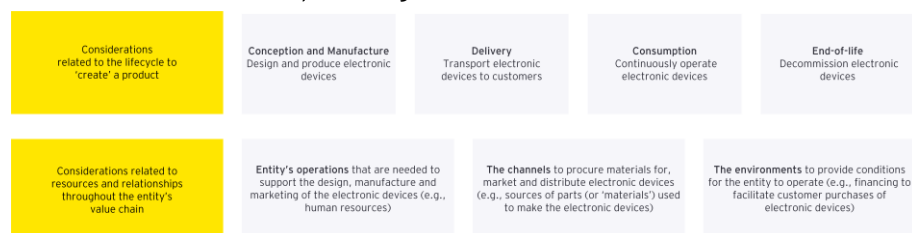
In determining the scope of its value chain, an entity considers both its business model (i.e., aspects of its operations associated with creating value and generating cash flows) and its external environment (i.e., external conditions and events that affect its operations). Also, an entity considers the breadth and composition of its value chain by looking at what it uses and depends on throughout the full lifecycle of a product or service, from conception to delivery, consumption and end-of-life.

Illustrations 3-1 and 3-2 below are based on the examples provided in the ISSB's educational material on materiality, and include possible considerations for an entity when determining the scope of its value chain:²¹

²¹ [Sustainability-related risks and opportunities and the disclosure of material information](#), ISSB, November 2024, available on the IFRS Foundation's website.

Illustration 3-1: Considering the entity, its business model, the external environment and distribution channels when determining the scope of value chain

Entity A manufactures electronic devices and in determining the scope of its value chain, it considers the lifecycle to 'create' a product as well as the resources and relationships throughout its value chain:



Entity A also considers both its business model and the external environment in which it operates when determining the scope of its value chain. For example, when considering its distribution channels, Entity A considers its:

- Business model: as part of its activities, Entity A depends on third-party vendors to sell its products to customers. These third-party vendors represent aspects of Entity A's operations associated with generating cash flows and, therefore, reflect part of Entity A's business model and value chain.
- External environment: changes in the regulatory environment in a jurisdiction in which Entity A sells its products may affect which products Entity A sells to its customers. The regulatory environment relates to those regulatory conditions and events external to Entity A that can affect its operations (e.g., an industry regulation that standardises and limits the types of charging devices permitted to be manufactured, in an effort to reduce electronic waste). The regulatory environment that Entity A operates in is, therefore, part of its value chain.

Illustration 3-2: Considering interactions with stakeholders, society, the economy and the natural environment when determining the scope of value chain

Entity X operates in the Containers and Packaging industry and depends on suppliers in three jurisdictions (A, B and C) for raw materials. Since Entity X uses and depends on each supplier to operate its business and create its products, these three suppliers are part of its value chain. In determining its value chain, Entity X considers its direct and indirect interactions with stakeholders, society, the economy and the natural environment throughout its value chain. Entity X notes that:

- Jurisdiction A's local communities are protesting against Entity X's deforestation practices, which could affect the ability of its suppliers in Jurisdiction A to do business with Entity X (interactions with society)
- Jurisdiction B's government has introduced a tax incentive for entities pursuing sustainable operations, which could influence how Entity X's suppliers operate (interactions with the economy)
- Jurisdiction C is experiencing a drought, which could affect the ability of its suppliers in Jurisdiction C to produce the raw materials needed by Entity X (interactions with the natural environment)

In identifying its sustainability-related risks and opportunities, Entity X considers these factors which indicate that it may be exposed to sustainability-related risks and opportunities as a consequence of the business partners in its value chain facing sustainability-related risks and opportunities. For example, Entity X may determine that tax incentives in Jurisdiction B represent a sustainability-related opportunity that could reasonably be expected to affect its prospects.

Therefore, even though the reporting entity that prepares sustainability-related financial disclosures is the same as the one that prepares the related financial statements, the breadth of reporting is not the same. That is, the sustainability-related financial disclosures are not constrained to what is recognised in the financial statements, but goes beyond that to capture information about the value chain.

3.3.3 Challenges in determining the scope of the value chain

Determining the scope of an entity's value chain could be challenging due to the possible scope of the value chain, as well as potential complexities in obtaining information to prepare the required disclosures. This is because obtaining information about the value chain may require a reporting entity to collect information from parties that the entity does not control or in which it has no ownership interest. For example, the ultimate consumers of an entity's products may be the most important contributors to the entity's Scope 3 GHG emissions. Also, the employment practices of a supplier in an entity's supply chain could have a reputational effect on the entity, even if the supplier has no direct relationship with the reporting entity. [IFRS S1.BC56, IFRS S1.BC57]. Joint ventures, associates and investments are not considered to be part of the reporting entity that is presenting consolidated financial statements. However, the reporting entity recognises these items in its financial statements and reports aspects of their performance. Likewise, sustainability-related financial information related to those investments is relevant to primary users in assessing the effects of sustainability-related risks and opportunities on the entity's prospects. [IFRS S1.BC54].

Although assessing the scope of the value chain may be challenging, it is not new or unique to the field of sustainability reporting. As part of their general purpose financial reports, entities frequently produce management commentary that provides insights into factors that have affected the entity's financial performance and financial position and factors that could affect its ability to create value and generate cash flows in the future. These factors also capture aspects of the value chain including the activities of diverse investments and dependencies. Therefore, since entities also assess activities within their value chain for general planning and risk management purposes, the requirements in IFRS S1 are effectively following this approach in the analysis of risk management or strategic business model.

In its Sustainability Report 2023, A.P. Møller-Maersk A/S included a figure showing the considerations made across its operations and value chain when identifying potential sustainability-related risks and opportunities that could reasonably be expected to affect its prospects.

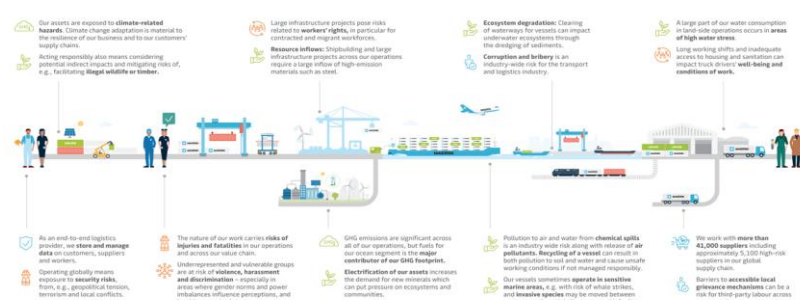
Practical example 3-1: A.P. Møller - Mærsk A/S (2023) Denmark

Sustainability Report 2023 [extract]

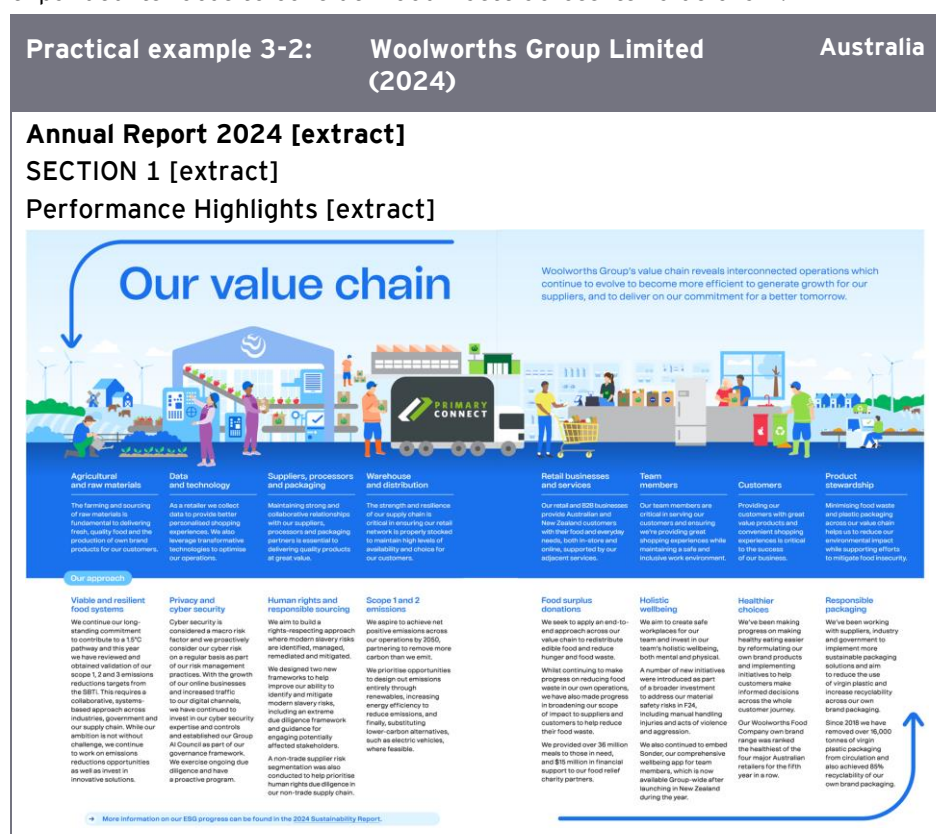
Strategy and governance [extract]

Our material ESG topics [extract]

How we impact people and the environment across our operations and value chain [extract]



In its Annual Report 2024, Woolworths Group Limited disclosed how it has expanded its focus to consider food waste across its value chain:



The ISSB noted that determining the value chain and clarifying the breadth of reporting is a process that is unique for each entity and is difficult to specifically prescribe through principles or standards, as it is unlikely to apply in the same way to all types of entities. The ISSB also referred to the existing market guidance and practice around reporting on a broad range of activities in the value chain and across subsidiaries (e.g., the SASB standards contain disclosure topics and metrics that demonstrate how an entity could report on value chain activities, and which of those activities may be relevant for a given industry).

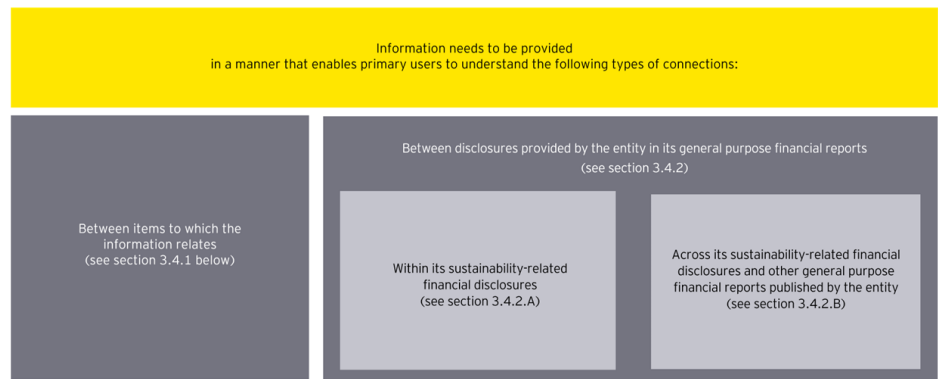
In determining the scope of its value chain, an entity is required to use “all reasonable and supportable information that is available to the entity at the reporting date without undue cost or effort”, in relation to each sustainability-related risk and opportunity identified that could reasonably be expected to affect the entity's prospects. This concept assists entities by establishing parameters for the type of information they consider when preparing disclosures regarding the value chain, and the effort required to obtain such information. For further information about this concept, see section 1.2.2 above.

3.4 Connected information

Entities are required to provide information in a manner that enables primary users to understand connections between various disclosures in an entity's general purpose financial reports, as well as insight into the connections between the items to which the information relates. [IFRS S1.B39].

The following Figure 3-4 illustrates the types of connections for which information needs to be provided according to IFRS S1: [IFRS S1.21]

Figure 3-4: Types of connections for which information is required



3.4.1 Connections between items to which the information relates

IFRS S1 provides examples relating to information about connections between items to which the information relates: [IFRS S1.B40]

- An entity pursued a particular sustainability-related opportunity that resulted in revenue increase. The connected information will depict the relationship between the entity's strategy and its financial performance.
- An entity identified a trade-off between two sustainability-related risks it is exposed to and took action on the basis of its assessment of that trade-off. The connected information will depict the relationship between those risks and the entity's strategy.
- An entity committed to a particular sustainability-related target, but that commitment has not yet affected the entity's financial position or financial performance because the applicable recognition criteria have not been met. The connected information will depict that relationship.

3.4.2 Connections between disclosures provided in general purpose financial reports

With respect to the connections between various disclosures in an entity's general purpose financial reports, IFRS S1 distinguishes two categories: a) connections between disclosures provided by an entity within its sustainability-related financial disclosures; and b) connections between disclosures provided across an entity's sustainability-related financial disclosures and other general purpose financial reports published by the entity.

3.4.2.A Connections between disclosures provided within an entity's sustainability-related financial disclosures

IFRS S1 explains the nature of information about connections between disclosures provided by an entity within its sustainability-related financial disclosures, as follows: [IFRS S1.B41]

- Information about a particular sustainability-related risk or opportunity explaining the connections between disclosures on governance, strategy and risk management (i.e., relating to the four content pillars as further discussed in section 4 below).
- Information between disclosures about various sustainability-related risks and opportunities provided within an entity's sustainability-related financial disclosures. For example, when an entity integrates its oversight of sustainability-related risks and opportunities and, therefore, needs to integrate the disclosures on governance instead of providing separate disclosures on governance for each sustainability-related risk and opportunity.

3.4.2.B Connections between disclosures provided across sustainability-related financial disclosures and other general purpose financial reports published by the entity

Connected information also needs to be provided to explain the connections between disclosures provided across an entity's sustainability-related financial disclosures and other general purpose financial reports published by the entity. For example, an entity needs to explain how information provided in its sustainability-related financial disclosures is connected with the information provided in its related financial statements. However, this type of connections is not restricted to connections with the related financial statements, but it also relates to all other reports that constitute the general purpose financial report (e.g., the management commentary).

IFRS S1 requires information about the current and anticipated effects of sustainability-related risks and opportunities on an entity's financial position, financial performance and cash flows (see relevant discussion on the core content information about the strategy pillar in section 4.3.4 below). This requirement represents a specific application of connected information between sustainability-related financial disclosures and the related financial statements of an entity.

To promote this connectivity, IFRS S1 requires an entity to: [IFRS S1.22, IFRS S1.23, IFRS S1.24]

- Identify the financial statements to which the sustainability-related financial disclosures relate
- Use consistent data and assumptions in preparing the sustainability-related financial disclosures with the related financial statements (to the extent possible considering the requirements of IFRS accounting standards or other applicable GAAP)
- Use the presentation currency of its related financial statements, when currency is specified as the unit of measure in the sustainability-related financial disclosures

An entity is required to align data and assumptions to the extent possible by taking into consideration the requirements in IFRS accounting standards (or other GAAP) instead of mandating full alignment. This is because there could be legitimate reasons for data and assumptions to vary between an entity's sustainability-related financial disclosures and its financial statements. For example:

- An entity's net-zero commitment may not give rise to a provision, based on the requirements in IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*. That is, simply making a commitment to offset future GHG emissions does not in itself give rise to a present obligation for an entity and, therefore a provision would not be recognised until the entity has emitted the gas it has promised to offset. This was also discussed ~ by the IFRS Interpretations Committee in its agenda decision in April 2024.²²
- While testing specific assets for impairment according to the requirements in IAS 36 *Impairment of Assets*, an entity may only use a subset of the data and assumptions needed when preparing disclosures about climate resilience reflecting various climate scenarios according to IFRS S2 (see Part B of this publication). For example, IAS 36 requires cash flow projections in the determination of value in use to be based on the most recent budgets or forecasts for a maximum of five years, unless management is confident that its projections are reliable and it can demonstrate its ability, based on past experience, to forecast cash flows accurately over a longer period.

²² [IFRIC Update](#), April 2024, available on the IFRS Foundation's website.

The following examples are based on the Basis for Conclusions to IFRS S1:
[IFRS S1.BC88]

Illustration 3-3: Examples of the types of connections

Entity W, a pharmaceutical company, has been exposed to claims of unethical testing. Therefore, it may need to explain how its strategic response has, or has not, led to the recognition of provisions and associated operating costs in its financial statements.

Entity X, an electronics manufacturer, has publicly announced a target of net zero for its corporate greenhouse gas emissions, which are primarily created during its manufacturing process. Entity X adopts a new strategy that involves shifting its procurement of energy to renewable sources and investing in more energy-efficient machinery. Therefore, Entity X may need to explain how this strategy to achieve the target led to an increase in capital expenditure and possibly an impairment review of non-energy-efficient machinery, as well as lower (and less volatile) energy prices, increased revenue due to a related increased demand from its customers, and an increase in margins on sales.

Entity Y, a supplier, finds that demand for its goods has risen due to its treatment of workers and its record on respecting workers' rights, especially because its approach in this area was better than many of its peers. Entity Y may need to explain how its strategy and performance in relation to the treatment of its workers has positioned it favourably and has led to increases in revenue.

Entity Z has a net zero greenhouse gas emissions plan that relies on replacing its fleet of diesel-powered vehicles with electric vehicles. Shifting to electric vehicles will require much more capital investment than was necessary for diesel vehicles. The transition plan is that each vehicle will be replaced when it reaches the end of its useful economic life. Entity Z concludes that the vehicles are not impaired and no changes to depreciation rates or useful life estimates are required to be reflected in the financial statements. Entity Z may need to explain that the transition plan will have consequences for its future cash flows and that its accounting, as reflected in the financial statements, is consistent with its transition plan.

3.4.3 Characteristics of connections

Drawing connections between disclosures involves, but is not limited to, disclosing necessary explanations and cross-references and using consistent data, assumptions, and units of measure. In doing so, IFRS S1 requires:
[IFRS S1.B42]

- Explanation of the connections between disclosures in a clear and concise manner
- Avoiding unnecessary duplication if an ISSB standard requires the disclosure of common items of information (see also discussion on the enhancing qualitative characteristic of understandability of information in section 3.1.1.B above)
- Disclosing information about significant differences between the data and assumptions used in preparing the entity's sustainability-related financial disclosures and the data and assumptions used in preparing the related financial statements, as explained in section 3.4.2.B above.

When disclosing sustainability-related financial information, there is a possibility that this information could result in duplication of information within the general purpose financial report. This is because other frameworks (such as IFRS accounting standards or other GAAP) may require similar information. Therefore, in identifying and explaining the connections both between the items to which the information relates and between disclosures provided by the entity in its general purpose financial reports (discussed in sections 3.4.1 and 3.4.2 above), an entity needs to avoid unnecessary duplication. To achieve this, one approach an entity may consider is to use cross references from sustainability-related financial disclosures to the other

In identifying and explaining the connections both between the items to which the information relates, and between disclosures provided by the entity in its general purpose financial reports, an entity needs to avoid unnecessary duplication.

general purpose financial reports published by the entity, subject to the specified requirements being met. The requirements about information included in sustainability-related financial disclosures by cross-reference are further discussed in section 5.2.2 below.

The following examples are included in IFRS S1 to describe the nature of disclosures that could explain the various types of connections. For example, in providing connected information, an entity may: [IFRS S1.B43, IFRS S1.B44]

- Explain the effect or likely effect of its strategy on its financial statements and financial planning, or explain how that strategy relates to the metrics the entity uses to measure progress against targets.
- Explain how its use of natural resources or changes within its supply chain could amplify or, alternatively, reduce its sustainability-related risks and opportunities. The information about the use of natural resources or changes within its supply chain may need to be linked to information about current or anticipated financial effects on the entity's production costs, its strategic response to mitigate those risks and its related investment in new assets. Also, the narrative information about the related metrics and targets may need to be linked to information in the related financial statements.
- Explain the combined effects of its sustainability-related risks and opportunities and its strategy on its financial position, financial performance and cash flows over the short, medium and long term. For example, when the entity faces decreasing demand for its products because of consumer preferences for lower-carbon alternatives, it may need to explain how its strategic response (e.g., closing a major factory) could affect its workforce and local communities, and the effect of that response on the related financial statements (e.g., the effect of closing a major factory on the useful lives of its assets and on impairment assessments).
- Describe the alternatives it considered in setting its strategy in response to its sustainability-related risks and opportunities, including a description of the trade-offs between those risks and opportunities. For example, an entity may need to explain the potential effects of its decision to restructure its operations (e.g., developing new products) in response to a sustainability-related risk (e.g., how environmental risks affect its reputation or ability to operate) on the future size and composition of the entity's workforce, or financial performance reported in the entity's financial statements.

4 Core content

4.1 Overview of TCFD

IFRS S1 requires an entity to disclose information about its governance, strategy, risk management and metrics and targets in relation to its sustainability-related risks and opportunities. These disclosure requirements represent the 'core content' that provides information about the way the entity manages those risks and opportunities. Information disclosed in relation to this 'core content' is necessary for primary users to assess the effects of sustainability-related risks and opportunities on an entity's cash flows, its access to finance and cost of capital over the short, medium and long term.

The core content disclosure requirements are derived from, and build on, the four pillars of the TCFD Recommendations, as summarised in Figure 4-1 below.

Figure 4-1: Core content builds on the four TCFD pillars



In 2024, the IFRS Foundation took over the monitoring of the progress on climate-related disclosures from the TCFD. The TCFD recommendations are a good starting point for entities as they begin implementing ISSB standards. The TCFD recommendations have been fully incorporated into ISSB standards, therefore, entities applying IFRS S1 and IFRS S2 will meet the TCFD recommendations. Although the requirements in IFRS S2 are consistent with the four core TCFD recommendations and eleven recommended disclosures, IFRS S2 includes additional requirements, which means that if an entity meets the TCFD requirements, it does not automatically meet the requirements of IFRS S2. Examples of these additional requirements include disclosing industry-based metrics, information about planned use of carbon credits to achieve their net emissions targets, and additional information about financed emissions.²³ The IFRS Foundation has published a comparison of the requirements in IFRS S2 and the TCFD recommendations.²⁴

An entity may have overarching processes, controls and procedures that are used to monitor and manage various sustainability-related risks and opportunities in an integrated manner. IFRS S1 does not require an entity to repeat disclosures relating to the core content for each type of sustainability-related risk and opportunity. Instead, an entity discloses that its approach to monitoring and managing a specific sustainability-related risk and opportunity is integrated into its overall process, controls and procedures

²³ [Making the transition from TCFD to ISSB](#), ISSB, available on the IFRS Foundation's website.

²⁴ [Comparison of IFRS S2 with the TCFD Recommendations](#), ISSB, November 2024, available on the IFRS Foundation's website.

and, if material, explain any adaptations made to those processes to address any unique characteristics of that specific risk and opportunity. [IFRS S1.B41(b), IFRS S1.B42(b), IFRS S1.BC94].

How we see it

The purpose of the core content disclosure requirements in IFRS S1 is to require an entity to explain its actual sustainability-related activities, instead of prescribing how it should govern, manage risks and opportunities, and set strategy in managing its business. If, for example, an entity has limited governance arrangements or strategies in place to monitor and manage its sustainability-related risks and opportunities, the entity is required to disclose that fact if that would be material information to primary users. Entities need to consider whether to introduce process improvements to strengthen their arrangements and processes for managing and monitoring sustainability-related risks and opportunities.

The objective of the governance disclosures in IFRS S1 is to enable primary users to understand the governance processes, controls and procedures an entity uses to monitor, manage and oversee sustainability-related risks and opportunities.

4.2 Governance

In defining 'governance', the TCFD includes a reference to the *G20/OECD Principles of Corporate Governance*, which states "Governance involves a set of relationships between an organization's management, its board, its shareholders, and other stakeholders. Governance provides the structure and processes through which the objectives of the organization are set, progress against performance is monitored, and results are evaluated."²⁵

The objective of the governance disclosures in IFRS S1 is to enable primary users to understand the governance processes, controls and procedures an entity uses to monitor, manage and oversee sustainability-related risks and opportunities. [IFRS S1.26].

To help primary users evaluate whether and how much attention is given to sustainability-related risks and opportunities, IFRS S1 requires disclosure of: [IFRS S1.27]

- The governance body(s) or individual(s) with oversight of an entity's sustainability-related risks and opportunities (see section 4.2.1 below)
- The management's role in the governance processes, controls and procedures used to monitor, manage and oversee sustainability-related risks and opportunities (see section 4.2.2 below)

4.2.1 Information about the oversight role

'Governance body(s)' that may have oversight of sustainability-related risks and opportunities include boards, committees or equivalent bodies charged with governance. IFRS S1 acknowledges that, for some entities, the responsibility for the oversight of sustainability-related risks and opportunities may be held by an individual(s) rather than a governance body(s). An individual may be charged with the overall oversight of sustainability-related risks and opportunities because of their specific expertise and experience. [IFRS S1.BC96].

IFRS S1 requires an entity to disclose information about oversight arrangements, as set out in Figure 4-2 below: [IFRS S1.27(a)]

25 [Recommendations of the TCFD](#), Appendix 5: Glossary and Abbreviations, page 62, TCFD, June 2017. Available on the TCFD's website.

Figure 4-2: Disclosures about oversight role

Theme	Disclosure required
Responsibility	Identify the governance body(s) or individual(s) responsible for oversight of sustainability-related risks and opportunities. This requirement includes information about how responsibilities for sustainability-related risks and opportunities is reflected in the terms of reference, mandates, role descriptions and other related policies applicable to that body(s) or individual(s). <i>[IFRS S1.27(a)(i)]</i> .
Competency	Describe how the governance body(s) or individual(s) determines whether they have, or will need to develop, the appropriate skills and competencies to oversee strategies that respond to sustainability-related risks and opportunities. <i>[IFRS S1.27(a)(ii)]</i> .
Inform	Explain how, and how often, they are informed about sustainability-related risks and opportunities. <i>[IFRS S1.27(a)(iii)]</i> .
Address	Explain how they take sustainability-related risks and opportunities into account when overseeing strategy and risk management and assessing transactions. As part of this disclosure, explain whether the governance body(s) or individual(s) has considered trade-offs associated with those risks and opportunities. <i>[IFRS S1.27(a)(iv)]</i> .
Monitor	Describe their oversight of the setting of targets and tracking progress against those targets. As part of this disclosure, explain whether and how related performance metrics are included in remuneration policies. <i>[IFRS S1.27(a)(v)]</i> .

4.2.2 Information about management's role

The governance disclosure requirements distinguish between oversight by a governance body or individual and the responsibilities of management-level positions or committees to enable primary users to understand how responsibilities are delegated within the entity in relation to sustainability-related matters. To illustrate this, the board of directors of an entity may provide oversight on broader sustainability-related matters, whereas executives within management may make operational decisions about how specific sustainability-related risks and opportunities are assessed and managed.

IFRS S1 requires an entity to make disclosures about management's role in the governance processes, controls and procedures used to monitor, manage and oversee sustainability-related risks and opportunities. These disclosures are summarised in Figure 4-3 below: *[IFRS S1.27(b)]*

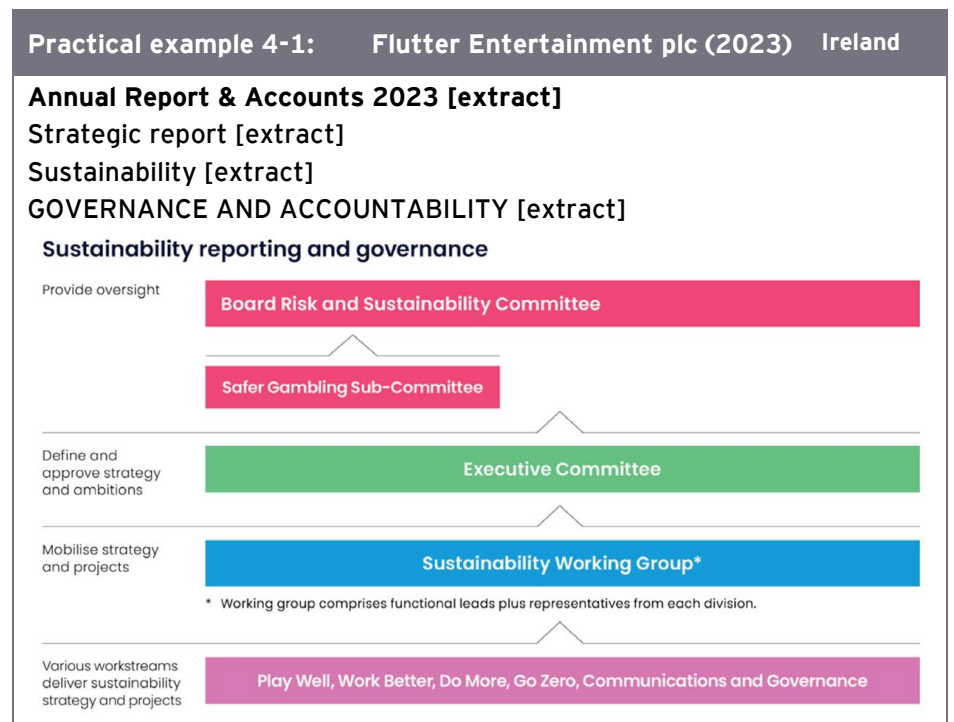
Figure 4-3: Disclosures about management's role

Theme	Disclosure required
Delegation	Information about whether the role is delegated to a specific management-level position or committee and how oversight over that position or committee is exercised. [IFRS S1.27(b)(i)]. As such, this disclosure enables primary users to understand how responsibilities are delegated and how the individual(s) or the governance body(s) maintains oversight over those delegated responsibilities. [IFRS S1.BC99].
Processes	Information about whether management uses controls and procedures to support the oversight of sustainability-related risks and opportunities and, if so, how these controls and procedures are integrated with other internal functions. [IFRS S1.27(b)(ii)].

Given the nature of the disclosure requirements about the role of the governance body and the role of management, it is likely that entities will use narrative disclosures to meet those requirements.

Depending on the nature of the information, clarity of the disclosure may be enhanced through the use of tables, graphs or diagrams in addition to narrative text.

Practical examples 4-1, 4-2 and 4-3 below show how some entities, in applying the TCFD Recommendations, have identified and described the role and mandate of the governance bodies that have oversight of its sustainability-related risks and opportunities and management's delegated roles in the governance. These entities provide a visual representation of the role of each body which is explained further in the accompanying narrative disclosure included in the relevant reports, which also details the processes, controls and procedures used to monitor, manage and oversee their sustainability-related risks and opportunities.



Telstra Group Limited has included in its Annual Report a flow chart where it explains its approach to climate risk governance:

Practical example 4-2: Telstra Group Limited (2024) Australia

Telstra Annual Report 2024 [extract]

Acting on climate and nature [extract]

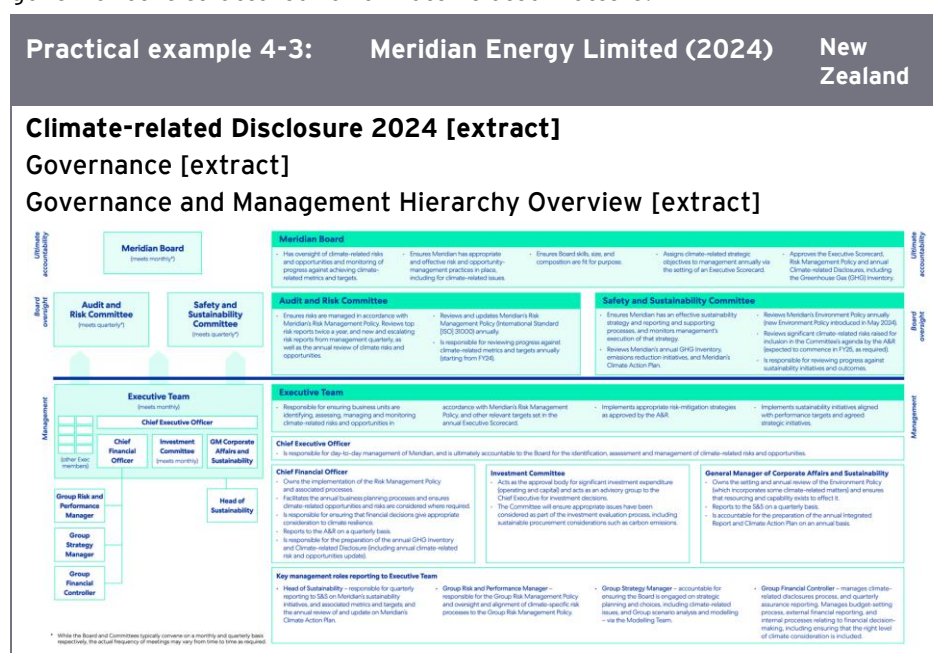
Governance of climate and nature-related matters [extract]

...

	Description	Key climate and nature responsibilities
Oversight	Board Oversees Telstra Group's approach to Environment, Social and Governance issues including approving key external environmental targets and selected environmental disclosures. Comprised of nine members with a diverse range of skills ⁶⁰ and experience including environment, social and governance and risk management.	Approves key external environment targets and selected environment disclosures, including IFRS 2 and TNFD reporting.
	Audit and Risk Committee (ARC) Oversees the design and implementation of Telstra's risk management framework. Reviews and monitors the Group's ESG performance and considers significant issues relating to ESG including reviewing reports from management on the Group's climate and nature-related risks and risk management plans to deal with those risks. Makes recommendations to the Board on key environmental targets and selected environmental disclosures, including IFRS S2 and TNFD disclosures.	Provide recommendations to the Board, for its approval on key external environment targets and selected environment disclosures, including IFRS S2 and TNFD reporting, and on changes to risk appetite set by the Board. In FY24, climate and nature-related topics presented included: greenwashing, nature and biodiversity, carbon credits and external positioning of our climate activities, and emerging mandatory reporting standards for climate.
	CEO Leadership Team The CEO and their senior leadership team including the CFO make up the CEOLT and hold ultimate accountability over the effectiveness of risk management in the company.	Review quarterly updates on climate and nature-related risks from the Sustainability Executive and Environment Executives Group (EEG). Deliver management decisions and oversight in relation to Telstra Group's sustainability strategy to effectively manage climate and sustainability risk within risk appetite.
Strategy and Management	Sustainability Executive Provides day-to-day management of nature and climate-related activities, risks, opportunities, dependencies and impacts.	Chairs the monthly Environment Executives Group and reports key progress and recommended actions to the CEOLT and ARC.
	Environment Executives Group (EEG) Meeting monthly, the EEG is attended by functional leads from across the business to discuss environment, nature and climate-related matters.	Determine climate and nature ambition and key priorities. Oversee execution of management decisions on climate and nature-related matters within function areas, identify resourcing and capability requirements and provide function specific climate and nature-related recommendations to the CEOLT.
	Sustainability Centre of Expertise (CoE) Reporting to the Sustainability Executive, the Sustainability CoE is a team of subject matter experts (including climate and nature) who liaise with internal and external stakeholders.	Accountable for the design and delivery of the sustainability strategy. Provide cross function support, education and capacity building on climate and nature-related matters. Monitor and prepare disclosures and mandatory sustainability reporting. Input into consultations with external bodies and agencies.
	Other governance forums Governance forums to bring together delivery leads, risk owners, subject matter experts and other stakeholders to lead specific components of the sustainability strategy.	Provide leadership, recommendations and guidance for the management of individual climate and nature-related targets such as scope 1+2 emissions reduction, network waste recycling or forums that manage biodiversity risks including pollution, invasive species and other risks. Oversee execution risk specific management actions and policies.
	Working Groups Specialist project groups which bring together cross function representatives and subject matter experts to progress actions towards our nature and climate targets, manage nature and climate-related risks, and develop internal capability and expertise.	Deliver project specific aims and objective, report on progress and provide recommendations to the EEG, including resourcing and training requirements. In FY24, a Nature and Biodiversity working group was formed, tasked with identifying and assessing existing and emerging nature and biodiversity issues to form our first nature and biodiversity register of risks and opportunities.

...

In its Climate-related Disclosure, Meridian Energy Limited discloses how its governance is structured for climate-related matters:



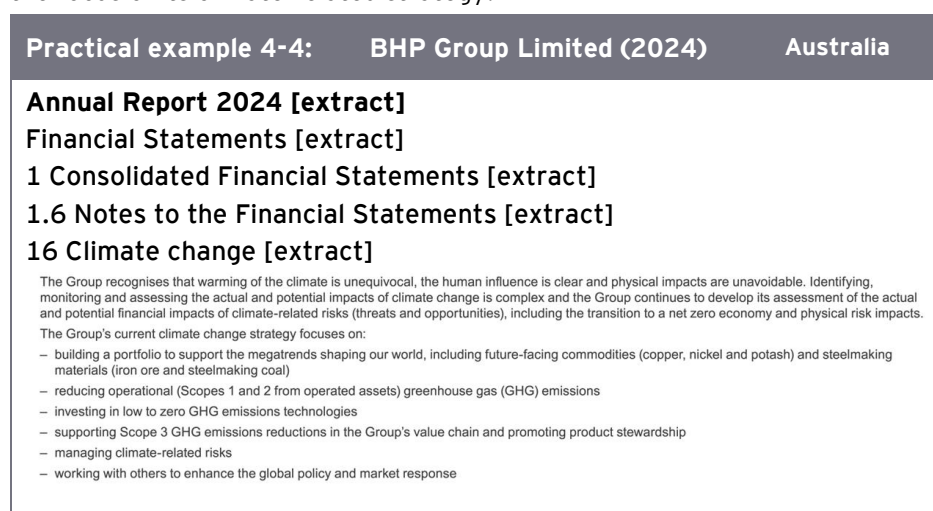
4.3 Strategy

The objective of the strategy disclosures in IFRS S1 is to enable users of general purpose financial reports to understand an entity's strategy for managing sustainability-related risks and opportunities.

The TCFD defines 'strategy' as referring to "an organization's desired future state. An organization's strategy establishes a foundation against which it can monitor and measure its progress in reaching that desired state. Strategy formulation generally involves establishing the purpose and scope of the organisation's activities and the nature of its businesses, taking into account the risks and opportunities it faces and the environment in which it operates."²⁶

The objective of the strategy disclosures in IFRS S1 is to enable primary users to understand an entity's strategy for managing sustainability-related risks and opportunities. [IFRS S1.28]. These disclosures can be used to inform primary users' expectations about the future performance of an entity.

In Note 16 of its 2024 financial statements, BHP Group Limited disclosed the focus of its climate-related strategy:



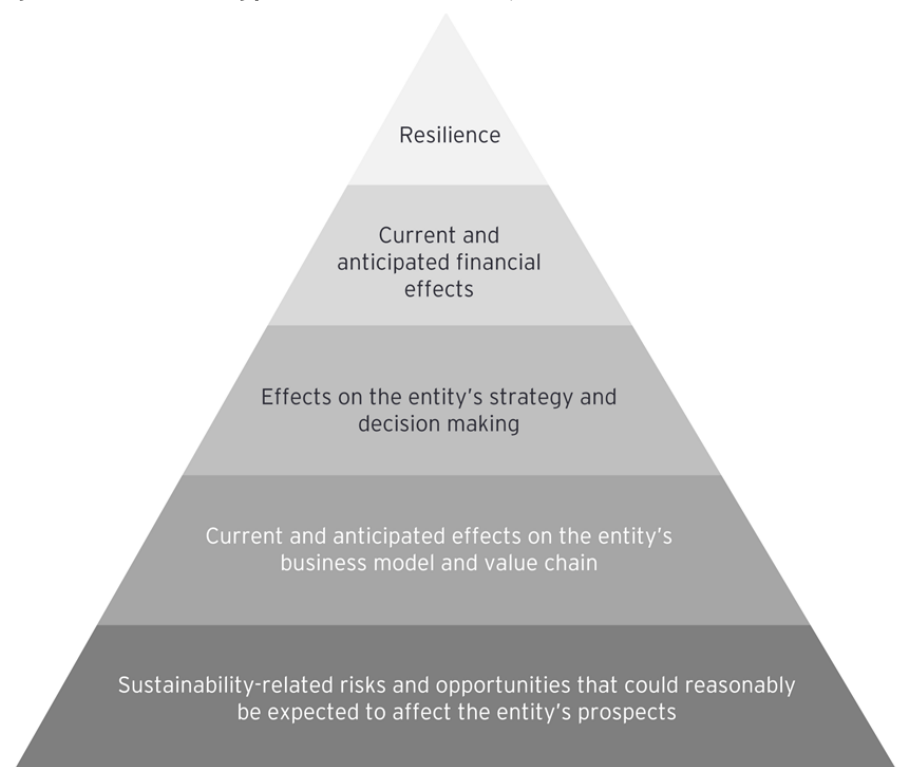
²⁶ [Recommendations of the TCFD](#), Appendix 5: Glossary and Abbreviations, pages 63-64, TCFD, June 2017. Available on the TCFD's website.

The foundation of the strategy disclosures is information about the sustainability-related risks and opportunities that could reasonably be expected to affect the entity's prospects (see section 4.3.1 below). The other strategy disclosures build on that initial disclosure by providing information about: *[IFRS S1.29]*

- The current and anticipated effects of those sustainability-related risks and opportunities on the entity's business model and value chain (see section 4.3.2 below)
- The effects of those risks and opportunities on the entity's strategy and decision-making (see section 4.3.3 below)
- The current and anticipated effects of those risks and opportunities on the entity's financial position, financial performance and cash flows (see section 4.3.4 below)
- The resilience of the entity's strategy and its business model to those sustainability-related risks (see section 4.3.5 below)

These strategy disclosure sub-topics are summarised in Figure 4-4 below.

Figure 4-4: Strategy disclosure sub-topics



4.3.1 Disclosures about sustainability-related risks and opportunities that could reasonably be expected to affect the entity's prospects

As discussed in section 1.2 above, an entity is required to identify the sustainability-related risks and opportunities that could reasonably be expected to affect its prospects. IFRS S1 requires an entity to disclose a description of each of those sustainability-related risks and opportunities. *[IFRS S1.30].*

To provide primary users with further context in relation to each of those sustainability-related risks and opportunities, IFRS S1 requires an entity to specify the time horizons over which the effects of each of those sustainability-related risks and opportunities could reasonably be expected to occur. IFRS S1 identifies the time horizons as being the short, medium or long term. *[IFRS S1.30(b)].*

The ISSB decided to not prescribe specific time frames that represent ‘short term’, ‘medium term’ and ‘long term’ because the ISSB considered that relevant information about an entity’s sustainability-related risks and opportunities is best understood in the context of entity-specific assessments of short, medium and long term. For that reason, IFRS S1 requires an entity to also disclose an explanation of how the entity defines the ‘short term’, ‘medium term’ and ‘long term’ time horizons and how those definitions are linked to the planning horizons used by the entity for strategic decision-making. [IFRS S1.30(c), IFRS S1.BC102].

In defining these time horizons, an entity needs to take into account a number of factors that can vary between entities and the industries in which they operate. Also, time horizons often become management processes, e.g., rolling forecast horizons, budget periods and strategic planning cycles. IFRS S1 includes the following examples as entity-specific or industry-specific factors: [IFRS S1.31, IFRS S1.BC102]

- Cash flow, investment and business cycles
- Planning horizons typically used in an entity’s industry for strategic decision-making and capital allocation plans
- The time horizons over which primary users conduct their assessments of entities in that industry

Meridian Energy Limited disclosed in its Climate-related Disclosure 2024 how it defines the time horizons across which it assesses its climate-related risks:

Practical example 4-5:	Meridian Energy Limited (2024)	Australia
Climate-related Disclosure 2024 [extract] Risk Management [extract] Identifying and assessing climate-related risks and opportunities - methodology [extract]		
Time horizons and risk scoring Meridian’s annual climate risk and opportunity assessment considers scenarios across three time horizons. Longer time horizons are helpful in considering the useful lives of assets (beyond a typical business case horizons). These horizons will continue to be reviewed based on emerging and relevant contexts, including climate science. The time horizons are as follows: • Short term: from today through to 2030. • Medium term: from 2030 to 2050. • Long term: from 2050 to 2100.		

4.3.2 Disclosures about the effects of sustainability-related risks and opportunities on the entity's business model and value chain

IFRS S1 requires an entity to describe the current and anticipated effects of sustainability-related risks and opportunities on the entity's business model and value chain and where in that business model and value chain those sustainability-related risks and opportunities are concentrated. For example, the sustainability-related risks and opportunities may be concentrated across geographical areas, facilities or types of assets. [IFRS S1.32].

The examples below are based on the Basis for Conclusions to IFRS S1 and illustrate the type of information an entity may provide to disclose where in its business model and value chain sustainability-related risks and opportunities are concentrated: [IFRS S1.BC52]

Illustration 4-1: Examples showing where in the entity's business model and value chain sustainability-related risks and opportunities are concentrated

Entity A operates in the beverage industry and has identified that it needs to disclose risks associated with water use, especially in areas where water is scarce. Entity A may describe how its use of water affects the supply available to meet its operational needs. It may explain how its water consumption affects communities close to the entity's operations that rely on the same source of water. It may also explain how over-consumption of water in those locations could lead to risks of reputational damage and loss of customers, or to the imposition of taxes or limits on the use of the resource. It may also describe how these risks have been assessed throughout its supply chain.

Entity B is a clothing brand and has identified that it needs to describe the opportunity associated with changing to use less resource-intensive materials in its products and packaging. The potential effects may be driven by Entity B's commitments to sustainable business practices, or consumer preferences for more sustainable or recycled alternatives. Entity B may also disclose the areas of its value chain and operations that are potentially most affected by this opportunity, and the processes in place to assess and monitor the opportunity.

Entity C is an electronics manufacturer and has identified that it needs to describe the risks of human rights issues in its supply chain, including reputational damage and supply chain disruptions. In doing so, Entity C may describe the effects on its policies, actions it has taken to assess and monitor the risks, and how it manages any identified abuses.

4.3.3 Disclosures about the effects of sustainability-related risks and opportunities on the entity's strategy and decision-making

To enable primary users to understand the effects of sustainability-related risks and opportunities on an entity's strategy and decision-making, IFRS S1 requires an entity to disclose information about: [IFRS S1.33]

- How the entity has responded to, and plans to respond to, sustainability-related risks and opportunities in its strategy and decision-making
- The entity's progress in respect of plans it has disclosed in previous reporting periods, including quantitative and qualitative information
- Trade-offs between sustainability-related risks and opportunities that the entity considered

The example below illustrates disclosures about trade-off between sustainability-related risks and opportunities:

Illustration 4-2: Example on trade-offs between sustainability-related risks and opportunities

During the reporting period, Entity A decided where to locate its new manufacturing facility that would replace the existing facility that was approaching the end of its useful life. Entity A had considered two alternative sites for its new manufacturing facility:

- Site X is located in the same region as the existing facility. However, the site is prone to flash flooding during heavy rains due to the poor drainage systems at the site and its surrounding area.
- Site Y is located in a different region, which is not prone to flood risk. A consequence of relocating to Site Y is that Entity A is currently the main employer in the community that surrounds Site X. A decision by Entity A to relocate to Site Y is that it would have an adverse effect on its local workforce and indirectly on the economic prospects for the entire community.

Entity A performed impact assessments to investigate the extent of flood risk of Site X and the social risk of moving to Site Y and identified options for mitigating those risks. Entity A decided, on cost/benefit grounds, to build its new manufacturing facility at Site X and as part of the development works, install new drainage systems that can divert flood waters away from the site and the community. In reaching this decision, Entity A also considered the benefit of continued access to the locally trained and engaged workforce to operate the facility.

4.3.4 Disclosures about current and anticipated financial effects of sustainability-related risks and opportunities

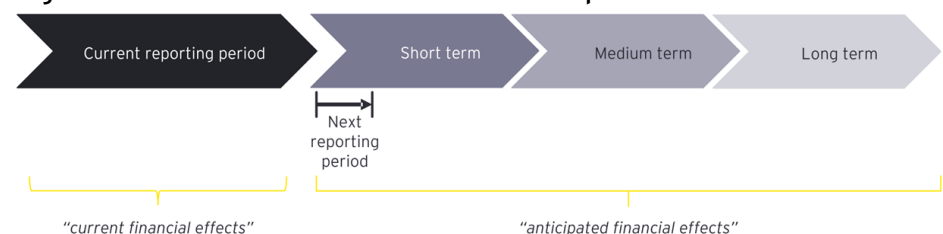
Disclosures about current and anticipated financial effects are intended to supplement or expand upon information provided in the related financial statements.

IFRS S1 requires an entity to disclose quantitative and qualitative information about: [IFRS S1.34]

- The effects of the entity's sustainability-related risks and opportunities on its financial position, financial performance and cash flows for the reporting period, which is referred to as 'current financial effects'
- The anticipated effects of those sustainability-related risks and opportunities on its financial position, financial performance and cash flows over the short, medium and long term, taking into consideration how the entity includes those sustainability-related risks and opportunities in its financial planning. These are referred to as 'anticipated financial effects'

The timescales contemplated by the meaning of 'current financial effects' and 'anticipated financial effects' are illustrated in Figure 4-5 below.

Figure 4-5: Timeline for current and anticipated financial effects



Disclosures of current and anticipated financial effects are intended to supplement or expand upon information provided in the related financial statements. This includes identifying and explaining the connections between sustainability-related risks and opportunities and the information reported in the financial statements (see discussion on connected information in section 3.4.2.B above). Connections between items of information may be able to be explained without duplicating information by using cross-references. For example, a cross reference to information disclosed in

the notes to the financial statements may satisfy the requirement in IFRS S1 to disclose how sustainability-related risks and opportunities have affected an entity's current and anticipated financial position, financial performance and cash flows. The use of cross-references is subject to the requirements in IFRS S1 (see further discussion in section 5.2.2 below).

In Note 16 of its 2024 financial statements, BHP Group Limited disclosed the areas of the financial statements that could be affected by its strategy and decision-making related to climate-related risks and opportunities.

Practical example 4-6:

BHP Group Limited (2024)

Australia

Annual Report 2024 [extract]

Financial Statements [extract]

1 Consolidated Financial Statements [extract]

1.6 Notes to the Financial Statements [extract]

16 Climate change [extract]

...

Areas of these Financial Statements that may be impacted in connection with this strategy throughout the value creation and delivery cycle of the Group's operations, include:

Phase	Areas of potential Financial Statement impact
Exploration and acquisition	– Financial impact of portfolio decisions
Development and mining / Process and logistics	– Impact of transition risks on asset carrying values
	– Physical climate-related risks and asset carrying values
	– Application of carbon pricing assumptions and acquisition of carbon credits
	– Useful economic lives of property, plant and equipment
Sales, marketing and procurement	– Expenditure on operational (Scopes 1 and 2 from operated assets) decarbonisation
	– Expenditure to support value chain (Scope 3) decarbonisation
Closure and rehabilitation	– Timing, scope and expected cost of closure and rehabilitation activities

At the date of issue of these Financial Statements, indicators show the appropriate measures are not in place globally to drive decarbonisation at the pace or scale required to achieve the aim of the Paris Agreement to limit the global average temperature increase to 1.5°C above pre-industrial levels. The significant judgements and key estimates used in the preparation of these Financial Statements reflect the Group's current planning range (which implies a projected global average temperature increase of approximately 2°C by CY2100), as described below.

While not the basis of preparation of these Financial Statements, the Group continues to perform sensitivity analysis under the Group's 1.5°C scenario to consider potential Financial Statement impacts of commodity and carbon prices in a rapidly decarbonising world. The Group's 1.5°C scenario is not a forecast of what is likely to occur.

Future changes to the Group's climate change strategy or global decarbonisation trends may impact the Group's significant judgements and key estimates, and result in material changes to financial results, cash flows and the carrying values of certain assets and liabilities in future reporting periods.

The Group has developed three unique planning cases which comprise the Group's planning range: a 'most likely' base case, used as the basis for judgements and assumptions in these Financial Statements, and an upside case and downside case that provide the range's boundaries. The three cases reflect proprietary forecasts for the global economy and associated sub-sectors (i.e. energy, transport, agriculture and steel) and the resulting market outlook for the Group's core commodities.

Given the complexity and inherent uncertainty of long run forecasting, these pathways are reviewed periodically to reflect new information, with a process in place to assess the need to update internal long-term price

...

4.3.4.A Disclosures about current financial effects

IFRS S1 requires an entity to disclose quantitative and qualitative information about how sustainability-related risks and opportunities have affected its financial position, financial performance and cash flows for the reporting period. [IFRS S1.35(a)].

An entity may also be required to disclose these current financial effects in the notes to its financial statements when applying IFRS accounting standards or other GAAP. As discussed in section 4.3.4 above, an entity should consider whether it can include a cross reference to this information to avoid unnecessary duplication of disclosures.

There may be cases where sustainability-related risks and opportunities have affected an entity's financial position, financial performance and cash flows for the reporting period. This is illustrated in the Illustration 4-3 below:

Illustration 4-3: Sustainability-related risks and opportunities with effects in the current reporting period

Entity A is an energy provider operating in country Z where the government imposed a regulation that includes certain targets to entities for reducing carbon dioxide emissions. The regulation was enacted a few years ago and is applicable in the next reporting period. Entity A identified climate-related risks due to that regulation.

Entity A applies IFRS accounting standards. This regulation is considered by Entity A to be a triggering event for an impairment assessment, which has led to partial impairment of certain power production facilities and the reduction of their useful life.

Entity A would need to disclose in its sustainability-related financial disclosures how these climate-related risks have affected its financial position, financial performance and cash flows for the reporting period. To avoid duplicating this information, Entity A may cross-reference to the notes to its financial statements such as the notes discussing about property, plant and equipment, impairment, and provisions.

There may be cases where sustainability-related risks and opportunities have not affected an entity's financial position, financial performance and cash flows for the reporting period. However, explaining that fact may still be material information for primary users. This is reflected in the Illustration 4-4 below:

Illustration 4-4: Sustainability-related risks and opportunities with no effects in the current reporting period

Entity B operates in the leasing industry of diesel-powered cars which have negligible value. Cars are leased for a minimum of five years. Entity B identified climate-related risks and opportunities relating to the significant contribution of Scope 1 GHG emissions by diesel-powered cars. Therefore, Entity B included in its business plan a target to gradually replace those cars with electric-powered ones. The replacement of cars will be conducted gradually based on when current lease term of each car ends. There is no capital commitment during the lease term in the current reporting period. Entity B assessed the effects of those risks and opportunities on its financial position, financial performance and cash flows for the current period and concluded that there are no implications.

Entity B would need to disclose in its sustainability-related financial disclosures how these climate-related risks and opportunities have affected its financial position, financial performance and cash flows for the reporting period. Although Entity B assessed that there are no implications in the current reporting period, it may conclude that disclosing the fact that there are no current financial implications could still be a material information for primary users.

Even though there is no effect in the current reporting period from these sustainability-related risks and opportunities, anticipated financial effects arising may exist (see Illustration 4-5 below).

In Note 16 of its 2024 financial statements, BHP Group Limited specifically disclosed the potential effect of climate-related risks and opportunities on the carrying values of assets recognised in its financial statements.

Practical example 4-7: BHP Group Limited (2024) Australia

Annual Report 2024 [extract]

Financial Statements [extract]

1 Consolidated Financial Statements [extract]

1.6 Notes to the Financial Statements [extract]

16 Climate change [extract]

Impact of transition risks on asset carrying values

Significant judgements and key estimates in relation to the preparation of these Financial Statements, including asset carrying values and impairment assessments, are impacted by the Group's current assessment of the range of economic and climate-related conditions that could exist in the world's transition to a net zero economy, considering the current trajectory of society and the global economy as a whole.

For example, demand for the Group's commodities may decrease due to policy, regulatory (including carbon pricing mechanisms), legal, technological, market or societal responses to climate change, resulting in a proportion of a cash generating unit's (CGU) reserves becoming incapable of extraction in an economically viable fashion. Alternatively, technological or market developments increasing demand for commodities in the portfolio that help enable decarbonisation may have a positive impact on prices for those commodities.

The Group has developed three unique planning cases which comprise the Group's planning range: a 'most likely' base case, used as the basis for judgements and assumptions in these Financial Statements, and an upside case and downside case that provide the range's boundaries. The three cases reflect proprietary forecasts for the global economy and associated sub-sectors (i.e. energy, transport, agriculture and steel) and the resulting market outlook for the Group's core commodities.

Given the complexity and inherent uncertainty of long run forecasting, these pathways are reviewed periodically to reflect new information, with a process in place to assess the need to update internal long-term price outlooks for developments in the periods between pathway updates.

The Group reflects the planning range and associated price outlooks in the internal valuations used as the basis for the Group's impairment assessments.

The discount rate used in the internal valuations reflects a real post-tax weighted average cost of capital (WACC), including country and state risk premia where appropriate, and ranges from 7.0 per cent to 9.5 per cent across the Group (2023: 7.0 per cent to 9.5 per cent). Cash flow forecasts used as the basis for impairment testing include asset specific risks, including climate-related risks such as operational interruptions as a result of physical climate-related risks, and therefore the Group does not include a separate climate-related risk adjustment in the Group's WACC.

Further detail on the Group's significant judgements and estimates that inform the planning range and FY2024 impairment assessments, is included in note 13 'Impairment of non-current assets'.

In addition to the planning range, and as described below in 'Paris Agreement and 1.5°C scenarios', the Group uses its 1.5°C scenario, which implies a global average temperature increase of 1.5°C by CY2100, to test resilience of the Group's portfolio in a rapidly decarbonising world.

Physical climate-related risks and asset carrying values

The Group's operations are exposed to physical climate-related risks. In FY2024, the Group continued to progress studies of physical climate-related risks to better understand the potential impacts on safety, productivity and cost, with the work to continue in FY2025.

The studies consider potential impacts of acute and chronic risks from material climate hazards, which differ based on an operated asset's geographic region, asset infrastructure and operational processes. The studies are ongoing and therefore the Group's consideration of physical climate-related risks, including factors such as potential operational interruptions caused by extreme weather events, therefore includes only the Group's current best estimates of related potential financial impacts.

Given the complexity of physical climate-related risk modelling and the status of the Group's ongoing physical risk assessment process, the identification of additional risks and/or the detailed development of the Group's response may result in material changes to financial results and the carrying values of assets and liabilities in future reporting periods.

Useful economic lives of property, plant and equipment

The determination of useful lives of the Group's PP&E requires judgement, including consideration of the Group's climate change strategy, targets and goals, decarbonisation plans and the possible impact of transition risks on demand for the Group's commodities.

Useful lives are reviewed each reporting period, including to ensure they do not exceed the remaining expected operating life of the operation in which they are utilised. The remaining lives of the Group's operations reflect the Group's planning range and its underlying climate-related assumptions.

A key component of the Group's operational decarbonisation strategy is the displacement of diesel within the Group's operations, particularly the haul truck fleet. The Group is supporting the development of new equipment by original equipment manufacturers, including entering into partnerships focused on the development and trialling of electric locomotives and haul trucks.

While technical and commercial development of the technology needed is progressing, the Group's operational plans generally assume replacement of haul trucks, and other diesel powered equipment, at the end of their useful lives in line with the Group's regular fleet renewal programs.

For example, a significant proportion of the Group's existing WAIO mining fleet is due for replacement prior to the expected availability of battery electric vehicle solutions. As such, the Group's decarbonisation plans have not had a material impact on the estimated remaining useful lives of the Group's existing fleet of assets in FY2024.

Woolworths Group Limited in Note 3.6 (Property, plant and equipment) and Note 3.9 (Impairment of non-financial assets) of its Annual Report, disclosed that there is no effect in the current reporting period from sustainability-related matters but indicates that there may be an effect in future reporting periods.

Practical example 4-8:	Woolworths Group Limited (2024)	Australia
Annual Report 2024 [extract] SECTION 4 Financial Report Consolidated Financial Statements [extract] Notes to the Consolidated Financial Statements [extract] 3 Assets and liabilities [extract] 3.6 Property, plant and equipment [extract]		
 Financial reporting impacts of sustainability-related matters The Group has identified climate-related physical risks to its assets and is currently working through actions to address these risks, including improving the resilience of its assets through the implementation of generators for areas exposed to a high risk of power outages, flood barriers, rainwater harvesting, and roof strengthening. Useful lives During the period, there were no changes to the useful lives of property, plant and equipment as a result of climate-related risks. If in future reporting periods there are changes to the proposed useful lives and/or residual values due to climate-related risks, these changes will be accounted for on a prospective basis.		
3.9 Impairment of non-financial assets [extract]		
 Financial reporting impacts of sustainability-related matters Notwithstanding that the Group continues to assess the potential impacts of climate change on its impairment testing, the Group has identified climate-related physical risks to its assets and is currently working through actions to address these risks. These actions include the replacement of its existing assets with more environmentally-friendly alternatives, such as refrigeration, solar and LED lighting, and converting the Group's home delivery fleet to electric vehicles, as well as increasing the resilience of the Group's store and supply chain assets through the implementation of generators for areas exposed to a high risk of power outages. Furthermore, the Group incorporates the potential increase of future flood risk into its existing site selection and design procedures. Given that the average remaining useful life of the Group's significant non-financial tangible assets is approximately eight years, the potential impacts of climate change are not considered to present a risk of impairment of the carrying value of non-financial assets in the near term.		

4.3.4.B Disclosures about anticipated financial effects: Next annual reporting period

Anticipated financial effects refer to those financial effects anticipated in the next annual reporting period and to those financial effects anticipated over the short, medium and long term.

IFRS S1 requires disclosure of information that connects the current financial effects with the anticipated financial effects in the next annual reporting period. In accordance with this disclosure requirement in IFRS S1, an entity is required to disclose quantitative and qualitative information about those sustainability-related risks and opportunities that have both of the following characteristics: [IFRS S1.35(b)]

- The sustainability-related risks or opportunities were identified as having current financial effects (see also section 4.3.4.A above).
- Within the next annual reporting period, there is a significant risk of a material adjustment to the carrying amounts of assets and liabilities reported in the related financial statements.

Similar to the disclosure of current financial effects, the information required by this disclosure may also be disclosed in the notes to the entity's financial statements due to requirements in IAS 1 for the disclosure of sources of

estimation uncertainty. Therefore, an entity may need to consider whether to include a cross reference to this information to avoid unnecessary duplication of disclosures.

How we see it

In our view, when an entity prepares sustainability-related financial disclosures about current financial effects and about anticipated effects for the next annual reporting period, it needs to base its materiality assessment for these disclosures on assumptions and data used for the information included in the financial statements and vice versa. This is consistent with the requirements of IFRS S1 to use 'consistent data and assumptions' in both the preparation of financial statements and in disclosing sustainability-related financial information (discussed in section 3.4.2.B).

4.3.4.C Disclosures about anticipated financial effects: Short, medium and long term

IFRS S1 requires an entity to disclose quantitative and qualitative information about how the entity expects its financial position to change over the short, medium and long term, given its strategy to manage sustainability-related risks and opportunities, taking into consideration the entity's:

[IFRS S1.35(c)]

- Investment and disposal plans, including plans for which the entity is not contractually committed
- Planned sources of funding to implement its strategy

An entity's investment and disposal plans may include plans for capital expenditure, major acquisitions and divestments, joint ventures, business transformation, innovation, new business areas, and asset retirements.

Similarly, IFRS S1 also requires an entity to disclose quantitative and qualitative information about how the entity expects its financial performance and cash flows to change over the short, medium and long term, given its strategy to manage sustainability-related risks and opportunities. *[IFRS S1.35(d)]*.

Illustration 4-5: Sustainability-related risks and opportunities with anticipated financial effects

Consider the same facts as in Illustration 4-4 above.

Although the climate-related risks identified in Illustration 4-4 do not affect Entity B's financial position, financial performance, and cash flows in the current reporting period, there are anticipated financial effects. Entity B needs to disclose those anticipated effects. For example, shifting the fleet to electric-powered cars will require Entity B to make an additional capital investment of approximately CU1million for the replacement of the petrol-powered cars with electric-powered ones and the installation of charging points where needed. It is expected that 30% of the total fleet will be replaced each year with the aim of replacing the total fleet within the next three years. The shift to electric-powered cars aims to reduce Entity B's Scope 1 GHG emissions produced by petrol-powered cars by approximately 20,000 tons each year.

4.3.4.D Measurement of current and anticipated financial effects

IFRS S1 does not provide guidance on how to measure current and anticipated financial effects other than to indicate that quantitative information may be disclosed as a single amount or a range. The ISSB acknowledged that, in some cases, ranges of possible outcomes could be more useful than single estimates. *[IFRS S1.36, IFRS S1.BC89]*.

How we see it

Given the variety of factors that may need to be considered in quantifying the anticipated financial effects of a sustainability-related risk or opportunity, an entity may need to use judgement to determine how to measure those effects. Such judgement relates to selecting the method that an entity expects that it will best reflect the anticipated effect on its financial position, financial performance and cash flows. In exercising judgement to select a relevant measurement method, an entity may consider whether the measurement methods used in IFRS accounting standards or other GAAP (such as expected value or the most likely amount) could be relevant to apply by analogy to quantify the anticipated financial effects.

4.3.4.E Preparing disclosures about anticipated financial effects

Stakeholders raised concerns about the difficulties that some entities may face in disclosing information about anticipated financial effects. To address these concerns, specifically for the preparation of disclosures about the anticipated financial effects of a sustainability-related risk or opportunity, IFRS S1 allows an entity to: [IFRS S1.37, IFRS S1.BC106, IFRS S1.BC107]

- Use all reasonable and supportable information that is available to the entity at the reporting date without undue cost or effort (for further information see discussion in section 1.2.2 above). The ISSB further clarified this requirement in the context of anticipated effects as summarised in Figure 4-6 below.
- Use an approach that is commensurate with the skills, capabilities and resources that are available to the entity for preparing those disclosures. However, the ISSB clarified that an entity cannot avoid providing quantitative information for anticipated financial effects because it does not have the skills or capabilities to do so if it has the resources available to obtain or develop those skills or capabilities.

Figure 4-6: The concept of reasonable and supportable information in the context of disclosures for anticipated effects

Phrase	Meaning
“use all reasonable and supportable information”	An entity is prohibited from overstating or understating the anticipated financial effects of opportunities or risks premised on information that is unsupportable or unreasonable.
“use... information that is available to the entity at the reporting date”	An entity is permitted to use only the information that is available to the entity at the reporting date (including information about past events, current conditions and forecasts of future conditions).
“use... information that is available to the entity... without undue cost or effort”	An entity is not required to carry out an exhaustive search for information to determine or measure the anticipated financial effects of risks and opportunities. Instead, an entity is permitted to carry out an information search that is proportional to the cost and effort involved in obtaining that information.

4.3.4.F Criteria and disclosures when quantitative information about current and anticipated financial effects is not required

The ISSB has established criteria for when an entity is not required to disclose quantitative information about the financial effects of a sustainability-related risk or opportunity. In particular: *[IFRS S1.38, IFRS S1.39, IFRS S1.BC109]*

- For either current or anticipated financial effects of a sustainability-related risk or opportunity, IFRS S1 states that an entity is not required to provide quantitative information if:
 - Those current or anticipated financial effects are not separately identifiable. That is, the financial effects may arise from many risks or opportunities and affect many items in the financial statements. As such, it may be difficult to attribute financial effects to an individual sustainability-related risk or opportunity.
- Or
- The level of measurement uncertainty involved in estimating those effects is so high that the resulting quantitative information would not be useful. See section 6.2 below for a further discussion on measurement uncertainty.
- Specifically for anticipated financial effects of a sustainability-related risk or opportunity, IFRS S1 does not require an entity to provide quantitative information on those anticipated financial effects if the entity lacks the skills, capabilities or resources to do so.

For current or anticipated financial effects of a particular sustainability-related risk or opportunity, the ISSB clarified that, even if an entity is not in a position to disclose quantitative information, it is still required to provide other quantitative and qualitative information that would be useful to primary users. For that reason, if an entity concludes that it is unable to provide quantitative information, IFRS S1 requires to: *[IFRS S1.40]*

- Explain why the entity has not provided quantitative information.
- Provide qualitative information about those financial effects—this is to include identifying line items, totals and subtotals within the related financial statements that are likely to be affected, or have been affected, by that sustainability-related risk or opportunity.
- Provide quantitative information about the combined financial effects of that sustainability-related risk or opportunity with other sustainability-related risks or opportunities and other factors. However, disclosing quantitative information about the combined financial effects is not required if the entity determines that this information would not be useful.

4.3.5 Disclosures about the resilience of the entity's strategy and business model to sustainability-related risks

IFRS S1 requires a resilience assessment of an entity's strategy and business model. The purpose of the resilience assessment is to inform primary users about the entity's ability to cope with and withstand the effects of sustainability-related risks and related uncertainties in different scenarios.

In particular, IFRS S1 requires an entity to disclose an assessment of the resilience of the entity's strategy and business model in relation to its sustainability-related risks, including information about how the assessment was carried out and its time horizon. The assessment is to be a qualitative and, if applicable, quantitative assessment. When providing quantitative information, IFRS S1 permits an entity to disclose a single amount or a range. *[IFRS S1.41]*.

IFRS S1 acknowledges that other ISSB standards may specify the type of information an entity is required to disclose about its resilience to specific sustainability-related risks and how to prepare those disclosures, including whether a scenario analysis is required. [IFRS S1.42]. For example, IFRS S2 includes specific requirements for resilience assessments for an entity's climate-related risks (see Part B of this publication).

The requirements to disclose information about the resilience of an entity's strategy and business models and to disclose information about the current and anticipated financial effects of an entity's sustainability-related risks and opportunities are designed to meet different information needs. The requirements for a resilience assessment relate to an entity's capacity to adjust to the uncertainties arising from sustainability-related risks, whereas the requirements on the current and anticipated financial effects of sustainability-related risks and opportunities relate to the effects of risks and opportunities on an entity's financial performance, financial position and cash flows. Therefore, these requirements can be applied independently. However, while an entity is not required to carry out a resilience assessment to determine the anticipated financial effects of sustainability-related risks and opportunities, the ISSB also acknowledged that an entity may find the resilience assessment useful and relevant in determining the anticipated financial effects of sustainability-related risks and opportunities. [IFRS S1.BC113].

4.4 Risk management

Risk management processes refer to processes an entity uses to identify, assess, prioritise and monitor sustainability-related risks and opportunities.

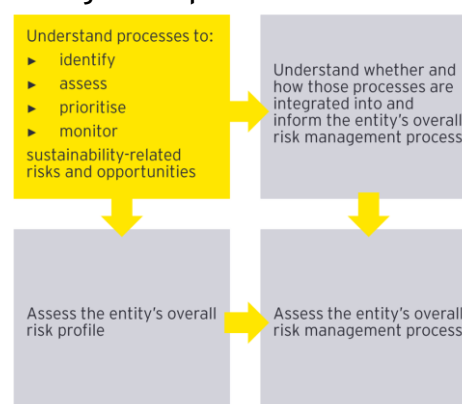
The TCFD defines 'risk management' as referring to "a set of processes that are carried out by an organization's board and management to support the achievement of the organization's objectives by addressing its risks and managing the combined potential impact of those risks".²⁷

The objective of risk management disclosures in IFRS S1 is to enable primary users to: [IFRS S1.43]

- Understand an entity's processes to identify, assess, prioritise and monitor sustainability-related risks and opportunities (see discussion in section 4.4.1 and 4.4.2 below)
- Understand whether and how those processes are integrated into and inform the entity's overall risk management process (see discussion in section 4.4.3 below)
- Assess the entity's overall risk profile and its overall risk management process

This objective is summarised in Figure 4-7 below:

Figure 4-7: Risk management processes



²⁷ [Recommendations of the TCFD](#), Appendix 5: Glossary and Abbreviations, page 63, TCFD, June 2017. Available on the TCFD's website.

The TCFD noted that in assessing an entity's financial and operating results, many investors want insight into the governance and risk management context in which such results are achieved.²⁸ This focus helps to draw a distinction between the purpose of the risk management disclosures and the strategy disclosures. The ISSB explained that disclosures about risk management processes relate to the risk management framework that the entity has put in place. In contrast, disclosures about strategy are focused on providing information about an entity's strategy for managing sustainability-related risks and opportunities. [IFRS S1.BC116].

In its ESG Report 2023, The Hong Kong and China Gas Company Limited (Towngas) disclosed the way it conducts its climate risk assessment by giving a summarised description of its risk management processes which is further analysed in a separate report it published.

Practical example 4-9: The Hong Kong and China Gas Company Limited (Towngas) (2023) Hong Kong

**Environmental, Social and Governance Report 2023 [extract]
NEUTRALISING OUR FOOTPRINT [extract]
Climate Change Management [extract]**

Identifying, Assessing, and Managing Climate-related Risks

To evaluate the potential impacts of climate change on our assets, businesses and value chain, we conduct comprehensive climate risk assessments using various climate models and scenarios analyses. This helps us account for a wide range of potential impacts and uncertainties and prepare for future climate-related risks. To ensure comprehensive strategic planning and informed decision-making for the future, we regularly review and update our assessments, strategies and scenario analysis to address emerging climate-related risks and opportunities in different time horizons. We also maintain open communication with stakeholders and explore strategies for strengthening our resilience against transition and physical climate-related risks. For more details, please refer to *the Guide* and sections below.

Physical Risks

Physical risks associated with climate change impacts can be broadly classified as acute (e.g., floods, droughts) and chronic (e.g., sea-level rise, temperature increases). In order to evaluate the impacts of physical risks present in our assets, three Representative Concentration Pathways (RCP) scenarios (RCP 2.6, RCP 4.5, RCP 8.5) were used. These scenarios ranged from limiting the global average temperature of 1.5°C to align with The Paris Agreement (RCP 2.6) to managing the challenges of a drastic increase in average temperature of 4°C (RCP 8.5).

In 2021 we conducted a deep asset physical risk assessment for our Tai Po Gas Production Plant and an asset level assessment of 100 major assets on the Chinese mainland. To extend the assessment coverage across the Chinese mainland, we included new projects and conducted asset level assessments of over 300 assets in 2023. Focusing on chronic risks, we used a climate model to identify climate-sensitive/vulnerable assets, i.e. assets most exposed to extreme impacts such as extreme temperature, rainfall and water stress.

Visits to over 10 selected assets were conducted in 2023 to understand their vulnerability and capacity to adapt to key hazards. We ensure that effective systems are in place to withstand different climate stressors. We also held ESG and climate change training for managerial employees on site to show them the climate impact projections for the assets, as well as to equip them with the knowledge required to tackle climate hazards in the future.

Risk	Time Horizon ¹	Potential Financial Implications	Mitigation Plan/Response
Acute  Heavy rainfall and increased frequency and intensity of river floods	Medium to Long Term	 Costs and  revenue from asset damage  Resilience upgrade expenses  Insurance costs and claims	- Review plan for adapting our infrastructure to climate change - Strengthen crisis management plans
Chronic  Increased temperatures	Long Term	 Revenue from gas-related services  Operating costs due to energy use	Diversify businesses to transform into a multi-energy provider

²⁸ [Recommendations of the TCFD](#), C Recommendations and Guidance, page 17, TCFD, June 2017. Available on the TCFD's website.

Transition Risks and Opportunities

In 2020, we analysed various assumptions under four self-developed scenarios based on the International Energy Agency's (IEA) *World Energy Outlook 2019*, which consider technological advancements and policy implementations. This enabled us to identify potential transition risks that could impact the Group under different time horizons. To ensure our analysis aligns with the latest trends, we updated these scenarios using the Network for Greening the Financial System (NGFS) scenarios and developed the Net Zero 2050 Scenario to align with the goal of limiting a global temperature rise to 1.5°C. We then prioritised top transition risks under the Net Zero 2050 Scenario and Below 2°C Scenario specifically for gas-related businesses.

Risk	Time Horizon ¹	Potential Financial Implications	Mitigation Plan/Response Measure
Policy and Legal Mandates on/regulation of products and services	Short to Medium Term	Revenue from gas-related services Compliance and insurance costs Income from low-carbon offerings	Align with government policies for low-carbon development Reduce GHG emissions via low-carbon energy and efficiency improvements
Technology Technological improvements or innovations to support the transition to a lower-carbon economy	Medium to Long Term	Investment in new technologies R&D spending Operational costs due to energy efficiency	Reduce operational GHG emissions Support R&D with proprietary technologies
Market Shifting consumer behaviour	Medium to Long Term	Revenue from gas-related services Operating costs due to raw material price changes Income from low-carbon products	Diversify businesses to transform into a multi-energy provider
Reputation Shareholders are likely to divest from fossil fuels and invest in low-carbon businesses	Long Term	Change in capital availability Communication costs	Enhance open disclosure for increased capital availability

¹Short term runs to 2025, aligned with our near-term targets that cover carbon reduction, energy efficiency, etc.; medium term runs to 2035, aligned with the Group's plan to replace fossil fuels in phases by introducing and using zero-carbon fuels in our HK operations; long term runs to 2050, aligned with the Hong Kong's Climate Action Plan 2050 to achieve carbon neutral before 2050

4.4.1 Risk management processes for identifying sustainability-related risks

IFRS S1 requires an entity to disclose information about the processes and related policies that it uses to identify, assess, prioritise and monitor sustainability-related risks. The information to be disclosed includes information about: [IFRS S1.44(a)]

- The inputs and parameters used by the entity in the processes and policies that identify, assess, prioritise and monitor sustainability-related risks (e.g., information about data sources and the scope of operations covered in those processes)
- Whether and how scenario analysis is used to inform the entity's identification of sustainability-related risks
- How the nature, likelihood and magnitude of the effects of those risks is assessed by the entity (e.g., whether qualitative factors, quantitative thresholds or other criteria are considered)
- Whether and how sustainability-related risks are prioritised by the entity relative to other types of risk
- How sustainability-related risks are monitored by the entity
- Whether and how the entity has changed the processes it uses compared with the previous reporting period

4.4.2 Risk management processes for identifying sustainability-related opportunities

IFRS S1 also requires an entity to disclose information about the processes that it uses to identify, assess, prioritise and monitor sustainability-related opportunities. [IFRS S1.44(b)].

Unlike the disclosures for risk management processes for sustainability-related risks, IFRS S1 does not detail specific information that needs to be disclosed about the entity's risk management processes that apply to its opportunities. The ISSB explained that the disclosure requirements for sustainability-related risks are more detailed than those for opportunities, because of the relative maturity of risk management processes and to meet the primary users' needs for information about an entity's processes for identifying, assessing, prioritising and monitoring risks. [IFRS S1.BC119].

How we see it

Disclosures relating to risk management may also enable primary users to understand an entity's processes for managing its sustainability-related opportunities. Therefore, some of those disclosures could also inform the disclosures relating to sustainability-related opportunities.

4.4.3 Integrating disclosures about risk management processes

IFRS S1 requires an entity to also disclose the extent to which, and how, an entity's processes for identifying, assessing, prioritising and monitoring sustainability-related risks and opportunities are integrated into and inform the entity's overall risk management process. [IFRS S1.44(c)]. This information assists primary users in evaluating the entity's overall risk profile and risk management activities.

When an entity uses the same risk management process to identify, assess, prioritise or monitor different sustainability-related risks and opportunities, the entity needs to integrate those disclosures instead of providing separate risk management disclosures for each sustainability-related risk and opportunity. To illustrate this, the ISSB provided the following example: An entity discloses that its climate-related risks and opportunities are integrated into its overall process for managing risks and opportunities. However, other (non-climate) sustainability-related risks and opportunities are identified, assessed, prioritised and monitored separately due to being subject to specific risk management processes that are not part of its overall risk management process. [IFRS S1.BC118].

4.5 Metrics and targets

4.5.1 Metrics

The objective of disclosures on metrics and targets is to enable primary users to understand an entity's performance in relation to its sustainability-related risks and opportunities. [IFRS S1.45].

For each sustainability-related risk and opportunity that could reasonably be expected to affect the entity's prospects, IFRS S1 requires an entity to disclose: [IFRS S1.46]

- The metrics required by an applicable ISSB standard
- The metrics the entity uses to measure and monitor:
 - That sustainability-related risk and opportunity (even if those metrics are not required by ISSB standards)
 - And
 - The entity's performance in relation to that risk and opportunity, including the entity's progress towards any targets it has set and any targets it is required to meet by law or regulation
- When disclosing the metrics as specified above, IFRS S1 requires an entity to include industry-based metrics in relation to its sustainability-related risks and opportunities. That is, an entity needs to include

Metrics disclosed by an entity need to include those associated with particular business models, activities or other common features that characterise participation in an industry.

metrics that are associated with particular business models, activities or other common features that characterise participation in an industry. [IFRS S1.48, IFRS S1.BC125].

4.5.1.A Metrics required by ISSB standards

For metrics that apply to climate-related risks and opportunities, IFRS S1 requires an entity to apply the requirements of IFRS S2. IFRS S2 requires an entity to refer to and consider the applicability of the industry-based disclosure topics defined in the *Industry-based Guidance on Implementing IFRS S2*, when identifying the climate-related risks and opportunities that could reasonably be expected to affect an entity's prospects. These are typically associated with particular business models, activities or other common features that characterise participation in an industry. Moreover, the industry-based guidance also suggests possible ways to measure and disclose information about climate-related risks and opportunities (see Part B of this publication). Even if an entity concludes not to use the *Industry-based Guidance on Implementing IFRS S2*, industry specific disclosures are still required by ISSB standards.

For metrics that apply to sustainability-related risks and opportunities other than climate, the ISSB is yet to issue other topic-based ISSB standards that may otherwise specifically apply to that sustainability-related risk or opportunity. Accordingly, in the absence of an ISSB standard that specifically applies to a sustainability-related risk or opportunity, IFRS S1 requires an entity to apply the sources of guidance requirements to identify applicable metrics. An entity is also required to identify the source (the specific standards, pronouncements, industry practice and other sources of guidance) and the metric when the metric is taken from a source other than an ISSB standard. [IFRS S1.47, IFRS S1.49]. For further discussion on sources of guidance, see section 5.1.2 below.

4.5.1.B Metrics developed by the entity

For metrics developed by an entity, IFRS S1 requires an entity to disclose the following information: [IFRS S1.50]

Figure 4-8: Disclosures for metrics developed by an entity

Theme	Disclosure required
Definition	How the metric is defined, including: - Whether the metric is derived by adjusting a metric taken from a source other than ISSB standards - If so, which source and how the metric disclosed by the entity differs from the metric specified in that source
Nature	Whether the metric is an absolute measure, a measure expressed in relation to another metric or a qualitative measure. The ISSB gives an example of a qualitative measure as indicating status by using the red, amber, green 'traffic light' colours
Validation	Whether the metric is validated by a third party and, if so, which party
Calculation	The method used to calculate the metric and the inputs to the calculation, including: - The limitations of the method used - The significant assumptions made

4.5.2 Targets

An entity's targets will include any targets it has set to monitor progress towards achieving its strategic goals as well as any targets it is required to meet by law or regulation. *[IFRS S1.51]*.

For each target, IFRS S1 requires an entity to disclose: *[IFRS S1.51]*

- The metric used to set the target and to monitor progress towards reaching the target
- The specific quantitative or qualitative target the entity has set or is required to meet
- The period over which the target applies
- The base period from which progress is measured
- Any milestones and interim targets
- Performance against each target and an analysis of trends or changes in the entity's performance
- Any revisions to the target and an explanation for those revisions

An entity is required to consistently define and calculate metrics for each reporting period, including those metrics used to set the entity's targets and monitor progress towards reaching them. In the event a metric is redefined or replaced in a reporting period, an entity is required to: *[IFRS S1.52, IFRS S1.B52]*

- Disclose a revised comparative amount, unless it is impracticable to do so
- Explain the changes to the metric
- Explain the reasons for those changes, including why the metric that has been redefined or replaced provides more useful information

The metrics and targets disclosed by entity have to be labelled and defined using names and descriptions that are meaningful, clear and precise. *[IFRS S1.53]*.

5 General requirements

5.1 Sources of guidance

The use of other sources of guidance is expected during the period of development of the full range of the ISSB standards, but will continue to be relevant in circumstances where a particular event, transaction or other condition is not specifically addressed by any ISSB standard.

As discussed in sections 1.2 and 3.2.2 above, IFRS S1 requires an entity to identify sustainability-related risks and opportunities that could reasonably be expected to affect the entity's prospects, as well as material information that apply to those risks and opportunities. Both identification processes are informed by the sources of guidance included in IFRS S1.

In these identification processes, an entity is required to first apply ISSB standards that specifically apply to that sustainability-related risk or opportunity. *[IFRS S1.54, IFRS S1.56]*. IFRS S1 also includes other sources of guidance which are intended to give direction to entities, especially in situations where there are no directly applicable requirements in ISSB standards. Such guidance effectively provides entities with a roadmap for the appropriate use of other standards and frameworks to produce decision-useful disclosures for primary users about sustainability-related risks and opportunities. The sources of guidance included in IFRS S1 are those that, if selected, would likely result in the provision of information that would enable entities to meet the objective of IFRS S1. The ISSB believes that this can contribute to reducing diversity in practice and improving comparability between information provided by peer entities. *[IFRS S1.BC128]*.

Up to the date of issuance of this publication the ISSB has so far issued specific requirements for disclosing information about sustainability-related risks and opportunities in relation to climate (i.e., IFRS S2). The use of other sources of guidance is particularly useful in these early days of the ISSB's standard setting activities, until more ISSB standards, beyond climate, are developed and issued. The ISSB believes that, as additional ISSB standards will be developed, the reliance of entities on those other sources of guidance will gradually decrease. This is because the range of the future ISSB standards will assist in identifying sustainability-related risks and opportunities, as well as in setting out disclosures designed to meet the needs of primary users and, therefore, there will be fewer gaps to fill. *[IFRS S1.BC128]*.

Despite the importance of other sources of guidance during the period of development of the full range of ISSB standards as described above, the ISSB expects that these other sources will continue to be useful to entities to meet the objective of IFRS S1 even after that period. *[IFRS S1.BC128]*. The rationale behind the requirements of IFRS S1 in respect of other sources of guidance is similar to that of IAS 8 applied under IFRS accounting standards. That is, there will be circumstances where a particular event, transaction or other condition is not specifically addressed by any ISSB standard. Also, the range of sustainability topics and the information needs of primary users are continuously evolving and it is likely that ISSB standards may not provide specific guidance for all possible circumstances. Moreover, the ISSB considered that this guidance can be particularly useful for entities that have not previously reported sustainability-related financial disclosures that focus on meeting the needs of primary users.

5.1.1 Use of sources of guidance when identifying sustainability-related risks and opportunities

As discussed in section 5.1 above, in identifying the sustainability-related risks and opportunities that could reasonably be expected to affect an entity's prospects, an entity needs to apply ISSB standards. That is, an entity needs to consider the sustainability-related topics and the respective sustainability-related risks and opportunities associated with those topics included in ISSB standards. *[IFRS S1.54]*.

In addition to ISSB standards, IFRS S1 provides a list of other sources of guidance to assist in the judgement involved in this identification process. The ISSB decided to distinguish the sources of guidance between those that an entity is required to refer to and consider the applicability of and sources that an entity is permitted, but not required, to refer to and consider the applicability of. The ISSB clarified that the use of “refer to and consider the applicability of” a source of guidance is intended to require or permit an entity to refer to that source of guidance and consider whether it is applicable. If it is, then an entity is required or permitted to apply that source of guidance. [IFRS S1.BC131, IFRS S1.BC132].

The list of sources of guidance that an entity is required to refer to and consider the applicability of is limited to the Sustainability Accounting Standards Board standards (the SASB standards). This was decided by the ISSB to make the application of the requirements less burdensome rather than an entity being required to refer to and consider the applicability of a long list of sources. The ISSB considered that using the SASB standards could reduce application costs for entities and produce useful and comparable disclosures for primary users. This is because the SASB standards were developed with a similar objective to IFRS S1 and their overall design with respect to disclosure topics and associated metrics generally follows the structure of the requirements in IFRS S1. In fact, the industry-based guidance provided by the SASB standards is complementary to the general requirements of IFRS S1, and includes disclosure topics that are focused on sustainability-related risks and opportunities that arise in an industry throughout the value chain. [IFRS S1.55(a), IFRS S1.BC129, IFRS S1.BC130, IFRS S1.BC134].

In February 2024, the ISSB issued educational material for using SASB standards which points out the usefulness of SASB standards as source of guidance.²⁹ In particular, the educational material emphasised that using the SASB standards can be beneficial because they are designed to provide primary users with decision-useful information that is comparable with peers. SASB standards are tailored to specific industries which enables entities to access guidance relevant to their business activities on sustainability-related topics beyond climate. Moreover, the ISSB’s educational material outlines how to use the SASB standards in order to meet the requirements in IFRS S1. Each SASB standard contains: [IFRS S1.IG12]

- *Industry descriptions:* Intended to support entities in identifying applicable industry guidance by describing the business models, activities and other common features that characterise participation in the industry (see section 5.1.1.A below)
- *Disclosure topics:* Describe specific sustainability-related risks or opportunities associated with the activities conducted by entities within a particular industry (see section 5.1.1.A below)
- *Metrics:* Accompany disclosure topics and are designed to provide useful information regarding an entity’s performance for a specific disclosure topic (either individually or as part of a set) (see section 5.1.2.A below)
- *Technical protocols:* Provide guidance on definitions, scope, implementation and presentation of associated metrics (see section 5.1.2.A below)
- *Activity metrics:* Quantify the scale of specific activities or operations of an entity and they are intended to be used in conjunction with metrics accompanying the disclosure topics to normalise data and facilitate comparisons (see section 5.1.2.A below)

²⁹ [Using the SASB Standards to meet the requirements in IFRS S1](#), ISSB, February 2024, available on the IFRS Foundation's website.

5.1.1.A Considerations when referring to the SASB standards to identify sustainability-related risks and opportunities

SASB industry descriptions

Entities can start identifying the relevant sustainability-related risks and opportunities by searching for the applicable SASB standards. In considering the applicability of SASB standards, an entity first needs to understand the activities that a particular SASB standard relates to. The SASB standards have descriptive names (e.g., Oil & Gas - Exploration & Production) and are organised by sector (e.g., Extractives & Minerals Processing). In addition, each industry SASB standard includes an 'industry description' section which summarises the typical business activities to which the SASB standard applies. The industry descriptions summarise the business that each SASB standard covers so that an entity understands the activities addressed and determines if a SASB standard is likely to be applicable to its business model and associated activities. The industry names and descriptions may not precisely align with the industry an entity considers itself to be a part of because industries can be classified and defined according to varying conventions. In performing that assessment, an entity may determine that:

[IFRS S1.IG14, IFRS S1.IG15, IFRS S1.IG16]

- Its business model and activities closely align with the description of a single SASB standard, in which case, the entity may need to refer only to that particular applicable SASB standard.
- Its business model and activities closely align with the description of more than one SASB standard (e.g., when the entity constitutes a hybrid or complex business model with activities spanning a wider array of activities than those reflected in any single SASB standard) and, therefore, needs to refer to and consider the applicability of those SASB standards.
- Its industry does not precisely align with the industry name of the SASB standard to which it considers itself to be part of, or its activities may not be specifically addressed by a SASB standard(s) for a particular industry. However, other SASB standards are likely to address those activities or similar activities.

SASB disclosure topics

The disclosure topics in the SASB standards are useful in helping entities understand the range of sustainability-related risks and opportunities that are within the scope of IFRS S1, which is particularly important in the identification of the sustainability-related risks and opportunities. This is because the disclosure topics have been informed by market input and empirical research, and they focus on sustainability-related risks and opportunities that are likely to affect an entity's prospects in a particular industry. Furthermore, the metrics that accompany disclosure topics in the SASB standards are commonly tailored to the activities of entities within a particular industry (see discussion on metrics in section 5.1.2.A below). Many entities may find they are already managing activities and disclosing information related to the disclosure topics in the SASB Standards.

[IFRS S1.BC134].

Having identified the SASB standard(s) that closely align(s) with its activities, an entity needs to determine which disclosure topic(s) within that SASB standard(s) align(s) with its activities in order to identify the sustainability-related risks and opportunities based on its business model and activities.

[IFRS S1.IG17]. Consider the following Illustration, based on an example provided in the *Implementation Guidance* to IFRS S1, about using disclosure topics of the SASB standards to enable entities to consistently identify sustainability-related risks and opportunities based on their business model and activities: [IFRS S1.IG18, IFRS S1.IG19]

Illustration 5-1: Identifying sustainability-related risks and opportunities by referring to and considering the applicability of SASB standards

Entity B conducts meat, poultry and dairy operations and, therefore, refers to and considers the applicability of the Meat, Poultry & Dairy SASB standard. Entity B concludes that the disclosure topics in that SASB standard that are applicable in its circumstances include disclosure topics such as the food safety and the workforce health & safety. Effectively, Entity B's process of identification of sustainability-related risks and opportunities is informed by the using the disclosure topics in this SASB standard.

In applying those disclosure topics, Entity B explains that a failure to maintain the quality and safety of its product may result in costly recalls, harm the reputation of its brand, lead to fines, reduce its revenues and increase regulatory scrutiny, including the imposition of trade restrictions.

Moreover, Entity B uses the disclosure topics to meet the requirements of IFRS S1 about how it manages the identified risks. In particular, Entity B provides information about its robust workforce safety practices to avoid reputational impairment, costly turnover, low worker morale and productivity, risks associated with potential liability for injuries, associated healthcare and workers' compensation costs.

The approach described in Illustration 5-1 above can be repeated for each of the applicable disclosure topics of the entity. However, the disclosure topics of the SASB standards are meant to inform the identification of sustainability-related risks and opportunities of a typical entity within a given industry, rather than every entity within a given industry. That is, SASB standards may include disclosure topics that would not result in useful information for primary users for every entity within a given industry. For example, an entity operating in a particular industry may not engage in activities that are covered by a disclosure topic of that industry in the SASB standards. Therefore, information resulting from that disclosure topic would not be useful to its primary users. Also, the disclosure topics in SASB standards are not exhaustive and, as such, they are not meant to include every disclosure topic that would result in useful information and be applicable to all entities in a given industry. [IFRS S1.IG13, IFRS S1.IG20].

Therefore, when an entity considers the applicability of the disclosure topics of SASB standards, it may, for the reasons explained above, conclude that those disclosure topics are not sufficient to inform the identification of all sustainability-related risks and opportunities that could reasonably be expected to affect its prospects.

The ISSB's educational material for using SASB standards includes five key questions an entity may consider when identifying which industry SASB standard and disclosure topics are applicable:³⁰

- What are the principal business activities of the entity?
- What are the business activities of peers or competitors of the entity?
- Does the SASB standard reviewed by the entity contain disclosure topics that accurately describe sustainability-related risks and opportunities relevant to the entity?
- Which sustainability-related risks and opportunities do investors most often ask the entity to discuss or disclose?
- Do the disclosure topics align with any risks or opportunities identified by the entity's enterprise risk management processes?

The following examples from the *Implementation Guidance* to IFRS S1 illustrate the identification of sustainability-related risks and opportunities by referring to and considering the applicability of the SASB standards:

³⁰ [Using the SASB Standards to meet the requirements in IFRS S1](#), ISSB, February 2024, available on the IFRS Foundation's website.

Extract from IFRS S1

Example 1—An entity with a single line of business

Entity Y is a regional passenger airline company. In identifying sustainability-related risks and opportunities that could reasonably be expected to affect its prospects, Entity Y is required to apply IFRS Sustainability Disclosure Standards in accordance with paragraph 54 of IFRS S1. In addition to applying IFRS Sustainability Disclosure Standards, Entity Y is required to refer to and consider the applicability of the disclosure topics in the SASB Standards. Entity Y concludes that its business model and activities most closely align with the *Airlines* SASB Standard.

Entity Y applies IFRS S2 *Climate-related Disclosures* and identifies climate-related risks or opportunities that could reasonably be expected to affect its prospects. In addition, Entity Y refers to and considers the applicability of the disclosure topics in the *Airlines* SASB Standard in accordance with paragraph 55(a) of IFRS S1. Entity Y concludes that all four disclosure topics in the *Airlines* SASB Standard are applicable to its activities and uses those disclosure topics to inform its identification of sustainability-related risks and opportunities that could reasonably be expected to affect its prospects.

...

Example 2—A large conglomerate with diverse activities

Entity A is a large conglomerate with diverse activities. Entity A produces electrical and industrial equipment for use in a range of industries. In addition to IFRS Sustainability Disclosure Standards, Entity A is required to refer to and consider the applicability of the disclosure topics in the SASB Standards in identifying its sustainability-related risks and opportunities. Because of the wide-ranging nature of its activities, Entity A begins its consideration of the applicability of the SASB Standards by considering the various sectors into which the SASB Standards are grouped. Entity A conducts activities in industries in the Health Care, Resource Transformation and Infrastructure sectors, and in some cases owns particular parts of its production process rather than relying on suppliers. It also has some activities in the Transportation and Consumer Goods sectors.

Entity A refers to and considers the applicability of the disclosure topics in the SASB Standards. Entity A concludes that eight SASB Standards are applicable to its business model and activities. Entity A considers the disclosure topics in the eight standards. Although Entity A observes that it engages in activities related to all of those disclosure topics, Entity A concludes that some of those disclosure topics are not applicable in the entity's circumstances. For example, Entity A concludes that the sustainability-related risk or opportunity characterised by a particular disclosure topic could not reasonably be expected to affect its prospects over the short, medium or long term because the disclosure topic relates to activities that are insignificant for the entity.

Entity A concludes that most of the disclosure topics in the SASB Standards it has considered are applicable to its significant activities. In some cases where it has less significant activities, it finds that only particular disclosure topics in those related industries are applicable. For example, Entity A concludes that most of the disclosure topics that it considered for its transportation and retail businesses are not applicable, due to the relatively small size of these businesses. However, Entity A concludes that incidents related to safety and labour practices in these businesses, although unlikely to have a large effect on its cash flows in the short term, could have a major effect on its reputation over the

medium and long term. This reputational risk could affect the performance of its larger businesses, including its ability to attract and retain talent, over a medium- and long-term time horizon, which could be reasonably expected to affect its medium- and long-term cash flows, access to finance and cost of capital. Thus, Entity A considers these topics in identifying sustainability-related risks and opportunities that could reasonably be expected to affect its prospects.

5.1.1.B Considerations when referring to other sources of guidance to identify sustainability-related risks and opportunities

The entity may also need to consider additional sources of guidance specified in IFRS S1 to identify its sustainability-related risks or opportunities.

[IFRS S1.IG13, IFRS S1.IG20]. In particular, an entity may refer to and consider the applicability of the CDSB Framework Application Guidance for Water-related Disclosures and the CDSB Framework Application Guidance for Biodiversity-related Disclosures (collectively referred to as 'CDSB Framework Application Guidance'). *[IFRS S1.55(b)(i)].*

For example, the CDSB Framework Application Guidance can support entities in identifying biodiversity-related risks (e.g., reduction in soil fertility, reduction in pollination for crop production, reduced availability of fish stocks) or water-related opportunities (e.g., improved water efficiency, development of new products and services, conservation and restoration of ecosystems through engagement and collaboration with stakeholders). However, that does not preclude an entity from having identified water- or biodiversity-related risks and opportunities in accordance with the SASB standards or other sources of guidance. *[IFRS S1.IG26, IFRS S1.IG27].* Moreover, the CDSB Framework Application Guidance explains how water- and biodiversity-related risks may be connected to other sustainability-related risks and opportunities that could reasonably be expected to affect an entity's prospects (e.g., water-related risks such as more frequent flooding are often inherently linked to climate-related risks). This information is necessary for an entity in meeting the requirements of IFRS S1 about connected information, as discussed in section 3.4 above).

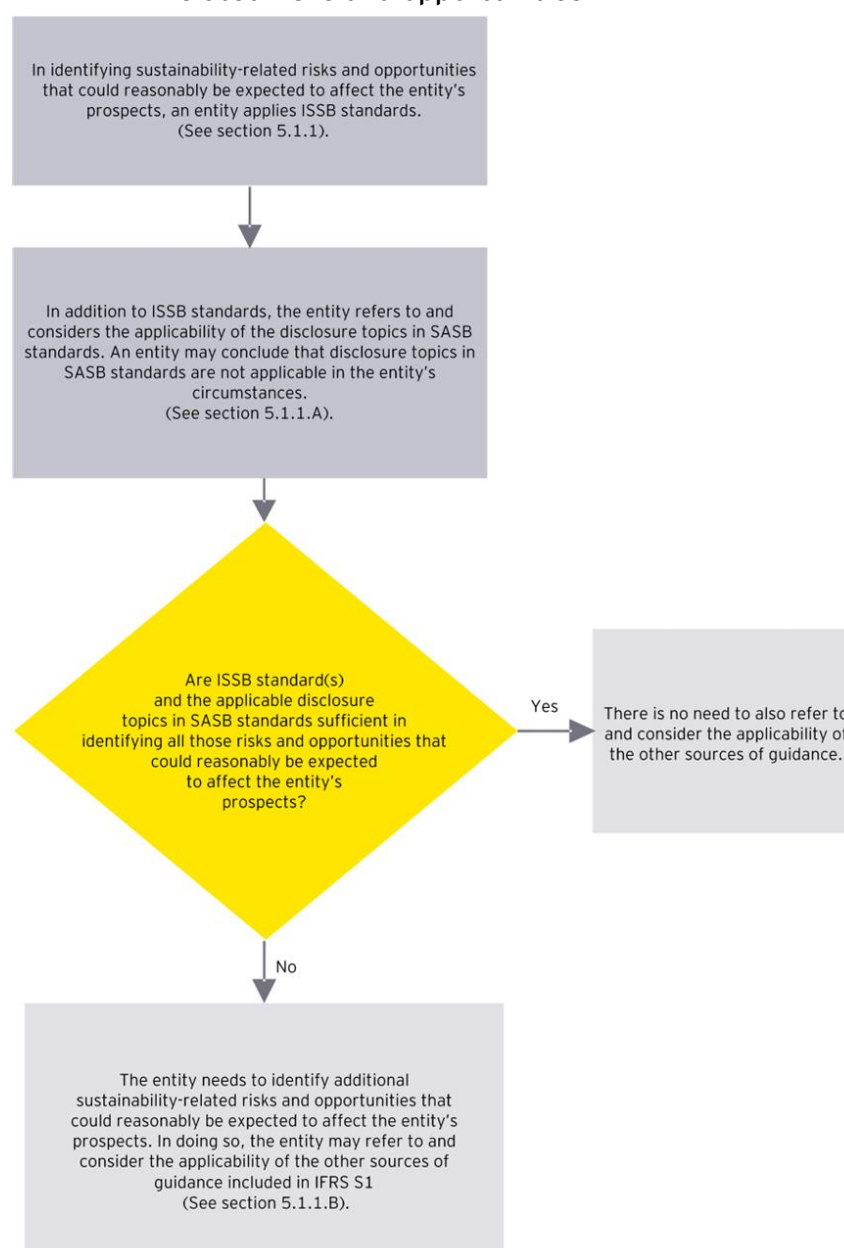
In addition, an entity is permitted to refer to and consider the applicability of the most recent pronouncements of other standard-setting bodies whose requirements are designed to meet the needs of primary users. *[IFRS S1.55(b)(ii)].* For example, an entity operates in a jurisdiction whose national standard-setter is responsible for the issuance of standards designed to meet the information needs of primary users. This national standard setter has issued a standard on human capital-related disclosures. IFRS S1 permits the entity to consider the applicability of this standard when identifying sustainability-related risks and opportunities.

IFRS S1 also permits an entity to refer to and consider the applicability of the sustainability-related risks and opportunities identified by entities that operate in the same industries or geographical regions. *[IFRS S1.55(b)(iii)].* In practice, some regulators may focus on specific areas in relation to their oversight of sustainability reporting. These focus areas may include references to sustainability-related risks and opportunities that could be common in a specific geographic region or industry operating within that region. However, when referring to peer disclosures prepared in accordance with sustainability-related frameworks other than ISSB standards, an entity needs to understand how relevant these sources are for the preparation of disclosures in accordance with ISSB standards. That is, an entity needs to ensure that the process of identifying sustainability-related risks and opportunities meets the information needs of primary users. For example, consider an entity that operates in the medical equipment and supplies industry which recently acquired an entity that operates in the health care distributors industry. While reassessing the scope of sustainability-related

risks and opportunities throughout its value chain (which is required on the occurrence of a significant event as discussed in section 1.2.3 above), the acquiring entity considers the sustainability-related risks and opportunities that may be prevalent in the health-care distributors industry. In doing so, the acquiring entity refers to sustainability-related risks and opportunities identified in the sustainability-related financial disclosures of entities operating in that industry.

The main reasons that the ISSB decided to permit and not require entities to consider these sources were: a) to prevent entities from having to consider an extensive list of open-ended sources of guidance that would lead to an increased burden for entities; and b) to facilitate the transition to ISSB standards by enabling entities to use sources that they may already be familiar with. The application of those sources of guidance is intended to support the application of ISSB standards and, therefore, an entity is still required to comply with all the requirements in ISSB standards to assert compliance with them. [IFRS S1.BC135].

Figure 5-1: Use of sources of guidance to identify sustainability-related risks and opportunities



How we see it

An entity applies ISSB standards as a starting point and refers to and considers the applicability of the SASB standards to identify its sustainability-related risks and opportunities. However, an entity needs to use its judgement to determine whether these two sources are sufficient to identify all those sustainability-related risks and opportunities that could reasonably be expected to affect its prospects. If they do not, the entity needs to identify additional sustainability-related risks and opportunities that could reasonably be expected to affect its prospects. In doing so, an entity may refer to and consider the applicability of the other sources of guidance discussed in this section. Although the other sources of guidance listed in IFRS S1 constitute an extensive list of open-ended sources, if an entity does refer to any of those, its goal remains that it must meet the information needs of primary users, rather than a broader remit of users.

Judgement is required in order to ensure that fair presentation of sustainability-related risks and opportunities is achieved when identifying information by using other sources of guidance.

5.1.2 Sources of guidance when identifying material sustainability-related financial information

As discussed in section 5.1 above, in determining whether information about sustainability-related risks and opportunities that could reasonably be expected to affect an entity's prospects is material, an entity needs to apply the requirements of the ISSB standard that specifically applies to that sustainability-related risk or opportunity. For example, if an entity identifies climate-related risks and opportunities that could reasonably be expected to affect its prospects, the requirements in IFRS S2 (that are discussed in Part B of this publication) are those that the entity needs to apply since IFRS S2 is ISSB standard that specifically applies to climate-related risk and opportunities. [IFRS S1.56].

However, as mentioned in section 5.1 above, ISSB has, thus far, only issued specific requirements for disclosing information about sustainability-related risks and opportunities in relation to climate (i.e., IFRS S2). Moreover, the information needs of primary users is continuously evolving and it is possible that ISSB standards may not provide specific guidance for all circumstances. Therefore, in the absence of an ISSB standard that specifically applies to a sustainability-related risk or opportunity, an entity needs to apply the requirements to sources of guidance specified in IFRS S1. Those requirements emphasise the judgement that is expected to occur when identifying information to ensure that the sustainability-related risks and opportunities are presented fairly in an entity's disclosures (see also discussion on fair presentation in section 3.1.1.A above). That is, while developing disclosures in the absence of an ISSB standard, an entity is required to identify information from sources of guidance that: [IFRS S1.57, IFRS S1.C1]

- Is relevant to the decision-making needs of primary users
- Faithfully represents the entity's risks and opportunities in relation to the specific sustainability-related risk or opportunity
- The list of sources of guidance included in IFRS S1 is intended to assist in making this judgement by including metrics that may be relevant to a particular sustainability-related risk or opportunity for a particular industry or in specified circumstances.

IFRS S1 requires an entity to provide information that fairly presents the sustainability-related risks and opportunities that could reasonably be expected to affect an entity's prospects (see section 3.1 above). Therefore, when an entity needs to refer to and consider the applicability of other sources of guidance to identify material information, it needs to ensure that the disclosures developed are relevant to the decision-making of primary users, and faithfully represent the entity's sustainability-related risks and opportunities.

5.1.2.A Considerations when referring to the SASB standards to identify material information about sustainability-related risks and opportunities

SASB metrics, technical protocols and activity metrics

As discussed in section 5.1.2 above, in the absence of an ISSB standard that specifically applies to a sustainability-related risk or opportunity, an entity needs to apply judgement to identify information that is relevant and faithfully represents that sustainability-related risk or opportunity. In making this judgement, IFRS S1 requires an entity to refer to and consider the applicability of the metrics associated with the disclosure topics included in the SASB standards. For each disclosure topic that an entity identifies as reasonably likely to affect its prospects (as discussed in section 5.1.1.A above), the entity would refer to and consider the applicability of metrics related to that disclosure topic. Those metrics accompany the disclosure topics and are designed to, either individually or as part of a set, provide useful and comparable information regarding an entity's performance for a specific disclosure topic (i.e., an entity's performance in responding to a specific sustainability-related risk or opportunity). Each of these metrics is supported by technical protocols that provide guidance on definitions, scope, implementation and presentation. The technical protocols may also serve as criteria against which the disclosed information can be verified (which is one of the enhancing qualitative characteristics of the provided information as discussed in section 3.1.1.B above). In conjunction to those metrics, there are activity metrics that quantify the scale of specific activities or operations by an entity and are used to normalise data and facilitate comparison.

[IFRS S1.58(a), IFRS S1.IG12, IFRS S1.IG23].

By considering the applicability of the metrics associated with each relevant topic, and any relevant activity metrics, an entity is able to identify applicable disclosures. The ISSB's educational material for using SASB standards³¹ suggests reviewing the list of metrics associated with each relevant disclosure topic and reviewing the list of activity metrics together with the metrics to normalise data and facilitate comparison. Moreover, the educational material includes seven key questions that an entity may consider when identifying which industry SASB standard and disclosure topics are applicable:

- Would a metric in the SASB standard help investors understand the entity's performance in relation to sustainability-related risks and opportunities to which it may be exposed?
- Do the entity's peers or competitors report metrics specified by SASB standards?
- Have investors asked the entity to discuss or disclose information consistent with metrics in the SASB standards?
- Has the entity reviewed the underlying technical protocols in the SASB standard that accompany each metric to help ensure that metrics are compiled consistently?
- Does the metric in the SASB standards align with information that is already managed or disclosed by the entity?
- If the entity already collects information similar to that required by the metric, how could the information be better aligned?
- Does the entity employ methodologies for data collection that are similar to those specified in the SASB standards' technical protocols?

Consider the following Illustration, based on an example provided in the *Implementation Guidance* to IFRS S1, which is a continuation of the example provided in Illustration 5-1 in section 5.1.1.A above. The example relates to

³¹ [Using the SASB Standards to meet the requirements in IFRS S1](#), ISSB, February 2024, available on the IFRS Foundation's website.

requirement in IFRS S1 to refer to and consider the applicability of the metrics associated with the disclosure topics included in SASB standards: [IFRS S1.IG18, IFRS S1.IG22, IFRS S1.IG23, IFRS S1.IG24]

Illustration 5-2: Identifying material information about sustainability-related risks and opportunities by referring to and considering the applicability of SASB standards

Entity B conducts meat, poultry and dairy operations and therefore, refers to and considers the applicability of the Meat, Poultry & Dairy SASB standard. Entity B concludes that the disclosure topics in that SASB standard that are applicable in its circumstances include disclosure topics such as the food safety and the workforce health & safety. In identifying material information about the sustainability-related risks and opportunities it has identified based on those disclosure topics, Entity B refers to and consider the applicability of the following metrics included in the Meat, Poultry & Dairy SASB Standard:

(a) food safety:

- (i) FB-MP-250a.1-Global Food Safety Initiative (GFSI) audit (1) non conformance rate and (2) associated corrective action rate for (a) major and (b) minor non-conformances
- (ii) FB-MP-250a.2-Percentage of supplier facilities certified to a Global Food Safety Initiative (GFSI) food safety certification program
- (iii) FB-MP-250a.3-(1) Number of recalls issued and (2) total weight of products recalled

And

- (iv) FB-MP-250a.4-Discussion of markets that ban imports of the entity's products

(b) workforce health & safety:

- (i) FB-MP-320a.1-(1) Total recordable incident rate (TRIR) and (2) fatality rate

And

- (ii) FB-MP-320a.2-Description of efforts to assess, monitor, and mitigate acute and chronic respiratory health conditions

In applying the accompanying technical protocols of the SASB standards, Entity B discloses information related to workforce health and safety for all of its workers, regardless of their location and type of employment (e.g., full-time, part-time, direct, contract, executive, labour, salary, hourly or seasonal). Entity B applies the accompanying technical protocols as a guide in supplementing its metrics with appropriate context (e.g., a discussion of notable recalls, including information related to the cause, amount, remediation cost, nature (voluntary or involuntary), associated corrective actions and other significant outcomes related to the recall, such as legal proceedings or consumer illness).

The importance of providing industry-specific disclosures to primary users is also explicit in the section of IFRS S1 that relates to the core content of disclosures about metrics (see discussion in section 4.5 above), which requires an entity to disclose industry-based metrics in relation to its sustainability-related risks and opportunities (i.e., metrics associated with particular business models, activities or other common features that characterise participation in an industry). The associated metrics are likely to be applicable in assessing the effects of sustainability-related risks and opportunities on the entity's cash flows, its access to finance and cost of capital over the short, medium and long term. Entity-specific judgement is needed for the metrics chosen in the information about sustainability-related risks and opportunities to be material. [IFRS S1.BC125, IFRS S1.BC133].

The following examples are a continuation of the Illustrative Example 1 and Example 2 included in the *Implementation Guidance* to IFRS S1 provided in the respective extract in section 5.1.1 above and relate to the identification

of information about sustainability-related risks and opportunities that could reasonably be expected to affect an entity's prospects by referring to and considering the applicability of the SASB standards: [IFRS S1.IE Example 1, IFRS S1.IE Example 2, IFRS S1.IE5-9, IFRS S1.IE12-15]

Extract from IFRS S1

Example 1-An entity with a single line of business

Entity Y is a regional passenger airline company. In identifying sustainability-related risks and opportunities that could reasonably be expected to affect its prospects, Entity Y is required to apply IFRS Sustainability Disclosure Standards in accordance with paragraph 54 of IFRS S1. In addition to applying IFRS Sustainability Disclosure Standards, Entity Y is required to refer to and consider the applicability of the disclosure topics in the SASB Standards. Entity Y concludes that its business model and activities most closely align with the *Airlines* SASB Standard.

...

In disclosing information about its sustainability-related risks and opportunities, Entity Y applies IFRS Sustainability Disclosure Standards that specifically apply to its identified sustainability-related risks and opportunities. For example, Entity Y applies IFRS S2 to disclose information about its greenhouse gas emissions. In the absence of an IFRS Sustainability Disclosure Standard that specifically applies to the sustainability-related risks and opportunities which Entity Y has identified, Entity Y refers to and considers the applicability of the metrics associated with the applicable disclosure topics in the *Airlines* SASB Standard. Entity Y concludes that applying these metrics will provide information that is relevant to the decision-making of users of general purpose financial reports and faithfully represents the sustainability-related risks and opportunities that it has identified. For example, the metrics associated with the 'Accident & Safety Management' disclosure topic include:

- (a) TR-AL-540a.1-Description of implementation and outcomes of a Safety Management System;
- (b) TR-AL-540a.2-Number of aviation accidents; and
- (c) TR-AL-540a.3-Number of governmental enforcement actions of aviation safety regulations.

In identifying information to provide, Entity Y considers the applicability of the technical protocols accompanying the metrics. For example, while disclosing a description of the implementation and outcomes of a Safety Management System, Entity Y might describe any actions or measures it has implemented to mitigate any safety risks and hazardous situations that it has identified. These actions or measures include, for example, particular changes in controls, operations, management, processes, products, business partners, training or technology.

Entity Y is required to apply the requirements relating to 'core content' in IFRS S1. Entity Y considers the disclosure topics, metrics and associated technical protocols in the *Airlines* SASB Standard when providing information required by IFRS S1, including information relating to strategy and metrics and targets.

Entity Y discloses that it applied the disclosure topics and metrics in the *Airlines* SASB Standard in preparing its sustainability-related financial disclosures, in accordance with paragraphs 49 and 59 of IFRS S1.

Example 2 - A large conglomerate with diverse activities

Entity A is a large conglomerate with diverse activities. Entity A produces electrical and industrial equipment for use in a range of industries. In addition to IFRS Sustainability Disclosure Standards, Entity A is required to refer to and consider the applicability of the disclosure topics in the SASB

Standards in identifying its sustainability-related risks and opportunities. Because of the wide-ranging nature of its activities, Entity A begins its consideration of the applicability of the SASB Standards by considering the various sectors into which the SASB Standards are grouped. Entity A conducts activities in industries in the Health Care, Resource Transformation and Infrastructure sectors, and in some cases owns particular parts of its production process rather than relying on suppliers. It also has some activities in the Transportation and Consumer Goods sectors.

...

In the absence of an IFRS Sustainability Disclosure Standard that specifically applies to the sustainability-related risks and opportunities that Entity A has identified, Entity A refers to and considers the applicability of the metrics associated with applicable disclosure topics. In identifying applicable metrics, Entity A considers whether the metric will provide information that is relevant to the decision-making of users of general purpose financial reports and that faithfully represents the sustainability-related risks and opportunities that it has identified.

In preparing its sustainability-related financial disclosures, Entity A concludes that some information should be aggregated to avoid obscuring material information with immaterial information. For example, it concludes that information about its strategy for sourcing critical materials for devices produced by its various activities should be aggregated because the entity manages the supplier relationships for those critical materials centrally.

In contrast, for other types of information, Entity A concludes aggregation would result in obscuring material information. For example, it concludes that information about the number of recalls related to its equipment in the Health Care sector should not be aggregated with information about the number of recalls related to its equipment in the Consumer Goods sector because the technologies, production processes and markets for each sector differ. Therefore, there are also varied reasons for the occurrence of product recalls in these sectors.

Entity A discloses information about the SASB Standards it has applied in preparing its sustainability-related financial disclosures, in accordance with paragraphs 49 and 59 of IFRS S1, including identifying the specific SASB Standards, disclosure topics and metrics it applied. Entity A also provides information to enable users of general purpose financial reports to understand the judgements that it has made in the process of preparing its sustainability-related financial disclosures and that have the most significant effect on the information included in those disclosures in accordance with paragraph 74 of IFRS S1.

The ISSB expects (as in the case of disclosure topics discussed in section 5.1.1 above) the associated metrics in the SASB standards to be typically applicable for an entity with the given business model and associated activities. Also, those metrics are not exhaustive. In situations where an entity concludes that metrics specified in the SASB standards are not applicable in its circumstances or are not sufficient to identify information that would fairly present all sustainability-related risks and opportunities that could reasonably be expected to affect its prospects (as discussed in 5.1.2 above), an entity needs to exercise judgement to refer to and consider other sources of guidance in accordance with IFRS S1 in this identification process. [IFRS S1.57, IFRS S1.C1, IFRS S1.IG13, IFRS S1.BC133].

5.1.2.B Considerations when referring to other sources of guidance to identify material information about sustainability-related risks and opportunities

To the extent that there is no conflict with ISSB standards, an entity is permitted to refer to and consider the applicability of: a) the CDSB Framework Application Guidance; b) the most recent pronouncements of other standard-setting bodies whose requirements are designed to meet the needs of primary users; and c) the information, including metrics, disclosed by entities that operate in the same industry(s) or geographical region(s). [IFRS S1.58(b)].

For example, an entity refers to and considers the applicability of the CDSB Framework Application Guidance in identifying information, including metrics, about the water- or biodiversity-related risks or opportunities that could reasonably be expected to affect an entity's prospects. An entity may consider the CDSB Framework Application Guidance in applying the core content requirements that are discussed in section 4 above). The Illustrative example below is based on the *Implementation Guidance* to IFRS S1: [IFRS S1.IG27]

Illustration 5-3: Identifying material information to disclose about the sustainability-related risks and opportunities by referring to and considering the applicability of CDSB Framework Application Guidance

- (a) Governance-in providing disclosures on governance relating to water-related risks and opportunities, the CDSB Framework Application Guidance on Water-related Disclosures suggests an entity may provide information about how water policies, strategy and information are delegated to management. In relation to collaboration with stakeholders to achieve effective water management, the guidance also suggests an entity may provide information about whether there are specific bodies, individuals or mechanisms located in areas that are affected by significant water loss whose function is to ensure compliance with water-related regulation and engagement with stakeholders.
- (b) Strategy-in providing disclosures on strategy relating to biodiversity-related risks and opportunities, the CDSB Framework Application Guidance on Biodiversity-related Disclosures suggests an entity may provide, for example, information about the geographic-specificity of biodiversity-related risks and opportunities and how those risks and opportunities may vary over the short, medium and long term. The guidance also suggests the type of quantitative and qualitative information an entity may consider providing in accordance with paragraphs 34-40 of IFRS S1, for example, the operational expenses, cost savings and revenue associated with biodiversity management, such as information about remediation costs or provisions in the case of accidents such as polluting spills, costs of staff training and revenue from biodiversity-efficient products and services.
- (c) Metrics and targets-the CDSB Framework Application Guidance on Biodiversity-related Disclosures provides examples of common biodiversity metrics such as concentrations of key pollutants in wastewater, the volume of timber and non-timber forest products harvested and areas of forest, grassland or wetland converted due to urbanisation. Due to changes in biodiversity over time, the guidance suggests an entity provides information about the time frames it has set for targets. The guidance also discusses targets tailored to specific locations due to geographical variation in biodiversity priorities, as well as differing legal and regulatory requirements.

Moreover, an entity may refer to and consider the applicability of the sources specified in Appendix C to IFRS S1, namely the GRI standards and the European Sustainability Reporting Standards (ESRS). Unlike the SASB

standards and the CDSB Framework Application Guidance, the GRI standards and ESRS are intended to meet the information needs of a different audience than only primary users. Therefore, IFRS S1 states that, if an entity refers to and considers the applicability of the GRI standards and ESRS, this is only allowed to the extent that these sources assist the entity in meeting the objective of IFRS S1 (see section 1.1 above) and do not conflict with ISSB standards. Allowing an entity to refer to and consider the applicability of those sources in identifying material information about sustainability-related risks or opportunities, but not in identifying the sustainability-related risks or opportunities themselves, is intended to ensure that any information disclosed by entities relates to a topic that has been identified as being of interest to primary users. [IFRS S1.58(c), IFRS S1.C2, IFRS S1.BC137, IFRS S1.BC138].

Although a subset of disclosures provided in accordance with GRI standards or ESRS could produce information that is useful to primary users, an entity still needs to consider the requirements in ISSB standards and not just repurpose a report prepared in accordance with those standards to automatically consider it as meeting the requirements in ISSB standards. In addition, an entity needs to comply with the requirement of IFRS S1 not to obscure material information required by ISSB standards (discussed in section 3.2.4.B above). Otherwise, if an entity applies these standards without applying the requirements in ISSB standards, it will not be able to make an explicit and unreserved statement of compliance with ISSB standards (see discussion about compliance also in section 7 below). [IFRS S1.58(c), IFRS S1.C3, IFRS S1.BC138, IFRS S1.BC139].

Illustration 5-4 is based on an example about referring to and considering the applicability of GRI standards when identifying information to disclose about a sustainability-related opportunity, as included in the ISSB's educational material on materiality:³²

Illustration 5-4: Referring to and considering the applicability of GRI standards to identify information to disclose about a sustainability-related opportunity

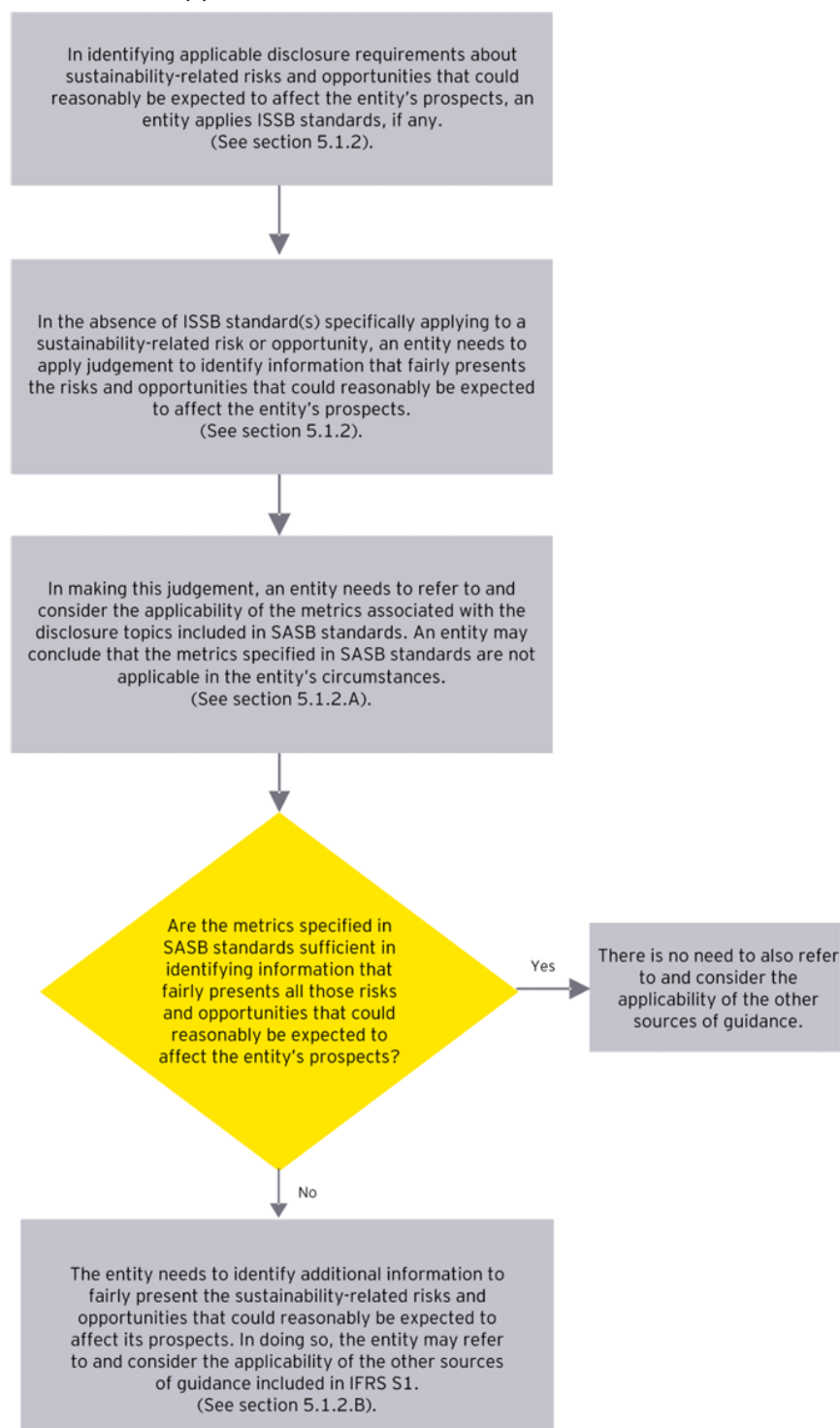
Entity Z operates in the technology industry and depends on highly skilled employees to operate its business model. Having referred to and considered the relevant SASB standards, Entity Z has identified Employee Recruitment, Inclusion & Performance as a sustainability-related opportunity that could reasonably be expected to affect its prospects.

In the absence of an ISSB standard that specifically applies to this sustainability-related opportunity, Entity Z refers to and considers the metrics associated with this disclosure topic in the relevant SASB standard. In addition to the SASB standards, Entity Z decides to refer to and consider the applicability of GRI standards to develop disclosures about this sustainability-related opportunity. Entity Z refers to GRI 404 Training and Education 2016 and considers if the following disclosures would provide useful information to primary users:

- Disclosure 404-1 *Average hours of training per year per employee*: Entity Z concludes that this information is material and would help it to meet the objective of IFRS S1 without conflicting with ISSB standards. Along with this disclosure, Entity Z discloses the specific GRI standard it applied to prepare this disclosure as required by IFRS S1 (see section 5.1.3 below).
- Disclosure 404-3 *Percentage of employees receiving regular performance and career development reviews*: Entity Z concludes that this information is not material and thus does not include such information in its sustainability-related financial disclosures.

³² [Sustainability-related risks and opportunities and the disclosure of material information](#), ISSB, November 2024, available on the IFRS Foundation's website.

Figure 5-2: Use of sources of guidance to identify material information about sustainability-related risks and opportunities



5.1.3 Disclosure of information about sources of guidance

To enable primary users to understand how sustainability-related financial disclosures have been prepared, an entity is required to identify and disclose:

- The sources of guidance (e.g., specific standards, pronouncements, industry practice or other sources, including, if applicable, the disclosure topics in the SASB standards) it applied in preparing its sustainability-related financial disclosures. *[IFRS S1.59(a)].*
- The industry or industries specified in ISSB standards, the SASB standards or other sources of guidance relating to a particular industry or industries that the entity has applied to the disclosures it has provided, including in identifying applicable metrics. This is intended to help primary users to understand the materiality judgements made by an entity in applying the industry-based disclosure requirements (e.g., if an SASB standards were used to prepare disclosures). By disclosing the industry as required above, primary users will be able to understand if a metric applicable for an entity in that industry has been omitted. *[IFRS S1.59(b), IFRS S1.BC140].*
- Information about the judgements an entity has made in the process of preparing its sustainability-related financial disclosures that have the most significant effect on the information included in those disclosures (see section 6.1 below) that include the sources of guidance applied. As part of this disclosure, it may be necessary for an entity to also disclose that it considered other sources of guidance but did not apply them. *[IFRS S1.74, IFRS S1.75, IFRS S1.BC141].*

5.2 Location of disclosures

The disclosures required by ISSB standards need to be part of an entity's general purpose financial reports. As explained in section 1.1 above, general purpose financial reports are those that provide financial information about a reporting entity that is useful to primary users in making decisions relating to providing resources to the entity. Therefore, requiring sustainability-related financial disclosures to be part of an entity's general purpose financial report, is intended to ensure that the primary users of those reports are provided with a comprehensive and connected package of reports. *[IFRS S1.60, IFRS S1.BC142].*

Illustration 5-5: Publishing sustainability-related financial disclosures as part of an entity's general purpose financial reports

Entity X makes its annual financial statements available to the public in late January of each year. However, Entity X's entire package of general purpose financial reports is published in late February of each year. Entity X is not applying the transition relief in IFRS S1.E4.

According to ISSB standards, an entity's sustainability-related financial disclosures are part of its general purpose financial reports. Although Entity X makes its financial statements publicly available in late January, these do not constitute the complete package of Entity X's general purpose financial reports. The complete package of general purpose financial reports is only available in late February. Therefore, Entity X reports its sustainability-related financial disclosures when it publishes its general purpose financial reports in late February.

5.2.1 Flexibility in location of disclosures

Apart from requiring the sustainability-related financial disclosures to be part of an entity's general purpose financial report, IFRS S1 does not prescribe the exact location of those disclosures within general purpose financial reports. There are various possible locations in which the sustainability-

related financial information can be disclosed, but this may be subject to regulations or other requirements that apply in the jurisdiction in which an entity operates. That is, there may be regulations or other requirements that specify the exact location in which an entity is required to provide its sustainability-related financial disclosures. For example, in some jurisdictions, entities prepare management commentary (also known as the 'management report', 'management's discussion and analysis', 'operating and financial review', 'integrated report' or 'strategic report') or a similar report. When such a report forms part of an entity's general purpose financial reports, this can be considered a possible location for sustainability-related financial disclosures. [IFRS S1.61, IFRS S1.BC143].

Moreover, the information required by ISSB standards can be included in the same location as the information disclosed to meet other requirements, such as information required by regulators (as discussed in section 3.2.4.C above). However, in such cases, the entity needs to ensure that the sustainability-related financial disclosures are clearly identifiable and not obscured by the additional information provided to meet those other requirements. See also section 3.2.4.B above for the requirements for not obscuring material information. [IFRS S1.62].

5.2.2 Information included by cross-reference

IFRS S1 allows for cross-references to avoid unnecessary duplication where disclosure of common items of information is required. The cross-referenced information becomes part of the complete set of sustainability-related financial disclosures.

There are cases where information required by ISSB standards may be available in another report published by the entity. For example, the required information could be disclosed in the related financial statements. As discussed in section 3.4.3 above, IFRS S1 specifies that when ISSB standards require the disclosure of common items of information, an entity is required to avoid unnecessary duplication. In such cases, IFRS S1 permits an entity to include cross-reference in another report published by the entity to provide sustainability-related financial disclosures. [IFRS S1.63, IFRS S1.B45].

Despite the benefit of cost-effectiveness when including information by cross-reference, IFRS S1 includes specific conditions in which cross-referencing is permitted. In particular, if material information is included in an entity's sustainability-related financial disclosures by cross-reference (cross-referenced information), that information is required to be available whenever an entity's sustainability-related financial disclosures are available. That is, the cross-referenced information needs to be available on the same terms and at the same time as all other sustainability-related financial disclosures. [IFRS S1.B45, IFRS S1.BC144].

When the cross-referenced information is not part of the same report as the entity's sustainability-related financial disclosures, an entity needs to explain how primary users can access that information. In doing so, an entity needs to clearly identify in its sustainability-related financial disclosures, the report within which the cross-referenced information is located, and explain how to access that report. Also, the cross-reference needs to indicate a precisely specified part of that report. [IFRS S1.B47, IFRS S1.BC144].

The cross-referenced information, effectively, becomes part of the complete set of sustainability-related financial disclosures and, therefore, it needs to comply with the requirements of ISSB standards (e.g., it needs to meet the qualitative characteristics discussed in section 3.1.1 above). An entity needs to ensure that this complete set of sustainability-related financial disclosures is not made less understandable because of including information by cross-reference. Moreover, the responsibility of the governance body(ies) or individual(s) authorising general purpose financial reports is the same for information included by cross-reference as for the information included directly. [IFRS S1.B45, IFRS S1.B46].

In its Annual Report 2024, Telstra Group Limited listed the documents that comprise its reporting suite for 2024, as follows:

Practical example 5-1: Telstra Group Limited (2024) Australia

Telstra Annual Report 2024 [extract]

Our reporting suite

Our FY24 reporting suite includes:

Our 2024 Telstra Annual Report (this report) which describes our strategy, financial performance and remuneration practices for FY24. It also includes climate and nature related disclosures guided by ISSB (International Sustainability Standards Board) IFRS (International Financial Reporting Standards) S2 and the recommendations of the TNFD (Taskforce on Nature-related Financial Disclosures).

Our 2024 Corporate Governance Statement which provides information about governance at Telstra.

Our 2024 Bigger Picture Sustainability Report which provides an in-depth look at our approach and performance in relation to our most material sustainability impacts.

Our 2024 Modern Slavery Act Statement which explains how we identify, manage and mitigate the specific risks of modern slavery in our operations and supply chains.

All reports are available at telstra.com/governance.

The sections of our Annual Report titled FY24 financial performance, FY24 highlights, Chair's message, CEO's message, Strategy and performance, Our material risks, Outlook, and Full year results and operations review comprise our operating and financial review (OFR) and form part of the Directors' report. Our OFR, Directors' report and Financial report were released to the ASX on 15 August 2024 in the document titled 'Financial results for the year ended 30 June 2024' which is available at telstra.com/investor.

Moreover, in its Bigger Picture Sustainability Report 2024, Telstra Group Limited included various cross-references to its Annual Report 2024, where the sustainability-related information can be found without duplicating it:

Practical example 5-2: Telstra Group Limited (2024) Australia

Telstra Annual Report 2024 [extract]

Sustainability at Telstra [extract]

Governance

Our governance arrangements and practices are essential for the long-term performance and sustainability of our company. They provide the structure through which our strategy and business objectives are set, our performance is monitored and the risks we face are managed.



For more information, see our **2024 Corporate Governance Statement** available on our [reports page](#).



For an overview of sustainability governance at Telstra, see our ***In focus: Sustainability at Telstra*** paper available on our [reports page](#).



For specific information on governance in relation to climate and nature, see the 'Acting on climate and nature' section in our **2024 Annual Report** available on our [reports page](#).

Note D1 of the financial statements 2024 of Meridian Energy Limited includes cross-references to its Climate-related Disclosures 2024 as well as other notes within the financial statements where the effect from climate risks has been disclosed:

Practical example 5-3: Meridian Energy Limited (2024) New Zealand

INTEGRATED REPORT 2024 [extract]

Financial performance [extract]

Notes to the Group financial statements: [extract]

D: Financial instruments used to manage risk [extract]

D1: Financial risk management [extract]

Refer to the Foreign Exchange section for derivatives used for term debt raised in foreign currencies.

Meridian swaps a significant portion of its borrowings to floating rates at loan inception, and hedges the resulting interest rate exposure over a tenure-based profile of fixed IRS. This is achieved using a combination of CCIRS and IRS hedges. Where Meridian borrows in foreign currency it uses CCIRs to swap all foreign currency denominated interest and principal repayments to the reporting currency. This results in floating rate borrowings in the entity's reporting currency. Meridian uses IRS hedges to fix floating interest rates in line with the Board approved hedging policy and profile.

Climate risk

Meridian is exposed to future changes in climate, which may impact on our industry, our business and our customers.

Future impacts may be physical, such as changes in weather patterns or rising temperatures, or they may be more transitional in nature, such as amendments to government policy and regulation, or changes in customer energy needs and demands.

Meridian actively assesses the operating environment in New Zealand, in respect of the potential future impacts that changes in climate may have on Meridian. We report formally on this process each year in our Climate-related Disclosure.



Climate-related Disclosures
bit.ly/3SzilVK

As part of preparing this report, Meridian considers climate-related risk and whether it may have any impact on our financial statements and associated disclosures. The most material area we see climate risk potentially having a future impact is on our valuation of generation structures, which we account for at fair value. Refer to Note B1 of the financial report for further detail on this asset class, including a sensitivity analysis indicating how much their value may change with variations in key inputs, such as generation volumes and wholesale market prices.

How we see it

IFRS S1 permits an entity to cross-reference to another report published by that entity if that other report includes information required by ISSB standards (as discussed in this section).

We believe that IFRS S1 does not explicitly require ‘another report published by the entity’ to be part of the entity’s general purpose financial reports. However, local laws and regulations may have more specific requirements than ISSB standards indicating to which other reports an entity can cross-reference. Therefore, the extent of cross-reference may differ according to each jurisdiction.

Moreover, IFRS S1 does not define which reports constitute an entity’s general purpose financial reports. The definition of ‘general purpose financial reports’ in Appendix A of IFRS S1 states that “general purpose financial reports include-but are not restricted to-an entity’s general purpose financial statements and sustainability-related financial disclosures”. Therefore, it is at the entity’s discretion to define which other reports (apart from the general purpose financial statements and sustainability-related financial disclosures) it considers to be ‘general purpose financial reports’ based on the definition provided in Appendix A of IFRS S1 “Reports that provide financial information about a reporting entity that is useful to primary users in making decisions relating to providing resources to the entity...”.

For example, Entity A publishes a climate-related transition plan in 2024. The climate-related transition plan includes information that meets specific requirements in ISSB standards and is issued on the same terms and at the same time as Entity A’s sustainability-related financial disclosures. Entity A intends to cross-reference to the specific information included in the transition plan to avoid duplicating this information in its 2024 sustainability-related financial disclosures. Entity A’s conclusion would differ depending on: a) how it determines what its general purpose financial reports are comprised of, and b) the jurisdiction in which it operates. For example:

- Entity A does not consider its climate-related transition plan to be part of its general purpose financial reports. Entity A operates in country Y where cross-references both within general purpose financial reports and to other reports published by the entity are allowed. Entity A decides to cross-refer to information included in the 2024 climate-related transition plan.
- Entity A does not consider its climate-related transition plan to be part of its general purpose financial reports. Entity A operates in country X where cross-references are only allowed as part of the information provided in an entity’s general purpose financial reports. Entity A concludes that it cannot cross-refer to information included in its climate-related transition plan, but needs to repeat it in its sustainability-related financial disclosures.
- Entity A considers its climate-related transition plan to be part of its general purpose financial reports. Depending on whether the jurisdiction in which Entity A operates allows cross-references within its general purpose financial reports, it can cross-refer to information included in the 2024 climate-related transition plan to avoid repeating the same information in its sustainability-related financial disclosures.

5.3 Timing of reporting

5.3.1 Simultaneous reporting of sustainability-related financial disclosures and financial statements

Sustainability-related financial disclosures need to be provided at the same time as an entity issues its related financial statements.

IFRS S1 requires an entity to provide its sustainability-related financial disclosures at the same time as it issues its related financial statements. This is also a natural consequence of the requirement in IFRS S1 that information included in an entity's sustainability-related financial disclosures by cross-reference needs to be available on the same terms and at the same time as all other sustainability-related financial disclosures. This simultaneous issuance is intended to provide primary users with a coherent, holistic and connected picture of an entity's financial position and performance, and to provide users with a comprehensive set of sustainability-related financial disclosures to enable more informed decisions. [IFRS S1.64, IFRS S1.BC142, IFRS S1.BC145].

5.3.2 Reporting period of sustainability-related financial disclosures

An entity normally prepares sustainability-related financial disclosures for a 12-month period (unless, for practical reasons, an entity prefers to report, for example, a 52-week period which is not precluded by IFRS S1). Regardless of this determination, an entity's sustainability-related financial disclosures need to cover the same reporting period as the related financial statements. [IFRS S1.64, IFRS S1.65].

IFRS S1 requires an entity to provide specific disclosures when it changes the end of its reporting period and provides sustainability-related financial disclosures for a period longer or shorter than 12 months. In particular, it needs to disclose the period covered by the sustainability-related financial disclosures, the reason for using a longer or shorter period, and the fact that the amounts disclosed in the sustainability-related financial disclosures are not entirely comparable. [IFRS S1.64, IFRS S1.66].

Sometimes entities receive information after the end of the reporting period about conditions that existed at the end of that reporting period. If such information is received before the date on which the sustainability-related financial disclosures are authorised for issue, the entity needs to update disclosures that relate to those conditions in the light of the new information. [IFRS S1.67].

Moreover, there may be transactions, other events and conditions that occur after the end of the reporting period, but before the date on which the sustainability-related financial disclosures are authorised for issue. In such cases, an entity needs to disclose information about those transactions, other events and conditions if non-disclosure of that information could reasonably be expected to influence decisions that primary users make on the basis of those reports. [IFRS S1.68].

How we see it

IFRS S1 requires the reporting period covered by the sustainability-related financial disclosures to be the same as the related financial statements. However, the reporting period of an entity may be different from the reporting periods used by some or all entities in a group (when the reporting entity is a parent of a group and prepares consolidated financial statements) and/or in its value chain. Although all entities in a group need to have the same reporting period, there may be situations where the applicable GAAP allows a mismatch if certain criteria are met. We believe that, if such an exception applies in the related financial statements, this exception will also apply for the sustainability-related financial disclosures of that reporting entity. This is consistent with the requirements of IFRS S1 for connectivity between financial statements and sustainability-related financial information (discussed in section 3.4.2.B above). Moreover, IFRS S2 acknowledges a potential mismatch in the reporting period of entities in the value chain with respect to GHG emissions, that may result in information not being readily available for the reporting entity to use when it prepares its own disclosures for its reporting period (see Part B of this publication).

5.3.3 Interim reporting

IFRS S1 does not mandate which entities are required to provide interim sustainability-related financial disclosures, or the frequency, or timing of such disclosures after the end of an interim period. However, entities may be required to publish interim general purpose financial reports by governments, securities regulators, stock exchanges and accountancy bodies, when their debt or equity securities are publicly traded.

Unlike IFRS accounting standards, ISSB standards do not include a standard that is specific to interim reporting. Instead, there are requirements within IFRS S1 that relate to interim reporting. In particular, entities that are required, or elect, to publish interim sustainability-related financial disclosures may be required, or choose, to provide less information than is provided in that of their annual sustainability-related financial disclosures. This is due to timeliness and cost considerations, and to avoid repetition of information previously reported. In general, interim sustainability-related financial disclosures are intended to provide an update on the latest complete set of the respective annual disclosures and therefore, focus on new information, events and circumstances without duplicating information previously reported. However, although more condensed sustainability-related financial disclosures may be provided, IFRS S1 does not prohibit or discourage an entity from publishing a complete set of sustainability-related financial disclosures (according to the requirements in IFRS S1) as part of its interim general purpose financial report. [IFRS S1.69, IFRS S1.B48].

5.4 Comparative information

IFRS S1 requires an entity to disclose comparative information in respect of the preceding period for all amounts disclosed in the reporting period, unless another ISSB standard permits or requires otherwise. Moreover, IFRS S1 requires an entity to disclose comparative information for narrative and descriptive sustainability-related financial disclosures if that information is useful to primary users to understand the reporting period's disclosures. [IFRS S1.70, IFRS S1.B49].

The IASB decided to not limit this requirement to metrics, but to expand it to 'all amounts' as this would be more useful to primary users. Amounts reported in sustainability-related financial disclosures may relate, e.g., to the current and anticipated financial effects of sustainability-related risks and opportunities or to metrics and targets. [IFRS S1.71, IFRS S1.BC147].

Comparative information is required in respect of the preceding period for all amounts disclosed in the reporting period, unless another ISSB standard permits or requires otherwise.

For specific disclosure requirements about comparative information when changes occur in amounts that are estimates, see discussion in section 6.2.3 below.

Frequently asked questions

Question 5-1: How do the requirements in IFRS S1.70 on providing comparative information apply in the case of acquiring or disposing of a subsidiary of the reporting entity?

(TIG meeting 13 June 2024 - Agenda paper no. 2, ISSB meeting 24 July 2024 - Agenda paper no. 9)

In June 2024, the TIG discussed a question about the application of the requirements in IFRS S1.70 to disclose comparative information. The question related to the provision of comparative information where there is a change in the composition of the reporting entity as a result of acquiring or disposing of a subsidiary. In particular, there are situations where a reporting entity discloses in the current reporting period amounts that relate to a newly acquired subsidiary in which it previously did not hold an interest. Also, there are situations where a reporting entity disposes of its entire interest in a subsidiary at the start of the current reporting period and therefore, there are not any amounts to be disclosed relating to that disposed subsidiary in the current reporting period.

In discussing a situation similar to the one described above, the TIG agreed that, unless another ISSB standard permits or requires otherwise, IFRS S1.70 requires an entity to disclose comparative information for all amounts disclosed in the current period but does not further prescribe what the entity should include or exclude from the amounts presented in the preceding reporting period. To determine the amounts required to be presented as comparative information, IFRS S1.70 is applied together with the other requirements in IFRS S1, such as the requirements in IFRS S1.20 on 'reporting entity' and IFRS S1.21-24 on 'connected information'.

Therefore, if during the current reporting period the reporting entity acquires a subsidiary in which it previously did not hold an interest (i.e., the subsidiary is only part of the group in the current reporting period from the date of acquisition, based on applicable GAAP), for amounts disclosed in the current reporting period, the comparative information will not include amounts related to the newly acquired subsidiary. Similarly, if during the current reporting period the reporting entity disposes of its entire interest in a subsidiary (i.e., the subsidiary is only part of the group up until the date of its disposal, based on applicable GAAP), for amounts disclosed in the current reporting period, the comparative information will include amounts relating to that subsidiary. In particular, the TIG used the following examples:

- An entity had a subsidiary throughout the entire preceding period but disposed of that subsidiary three months after the beginning of the current reporting period. The subsidiary is part of the group for the purposes of consolidated financial statements based on the applicable GAAP up until the date of disposal (three months into the reporting period). The comparative information will include amounts related to the subsidiary as part of the reporting entity for the entire preceding period (i.e., twelve months)
- An entity had a subsidiary throughout the entire preceding period and that subsidiary solely represented its operations in a specific industry. The entity disposed of that subsidiary on the first day of the current reporting period. In the comparative period, some industry-specific metrics that were disclosed related only to the industry represented by that subsidiary.

As the entity no longer undertakes any activities in this specific industry, those industry-specific metrics are not disclosed in the current reporting period. Therefore, the entity is not required to provide comparative information for those industry metrics, because the metrics are not disclosed in its current reporting period. However, the TIG described such a situation as an 'extreme scenario' and further clarified that, if metrics are still disclosed in the current reporting period and the disposed subsidiary contributed to the corresponding comparative information for those metrics (e.g., amounts relating to Scope 2 GHG emissions), the comparative information would not be adjusted as a result of the disposal of the subsidiary in the current reporting period.

With respect to the application of IFRS S1.70 in combination with the other requirements in IFRS S1, the TIG specifically emphasised the following:

- An entity's sustainability-related financial disclosures need to be for the same reporting entity as the related financial statements (discussed in section 3.3 above). The requirements related to comparative information in IFRS S1.70 are bound by the composition of that reporting entity in the related financial statements in the comparative period. Therefore, when there has been a change to the composition of the reporting entity (such as an acquisition or disposal), in applying IFRS S1.70, the comparative information provided about the reporting entity needs to reflect the composition of the reporting entity in the related financial statements in the comparative period. That is, for information accompanying the consolidated financial statements, what information is given will depend on the composition of the group at that time, in accordance with applicable GAAP.
- IFRS S1 requires information explaining the connections between disclosures across an entity's sustainability-related financial disclosures and its related financial statements. Also, data and assumptions used when preparing sustainability-related financial disclosures need to be consistent with the corresponding ones used in the preparation of the related financial statements (discussed in section 3.4.2.B above). Therefore, to the extent information is provided about the effects of an acquisition or disposal in the sustainability-related financial disclosures, the entity needs to be led by the respective information that was provided in the related financial statements. Such a consideration would establish the connection between the information provided in the disclosures and enable primary users to understand the connections between those disclosures. For example, where the decision about an acquisition or disposal of a subsidiary is part of an entity's strategy, this may lead to the identification of a new sustainability risk and therefore, the recognition of a liability in the related financial statements, in relation to that sustainability risk.
- In practice, more complex scenarios may arise in which the composition of the reporting entity may not be the only relevant factor in explaining changes in comparative information between periods. Such scenarios could be step acquisitions, step disposals or scenarios in which the reporting entity had a business relationship with the acquired entity prior to acquisition and therefore, was part of its value chain, or where the entity is still part of the value chain by virtue of a business relationship after disposal. In such scenarios, relevant information about sustainability-related risks and opportunities related to that entity that arises from the reporting entity's value chain, would still be included in current and comparative information.

In its Sustainability Report 2023, A.P. Møller-Maersk A/S clarified that any data from divestments and acquisitions relating to ESG performance have been included until the day of the transaction or from the reporting year following the transaction respectively.

Practical example 5-4:	A.P. Møller - Mærsk A/S (2023)	Denmark
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Sustainability Report 2023 [extract]

Data and assurance [extract]

ESG performance data accounting policies [extract]

Basis of reporting [extract]

Scope and consolidation [extract]

Data from divestments are included until the day of transaction, while data from acquisitions are included from the reporting year following the transaction. In 2023, data from Pilot Freight Services (Pilot), Senator International (Senator) and LF Logistics, which were acquired in 2022, has been included in the ESG performance data. During 2023, the acquisitions of Martin Bencher Group and Grindrod Logistics was completed. Data from these companies will be included in the Annual Report 2024. Data from Maersk Supply Services is included up until the divestment date of 15 May 2023.

Along with the above mentioned question, the TIG discussed the application of the requirements in IFRS S1.70 when applying IFRS S2 where there is a change in the composition of the reporting entity, such as an acquisition or a disposal of a subsidiary. Please refer to the relevant discussion in Question 4-3 in Part B of this publication.

6 Judgements, uncertainties and errors

6.1 Judgements

In preparing and presenting sustainability-related financial disclosures, an entity will need to apply various judgements. IFRS S1 requires an entity to disclose information about the judgements (apart from those involving estimations of amounts discussed in section 6.2 below) an entity has made in the process of preparing its sustainability-related financial disclosures. This requirement specifically relates to judgements that have the most significant effect on the information included in the sustainability-related financial disclosures. Providing such information to primary users enables them to understand how sustainability-related financial disclosures have been prepared. [IFRS S1.74, IFRS S1.BC158].

IFRS S1 provides some examples where judgement is required by an entity in preparing its sustainability-related financial disclosures. These are when an entity is: [IFRS S1.75]

- Identifying sustainability-related risks and opportunities that could be reasonably expected to affect the entity's prospects (see section 1.2 above)
- Determining which sources of guidance to apply (see section 5.1 above)
- Identifying material information to include in the sustainability-related financial disclosures (see section 3.2.2 above)
- Assessing whether an event or change in circumstances is significant and requires reassessment of the scope of all affected sustainability-related risks and opportunities throughout the entity's value chain (see section 1.2.3 above)

This requirement builds on the principle of IAS 1 relating to judgements made by an entity in applying its accounting policies that have the most significant effects on the amounts recognised in an entity's financial statements. The ISSB decided to include this overarching requirement for judgements made by an entity in the absence of a specifically applicable disclosure requirement about judgements in other ISSB standards. Other ISSB standards may require disclosure of judgements and estimates. In such cases, the requirements in IFRS S1 would complement those more specific requirements. However, other ISSB standards may also require disclosure of some of the information that an entity would otherwise be required to disclose in accordance with this overarching requirement in IFRS S1. [IFRS S1.76, IFRS S1.BC159, IFRS S1.BC160, IFRS S1.BC162].

6.2 Measurement uncertainty

6.2.1 Estimated amounts give rise to measurement uncertainty

Measurement uncertainty arises when amounts included in sustainability-related financial disclosures cannot be measured directly and can only be estimated. Such measurement uncertainty not only arises when estimating metrics, but also in other cases, such as when providing information about the effects of sustainability-related risks and opportunities on an entity's financial position, financial performance and cash flows for the reporting period, and the anticipated financial effects over the short, medium and long term (see further discussion in section 4.3.4 above). [IFRS S1.BC163].

The following example is based on the Basis for Conclusions to IFRS S1: [IFRS S1.BC163].

Illustration 6-1: Example of measurement uncertainty

Entity N's assets are increasingly at risk from climate-related forest fire events. This risk is considered as part of the impairment analysis and measurement of those assets. The frequency and severity of these fires are highly uncertain. Therefore, primary users need information about this uncertainty, including the fact that there is a significant risk of a material adjustment within the next annual reporting period to the carrying amounts of these assets.

6.2.2 IFRS S1 requirements for measurement uncertainties

IFRS S1 requires an entity to disclose information to enable primary users to understand the most significant uncertainties affecting the amounts reported in the sustainability-related financial disclosures. In doing so, an entity identifies the amounts it has disclosed that are subject to a high level of measurement uncertainty and, for each of those amounts, it needs to disclose: (i) the sources of measurement uncertainty (e.g., the dependence of the amount on the outcome of a future event, on a measurement technique or on the availability and quality of data from the entity's value chain), and (ii) the assumptions, approximations and judgements the entity has made in measuring the amount. [IFRS S1.77, IFRS S1.78, IFRS S1.82, IFRS S1.BC163].

These disclosure requirements relate to estimates used in preparing sustainability-related financial disclosures and are the entity's most difficult, subjective or complex judgements. In some cases, estimates involve assumptions about possible future events with uncertain outcomes. The greater the number of variables and assumptions, the more subjective and complex those judgements become. Accordingly, the uncertainty affecting the amounts reported in the sustainability-related financial disclosures increases. [IFRS S1.79, IFRS S1.80].

The use of reasonable estimates is essential in preparing sustainability-related financial disclosures. However, estimates need to be accurately described and explained to avoid undermining the usefulness of the information that includes those estimates. IFRS S1 is explicit that even a high level of measurement uncertainty would not necessarily prevent such an estimate from providing useful information. [IFRS S1.79].

The type and extent of the information an entity may need to disclose will vary according to the nature of the amount reported in the sustainability-related financial disclosures, i.e., the sources of and the factors contributing to the uncertainty and other circumstances.

IFRS S1 provides examples of the type of information an entity may need to disclose: [IFRS S1.81]

Extract from IFRS S1

- 81 The type and extent of the information an entity might need to disclose vary according to the nature of the amount reported in the sustainability-related financial disclosures—the sources of and the factors contributing to the uncertainty and other circumstances. Examples of the type of information an entity might need to disclose are:
- (a) the nature of the assumption or other source of measurement uncertainty;
 - (b) the sensitivity of the disclosed amount to the methods, assumptions and estimates underlying its calculation, including the reasons for the sensitivity;
 - (c) the expected resolution of an uncertainty and the range of reasonably possible outcomes for the disclosed amount; and
 - (d) an explanation of changes made to past assumptions concerning the disclosed amount, if the uncertainty remains unresolved.

How we see it

There may be cases where specific sustainability-related information about conditions that existed at the end of that reporting period is not available before the date on which the sustainability-related financial disclosures are authorised for issue (see discussion in section 5.3.2 above). In such cases, the use of reasonable estimates may be essential in preparing sustainability-related financial disclosures relating to the information that is not yet available. IFRS S1 is explicit that even a high level of measurement uncertainty would not necessarily prevent such an estimate from providing useful information. Therefore, estimating such information is required unless estimates are not reasonable considering the concept of 'reasonable and supportable information' discussed in section 1.2.2 above.

6.2.3 Revised comparative information for estimated metrics

6.2.3.A New information for estimated metrics disclosed in the preceding period

New information may be identified in relation to an estimated metric disclosed in the preceding period which could provide evidence of circumstances that existed in that preceding period. In such case, a revised comparative amount needs to be disclosed.

As explained in section 5.4 above, an entity is required to provide comparative information in respect of the preceding period for all amounts disclosed in the reporting period (unless another ISSB standard permits or requires otherwise). Sometimes, the amount disclosed for a metric is an estimate (as discussed in section 6.2.1 above), and there may be cases where an entity identifies new information in relation to the estimated metric that was disclosed in the preceding period. If this new information provides evidence of circumstances that existed in that preceding period, IFRS S1 requires an entity to: [IFRS S1.B50]

- Disclose a revised comparative amount that reflects that new information
- Disclose the difference between the amount disclosed in the preceding period and the revised comparative amount
- Explain the reasons for revising the comparative amount

Although the feedback that the ISSB received for the principle of providing comparative information was widely accepted, there were concerns over its application specifically to comparative information of amounts that are estimates. One of the main concerns related to the fact that the requirement to revise comparative information differs from the approach to changes in

estimates in financial statements prepared under IFRS accounting standards. That is, according to the requirements in IFRS accounting standards, changes in estimates are recognised in the current and future periods affected by the change and, therefore, the comparative information is not changed. Instead, the change in estimate is reflected in the profit or loss of the reporting period that the change occurs and in equity because they are part of a double-entry model. However, in sustainability-related financial disclosures, estimates cannot affect equity (e.g., a change in a Scope 3 GHG emissions estimate affects only the estimate itself). Therefore, revised comparatives that reflect updated estimates are useful information for primary users to understand trends. Consequently, the ISSB decided that an entity would provide more useful information if the entity revised comparatives to reflect changes in estimates that relate to the preceding period rather than changing reporting period information. [IFRS S1.BC149, IFRS S1.BC150, IFRS S1.BC151].

IFRS S1 acknowledges that sometimes it may be impracticable to revise a comparative amount to achieve comparability with the reporting period (e.g., data may not have been collected in the preceding period in a way that allows retrospective application of a new definition of a metric which may make it impracticable to recreate the data). Therefore, a revised comparative amount for the preceding period does not need to be disclosed if it is impracticable to do so, but an entity needs to disclose that fact. [IFRS S1.B51, IFRS S1.B54].

However, if a metric is forward-looking and relates to possible future transactions, events and other conditions, the entity is permitted, but not required, to revise a comparative amount for that forward-looking metric (e.g., when disclosing expected expenditure on new equipment for a future year and the price of that equipment subsequently increases). If the entity chooses to provide comparative information for a forward-looking metric, it needs to ensure that this does not involve the use of hindsight. [IFRS S1.B51].

How we see it

As more reliable information becomes available in the current reporting period that supports sustainability-related metrics that are based on estimates, it may be appropriate to revise previously reported estimates to improve comparability of the information provided to primary users. For example, in the case of assessing progress towards net zero targets, improved or more granular GHG emissions data may become available in future periods. Therefore, an entity needs to set up appropriate processes and controls to collect the necessary data to provide revised estimates retrospectively and disclose what has changed compared to the preceding period.

Please refer to Question 4-4 in Part B of this publication for the discussion that the TIG had on specific question about providing estimates in the current period by using information disclosed in the prior period and whether these estimates need to be revised in the following year when these become comparative information.

Frequently asked questions

Question 6-1: Does the requirement in IFRS S1.B50 to revise estimated amounts disclosed in a preceding period relate only to estimated amounts disclosed for metrics or all estimated amounts disclosed, including those disclosed for metrics?

(TIG meeting 15 March 2024 - Agenda paper no. 2, ISSB meeting 16 May 2024 - Agenda paper no. 9)

The TIG agreed with the ISSB staff analysis that revision of estimated amounts disclosed in the preceding period (as long as the relevant circumstances outlined in IFRS S1.B50 exist) is required when those amounts are metrics, rather than requiring revision of all estimated amounts. However, this requirement does not apply to errors as IFRS S1 has specific requirements for errors.

The TIG agenda paper noted that, the first sentence of IFRS S1.B50 states that “in some cases, the amount disclosed for a metric is an estimate”. This is immediately followed by the sentence referring to “the estimated amount disclosed in the preceding period” to imply that the specific ‘amount disclosed’ refers to that which is indicated in the first sentence i.e., ‘amount disclosed for a metric’. Therefore, by no means is the use of word ‘amounts’ intended to expand the requirement in IFRS S1.B50 to all amounts.

Moreover, the TIG agenda paper noted that, although the Basis for Conclusions of IFRS S1 is not part of IFRS S1 and does not establish requirements, it does provide useful context. In this respect, the TIG agenda paper refers to IFRS S1.BC147-BC155 where the ISSB’s considerations have been included in relation to the requirements in IFRS S1 on comparative information. However, the fact that the requirement in IFRS S1.B50 is not explained in the Basis for Conclusions of IFRS S1 should not be interpreted as applying to all estimated preceding period amounts disclosed.

During its discussion, the TIG pointed out the following:

- IFRS S1 does not define ‘amounts’, nor does it define ‘metrics’. However, there are examples of ‘amounts’ provided in IFRS S1.71 that include metrics and targets as well as current and anticipated financial effects of sustainability-related risks and opportunities. Also, IFRS S1.46, IFRS S1.48 and IFRS S2.28 set out requirements for disclosing metrics, including cross-industry metrics and industry-specific metrics. The TIG suggested that entities to consider listing clearly and consistently what their metrics are to allow them to better scope the implications of the requirements to revise preceding period estimated amounts. Also, data quality scoring may be useful when assessing the level of estimation within metrics.
- Although the requirements in ISSB standards do not change the requirements in the accounting standards applied by an entity (e.g., IFRS accounting standards), the connection with the related financial statements is still necessary. That is, explaining the relationship between prior period amounts that are adjusted in accordance with ISSB standards and the respective unadjusted information in the related financial statements may be necessary.
- In certain cases, narrative or descriptive disclosures may be necessary to explain the consequential effects from revising preceding period estimated amounts that are metrics as this may be material information for the primary users. Therefore, although IFRS S1.BC152 explains that such narrative or descriptive disclosures are not required, entities need to apply judgement to determine whether these additional explanations would be useful to primary users.

Question 6-2: When an entity estimates Scope 3 GHG emissions in the current period by using information disclosed in the prior period, in applying the requirements of IFRS S1.B50, does that entity need to revise those estimated amounts in the following year when these become comparative information?

See response to Question 4-4 in Part B of this publication.

6.2.3.B Revised comparatives for redefined, replaced and new metrics

If an entity redefines, replaces or introduces a new metric in the reporting period, it needs to disclose a revised comparative amount for that metric, unless it is impracticable to do so. IFRS S1 includes a definition for the term 'impracticable' in Appendix A, clarifying that "applying a requirement is impracticable when an entity cannot apply it after making every reasonable effort to do so". This definition is based on IAS 1 for consistent use with IFRS accounting standards. Accordingly, IFRS S1 also sets a high threshold for how an entity determines whether it is impracticable to meet the requirements and this threshold is higher than a cost-benefit threshold. In addition, an entity needs to explain the changes in the metric and the reasons for those changes, including why the redefined or replacement metric provides more useful information than the previous metric.

[IFRS S1.B52, IFRS S1.B53, IFRS S1.BC152, IFRS S1.BC155].

6.3 Errors

IFRS S1 describes prior period errors as omissions from and misstatements in the entity's sustainability-related financial disclosures for one or more prior periods. These errors can be the effects of mathematical mistakes, mistakes in applying the definitions for metrics or targets, oversights or misinterpretations of facts, or fraud. Such errors arise from a failure to use, or the misuse of, reliable information that was available when the sustainability-related financial disclosures for that period(s) were authorised for issue. Also, errors arise when such reliable information is not used or misused, while it could reasonably be expected to have been obtained and considered in the preparation of those disclosures. *[IFRS S1.84, IFRS S1.B56].*

Potential reporting period errors are corrected before the sustainability-related financial disclosures are authorised for issue, if these are discovered in the reporting period to which they relate. However, material errors are sometimes not discovered until a subsequent period. If an entity identifies a material error in its prior period sustainability-related financial disclosures, this needs to be corrected by restating the comparative amounts for the prior period(s) disclosed, unless it is impracticable to do so. *[IFRS S1.83, IFRS S1.86, IFRS S1.B57].*

Moreover, if a material error is identified in the sustainability-related financial disclosures for its prior periods, an entity needs to disclose the nature of that error, and the correction (to the extent practicable) for each prior period disclosed. Also, if correction of that error is impracticable, an entity needs to disclose the circumstances that led to the existence of that condition and a description of how and from when the error has been corrected. When it is impracticable to determine the effect of an error on all prior periods presented, the comparative information is restated to correct the error from the earliest date practicable. *[IFRS S1.B58, IFRS S1.B59].*

Corrections of errors are distinguished from changes in estimates. This is because estimates are approximations that an entity may need to revise due to additional information that becomes known (see also discussion in section 6.2 above), rather than omissions or misstatements. Therefore, IFRS S1 distinguishes the requirements for an entity that revises a comparative amount (e.g., to update an estimate for a metric or redefine a metric), as discussed in section 6.2.3 above, and the requirements for restating an amount due to an error. *[IFRS S1.85, IFRS S1.BC165].*

7 Statement of compliance

An explicit and unreserved statement of compliance can be included only if an entity's sustainability-related financial disclosures comply with all the requirements of the ISSB standards.

An explicit and unreserved statement of compliance can be included only if an entity's sustainability-related financial disclosures comply with all the requirements of ISSB standards. Qualified statements of compliance with ISSB standards are not allowed. Including a statement of compliance is important information to communicate to primary users about the entity having applied all the requirements of ISSB standards, rather than having been selective in its approach to reporting sustainability-related financial information. *[IFRS S1.72, IFRS S1.BC156].*

However, there are situations where IFRS S1 relieves an entity from disclosing information that is specifically required by an ISSB standard, without preventing that entity from asserting compliance with them. These situations relate to where: *[IFRS S1.73]*

- Law or regulation may prohibit an entity from disclosing information that is specifically required by an ISSB standard (see discussion on interaction with law or regulation in section 3.2.4.C above)
- The information about a sustainability-related opportunity is commercially sensitive (see discussion on commercially sensitive information in section 3.2.5.B above)
- To assert compliance with ISSB standards, an entity does not necessarily need to implement strategic goals. For example, an entity does not need to follow a particular transition plan to a lower-carbon economy, but it is required to disclose information about the targets it has set or is required to set by law or regulation. That is, an entity that does not manage some of its sustainability-related risks and opportunities, or that has not established its own metrics and targets for them, could still assert compliance with ISSB standards by disclosing that fact, as this is often material for primary users to know. Similarly, an entity may not have governance processes, controls or procedures in place to monitor and manage specific sustainability-related risks and opportunities, but that fact, in itself, is often material for primary users to know through a disclosure. *[IFRS S1.BC157].*

As discussed in section 3.2.8 above, the aim of the Inaugural Jurisdictional Guide issued in May 2024 is to set the basis for the development of jurisdictional profiles and enable market participants and regulators to understand the progress that each jurisdiction makes towards developing sustainability-related information. This jurisdictional guide also discusses the assertion of compliance with ISSB standards by confirming the fact that such compliance is only possible if an entity complies with all requirements in ISSB standards (subject to the exemptions mentioned above relating to situations where law or regulation prohibits specific disclosures or situations of information that is commercially sensitive). Additionally, the jurisdictional guide emphasises that the ISSB has provided transition reliefs from specific requirements in ISSB standards to facilitate their initial application (see discussion in section 9 below). The reliefs are available to all entities in the first year they apply ISSB standards and entities using those reliefs will be able to assert compliance with ISSB standards. For example, using the 'climate-first' relief (discussed in section 9.3 below), an entity can limit its disclosures to information that relates only to climate-related risks and opportunities in the first annual reporting period in which it applies ISSB standards, and still be able to assert compliance.

However, in the jurisdictional guide it is acknowledged that the pace of progress in adopting ISSB standards will vary by jurisdiction. Therefore, to facilitate primary users understanding of the application of the climate-relevant requirements in ISSB standards, after the first year of using the 'climate-first' transition relief, entities that comply with all the requirements in IFRS S2 and with the climate-relevant provisions in IFRS S1 (including those in jurisdictions described as 'adopting climate requirements in ISSB

Standards') can state that they comply with the climate-related requirements in ISSB standards.

Moreover, some jurisdictions may consider extending the transition reliefs for periods beyond those included in ISSB standards. This is further explained in the additional guide for preparers 'Voluntarily applying ISSB Standards - A guide for preparers' issued in September 2024 (see also discussion in section 3.2.8 above). In particular, an entity would not be able to state compliance if those reliefs are extended beyond the first year. In such case, an entity would state that it partially applied ISSB standards and needs to identify the requirements that were not met. An entity would need to state this 'partial application' by describing how its disclosures only partially reflect the requirements of ISSB standards and how it is progressing. The reasons for phasing its disclosures beyond the first year of application that is allowed for by the transition reliefs could also be useful information for an entity to disclose.

8 Effective date

Several stakeholders stressed the fact that, due to the urgency of creating a global baseline of sustainability-related financial disclosures, the effective dates for IFRS S1 and IFRS S2 should not be more than 12 months after their issuance. The ISSB decided that setting an effective date for annual reporting periods beginning on or after 1 January 2024 is consistent with its current pace in meeting primary users' urgent need for sustainability-related and climate-related financial disclosures. *[IFRS S1.BC167, IFRS S1.BC171]*.

In particular, an entity needs to apply IFRS S1 for annual reporting periods beginning on or after 1 January 2024. Earlier application is permitted, however, if doing so, an entity needs to disclose that fact and apply IFRS S2 at the same time. *[IFRS S1.E1]*. The actual effective date for entities will depend on when ISSB standards become mandatory in the jurisdictions in which they operate, unless those entities voluntarily apply ISSB standards before they become mandatory in their jurisdictions.

9 Transition reliefs

IFRS S1 includes the transition reliefs available in the first annual reporting period in which an entity applies the ISSB standards.

How well prepared an entity is to apply ISSB standards will depend on various factors such as an entity's current reporting approach for sustainability-related risks and opportunities, its size and the jurisdiction in which it operates, etc. Taking into consideration the level of preparedness, the ISSB acknowledged that entities may need time to create or adjust internal systems, processes and controls to prepare the disclosures required by ISSB standards. Therefore, the ISSB decided to introduce transition reliefs. [IFRS S1.BC170].

IFRS S1 includes transition reliefs available in the first annual reporting period in which an entity applies ISSB standards that are discussed in section 9.1, 9.2 and 9.3 below. [IFRS S1.E3].

9.1 Transition relief for simultaneous reporting

The ISSB considered the feedback received from stakeholders expressing a number of concerns about data availability and preparer readiness to meet the requirement of simultaneous reporting of sustainability-related financial disclosures and financial statements, especially in the first year of application of ISSB standards. For example, challenges due to the potential reporting burden and higher costs, time-consuming collection and aggregation of data due to underdeveloped systems, delayed calculation of metrics due to later finalisation of financial statements.

In response to these concerns, the ISSB decided to provide transition relief to give entities more time to prepare and align reporting of sustainability-related financial disclosures and financial statements. The transition relief is available in the first annual reporting period in which an entity applies IFRS S1 and allows an entity to not report its sustainability-related financial disclosures at the same time as its related financial statements. [IFRS S1.BC145, IFRS S1.BC146, IFRS S1.BC172]. In particular, Appendix E states: [IFRS S1.E4]

Extract from IFRS S1

- E4** In the first annual reporting period in which an entity applies this Standard, the entity is permitted to report its sustainability-related financial disclosures after it publishes its related financial statements. In applying this transition relief, an entity shall report its sustainability-related financial disclosures:
- (a) at the same time as its next second-quarter or half-year interim general purpose financial report, if the entity is required to provide such an interim report;
 - (b) at the same time as its next second-quarter or half-year interim general purpose financial report, but within nine months of the end of the annual reporting period in which the entity first applies this Standard, if the entity voluntarily provides such an interim report; or
 - (c) within nine months of the end of the annual reporting period in which the entity first applies this Standard, if the entity is not required to and does not voluntarily provide an interim general purpose financial report.

As indicated above, the relief permits the annual sustainability-related financial disclosures to be provided with the following second-quarter or half-year interim general purpose financial report. The ISSB decided to specify the timing of delay to enable primary users to know when the information would be provided. However, this relief is not suggesting that an entity is required to provide quarterly or half-yearly reporting (see also discussion about interim reporting in section 5.3.3 above). [IFRS S1.BC172, IFRS S1.BC173].

9.2 Transition relief for comparative information

Considering that entities may be able to apply the requirements in IFRS S1 sooner if comparative information is not required in the first annual reporting period in which they apply IFRS S1, the ISSB decided to provide a relief from the requirement to disclose comparative information. This relief allows an entity to report on only that first annual reporting period without being required to provide disclosures specified in IFRS S1 for any period before the date of initial application. That is, an entity is not required to disclose comparative information in the first annual reporting period in which it applies IFRS S1. [IFRS S1.E3, IFRS S1.BC174].

9.3 'Climate-first' transition relief

In taking advantage of the 'climate-first' transition relief, an entity would apply the requirements in IFRS S1 only to the extent that they relate to the disclosure of information about climate-related risks and opportunities.

Limiting an entity's disclosures to information that relates only to climate-related risks and opportunities in the first annual reporting period in which an entity applies ISSB standards, is another relief that the ISSB decided to provide to entities. This transition relief temporarily narrows the scope of reporting in accordance with IFRS S1 from the provision of information about all sustainability-related risks and opportunities that could reasonably be expected to affect an entity's prospects, to the provision of information about only climate-related risks and opportunities. It does not otherwise alter the requirements of IFRS S1. Therefore, the entity would apply the requirements in IFRS S1 only to the extent that they relate to the disclosure of information about climate-related risks and opportunities. [IFRS S1.E5, IFRS S1.BC175].

In particular, if an entity applies this relief: [IFRS S1.E5, IFRS S1.E6, IFRS S1.BC176]

- It applies IFRS S2 (that is discussed in Part B of this publication) to identify climate-related risks and opportunities and discloses information about them.
- It is required to disclose that fact.
- The relief from providing comparative information would be extended. Specifically, in the first annual reporting period in which it applies IFRS S1, the entity is not required to disclose comparative information about its climate-related risks and opportunities. Also, in the second annual reporting period in which the entity applies IFRS S1, the entity is not required to disclose comparative information about its sustainability-related risks and opportunities, other than its climate-related risks and opportunities. Therefore, comparative information in relation to climate-related risks and opportunities is required in the second annual reporting period.

Asserting compliance with ISSB standards means application of all the requirements in IFRS S1 and IFRS S2. However, electing to use this transition relief allows an entity to assert such compliance in its first year of applying ISSB standards, even though it discloses only information about climate-related risks and opportunities in accordance with IFRS S2 (see further discussion about compliance with ISSB standards in section 7 above).

In January 2025, the ISSB issued educational material, *Applying IFRS S1 when reporting only climate-related disclosures in accordance with IFRS S2*.³³ This educational material is intended to help preparers understand which requirements in IFRS S1 are applicable when an entity discloses information on only climate-related risks and opportunities in accordance with IFRS S2. For completeness, the educational material also includes an appendix that contains the requirements in IFRS S1 that are not applicable when reporting on only climate-related risks and opportunities.

³³ [Applying IFRS S1 when reporting only climate-related disclosures in accordance with IFRS S2](#), ISSB, January 2025, available on the IFRS Foundation's website.

Frequently asked questions

Question 9-1: In identifying climate-related risks and opportunities, does an entity need to refer to and consider the applicability of SASB standards in addition to the requirements of IFRS S2 when applying the 'climate-first' transition relief?

The ISSB's educational material '*Applying IFRS S1 when reporting only climate-related disclosures in accordance with IFRS S2*' clarified that the requirement in IFRS S1 to refer to and consider the applicability of the disclosure topics in SASB standards, in addition to applying ISSB standards when identifying sustainability-related risks and opportunities (as discussed in section 5.1.1 above), is not applicable when using the 'climate-first' transition relief.

The ISSB's educational material further explains that, in identifying climate-related risks and opportunities that could reasonably be expected to affect an entity's prospects, the entity needs to apply IFRS S2, which requires referring to and considering the applicability of the industry-based disclosure topics defined in the Industry-based Guidance on Implementing IFRS S2 (see Part B for further discussion relating to the Industry-based Guidance on Implementing IFRS S2). Since the Industry-based Guidance on Implementing IFRS S2 has been derived from SASB standards, the climate-related metrics in it are identical to corresponding requirements in SASB standards. Therefore, for entities reporting only on climate-related risks and opportunities in accordance with IFRS S2, there is no need to also refer to and consider the applicability of SASB standards.

Some entities that decide to take advantage of the 'climate-first' transition relief in the first year of application of ISSB standards, may also wish to disclose information about sustainability-related risks and opportunities, beyond those relating to climate. The ISSB clarified that this relief is not intended to restrict an entity from providing incremental information to primary users. Instead, the relief is still available to entities that want to also provide information for sustainability-related risks and opportunities, in addition to those relating to climate, to the extent that this additional information does not reflect information about all sustainability-related risks and opportunities that could be reasonably expected to affect the entity's prospects. Therefore, the ISSB emphasised the importance of ensuring in those cases where the relief is used, that the information about climate-related risks and opportunities provided in accordance with IFRS S1 and IFRS S2 is not obscured by the incremental information. [IFRS S1.BC177].

How we see it

Entities may already have been disclosing information about sustainability-related topics, other than climate, in their general purpose financial reports. In the first annual reporting period that these entities apply ISSB standards, they may continue providing information in their sustainability-related financial disclosures about the other sustainability-related topics for consistency and comparability purposes with their prior year reporting. However, they need to be explicit that the 'climate-first' transition relief is applied and that the additional information is not provided for the purposes of complying with the full requirements of ISSB standards had the 'climate-first' relief not been applied. They also need to ensure that material information provided in accordance with ISSB standards is not obscured by this additional information.

Part B - Introduction to IFRS S2

1 Introduction to IFRS S2

1.1 The objective and scope of IFRS S2

IFRS S2 requires an entity “to disclose information about its climate-related risks and opportunities that is useful to primary users of general purpose financial reports in making decisions relating to providing resources to the entity”. To meet this objective, an entity is required to disclose information about the climate-related risks and opportunities that could reasonably be expected to affect the entity’s prospects. Consistent with the requirements in IFRS S1, risks and opportunities that could reasonably be expected to affect the entity’s prospects are those that could reasonably be expected to affect its cash flows, its access to finance or cost of capital over the short, medium, and long term. [IFRS S2.1, IFRS S2.2].

Those climate-related risks and opportunities that are not reasonably expected to affect an entity’s prospects are outside the scope of IFRS S2. [IFRS S2.4].

An entity’s climate-related risks and opportunities are a subset of its sustainability-related risks and opportunities that are required to be disclosed in accordance with IFRS S1. For further information on the identification of sustainability-related risks and opportunities, refer to Chapter 52.

In developing IFRS S2, the ISSB acknowledged that climate change is likely to present risks for nearly all entities and economic sectors. The ISSB also acknowledged that climate change opportunities might be available to entities, such as opportunities arising from an entity’s actions to mitigate climate change or adapt to the effects of climate change. [IFRS S2.BC2].

An entity’s exposure to climate-related risks and opportunities might be direct (i.e., the impact is on the entity’s own resources) or indirect through its value chain and relationships with, for example, suppliers and customers. The concept of a ‘value chain’ is explained in Chapter 52. Furthermore, the extent of an entity’s exposure to climate-related risks and opportunities will depend on factors such as the sector, industry, location (geographical and geopolitical) in which the entity operates and other specific circumstances including its business model. The nature and extent of an entity’s exposure to climate-related risks and opportunities will affect how primary users assess an entity’s overall risk profile and, therefore, influence users’ decisions about whether they will provide resources to the entity. [IFRS S2.BC2].

When an entity prepares the climate-related financial disclosures required by IFRS S2 (such as the cross-industry metric disclosures about the amount and percentage of assets or business activities vulnerable to climate-related transition risks and physical risks - see section 4.5.1 below), the entity needs to consider the linkages between the amounts disclosed in its climate-related financial disclosures and the amounts recognised and disclosed in its corresponding financial statements. Connections between these disclosures may be able to be explained by cross reference to information already reflected in the entity’s financial statements. To assist an entity in assessing and disclosing the extent to which climate change affects its financial statements prepared in accordance with IFRS accounting standards, refer to *Applying IFRS: Connected Financial Reporting: Accounting for Climate Change (Updated May 2025)*.³⁴ [IFRS S2.BC133].

34 [Applying IFRS Connected Financial Reporting: Accounting for Climate Change May 2025](#), EY Global, May 2025, available on ey.com/ifrs.

2 Climate-related risks and opportunities

IFRS S2 applies to the climate-related risks to which an entity is exposed and the climate-related opportunities that are available to the entity. [IFRS S2.3].

2.1 Climate-related risks

Consistent with the Taskforce for Climate-related Financial Disclosures (TCFD) Recommendations, climate-related risks to which IFRS S2 applies are either: [IFRS S2.BC18]

- Physical risks from climate change ('climate-related physical risks')
Or
- Transition risks associated with the transition to a lower-carbon economy ('climate-related transition risks')

IFRS S2 defines the 'climate-related physical risks' and 'climate-related transition risks', as follows: [IFRS S2 Appendix A]

Extract from IFRS S2

Appendix A

Defined terms

climate-related physical risks

Risks resulting from climate change that can be event-driven (acute physical risk) or from longer-term shifts in climatic patterns (chronic physical risk). Acute physical risks arise from weather-related events such as storms, floods, drought or heatwaves, which are increasing in severity and frequency. Chronic physical risks arise from longer-term shifts in climatic patterns including changes in precipitation and temperature which could lead to sea level rise, reduced water availability, biodiversity loss and changes in soil productivity.

These risks could carry financial implications for an entity, such as costs resulting from direct damage to assets or indirect effects of supply-chain disruption. The entity's financial performance could also be affected by changes in water availability, sourcing and quality; and extreme temperature changes affecting the entity's premises, operations, supply chains, transportation needs and employee health and safety.

climate-related transition risks

Risks that arise from efforts to transition to a lower-carbon economy. Transition risks include policy, legal, technological, market and reputational risks. These risks could carry financial implications for an entity, such as increased operating costs or asset impairment due to new or amended climate-related regulations. The entity's financial performance could also be affected by shifting consumer demands and the development and deployment of new technology.

An entity may seek to manage the physical and transition risks related to climate change by developing mitigation and adaptation responses:

[IFRS S2.BC21]

- Mitigation efforts relate primarily to an entity's responses to transition risks (e.g., adopting new technologies or changing business models to reduce greenhouse gas (GHG) emissions).
- Adaptation responses primarily involve an entity preparing for both the current and anticipated effects of physical risks (e.g., infrastructure investments to improve resilience to physical risks).

IFRS S2 does not define the scope of the term 'climate-related' in the context of climate-related risks and opportunities.

The ISSB explained that an entity's climate-related risks and opportunities will not necessarily be mutually exclusive. This is because, for example, a customer preference for low-carbon products might simultaneously represent both a risk to the demand for an entity's existing product line and an opportunity for the entity to produce an alternative low-carbon product or gain market share. [IFRS S2.BC23].

2.2 Climate-related opportunities

In the same way that climate-related risks refer to the potential negative effects that climate change may have on an entity, climate-related opportunities refer to the potential positive effects arising from climate change for an entity. IFRS S2 also clarifies that climate-related opportunities may arise from an entity's efforts to mitigate and adapt to climate change. [IFRS S2 Appendix A].

2.3 Nature and social aspects of climate-related risks and opportunities

IFRS S2 does not define the scope of the term 'climate-related'. The ISSB explained that this is because climate change impacts are wide ranging and interrelated and their effects on an entity will vary depending on the region, market and industry in which an entity operates, which means it is not possible to precisely define the full scope of climate-related risks and opportunities that might affect an entity. [IFRS S2.BC25].

Extract from the Basis for Conclusions to IFRS S2

BC25 Although the requirements in IFRS S2 do not explicitly reference some climate-related matters such as reduced access to fresh water, biodiversity loss, deforestation and climate-related social impacts, disclosures about these and other such matters are required if an entity determines that the information is material for users of general purpose financial reports. For example, if a beverage manufacturer determines it is exposed to short-, medium- or long-term effects of climate change on water availability-especially in water-stressed regions-the entity might determine that information about the implications of reduced water availability for its strategy, operations, capital planning and asset values is material. Therefore, this information would be required by IFRS S2.

In some cases, a risk or opportunity identified by an entity may have attributes that are related to climate as well as nature or socioeconomic factors. The impact that the risk or opportunity may have on an entity is unaffected by how it is classified or viewed. However, the timing of when information about that risk or opportunity is disclosed could be affected by its classification if the entity applies the 'climate first' transition relief (as discussed in Chapter 52).

In December 2023, the IFRS Foundation published *Education material: Nature and social aspects of climate-related risks and opportunities* to explain whether and how entities should consider the nature and social aspects of climate-related risks and opportunities when applying IFRS S2. The education material includes three examples of climate-related risks and opportunities with a nature or social aspect. While the educational material is not part of the standard and does not add or change requirements in IFRS S2, these examples indicate that climate-related risks and opportunities can be broad in scope.

Extract from Educational material: Nature and social aspects of climate-related risks and opportunities

Example 3-Disclosing information about a company's response to a climate-related risk (social aspect)

...

Fact pattern

An entity operates in the electric utilities and power generators industry. It generates electricity from both renewable and fossil fuel sources and sells that electricity to customers in its jurisdiction.

The entity operates in a jurisdiction with a nationally determined contribution (NDC) arising from the latest international agreement on climate change (as defined in Appendix A of IFRS S2). To align with that NDC, the entity has set a greenhouse gas (GHG) emissions reduction target for 20XY.

To achieve its GHG emissions reduction target, the entity plans to phase out its coal-based plants by 20X0 and increase its renewable energy production by X%. The entity currently has X00 employees working in its coal-based plants. Those plants operate next to the only remaining coal mining site in the jurisdiction, which currently employs more than X,000 people.

Considering the NDC in the entity's jurisdiction, the entity is pursuing a 'just transition' to a lower-carbon economy. That is, the entity is transitioning to a lower-carbon economy in a way that is as fair and inclusive as possible to everyone concerned and maximises opportunities for decent work among all communities, workers and social groups. The entity anticipates that its jurisdiction will introduce regulation requiring entities to undertake their transition to a lower-carbon economy in this manner.

Consequently, the entity identifies regulatory risk associated with the NDC in its jurisdiction as a climate-related risk to which it is exposed. The latest international agreement on climate change, and the NDC arising from it, were developed to combat climate change. If the entity is not able to comply with the 'just transition' requirements associated with the NDC, there can be regulatory, reputational and legal consequences, which can affect the entity's prospects.

Application of IFRS S2

In accordance with paragraph 10 of IFRS S2, the entity discloses information that enables users of general purpose financial reports to understand the regulatory risk associated with how the entity manages its workforce as it transitions to a lower-carbon economy as a climate-related risk that it has determined could reasonably be expected to affect its prospects.

...

How we see it

Climate-related social impacts, nature and biodiversity loss, water, and deforestation could represent climate-related risks and opportunities that are within the scope of IFRS S2. Therefore, an entity that elects to use the 'climate first' transition relief in their first year of applying ISSB standards will still need to disclose information about those risks and opportunities if the entity judges that:

- The risks and opportunities are climate-related
- And
- The risks and opportunities could reasonably be expected to affect the entity's prospects

3 Identifying climate-related risks and opportunities

Similar to sustainability-related risks and opportunities (as discussed in Chapter 52), climate-related risks and opportunities arise from an entity's impacts and dependencies on natural resources and its relationships with stakeholders and society, the economy and its interaction with the natural environment. [IFRS S2.BC26].

The importance of understanding the role of impacts and dependencies in the identification of climate-related risks and opportunities is explained further in Figure 3-1 below.

Figure 3-1: Impacts and dependencies

Topic	Explanation	Example
Dependencies	A climate-related risk may arise from changes in the availability, quality or cost-stability of essential inputs that an entity depends on.	A sports drink company depends on the availability and quality of water to manufacture its products. Supplies of fresh water become limited during times of drought, which could result in water supply disruptions and higher water costs. This could affect production volumes and costs and, therefore, affect the amount of future cash flows that the sports drink company can expect to generate from its operations. [IFRS S2.BC27].
Impacts	A climate-related risk or opportunity may arise if an entity's impacts on climate change affect the resources and relationships on which the entity depends.	A manufacturing company expects a carbon tax to be introduced in a key jurisdiction in which it has emissions-intensive operations. The introduction of a carbon tax will increase the company's costs of production which it will pass onto consumers through higher product prices. Higher prices will affect the demand of the company's products and thus the amount of its future cash flows and the useful life of its manufacturing plant. [IFRS S2.BC28].

The TCFD provided categories for climate-related risks and opportunities, which may help an entity to identify its climate-related risks and opportunities under IFRS S2. A list of these categories is provided in Figure 3-2 below. Furthermore, the ISSB noted that the *Industry-based Guidance on Implementing IFRS S2*, which is based on the SASB standards but is not intended to be comprehensive or interpreted as such, provides some parameters for identifying climate-related risks and opportunities. This is discussed further in section 4.3.1.B below. [IFRS S2.BC24].

Figure 3-2: Categories of climate-related risks and opportunities

Physical risks	Transition risks	Opportunities
▪ Acute risk ▪ Chronic risk	▪ Policy and legal risks ▪ Market risk ▪ Technology risk ▪ Reputation risk	▪ Resource efficiency ▪ Energy source ▪ Products and services ▪ Markets ▪ Resilience

4 Core content

4.1 Overview

The core content disclosures in IFRS S2 are structured around four thematic areas that address how an entity oversees and manages its climate-related risks and opportunities. The core content areas require an entity to disclose information about its governance, strategy, risk management, and metrics and targets. This disclosure is intended to provide primary users with a complete set of information that enables them to understand the entity's exposure to and management of its climate-related risks and opportunities. [IFRS S2.BC30].

These disclosure requirements in IFRS S2 for climate-related risks and opportunities are structured around the same core content disclosure requirements in IFRS S1 for general sustainability-related risks and opportunities. The purpose of the core content disclosures and guidance on avoiding duplication in disclosures are discussed in Chapter 52.

4.1.1 Comparison with TCFD Recommendations

In July 2023, the ISSB published *Comparison IFRS S2 Climate-related Disclosures with the TCFD Recommendations*, which notes that the requirements of IFRS S2 integrate and are consistent with the 11 recommended disclosures of the TCFD.³⁵ In analysing the core content requirements in IFRS S2 and the associated core recommendations, recommended disclosures and guidance in the TCFD, the ISSB categorised the differences between IFRS S2 and TCFD Recommendations into three types, which are summarised in Figure 4-1 below:

Figure 4-1: Comparing TCFD Recommendations and IFRS S2

Type of difference	What IFRS S2 requires
Different wording	In some cases, IFRS S2 uses different wording to capture the same information as the TCFD Recommendations. In those cases, the requirements in IFRS S2 are considered to be broadly consistent with the TCFD Recommendations.
More detailed information	In some cases, IFRS S2 requires the disclosure of more detailed information, noting that the IFRS S2 disclosure requirements remain in line with the corresponding TCFD Recommendations.
Different guidance	In some cases, IFRS S2 requirements differ from the TCFD Recommendations, but mainly as a result of providing additional requirements and guidance. However, there is no intended difference between IFRS S2 and the TCFD's overall recommendations.

The specific differences between the IFRS S2 requirements and the TCFD Recommendations for each of the core content areas are identified and explained in the sections below.

³⁵ Further guidance provided by the ISSB on the TCFD can be found at [Making the transition from TCFD to ISSB](#), available on the IFRS Foundation's website.

How we see it

Entities that are currently preparing climate-related disclosures in accordance with the TCFD Recommendations cannot assume that their existing disclosures will be sufficient to comply with ISSB standards. As noted in the table above, IFRS S2 includes additional requirements and guidance. IFRS S1 also specifies additional disclosure considerations. All of these requirements need to be met in order to provide a complete set of sustainability-related financial disclosures in accordance with ISSB standards.

4.2 Governance

The governance disclosure requirements in IFRS S2 for climate-related risks and opportunities correspond with the governance disclosure requirements for sustainability-related risks and opportunities in IFRS S1. As such, the commentary in Chapter 52 on governance disclosure requirements in IFRS S1 is also applicable to the preparation of governance disclosures relating to climate-related risks and opportunities.

An entity is not required to provide separate governance disclosures for each sustainability-related risk and opportunity if oversight of the entity's sustainability-related risks and opportunities is managed on an integrated basis. In such cases, an entity needs to avoid unnecessary duplication by providing an integrated governance disclosure that meets the requirements set out in both IFRS S2 and IFRS S1. [IFRS S2.7].

TCFD comparison

The ISSB indicates that IFRS S2 disclosure requirements for an entity's governance on climate-related risks and opportunities is broadly consistent with the TCFD recommended disclosures.

However, in its TCFD comparison document, the ISSB noted that IFRS S2 requires disclosure of more detailed information about the description of the board's oversight of climate-related risks and opportunities. For example, how responsibilities for climate-related risks and opportunities are reflected in the terms of reference, mandates, role descriptions and other related policies applicable to the governance body(ies) or individual(s) who have oversight of those risks and opportunities.

4.3 Strategy

The strategy requirements in IFRS S2 for climate-related risks and opportunities correspond with the strategy disclosure requirements for sustainability-related risks and opportunities in IFRS S1, except that IFRS S2 has additional requirements and provides additional guidance in relation to:

- Identifying and classifying climate-related risks and opportunities that could reasonably be expected to affect the entity's prospects
- The effects of an entity's climate-related risks and opportunities on its strategy and decision-making, including information about its climate-related transition plan (if it exists)
- The resilience of the entity's strategy and business model to climate-related changes, developments and uncertainties

The following sections discuss each of these additional requirements and guidance.

For the remainder of the strategy disclosure requirements in IFRS S2, the commentary in Chapter 52 on strategy disclosure requirements in IFRS S1 is also applicable to the preparation of strategy disclosures relating to climate-related risks and opportunities.

4.3.1 Disclosures about climate-related risks and opportunities

4.3.1.A Classifying climate-related risks

IFRS S2 requires an entity to classify each climate-related risk identified as either a climate-related physical risk or climate-related transition risk.

IFRS S2 requires an entity to classify each climate-related risk identified as either a climate-related physical risk or climate-related transition risk. [IFRS S2.10(b), IFRS S2.B5]. The differences between physical risks and transition risks are discussed in sections 2 and 3 above.

In its Integrated Report and Financial Statements 2023, Mondi plc discloses its physical risks, transition risks and its climate-change related opportunities. It describes one of physical risks, as follows:

Practical example 4-1: Mondi plc (2023)			United Kingdom
Integrated report and financial statements 2023 [extract]			
Strategic report [extract]			
Mondi Action Plan 2030 (including our TCFD disclosure) [extract]			
Taking Action on Climate: TCFD [extract]			
Climate change-related risks: Physical risks [extract]			
Risk	Risk description	How we manage and mitigate this risk	Estimated financial impact (€m)
1. Higher wood procurement costs	Temperature increase, changes in rainfall patterns and windstorms can result in large-scale forest damage. In Europe, at lower altitudes, fibre losses from pests (e.g. bark beetles) and diseases are expected to continue unless precipitation increases.	In mountainous regions, we expect an increase in yearly forest growth due to rising temperatures. At lower altitudes, spruce will be mainly replaced with other softwood species. We are investigating alternatives to support flexibility in species mix for our future pulp production.	90-180
Timeframe: Long term	A reduction in the cutting capacity of the sawmilling industry due to a lack of spruce saw logs could lead to a change in the mix of available pulpwood and sawmill chips. Increasing competition for wood is being driven by demand for renewable raw materials and timber for green energy generation to achieve EU GHG reduction and Net-Zero targets. At the same time, there is a call to increase forest areas set aside for conservation, which is reflected in the 2030 EU Forest Strategy.	We invest in research and development projects and are building strategic partnerships with forest owners and industries, NGOs and scientific institutions to foster sustainable forest management. This is supported by the sustainable working forest model and fit-for-purpose certification concepts, which we developed and promote with our partners. We have started to explore approaches to climate-fit forestry to enhance forest ecosystems' resilience. We also promote the cascading use of wood nationally and via Cepi on a European level.	

4.3.1.B Using industry-based guidance to identify climate-related risks and opportunities

In identifying the climate-related risks and opportunities that could reasonably be expected to affect an entity's prospects, IFRS S2 requires an entity to refer to and consider the applicability of the industry-based disclosure topics defined in the *Industry-based Guidance on Implementing IFRS S2*, which was issued by the ISSB at the same time as IFRS S1 and IFRS S2.³⁶ [IFRS S2.12].

In the Exposure Draft of IFRS S2, the ISSB proposed industry-based requirements that were derived from SASB standards (with enhancements made to the international applicability of some requirements) to enable comparable disclosures among industry peer entities. Feedback on the proposed industry-based requirements was mixed, in part because of concerns about the ability and relevance of applying some of the proposals internationally given the SASB standards were primarily developed for the US market. In response to that feedback, the ISSB decided to retain the industry-based guidance with some enhancements to its international applicability but issued it as non-authoritative guidance that "suggests possible ways to apply some of the disclosure requirements in IFRS S2 but does not create additional requirements".

³⁶ [Industry-based Guidance on implementing Climate-related Disclosures](#), ISSB, June 2023, available at the IFRS Foundation's website.

The disclosure topics identified and defined in the industry-based guidance list climate-related risks and opportunities that are typically associated with particular business models, activities or other common features that characterise participation in an industry. For example, in the real estate industry, the industry-based guidance identifies energy management, water management, management of tenant sustainability impacts and climate change adaption as disclosure topics. [IFRS S2.BC135, IFRS S2.BC136].

The industry-based guidance also suggests possible ways to measure and disclose information about climate-related risks and opportunities. This is discussed further in relation to metrics and targets in section 4.5 below.

IFRS S2 requires an entity to “refer to and consider the applicability of” the disclosure topics defined in the *Industry-based Guidance on Implementing IFRS S2*. [IFRS S2.12]. The same requirements are included in IFRS S1 in relation to the sources of guidance. As discussed in Chapter 52, this requirement means that, after referring to the industry-based guidance, an entity is not required to apply that guidance if the entity considers that it is not applicable.³⁷ However, even if an entity decides not to use the Industry-based Guidance on Implementing IFRS S2, industry specific disclosures are still required by ISSB standards.

The ISSB included this requirement to refer to the industry-based guidance because it considers the guidance to be a helpful starting point for identifying climate-related risks and opportunities about which an entity may need to prepare disclosures. The ISSB also noted that the disclosure topics and associated metrics set out in the guidance are not intended to be exhaustive and, therefore, it should not be interpreted as comprehensive. Consequently, an entity will also need to disclose climate-related financial information about other topics that are common to an industry but that are not included in the industry-based guidance if those topics relate to climate-related risks and opportunities that could reasonably be expected to affect the entity’s prospects. [IFRS S2.BC137, IFRS S2.BC24].

4.3.1.C Using reasonable and supportable information to identify climate-related risks and opportunities

In identifying the climate-related risks and opportunities that could reasonably be expected to affect an entity’s prospects, IFRS S2 requires an entity to use all reasonable and supportable information that is available to the entity at the reporting date without undue cost or effort. This information includes information about past events, current conditions and forecasts of future conditions. [IFRS S2.11].

The requirement that an entity “use all reasonable and supportable information that is available to the entity at the reporting date without undue cost or effort” is a concept that is employed in both IFRS S1 and IFRS S2 so that the ISSB could clarify its expectations about the level of effort needed to comply with a specific disclosure requirement.

More information about the application of the “use all reasonable and supportable information that is available to the entity at the reporting date without undue cost or effort” concept is provided in Chapter 52.

³⁷ An entity that has elected to use the climate-first transition relief in its first year of applying ISSB Standards is required to refer to and consider the applicability of the Industry-based Guidance, but it is not required to also refer to and consider the applicability of the SASB Standards (in accordance with IFRS S1.55(a)) in that first year of reporting. This clarification was made in the ISSB’s *Education material: Applying IFRS S1 when reporting only climate-related disclosures in accordance with IFRS S2* (January 2025), which noted that the Industry-based Guidance was derived from the SASB Standards (refer to footnote 7 of the Education Material).

Frequently asked questions

Question 4-1: Can an entity use scenario analysis to assist in identifying climate-related risks and opportunities?

Many entities that have been previously reporting in accordance with the TCFD may have used scenario analysis to assist in the identification of their climate-related risks and opportunities. Under ISSB standards, an entity can, but is not required to, use scenario analysis to assist in identifying its climate-related risks and opportunities. This is acknowledged in the Basis for Conclusions on IFRS S2, which states that “climate-related scenario analysis can be used to inform a variety of other disclosures required by IFRS S2, including the identification and assessment of risks and opportunities”. Furthermore, IFRS S2 requires an entity to disclose in its risk management disclosures whether and how scenario analysis is used to inform the entity’s identification of climate-related risks. [IFRS S2.25(a)(ii), IFRS S2.BC69].

Although an entity is not required to use scenario analysis in the identification of climate-related risks and opportunities, IFRS S2 requires scenario analysis to be used for the purposes of assessing the resilience of the entity’s strategy and business model to climate-related changes. This is discussed further in section 4.3.3 below.

How we see it

Scenario analysis is an analytical tool that can be used for different purposes. An entity may, but is not required under IFRS S2 to, perform such an analysis to inform the identification of climate-related risks and opportunities that an entity considers could reasonably be expected to affect its prospects. However, under IFRS S2, an entity is required to use scenario analysis in order to assess the resilience of its business model and strategy based on a range of outcomes that may be plausible but uncertain.

If an entity discloses that it uses scenario analysis to inform its identification of climate-related risks and opportunities, it needs to make it apparent to primary users that the risks and opportunities identified are those could be reasonably expected to affect its prospects rather than just being presented as outputs of the scenario analysis. Identifying a valid and complete set of climate-related risks and opportunities is important as they form the foundation of other disclosures that seek to provide information to primary users about the entity’s exposure to climate-related risks and opportunities and the entity’s planned response to that exposure. This includes disclosures about:

- The current and anticipated effects of the risks and opportunities on the entity’s business model and value chain
- How the entity is responding/plans to respond to those risks and opportunities in its strategy and decision-making
- The current and anticipated effects of the risks and opportunities on the entity’s financial position, financial performance and cash flows
- The resilience of the entity’s strategy and business model to those risks and opportunities

4.3.2 Disclosures about the effects of climate-related risks and opportunities on the entity’s strategy and decision-making

Consistent with IFRS S1, IFRS S2 requires an entity to disclose information to enable primary users to understand the effects of climate-related risks and opportunities, including how it has responded, and plans to respond, to such

risks and opportunities in its strategy and decision-making. However, IFRS S2 is more prescriptive by also requiring the disclosure of: [IFRS S2.14(a)]

- How the entity plans to achieve any climate-related targets it has set
And
- Any targets it is required to meet by law or regulation

Figure 4-2 below outlines the specific disclosures that IFRS S2 requires an entity to provide about its responses or planned responses to climate-related risks and opportunities.

Figure 4-2: An entity's responses to climate-related risks and opportunities

Required disclosure	Remarks
Information about current and anticipated changes to the entity's business model, including its resource allocation, to address climate-related risks and opportunities. [IFRS S2.14(a)(i)].	Examples include: ▪ Plans to manage or decommission operations that are carbon, energy or water-intensive ▪ Reallocation of resources due to demand or supply-chain changes ▪ Reallocation of resources due to new business development resulting in capital expenditure or additional expenditure on research and development ▪ Acquisitions or divestments
Information about current and anticipated <i>direct</i> mitigation and adaptation efforts. [IFRS S2.14(a)(ii)].	Examples include: ▪ Changes in production processes ▪ Equipment changes ▪ Relocation of facilities ▪ Workforce adjustments ▪ Product specification changes
Information about current and anticipated <i>indirect</i> mitigation and adaptation efforts. [IFRS S2.14(a)(iii)].	Examples include: ▪ Working with customers ▪ Working with supply chains
Information about an entity's climate-related transition plan (if it has one). [IFRS S2.14(a)(iv)].	Information to be disclosed about an entity's transition plan includes: ▪ Key assumptions used in developing the transition plan ▪ Dependencies on which the transition plan relies upon
Information about how the entity plans to achieve any climate-related targets, including any GHG emission targets. [IFRS S2.14(a)(v)].	This includes targets that the entity has set and targets that the entity is required to meet by law or regulation. The targets are discussed further in section 4.5 below.

With respect to the entity's plans, IFRS S2 also requires an entity to disclose:

- Information about how the entity is resourcing, and intends to resource, those plans [IFRS S2.14(b)]
- Information (both quantitative and qualitative) about the progress of those plans compared to previous reporting periods [IFRS S2.14(c)]

4.3.2.A Climate-related transition plans

IFRS S2 defines the 'climate-related transition plan', as follows:

[IFRS S2 Appendix A]

Extract from IFRS S2

Appendix A

Defined terms

climate-related transition plan	An aspect of an entity's overall strategy that lays out the entity's targets, actions or resources for its transition towards a lower-carbon economy, including actions such as reducing its greenhouse gas emissions.
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The ISSB considers that disclosure of an entity's transition plan, or set of plans, to respond to the expected transition to a lower-carbon economy (if it has such plans) will help primary users assess the effects of climate-related risks and opportunities on the entity's cash flows, its access to finance and cost of capital. [IFRS S2.BC46].

IFRS S2 does not specify what is included in a transition plan. The ISSB notes that a transition plan will reflect an entity's individual circumstances, therefore, its focus is to enhance the comparability and consistency of disclosures about transition plans. [IFRS S2.BC52]. Transition plans can vary; for some entities, their transition plans form part of their overall business strategy as the plan is being used to adjust the entity's business model in response to its climate-related risks and opportunities. Whereas for some other entities, the plan does not form part of the overall business strategy and instead applies only to a particular product line, business unit or set of activities. [IFRS S2.BC47].

To assess the credibility of an entity's transition plan and to be able to make comparisons between entities' transition plans, primary users need to understand the assumptions and dependencies that underpin an entity's transition plan. For that reason, IFRS S2 requires an entity to disclose:

- The assumptions it made in developing its climate-related transition plan
- The dependencies on which the plan's achievement relies

The ISSB explains the difference between assumptions and dependencies in the context of transition plans in Figure 4-3 below: [IFRS S2.BC52]

Figure 4-3: Differences between assumptions and dependencies in transition plans

	Meaning	Examples
Assumption	A belief, expectation, hypothesis or premise that the entity expects will occur and, therefore, builds into its climate-related transition plan. Assumptions are uncertain.	▪ Expectations about regulatory requirements ▪ Expectations about the ability of an entity to implement planned changes within its value chain
Dependencies	Critical factors and conditions that are required for an entity's transition plan to be realised.	▪ An emission removal technology that an entity will rely upon to meet its GHG emission targets ▪ The minimum level of resource availability needed so that the

		entity can implement its transition plan
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In preparing its climate-related financial disclosures, an entity needs to consider how to make connections between information disclosed in its transition plan and the disclosure of other information such as its GHG emissions, its emission targets and climate resilience. [IFRS S2.BC49].

How we see it

IFRS S2 does not require an entity to develop a transition plan. The standard only requires the disclosure of particular information about transition plans if an entity has such a plan. In our view, given the importance that primary users place on information about an entity's transition plan, an entity that does not have a transition plan needs to consider disclosing that fact.

Some organisations that are external to the ISSB have also been working on guidance on the preparation of transition plans. One such initiative is the Transition Plan Taskforce (TPT) which was launched by the UK Government with the intention to set out good practices for robust and credible transition plan disclosures as part of an entity's annual reporting on forward business strategy. The TPT published its *Disclosure Framework* in October 2023, which sets out five key elements of a good practice transition plan, which are expanded upon through 19 sub-elements and a series of disclosure recommendations for each sub-element.³⁸

TPT's five key elements of a good practice transition plan are summarised in Figure 4-4 below.

Figure 4-4: Key elements of a transition plan

Key element	Details
Foundations	"An entity shall disclose the Strategic Ambition of its plan. This shall comprise the entity's objectives and priorities for responding and contributing to the transition towards a low GHG emissions, climate-resilient economy, and set out whether and how the entity is pursuing these objectives and priorities in a manner that captures opportunities, avoids adverse impacts for stakeholders and society, and safeguards the natural environment. Under this element, an entity should also disclose the high-level implications that this transition plan will have on its business model and value chain, as well as the key assumptions and external factors on which the plan depends."
Implementation Strategy	"An entity shall disclose the actions it is taking within its business operations, products and services, and policies and conditions to achieve its Strategic Ambition, as well as the resulting implications for its financial position, financial performance, and cash flows."
Engagement Strategy	"An entity shall disclose how it is engaging with its value chain, industry peers, government, public sector, communities, and civil society in order to achieve its Strategic Ambition."
Metrics & Targets	"An entity shall disclose the metrics and targets that it is using to drive and monitor progress towards its Strategic Ambition."

³⁸ [TPT Disclosure Framework](#), TPT, October 2023, available in the TPT's website.

Governance	“An entity shall disclose how it is embedding its transition plan within its governance structures and organisational arrangements in order to achieve the Strategic Ambition of its transition plan.”
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The ISSB's Vice-Chair, Sue Lloyd, stated in the foreword to the TPT Disclosure Framework that the TPT Disclosure Framework, “provides a practical and useful complement to [the ISSB] Standards. It will be a useful tool for companies in developing transition plans and informing the disclosure requirements in IFRS S2”.

How we see it

External initiatives such as the TPT Disclosure Framework may provide a useful source of insight and guidance that entities may choose to refer to when preparing their transition plan disclosures in accordance with IFRS S2. In our view, these initiatives may help to improve good disclosure practices and, as such, an entity may wish to consider the relevance of those initiatives to its own disclosures. However, entities need to be mindful that ISSB standards do not require an entity to comply with the guidance or recommendations in the TPT Disclosure Framework or other external initiatives and that, similarly, compliance with the TPT Disclosure Framework or other external initiatives will not necessarily mean that the entity's disclosures comply with ISSB standards.

All requirements in IFRS S1 and IFRS S2 need to be met in order to provide a complete set of sustainability-related financial disclosures in accordance with ISSB standards.

4.3.3 Disclosures about the resilience of the entity's strategy and business model

Because the likelihood, magnitude and timing of climate-related risks and opportunities affecting an entity are uncertain and often complex, primary users have indicated that they need to understand the resilience of the entity's strategy and business model to climate change. [IFRS S2.BC57].

IFRS S2 defines 'climate resilience', as follows: [IFRS S2 Appendix A]

Extract from IFRS S2

Appendix A

Defined terms

climate resilience

The capacity of an entity to adjust to climate-related changes, developments or uncertainties. Climate resilience involves the capacity to manage **climate-related risks** and benefit from **climate-related opportunities**, including the ability to respond and adapt to **climate-related transition risks** and **climate-related physical risks**. An entity's climate resilience includes both its strategic resilience and its operational resilience to climate-related changes, developments and uncertainties.

Compared to IFRS S1, the climate resilience disclosure requirements in IFRS S2 are more extensive and prescriptive and require a scenario analysis to be completed. In providing quantitative information, IFRS S2 permits an entity to disclose a single amount or a range. [IFRS S2.22].

IFRS S2 requires disclosure of:

- An entity's assessment of its climate resilience as at the reporting date. [IFRS S2.22(a)].

- How and when the entity carried out climate-related scenario analysis, which is used to inform the resilience assessment. *[IFRS S2.22(b)]*.

The relationship between a resilience assessment and scenario analysis is explained in Figure 4-5 below.

Figure 4-5: Difference between a resilience assessment and scenario analysis

Topic	Explanation
Resilience assessment	Using a range of plausible but uncertain climate outcomes (i.e., scenarios), management assesses the implications for the entity's business model and strategy and its capacity to adapt or respond. <i>[IFRS S2.BC59]</i>. Information about an entity's assessment of its climate resilience has to be disclosed as at each reporting date. <i>[IFRS S2.BC68]</i>.
Scenario analysis	An analytical exercise used to inform that resilience assessment. An entity is not required to disclose the specific results of its scenario analysis. Instead, an entity is required to disclose information about its interpretation of those results. <i>[IFRS S2.BC59]</i>. A scenario analysis does not need to be performed every year. <i>[IFRS S2.BC68]</i>.

4.3.3.A Resilience assessment

Within the context of an entity's identified climate-related risks and opportunities, paragraph 22(a) requires disclosure of information about the resilience of the entity's strategy and business model to the following factors described in Figure 4-6 below: *[IFRS S2.BC58]*

Figure 4-6: Assessing resilience

Factor	Explanation	Example
Climate-related changes	Such as events or changes resulting from climate change	▪ Pervasive wildfires ▪ Rising sea levels
Climate-related developments	Such as evolving macroeconomic factors, e.g., regulatory responses and demographic shifts	▪ Regulatory limits on the use of particular fossil fuels
Climate-related uncertainties	Such as different confidence intervals associated with climate-related changes and climate-related developments	▪ Assumptions about the pervasiveness of wildfires ▪ Assumptions about the stringency of regulation

A resilience assessment involves interpreting the results of the scenario analysis. In particular, IFRS S2 requires that an entity's disclosure of the assessment of its climate resilience as at the reporting date enables primary users to understand: *[IFRS S2.BC59, IFRS S2.22(a)]*

- The implications (if any) for its strategy and business model, including how the entity would need to respond to the effects identified in the scenario analysis
- The significant areas of uncertainty considered in the entity's assessment of its climate resilience

- The entity's capacity to adjust or adapt its strategy and business model to climate change over the short, medium and long term, including:
 - The availability of, and flexibility in, the entity's existing financial resources to respond to the effects identified in the climate-related scenario analysis, including to address climate-related risks and to take advantage of climate-related opportunities
 - The entity's ability to redeploy, repurpose, upgrade or decommission existing assets
 - The effect of the entity's current and planned investments in climate-related mitigation, adaptation and opportunities for climate resilience

The following Illustration is based on the example used in the Basis for Conclusions to IFRS S2 to explain the type of information that an entity might disclose about the significant areas of uncertainty considered in its climate resilience assessment: [IFRS S2.BC60]

Illustration 4-1: Example showing disclosure of significant areas of uncertainty

In performing scenario analysis, Entity A identifies that future climate-driven migration could have implications in the long term for some of the assets and operations of Entity A and its major suppliers that are located near Region X which might become uninhabitable due to rising sea levels. Depending upon where those affected local communities relocate, the ability for Entity A and its suppliers to continue to run their operations at full capacity could be adversely impacted. It is not known whether, where or when the local communities may relocate and the consequential impact on Entity A's operations and its supply chain is also uncertain.

In accordance with paragraph 22(a)(ii) of IFRS S2, Entity A discloses that its resilience assessment is subject to significant uncertainty arising from the effects of future climate-driven migration from Region X, which, in turn, has implications for the stability of Entity A's supply chain and the resilience of its own assets and operations that are located near Region X. Given the time horizon that applies to this risk in the long term, Entity A also discloses that the degree of judgement required to interpret the results of this scenario analysis also increases.

In its 2024 Climate Report, Commonwealth Bank of Australia discloses its assessment of the resilience of its portfolio, as follows:

Climate Report 2024 [extract]

Risk [extract]

Our approach to climate risk [extract]

Identifying and assessing [extract]

Assessing the resilience of our portfolio

Our assessment of the Bank's resilience to climate risks through the CRMA considers the extent to which industries or regions we lend to are exposed to *physical* or *transition risks*. The table below identifies sub sectors, primarily based on ANZSIC classifications within our portfolio which are exposed to elevated climate-related *physical* or *transition risk*. This year, we have tested the resilience of 48% and 89% of our lending portfolios to potential climate-related *physical* and *transition risks*, respectively.

Sectors ²	Jun 24		Jun 23 ¹		Physical risk ³	Transition risk ⁴
	Total sector TCE \$bn	TCE % of total	Total sector TCE \$bn	TCE % of total		
Consumer	793.0	57.5%	776.8	55.5%		
Australian home loans exposed to high physical risk ⁵	30.3	2.2%	30.1	2.2%	●	
Australian home loans exposed to high cyclone risk	11.0	0.8%	11.0	0.8%	●	
Australian home loans exposed to high flood risk	16.9	1.2%	16.7	1.2%	●	
Australian home loans exposed to high fire risk	1.8	0.1%	1.8	0.1%	●	
Australian home loans exposed to sea level rise	1.6	0.1%	1.6	0.1%	●	
Australian home loans exposed to high transition risk ⁵	16.5	1.2%	16.0	1.1%		●
Agriculture & forestry	32.5	2.4%	30.0	2.1%		
Dairy	7.2	0.5%	7.4	0.5%	●	●
Livestock	13.5	1.0%	11.9	0.8%	●	●
Transport & storage	27.9	2.0%	24.8	1.8%		
Coal terminals ⁶	0.3	0.0%	0.4	0.0%		●
LNG terminals ⁷	0.2	0.0%	0.2	0.0%		●
Air transport ⁸	6.1	0.4%	3.7	0.3%		●
Oil and gas shipping (including FPSO) ⁹	0.1	0.0%	0.4	0.0%		●
Rail transport	1.9	0.1%	1.8	0.1%		●
Road transport	4.9	0.4%	4.1	0.3%		●
Pipeline transport	0.8	0.1%	0.9	0.1%		●
Manufacturing	19.5	1.4%	19.3	1.4%		
Petroleum refining	0.0	0.0%	0.0	0.0%		●
Heavy industry (steel, alumina, aluminium and cement) ¹⁰	0.9	0.1%	1.0	0.1%		●
Chemicals manufacturing	0.8	0.1%	1.0	0.1%		●
Auto manufacturing	1.3	0.1%	1.2	0.1%		●
Retail trade	15.7	1.1%	15.4	1.1%		
Automotive fuel retailing	1.3	0.1%	1.6	0.1%		●
Wholesale trade	16.8	1.2%	15.9	1.1%		
Petroleum product wholesaling and marketing	1.9	0.1%	1.8	0.1%		●
Electricity, gas & water	15.9	1.2%	13.7	1.0%		
Non-renewable power generation ^{10,11}	1.5	0.1%	1.9	0.1%		●
Gas supply	0.5	0.0%	0.6	0.0%		●
Mining, oil & gas	6.9	0.5%	7.3	0.5%		
Upstream oil and gas exploration and production	1.7	0.1%	2.4	0.2%		●
Thermal coal mining ¹⁰	1.0	0.1%	0.9	0.1%		●
Metallurgical coal mining	0.1	0.0%	0.1	0.0%		●
Total elevated risk	90.7	6.6%	87.4	6.2%		
Total TCE	1,378.1		1,400.1			

...

An entity is not required to disclose the specific results of its scenario analysis. Instead, an entity is required to disclose information about its interpretation of those results.

4.3.3.B Scenario analysis

As noted above, IFRS S2 does not require an entity to disclose the results of its scenario analysis. Instead, IFRS S2 requires disclosure of information about the approach the entity used to carry out its scenario analysis.

In relation to how the scenario analysis was carried out, IFRS S2 requires disclosure of: [IFRS S2.22(b)]

- Information about the inputs used in the analysis
- Key assumptions made in the analysis

Disclosures about inputs and assumptions used in the analysis are discussed in Figure 4-7 below (noting these lists are not exhaustive).

Figure 4-7: Scenario analysis inputs and assumptions

Disclosures about inputs	Disclosures about assumptions
▪ Which climate-related scenarios were used for the analysis and the sources of those scenarios ▪ Whether the analysis included a diverse range of climate-related scenarios ▪ Whether the scenarios used are associated with climate-related transition risks or climate-related physical risks ▪ Whether a climate-related scenario aligned with the 'latest international agreement on climate change' was used ▪ Why the entity decided that its chosen scenarios are relevant to assessing its resilience to climate-related changes, developments or uncertainties ▪ The time horizons used in the analysis ▪ What scope of operations (e.g., the operating locations and business units) was used in the analysis	▪ Climate-related policies in the jurisdictions in which the entity operates ▪ Macroeconomic trends ▪ National- or regional-level variables (e.g., local weather patterns, demographics, land use, infrastructure and availability of natural resources) ▪ Energy usage and mix ▪ Developments in technology

The 'latest international agreement on climate change' is defined by IFRS S2 to mean "An agreement by states, as members of the United Nations Framework Convention on Climate Change, to combat climate change. The agreements set norms and targets for a reduction in greenhouse gases." [IFRS S2 Appendix A].

When the ISSB issued IFRS S2, the Paris Agreement of April 2016 was the latest international agreement on climate change. Signatories to the Paris Agreement agreed to: [IFRS S2.BC145]

- Limit the increase in the global average temperature to well below 2 degrees Celsius above pre-industrial levels
- Pursue efforts to limit the temperature increase to 1.5 degrees Celsius above pre-industrial levels

However, the ISSB decided against requiring the use of scenarios consistent with the latest international agreement on climate change or particular science-based scenarios for the following reasons: [IFRS S2.BC67]

- It would not be practical to specify which scenarios an entity should be required to use
- Any scenarios specified in the standards might quickly become out of date and could lead to an entity disclosing information that does not

reflect its circumstances or the views of management on what might be plausible

IFRS S2 requires disclosure of the reporting period in which the climate-related scenario analysis was carried out. This is because the ISSB decided that, for the purposes of IFRS S2, an entity could carry out scenario analysis as part of its multi-year strategic planning cycle (e.g., every 3-5 years) rather than be required to update its scenario analysis at each reporting date.

Although an entity is not required to update its scenario analysis at each reporting date, IFRS S2 requires the entity to: [IFRS S2.B18, IFRS S2.BC68]

- At a minimum, update its climate-related scenario analysis in line with its strategic planning cycle
- Assess its climate resilience on an annual basis to reflect updated insight into the implications of climate uncertainty for the entity's business model
- Disclose the information required in section 4.3.3 above at each reporting date, including the information about how and when the scenario analysis was carried out, even if the scenario analysis had not been updated during the reporting period

IFRS S2 only requires scenario analysis to be used in assessing an entity's climate resilience. However, an entity may choose to use scenario analysis to inform a variety of other disclosures that are required by IFRS S2, including: [IFRS S2.BC69]

- Identifying and assessing climate-related risks and opportunities (see section 3 above)
- Assessing the anticipated financial effects associated with those risks and opportunities (see section 4.3.3.C below)
- Developing transition plans (see section 4.3.2.A above)

In its 2024 Climate Report, Commonwealth Bank of Australia discloses information about the scenarios used in its scenario analysis. This includes the following information:

Practical example 4-3:

Commonwealth Bank of Australia (2024)

Australia

Climate Report 2024 [extract]

Appendix [extract]

4. Approach to climate scenario analysis [extract]

Climate scenario analysis is a rapidly evolving field, with global scenarios regularly produced and updated. We use assumptions and inputs drawing from credible, global climate scenarios produced by parties such as the *Network for Greening the Financial System (NGFS)*.

We review our choice of scenarios to check that, in our view, they present plausible and appropriately severe outcomes; are consistent with market practices (including use by regulators and peer banks); and that they have detailed sector and geographic data readily available.

Depending on the nature of changes in the scenarios, in some cases, we may look to re-run previous analyses using updated information.

Climate scenario analysis considers the effects of climate risk over the long term (~30 years), medium term (~10 years) and short term (~3 years) time horizons. In some cases we may focus on specific time horizons. This approach helps us to consider the changing impacts on the Bank's risk profile over time, due to longer term *chronic physical risks*; increasingly frequent and severe *acute physical risks*; and evolving *transition risks* arising from regulatory change, technological advancements and evolving stakeholder expectations.

Climate scenarios used in the Group Climate Risk Materiality Assessment

Our CRMA was based on the following two severe, but plausible, climate scenarios:

Severe physical risk scenario	Severe transition risk scenario
Source: based on the NGFS 'Current Policies' scenario which assumes that only current global and local climate policies are maintained. Scenario description: - Global emissions continue to rise until 2080 and the world warms to >3°C above pre-industrial levels by 2100. - This leads to irreversible changes such as sea level rises and increasing severity and frequency of weather events. For example: - Increasing number of severe cyclones which may track further south. - Fire activity is larger and more intense. - Increased intensity of rainfall events drives moderate increases in flooding in coastal catchments. - Agricultural productivity in certain geographies and commodities decreases significantly by 2050. - Government action and demand for finance shifts towards climate resilience and adaptation measures.	Source: based on the NGFS 'Sudden Wake-up Call' short-term scenario, and the NGFS 'Delayed Transition' mid- and long-term scenario. Scenario description: - Globally coordinated government policies are rapidly introduced to further reduce greenhouse gas emissions. This is followed by a disruptive transition that ultimately limits global warming to well below 2°C above pre-industrial levels by 2100. - Climate policy leads to a fossil fuel market crash, including asset stranding, abrupt devaluation of polluting firms, and a general tightening of financial conditions. - Stakeholder expectations for corporate action on climate change continue to increase. - Severe weather events continue to increase in intensity to 2030, before stagnating at those levels.

In its 2023 Global Sustainability Report, Nutrien Ltd discloses information about the scenarios used in its scenario analysis. This includes the following information:

Practical example 4-4: Nutrien Ltd (2023)		Canada
Global Sustainability Report 2023 [extract] Governance [extract] Nutrien Climate-related Disclosures [extract] Scenarios We continue to evaluate, refine and consider various climate scenarios to help identify risks and opportunities and assess the resiliency of our business model. These scenarios are hypothetical and are not intended to be used as forecasts or predictions.		
	Transition scenarios International Energy Agency ("IEA") Scenarios: • Announced Pledges Scenario ("APS") • Sustainable Development Scenario ("SDS") • Net Zero Emissions ("NZE") by 2050	Physical scenarios The Intergovernmental Panel on Climate Change ("IPCC") Sixth Assessment Report (AR6): • SSP 1-2.6 • SSP 5-8.5 • SSP 2-4.5 A combination of IPCC AR6 scenarios may be best suited for identifying and assessing a potential range of outcomes of future events under conditions of uncertainty
Scenario models		
Time horizons	Impact models cover the time horizon over the next 30 years to 2050	Scenario models are focused primarily between the 2030 and the 2050 time horizons as these relate to key milestones for global emissions reductions
Potential key inputs	• Key internal inputs include production estimates, emissions factors and discount rates • External inputs include carbon prices and CO ₂ emissions assumptions based on the IEA's World Energy Outlook for the relevant period	• Key internal inputs include our global operational footprint, grower regional locations, historical sales, acreage and yield data • External inputs include historical and projected acres data, inflation rates and the latest IPCC climate datasets covering flood depth, extreme wind, extreme rainfall, wildfire, drought, hail and thunderstorm, heat and cold hazards
Key areas of our organization to be considered	• Nitrogen, Potash and Phosphate operating segments, which account for most of our Scope 1 and 2 GHG emissions profile • Retail growers as nitrogen fertilizer application accounts for a significant portion of our Scope 3 GHG emissions	• Retail with its direct connection to grower customers • Wholesale production operations and key transportation, storage and distribution sites
Potential climate-related risks and opportunities	• Carbon pricing mechanisms • Growers expected to reduce emissions • New technologies or products risk • New strategies and technologies to reduce GHG emissions • New markets for ammonia • Helping growers reduce emissions from agriculture • Reputational risks associated with climate change including our stakeholder's perception of our role in the transition to a lower-carbon economy	• Physical risk to growers • Physical risks to our supply chain and our transportation, distribution and logistics networks • Helping growers deal with chronic impacts of climate change

4.3.3.C Application guidance on preparing climate-related scenario analysis

During the development of IFRS S2, the ISSB received feedback that scenario analysis might be challenging, and especially so for entities that lack the skills, capabilities and resources to carry out that analysis. In response to that feedback, the ISSB confirmed that an entity is required to use climate-related scenario analysis to assess its climate resilience and also:

[IFRS S2.BC62, IFRS S2.BC63]

- Included application guidance in IFRS S2 for preparing climate-related scenario analysis, noting that scenario analysis encompasses a range of practices, from qualitative scenario narratives to sophisticated quantitative modelling
- Clarified that the approach an entity uses for scenario analysis needs to be 'commensurate with its circumstances'

The application guidance in IFRS S2 was developed to support an entity to select an approach to scenario analysis that is commensurate with its circumstances. This application guidance is based on the range of practices outlined in documents published by the TCFD, including, *Technical Supplement: The Use of Scenario Analysis in Disclosure of Climate-related Risks and Opportunities* and *TCFD: Guidance on Scenario Analysis for Non-Financial Companies*.^{39,40} [IFRS S2.BC64].

This application guidance requires an entity to use an approach to scenario analysis that enables it to consider all reasonable and supportable information available to the entity at the reporting date without undue cost or effort. In making judgements on the selection of an approach to scenario analysis, the application guidance specifies: [IFRS S2.B1]

39 [Technical Supplement: The Use of Scenario Analysis in Disclosure of Climate-Related Risks and Opportunities](#), TCFD, June 2017, available in the TCFD's website.

40 [TCFD: Guidance on Scenario Analysis for Non-Financial Companies](#), TCFD, October 2020, available in the TCFD's website.

- The factors to consider when assessing an entity's circumstances (see (i) in this section below)
- The factors to consider when determining an entity's appropriate approach to climate-related scenario analysis (see (ii) in this section below)
- Additional factors to consider when determining an entity's approach to climate-related scenario analysis over time (see (iii) in this section below)

(i) Assessing an entity's circumstances

Assessing an entity's circumstances requires consideration of: [IFRS S2.B2]

- The entity's exposure to climate-related risks and opportunities
- The skills, capabilities and resources available to the entity for the climate-related scenario analysis

An entity's approach to climate-related scenario analysis needs to be commensurate with the entity's circumstances at the time the climate-related scenario analysis is carried out. For example, an entity with a relatively low climate risk exposure and limited resources might develop a scenario narrative that is focused on a key product, business unit or operating location. In contrast, a large entity that is highly exposed to climate risks and has strong analytical expertise might perform sophisticated quantitative modelling that uses a range of scenarios to capture multiple risk transmission channels across the entity's own operations and value chain.

[IFRS S2.BC65].

Figure 4-8: Assessing an entity's circumstances

Factors to consider	Explanation
Exposure to climate-related risks and opportunities	An entity's exposure to climate-related risks and opportunities will inform the entity's assessment of: ▪ Its circumstances ▪ The approach to use for its climate-related scenario analysis Generally speaking, the greater the entity's exposure to climate-related risks or opportunities, the more likely it is the entity would determine that a more technically sophisticated form of climate-related scenario analysis is required. [IFRS S2.B4].
Skills, capabilities and resources available	An entity considers both internal and external skills, capabilities and resources when determining an appropriate approach to use for its climate-related scenario analysis. Context is necessary when assessing an entity's skills and capabilities, noting also that the ISSB expects entities to develop their skills and capabilities and strengthen their disclosures over time through a process of learning and iteration. For instance, an entity that is only just starting to explore scenario analysis in assessing climate resilience or that participates in an industry where scenario analysis is not commonly used might need more time to develop its skills and capabilities. Consequently, such entities might be unable to use a quantitative or technically sophisticated approach to scenario analysis without undue cost or effort. In contrast, an entity that participates in an industry whereby scenario analysis is an established practice (such as the extractive

	industries) would be expected to have had experience to develop its skills and capabilities. However, if an entity's climate-related risk exposure warrants a sophisticated approach to scenario analysis, IFRS S2 states that the entity cannot use a lack of skills or capabilities to justify using a less sophisticated approach if it has the resources available to invest in obtaining or developing the necessary skills and capabilities. [IFRS S2.B6, IFRS S2.B7, IFRS S2.BC65].
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Each time an entity carries out scenario analysis, it is required to assess its circumstances. The following Illustration is based on the example used in IFRS S2 to explain when an entity reassesses its circumstances: [IFRS S2.B3]

Illustration 4-2: Reassessing an entity's circumstances

Entity A carries out its climate-related scenario analysis every three years to align with its strategic planning cycle. In accordance with paragraph B3 of IFRS S2, Entity A would be required to assess its circumstances every three years when it carries out its scenario analysis. Each time Entity A assesses its circumstances, it needs to reconsider its exposure to climate-related risks and opportunities and the skills, capabilities and resources available at that time.

(ii) Determining the appropriate approach to climate-related scenario analysis

Determining an approach to climate-related scenario analysis that considers all reasonable and supportable information available to the entity at the reporting date without undue cost or effort involves: [IFRS S2.B8]

- Selecting inputs to the climate-related scenario analysis
- Making analytical choices about how to carry out the climate-related scenario analysis

According to IFRS S2, reasonable and supportable information includes information that is obtained from an external source or owned or developed internally and is about: [IFRS S2.B9]

- Past events
- Current conditions
- Forecasts of future conditions
- Quantitative or qualitative information

Judgement is needed to determine the mix of inputs and analytical choices that enables an entity to consider all reasonable and supportable information that is available to it at the reporting date without undue cost or effort. The degree of judgement required depends on the availability of detailed information and the time horizon (i.e., the degree of judgement required increases as the time horizon increases and the availability of detailed information decreases). [IFRS S2.B10].

Selecting inputs

An entity also needs to consider all reasonable and supportable information available to it at the reporting date without undue cost or effort when selecting the scenarios, variable and other inputs to use in its climate-related scenario analysis. [IFRS S2.B11]

The ISSB clarified that publicly available climate-related scenarios from authoritative sources that describe future trends and a range of pathways to plausible outcomes are inputs that are available to the entity without undue cost or effort. [IFRS S2.B11].

Having a reasonable and supportable basis for selecting a particular scenario or set of scenarios means that the inputs to an entity's climate-related scenario analysis need to be relevant to the entity's circumstances.

Therefore, when selecting a scenario or set of scenarios, the entity considers factors such as: [IFRS S2.B12, IFRS S2.13, IFRS S2.BC66]

- The type and nature of activities undertaken by the entity
- The geographical location of those activities
- The physical and transition risks to which it is exposed

IFRS S2 does not specify the scenarios that an entity is required to use, because the ISSB decided that it would not be practical, the scenarios specified might become outdated and it could lead to information being disclosed that fails to reflect the entity's specific circumstances and management's view of what is plausible. [IFRS S2.BC67].

The below Illustration is based on an example used in IFRS S2: [IFRS S2.B12]

Illustration 4-3: Selecting relevant scenarios

Entity A's assets and operations are concentrated in Jurisdiction X where emissions are likely to be regulated in the near future. To carry out scenario analysis, Entity A selects a scenario that is consistent with Jurisdiction X's commitments to the latest international agreement on climate change.

IFRS S2 also requires an entity to disclose information such as the number of scenarios used and whether the scenarios cover different outcomes or pathways (such as, orderly and disorderly transition scenarios). This forms part of the requirement to disclose whether the analysis included a diverse range of scenarios. [IFRS S2.22(b)(i)(2), IFRS S2.BC66].

How we see it

In our view, IFRS S2 requires an entity to perform scenario analysis using at least two scenarios. Some entities may identify a scenario as their 'base case' for the purposes of identifying the climate-related risks and opportunities that can reasonably be expected to affect their prospects. When this occurs, and depending on facts and circumstances, it may be possible for an entity to meet the disclosure objectives of IFRS S2 by assessing the resilience of the entity's strategy and business model using only one other scenario. However, in our view, good practice is for an entity to assess resilience using at least two other scenarios that are different from the 'base case'.

In our view, there may be circumstances in which an entity can meet the objective of the resilience assessment disclosures by selecting different scenarios for transition risk and physical risk when performing its resilience assessment. That is, an entity can use one scenario (or scenarios) for assessing the resilience of its strategy and business model to transition risks and another scenario (or scenarios) for assessing resilience to physical risks.

Making analytical choices

Analytical choices include whether an entity uses qualitative analysis or quantitative modelling in carrying out climate-related scenario analysis.

IFRS S2 requires an entity to prioritise the analytical choices that will enable it to consider all reasonable and supportable information that is available to it at the reporting date without undue cost or effort. For example, an entity's resilience assessment needs to incorporate multiple carbon price pathways associated with a given outcome (e.g., a 1.5 degree Celsius outcome) if information about those pathways is available without undue cost or effort and this approach is warranted by the entity's risk exposure. [IFRS S2.B14].

In making those analytical choices, the ISSB noted that: [IFRS S2.B15]

- The use of quantitative information will often enable a more robust assessment of an entity's climate resilience.

- The use of qualitative information including scenario narratives, which might or might not be combined with quantitative data, can also provide a reasonable and supportable basis for an entity's resilience assessment.

(iii) Additional considerations when determining an entity's approach to climate-related scenario analysis over time

IFRS S2 states that an entity's approach to climate-related scenario analysis may not be the same from one reporting period or strategic planning cycle to the next. [IFRS S2.B16]. This is because:

- Climate-related scenario analysis is an evolving practice.
- The approach to scenario analysis that an entity uses is based on its particular circumstances (i.e., its exposure to climate-related risks and opportunities and the skills, capabilities and resources available to the entity). Therefore, as those circumstances change over time, the entity's approach to climate-related scenario analysis will change too.

For example, an entity that is highly exposed to climate-related risks might initially carry out scenario analysis by using qualitative scenario narratives because it does not currently have the skills, capabilities or resources to carry out quantitative climate-related scenario analysis. However, as the entity builds its capabilities through experience over time, the entity would begin to apply a more advanced quantitative approach to climate-related scenario analysis. In contrast, an entity that is highly exposed to climate-related risks which does have access to the necessary skills, capabilities or resources, is required to apply a more advanced quantitative approach to climate-related scenario analysis. [IFRS S2.B17].

TCFD comparison

The ISSB indicates that IFRS S2 disclosure requirements for an entity's strategy for managing climate-related risks and opportunities is broadly consistent with the TCFD recommended disclosures. However, in its TCFD comparison document, the ISSB noted that there are some differences, including those outlined below.

For disclosures related to an entity's climate-related risks and opportunities, IFRS S2:

- Includes an additional requirement for an entity to refer to and consider the applicability of industry-based disclosure topics in the *Industry-based Guidance on Implementing IFRS S2*, when identifying climate-related risks and opportunities
- Requires more detailed information to be disclosed about where climate-related risks and opportunities are concentrated within an entity's business model and value chain

For disclosures related to the impact of an entity's climate-related risks and opportunities on its business strategy and financial planning, IFRS S2:

- Requires more detailed information about the entity's response to the identified risks and opportunities, including any transition plans that the entity has and how the entity plans to achieve its climate-related targets
- Sets out criteria for when quantitative and qualitative information is required when disclosing the current and anticipated effects of the risks and opportunities on an entity's financial position, financial performance and cash flows
- Sets out the parameters for the information and approach to be used in disclosing the anticipated financial effects (i.e., to use all reasonable and supportable information that is available at the reporting date without undue cost or effort and to use an approach that is commensurate with the entity's circumstances)

For disclosures related to the resilience of the entity's strategy, IFRS S2:

- Does not specify specific scenarios that an entity must use in its climate-related scenario analysis
- Requires more detailed information to be disclosed about the resilience assessment, including significant areas of uncertainty in the assessment, the entity's capacity to adjust and adapt its strategy and business model, and how and when the scenario analysis was carried out
- Sets out the parameters for the information and approach to be used in climate-related scenario analysis (i.e., to consider all reasonable and supportable information that is available at the reporting date without undue cost or effort and to use an approach that is commensurate with the entity's circumstances)

4.4 Risk management

The risk management requirements in IFRS S2 for climate-related risks and opportunities correspond with the risk management disclosure requirements for sustainability-related risks and opportunities in IFRS S1, except that IFRS S2 requires an entity to provide information about the use of climate-related scenario analysis in its risk management processes.

Specifically, IFRS S2 requires an entity to explain whether and how the entity uses climate-related scenario analysis to inform its identification of climate-related opportunities when disclosing information about the processes it uses to identify, assess, prioritise and monitor climate-related opportunities.

[IFRS S2.25(b)].

In respect of the remainder of the risk management disclosure requirements in IFRS S2, the commentary in Chapter 52 on risk management disclosure requirements also applies to the preparation of risk management disclosures relating to climate-related risks and opportunities.

An entity is not required to provide separate risk management disclosures for each sustainability-related risk and opportunity if oversight of the entity's sustainability-related risks and opportunities is managed on an integrated basis. In such cases, an entity is required to avoid unnecessary duplication by providing an integrated risk management disclosure that meets the requirements set out in IFRS S2 and IFRS S1. *[IFRS S2.26].*

TCFD comparison

The ISSB indicates that IFRS S2 disclosure requirements about risk management for climate-related risks and opportunities is broadly consistent with the TCFD recommended disclosures, which focus more on risks.

For disclosures that describe an entity's processes for identifying, assessing, and managing climate-related risks, the ISSB noted in its TCFD comparison document that IFRS S2:

- Requires more detailed information about: the input parameters that an entity uses to identify risks; if and how the entity uses scenario analysis to identify risks; and whether the entity's processes for identifying, assessing, prioritising and monitoring risks have changed since the last reporting period
- Includes additional disclosures of the entity's processes for identifying, assessing, prioritising and monitoring opportunities

For disclosures related to describing how an entity's processes for identifying, assessing, and managing climate-related risks are integrated into the entity's overall risk management, the ISSB noted that IFRS S2 includes additional disclosures on the extent to which, and how, the processes used to identify, assess, prioritise and monitor opportunities are integrated into and inform the entity's overall risk management process.

4.4 Risk management

The risk management requirements in IFRS S2 for climate-related risks and opportunities correspond with the risk management disclosure requirements for sustainability-related risks and opportunities in IFRS S1, except that IFRS S2 requires an entity to provide information about the use of climate-related scenario analysis in its risk management processes.

Specifically, IFRS S2 requires an entity to explain whether and how the entity uses climate-related scenario analysis to inform its identification of climate-related opportunities when disclosing information about the processes it uses to identify, assess, prioritise and monitor climate-related opportunities.

[IFRS S2.25(b)].

In respect of the remainder of the risk management disclosure requirements in IFRS S2, the commentary in Chapter 52 on risk management disclosure requirements also applies to the preparation of risk management disclosures relating to climate-related risks and opportunities.

An entity is not required to provide separate risk management disclosures for each sustainability-related risk and opportunity if oversight of the entity's sustainability-related risks and opportunities is managed on an integrated basis. In such cases, an entity is required to avoid unnecessary duplication by providing an integrated risk management disclosure that meets the requirements set out in IFRS S2 and IFRS S1. *[IFRS S2.26].*

TCFD comparison

The ISSB indicates that IFRS S2 disclosure requirements about risk management for climate-related risks and opportunities is broadly consistent with the TCFD recommended disclosures, which focus more on risks.

For disclosures that describe an entity's processes for identifying, assessing, and managing climate-related risks, the ISSB noted in its TCFD comparison document that IFRS S2:

- Requires more detailed information about: the input parameters that an entity uses to identify risks; if and how the entity uses scenario analysis to identify risks; and whether the entity's processes for identifying, assessing, prioritising and monitoring risks have changed since the last reporting period
- Includes additional disclosures of the entity's processes for identifying, assessing, prioritising and monitoring opportunities

For disclosures related to describing how an entity's processes for identifying, assessing, and managing climate-related risks are integrated into the entity's overall risk management, the ISSB noted that IFRS S2 includes additional disclosures on the extent to which, and how, the processes used to identify, assess, prioritise and monitor opportunities are integrated into and inform the entity's overall risk management process.

4.5 Metrics and targets

The disclosure requirements in IFRS S2 for metrics and targets are much more detailed than the general disclosure requirements for metrics and targets in IFRS S1 because IFRS S2 specifically addresses the metrics and targets that are relevant to climate-related risks and opportunities.

To enable primary users to understand an entity's performance in relation to its climate-related risks and opportunities, including progress towards any of the climate-related targets it has set, and any targets it is required to meet by law or regulation, IFRS S2 requires an entity to disclose:

- Information related to seven cross-industry metric categories (i.e., metrics that are industry agnostic) (see section 4.5.1 below)

- Industry-based metrics associated with the entity's business model and economic activities (i.e., metrics that are relevant to the industry that the entity participates in) (see section 4.5.2 below)
- Climate-related targets, which may be set either by the entity or required by laws or regulations that apply to the entity, to mitigate or adapt to climate-related risks or take advantage of climate-related opportunities, including metrics used by the government body or management to measure progress towards these targets (see section 4.5.3 below) [IFRS S2.27, IFRS S2.28]

IFRS S2 requires an entity to disclose information about metrics even if the entity does not have governance arrangements, strategies or risk management processes that address climate-related risks and opportunities. The ISSB clarified that the objective of the disclosures on metrics is to require an entity to disclose information about its performance against: [IFRS S2.BC73]

- The metrics it uses for measuring and monitoring climate-related risks and opportunities (which may include metrics that are not specified by IFRS S2)
- The metrics specified by IFRS S2 (even in cases where the entity does not use those metrics to measure and monitor its climate-related risks and opportunities)

4.5.1 Cross-industry metrics

IFRS S2 requires entities to disclose information about seven cross-industry metric categories that the ISSB derived from the TCFD's *Guidance on Metrics, Targets and Transition Plans*⁴¹, which was published in October 2021.

The seven cross-industry metric categories are summarised in Figure 4-9 below. [IFRS S2.29].

Figure 4-9: Cross-industry metrics

#	Category	Information to be disclosed
1	GHG emissions	Absolute gross GHG emissions generated during the reporting period (in metric tonnes of CO ₂ equivalent), classified as: ▪ Scope 1 GHG emissions ▪ Scope 2 GHG emissions ▪ Scope 3 GHG emissions This disclosure and other GHG-related disclosures are discussed further in sections 4.5.1.A and 5 below.
2	Climate-related transition risks	The amount and percentage of assets or business activities vulnerable to climate-related transition risks (see section 4.5.1.B below)
3	Climate-related physical risks	The amount and percentage of assets or business activities vulnerable to climate-related physical risks (see section 4.5.1.B below).
4	Climate-related opportunities	The amount and percentage of assets or business activities aligned with climate-related opportunities (see section 4.5.1.B below)
5	Capital deployment	The amount of capital expenditure, financing or investment deployed towards climate-related risks and opportunities (see section 4.5.1.C below)

41 [TCFD: Guidance on Metrics, Targets and Transition Plans](#), TCFD, October 2021, available in the TCFD's website.

6	Internal carbon pricing	▪ An explanation of whether and how the entity is applying a carbon price in decision-making ▪ The price of GHG emissions (per metric tonne) that the entity uses to assess the costs of its GHG emissions See section 4.5.1.D below.
7	Remuneration	▪ A description of whether and how climate-related considerations are factored into executive remuneration ▪ The percentage of executive management remuneration recognised in the current reporting period that is linked to climate-related considerations See section 4.5.1.E below.

By requiring entities to provide common information to primary users regardless of the industries to which they belong, the cross-industry metrics are intended to allow users to: [IFRS S2.BC75]

- Assess an entity's exposure to, and management of, its climate-related risks and opportunities
- Gain an understanding of key aspects and drivers of climate-related risks and opportunities
- Gain insight into the potential effects of climate change on the entity

4.5.1.A GHG emissions disclosures

An entity is required to disclose its absolute gross GHG emissions generated during the reporting period. An entity's gross GHG emissions are classified as: [IFRS S2.29(a)(i)]

- Scope 1 GHG emissions
- Scope 2 GHG emissions
- Scope 3 GHG emissions

An entity's disclosure of its GHG emissions is expressed as metric tonnes of CO₂ equivalent. This means that the entity needs to aggregate the seven constituent GHG gases into CO₂ equivalent value. Refer to section 5.3.2 for further discussion.

The ISSB's Education material, *Greenhouse Gas Emissions Disclosure requirements applying IFRS S2 Climate-related Disclosures*, clarified that:

- 'Gross' refers to the measurement of GHG emissions without considering any removal efforts (e.g., the use of carbon credits)
- 'Absolute' refers to the disclosure of the total amount of GHG emissions. The disclosure of GHG emissions intensity would not be an example of absolute GHG emissions.

IFRS S2 requires the *GHG Protocol* to be used to measure an entity's GHG emissions unless a jurisdictional authority or securities exchange requires a different method to be used.

In its 2023 Annual Report, Standard Chartered plc discloses its total GHG emissions for Scope 1, Scope 2 and Scope 3 (by category) in tonnes of CO₂ equivalent. The footnotes indicate where restatements have been made.

Practical example 4-5: Standard Chartered PLC (2023) United Kingdom

Annual Report 2023 [extract]

Sustainability Review [extract]

Sustainability Strategic Pillars [extract]

Pillar 3: Deliver on our annual milestones set forth in our net zero roadmap [extract]

Our emission sources [extract]

Scopes of GHG emissions	2023 ⁴ (tCO ₂ e)	2022 (tCO ₂ e)	2021 (tCO ₂ e)
Scope 1 emissions ¹	8,488	2,071	2,902
Scope 2 emissions ²	26,246	47,363	82,761
Total Scope 1 and 2 emissions³	34,734	49,434	85,663
Scope 3 emissions:			
Category 1: Purchased goods and services (other)	286,304	380,732	330,224
Category 1: Purchased goods and services (data centres) ⁵	4,431	7,060	43,132
Category 2: Capital goods	42,707	34,496	47,217
Category 4: Upstream transportation and distribution	24,125	20,300	20,949
Category 5: Waste generated in operations ⁶	520	747	
Category 6: Business travel (air travel)	60,279	39,107	3,654
Category 6: Business travel (miscellaneous other than air travel)	8,918	2,654	4,994
Category 7: Employee commuting	71,228	61,917	
Category 13: Downstream leased assets (real estate)	7,898	8,594	
Category 15: Investments ^{7,8}	41,944,000	49,512,000	45,200,000
Total Scope 3 emissions	42,450,410	50,067,607	45,650,190
Total emissions	42,485,144	50,117,041	45,735,853

- 1 As we aim to improve our emissions measurement and reporting year-on-year, we have included fugitive emissions in our Scope 1 figures for the first time in 2023: 5,266 tCO₂e. Prior year data was not available for fugitive emissions. For more information on the methodology and assumptions used to calculate GHG emissions, please refer to the Environmental Reporting Criteria at sc.com/sustainabilityhub.
- 2 Scope 2 indirect emissions include indirect emissions from purchased electricity measured under the market-based approach as set out in the GHG protocol.
- 3 Our Scope 1 and 2 emissions calculations for the most recent reporting year were independently assured by Global Documentation Ltd., the assurance scope excluded fugitive emissions. Market-based emissions have decreased from 2022 to 2023 due to footprint reduction, efficiency gains and the purchase of additional energy attribution certificates by the Group.
- 4 The reporting period for GHG emissions is 1 October to 30 September. This only differs for Category 1: Purchased Goods (other); Category 2: Capital goods; Category 4: Upstream transportation and distribution; Category 6: Business travel (miscellaneous other than air travel) and Category 15: Investments where a period of 1 January to 31 December is used. Emissions data for these categories is also on a one-year lag with emissions reported in 2023 based on 2022 emissions data.
- 5 Purchased goods and services (data centres) have been restated from 706tCO₂e to 7,060tCO₂e due to an error in converting the unit of emissions.
- 6 Waste emissions have been restated from 498tCO₂e to 747tCO₂e due to an out of date emissions factor being used in prior year.
- 7 Category 15: Investments only includes financed emissions and are measured on a one-year lag, with emissions reported in 2023 being based on 2022 emissions and financial data. Financed emissions are included on page 110. A facilitated emissions baseline was measured for the first time during the year. Refer to page 112 for more details.
- 8 2022 absolute emissions have been restated from 58.5MtCO₂e to 49.5MtCO₂e. This is due to (i) reduction in shipping absolute emissions as improved data has resulted in individual ship-level fair values being obtained; (ii) pausing of aviation emissions reporting due to the sale of the Group's aviation leasing and lending business; (iii) decreases in Automotive Manufacturers' emissions due to changes in the industry emissions reporting methodology referenced earlier on page 95; (iv) decreases in emissions from the 'Others' sector where improved data has been obtained to calculate emissions; and (v) the sectoral baselining of emissions reporting for Cement and Commercial Real Estate as separate high-emitting sectors.

In its 2023 Annual Report, Magna International Inc. discloses information about its GHG intensity metrics.

Practical example 4-6: Magna International Inc. Canada (2023)

FY 2023 Sustainability Report [extract] Sustainability Metrics [extract] 5.1 Energy Management and Emissions [extract]

5.1.2 Emissions

Energy consumed can be converted to CO₂ emissions based on regional conversion factors. In order to help us and our stakeholders better assess trends related to the emissions we generate, we track emissions "intensity" on the basis of total sales, employee headcount and aggregate square footage of our facilities and offices. These intensity metrics assist us in determining whether we are becoming more efficient by normalizing emissions on a per dollar of sales, per employee and per square footage basis. The raw data for Scope 1 & 2 emissions, together with intensity metrics are set out below. Magna adheres to the GHG Protocol Corporate Accounting and Reporting Standard ("GHG Protocol") for its Scope 1 and 2 reporting. Magna adheres to the GHG Protocol Corporate Value Chain (Scope 3) Standard and guidance from the SBTi for its Scope 3 reporting. We use commonly accepted emission factors such as those available from the GHG Protocol, International Energy Association (IEA), United States EPA, including its eGrid database, United Kingdom Department for Energy Security and Net Zero,ecoinvent and CEDA (Comprehensive Environmental Data Archive), as well as other local or regional references. Our Scope 1 and 2 emissions data is verified annually by an independent third party verification firm.

ISSB S2, 29(a)(i)
Scope 1 Emissions (metric tons)
Scope 2 Emissions (metric tons) ⁽¹⁾
Scope 1 & 2 Emissions (metric tons) ⁽²⁾
Sales (USD, millions)
Sales Intensity (CO ₂ metric tons/\$ Sales)
Employees
Employee Intensity (metric tons/employee)
Square Footage (million sq. ft.)
Square Footage Intensity (metric tons/sq. ft.)

Notes:
(1) Market-based emissions calculation method.
(2) Sales Intensity, Employee Intensity and Square Footage Intensity are calculated as follows:

In connection with our net-zero commitment targets to SBTi for validation, we submitted 2021 as per the table below:

Emission Type
Scope 1 (tCO ₂ e)
Scope 2 (tCO ₂ e)
Scope 3 (tCO ₂ e)
Total

IFRS S2 requires the *Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard* (2004) to be used to measure an entity's GHG emissions unless a jurisdictional authority or a securities exchange on which the entity is listed requires a different method to be used to measure the entity's GHG emissions. [IFRS S2.29(a)(ii)]. The *Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard* (2004) is one of the publications that are collectively referred to as the GHG Protocol. Refer to section 5 below for more details on the GHG Protocol and the use of other methods.

An entity is required to disclose the approach that it uses to measure GHG emissions, including: [IFRS S2.29(a)(iii)]

- The measurement approach, inputs and assumptions used to measure its GHG emissions
- The reason why the entity has chosen the measurement approach, inputs and assumptions used to measure its GHG emissions
- Any changes the entity made to the measurement approach, inputs and assumptions during the reporting period and the reasons for those changes (see section 5.3.1 below for further discussion)

In its 2023 Climate-Related Disclosures Report, Scales Corporation Limited discloses information about measurement approach, inputs and assumptions the entity uses to measure its GHG emissions:

Practical example 4-7:

Scales Corporation Limited (2023)

New Zealand

Climate-Related Disclosures Report - 2023 [extract]

5. Metrics and Targets [extract]

5.2.3 Inclusions [extract]

Table 6: Inclusions, methodologies and uncertainties

Scope	Emission Category	Activity	Data Source	Gwp Source	Methodology, Data
Scope 1	Stationary combustion	Fossil fuels used by plant equipment	Invoices	MFE guidelines 2023	Fuel based method
	Mobile combustion	Fossil fuels used by fleet/pool vehicles and forklifts	Fuel purchase transaction history	MFE guidelines 2023	Fuel based method
	Fugitive emissions	Refrigerant used by refrigeration equipment	Maintenance reports and invoices	MFE guidelines 2023	Top up method. App
Scope 2	Purchased energy	Electricity consumption	Invoices	Selection of electricity grid factors by operating location	Location based method
	Business travel	Air travel	Travel itineraries, reimbursements, credit card purchase history	MFE guidelines 2023, Consumption emissions modelling report	Hybrid method. Distance, quality, medium uncertainty
		Rental car/taxis	Travel itineraries, reimbursements, credit card purchase history	MFE guidelines 2023, Consumption emissions modelling report	Hybrid method. Distance, Dollars spent for tax
		Hotels and accommodation	Travel itineraries, reimbursements, credit card purchase history	MFE guidelines 2023, Consumption emissions modelling report	Nights stayed method where unspecified
	Employee commuting	Employee commuting and working from home	Internal reports/ staff survey	MFE guidelines 2023	Distance based method, quality is low due to uncertainty
Scope 3	Upstream transportation and distribution	Movement of product from suppliers	Logistics shipping and freight reports	UK GHG conversion factors 2023	Tonnes km (tkm) based method, Only includes emissions from downstream uncertainty
	Downstream transportation and distribution	Movement of product to customers	Logistics shipping and freight reports	MFE guidelines 2023, UK GHG conversion factors 2023	tkm based method, emissions from downstream of uncertainty
	Purchased goods and services	Coldstores/toll processing provided by a third party (toll processing relates specifically to Shelby)	Third-party supplier warehouse volume reports/invoices	Selection of electricity grid factors by operating location	Hybrid method. Used toll processing sites
	Fuel and energy related activities	Transmission and distribution (T&D) losses		Selection of electricity T&D loss factors by operating location	Electricity consumption losses-estimation based on uncertainty
		Well-to-tank emissions		UK GHG conversion factors 2023	Fuel consumption approach, medium uncertainty
	Waste generated in operations	Waste	Supplier invoices and waste reports	MFE guidelines 2023	Hybrid method. Weight and number of collection uncertainty
		Water supply and wastewater	Council invoices and meter data	MFE guidelines 2023	Hybrid method. Volume for office spaces, Different Variable data quality
	Upstream leased assets	Short-term leased space	Property measurements and invoices	MFE guidelines 2023	Estimate based on area, Used site footprint

Additional disclosure requirements relating to an entity's absolute gross Scope 1, Scope 2 and Scope 3 GHG emissions are outlined in Figure 4-10 below. [IFRS S2.29(a)(iv)].

Figure 4-10: GHG emissions disclosures

GHG emissions	Specific disclosures
Scope 1 and Scope 2	An entity is required to disaggregate Scope 1 and Scope 2 GHG emissions between: ▪ The consolidated accounting group (e.g., the parent and its consolidated subsidiaries); and ▪ Other investees excluded from the consolidated accounting group (e.g., investees include associates, joint ventures and unconsolidated subsidiaries) An Illustration of this disaggregation is provided in Illustration 4-4 below.
Scope 2	For Scope 2 GHG emissions, an entity discloses: ▪ Its location-based Scope 2 GHG emissions ▪ Information about any contractual instruments that will inform users' understanding of the entity's Scope 2 GHG emissions (i.e., IFRS S2 does not require an entity to also disclose its market-based Scope 2 GHG emissions) The meaning of 'location-based' and 'market-based' Scope 2 GHG emissions is discussed further in section 5.2.3 below.
Scope 3	For Scope 3 GHG emissions, an entity is required to disclose the categories included within the entity's measure of Scope 3 GHG emissions, in accordance with the Scope 3 categories described in the <i>Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2011)</i>. These categories are: ▪ Category 1. Purchased goods and services ▪ Category 2. Capital goods ▪ Category 3. Fuel- and energy-related activities (not included in Scope 1 or Scope 2) ▪ Category 4. Upstream transportation and distribution ▪ Category 5. Waste generated in operations ▪ Category 6. Business travel ▪ Category 7. Employee commuting ▪ Category 8. Upstream leased assets ▪ Category 9. Downstream transportation and distribution ▪ Category 10. Processing of sold products ▪ Category 11. Use of sold products ▪ Category 12. End-of-life treatment of sold products ▪ Category 13. Downstream leased assets ▪ Category 14. Franchises ▪ Category 15. Investments Additional disclosures are required for Scope 3 'financed emissions' if an entity is engaged in asset management, commercial banking or insurance activities. Financed emissions are discussed further in section 5.7 below.

The following Illustration is based on Illustrative Example 1 in *Accompanying Guidance on Climate-related Disclosures: [IFRS S2.IE3, IFRS S2.IE4, IFRS S2.IE5]*

Illustration 4-4: Disaggregating Scope 1 and Scope 2 GHG emissions

Entity A has an 80% interest in SubCo and a 40% interest in an incorporated joint venture, JVCo. Entity A and the other parties to the joint venture jointly control JVCo. Entity A has been appointed as the operator of JVCo, which means that Entity A is responsible for managing and conducting the activities and operations approved by the joint venturers.

Entity A prepares financial statements in accordance with IFRS accounting standards. Entity A's consolidated financial statements present the assets, liabilities, equity, income, expenses and cash flows of Entity A and the entities it controls as single economic entity. Entity A determines that it controls SubCo. The reporting entity of Entity A's consolidated financial statements, therefore, consists of Entity A and SubCo. The assets, liabilities, equity, income, expenses and cash flows of JVCo are not included in the Entity A consolidated group because Entity A does not control JVCo. Instead, Entity A recognises its interest in JVCo as an equity accounted investment.

Entity A's consolidated group is also the reporting entity for the preparation of Entity A's sustainability-related financial disclosures, including its disclosure of GHG emissions. Entity A has selected the operational control approach⁴² to measure its GHG emissions. Because Entity A has operational control over JVCo, all of JVCo's GHG emissions are included in Entity A's GHG emissions (as the reporting entity).

The Scope 1 and Scope 2 GHG emissions for each individual entity is:

GHG emissions (metric tonnes CO ₂ e)			
	Scope 1	Scope 2	Total
Entity A (parent)	1,000	350	1,350
SubCo	3,000	800	3,800
JVCo	6,000	1,400	7,400

The Scope 1 and Scope 2 GHG emissions for the Entity A reporting entity in accordance with operational control is measured as follows (noting that by having operational control, Entity A would include 100% of the GHG emissions into the measurement of its GHG emissions):

GHG emissions (metric tonnes CO ₂ e)			
	Scope 1	Scope 2	Total
Entity A (parent)	1,000	350	1,350
SubCo	3,000	800	3,800
JVCo	6,000	1,400	7,400
Total	10,000	2,550	12,550

In accordance with paragraph 29(a)(iii) of IFRS S2, Entity A discloses the disaggregation of its Scope 1 and Scope 2 GHG emissions between the consolidated group and its other investee as follows:

GHG emissions (metric tonnes CO ₂ e)			
	Scope 1	Scope 2	Total
Entity A consolidated group	4,000	1,150	5,150
Investment in JVCo	6,000	1,400	7,400
Total Scope 1 and Scope 2 GHG emissions (operational control basis)	10,000	2,550	12,550

42 The operational control approach is discussed in section 5.2.2.B (ii) below.

Frequently asked questions

Question 4-2: Does Category 15: Investments apply only to financial institutions?

Category 15 is relevant for any entity with investments that are not included in the entity's Scope 1 and Scope 2 GHG emissions. Financial institutions such as commercial banks often have a large number of investments in this category.

Question 4-3: How do the requirements in IFRS S1 for comparative information apply to the disclosure of GHG emissions when a subsidiary in a group has been acquired or disposed of?

(TIG meeting 13 June 2024 - Agenda paper no. 2, ISSB meeting 24 July 2024 - Agenda paper no. 9)

Having considered its issue in Question 5-1 of Chapter 52, the TIG further discussed the application of the requirements in IFRS S1.70 about comparative information when applying IFRS S2 when there has been a change in the composition of the reporting entity (such as the acquisition or disposal of a subsidiary) and whether IFRS S2 would require a different approach than IFRS S1.

The TIG noted that IFRS S1.70 applies to all information disclosed using ISSB standards, unless another ISSB standard requires or allows otherwise. Considering this requirement, the TIG agreed that since IFRS S2 does not include any additional specific requirements related to the disclosure of comparative information, the principles of IFRS S1 need to be applied in the application of IFRS S2. Therefore, consistent with the outcome for Question 5-1 in Chapter 52, the TIG agreed that when there has been a change in the composition of the reporting entity as a result of acquiring or disposing of a subsidiary, comparative climate-related information reflects the composition of the reporting entity in the related financial statements in the comparative period. That is, for information accompanying the consolidated financial statements, what information is given will depend on the composition of the group at that time, in accordance with applicable GAAP.

In its discussion, the TIG considered the requirement in IFRS S2 to measure GHG emissions in accordance with the GHG Protocol. IFRS S2.29a(ii) requires an entity to measure its GHG emissions in accordance with the GHG Protocol only to the extent that the requirements in the GHG Protocol do not conflict with the requirements in IFRS S2. Apart from requirements associated with the measurement of GHG emissions, the GHG Protocol also includes requirements associated with other aspects of GHG emissions reporting. However, the TIG referred to IFRS S2.B23 and agreed that an entity is only required to use the GHG Protocol to measure the GHG emissions of the reporting entity using the relevant measurement approach selected in applying the GHG protocol. That is, the GHG Protocol is only used to measure what is required to be disclosed by ISSB standards and any other requirements in the GHG Protocol (including those relating to comparative information) would not affect the application of IFRS S1 requirements. Therefore, the information provided for the current reporting period and the comparative period relating to GHG emissions needs to reflect the composition of the reporting entity at each of those points in time based on the applicable GAAP, in accordance with IFRS S1. The TIG also pointed out that while information about GHG emissions is required to be provided for the consolidated group (according to the applicable GAAP), the composition of the group does not limit the choice of approach about how the emissions are measured. Any of the alternative GHG emissions measurement approaches included in the GHG Protocol is available to the entity and permitted by IFRS S2 (see further discussion at section 5.2.2).

The difference between the boundaries of a reporting entity and the approach to measurement may not necessarily lead to a direct relationship between changes in the reporting entity and changes in the measurement of GHG emissions. The TIG used the following example: An entity acquires a subsidiary in the current period but had operational control over that subsidiary's operations in the comparative period. The change in the reporting entity in the current period does not lead to any change in the measurement of the GHG emissions for the reporting entity with respect to the comparative period because the entity already had operational control over the subsidiary for the comparative period.

Question 4-4: When an entity estimates Scope 3 GHG emissions in the current period by using information disclosed in the prior period, in applying the requirements of IFRS S1.B50, does that entity need to revise those estimated amounts in the following year when these become comparative information?

(TIG meeting 13 June 2024 - Agenda paper no. 1, ISSB meeting 24 July 2024 - Agenda paper no. 9)

The TIG discussed a situation where a reporting entity has the same reporting period as an entity in its value chain but the information about Scope 3 GHG emissions included in Category 15 Investments of that entity in its value chain is not available in time for the reporting entity's year-end reporting. Therefore, to estimate its GHG emissions for the current reporting period, the reporting entity uses, as a reasonable estimate, the information disclosed by the entity in its value chain from the prior period.

Illustration 4-5: Estimated information for the comparative period

Entity A is the reporting entity and Entity B is an entity that is included in Entity A's value chain. Both entities have a 12-month reporting period that ends on 31 December. Entity A reports two years of information, the current reporting period (ended 31 December 20X2) and comparative period (ended 31 December 20X1) by estimating and disclosing GHG emissions information as follows:

- In its prior period report (20X1), Entity A used GHG emissions data from Entity B's 20X0 report as an estimate for 20X1.
- For its current period (20X2), Entity A used GHG emissions data from Entity B's 20X1 report as a reasonable estimate for 20X2.
- For its comparative period in the 20X2 report (i.e., 20X1 information included as comparative information in the 20X2 report), Entity A updated the comparative period's estimated amounts based on the new information as it now has the actual data of Entity B's 20X1 report.

As a result, Entity A uses for both 20X2 (Entity B's 20X1 published GHG emissions data as an estimate) and 20X1 (actual Entity B's 20X1 published GHG emissions data) the same 20X1 GHG emissions data set.

The TIG considered the concerns raised in the situation described above with respect to the comparability of information reported when applying IFRS S1.B50(a) and whether changes as a result of decarbonisation, in Entity B's GHG emissions would be reflected appropriately over time. However, the TIG agreed that even in such situations, it is still necessary to apply the requirements of IFRS S1.B50 to revise preceding period estimates (assuming these have been considered by the entity as a reasonable estimate) when presenting comparative information to reflect new information that provides evidence of circumstances that existed in that preceding period. In doing so, the entity will provide primary users with information about what was changed, how much it changed by and why it was changed.

During its discussion, the TIG pointed out the following:

- IFRS S1.B50 requires an entity to revise an estimated amount disclosed in the preceding period if new information is identified and the new information provides evidence of circumstances that existed in the preceding period. However, purely revising the estimates to comply with this requirement would not be sufficient. An entity is also required to disclose the difference between the amount disclosed in the preceding period and the revised comparative amount, as well as to explain the reasons for revising the comparative amount. Such information, which complements the revised estimates, enhances the primary users' understandability of the disclosed information (see discussion in Chapter 52). Moreover, current period disclosure about the likelihood of revising estimates in future periods (e.g., in anticipation of receiving updated information for an estimated amount that is currently being disclosed) could be material to users (see also Chapter 52 for further discussion on disclosure requirements about measurement uncertainties).
- In preparing disclosures to meet the requirements in IFRS S1.B50, an entity is required to apply materiality. Whether information is material is a matter of judgement and depends on the facts involved and the circumstances of a specific entity. An entity needs to determine whether revising preceding period estimated amounts when providing comparative information as well as providing information about the difference between a preceding period amount and a current period revised amount is material. An entity may assess, based on both qualitative and quantitative factors, that such information would influence decisions that primary users make or may determine that this is not material information and therefore, not apply the requirements IFRS S1.B50. See discussion on the application of materiality in Chapter 52.
- The TIG noted that, although the question was discussed in the context of Scope 3 Category 15 GHG emissions for an entity operating in the financial services industry, the outcome and the points emphasised above would be equally applicable to all other metrics that are estimates (in specific circumstances) and to entities across different industries. However, the TIG made some additional points that specifically apply to the measurement of Scope 3 GHG emissions:
 - The approach of using prior period information from an entity in the value chain as the basis to estimate current period information is appropriate in the circumstances of an entity to measure GHG emissions according to the requirements in IFRS S2. This includes the use of a measurement approach, inputs and assumptions that result in a faithful representation of this measurement as well as the use all reasonable and supportable information that is available to the entity at the reporting date without undue cost or effort (for further discussion, see section 5.6.1 above).
 - IFRS S1 and IFRS S2 are applied together. Requirements in IFRS S1 are applied in the context of the overall disclosure objective and specific disclosure objectives in IFRS S2. Therefore, the TIG emphasised the requirements of IFRS S2 with respect to providing information that: a) enables primary users to understand the most significant uncertainties affecting amounts reported in an entity's sustainability-related financial disclosures (see Chapter 52), b) is a complete, neutral and accurate depiction of an entity's sustainability-related risks and opportunities (see Chapter 52), c) is of sufficient quality and quantity and includes estimates for which reasonable assertions and inputs are used (see Chapter 52) and, d) is clear and concise (see Chapter 52).

4.5.1.B Assets or business activities vulnerable to climate-related risks or aligned to climate-related opportunities

An entity is required to disclose the amount and percentage of assets or business activities that are:

- Vulnerable to climate-related transition risks
- Vulnerable to climate-related physical risks
- Aligned with climate-related opportunities

These disclosures are required separately for transition risks, physical risks and opportunities.

Figure 4-11 below lists some example metrics, which are provided in *Accompanying Guidance on IFRS S2 Climate-related Disclosures*.

Figure 4-11: Cross-industry metrics relating to risks and opportunities

Metric category	Example metrics (expressed in amount and percentage)
Climate-related transition risks	▪ volume of real estate collaterals highly exposed to transition risk ▪ concentration of credit exposure to carbon-related assets ▪ percentage of revenue from coal mining ▪ percentage of revenue passenger kilometres not covered by the Carbon Offsetting and Reduction Scheme for International Aviation
Climate-related physical risks	▪ proportion of property, infrastructure or other alternative asset portfolios in areas subject to flooding, heat stress or water stress ▪ proportion of real assets exposed to climate-related hazards ▪ number and value of mortgage loans in 100-year flood zones ▪ wastewater treatment capacity located in 100-year flood zones ▪ revenue associated with water withdrawn and consumed in regions of high or extremely high baseline water stress
Climate-related opportunities	▪ revenues from products or services that support the transition to a lower-carbon economy ▪ net premiums written related to energy efficiency and lower-carbon technology ▪ number of (1) zero-emissions vehicles, (2) hybrid vehicles and (3) plug-in hybrid vehicles sold ▪ proportion of homes delivered certified to a third-party, multi-attribute, green-building standard

In preparing these disclosures, IFRS S2 states that an entity must use all reasonable and supportable information that is available to the entity at the reporting date without undue cost or effort. [IFRS S2.30]. The application of this requirement is discussed further in sections 4.3.1.C above as well as Chapter 52.

Frequently asked questions

Question 4-5: What do the terms 'business activities' and 'vulnerable' mean in the absence of definitions in IFRS S2?

(TIG meeting 15 March 2024 - Agenda paper no. 1, ISSB meeting 16 May 2024 - Agenda paper no. 9)

The TIG agreed with the ISSB staff analysis that the nature of an entity's assets and business activities and associated vulnerabilities could vary greatly, depending on the entity. The ISSB staff explained that this is why specific metrics are not prescribed in paragraph 29 of IFRS S2. Instead, decisions about the disclosure of those metrics should be made in the context of the disclosure objectives of IFRS S2. The disclosure objectives provide an entity with an 'anchor' to apply judgement to determine the information to be disclosed and the level of granularity at which that information is disclosed. The information that is required to be disclosed is that which is reasonably expected to influence an investor decision, which also means that materiality judgements are critical in determining the information to provide.

The TIG observed that factors that could be considered when identifying 'business activities' include:

- Activities that are exposed to climate-related risks which may impact the entity's operations and future performance. This is based on the specific disclosure objectives on metrics and targets to enable primary users to understand 'an entity's performance' in relation to such risks.
- The types of activities involved in revenue generation or that result in costs incurred.
- Activities based on the various types of operations within the business.

This determination will require an entity to exercise judgement including considering the disclosure that would provide the most decision-useful information to primary users.

Given IFRS S2 requires an entity to disclose separately the business activities vulnerable to physical risks and transition risks because those types of risks might materialise over different time horizons, the TIG also observed that this fact should be considered when determining the types of business activities impacted by physical or transition risks.

The TIG also made the following observations on the term 'vulnerable':

- An entity's 'exposure' to a risk is a helpful guide for determining 'vulnerability' to a risk.
- An assessment of the breadth and composition an entity's value chain is relevant in identifying potential vulnerabilities across the business as a result of climate-related risks.
- The *Industry-based Guidance on implementing IFRS S2* might assist in the identification of relevant types of vulnerabilities based on the entity's business.
- Scenario analysis can provide insights into the entity's exposure to climate-related risks and, therefore, the resulting vulnerabilities.
- An entity might consider the inputs for an asset impairment test for financial statement preparation purposes, as part of an assessment of vulnerabilities across assets for sustainability-related financial disclosures.

Question 4-6: Does the 'amount' of assets or business activities that are vulnerable to climate-related risks or aligned to climate-related opportunities need to be expressed as a monetary amount?

No. The *Accompanying Guidance on IFRS S2 Climate-related Disclosures* has some examples of metrics whereby the amount of assets that are vulnerable to climate-related risk or aligned to climate-related opportunities is expressed as a non-monetary amount (refer to Figure 4-11 above). One of those example metrics that is expressed as a non-monetary amount is wastewater treatment capacity located in 100-year flood zones.

Given that IFRS S2 does not prescribe a basis for measuring or presenting the amount that is used for these metrics, judgement will be required. In exercising that judgement, an entity is required to consider the specific disclosure objective for metrics and targets under IFRS S2.27, which is to enable users of general-purpose financial reports to understand the entity's performance in relation to its climate-related risks and opportunities, as well as connectivity with other general purpose financial reports published by the entity. In some cases, a non-monetary metric may be considered to better meet the disclosure objective. In other cases, the disclosure objective may be better met with a metric expressed as a monetary amount.

Illustration 4-6: Selecting a vulnerability metric

Entity A has a mining project that is exposed to a climate-related physical risk. The mine has been approved to enter into the development phase. The mine asset is measured in Entity A's statement of financial position at historical cost. The carrying amount of the mine is negligible because Entity A's accounting policy is to expense the costs to explore and evaluate the mineral deposit.

In preparing the metric for the amount of assets vulnerable to the climate-related physical risk, Entity A first considers which amounts would provide connectivity between Entity A's financial statements and its climate-related financial disclosures.

- Entity A concludes that a metric based on the mine asset carrying amount would not provide useful information to users because the carrying amount bears no correlation to the future cash flows that Entity A expects to generate from the production of minerals from the mine when it has been developed. Furthermore, because the carrying amount is negligible, the amount also does not provide useful information about Entity A's risk of exposure to a future impairment loss.
- Entity A identifies no other amounts in the financial statements that would provide information to users about the extent of vulnerability of Entity A's assets or business activities to climate-related physical risk. This is because, for example, the mine asset is not yet generating revenue because the minerals are yet to be extracted.

Instead of disclosing the mine's vulnerability arising from the climate-related physical risk using a monetary amount, Entity A identifies that the volume of mineral reserves (i.e., the economically recoverable quantities of minerals in the ground) at the mine would be an amount that provides users with insight into vulnerability to the climate-related physical risk even though this is a non-monetary amount measured in tonnes. Using this amount in the disclosure would also provide connectivity between Entity A's climate-related financial disclosures and its reserves statement, which is a separate report that many mining companies publish to meet the information needs of investors and other users.

In its 2023 Annual Report, NZX Limited discloses information about cross-industry metrics:

Practical example 4-8: NZX Limited (2023)		New Zealand
2023 Annual Report [extract] NZX 2023 CLIMATE STATEMENT [extract] 5. Metrics & Targets [extract] 5.2 Other metrics [extract]		
Cross-industry metric category		
Transition risks: Assets or business activities vulnerable	72.1% of total operating revenue (Capital Markets Origination, Secondary Markets and Funds Management revenue streams)	
Physical risks: Assets or business activities vulnerable	9.7% of total assets (Property, plant & equipment and right-of-use lease assets)	
Climate-related opportunities: revenue, assets or business activities	No assets linked to climate-related opportunities	
Capital deployment: capital expenditure, financing or investment	No capital is currently deployed in low-emissions products and services	
Internal emissions price:	\$143 per tCO ₂ e (Price of carbon credit offsets that we purchase from Toitū)	
Remuneration	Air travel-linked KPIs (Air travel is NZX's largest emission source)	

4.5.1.C Capital deployment

An entity is required to disclose the amount of capital expenditure, financing or investment deployed towards climate-related risks and opportunities. [IFRS S2.29(e)].

IFRS S2 does not provide application guidance that is specific to this disclosure requirement, but it does provide some general guidance, which is outlined in section 4.5.1.F below. In addition, the Accompanying Guidance on IFRS S2 lists the following as example metrics:

- Percentage of annual revenue invested in research and development of lower-carbon products/services
- Percentage of investment in climate adaptation measures (for example, soil health, irrigation and technology)

The following Practical Examples illustrate the disclosure of information about capital deployment:

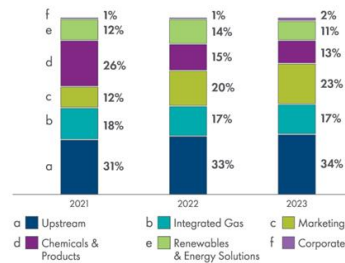
Practical example 4-9: Z Energy Limited (2023)		New Zealand
Climate Statements [extract] Metrics and Targets [extract] Exposure to transition and physical risks [extract]		
Capital deployment		
Expenditure against future energy solutions commitments under Overseas Investment Act		
In 2022, a commitment was made as part of Ampol's application for consent under the Overseas Investment Act 2005 to acquire Z to spend at least \$50 million toward low carbon investments by 30 April 2029 to support future energy solutions in New Zealand. At the end of 2023, \$47.8 million (which includes \$17.5m for taking the Group's holding in Flick Energy to 100 per cent) has been spent aligned with this commitment.		
2023 total capital expenditure on climate-related risks and opportunities		
Total capital expenditure, financing and investment deployed towards climate-related risks and opportunities in 2023 was \$32.6 million, and included investment in the following climate-related risks and opportunities:		
Description	Associated risk/opportunity	Approach and assumptions
EV charging rollout	Reputation Market and technology changes Investment in low carbon Optimise asset base	Installation of additional 82 EV charging bays at Z retail sites
Additional capital investment in Flick	Reputation Market and technology changes Invest in low carbon	Additional capital investment in Flick Electric to bring Z's ownership up to 100%
Investment in Red Phase	Reputation Market and technology changes Investment in low carbon Optimise asset base	Investment in Red Phase
Forest Partners	Emissions Trading Scheme (ETS) Obligations	Investment in the Forest Partners forestry joint venture to help meet Z's future carbon credit obligations

Annual Report and Accounts [extract]

Our journey to net zero [extract]

Energy transition strategy [extract]

Cash capital expenditure evolution by segment



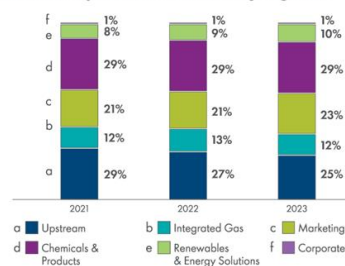
Cash capital expenditure by segment for 2024 is expected to be approximately \$8 billion for Upstream, \$5 billion for Integrated Gas, \$3 billion for Marketing, \$3.4 billion for Chemicals and Products, and \$4.5 billion for Renewables and Energy Solutions.

Investing in the energy transition

Total cash capital expenditure* of \$24.4 billion in 2023

Non-energy products [A] \$2.3 billion	Low-carbon energy solutions [B] \$5.6 billion
LNG, gas and power marketing and trading [C] \$4.0 billion	Oil, oil products and other [D] \$12.5 billion

Operational expenditure evolution by segment



[A] Products for which usage does not cause Scope 3, Category 11 emissions: Lubricants, Chemicals, Convenience Retailing, Agriculture & Forestry, Construction & Road.
[B] E-Mobility and Electric Vehicle Charging Services, Low-Carbon Fuels, Renewable Power Generation, Environmental Solutions, Hydrogen, CCS. We define low-carbon energy products as those that have an average carbon intensity that is lower than conventional hydrocarbon products, assessed on a life-cycle basis.

[C] LNG Production & Trading, Gas & Power Trading, and Energy Marketing.

[D] Upstream segment, GTL, Refining & Trading, Marketing fuel and hydrocarbon sales, Shell Ventures, Corporate segment.

Movements in cash capital expenditure in 2023 versus 2022 were driven by:

- Non-energy products: 41% lower in 2023 than in 2022 due to the completion of Shell Polymers Monaca in 2022 and greater inorganic expansion in Lubricants and Convenience Retailing in 2022.
- Low-carbon energy solutions: increased by 30% mainly due to the acquisition of Nature Energy (nearly \$2 billion) and the roll-out of electric vehicle charging.
- LNG, gas and power marketing and trading: comparable year on year.
- Oil, oil products and other: remained at a similar level to 2022.

Energy transition: Total cash capital expenditure* by segment

Classification	Segment	2023		2022	
Non-energy products [A]	Marketing	0.9	2.3	1.5	3.9
	Chemicals and Products	1.4		2.4	
Low-carbon energy solutions [B]	Marketing	3.3	5.6	1.4	4.3
	Renewables & Energy Solutions	2.3		2.9	
LNG, gas and power marketing and trading [C]	Integrated Gas	3.7	4.0	3.8	4.2
	Renewables & Energy Solutions	0.3		0.4	
Oil, oil products and other [D]	Integrated Gas	0.5		0.5	
	Upstream	8.3		8.1	
	Marketing	1.4	12.5	2.0	12.5
	Chemicals and Products	1.8		1.4	
	Renewables & Energy Solutions	0.1		0.2	
	Corporate	0.4		0.3	
Total		24.4	24.4	24.8	24.8

[A] Products for which usage does not cause Scope 3, Category 11 emissions: Lubricants, Chemicals, Convenience Retailing, Agriculture & Forestry, Construction & Road.

[B] E-Mobility and Electric Vehicle Charging Services, Low-Carbon Fuels, Renewable Power Generation, Environmental Solutions, Hydrogen, CCS. We define low-carbon energy products as those that have an average carbon intensity that is lower than conventional hydrocarbon products, assessed on a life-cycle basis.

[C] LNG Production & Trading, Gas & Power Trading, and Energy Marketing.

[D] Upstream segment, GTL, Refining & Trading, Marketing fuel and hydrocarbon sales, Shell Ventures, Corporate segment.

* Non-GAAP measure (see page 365).

4.5.1.D Internal carbon prices

An entity is required to disclose: [IFRS S2.29(f), IFRS S2.BC130]

- An explanation of whether and how the entity is applying a carbon price in decision-making (e.g., investment decisions, transfer pricing and scenario analysis)-this is referred to as an 'internal carbon price'
- The price of GHG emissions (per metric tonne) that the entity uses, if any, to assess the costs of its GHG emissions

Extract from IFRS S2

Appendix A

Defined terms

Internal carbon price	Price used by an entity to assess the financial implications of changes to investment, production and consumption patterns, and of potential technological progress and future emissions-abatement costs. An entity can use internal carbon prices for a range of business applications. Two types of internal carbon prices that an entity commonly uses are: (a) a shadow price, which is a theoretical cost or notional amount that the entity does not charge but that can be used to understand the economic implications or trade-offs for such things as risk impacts, new investments, the net present value of projects, and the cost and benefit of various initiatives; and (b) an internal tax or fee, which is a carbon price charged to a business activity, product line, or other business unit based on its greenhouse gas emissions (these internal taxes or fees are similar to intracompany transfer pricing).
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In explaining how the internal carbon price is used in decision-making, an entity is expected to explain whether it is using a current price, shadow price or another price to represent the price for each metric tonne of carbon. However, if the entity does not have an internal carbon price, the entity needs to consider disclosing that fact. [IFRS S2.BC130].

In its 2023 TCFD Report, Cemex, S.A.B. de C.V. discloses information about its use of internal carbon pricing:

Practical example 4-11: Cemex, S.A.B. de C.V. (2023) Mexico

Report 2023 [extract]

Task Force on Climate-Related Financial Disclosure Response (TCFD) [extract]

Strategy [extract]

Internal Carbon Pricing

Since 2020, Cemex designed a methodology to implement an internal carbon price as a shadow price with the primary objective of driving low-carbon investments and changing internal behaviors, reflecting a cost for CO₂ emissions that simulates a scenario in which all our sites in the world operate under an emission trading system (ETS). Every year, we update the price of carbon according to the latest EU ETS average price forecast from a ten analysts' report (83.5 EUR/t for 2023 and 142 EUR/t for 2030; UKA 2023: 53.6 GBP/ton), which also includes UK ETS price forecast. California market price increased based on Analyst's Best Estimate used for California operation (33 USD/t in 2023, 28 USD/t in 2022 and 48 USD/t in 2030). A carbon floor price is used for non-regulated countries outside EU and California (22 USD/ton in 2023, 20 USD/ton in 2022 and 36 USD/t in 2030). These forecasts are used in all our business units, allowing managers to make operational and investment decisions taking into consideration the impact of CO₂ emissions on their present and future financial performance.

4.5.1.E Executive remuneration

An entity is required to disclose: [IFRS S2.29(g)]

- A description of whether and how climate-related considerations are factored into executive remuneration
- The percentage of executive management remuneration recognised in the current period that is linked to climate-related considerations

How we see it

IFRS S2 does not define 'executive management'. As such, entities will need to exercise judgement in determining which management roles will represent 'executive management' and are, therefore, within the scope of this disclosure requirement.

In our view, this disclosure would allow primary users to understand whether, and to what extent, the managers of an entity that have the authority and responsibility for managing the activities of the entity are incentivised through remuneration for their performance in managing the entity's climate-related risks and opportunities. In that context, to identify the management roles that represent 'executive management', an entity could consider the definition of 'key management personnel' in IAS 24 *Related Party Disclosures*, which states that "Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the entity, directly or indirectly, including any director (whether executive or otherwise) of that entity".

IFRS S2 also does not define 'remuneration'. In our view, the ordinary meaning of 'remuneration' would be sufficient to apply this disclosure requirement. In determining what constitutes 'remuneration', an entity could also consider referring to the definition of 'compensation' in IAS 24, which includes short-term employee benefits (e.g., wages), post-employment benefits (e.g., pensions), other long-term employee benefits (e.g., long-service leave), termination benefits and share-based payment.

4.5.1.F Preparation guidance

In preparing the cross-industry metric disclosures other than GHG emissions mentioned above, IFRS S2 states that an entity is required to consider:

[IFRS S2.B65]

- The time horizons over which the effects of climate-related risks and opportunities could reasonably be expected to occur (refer to Chapter 52)
- Where in the entity's business model and value chain climate-related risks and opportunities are concentrated (e.g., geographical areas, facilities or types of assets) (refer to Chapter 52)
- The information disclosed in relation to the effects of climate-related risks and opportunities on the entity's financial position, financial performance and cash flows for the reporting period (refer to Chapter 52)
- Whether industry-based metrics partially or completely provide the information required by the cross-industry metric disclosures
- Connectivity between the cross-industry metric disclosures and the amounts recognised and disclosed in the related financial statements. Connectivity also includes consistency in the data and assumptions used (to the extent possible) in the disclosures and in the preparation of the financial statements

4.5.2 Industry based metrics

In addition to cross-industry metrics, IFRS S2 requires an entity to disclose industry-based metrics that are associated with one or more particular business models, activities or other common features that characterise participation in an industry. Disclosure of industry-based metrics is required to enable primary users to understand an entity's exposure to and management of climate-related risks and opportunities that are common to the entity's industry. [IFRS S2.BC134].

IFRS S2 requires an entity to refer to the *Industry-based Guidance on Implementing IFRS S2* and consider the applicability of the industry-based metrics corresponding to the disclosure topics identified for the relevant industry. [IFRS S2.32]. As discussed in section 4.3.1.B above, this requirement means that, after referring to the industry-based guidance, an entity is not required to apply that guidance if the entity considers that it is not applicable. However, even if an entity concludes that the industry-based guidance does not apply, IFRS S2 still requires the entity to disclose industry-based metrics. As the ISSB has explained, the disclosure topics and metrics included in the industry-based guidance is not intended to be exhaustive. Therefore, information about other topics not included in the industry-based guidance will need to be disclosed if the entity determines that the information is material. [IFRS S2.BC37].

4.5.3 Climate-related targets

IFRS S2 requires an entity to disclose:

- Its climate-related targets (see section 4.5.3.A below)
- Information about its approach to setting, reviewing and monitoring progress against each target (see section 4.5.3.B below)
- Information about its performance against each target (see section 4.5.3.C below)
- Specific information for each GHG emission target the entity has (if any) (see section 4.5.3.D below)

4.5.3.A Disclosures about an entity's climate-related targets

IFRS S2 requires an entity to disclose its quantitative and qualitative climate-related targets. These may be either: [IFRS S2.33]

- Targets that the entity has set to monitor progress towards achieving its strategic goals

Or

- Targets that the entity is required to meet by law or regulation (if any)

These targets include any GHG emissions targets.

For each target, IFRS S2 requires an entity to disclose the following:

Figure 4-12: Climate-related target disclosures

Information to disclose	Further information
The metric used to set the target [IFRS S2.33(a)]	IFRS S2 also requires an entity to consider cross-industry metrics and industry-based metrics when identifying and disclosing metrics used to set climate-related targets and to measure progress. [IFRS S2.B67]. For metrics that were developed by an entity to measure progress towards a target, IFRS S1 specifies additional disclosures that the entity is required to make (see Chapter 52).

The objective of the target [IFRS S2.33(b)]	An entity might refer to, for example, mitigation, adaptation or conformance with science-based initiatives.
The part of the entity to which the target applies [IFRS S2.33(c)]	An entity might refer to, for example, whether the target applies to the entity in its entirety or only a part of the entity (e.g., a specific business unit or specific geographical region).
Target measurement considerations	Specifically, an entity is required to disclose: ▪ The period over which the target applies [IFRS S2.33(d)] ▪ The base period from which progress is measured [IFRS S2.33(e)] ▪ Any milestones and interim targets. [IFRS S2.33(f)].
If the target is quantitative, whether it is an absolute target or an intensity target [IFRS S2.33(g)]	IFRS S2 describes: ▪ An <i>absolute target</i> as “a total amount of a measure or a change in the total amount of a measure” ▪ An <i>intensity target</i> as “a ratio of a measure, or a change in the ratio of a measure, to a business metric” [IFRS S2.B66]
How the latest international agreement on climate change has informed the target [IFRS S2.33(h)]	This disclosure includes any jurisdictional commitments that arise from the latest international agreement.

4.5.3.B Approach to set, review and monitor progress against targets

An entity is required to disclose information about the entity’s approach to:
[IFRS S2.34]

- Setting and reviewing each target
- Monitoring its progress against each target

The information to be disclosed includes: [IFRS S2.34]

- Whether a third party has validated the target and the methodology for setting the target
- The entity’s processes for reviewing the target
- The metrics used by the entity to monitor its progress towards reaching the target
- Any revisions that have been made to the target and an explanation for those revisions

4.5.3.C Reporting performance against each target

An entity is required to disclose information about its performance against each climate-related target. The information disclosed also needs to include an analysis of trends or changes in the entity’s performance. [IFRS S2.35].

In identifying and disclosing the metrics used to set and monitor progress towards reaching a target, IFRS S2 requires that an entity refers to and considers the applicability of cross-industry metrics and industry-based metrics. The metrics include those described in an applicable ISSB standard and metrics that otherwise satisfy the IFRS S1 requirements. [IFRS S2.37].

4.5.3.D GHG emission targets

In addition to the requirements outlined above, IFRS S2 also requires information to be disclosed in relation to any GHG emissions target(s) that an entity has set (or is required to meet by law or regulation) which is summarised in Figure 4-13 below. *[IFRS S2.36].*

Figure 4-13: GHG emission target disclosures

Information to disclose	Further information
The scope of the GHG emissions target	Specifically, an entity is required to disclose: - Which GHG emissions are covered by the target (noting that the various constituent gases are described in section 5.2 below) <i>[IFRS S2.36(a)]</i> - Whether the target covers Scope 1, Scope 2 or Scope 3 GHG emissions <i>[IFRS S2.36(b)]</i>
Whether the target is a gross GHG emissions target or net GHG emissions target <i>[IFRS S2.36(c)]</i>	IFRS S2 describes: - Gross GHG emissions targets as “reflect[ing] the total changes in greenhouse gas emissions planned within the entity’s value chain”. - Net GHG emissions targets as “the entity’s targeted gross greenhouse gas emissions minus any planned offsetting efforts (for example, the entity’s planned use of carbon credits to offset its greenhouse gas emissions)”. For net GHG emissions targets, the entity is also required to separately disclose its associated gross GHG emissions target. IFRS S2 also clarifies that the net GHG emissions target disclosure cannot obscure information about the entity’s gross GHG emissions target. <i>[IFRS S2.B68, IFRS S2.B69].</i>
Whether the target was derived using a sectoral decarbonisation approach <i>[IFRS S2.36(d)]</i>	In the Basis for Conclusions to IFRS S2 the ISSB explains that a sectoral decarbonisation approach sets GHG emissions targets on a sector-by-sector basis by translating GHG gas emissions targets made at the international level (e.g., established through the latest international agreement on climate change) into sector-based benchmarks, against which the performance of individual entities can be compared.

A sectoral decarbonisation approach acknowledges that entities operating in different sectors will have specific challenges associated with the transition to a lower-carbon economy (because, for example, the location of where in an entity’s value chain that GHG emissions are concentrated will vary by sector).

The Science Based Targets Initiative (SBTi) uses a sectoral decarbonisation approach. *[IFRS S2.BC150].*

Information to disclose	Further information
The entity's planned use of carbon credits to offset GHG emissions to achieve any net GHG emissions target [IFRS S2.36(e)]	IFRS S2 defines a carbon credit as "An emissions unit that is issued by a carbon crediting programme and represents an emission reduction or removal of greenhouse gases. Carbon credits are uniquely serialised, issued, tracked and cancelled by means of an electronic registry". [IFRS S2 Appendix A]. Information to be disclosed about an entity's planned use of carbon credits includes: [IFRS S2.36(e)] ▪ The extent of the entity's use of carbon credits to achieve its net GHG emissions targets (if any) ▪ The identity of the third-party scheme(s) that will verify or certify the carbon credits ▪ The type of carbon credit - this includes whether the underlying offset will be nature-based or based on technological carbon removals (see further discussion below) ▪ Any other factors that primary users might need to understand the credibility and integrity of the scheme from which the entity obtains carbon credits (e.g., assumptions regarding the permanence of the carbon offset) An entity might also disclose information about carbon credits it has already acquired and which the entity is planning to use to meet its GHG emissions targets. [IFRS S2.B71].

Carbon credits

Carbon credits may be nature-based (i.e., aim to enhance natural carbon sinks, such as through afforestation, soil-based carbon sequestration and the use of other biomass stores) or based on technological carbon removals. The ISSB noted that disclosure about the type of carbon credit helps primary users to assess an entity's risk profile. For example, if an entity plans to use carbon credits based on technological carbon removals, a user will want to understand whether the technological solution is currently economical at commercial scales or whether it will likely require substantial investment to be economically viable in the future. In contrast, nature-based approaches are often more cost-effective than technological solutions. However, nature-based approaches may be subject to concerns about:

- Quality of the carbon offset scheme based on 'permanence' (i.e., how long the GHG emissions will be safely removed from the atmosphere) and 'additionality' (i.e., whether any new climate benefits have been brought about by a particular investment that would not have occurred anyway) And
- Their secondary effects on other social and environmental issues, such as food production

Consequently, disclosures about an entity's reliance on carbon credits, how credits are generated, and the credibility and integrity of the scheme from which the entity obtains the credits provide important information to users because additional climate-related risks and opportunities may arise from uncertainty about the suitability of some schemes, the available technology and future prices of

Disclosure of the type of carbon credit helps users of general purpose financial reports to assess an entity's risk profile

carbon credits. The ISSB notes that this may happen because, for example: [IFRS S2.BC154, IFRS S2.BC155, IFRS S2.BC156].

- Carbon capture and storage technology solutions might prove to be ineffective.
- Or
- Regulations might be introduced or revised to discourage or ban the use of specified carbon credit schemes due to climate activism efforts, policy changes or concerns about food shortage issues that might arise as a consequence of decisions made.

TCFD comparison

The ISSB indicates that some of the IFRS S2 disclosure requirements for metrics and targets relating to climate-related risks and opportunities are broadly consistent with the TCFD recommended disclosures.

For disclosures related to the metrics used by an entity to manage and assess its climate-related risks, the ISSB noted in its TCFD comparison document that IFRS S2 requires the disclosure of industry-based metrics in addition to the categories of cross-industry metrics which are also included in TCFD guidance.

For disclosures related to GHG emissions, the ISSB noted that IFRS S2 includes additional requirements to:

- Separately disclose Scope 1 and Scope 2 GHG emissions for the consolidated group and for investees that are not part of the consolidated group (e.g., equity accounted investments)
- Disclose Scope 2 GHG emissions according to the location-based approach and to disclose information about any contractual instruments relating to Scope 2 GHG emissions
- Disclose 'financed emissions' if the entity has activities in asset management, commercial banking or insurance
- Disclose the measurement approach, inputs and assumptions used to measure Scope 3 GHG emissions

IFRS S2 also specifies a Scope 3 measurement framework for preparing disclosures on Scope 3 GHG emissions. The general 'disaggregation' principle in IFRS S1 would also require an entity to disaggregate its GHG emissions disclosure by constituent gases if that disaggregation provides material information to users of the entity's general purpose financial reports.

For disclosures related to targets used by the entity to manage its climate-related risks and opportunities and its performance against those targets, the ISSB noted that IFRS S2:

- Differs from the TCFD Recommendations by requiring an entity to disclose how the latest international agreement on climate change has informed its target and whether the target has been validated by a third party
- Requires more detailed information to be disclosed about the entity's GHG emissions targets and additional requirements about the planned use of carbon credits to achieve the entity's net GHG emissions targets
- Includes additional requirements to disclose information about the entity's approach to setting and reviewing targets, monitoring progress against those targets, including whether a sectoral decarbonisation approach was used in setting the targets

5 Greenhouse gas emissions

5.1 Measurement of GHG emissions

IFRS S2 requires an entity's disclosure of its GHG emissions to be measured in accordance with the *Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (2004)*. The ISSB clarified that an entity applies the requirements in the GHG Protocol only to the extent that those requirements do not conflict with IFRS S2. In other words, an entity uses the GHG Protocol to measure what is required to be disclosed by IFRS S1 and IFRS S2.

Therefore, as an example, an entity is required to disclose its Scope 3 emissions because that it is a requirement in IFRS S2 even though the GHG Protocol does not require the disclosure of Scope 3 GHG emissions.

[IFRS S2.29(a)(ii), IFRS S2.B23]. Furthermore, other requirements and guidance that are included in the GHG Protocol Corporate Standard that do not relate to the measurement of GHG emissions is not relevant to the application of IFRS S2.

An exception to the general requirement in IFRS S2 to use the GHG Protocol to measure GHG emissions applies if an entity is required by a jurisdictional authority, or a securities exchange on which it is listed, to use a different method for measuring its GHG emissions. This exception applies for as long as the jurisdiction's, or securities exchange's, requirement to use a different method applies to the entity. Furthermore, in some cases, the jurisdiction's, or securities exchange's, specific requirements might apply only to one part of the reporting entity (e.g., its operations in a specific jurisdiction) or for only some categories of GHG emissions (e.g., Scope 1 and Scope 2 GHG emissions). In such cases, the exception that IFRS S2 allows does not exempt the entity from being required to disclose its Scope 1, Scope 2 and Scope 3 GHG emissions for the whole of the entity. [IFRS S2.B24, IFRS S2.B25].

5.2 Overview of GHG Protocol

The GHG Protocol provides standards and guidance for accounting for, measuring and reporting emissions of the following seven GHGs identified by the United Nations Framework Convention on Climate Change (UNFCCC):

- Carbon dioxide (CO₂)
- Methane (CH₄)
- Nitrous oxide (N₂O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulphur hexafluoride (SF₆)
- Nitrogen trifluoride (NF₃)

These gases are classified as GHGs because they trap heat in the atmosphere.

The following publications are collectively known as the GHG Protocol:

- *Corporate Accounting and Reporting Standard* (Corporate Standard)⁴³
- *Scope 2 Guidance*⁴⁴
- *Corporate Value Chain (Scope 3) Accounting and Reporting Standard* (Scope 3 Standard)⁴⁵
- *Technical Guidance for Calculating Scope 3 Emissions* (Scope 3 Guidance)⁴⁶

43 Refer to [Corporate Standard](#), available in the GHG Protocol website.

44 Refer to [Scope 2 Guidance](#), available in the GHG Protocol website.

45 Refer to [Corporate Value Chain \(Scope 3\) Standard](#), available in the GHG Protocol website.

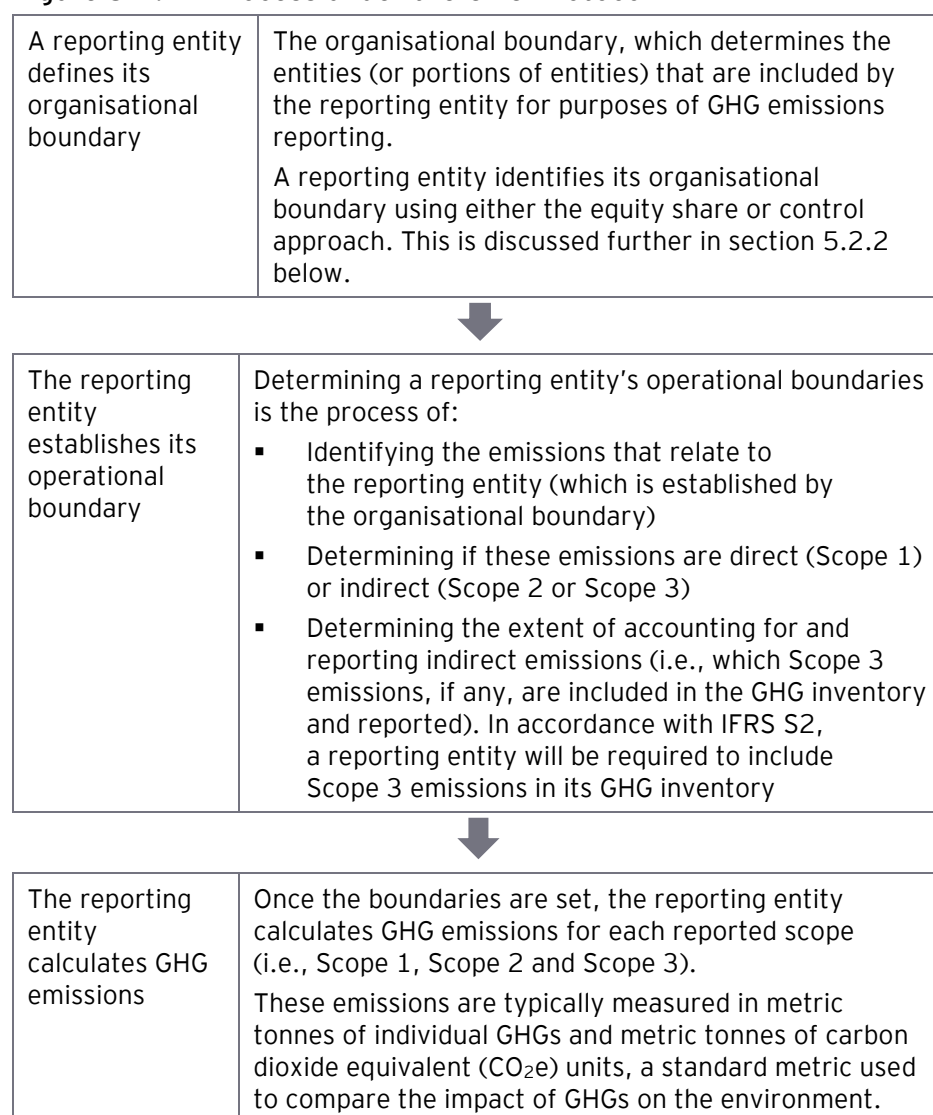
46 Refer to [Scope 3 Calculation Guidance](#), available in the GHG Protocol website.

The following sections provide a brief introduction to some of the key concepts in the GHG Protocol that may be relevant for measuring an entity's GHG emissions. Detailed guidance on the application of the GHG Protocol can be found in the EY publication, *Sustainability reporting developments - A comprehensive guide - Greenhouse Gas Protocol Interpretative guidance*.⁴⁷

5.2.1 Accounting for, measuring and reporting GHG emissions

Accounting for, measuring and reporting GHG emissions in accordance with the GHG Protocol is based on the following process:

Figure 5-1: Process under the GHG Protocol



The GHG Protocol is designed to enable reporting entities to track and report consistent and comparable GHG emissions data over time. Therefore, it requires a reporting entity to establish a base year (a specific year or an average of multiple years) against which subsequent emissions can be compared. The GHG Protocol requires the base year emissions to be retrospectively recalculated in certain circumstances to maintain comparability over time.

⁴⁷ [Sustainability reporting developments: A comprehensive guide, Greenhouse Gas Protocol, Interpretative guidance](#), EY Global, September 2024, available at www.ey.com.

5.2.2 Organisational boundary

A reporting entity may have many different entities in its legal and organisational structure, which may include wholly owned subsidiaries, partially owned subsidiaries and equity method investments. The GHG Protocol provides guidance on whether a reporting entity must include emissions from these various entities when measuring its GHG emissions. The GHG Protocol refers to the process of identifying which entities to include as “setting organisational boundaries”.

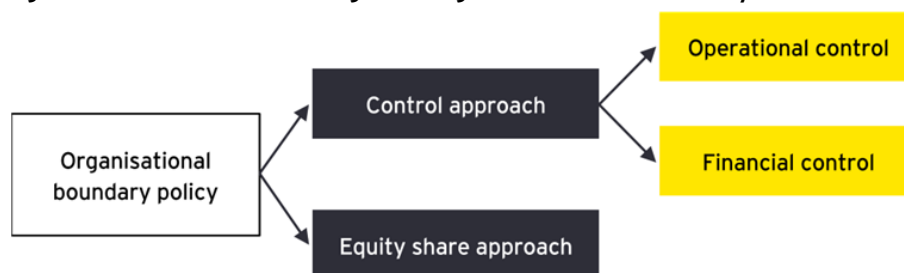
The GHG Protocol allows a reporting entity to select one of two methods of setting organisational boundaries:

- The equity share approach
- Or
- The control approach

The GHG Protocol calls these methods consolidation approaches. For entities that wholly own and control all their operations, either approach will result in the same organisational boundary. However, for entities that have partially owned operations (or for entities that only have an economic interest in the operations without control), the organisational boundary identified, and therefore, the GHG emissions included in their inventory, can differ depending on the consolidation approach used.

Because control can be defined from an operational or financial perspective, the GHG Protocol further divides the control approach into the operational control approach and financial control approach. The decision tree below shows the options available to a reporting entity for determining its organisational boundary:

Figure 5-2: Determining the organisational boundary



5.2.2.A Equity share approach

Under the equity share approach, a reporting entity sets its organisational boundary based on its share of the equity of an owned, or partially owned, entity (i.e., the reporting entity includes the same proportionate share of emissions of the owned entity as its share of equity of the entity). The equity share percentage used by the reporting entity should reflect the extent of the rights the reporting entity has to both the risks and rewards generated by an owned entity. This percentage is often the same as the legal ownership share of the owned entity, but it may not be in all cases. For example, the equity share and ownership share will differ when the ownership share does not faithfully represent the economic interest in the owned entity.

5.2.2.B Control approach

Under the control approach, a reporting entity includes within its organisational boundaries 100% of the emissions of operations over which it has control, regardless of the equity share or legal ownership share held by the reporting entity. For example, a reporting entity that has an equity share of 65% and control over a subsidiary would account for and report 100% of the subsidiary's emissions using the control approach. Conversely, if the reporting entity has an equity share of 35% in an entity that it does not

control, none of the emissions of the uncontrolled entity would be included in the reporting entity's GHG inventory.

The GHG Protocol provides two methods of determining control:

- Financial control (see (i) of this section below)
- Operational control (see (ii) of this section below)

The selected control approach must be used consistently throughout the entire organisation and over time.

(i) Financial control

A reporting entity has financial control over another entity if it can control the entity to gain economic benefits from the entity's activities. Financial control is often obtained if the reporting entity has the right to the majority of the economic benefits of the operation. Similar to the concept of equity share above, the determination of financial control depends on the economic substance of the relationship rather than the legal ownership. That is, financial control is not determined by legal ownership but by whether the reporting entity holds the rights to the majority of the economic benefits of the operation (e.g., the risks and rewards of ownership of the entity's assets). For example, a reporting entity may have financial control over another entity that is a variable interest entity, even though it owns less than 50% of the other entity.

When financial control is shared jointly by two or more parties (e.g., a joint venture under IFRS 11 *Joint Arrangements*), emissions are accounted for using the equity share approach even when the financial control approach is applied throughout the remainder of the reporting entity.

How we see it

We believe that the determination of financial control will often be consistent with the determination of control for financial reporting purposes under IFRS accounting standards (i.e., if an entity is consolidated for financial reporting purposes, it will likely be included in the organisational boundaries under the financial control approach).

However, the financial accounting guidance on the assessment of control under IFRS accounting standards has changed since the Corporate Standard was first issued. Therefore, there may be differences between the consolidation conclusion under the GHG Protocol's financial control approach and the conclusion for financial accounting.

(ii) Operational control

The GHG Protocol specifies that a reporting entity that applies the operational control approach needs to include any facility over which it has operational control in the organisational boundary, even if it is not the owner of the facility. This is particularly relevant for leased assets and other assets that are operated under a contractual arrangement.

A reporting entity that elects to use the operational control approach determines control by whether it has the authority to introduce and implement operating policies at an operation or facility. Operational control does not mean that the reporting entity can make **all** decisions concerning the operation or facility. For example, operational control may include decisions about how the day-to-day functions are performed but may not include certain other significant decisions (e.g., financing decisions, buying/selling significant assets) otherwise relevant to the financial control conclusions.

Certain facilities or operations may be under joint control (e.g., joint ventures). Under the operational control approach, a reporting entity needs to determine whether it can introduce and implement operating policies for each facility or operation to determine whether the facilities or operations under joint control are included in its reporting boundary. A reporting entity

that has operational control over an operation will include 100% of the operation's emissions in its reporting boundary even though it only owns 50% of the investee.

The following Practical Example explains how SAP SE has determined its organisational boundary:

Practical example 5-1:	SAP SE (2022)	Germany
SAP Integrated Report 2022 [extract] Non-Financial Notes: Environmental Performance [extract] Carbon Emissions [extract] Organizational Boundaries SAP defines its organizational boundaries by applying the operational control approach as set out in the GHG Protocol. Operational control is established when SAP has the full authority to introduce and implement its operating policies. The emissions of all operations over which the company has operational control and all owned, leased facilities, co-location data centers, and vehicles that the company occupies or operates are accounted for in the carbon emissions. They are based either on measurements or, where no measured data is available, on estimations and extrapolations. A portion of SAP's leased facilities operates under full-service or multitenant leases, where SAP does not have access to actual energy consumption information. SAP includes these facilities in our definition of operational control and accounts for them by estimating related energy consumption. To support the growing demand for SAP's cloud offerings, we subcontract computation power in local third-party data centers. Carbon emissions are approximated and included based on the consumed or extrapolated computation power. In most instances, however, SAP has 100% ownership of its subsidiaries. Accordingly, the difference between applying the control versus the equity approach is about 0.98% based on SAP revenue. If investments in associates were included, the difference would be even smaller, about 0.71%.		

Frequently asked questions

Question 5-1: What is the difference between the reporting entity concept in IFRS S1 and the organisational boundary for GHG emissions disclosures?

IFRS S1 specifies that sustainability-related financial disclosures are prepared for the same reporting entity as the related financial statements. A reporting entity would prepare consolidated financial statements if the reporting entity was a consolidated group comprised of a parent entity and its subsidiaries. The sustainability-related financial disclosures would be similarly prepared for the consolidated group. Therefore, the sustainability-related financial information disclosed would be the sustainability-related risks and opportunities that either affect the consolidated group directly or affect the consolidated group's value chain.

The organisational boundary determined for GHG emissions is only relevant for the purposes of preparing the reporting entity's GHG emissions disclosures. The organisational boundary is not relevant for determining whether other sustainability-related financial information needs to be disclosed in the reporting entity's sustainability-related financial disclosures.

Consolidated financial statements and organisational boundaries are different concepts and determined based on different criteria. Therefore, the composition of a consolidated group and an organisational boundary will align only if the specific facts and circumstances of an entity's operations and structure are such that they happen to align. In many cases, they will not align which may explain why paragraph 29(a)(iv) requires an entity to disaggregate emissions between the consolidated accounting group and other investees that are not part of the consolidated accounting group.

Question 5-2: What are examples of entities (or assets) that would be included in the organisational boundary for GHG emissions disclosure purposes that would not form part of the consolidated group?

As stated in the previous question, paragraph 29(a)(iv) of IFRS S2 requires an entity to disaggregate emissions between the consolidated accounting group and other investees that are not part of the consolidated accounting group. The types of entities (or assets) that would not be part of a consolidated group depends on the applicable accounting policies as well as measurement approach that is adopted for GHG emissions reporting purposes.

Equity share approach

The equity share approach (which is explained above in Section 5.2.2.A) typically includes the following entities in the organisational boundary to the extent they are outside of the consolidated accounting group:

- Associates
- Joint ventures
- Unconsolidated subsidiaries
- Any other entity not being a subsidiary, associated or joint venture subject to GHG emission disclosure requirements under the equity share approach

The equity share approach will include those entities in the organisational boundary, but only include emissions attributable to that entity to the extent of the entity's share of equity in that entity. Similarly, for subsidiaries of a consolidated group that are not wholly-owned subsidiaries, the equity share approach will include those subsidiaries in the organisational boundary and only include emissions attributable to those subsidiaries to the extent of the entity's share of equity in them.

Operational control approach

The operational control approach (which is explained above in Section 5.2.2.B) typically includes the following in the organisational boundary to the extent they are outside of the consolidated accounting group:

- Unconsolidated entities (including subsidiaries, associates, joint ventures and other entities) where the entity has operational control (e.g., an organisational boundary based on operational control would include GHG emissions attributable to interests of other joint venture partners in a joint venture that is classified as a joint operation in accordance with IFRS 11)
- Facilities that are not recognised as assets in the consolidated group's financial statements but the entity has operational control

In each of these cases, all of the emissions attributable to the entity or assets that within the entity's operational control (i.e., 100% of the GHG emissions) will form part of the entity's Scope 1 and Scope 2 GHG emissions.

Financial control approach

The financial control approach (which is explained above in Section 5.2.2.B) typically includes the following in the organisational boundary to the extent they are outside of the consolidated accounting group:

- Unconsolidated subsidiaries (e.g., when the investment entity exception is used in IFRS accounting standards)
- Joint ventures accounted for in accordance with the equity method of accounting. As noted in this section above, emissions are accounted for using the equity share approach when financial control is shared jointly by two or more parties.

Question 5-3: How should an entity classify GHG emissions from leased assets?

There are several factors that can determine the classification of GHG emissions from leased assets. These include:

- Whether the entity is a lessee or a lessor
- The accounting classification of the lease
- The measurement approach that is applied for GHG emissions reporting purposes (i.e., equity share, financial control or operational control)

The guidance in the GHG Protocol for classifying emissions from leased assets is based on the finance/capital lease and operating lease classifications that were included in the financial reporting requirements in effect when the GHG Protocol was published in 2004, such as IAS 17 *Leases*. These classifications applied to both lessees and lessors. However, the financial reporting requirements for leases have changed since the GHG Protocol was first published. For instance, under IFRS accounting standards, IAS 17 has been superseded by IFRS 16 *Leases*, which has removed the finance lease and operating lease distinction for lessees and, instead, generally requires leases to be recognised on the lessee's statement of financial position. Under IFRS 16, the classification of leases by lessors has remained largely unchanged.

Classification based on IAS 17 (or comparable standards)

Applying the guidance in the GHG Protocol, the classification by lessees of GHG emissions from lease assets is, as follows:

Accounting classification of the lease under IAS 17 (or comparable standards)	GHG measurement approach being applied	Classification of emissions associated with leased asset
Finance lease	Either equity share, financial control or operational control approach	Scope 1 and Scope 2, on the basis that the lessee has either ownership, financial control or operational control of asset
Operating lease	Either equity share or financial control approach	Scope 3, on the basis that the lessee does <i>not</i> have ownership or financial control of asset
	Operational control	Scope 1 and Scope 2, on the basis that the lessee has operational control of asset*

*However, the GHG Protocol acknowledges that emissions from a leased asset could be classified as Scope 3 emissions in circumstances where the entity does not have operational control over a leased asset held in an operating lease. This could be an area of significant judgement.

Applying the guidance in the GHG Protocol, the classification by lessors of GHG emissions from lease assets is, as follows:

Accounting classification of the lease under IAS 17 (or comparable standards)	GHG measurement approach being applied	Classification of emissions associated with leased asset
Finance lease	Either equity share, financial control or operational control approach	Scope 3, on the basis that the lessor does <i>not</i> have either ownership, financial control or operational control of asset
Operating lease	Either equity share or financial control approach	Scope 1 and Scope 2, on the basis that the lessor has either ownership or financial control of asset
	Operational control	Scope 3, on the basis that the lessor does <i>not</i> have operational control of asset*

* However, the GHG Protocol acknowledges that emissions from a leased asset could be classified as Scope 1 and Scope 2 emissions in circumstances where the entity continues to have operational control over a leased asset held in an operating lease. This could be an area of significant judgement.

Classification based on IFRS 16

For the reasons noted above, the GHG Protocol does not provide any guidance on classification of GHG emissions from leased assets when an entity accounts for its leases in accordance with IFRS 16. Given the changes to accounting classifications for leases since the GHG Protocol was published, some entities may encounter challenges in how they determine the classification of emissions from leased assets.

How we see it

At present, there is an inconsistency between the model referred to in the GHG Protocol for the classification of leases (based on the previous accounting standards such as IAS 17) and currently applicable accounting standards upon which an entity's financial statements will be based, such as IFRS 16. Until such time as the GHG Protocol is revised to address this inconsistency, our view is that an entity can choose to classify GHG emissions from leased assets based on either:

- The finance and operating lease classifications in IAS 17 or comparable standards
- Or

- The accounting model according to IFRS 16

If an entity chooses to apply the lease classifications in IAS 17 or comparable standards, the GHG emissions from leased assets will be classified on the basis set out in Question 5-X above.

If an entity instead chooses to apply the accounting model in IFRS 16, our view is that the GHG emissions from leased assets will be classified on the basis set out below.

For lessees:

Accounting treatment under IFRS 16	GHG measurement approach being applied	Classification of emissions associated with leased asset
Lease is recognised on the entity's statement of financial position (i.e., right-of-use asset, which represents the entity's right to the underlying asset)	Either equity share, financial control or operational control approach	Scope 1 and Scope 2, on the basis that the lessee has either ownership, financial control or operational control of asset
Short-term lease exemption or low-value assets exemption is applied	Either equity share or financial control approach	Scope 3, lessee on the basis that the does <i>not</i> have ownership or financial control of asset
	Operational control	Scope 1 and Scope 2, lessee on the basis that the has operational control of asset*

*Consistent with the reasoning in the GHG Protocol, emissions from a leased asset could be classified as Scope 3 emissions in circumstances where the entity does not have operational control over a leased asset held in a short-term lease or related to a low-value asset. This could be an area of significant judgement.

For lessors, our view is that an entity is required to follow the guidance for lessors in the GHG Protocol given that lessor accounting has largely remained unchanged under IFRS 16 and, as such, lessors continue to be required to classify each lease as either an operating lease or finance lease.

5.2.3 Scope 2 GHG emissions calculation methods

Scope 2 GHG emissions measurement methods are:

- Location-based method (see section 5.2.3.A below)
- Market-based method (see section 5.2.3.B below)

5.2.3.A Location-based method

The location-based method reflects the average emissions factors of the electricity grids on which a reporting entity consumes electricity. The location-based method is required to be used by all reporting entities. A reporting entity's electricity procurement decisions (e.g., a decision to purchase electricity generated from renewable sources) are not factored into the location-based method calculation of Scope 2 emissions. Therefore, this method can be applied in all locations and provides information on emissions from the overall mix of generation sources used in the grid. The location-based method results in Scope 2 emissions from a reporting entity's activities in the respective regions that are consistent with the Scope 2 emissions from other entities' activities in the same region. This provides better comparability of entities based on the location of their activities.

Under the location-based method, a reporting entity uses an emissions factor that represents the average emissions from energy generation within a defined geographical area (e.g., local, subnational or national level) during a defined time period, which is often 12 months (i.e., the grid average emissions factor). Supplier-specific emissions factors should not be used under this method. Additionally, these emissions factors do not reflect the impact of contractual instruments.

5.2.3.B Market-based method

The market-based method represents the emissions associated with the choices a reporting entity makes when acquiring electricity. Scope 2 emissions under the market-based method are derived from a reporting entity's contractual relationships or instruments. For example, if a reporting entity chooses a specific energy generation supplier or enters into a supply agreement for electricity from a regional wind farm, it would use the emissions factors resulting from these contracts in its Scope 2 emissions calculation under the market-based method. Unlike the location-based method, the market-based method provides information about the decisions a reporting entity has made to reduce emissions from its consumption of electricity.

Contractual instruments include direct contracts with a supplier (e.g., power purchase arrangements, virtual power purchase arrangements) and bundled or unbundled attribute claims (e.g., renewable energy certificates, energy attribute certificates, guarantees of origin, supplier-specific emission rates, residual mix factors).

While the GHG Protocol requires the disclosure of Scope 2 GHG emissions on both location-based as well as the market-based method, IFRS S2 only requires the disclosure of the location-based method. In addition to this, entities are required to provide information about any contractual instruments that is necessary to inform users' understanding of the entity's Scope 2 GHG emissions. [IFRS S2.29(a)(v)].

5.3 Categories of GHG emissions

Appendix A to IFRS S2 includes definitions of:

- Direct GHG emissions, specifically Scope 1 GHG emissions
- Indirect GHG emissions, which refer to Scope 2 and Scope 3 GHG emissions

These definitions from IFRS S2 are reproduced below:

Extract from IFRS S2

Appendix A

Defined terms

indirect greenhouse gas emissions	Emissions that are a consequence of the activities of an entity, but occur at sources owned or controlled by another entity.
Scope 1 greenhouse gas emissions	Direct greenhouse gas emissions that occur from sources that are owned or controlled by an entity.
Scope 2 greenhouse gas emissions	Indirect greenhouse gas emissions from the generation of purchased or acquired electricity, steam, heating or cooling consumed by an entity. Purchased and acquired electricity is electricity that is purchased or otherwise brought into an entity's boundary. Scope 2 greenhouse gas emissions physically occur at the facility where electricity is generated.
Scope 3 greenhouse gas emissions	Indirect greenhouse gas emissions (not included in Scope 2 greenhouse gas emissions) that occur in the value chain of an entity, including both upstream and downstream emissions. Scope 3 greenhouse gas emissions include the Scope 3 categories in the Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2011):

5.3.1 Measurement approach, inputs and assumptions

As noted in section 4.5.1.A above, IFRS S2 requires an entity to disclose the measurement approach, inputs and assumptions used to measure its GHG emissions. This disclosure required includes information about: *[IFRS S2.B26]*

- The measurement approach the entity uses in accordance with the GHG Protocol (see section 5.3.1.A below)
- The applicable method if the entity is not using the GHG Protocol and the measurement approach the entity uses (see section 5.3.1.B below)
- The emission factors the entity uses (see section 5.3.1.C below)

5.3.1.A GHG Protocol measurement approaches

Because the GHG Protocol includes different measurement approaches for measuring its GHG emissions, IFRS S2 requires an entity to disclose:

[IFRS S2.B27]

- The approach it uses to determine its GHG emissions (e.g., the equity share or control approach)
- The reason(s) for the entity's choice of measurement approach and how that approach enables users of the entity's general purpose financial reports to understand the entity's performance in relation to its climate-related risks and opportunities, including progress towards its climate-related targets (if any)

5.3.1.B Other methods and measurement approaches

If an entity discloses its GHG emissions measured in accordance with another method (as outlined in section 5.1), IFRS S2 requires the entity to disclose:

[IFRS S2.B28]

- The applicable method and measurement approach the entity uses to determine its GHG emissions
- The reason(s) for the entity's choice of method and measurement approach and how that approach enables users of the entity's general purpose financial reports to understand the entity's performance in relation to its climate-related risks and opportunities, including progress towards its climate-related targets (if any)

Frequently asked questions

Question 5-4: Is an entity permitted to use the relief that allows for the use of a method other than the GHG Protocol Corporate Standard to measure the entity's GHG emissions in a circumstance in which only part of the entity is required by a jurisdictional authority to use another method to measure its GHG emissions?

(TIG meeting 19 September 2024 - Agenda paper no. 3, ISSB meeting 20 November 2024 - Agenda paper no. 9C)

The ISSB staff's analysis of this question noted that an entity applying IFRS S2 would be:

- Permitted to measure part of its GHG emissions using a measurement method that is different from the GHG Protocol Corporate Standard, but only to the extent that part of the entity is required by a jurisdictional authority or an exchange on which it is listed to use that different method for measuring those GHG emissions
- Required to measure the remainder of its GHG emissions in accordance with the GHG Protocol Corporate Standard

The part of an entity's GHG emissions that is measured using a method that is different from the GHG Protocol Corporate Standard could refer, for example, to a subsidiary of the entity or to specific assets or operations of the entity.

If and when an entity applies this relief based on the ISSB staff's analysis, the entity's GHG emissions disclosures would be comprised of amounts measured using different methods (i.e., some measured using the GHG Protocol Corporate Standard, and others measured using a different method). To ensure that an entity's GHG emissions disclosures are understood by users of the general purpose financial reports, the ISSB staff's analysis noted that the entity would need to:

- Disclose the applicable method the entity has used to measure its GHG emissions if the entity is not using the GHG Protocol Corporate Standard, including the measurement approach the entity uses
- If material, disaggregate total GHG emissions by
 - GHG emissions measured using the GHG Protocol Corporate Standard
 - GHG emissions measured using a method(s) that is different from the GHG Protocol Corporate Standard
- Consider the qualitative characteristics of sustainability-related financial information, such as the understandability and comparability of the GHG emissions information.

There were mixed views among TIG members on this question. While many TIG members agreed with the ISSB staff's analysis, some other TIG members acknowledged a tension between that analysis and the requirement in IFRS accounting standards (specifically IFRS 10 *Consolidated Financial Statements*) that a reporting entity applies uniform accounting policies in the preparation of its consolidated financial statements.

An entity is not required to apply this relief. If the relief is not applied, the entity would be required to measure all of its GHG emissions in accordance with the GHG Protocol Corporate Standard. This may mean that an entity would need to recalculate some of its GHG emissions that were measured in accordance with the requirements of the jurisdictional authority or exchange for the purposes of preparing its sustainability-related financial disclosures in accordance with ISSB Standards.

Following the discussion at the TIG meeting, the ISSB has proposed amendments to IFRS S2 to clarify this issue. The proposed amendments are discussed further in section 8 below.

An example of how an entity might apply the jurisdictional relief based on the ISSB staff analysis (refer Question 5-3 above) is outlined in the following Illustration:

Illustration 5-1: Disclosure considerations when applying jurisdictional relief to part of an entity

Entity P is incorporated in Country X and prepares sustainability-related financial disclosures for its consolidated group, which includes a subsidiary Entity S which is incorporated in Country Y. Entity S is required by the regulations in Country Y to separately report its Scope 1 and Scope 2 GHG emissions using a measurement method that is different from the GHG Protocol Corporate Standard. Entity S's GHG emissions are material to Entity P's consolidated group.

In preparing the sustainability-related financial disclosures for the consolidated group, Entity P elects to use the jurisdictional relief permitted by paragraph 29(a)(ii) of IFRS S2. Accordingly, Entity P discloses its absolute gross GHG emissions generated during the reporting period in accordance with paragraph 29(a)(i) of IFRS S2 as follows:

	GHG emissions (metric tonnes CO ₂ e)			
	Scope 1	Scope 2	Scope 3	Total
GHG emissions measured using GHG Protocol Corporate Standard	8,000	2,700	32,000	42,700
Entity S's GHG emissions measured according to local regulations	3,000	1,100	-	4,100
Total GHG emissions for the consolidated group	11,000	3,800	32,000	46,800

In accordance with paragraph 29(a)(iii), Entity P would disclose the measurement approaches, inputs and assumptions it used to measure its GHG emissions. This would include disclosing that a method that is different from the GHG Protocol Corporate Standard was used to measure the Scope 1 and Scope 2 GHG emissions attributable to Entity S.

5.3.1.C Emissions factors

If an entity estimates the GHGs emitted using activity data and emissions factors as its basis for measuring its GHG emissions, IFRS S2 requires the entity to use the emissions factors that best represent the entity's activity. IFRS S2 does not specify the emissions factors that an entity is required to use. [IFRS S2.B29]. These estimates require:

- 'Activity data', which refers to the number of times that a specific activity occurs for which an emissions factor is available and can be applied. For Scope 1 emissions, activity data is often denominated in fuel consumed (e.g., litres of petrol, cubic feet of natural gas) or units of product produced
- An 'emissions factor', which refers to a value that represents the quantity of a specific GHG (or CO₂e) emitted for a specific unit of activity. For example, CO₂e emissions by fuel type for specific vehicles are common emissions factors used for calculating Scope 1 mobile emissions

Consequently, IFRS S2 requires an entity to disclose information so that primary users can understand the emission factors that the entity has used to measure its GHG emissions. [IFRS S2.B29].

5.3.2 Aggregation of GHGs into CO₂ equivalents

Although there are seven constituent GHGs, IFRS S2 requires an entity's disclosure of its absolute gross GHG emissions generated during the reporting period to be expressed in metric tonnes of CO₂ equivalent (CO₂e). [IFRS S2.29(a)(i)].

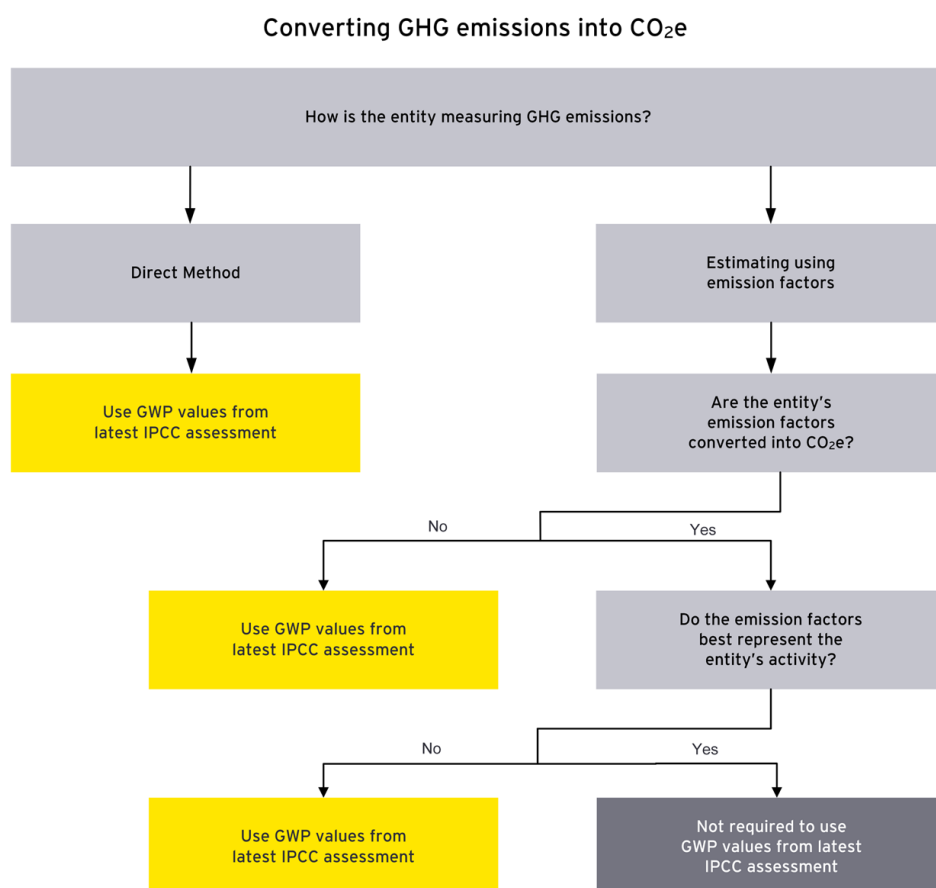
If an entity uses direct measurement (also known as 'direct monitoring') to measure its GHG emissions by measuring the concentration of GHGs and the rate of emissions from operations and processes, this means that the entity will be directly, and separately, measuring the specific constituent GHG emitted (e.g., the units of methane (CH₄) emitted). To convert the constituent GHGs into a CO₂ equivalent value, IFRS S2 requires an entity to use global warming potential (GWP) values based on a 100-year time horizon, from the latest Intergovernmental Panel on Climate Change assessment available at the reporting date. [IFRS S2.B21].

Each of the seven constituent GHGs have a different GWP. The GWP of a given GHG indicates how much energy one unit of the GHG absorbs (i.e., the ability of that gas to trap heat in the atmosphere) compared to one unit of carbon dioxide, generally over a 100-year period. The larger the GWP, the more that the GHG warms the earth compared to carbon dioxide over the stated time period. For example, PFCs and HFCs often absorb thousands of times more energy than carbon dioxide. The GWP of each GHG is used to convert GHGs, other than carbon dioxide, into carbon dioxide equivalent (CO₂e) units. Therefore, the CO₂e unit of measurement is used to evaluate releasing (or avoiding releasing) different GHGs against a common basis. [IFRS S2 Appendix A].

If an emission factor used by an entity has already converted the constituent gases into CO₂e values, IFRS S2 does not require the entity to recalculate the emission factors using GWP values based on a 100-year time horizon from the latest Intergovernmental Panel on Climate Change assessment available at the reporting date. However, if the emission factors are not converted into CO₂e values, then the entity is required to use the GWP values based on a 100-year time horizon from the latest Intergovernmental Panel on Climate Change assessment available at the reporting date. [IFRS S2.B22].

Figure 5-3 below, which is based on a flowchart from TIG meeting 19 September 2024 - Agenda paper no. 5, illustrates factors that an entity needs to consider when converting GHG emissions into a CO₂ equivalent value:

Figure 5-3: Decisions in converting GHG emissions into CO₂e



At its September 2024 meeting, the TIG discussed whether the jurisdictional relief in IFRS S2 can be applied to relieve an entity from the requirement to use GWP values from the latest IPCC assessment in circumstances where the entity is required by a jurisdictional authority to use different GWP values. Following the discussion at the TIG meeting, the ISSB has proposed amendments to IFRS S2 to clarify this issue. The proposed amendments are discussed further in section 8 below.

5.3.3 Using information from reporting periods that are different from the entity's reporting period

An entity's reporting period may be different from the reporting periods used by some or all the entities in its value chain. A consequence of mismatched reporting periods is that GHG emissions information that relates to the entity's value chain may not be readily available for the entity to use when it prepares its own disclosures for its reporting period. The ISSB acknowledged that different reporting periods can cause challenges in preparing disclosures that rely on value chain information. For that reason, where an entity's reporting period is different from the reporting periods of entities in its value chain, IFRS S2 permits an entity to measure its GHG emissions using information for reporting periods that are different from its own reporting period if all of the following conditions are met: [IFRS S2.B19]

- The entity uses the most recent data available from those entities in its value chain without undue cost or effort to measure and disclose its GHG emissions.
- The length of the reporting periods is the same.
- The entity discloses the effects of significant events and changes in circumstances (relevant to its GHG emissions) that occur between the reporting dates of the entities in its value chain and the date of the entity's general purpose financial reports.

5.4 Scope 1 GHG emissions

Scope 1 emissions are emissions from sources owned or controlled by a reporting entity. For example, emissions from equipment, a vehicle or production processes that are owned or controlled by the reporting entity are considered Scope 1 emissions. These emissions include all direct emissions within the entity's inventory boundary. The combination of organisational and operational boundaries make up a reporting entity's inventory boundary, which is also called the reporting boundary.

Two or more reporting entities should never account for the same emissions as Scope 1 emissions. For example, emissions from the generation of heat, electricity or steam that is sold to another entity are not subtracted from Scope 1 emissions but are reported as Scope 2 emissions by the entity that purchases the related energy. Theoretically, if every entity and individual throughout the world reported their GHG emissions using the same organisational boundary (e.g., equity share, financial control or operational control approach), the total of all Scope 1 emissions would equal the total GHGs emitted throughout the world.

5.5 Scope 2 GHG emissions

According to the GHG Protocol, an entity's Scope 2 GHG emissions need to be measured using either a location-based approach or a markets-based approach. This is described further in section 5.2.3 above on the application of the GHG Protocol.

As noted in section 5.2.3 above, IFRS S2 requires an entity to: *[IFRS S2.29(a)(v), IFRS S2.B30]*

- Disclose its location-based Scope 2 GHG emissions
- Provide information about any 'contractual instruments' the entity has entered into if it has entered into those instruments and information about those instruments would inform users' understanding of the entity's Scope 2 GHG emissions

The meaning of a 'contractual instrument' is explained in IFRS S2: *[IFRS S2.B31]*

Extract from IFRS S2

B31 Contractual instruments are any type of contract between an entity and another party for the sale and purchase of energy bundled with attributes about the energy generation or for unbundled energy attribute claims (unbundled energy attribute claims relate to the sale and purchase of energy that is separate and distinct from the greenhouse gas attribute contractual instruments). Various types of contractual instruments are available in different markets and the entity might disclose information about its market-based Scope 2 greenhouse gas emissions as part of its disclosure.

5.6 Scope 3 GHG emissions

IFRS S2 requires an entity to disclose information about its Scope 3 GHG emissions according to the 15 categories of Scope 3 GHG emissions as described in the GHG Protocol. The purpose of this disclosure is to enable primary users to understand the source of the entity's Scope 3 emissions. *[IFRS S2.29(a)(vi), IFRS S2.B32]*.

As such, when an entity prepares its Scope 3 GHG emissions disclosures, IFRS S2 requires the entity to: *[IFRS S2.B32, IFRS S2.B34]*

- Consider its entire value chain (upstream and downstream)
- Reassess which Scope 3 categories and entities throughout its value chain to include in the measurement of its Scope 3 GHG emissions if a

significant event or a significant change in circumstances has occurred. This reassessment is consistent with the requirements in IFRS S1 about reassessing the scope of sustainability-related risks and opportunities (see Chapter 52)

Frequently asked questions

Question 5-5: What is the relationship between the GHG Corporate Value Chain Standard and IFRS S2 in measuring an entity's Scope 3 GHG emissions?

(TIG meeting 13 June 2024 - Agenda paper no. 1, ISSB meeting 24 July 2024 - Agenda paper no. 9, TIG meeting 19 September 2024 - Agenda paper no. 1, ISSB meeting 20 November 2024 - Agenda paper no. 9C)

The Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2011) (GHG Corporate Value Chain Standard) is referenced by IFRS S2 in the:

- Definition of Scope 3 GHG emissions [IFRS S2 Appendix A]
- Requirements about the disclosure of Scope 3 GHG emissions categories [IFRS S2.29(a)(vi)(1)]

However, the GHG Protocol Corporate Value Chain Standard is not referenced by IFRS S2 in relation to the measurement of Scope 3 GHG emissions. Consequently, an entity is required to use the Scope 3 measurement framework in paragraphs B38-B57 of IFRS S2 to measure its Scope 3 GHG emissions. This means that the entity measures its Scope 3 GHG emissions using:

- A measurement approach, inputs and assumptions that result in a faithful representation of this measurement [IFRS S2.B38]
- All reasonable and supportable information that is available to the entity at the reporting date without undue cost or effort [IFRS S2.B39]

Question 5-6: Is an entity required to include all 15 Scope 3 categories in its measurement of Scope 3 GHG emissions?

(ISSB's Education material Greenhouse Gas Emissions Disclosure requirements applying IFRS S2 Climate-related Disclosures May 2025)

No. IFRS S2 requires an entity to include the GHG emissions associated with each relevant Scope 3 category in the GHG Protocol Corporate Value Chain Standard if that disclosure would provide primary users with material information. Therefore, the categories included in an entity's measurement of Scope 3 GHG emissions and the particular GHG emissions included within a category that is included within that measurement depends on the facts and circumstances specific to the entity.

Materiality judgements require considering both quantitative and qualitative factors. Questions 5-X to 5-Y provide some further factors to consider when making judgements about the measurement of an entity's Scope 3 GHG emissions.

Question 5-7: Can an entity limit its measurement and disclosure of Scope 3 GHG emissions for each relevant category on the basis of the minimum boundaries set out in the GHG Protocol Corporate Value Chain Standard?

(ISSB's Education material Greenhouse Gas Emissions Disclosure requirements applying IFRS S2 Climate-related Disclosures May 2025)

No, the minimum boundaries outlined in the GHG Protocol Corporate Value Chain Standard, which limit the measurement and disclosure of Scope 3 GHG emissions, are not applicable to entities that are measuring and disclosing their Scope 3 GHG emissions in accordance with IFRS S2.

This is because:

- IFRS S2 requires entities to disclose material information about their Scope 3 GHG emissions considering all of the categories set out in the GHG Protocol Corporate Value Chain Standard; and
- IFRS S1 also requires entities to consider their entire value chain when providing information about the sustainability-related risks and opportunities that could reasonably be expected to affect their prospects.
- As such, this may represent a difference between how an entity measures its Scope 3 emissions under the GHG Protocol and how its Scope 3 emissions will be measured under IFRS S2.

Question 5-8: Does the relevance principle in the GHG Protocol apply when measuring and disclosing GHG emissions in accordance with IFRS S2?

No, the relevance principle in the GHG Protocol is not applicable in disclosing GHG emissions in accordance with IFRS S2. Instead, in applying IFRS S2, materiality judgements (made in accordance with IFRS Sustainability Disclosure Standards) will determine which categories are included in the measurement of an entity's Scope 3 GHG emissions.

This question has arisen because entities that have historically been measuring and disclosing Scope 3 emissions in accordance with the GHG Protocol will have been applying the relevance principle to their disclosed Scope 3 emissions. The GHG Protocol Corporate Value Chain (Scope 3) Standard notes that "Companies should follow the principles of relevance, completeness, accuracy, consistency, and transparency when deciding whether to exclude any activities from the scope 3 inventory. Companies should not exclude any activity that would compromise the relevance of the reported inventory." It includes a table that lists size, influence, risk, stakeholders, outsourcing, sector guidance and other factors as criteria for identifying relevant Scope 3 activities.

Some observers have interpreted the commentary in the Basis for Conclusions on IFRS S2 as indicating that the relevance principle also applies when measuring and disclosing Scope 3 emissions in accordance with IFRS S2. This is based on paragraph BC110 stating that "an entity is required to consider the relevance of all 15 categories but might determine that not all categories are applicable to the entity and, therefore, do not need to be included in the measurement of its Scope 3 greenhouse gas emissions". However, this is not considered to be a reference to the relevance principle in the GHG Protocol. Instead, as the ISSB's Education material *Greenhouse Gas Emissions Disclosure requirements applying IFRS S2 Climate-related Disclosures* (May 2025) clarifies "Although an entity is required to consider the relevance of all 15 categories—including by considering whether information about the GHG emissions within those categories and their measurement would provide material information about an entity's exposure to transition risk—it might find that not all are relevant". In those circumstances, the ISSB's Education material gives an example of a Scope 3 category not being relevant because it is not applicable to the entity.

In many cases, judgements about relevance (per the GHG Protocol) and materiality (per ISSB Standards) might result in the same conclusion regarding which categories of Scope 3 GHG emissions need to be included in the disclosure of an entity's absolute gross Scope 3 GHG emissions generated during the reporting period. However, there could be a risk that an entity might exclude a Scope 3 category applying the GHG Protocol based on relevance considerations, even though that category could be considered quantitatively or qualitatively material when applying the ISSB standards.

Question 5-9: When measuring Scope 3 GHG emissions, is an entity required to consider if categories that are individually immaterial could be material in aggregate when applying IFRS Sustainability Disclosure Standards?

Yes, an entity is required to include categories that are individually immaterial, but material in aggregate, in the disclosure of its Scope 3 GHG emissions for the reporting period in accordance with IFRS S2.29(a)(i)(3). However, categories that are too small (i.e., de minimis or trivial in amount), even in aggregate, to materially change the total Scope 3 calculation can be excluded from an entity's scope 3 GHG emissions measurement.

Aggregating all categories, including the categories that are individually immaterial (from a quantitative and qualitative perspective), in the measurement of Scope 3 GHG emissions is consistent with how similar calculations in financial reporting are viewed. If an entity were to exclude categories that are individually immaterial, but material in aggregate, from the disclosure of its Scope 3 GHG emissions, the measurement of the entity's Scope 3 emissions might be considered incomplete and not fairly present the extent of an entity's exposure to GHG emissions in its value chain for those users interested in an entity's total Scope 3 GHG emissions generated during the reporting period as well as a disaggregation of its GHG emissions by category.

Although paragraph 29(a)(vi)(1) of IFRS S2 requires the disclosure of the categories included within an entity's measure of its Scope 3 GHG emissions, IFRS S2 does not specifically require an entity to disclose Scope 3 GHG emissions by individual category. Instead, as with all disclosure requirements in ISSB standards, an entity disclosing GHG emissions does need to apply:

- The materiality requirements in IFRS S1.17-18; and
- Principles of aggregation and disaggregation set out in IFRS S1.B29-B30, which requires an entity to consider all facts and circumstances and decide how to aggregate and disaggregate information in its sustainability-related financial disclosures.

A consequence of applying these requirements is that an entity may need to disclose information about one or more of its Scope 3 categories. The table below provides an illustration of how these judgements might be made in the measurement and disclosure of Scope 3 GHG emissions.

Stream	Category	Analysis	Separately disclosed
Upstream	1 - Purchased goods and services	Individually material	Yes
Upstream	2 - Capital goods	Individually immaterial, but assessed as material in aggregate with other categories	Disclosed as an aggregated category 'remainder of Scope 3 emissions'
Upstream	3 - Fuel and energy related activities	Individually immaterial, but assessed as material in aggregate with other categories	Disclosed as an aggregated category remainder of Scope 3 emissions'
Upstream	4 - Upstream transportation and distribution	Immaterial. Not calculated as too insignificant to even be material in aggregate	No

Stream	Category	Analysis	Separately disclosed
Upstream	5 - Waste generated in operations	Immaterial. Not calculated as too insignificant to even be material in aggregate	No
Upstream	6 - Business travel	Individually immaterial, but assessed as material in aggregate with other categories	Disclosed as an aggregated category remainder of Scope 3 emissions'
Upstream	7 - Employee commuting	Individually immaterial, but assessed as material in aggregate with other categories	Disclosed as an aggregated category remainder of Scope 3 emissions'
Upstream	8 - Upstream leased assets	Not applicable	No
Downstream	9 - Downstream transportation and distribution	Individually material	Yes
Downstream	10 - Processing of sold products	Individually material	Yes
Downstream	11 - Use of sold products	Individually material	Yes
Downstream	12 - End-of-life treatment of sold products	Not applicable	No
Downstream	13 - Downstream leased assets	Not applicable - no downstream leased assets	No
Downstream	14 - Franchises	Not applicable - no franchising arrangements	No
Downstream	15 - Investments	Not applicable	No

Question 5-10: What are some qualitative factors that might indicate that information about GHG emissions is material?

Even if a GHG emission or Scope 3 category is not quantitatively material (based on magnitude considerations), the emission or category might be material on qualitative grounds. Factors that might indicate that a GHG emission or Scope 3 category is qualitatively material include, but is not limited to, the following:

- **Reduction Targets:** Has the entity committed to achieving GHG emissions reduction targets, and does the specific scope or category within Scope 3 forms part of its reduction strategy in meeting this target? Have the targets been set on total Scope 1, 2 and 3 GHG emissions or there are separate targets for, say, Scope 1 and 2 combined versus Scope 3?
- **Public statements:** Has the entity made any public commitments about net zero or carbon neutral goals? Does the entity advertise any products as 'green', carbon neutral, or similar assertions?
- **Specific Targets:** Whether the entity has set any specific GHG reduction targets for this scope or category of Scope 3.
- **Jurisdictional Impact:** Does the entity operate in jurisdictions with nationally determined contributions that could impact the entity or its value chain, such as suppliers being subject to increasingly strict emissions-related regulations and taxation policies for certain scopes

or categories? Further, does compliance with other jurisdictions have a material effect on the entity's financial position through potential fines or required changes to products or services?

- Executive remuneration: Does the achievement of certain levels of GHG emissions affect executive compensation?
- Transition Plan: Does the entity have any specific emissions reduction strategies in relation to this scope or category noted within their transition plan?

Another factor that may be relevant when assessing qualitative factors that could indicate whether GHG emissions would be material is the potential to manage or influence GHG emissions. Entities may be able to manage Scope 1 and 2 GHG emissions more directly, exerting direct influence over decisions which result in these GHG emissions, whereas with Scope 3 GHG emissions the decisions are made within the value chain, with the entity having less influence over those decisions. While this could be a relevant factor to consider when assessing materiality of GHG emissions, entities should not use their potential to influence or manage emissions as a basis for exclusion if the emissions would otherwise be quantitatively material. For example, an entity with significant Scope 3 Category 1 emissions from purchased goods and services cannot justify excluding this category from disclosure based on influence or management potential if the total (Scope 1, Scope 2 and Scope 3) GHG emissions or total Scope 3 GHG emissions is considered material information to the users of the general purpose financial reports.

Question 5-11: Should the materiality of a GHG emission be assessed based on the size of that emission relative to its particular Scope or relative to the total of Scope 1, Scope 2 and Scope 3 GHG emissions?

Materiality judgements may be different for different GHG emissions because investors and other primary users might have different information needs for different scopes of emissions. For this reason, an entity is required to assess the materiality of a GHG emission component in relation to the specific related scope of GHG emissions. For instance, the materiality of a Scope 1 GHG emission would be assessed in relation to the entity's total Scope 1 GHG emissions. However, qualitative factors will also need to be considered to determine the materiality of GHG emissions. For instance, an entity might have a direct cost exposure arising from Scope 1 emissions or might be required by law to reduce its Scope 1 emissions. This information may be relevant to a primary user even though those emissions might be insignificant relative to the entity's total GHG footprint (Scope 1, 2 and 3) or even relative to its particular Scope.

5.6.1 Scope 3 measurement framework

Scope 3 GHG emissions can be quantified by either direct measurement (i.e., the direct monitoring of GHG emissions) or estimation (which involves approximate calculations of data based on assumptions and appropriate inputs). The ISSB considers that, in theory, direct measurement provides the most accurate evidence of an entity's Scope 3 GHG emissions. However, the ISSB also acknowledges that, due to the challenges of directly measuring Scope 3 GHG emissions, an entity's measurement of Scope 3 GHG emissions is likely to include the use of estimation rather than solely comprising direct measurement. [IFRS S2.B38, IFRS S2.B43, IFRS S2.B44, IFRS S2.B45].

IFRS S2 requires an entity to use a measurement approach, inputs and assumptions that result in a faithful representation of its measurement of Scope 3 GHG emissions. Although IFRS S2 does not specify the inputs an entity is required to use to measure its Scope 3 GHG emissions, the standard does require the entity to prioritise inputs and assumptions using the following identifying characteristics:

- Data based on direct measurement (see section 5.6.1.A below)
- Data from specific activities within the entity's value chain (see section 5.6.1.B below)
- Timely data that faithfully represents the jurisdiction of, and the technology used for, the value chain activity and its GHG emissions (see section 5.6.1.C below)
- Data that has been verified (see section 5.6.1.D below)

Each of these characteristics are explained further in the sections below, noting that these characteristics are not listed in a particular order and, as such, an entity's prioritisation of the measurement approach, inputs and assumptions may require management to use judgement to make trade-offs between data. [IFRS S2.B40, IFRS S2.B42].

An example of a trade-off that management may need to make is between the timeliness of the data and specificity of the data. Recent data may provide less detail about the specific value chain activity (such as technology used, location and jurisdiction of the activity) whereas data that is older and published infrequently might be more representative of the value chain activity and its GHG emissions. [IFRS S2.B42].

When an entity selects the measurement approach, inputs and assumptions to measure its Scope 3 GHG emissions, IFRS S2 specifies that the entity is required to use all reasonable and supportable information that is available to the entity at the reporting date without undue cost or effort. [IFRS S2.B39].

IFRS S2 states that an entity is required to apply the Scope 3 measurement framework to prioritise inputs and assumptions even if: [IFRS S2.B41]

- The entity is required by a jurisdictional authority or securities exchange to use a method other than the GHG Protocol to measure its GHG emissions
- The entity has elected to use the transition relief that allows the entity to measure its GHG emissions using a method other than the GHG Protocol for its first annual reporting period when it applies IFRS S2

5.6.1.A Data based on direct measurement

IFRS S2 requires an entity to prioritise direct measurement of Scope 3 GHG emissions, but acknowledges that it expects that Scope 3 GHG emissions data will include estimation. [IFRS S2.B43, IFRS S2.B44].

IFRS S2 outlines that estimates of Scope 3 GHG emissions are likely to use two types of inputs: [IFRS S2.B45]

- Data that represents the entity's activity that results in GHG emissions (activity data). For example, the entity might use distance travelled as activity data to represent the transport of goods within its value chain.
- Emission factors that convert activity data into GHG emissions. For example, the entity will convert the distance travelled (activity data) into GHG emissions data using emission factors.

5.6.1.B Data from specific activities within the entity's value chain

Measurement of an entity's Scope 3 GHG emissions will be based on: [IFRS S2.B46]

- Primary data - data obtained directly from specific activities within the entity's value chain (e.g., data provided by suppliers)
- Secondary data - data not obtained directly from activities within the entity's value chain (e.g., data from third party data providers and industry-average data)
- A combination of both primary and secondary data

IFRS S2 requires an entity to prioritise primary data when estimating the entity's Scope 3 GHG emissions. This is because the ISSB considers that data from specific activities within an entity's value chain provides a more accurate representation of the entity's specific value chain activities and, thus, primary data provides a better basis to measure an entity's Scope 3 GHG emissions. However, if an entity uses secondary data to measure its Scope 3 GHG emissions, IFRS S2 requires the entity to consider the extent to which the secondary data faithfully represents the entity's activities. *[IFRS S2.B47, IFRS S2.B48, IFRS S2.B49].*

Examples of primary and secondary data are provided in Figure 5-4 below:

Figure 5-4: Primary and secondary data

Type of data	Examples
Primary data	- Data sources include meter readings, utility bills and other methods that represent specific activities in the entity's value chain. - Data sources may be from internal sources such as from the entity's own records or from external sources such as from suppliers and other value chain partners (e.g., supplier-specific emission factors for purchased goods or services). <i>[IFRS S2.B48].</i>
Secondary data	- Data sources include third-party data providers and industry-average data (e.g., from published databases, government statistics, literature studies and industry associations). - Secondary data includes both: <i>[IFRS S2.B49]</i> - Data used to approximate the activity or emission factors - Primary data from a specific activity (proxy data) that is used to estimate GHG emissions for another activity

5.6.1.C Timely data that faithfully represents the jurisdiction of, and the technology used for, the value chain activity and its GHG emissions

If an entity uses secondary data to measure its Scope 3 GHG emissions, IFRS S2 requires the entity to prioritise the use of activity or emissions data that is: *[IFRS S2.B50, IFRS S2.B51, IFRS S2.B52]*

- Based on, or represents, the technology used in the value chain activity the data is intended to represent (see Illustration 5-2 below)
- Based on, or represents, the jurisdiction in which the activity happened (e.g., where the entity operates or where the activity took place)
- Timely and representative of the entity's value chain activity during the reporting period (e.g., considering whether the secondary data sources relied on information collected in the entity's current reporting period or in a reporting period that is different from the entity's current reporting period)

The Illustration below is based on an example used in IFRS S2: [IFRS S2.B50]

Illustration 5-2: Use of secondary data

In measuring its Scope 3 GHG emissions from business travel, Entity A obtains primary data from its business travel activities including data about:

- The specific aircraft model used for each flight
- Distance travelled for each flight
- Travel-class used by the travelling employees

Entity A would then estimate its GHG emissions from business travel by applying this primary data with secondary data on the GHG emissions relating to each of those activities.

5.6.1.D Verified data

IFRS S2 requires an entity to prioritise Scope 3 GHG emissions data that is verified. Data can be subject to internal or external verification and may involve on-site checking, reviewing calculations, or cross-checking of data against other sources. [IFRS S2.B53].

The ISSB acknowledges that an entity might need to use unverified data if it is unable to verify its Scope 3 GHG emissions without undue cost or effort. [IFRS S2.B54].

5.6.1.E Disclosure of inputs to Scope 3 GHG emissions

As part of an entity's disclosure of information about the measurement approach, inputs and assumptions that the entity uses to measure its Scope 3 GHG emissions in accordance with IFRS S2 (as discussed in section 5.3.1 above), the entity is required to disclose information about: [IFRS S2.B55, IFRS S2.B56]

- The characteristics of the data inputs referred to in section 5.6.1 on Scope 3 measurement framework that are used in the measurement of Scope 3 GHG emissions
- How the entity has prioritised the highest quality data available, which faithfully represents the value chain activity and its Scope 3 GHG emissions
- The extent to which the entity's Scope 3 GHG emissions are measured using:
 - Inputs from specific activities within the entity's value chain
 - Inputs that are verified

IFRS S2 includes a specifically stated presumption that Scope 3 GHG emissions can be estimated reliably using secondary data and industry averages. However, if an entity determines it is impracticable to estimate its Scope 3 GHG emissions (i.e., the entity cannot apply the requirement after making every reasonable effort to do so), IFRS S2 requires the entity to disclose how it is managing its Scope 3 GHG emissions. The ISSB expects that cases when measuring Scope 3 GHG emissions is impracticable will be rare. [IFRS S2.B57].

5.7 Financed emissions

IFRS S2 requires an entity participating in financial activities, including commercial and investment banks, asset managers and insurance entities to provide additional and specific disclosures about its Category 15 Scope 3 GHG emissions or those emissions associated with its investments, specifically its 'financed emissions' in: [IFRS S2.B59]

- Asset management (see section 5.7.1 below)
- Commercial banking (see section 5.7.2 below)
- Insurance (see section 5.7.3 below)

Appendix A

Defined terms

financed emissions	The portion of gross greenhouse gas emissions of an investee or counterparty attributed to the loans and investments made by an entity to the investee or counterparty. These emissions are part of Scope 3 Category 15 (investments) as defined in the Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2011).
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The amount of financed emissions of an entity participating in financial activities is a key focus area for primary users because it is an indicator of an entity's exposure to climate-related risks and opportunities and how the entity might need to adapt its financial activities over time. This is because: *[IFRS S2.B58]*

- Investees, borrowers and counterparties with high GHG emissions could be more susceptible to risks associated with technological changes, shifts in supply and demand and policy changes.
- As a consequence, those risks could increase the exposure of entities providing financial services to counterparties, borrowers and investees to credit risk, market risk, reputational risk and other financial and operational risks (such as credit risk associated with financing borrowers affected by carbon taxes or reputational risks from financing fossil fuel projects).

The application guidance in IFRS S2 supports the use of different measurement approaches to calculate an entity's financed emissions. In developing this application guidance, the ISSB's intention was to allow for measurement methodologies for different asset classes to emerge and be accepted by the market, such as the measurement methodologies developed by the Partnership for Carbon Accounting Financials. *[IFRS S2.BC125]*.

Frequently asked questions

Question 5-12: Does the scope of the requirement to disclose 'financed emissions' also determine what is included or excluded from an entity's Scope 3 Category 15 GHG emissions disclosures?

(TIG meeting 19 September 2024 - Agenda paper no. 4, ISSB meeting 20 November 2024 - Agenda paper no. 9C)

No. The TIG noted that the 'financed emissions' disclosure requirements in paragraph 29(a)(vi)(2) of IFRS S2 is directed at requiring entities engaged in specific activities (i.e., asset management, commercial banking or insurance) to disclose additional information about the GHG emissions included in Scope 3 Category 15 beyond the general requirement for all entities to disclose Scope 3 GHG emissions.

As such, many TIG members noted that the inclusion or exclusion of activities or asset classes in these financed emissions requirements has no bearing on the general requirement for all entities to disclose Scope 3 GHG emissions in accordance with paragraph 29(a)(i)(3) of IFRS S2.

5.7.1 Asset management

IFRS S2 requires an entity that participates in asset management activities to disclose the information set out in Figure 5-5 below:

Figure 5-5: Asset management disclosures

Information to disclose	Further considerations
The entity's absolute gross financed emissions, disaggregated by Scope 1, Scope 2 and Scope 3 GHG emissions [IFRS S2.B61(a)]	-
For each of the disaggregated Scope 1, Scope 2 and Scope 3 GHG emissions disclosures, the total amount of assets under management (AUM) included in the entity's financed emissions disclosures, expressed in the presentation currency of the entity's financial statements [IFRS S2.B61(b)]	-
The percentage of the entity's total AUM included in the financed emissions calculation [IFRS S2.B61(c)]	Explain the exclusions, including the type of assets excluded and associated amount of AUM, if the percentage of the entity's total AUM included in the financed emissions calculation is less than 100%.
The methodology used by the entity to calculate its financed emissions [IFRS S2.B61(d)]	Describe the allocation method used by the entity to attribute its share of emissions in relation to the size of its investments.

5.7.2 Commercial banking

IFRS S2 requires an entity that participates in commercial banking activities to disclose the information set out in Figure 5-6 below:

Figure 5-6: Commercial banking disclosures

Information to disclose	Further considerations	
The entity's absolute gross financed emissions, disaggregated by Scope 1, Scope 2 and Scope 3 GHG emissions for each industry by asset class. [IFRS S2.B62(a)].	For disaggregation by industry	The Global Industry Classification Standard (GICS) 6-digit industry-level code is required to classify counterparties (using the latest version of the classification system available at the reporting date).
	For disaggregation by asset class	Asset classes include: - Loans - Project finance - Bonds - Equity investments - Undrawn loan commitments

		If financed emissions are calculated and disclosed for other asset classes, the entity is required to explain why including those additional asset classes provides relevant information to primary users.
The entity's gross exposure to each industry by asset class, expressed in the presentation currency of the entity's financial statements. <i>[IFRS S2.B62(b)].</i>	For funded amounts	Gross exposure is to be calculated as the funded carrying amounts (before subtracting any loss allowance), whether prepared in accordance with IFRS accounting standards or other GAAP.
	For undrawn loan commitments	The full amount of the commitment is disclosed separately from the drawn portion of loan commitments.
The percentage of the entity's gross exposure included in the financed emissions calculation. <i>[IFRS S2.B62(c)].</i>	For exclusions	Explain the exclusions, including the type of assets excluded, if the percentage of the entity's gross exposure included in the financed emissions calculation is less than 100%.
	For funded amounts	Exclude all impacts of risk mitigants (if applicable) from gross exposure.
	For undrawn loan commitments	Separately disclose the percentage of the entity's undrawn loan commitments included in the financed emissions calculation.
The methodology used by the entity to calculate its financed emissions. <i>[IFRS S2.B62(d)].</i>	Describe the allocation method used by the entity to attribute its share of emissions in relation to the size of its gross exposure.	

5.7.3 Insurance

IFRS S2 requires an entity that participates in insurance activities to disclose the information set out in Figure 5-7 below:

Figure 5-7: Insurance disclosures

Information to disclose	Further considerations	
The entity's absolute gross financed emissions, disaggregated by Scope 1, Scope 2 and Scope 3 GHG emissions for each industry by asset class. <i>[IFRS S2.B63(a)].</i>	For disaggregation by industry	The GICS 6-digit industry-level code is required to classify counterparties (using latest version of the classification system available at the reporting date).
	For disaggregation by asset class	Asset classes include: - Loans - Bonds - Equity investments - Undrawn loan commitments If financed emissions are calculated and disclosed for other asset classes, the entity is required to explain why including those additional asset classes provides relevant information to primary users.
The entity's gross exposure for each industry by asset class, expressed in the presentation currency of the entity's financial statements. <i>[IFRS S2.B63(b)].</i>	For funded amounts	Gross exposure is to be calculated as the funded carrying amounts (before subtracting any loss allowance), whether prepared in accordance with IFRS accounting standards or other GAAP.
	For undrawn loan commitments	The full amount of the commitment is disclosed separately from the drawn portion of loan commitments.
The percentage of the entity's gross exposure included in the financed emissions calculation. <i>[IFRS S2.B63(c)].</i>	For exclusions	Explain the exclusions, including the type of assets excluded, if the percentage of the entity's gross exposure included in the financed emissions calculation is less than 100%.
	For undrawn loan commitments	Separately disclose the percentage of the entity's undrawn loan commitments included in the financed emissions calculation.
The methodology used by the entity to calculate its financed	Describe the allocation method used by the entity to attribute its share of emissions in relation to the size of its gross exposure.	

emissions. [IFRS S2.B63(d)].	
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Frequently asked questions

Question 5-12: Can an entity exclude Scope 3 emissions relating to its investment or lending activity from its measurement of financed emissions?

No, IFRS S2 requires an entity that participates in either asset management activities, commercial banking activities or financial activities associated with the insurance industry to disclose its absolute gross financed emissions, disaggregated by Scope 1, Scope 2 and Scope 3 GHG emissions. Therefore, the measurement of an entity's financed emissions must include the Scope 1, Scope 2 and Scope 3 GHG emissions related to those investments or lending.

This represents a difference from the GHG Protocol Corporate Value Chain Standard, which provides the following guidance on accounting for emissions from investments, "Where relevant, companies should also account for the scope 3 emissions of the investee or project".⁴⁸

Consistent with the explanation provided above in Question 5-7, minimum boundaries and other measurement and disclosure limitations outlined in the GHG Protocol Corporate Value Chain Standard are not applicable to entities that are measuring and disclosing their Scope 3 GHG emissions in accordance with IFRS S2.

5.8 Facilitated and associated emissions

Although not specifically addressed in IFRS S2, the Basis for Conclusions on IFRS S2 indicates that, due to the lack of an established methodology, the ISSB decided that the calculation of financed emissions is not required to include: [IFRS S2.BC127, IFRS S2.BC129]

- Derivatives
- 'Associated emissions' of underwriting portfolios in the insurance and reinsurance industries
- 'Facilitated emissions' relating to financial activities associated with investment banking

At its September 2024 meeting, the TIG discussed whether an entity with facilitated or associated emissions (i.e., asset class: derivatives, underwriting activities in the insurance and reinsurance industries and investment bank activities in the investment banking industry) would be required to include those emissions within its measurement of Scope 3 GHG emissions. Following the discussion at the TIG meeting, the ISSB has proposed amendments to IFRS S2 to clarify this issue. The proposed amendments are discussed further in section 8 below.

⁴⁸ Refer to Corporate Value Chain (Scope 3) Standard, available on the GHG Protocol website.

6 Effective date

IFRS S2 is effective for annual reporting periods beginning on or after 1 January 2024. An entity is permitted to apply IFRS S2 earlier than 1 January 2024, but to do so, the entity is required to disclose that fact and it is also required to apply IFRS S1 at the same time. *[IFRS S2.C1]*.

The actual effective date for entities will depend on when ISSB standards become mandatory in the jurisdictions in which they operate, unless those entities voluntarily apply the standards before they become mandatory in their jurisdictions. See also relevant discussion in Chapter 52.

7 Transition reliefs to IFRS S2

In developing IFRS S2, the ISSB decided to provide some relief to ease an entity's transition to the new requirements in the entity's first year of applying those requirements.

The transition reliefs set out in Table 7-1 below are available for an entity to use in the first annual reporting period in which the entity applies IFRS S2. The entity can choose to use all, some, or none of those reliefs in its first annual reporting period. [IFRS S2.C4, IFRS S2.BC174].

Figure 7-1: Transition reliefs for IFRS S2

Relief topic	Nature of relief that applies to the first annual reporting period in which the entity applies IFRS S2
Comparative information	An entity is not required to disclose comparative information. [IFRS S2.C3].
GHG Protocol	An entity is permitted to continue to use a method other than the GHG Protocol to measure its GHG emissions if the entity used that method to measure its GHG emissions in the annual reporting period immediately preceding the date of initial application of IFRS S2. [IFRS S2.C4(a)]. The date of initial application is the start of the reporting period in which an entity first applies IFRS S2.
Scope 3 GHG emissions	An entity is not required to disclose its Scope 3 GHG emissions, including the additional information about financed emissions (if applicable). [IFRS S2.C4(b)].

If an entity uses either of the abovementioned reliefs relating to the GHG Protocol or Scope 3 GHG emissions, IFRS S2 allows the entity to continue to use that relief so that it is not required to present that information as comparative information in subsequent reporting periods. [IFRS S2.C5]. This is explained further in Illustration 7-1 below:

Illustration 7-1: Comparative information transition relief

Entity A applies ISSB standards for the first time for the annual reporting period ending 31 December 2024.

In its first set of sustainability-related financial disclosures, Entity A elects to not disclose its Scope 3 GHG emissions in accordance with the transition relief options available in IFRS S2.

In its second set of sustainability-related financial disclosures, which is for the annual reporting period ending 31 December 2025, Entity A is required to disclose its Scope 3 GHG emissions for the 2025 reporting period. However, in accordance with the transition relief in IFRS S2, Entity A elects to not disclose its Scope 3 GHG emissions for the 2024 comparative period.

In its third set of sustainability-related financial disclosures, which is for the annual reporting period ending 31 December 2026, Entity A is required to disclose its Scope 3 GHG emissions for the 2026 reporting period and its Scope 3 GHG emissions for the 2025 comparative period. This is because the transition relief for Scope 3 GHG emissions only applies to the Scope 3 GHG emissions that relate to the first annual reporting period.

Frequently asked questions

Question 7-1: Is an entity that applies the transition relief not to disclose Scope 3 GHG emissions in its first year of reporting required to disclose its Scope 3 GHG emissions if it has a Scope 3 GHG emissions reduction target?

Some entities applying ISSB Standards for the first time may already have existing Scope 3 GHG emissions reduction targets that they have set or are required to meet by law or regulation.

In our view, if an entity has a Scope 3 target and elects to apply the transition relief in IFRS S2.C4(b), which permits an entity not to disclose Scope 3 GHG emissions in its first annual reporting period in which it applies ISSB Standards, the entity is not required to disclose its Scope 3 emissions as a metric in that reporting period. Under this view, the transition relief in IFRS S2.C4(b) is considered to apply broadly to any requirement that would otherwise require the disclosure of Scope 3 GHG emissions.

However, in that first reporting period, the entity would still be required to disclose information about its Scope 3 target, including (but not limited to):

- General information about the characteristics of the target (see paragraph 33(a)-(h)) and specific information about the GHG emissions aspects of the target (see paragraph 36)
- Information about the entity's approach to setting and reviewing the target and how it monitors progress against the target, including the metrics used to monitor progress towards reaching the target (see paragraph 34(c))
- Information about the entity's performance against the target and an analysis of trends or changes in the entity's performance (see paragraph 35).

Given the entity is applying the transition relief in IFRS S2.C4(b), it could meet these climate-related target disclosure requirements by disclosing qualitative information about its progress towards the target. Disclosure of the related Scope 3 emissions would not be required.

8 Future developments

In response to challenges faced by stakeholders in implementing the requirements of IFRS S2, the ISSB published an Exposure Draft (ED) *Amendments to Greenhouse Gas Emissions Disclosures* on 28 April 2025.

The ED proposes the following targeted amendments to IFRS S2 to:

- Provide relief to allow entities to exclude some Scope 3 Category 15 GHG emissions including those related to derivatives, facilitated emissions and insurance-associated emissions when measuring and disclosing Scope 3 GHG emissions (see section 5.8 above).
- Provide relief to entities involved in commercial banking and insurance activities from using the GICS in some circumstances to allow the use of an alternative industry-classification system when disclosing information about their financed emissions (see section 5.7 above).
- Amend the relief that allows entities to use an alternative method to the GHG Protocol when measuring GHG emissions (if required by a jurisdictional authority or an exchange), clarifying that it applies to an entity either in whole or in part (see section 5.1 above).
- Allow entities to use alternative GWP values instead of using the GWP values based on the latest IPCC assessment, to the relevant part of the entity that is required by a jurisdictional authority or exchange to apply those different GWP values (see section 5.3.2 above).

The proposed amendments to such GHG emissions disclosure requirements are expected to be widely applicable to entities that apply IFRS S2. However, those most likely to be affected include: entities subject to jurisdictional requirements related to the use of specific GHG emissions measurement methods or the use of specific GWP values; and entities in the financial sector that have Scope 3 Category 15 GHG emissions.

The comment letter period ends on 27 June 2025. The ISSB intends to set the effective date of the proposed amendments as early as possible and to permit early application. After its analysis of the feedback from the comment letters, the ISSB will redeliberate the proposals in the second half of 2025 with the intention to issue the amendments soon thereafter.

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