

# Navigating sustainability reporting: Practical application and analysis

April 2024

On 6 March 2024, the US Securities and Exchange Commission (SEC) adopted [final rules](#) that will require public companies to make disclosures about climate-related risks. On 4 April 2024, the SEC [stayed](#) the rules to “facilitate the orderly judicial resolution” of pending legal challenges. Read [PwC's US In depth](#) regarding the final rules for more information.



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# 1. Background

## 1.1 The three main sustainability reporting frameworks

Over recent years, there has been increasing demand from investors and other stakeholders for transparent, consistent and comparable disclosures on environmental, social and governance (ESG) matters in sustainability reporting. PwC's 2022 Global Investor Survey suggests that sustainability reporting outcomes rank highly among investors' priorities for business, and that a majority of investors want to place more trust in sustainability reporting. The survey also notes that common sustainability reporting frameworks, as well as external assurance, would boost investor confidence in sustainability reports. To address this need, regulators and standard setters in various jurisdictions issued proposals on sustainability-related disclosure requirements in 2022, looking to transform sustainability reporting.

This In depth focuses on the standards or proposals from the three major standard setters/regulators: the International Sustainability Standards Board (ISSB), the US Securities and Exchange Commission (SEC), and the European Commission (EC). Throughout this publication, the frameworks are collectively referred to as 'the three main frameworks'. All three frameworks primarily focus on disclosure requirements (rather than measurement).

In June 2023, the ISSB released its first two standards, referred to as IFRS® Sustainability Disclosure Standards: IFRS S1, 'General Requirements for Disclosure of Sustainability-related Financial Information', and IFRS S2, 'Climate-related Disclosures' (refer to PwC [In depth INT2023-05](#)<sup>1</sup>). IFRS S1 and IFRS S2 are effective for annual reporting periods beginning on or after 1 January 2024, with early adoption permitted. This is subject to the endorsement of the standards by local jurisdictions.

In December 2022, against the background of the European Green Deal, the EC published the final Corporate Sustainability Reporting Directive (CSRD). The objective of the CSRD is to fundamentally revise and strengthen the non-financial reporting rules introduced by the 2014 Non-Financial Reporting Directive (NFRD). The CSRD came into force in early January 2023, and Member States have 18 months to transpose the CSRD provisions into their national law. To enact the directive, 12 European Sustainability Reporting Standards (ESRS) were developed by the European Financial Reporting Advisory Group (EFRAG) and issued by the EC. Whether entities will be within the scope of the CSRD depends on specific criteria, including size and listing status. Timing for first-time application depends on the reason why an entity is within its scope, with the earliest adoption being on 1 January 2024 for reporting in 2025<sup>2</sup>. The ESRS are expected to be applicable in all Member States of the European Union, once the European Commission has adopted them as delegated acts, provided that no objection is expressed by the European Parliament and Council.

The SEC issued a proposed rule, 'The Enhancement and Standardisation of Climate-Related Disclosures for Investors', in March 2022, designed to significantly enhance climate-related disclosures in nearly all SEC registrants' annual filings and registration statements<sup>3</sup>.

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<sup>1</sup> [In depth INT2023-05](#) – IFRS Sustainability Disclosure Standards – Guidance, insights and where to begin.

<sup>2</sup> For more detailed information on adoption requirements for the CSRD, see [In brief INT2022-21 'Finalisation of EU CSRD'](#).

<sup>3</sup> For more detailed information on the SEC's proposed rule, refer to [US In the loop: The SEC wants me to disclose what? The SEC's climate disclosure proposal](#).

## 1.2 The purpose of this document

The ISSB™ standards, IFRS S1 and IFRS S2, and the 12 ESRS were finalised in June and July 2023, respectively. The SEC framework remains a proposal, with timing of the final rule unclear. Many preparers are expected to be within the scope of multiple frameworks, which will result in practical challenges. This In depth is a collection of insights into issues which could arise as preparers implement the three main frameworks.

While the three main frameworks have much in common, there are also some fundamental differences. This In depth aims to reduce some of the potential complexity when having to comply with multiple frameworks by highlighting areas of convergence and areas of difference. We expect to update the In depth on a regular basis to reflect the progress of the three main frameworks along with any additional relevant considerations.

This In depth should be read in conjunction with the applicable standards and rules, and it is not intended to be a comprehensive guide to the disclosure requirements in the three main frameworks. The In depth should serve as a starting point as preparers consider the impact of the three main frameworks.

The SEC rule is still in the process of being developed, and so references and terms used in this In depth might be different from the content in the final version.



## 2. Sustainability reporting policies and interaction with financial reporting

When applying sustainability reporting standards and rules, there will be areas where preparers encounter challenges in addressing the disclosure reporting requirements due to lack of guidance within the three main frameworks. The sustainability reporting standards have less guidance when compared to the volume of guidance available in the financial reporting standards, given the maturity of financial reporting standards. Many common presentation and measurement questions, such as how to reflect acquisitions and divestitures, are not explicitly addressed in the three main frameworks.

Entities will need a model to approach situations for which there is limited or no guidance in the applicable sustainability reporting framework. From a financial reporting perspective, standards such as IAS 8, 'Accounting Policies, Changes in Accounting Estimates and Errors', provide guidance on addressing transactions, other events and conditions in the absence of a specific IFRS accounting standard providing authoritative guidance. US GAAP has similar guidance in ASC 105, 'Overview of Generally Accepted Accounting Principles'. While there is no comparable hierarchy within the three main frameworks, we believe that the principles in IAS 8 and ASC 105 provide a reasonable approach.

In the absence of specific guidance, IAS 8 and ASC 105 prioritise accounting principles for similar transactions or events within IFRS and US GAAP, respectively, followed by guidance provided by other standard-setting bodies. Below is a list of sources of guidance that provide a comparable approach for sustainability reporting to enable interoperability – that is, the ability for an entity to easily apply the three frameworks in conjunction with one another. We believe that preparers should consider the hierarchy below, in the order listed, when developing sustainability reporting policies. In the absence of, or when there is limited authoritative guidance on, sustainability-related topics within the framework being used, this hierarchy will promote interoperability and build trust in the sustainability ecosystem at what is a critical juncture:

- The reporting entity's applicable sustainability reporting framework(s), standards and authoritative guidance.
- Other sustainability reporting frameworks (that is, one of the other three main frameworks) or other widely applied standards such as the Global Reporting Initiative (GRI).
- The reporting entity's own financial reporting framework and its related financial reporting policies.

### **The reporting entity's applicable sustainability reporting framework(s), standards and authoritative guidance**

When developing a sustainability reporting policy to address a specific sustainability-related matter, the reporting entity should first consider the sustainability reporting framework that it is required to apply by relevant regulations, or it has chosen to apply in the absence of regulation. This includes, but is not limited to, guidance in the form of basis for conclusions, illustrative examples and accompanying guidance. In some instances, the sustainability reporting framework might refer to additional sources of guidance that an entity might consider (such as the Greenhouse Gas Protocol, or the standards of the Sustainability Accounting Standards Board). However, these sources should only be considered to the extent that they do not conflict with the requirements of the sustainability reporting framework being used. For example, paragraph C2 of IFRS S1 states, for the purposes of identifying information to provide about a sustainability-related risk or opportunity, that an entity may refer to and consider the GRI Standards and the ESRS where this does not conflict with the requirements of the IFRS Sustainability Disclosure Standards.

### **Other sustainability reporting frameworks (that is, one of the other three main frameworks) or other widely applied standards such as the Global Reporting Initiative (GRI)**

Where the sustainability reporting framework that is being used is silent, preparers could consider the guidance in one of the other three main frameworks. In these situations, where an entity is subject to multiple frameworks, developing sustainability reporting policies using the guidance in the other frameworks will help reduce inconsistencies between the entity's sustainability reports, which fosters more consistent and comparable sustainability reporting.

The approach of using other sustainability reporting frameworks might also be beneficial if entities want their treatment of certain matters that are not addressed in their own applicable sustainability reporting frameworks to be comparable

with their peers (within a country, or globally) which provide sustainability-related disclosures under a different framework.

### **The reporting entity's own financial reporting framework and its related financial reporting policies.**

A reporting entity could choose to apply the principles of its own financial reporting framework and financial reporting policies to the sustainability reporting transaction or event if there is a natural symmetry between the financial and sustainability reporting. For example, leveraging the well-understood financial reporting methodology for making assumptions with respect to reporting boundaries or changes in group structure will likely reduce complexity for preparers and users alike. Financial reporting principles are well known by stakeholders, so developing sustainability reporting policies based on financial reporting principles will aid understandability in many instances.

Consistency between sustainability reporting and financial reporting is increasingly important, because sustainability information appears more often in the same document as financial information. Users of an entity's reporting as a whole might assume or expect that the sustainability and financial reporting disclosures would be on the same or a similar basis when similar assumptions and policies need to be selected. For example, when there is a change in group structure (such as an acquisition or divestiture) in the reporting period, consistent treatment under financial and sustainability reporting might provide the most decision-useful information and reduce the complexity of separately evaluating how a transaction impacted financial reporting and sustainability reporting.

Consistency between sustainability reporting and financial reporting is particularly important when reporting metrics that utilise both sustainability and financial data – for example, an intensity measure such as emissions per unit of revenue. Reflecting the effects of an acquisition in revenue and emissions in a comparable manner will result in more useful metrics, because the numerator and denominator will be calculated on a comparable basis.

For the reasons above, the guidance in this In depth leverages financial reporting principles where considered relevant. However, when there are deviations from this approach, for example, when one of the three main frameworks provides explicit guidance that is different to financial reporting, this deviation will be explained.



# 3. Scope and application of the three main frameworks

Assessing the scope and application of the three main frameworks can be complex. This requires the consideration of the following key factors:

1. Whether the entity meets the characteristics of a specific type of entity that are within the scope of the relevant framework (for example, listed companies) (see discussion below).
2. The sustainability-related topics that need to be disclosed in order to meet the disclosure requirements of the relevant framework (see discussion below).
3. Which entities are included in the reporting boundary of the relevant framework (see '7. Reporting boundary').

## 3.1 Entities that are within the scope of the three main frameworks

See Sustainability reporting guidance chapter 2, *Scope*, for more information.

## 3.2 Topics within the scope of the three main frameworks

A clear difference between the three main frameworks is the breadth of topics within their scope.

However, further alignment is expected if the SEC and ISSB continue to issue further thematic guidance as expected. Additionally, industry standards are another point of potential future alignment. The ISSB expressed support for required industry disclosures in its deliberations during 2022. In March 2023, EFRAG indicated that it intends to turn its attention to implementation guidance as requested by the EC; however, it also stated that development of sector standards remains a 'key task'. Further information on these announcements can be found [here](#).

The topics within the scope of the three main frameworks are explained further below.

### **IFRS Sustainability Disclosure Standards: IFRS S1 and IFRS S2**

IFRS S1 is the core framework for the disclosure of material information about sustainability-related risks and opportunities across an entity's value chain.

Entities might be required to apply other IFRS Sustainability Disclosure Standards, often referred to as 'thematic standards' (to date, just IFRS S2) when applying IFRS S1. The other IFRS Sustainability Disclosure Standards will specify the information that an entity is required to disclose about specific sustainability-related risks and opportunities. [IFRS S1 para 7]. However, in the absence of other IFRS Sustainability Disclosure Standards addressing a specific topic and/or specific risks and opportunities, entities should apply the principles of IFRS S1.

IFRS S2 sets out requirements for entities to disclose information about climate-related risks and opportunities.

Although IFRS S1 and IFRS S2 are the first two standards issued by the ISSB, further standards will be issued in due course. The ISSB is currently seeking feedback from stakeholders on its priorities for its two-year work plan. (The consultation was open for comments on the [IFRS Foundation's website](#) until 1 September 2023.)

IFRS S1 provides some transition relief, including requiring only climate-related disclosures in the first year that an entity applies IFRS S1 and IFRS S2. Information about other sustainability-related risks and opportunities will be



provided in the second year of application. [IFRS S1 para E5<sup>4</sup>].

There are currently no industry-based IFRS Sustainability Disclosure Standards; however, IFRS S1 requires entities to refer to, and consider the applicability of, the disclosure topics in the industry-based SASB standards to identify sustainability-related risks and opportunities, and the disclosures thereof. Additionally, industry-based topics and metrics guided by the SASB standards should be referred to and considered. [IFRS S1 para 55].

[IFRS S1 para 58<sup>5</sup>].

Both IFRS S1 and IFRS S2 contain application guidance that provides further clarity on key elements of the standards.

## ESRS

The ESRS span a broad list of environmental, social and governance topics.

The first set of ESRS comprises 12 standards and includes the following:

- Two cross-cutting standards (ESRS 1 on general requirements and ESRS 2 on general disclosures) which apply to the sustainability matters covered by topical and sector-specific standards. [ESRS 1 para 5].
- Ten topical standards covering:
  - environment (climate change, pollution, water and marine resources, biodiversity and ecosystems, resource use and circular economy);
  - social (own workforce, workers in the value chain, affected communities, consumers and end-users); and
  - governance (business conduct).

The final ESRS issued in July 2023 indicate that all standards, with the exception of ESRS 2 on general disclosures, will be subject to a materiality assessment. [ESRS 1 para 29]. Additional phase-in provisions have been introduced, as well as some disclosures now being voluntary. Further details on the final ESRS can be found [here](#).

ESRS that are sector-specific, ESRS specific to small and medium-sized enterprises (SMEs) and ESRS specific to non-EU companies will be released in phases over the next few years. EFRAG is also working on developing implementation guidance to support the application of sector-agnostic standards. It is expected that the guidance will cover the double materiality assessment and the inclusion of value chain information.

## The SEC's proposed rule on climate-related disclosures

Currently the SEC's proposed rule addresses climate-related risks, and industry-specific disclosures are not required. The SEC also intends to issue a proposal on human capital management disclosures in the future.

Once an entity has assessed which framework it is subject to and what topics need to be disclosed, it is important to identify where the required sustainability-related information should be disclosed.

### FAQ 3.2.1 – Where should sustainability-related information be disclosed?

#### Question

Where should sustainability-related information be disclosed?

<sup>4</sup> Refer to Section 4 in the PwC ISSB In depth, [IFRS Sustainability Disclosure Standards – Guidance, insights and where to begin](#), for further guidance on transitional provisions relating to IFRS S1 and IFRS S2.

<sup>5</sup> Refer to Sections 1.2 and 2.2.4 in the PwC ISSB In depth, [IFRS Sustainability Disclosure Standards – Guidance, insights and where to begin](#).

## PwC response

Where to report sustainability-related information is generally specified by the relevant sustainability reporting framework.

	EC	ISSB	SEC
Reference	ESRS 1 paras 111–117, 119–122 and QC 17  ESRS 1 App D and App ESRS 2 para 16	IFRS S1 paras 60–63, App B paras B31–B33, B45–B47 and App D para D26  IFRS S1 paras BC142–BC144	Proposed Article 14 of Regulation S-X – Climate-related disclosure, Article 14-01(a)
Guidance	Disclosure should be included within a dedicated section of the management report identified as the sustainability statements.  Ability to incorporate information by reference is determined by the requirements in ESRS 1.  ESRS 2 requires the disclosure of a list of the disclosure requirements of ESRS (or the specific data points mandated by a Disclosure Requirement) that have been incorporated by reference.	An entity is required to disclose information required by IFRS Sustainability Disclosure Standards as part of its general purpose financial reporting – such as in management commentary, but with flexibility on location.	Disclosure of climate-related risks and GHG emissions would be required to be included in a separate section of the annual report or registration statement. In some cases, disclosures can be incorporated by reference as determined by instructions to individual forms.  A financial statement footnote would include disclosure of the financial impact of severe weather and transition-related activities and expenditure metrics.

The ESRS and SEC proposed rules on climate-related disclosures are prescriptive in terms of where to report sustainability-related information. The following considerations can be taken into account in determining where sustainability-related information can be disclosed under the ISSB standards:

- **Local territory regulations and/or other requirements that apply to an entity**

When reporting under IFRS Sustainability Disclosure Standards, local territory laws or regulations might specify where/in which reports sustainability-related information should be disclosed. IFRS S1 states that “**subject to any regulation or other requirements that apply to an entity, there are various possible locations in its general purpose financial reporting in which to disclose sustainability-related financial information**”.

IFRS S1 allows information that stems from local legislation to be included in an entity's sustainability reporting. Where material sustainability-related information required by IFRS Sustainability Disclosure Standards is disclosed in the same location as information to meet other requirements, such as regulatory requirements, such sustainability-related information should be clearly identified and not obscured by that additional information.

- **Management commentary**

An entity reporting under IFRS Sustainability Disclosure Standards could include sustainability-related financial information in its management commentary, where management commentary forms part of the entity's general purpose financial reporting and where this is permitted by local laws or regulations. Management commentary can be included in different reports and can be known by various names including, but not limited to, ‘management's discussion and analysis’, ‘integrated report’, or ‘operating and financial review’. Management commentary provides insights into what has affected an entity's financial position and performance, and it complements an entity's financial statements.

Further information can be found in the [IFRS practice statement on management commentary](#) and the International Accounting Standards Board® (IASB) [project on management commentary](#), including an [exposure draft](#) published in May 2021.

- **Cross-referencing**

Information that is required to be disclosed by an IFRS Sustainability Disclosure Standard can be included by cross-reference. However, in order for information to be included by cross-reference, it needs to be available on the same terms and at the same time as the sustainability-related financial disclosures.

Additionally, the complete set of sustainability-related financial disclosures should not be made less understandable by including information by cross-reference. The reporting requirements under IFRS S1 indicate that sustainability-related information is understandable where information is clear and concise. The standard makes it clear that, in order for information to be concise, unnecessary duplication of information should be avoided, including information also provided in financial statements. In addition, boilerplate information that is not specific to an entity should be avoided.

Information that is material and that is included by cross-reference becomes part of the complete set of sustainability-related financial disclosures, and then needs to comply with the requirements of IFRS Sustainability Disclosure Standards.

Where information is included by cross-reference:

- The report within which that information is located shall be clearly identified in the entity's sustainability-related financial disclosures. The cross-reference included needs to be precise – that is, it needs to be to a precisely specified part of that report.
- An explanation of how that report can be accessed must be provided.

For entities reporting under ESRS, there are specific conditions relating to information that has been incorporated by reference. [ESRS 1 para 120]. Provided that these conditions are met, the incorporation of information by reference is allowed only for information found in the following locations:

- another section of the management report;
- the financial statements;
- the corporate governance report (if not part of the management report);
- the remuneration report required by Directive 2007/36/EC of the European Parliament and of the Council;
- the universal registration document, as referred to in Article 9 of Regulation (EU) 2017/1129;
- public disclosures under Regulation (EU) 575/2013 of the European Parliament and of the Council ('Pillar 3 disclosures'). [ESRS 1 para 119].

For disclosures required outside the financial statements, SEC registrants may incorporate by reference disclosures included in other sections of their registration statement or annual report (for example, Risk Factors, MD&A, or the financial statements), or from other reports filed with or furnished to the SEC into the separately captioned 'Climate-Related Disclosures', provided that the SEC's general rules regarding incorporation by reference are met. Registrants should not incorporate information into the financial statements by reference to information reported outside the financial statements.

## 4. Risks and opportunities

A common key objective and requirement across the three main frameworks is the identification and disclosure of sustainability-related risks and opportunities.

In addition to risks and opportunities, ESRS require the disclosure of material 'impacts'. [ESRS 1 para 2]. In all ESRS, the term 'impacts' refers to sustainability-related impacts, actual impacts or potential future impacts, positive and negative, that are connected with the entity's business, that have been identified through an impact materiality assessment. [ESRS 1 para 14(a)]. For example, an entity might cut down trees on a large plot of land in order to build a production plant. These trees are a habitat for various birds and animals in this location. Cutting down the trees results in an impact (loss of natural habitat) – which is connected to the entity's business and has a negative impact on the environment.

Under the ESRS, the term 'risks and opportunities' refers to the entity's sustainability-related financial risks and opportunities that have been identified through a *financial* materiality assessment. Collectively, these are referred to as 'impacts, risks and opportunities'. [ESRS 1 para 14(b)]. Refer to '5. Materiality' below.

The IFRS Sustainability Disclosure Standards do not define sustainability-related risks and opportunities. However, to effectively identify sustainability-related risks and opportunities, and to meet the objective of IFRS S1, an entity needs to have an understanding of the resources that it relies on, and relationships along its value chain. An entity's dependencies and impacts on resources and relationships give rise to sustainability-related risks and opportunities.

The term 'climate-related risks' under the SEC's proposed rule means the actual or potential negative impacts of climate-related conditions and events on a registrant's consolidated financial statements, business operations or value chains as a whole. The disclosure of climate-related opportunities is optional when reporting under the SEC's proposed rule.

As noted above, IFRS S1 refers to sustainability-related risks and opportunities. However, the SEC only requires climate-related risks, while the ESRS include sustainability-related risks and opportunities, as well as impacts. As a result, reference to 'sustainability-related risks and opportunities' throughout this In depth might refer to any of these concepts, as required by the applicable sustainability reporting framework.

For entities reporting under the IFRS Sustainability Disclosure Standards, guidance from other materials is permitted in the absence of specific guidance in the IFRS Sustainability Disclosure Standards. Therefore, in identifying sustainability-related risks and opportunities, entities:

- shall refer to IFRS Sustainability Disclosure Standards first;
- shall refer to, and consider whether the disclosure topics in the industry-based SASB Standards are applicable;
- are permitted, but not required, to consider the CDSB Framework. The CDSB Framework can also be used as a source of guidance in preparing disclosures about identified risks and opportunities;
- are permitted, but not required, to consider the most recent pronouncements of other standard-setting bodies whose requirements are designed to meet the needs of users of general purpose financial reporting. Such pronouncements can also be used to identify disclosures about risks and opportunities;
- may refer to and consider the sustainability-related risks and opportunities that have been identified by entities that operate in the same industries or geographical regions.

[IFRS S1 para 54]. [IFRS S1 para 55].

When identifying the sustainability-related risks and opportunities that could reasonably be expected to affect the entity's prospects, the entity shall use all reasonable and supportable information that is available to the entity at the reporting date without undue cost or effort. [IFRS S1 App B para B6(a)]. [IFRS S1 App B para B8]. [IFRS S1 App B para B9]. [IFRS S1 App B para B10].

In the absence of guidance in a relevant IFRS Sustainability Disclosure Standard, entities are permitted, but not required, to consider the GRI Standards and ESRS in identifying *disclosures* about sustainability-related risks and opportunities. [IFRS S1 para 58(c)]. [IFRS S1 App C para C2]. [IFRS S1 App C para C3]. [IFRS S1 para BC136].

[IFRS S1 para BC137].

Further guidance on identifying and disclosing sustainability-related risks and opportunities when reporting under the IFRS Sustainability Disclosure Standards can be found [here](#).

A commonality among the three main frameworks is that each framework requires entities to consider sustainability risks and opportunities that might occur over the short, medium and long term. Under ESRS, the time horizons of short, medium and long term are defined. There could be circumstances, however, which result in an entity applying a different definition of medium- and/or long-term time horizons. [ESRS 1 para 7780]. [ESRS 1 para 80]. Time horizons for disclosure of sustainability risks and opportunities over the short, medium and long term are not defined in the IFRS Sustainability Disclosure Standards or the SEC's proposed rule.

Identifying sustainability-related risks and opportunities is an important step that reporting entities need to carefully assess in order to appropriately achieve the stated objectives of the three main frameworks, and to address the disclosure requirements thereof. An entity's financial position and performance could be impacted if material sustainability-related risks and opportunities are not identified and disclosed.

#### FAQ 4.1 – How do laws and regulations impact sustainability reporting?

##### Question

How do laws and regulations impact sustainability reporting?

##### PwC response

Changes in existing legislation, and new laws and regulations, might have a direct impact on the determination of material amounts and disclosures in financial statements and sustainability reports. This FAQ addresses laws and regulations established by jurisdictions beyond those that relate directly to the three main frameworks.

##### General framework (financial reporting)

There is guidance under financial reporting frameworks that can assist preparers in determining how to account for and disclose the impacts of laws and regulations in the financial statements. For example, IAS 12, 'Taxation', and ASC 740, 'Income taxes', provide guidance on what to consider when there are changes in tax rates.

##### Sustainability frameworks

	EC	ISSB	SEC
<b>Reference</b>	ESRS 1 para 2	IFRS S1 para 1 and App B para B1	Regulation S-K Item 1502(a)
<b>Guidance</b>	The undertaking shall disclose, in accordance with applicable ESRS, all of the material information regarding impacts, risks and opportunities in relation to environmental, social and governance matters.	An entity is required to disclose information about its sustainability-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.	Describe any climate-related risks reasonably likely to have a material impact on the registrant, including on its business or consolidated financial statements, which might manifest over the short, medium and long term.

The three main frameworks require disclosures regarding material risks and opportunities. New legislation and/or changes to existing legislation might impact an entity and the risks and opportunities disclosed in its sustainability report. There is currently no guidance in the three main frameworks that specifically addresses this topic.

New laws or regulations, or changes to existing laws or regulations, could result in the identification and disclosure of material sustainability-related risks and opportunities.

Since the assessment of risks and opportunities is forward looking, an entity cannot only consider existing laws and regulations. Entities need to monitor the legislative and regulatory landscape and developments that might impact the entity's operations in those jurisdictions and the likelihood that they will be enacted. Entities should consider whether it would be helpful to provide information about differences in how new or potential changes in laws and regulations are considered for financial reporting and sustainability reporting purposes.

### **Example of new legislation**

A law is passed in the current reporting period, in the jurisdiction in which the entity operates, requiring entities to ensure that manufacturing waste is recovered or disposed of without endangering human health or harming the environment.

As a result of the law being passed, the entity should consider whether additional risks and opportunities have arisen, including the potential impact that the law might have on its business model and strategy for managing risks. For example, the entity might identify a risk that changes are needed to its manufacturing processes, or that it could be exposed to material penalties (monetary and non-monetary) as a result of its inability to comply with the law.

### **Example of potential new legislation**

During an entity's current reporting period, the government in one of the jurisdictions in which it operates proposes a law that is expected to come into effect in the next reporting period. The proposed law will require all government suppliers to achieve a specified reduction in GHG emissions before being considered for new contract awards. There is a risk that the entity will be unable to meet the new requirement and it therefore might be ineligible for new government contracts, which is a significant portion of its current revenue.

## **FAQ 4.2 – Should sustainability metrics that can impact the cash flows referenced in sustainability-linked loans or other similar financial instruments be reported by the borrower as part of their sustainability disclosures?**

### **Question**

Should sustainability metrics that can impact the cash flows referenced in sustainability-linked loans or other similar financial instruments be reported by the borrower as part of their sustainability disclosures?

### **PwC response**

Interest rates on sustainability-linked loans (SLLs) or other similar financial instruments can be positively or negatively impacted as a result of whether the borrower does or does not meet specified sustainability targets. Typically the sustainability metrics agreed between the borrower and the lender(s) are significant to the borrower.

Sustainability standards require the disclosure of material sustainability-related risks and opportunities, as well as how those risks and opportunities are assessed and managed.

### **General framework (financial reporting)**

IFRS 7 requires qualitative and quantitative disclosures about risks associated with financial instruments. Risk arises from the uncertainty in cash flows which in turn affects the future cash flows and fair values of financial assets and liabilities. Where green variability features or other sustainability-linked metrics in the instrument are immaterial, disclosure would not be required.

If a registrant has long-term debt for which principal or interest payments are contingent, S-X Rule 5-02 of SEC Regulation requires the registrant to disclose the nature of the contingency.

### **Sustainability frameworks**

There is a lack of specific guidance within the sustainability reporting frameworks around expected disclosure for SLLs.

	EC	ISSB	SEC
Reference	Overall disclosures – no general principle specific to SLLs	Overall disclosures – no general principle specific to SLLs	Overall disclosures – no general principle specific to SLLs
Guidance	General sustainability information – ESRS do not include a principle for reporting sustainability information related to SLLs.	General sustainability information – IFRS S1 and IFRS S2 do not include a principle for reporting sustainability information related to SLLs.	The SEC proposal does not include a principle for reporting sustainability information related to SLLs.

In considering whether the metrics included within the terms of a SLL should be reported by the borrower in its sustainability disclosures, an entity should consider, in particular, whether:

1. the impact on the cash flows of the instrument, as a result of meeting or failure to meet the required targets, gives rise to a risk or opportunity that is material to the entity’s cash flows over the short, medium or long term;
2. the metrics chosen are used to measure, monitor and manage its material sustainability-related risks and opportunities; or
3. the metric was agreed between the borrower and lender because it relates to material sustainability-related risks or opportunities.

Where any of the above considerations are met, we believe that the metric referenced in the SLL should be disclosed in the entity’s sustainability disclosures.

Exclusion of these metrics from sustainability disclosures would only be appropriate where the risks or opportunities associated with the sustainability feature, and the associated metrics, of the SLL are not material. It would be expected that this conclusion would be internally consistent with how the reporting entity portrays these instruments and their sustainability-linked features in other aspects of its reporting. In the interest of balanced disclosures, we believe that the prominence of these instruments should be commensurate with their materiality.

## 5. Materiality

Consistent with financial reporting, sustainability reporting disclosures will be driven largely by an entity's assessment of what is material. The approach to materiality, however, is one of the key differences between the three main frameworks.

ESRS materiality is assessed based on 'double materiality', which consists of 'financial materiality' (an outside-in perspective) and 'impact materiality' (an inside-out perspective). [ESRS 1 para 37]. A sustainability matter is material from an impact perspective where it relates to the entity's material impacts on people or the environment over the short, medium and long term. These impacts can be actual or potential, positive or negative. [ESRS 1 para 43]. A sustainability matter is financially material if it triggers, or could reasonably be expected to trigger, material financial effects on the reporting entity. The financial materiality assessment under ESRS corresponds to the identification of information that is considered material for primary users. Additionally, the financial materiality of a sustainability matter includes the assessment of risks and opportunities outside the scope of financial statement consolidation. [ESRS 1 para 47]. [ESRS 1 para 48]. [ESRS 1 para 49].

Under the IFRS Sustainability Disclosure Standards, information is material if omitting, misstating or obscuring that information could reasonably be expected to influence the decisions of primary users. [IFRS S1 para 18]. [IFRS S1 App B para B13]. There is no specified threshold for materiality, nor do the standards predetermine what would be material in a particular situation. [IFRS S1 para 17]. [IFRS S1 App B para B19]. The IFRS Sustainability Disclosure Standards therefore consider the impact of sustainability on an entity through an investor lens, and they require information about how material sustainability-related risks and opportunities could impact financial performance. This is consistent with the materiality assessment under the SEC's proposed rule (see below).

Although the definition of materiality under IFRS S1 is the same as the definition of materiality under IAS 1, 'Presentation of financial statements', entities are likely to exercise different judgement from that used when determining materiality for general purpose financial statements. For example, under IFRS S1, it is expected that entities might need to consider financial implications of sustainability-related risks and opportunities over longer periods of time (short, medium and long term) than those considered material in preparing general purpose financial statements. [IFRS S1 para BC69].

Under the SEC's proposed rule, materiality outside the financial statements will be assessed based on the definition of materiality in existing securities laws/US Supreme Court precedent. However, a specified 1% bright-line threshold would be applied for financial statement footnote quantitative disclosures.

Applying the concept of materiality to sustainability-related risks and opportunities is a highly complex and judgemental area. Materiality judgements should be reassessed at each reporting date to take into account any changed circumstances and assumptions. In order to help users of sustainability reporting to understand the judgements made by an entity, information about materiality judgements should be disclosed. [IFRS S1 para 74]. [IFRS S1 para 75(c)]. [IFRS S1 App B para B28].

### PwC observation

The SEC's proposed rule on climate-related disclosures and the ESRS are silent on whether materiality judgements should be reassessed at each reporting date. However, in order to enhance the understandability of the information disclosed, including judgements applied, we believe that entities reporting under the SEC's proposed rule on climate-related disclosures and the ESRS should reassess materiality judgements at each reporting date. Additionally, disclosures of materiality judgements made should be provided, including any changes in those judgements as a result of changed circumstances or assumptions.



## 6. Sustainability reporting policies, sustainability reporting estimates and errors

The three main frameworks are all based on the four pillars of the Task Force on Climate-related Financial Disclosures (TCFD) framework, and they require disclosures to be provided regarding governance, strategy, risk management<sup>6</sup>, and metrics and targets. The IFRS Sustainability Disclosure Standards and the ESRS follow the same four-pillar approach for broader sustainability-related risks and opportunities (that is, not limited to climate-related risks and opportunities). However, it is important for users of sustainability reporting to understand the policies that have been applied and which underlie the disclosures which are made.

From 2024, the IFRS Foundation has been tasked by the Financial Stability Board (FSB) to take over the monitoring of companies' progress towards climate-related disclosures against the recommendations published by the TCFD.

### PwC observation

Unlike financial reporting, where the clear disclosure of an entity's financial reporting policies is required, neither the ISSB nor the SEC defines 'sustainability reporting policies'. ESRS 1 does include limited guidance with regard to 'policy'.

Although not explicitly required, preparers should consider whether to describe the policies applied in a footnote in the sustainability report, similar to that found in the financial statements. This will ensure that sustainability reporting policies are appropriately identified and documented to enhance consistency of reporting.

### FAQ 6.1.1 – What is a sustainability reporting policy?

#### Question

What is a sustainability reporting policy?

### PwC response

#### General framework (financial reporting)

Accounting policies are the specific principles, bases, conventions, rules and practices applied by an entity in preparing and presenting financial statements. [IAS 8 para 5]. There is no specific definition for accounting policies or accounting principles in US GAAP, but ASC 250 provides guidance on how to differentiate between changes in policies and changes in estimates or errors.

#### Sustainability frameworks

In general, we would expect sustainability reporting to follow financial reporting principles in the area of reporting policies, although other approaches might be acceptable.

<sup>6</sup> Paragraph 7 of ESRS 1 refers to 'impact, risk and opportunity management'.

	EC	ISSB	SEC
<b>Reference</b>	ESRS 2 paras 52 and 53(g)	IFRS S1 paras D21–D24	No specific guidance in the SEC’s proposal about the definition of a policy
<b>Guidance</b>	Does not reference or define sustainability reporting policies. However, an entity is required to provide an understanding of the process through which the entity identifies impacts, risks and opportunities and assesses their materiality, as the basis for determining the disclosures in its sustainability reporting, in addition to other input parameters such as data sources, the scope of operations covered and the detail used in assumptions.	Does not reference or define sustainability reporting policies. However, IFRS S1 does require an entity to describe the underlying assumptions and methods used for producing sustainability information to be useful to the users.	The SEC proposal has no specific guidance regarding the definition of sustainability policies, but includes several examples of policies. For example, the SEC guidance refers to required disclosures of policy decisions made to calculate financial statement metrics, and states that whether to disclose climate-related opportunities is a policy election that must be applied consistently.

Management will need to select and implement policies that govern the compilation of sustainability data and the preparation of sustainability reporting. These policies commonly include the determination of criteria, reporting boundaries, method of consolidation of sustainability information, methodologies of calculation of underlying sustainability metrics and, in the absence of a specific thematic standard, the sources of guidance considered.

Such policies should be applied consistently from period to period. Where the criteria, measurement method or reporting boundary are not consistent from one reporting period to another, it is important that the sustainability information includes adequate disclosure of this fact, together with the reasons.

None of the three main frameworks defines what a sustainability reporting policy is. Therefore, entities could adapt the definition provided in paragraph 5 of IAS 8 and define sustainability reporting policies as the specific principles, bases, conventions, rules and practices applied by an entity in preparing and presenting sustainability reporting. Alternatively, the definition of ‘policy’ in Annex II, ‘Acronyms and glossary of terms’, to ESRS could be applied.

Refer to FAQ 6.2 for guidance on distinguishing between prior period errors and changes in sustainability reporting policies and estimates.

#### PwC observation

Although not explicitly required, we believe that entities disclosing their sustainability reporting policies would provide information to the users of sustainability reporting that enhances their understanding, in particular in areas where the policies deviate from those applied in the financial statements.

#### FAQ 6.1.2 – Should consolidated sustainability reporting be prepared using consistent sustainability reporting policies among entities within the consolidated group?

##### Question

Should consolidated sustainability reporting be prepared using consistent sustainability reporting policies among entities within the consolidated group (that is, parent and subsidiary)?

## PwC response

### General framework (financial reporting)

Under IFRS Accounting Standards, appropriate adjustments might need to be made to the subsidiary's financial statements in preparing the consolidated financial statements to ensure conformity with the group's accounting policies. [IFRS 10 para 19]. [IFRS 10 App B para87]. While not explicitly stated in US GAAP, the same principle is applied.

### Sustainability frameworks

	EC	ISSB	SEC
<b>Reference</b>	ESRS 1 paras 90, QC11, QC12	IFRS S1 para 23	
<b>Guidance</b>	Data and assumptions used in the preparation of sustainability reporting should be consistent to the extent possible with the corresponding financial data and assumptions used in the entity's financial statements.	Data and assumptions used in the preparation of sustainability reporting should be consistent to the extent possible with the corresponding financial data and assumptions used in the entity's financial statements.	While not explicit in the SEC rule, we believe that the data and assumptions used in the preparation of sustainability reporting should be consistent to the extent possible with the corresponding financial data and assumptions used in the entity's financial statements. Accordingly, since US GAAP requires consistent accounting policies within a consolidated group, a parent and its consolidated subsidiaries should apply the same sustainability policies.

Entities in the group should use the same sustainability reporting policies for disclosures about the same sustainability information.

When sustainability reporting is prepared on a consolidated basis and subsidiaries apply reporting policies inconsistent with the reporting entity, appropriate adjustments should be made to the subsidiary's sustainability information in consolidation to reflect aligned policies within the consolidated sustainability disclosures. This principle aligns with the requirements in financial reporting.

Also refer to:

- FAQ 6.1.1 — What is a sustainability reporting policy?
- FAQ 6.2 — How does an entity distinguish between prior period errors, changes in sustainability reporting estimates and changes in sustainability reporting policies?

#### FAQ 6.1.3 – Should sustainability-related information for associates and joint ventures be prepared using reporting policies consistent with the entity's own policies?

##### Question

Should sustainability-related information for associates and joint ventures be prepared using reporting policies consistent with the entity's own policies?

## PwC response

### General framework (financial reporting)

Under IFRS Accounting Standards, the consolidated financial statements are prepared using uniform accounting policies for similar transactions and events. This also applies to investments accounted for using the equity method. Generally, if an associate or a joint venture uses accounting policies other than those of the group's financial statements for transactions and events in similar circumstances, appropriate adjustments should be made to the associate's or joint venture's accounting policies when incorporating these entities' information in the consolidated financial statements. [IAS 28 paras 35-36]. Under US GAAP, the investee's accounting policies do not have to conform to the investor's accounting policies if the investee follows an acceptable alternative US GAAP treatment. Further, if an investee uses industry-specific accounting principles when preparing its own financial statements, the investor is required to retain the industry-specific accounting principles in its application of the equity method [ASC 323-10-25-7].

### Sustainability frameworks

	EC	ISSB	SEC
<b>Reference</b>	ESRS 1 paras 90, QC11, QC12	IFRS S1 App D para 19	
<b>Guidance</b>	Data and assumptions used in the preparation of sustainability reporting should be consistent to the extent possible with the corresponding financial data and assumptions used in the entity's financial statements.	Consistency refers to the use of the same approaches or methods for disclosures about the same sustainability-related risks and opportunities, from period to period, both by a reporting entity and other entities.	US GAAP does not require an investee's accounting policies to conform to the investor's accounting policies, as long as the investee follows an acceptable alternative US GAAP treatment. While not explicit in the SEC rule, the same would apply to sustainability disclosures – that is, policies may differ as long as the disclosures are acceptable under the applicable reporting framework.

Under the EC and ISSB standards, when associates and joint ventures apply reporting policies inconsistent with the reporting entity, we would expect appropriate adjustments to be made to the associates' and joint ventures' sustainability information in preparation for inclusion in the consolidated sustainability disclosures. As described above, on consolidation, the SEC would allow for differing policies provided that the disclosures are acceptable under the applicable reporting framework.

Also refer to:

- FAQ 10.1— Aggregation and disaggregation of information.
- FAQ 10.3.1 — What should entities consider when faced with practical challenges when trying to obtain the necessary sustainability-related information to be used in sustainability reporting?

### Sustainability reporting estimates

Although policies are the backbone to sustainability reporting, there is a need to use estimation techniques when reporting. This is generally where amounts disclosed in sustainability reporting cannot be measured directly and can only be estimated. However, when this happens, measurement uncertainty arises. Measurement uncertainty includes assumptions about possible future events with uncertain outcomes.

An entity reporting under IFRS S1 is not required to update forward-looking estimates disclosed in a prior year. However, the entity is permitted to update forward-looking estimates, unless it involves the use of hindsight. [IFRS S1 App B para B51]. Forward-looking estimates relate to possible future transactions, events and other conditions. Refer to the example included in FAQ 6.2 below.

The use of reasonable estimates is an essential part of sustainability reporting and does not reduce the usefulness of the disclosures if the estimates are accurately described and explained. Refer to '9.3 Carbon offset reversals' below for further information regarding the practical challenges in collecting sustainability-related information.

### **Prior period errors**

Prior period errors include omissions or misstatements in an entity's sustainability reporting for one or more prior periods. These errors can arise from a failure to use, or the misuse of, reliable data that:

- was available when the entity authorised its sustainability reporting to be issued for those periods; and
- could reasonably be expected to have been obtained by the entity and considered in the preparation of its sustainability reporting for those periods.

[IFRS S1 para 84]. [ESRS 1 para 97].

Paragraph B56 of IFRS S1 and paragraph 98 of ESRS 1 include similar guidance, but not exclusive guidance regarding the identification of prior period errors.

When errors are identified, there is a requirement for management to assess the impact of these errors on previously issued sustainability reporting and the current sustainability reporting where previously reported information will be included in comparative disclosures.

For any material prior period errors, an entity is required to restate comparative amounts for the prior period(s) disclosed, unless it is impracticable to do so. Determining when the correction of an error is impracticable is an area of judgement, and it would generally mean that an entity cannot make the correction after making every reasonable effort to do so. [IFRS S1 App A]. If an error is determined to be material to the prior period, the standards require the entity to disclose:

- the nature of the error; and
- the correction included in each reporting period if practicable to do so or qualitative information of the error.

[IFRS S1 App B para B58]. [ESRS 2 para 14].

Local regulations might require restatement of previously issued information as soon as the error is identified, which might be before the entity publishes its next sustainability report.

### **Distinguishing between prior period errors, changes in estimates and changes in sustainability reporting policies**

Sustainability reporting is inherently fluid and contains many estimates. Such estimates are likely to need updating when the circumstances on which the estimate was based changes or as a result of new information. Applying the following guidance might assist in identifying when changes relate to new information, a change in the sustainability reporting policy or an error.

#### **FAQ 6.2 – How does an entity distinguish between prior period errors, changes in sustainability reporting estimates and changes in sustainability reporting policies?**

##### **Question**

How does an entity distinguish between prior period errors, changes in sustainability reporting estimates and changes in sustainability reporting policies?

## PwC response

### General framework (financial reporting)

Accounting estimates might need revision if changes occur in the circumstances on which the accounting estimate was based on or as a result of new information. [IAS 8 para 34]. [ASC Master Glossary].

An entity should distinguish between the correction of errors in previous reports and changes in estimates. As noted in paragraph 48 of IAS 8, management can change accounting estimates to reflect the prevailing circumstances and to take account of the latest information. This is because of the inherent uncertainty over the amounts recognised previously. Errors, on the other hand, result from the deliberate or accidental misuse of, or disregard for, information that was or could reasonably be expected to have been obtained and taken into account [IAS 8 para 5], or mathematical mistakes, mistakes in the application of generally accepted accounting principles, or oversight or misuse of facts that existed at the time when the financial statements were prepared. [ASC 250-10-20].

In several areas of accounting, an entity might select from more than one acceptable accounting principle. A change in accounting principle is a change from one acceptable accounting principle to another where there are two or more generally accepted accounting principles. Accounting policies are the specific principles, bases, conventions, rules and practices applied by an entity in preparing and presenting financial statements. [IAS 8 para 5]. [ASC Master Glossary, 'Change in accounting principle'].

### Sustainability frameworks

Both IFRS S1 and ESRS 1 require a reporting entity to distinguish between prior period errors and changes in sustainability reporting estimates. None of the frameworks addresses how a reporting entity should distinguish between prior period errors, changes in sustainability reporting estimates and changes in sustainability reporting policies.

	EC	ISSB	SEC
Reference	ESRS 1 paras 84, 87-92, 95-101 ESRS 2 para 13	IFRS S1 paras 77-86, B50-B59	Item 1504(e)(4)(i) discusses the disclosure of material updates to a fourth quarter estimate of GHG emissions. No other specific guidance is included in the SEC proposal.
Guidance	<p>Although ESRS 1 requires a distinction between corrections of errors and changes in estimates, it does not provide guidance on how to distinguish between them.</p> <p>ESRS 1 would require entities to restate the comparative information for changes in estimates and prior period errors.</p>	<p>IFRS S1 requires a distinction between the corrections of errors and changes in estimates.</p> <p>It also requires entities to restate the comparative information for changes in estimates and prior period errors.</p> <p>An entity is not required to restate a comparative amount for a forward-looking metric, but an entity is permitted to restate that metric if doing so does not involve hindsight.</p> <p>Forward-looking metrics relate to possible future transactions, events and other conditions.</p>	<p>SEC disclosures would be subject to general SEC guidance. Any changes in estimates disclosed in an SEC filing would follow the guidance of the entity's financial reporting framework. The SEC proposal requires that a material difference between an estimate used to determine fourth quarter emissions and the actual, determined GHG emissions data for the fourth fiscal quarter be disclosed promptly in a subsequent filing.</p> <p>The guidance in SAB 99, 'Materiality' (codified in ASC 250-10-S99), requires both a qualitative and quantitative assessment of materiality when assessing errors. Although SAB 99 applies in the context of financial statements, it might be reasonable to conclude that the same guidance applies to</p>

sustainability disclosures outside the financial statements but within the SEC filing. In SEC filings, prior periods are generally not adjusted for changes in estimates.

In general, we expect sustainability reporting to follow financial reporting principles when differentiating between errors and changes in estimates or policies, although other approaches might be appropriate.

An error could be reporting information in accordance with a policy that did not comply with the framework, or the failure to consider information reasonably available when the disclosure was made. A voluntary change in sustainability reporting policy, where both the old and new policies comply with the relevant framework, would be an example of change in policy. Sustainability reporting estimates are approximations that an entity might need to revise as additional information becomes known.

Both IFRS S1 and ESRS 1 require the restatement for prior period errors and changes in sustainability reporting estimates; however, both standards require the entity to distinguish between errors and changes in estimates. IFRS S1 does not require, but permits, the restatement of forward-looking estimates.

For example, assume that, in 2022, an entity disclosed the estimated amount of potential revenues arising from a sustainability-related opportunity for the next five years (2023–2027) as CU200,000 per annum. In 2023, the entity changes the assumptions used for estimating the annual amount of the potential revenues. Using the new assumptions, the revised estimate of the amount of the potential revenues is CU350,000 per annum for 2024–2027. Applying paragraph B51 of IFRS S1, the entity is permitted, but not required, to restate its comparative disclosures, but it would update its 2023 disclosures to reflect the new estimation approach.

Refer to FAQ 6.1.1 – What is a sustainability reporting policy?

### FAQ 6.3 – Should an immaterial prior period error be corrected in the current year?

#### Question

Should an immaterial prior period error be corrected in the current year?

#### PwC response

##### General framework (financial reporting)

Generally accepted accounting principles do not contain explicit guidance on how to correct immaterial prior period errors.

##### Sustainability frameworks

In general, there is no guidance provided within the sustainability reporting frameworks regarding the treatment of immaterial prior period errors. The frameworks do, however, provide guidance regarding material prior period errors, which is discussed above.

When management is assessing whether it is appropriate to correct an error that is not material to the prior period sustainability report in the current period, rather than retrospectively, management should evaluate whether such an approach would result in a material error in the current period, taking into account both quantitative and qualitative factors.

In making this evaluation, management should consider whether the impacted disclosure is cumulative.

### Non-cumulative disclosures

Some metrics reported in sustainability reporting may be for a point in time or annual reporting period (a 'non-cumulative disclosure' for the purposes of this FAQ).

Correcting an immaterial prior period error related to a non-cumulative disclosure in the current year could compound the effect of the initial error, since both the prior period and the current year information disclosed would contain errors.

For example, consider the disclosure of the number of health and safety reported incidents for the period. As part of preparing its current year disclosures, the entity identified an immaterial error that related to reported incident metrics reported in the prior year. Since management has assessed that the prior period error is immaterial both qualitatively and quantitatively, the entity is not required to restate the comparative information.

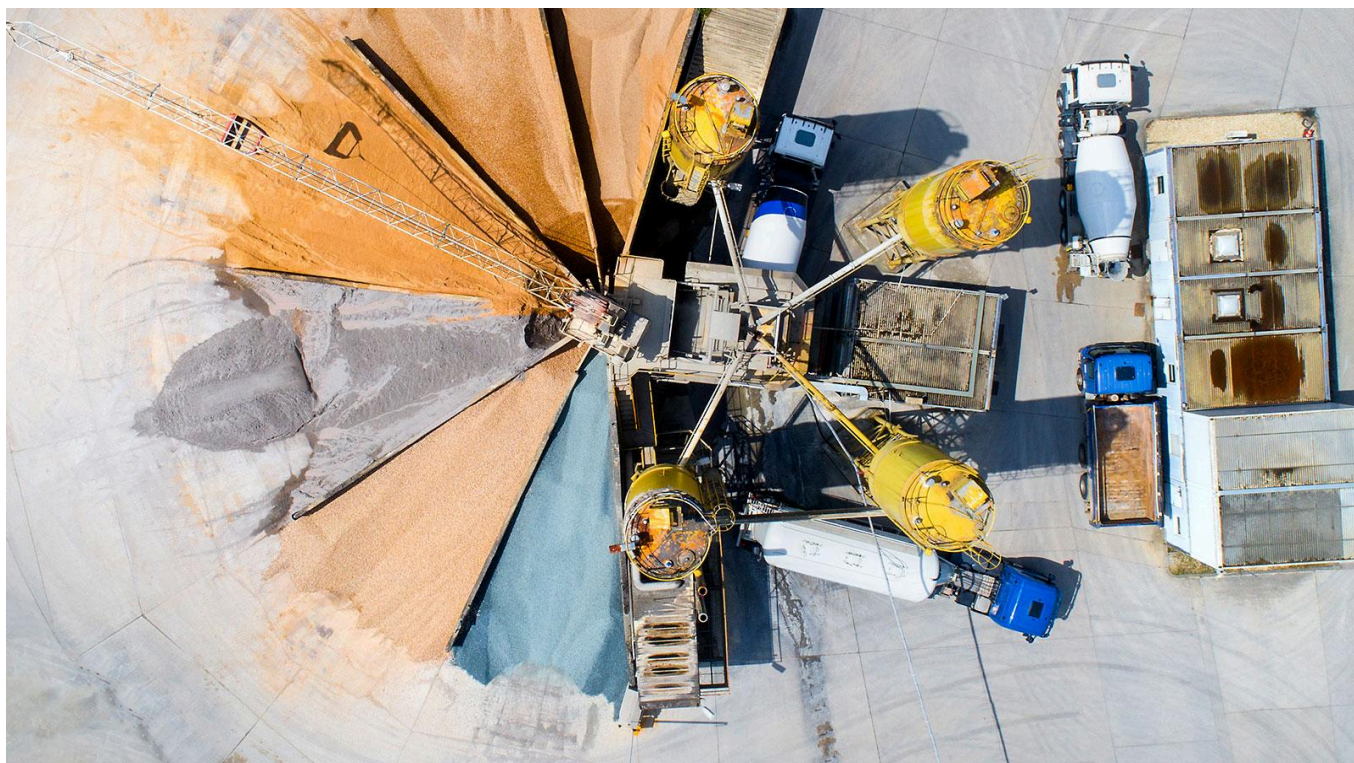
Correcting the error by reporting the prior period incident in the current period would compound the effect of the initial error (by including an immaterial error in both the prior and current period figures). As a result, consideration should be given to correcting immaterial errors in the prior period.

### Cumulative disclosures

Where an entity provides cumulative disclosures, a different approach might be more appropriate.

For example, an entity discloses its progress towards its water usage reduction targets measured against a baseline of water usage for a previous period. Where it identifies an immaterial prior period error related to its progress reported in the prior year, it could correct that error in the current period to ensure that the cumulative disclosure is correct, provided that this does not result in a material error in the current period disclosures.

Where the immaterial error relates to a period outside the current and comparative periods disclosed, entities would only update the cumulative disclosures.





# 7. Reporting boundary

## 7.1 Background

A reporting boundary identifies the entities within a group that need to be included in a reporting entity's reported metrics (that is, analogous to which entities are consolidated for financial reporting purposes). Therefore the reporting boundary should be one of the key areas of focus when preparing to collect data to be included in sustainability reporting.

Unless there is a specific requirement to follow a different reporting boundary, sustainability reporting should apply the same reporting boundary as is used for general purpose financial statements. For example, if the reporting entity is the parent of a group and is required to prepare consolidated financial statements, the consolidated financial and sustainability statements will be for the parent and its subsidiaries.

[ESRS 1 para 62]. [IFRS S1 para 20]. [IFRS S1 App B para B38].

Some sustainability reporting frameworks specify a reporting boundary that differs from the financial statements. For example, ESRS require a reporting entity with associates or joint ventures (which are part of the reporting entity's value chain) to include information related to these investments where they are deemed material to the reporting entity's value chain. However, in contrast to financial reporting that also requires an entity to provide additional information with regard to investments not consolidated in the parent entity's financial statements, this required disclosure under ESRS is not limited to the reporting entity's share of equity held. [ESRS 1 para 67].

This section does not extend to GHG emissions reporting, as the reporting boundary for GHG emissions is defined by the applied organisational boundary approach, which differs based on the applicable sustainability reporting framework. As such, the reporting boundary for calculating and reporting GHG emissions may not be aligned with the consolidated financial statements or that used for other sustainability metrics, depending on the framework and approach applied.

See the PwC observation included in '8. Business model and value chain'.

This chapter covers many different scenarios that reporting entities might encounter when considering where the reporting boundary for sustainability reporting lies and subsidiaries that are held at fair value.

## 7.2 Changes in the group structure

When determining its reporting boundary, a group needs to consider how any structural changes in that boundary will be addressed. For example, the acquisition of a new entity could broaden the reporting boundary, or the sale of an investment could change the reporting entity's exposure to a specific sustainability-related risk and therefore reduce the boundary.

### PwC observation

In the absence of authoritative guidance from the three main frameworks, an approach which follows the financial reporting principles might provide the most decision-useful information and reduce the overall complexity of reporting.

### Acquisition date

Most financial reporting frameworks require a reporting entity to include subsidiaries in the consolidated financial statements from the date when the reporting entity obtains control of the subsidiary (referred to as the 'acquisition date'). This concept is not explicitly addressed in the three main frameworks.

### PwC observation

Not all sustainability-related disclosures might be impacted by the determination of an acquisition date. For example, the acquisition of a subsidiary might result in an additional sustainability-related risk that might need to be disclosed by the reporting entity, if considered material. In general, the disclosure of this material risk would be required irrespective of the day in the reporting period on which the subsidiary was acquired.

In other situations, disclosure from the acquisition date might provide more useful information to the users of sustainability reporting. For example, where a subsidiary is acquired halfway through the current reporting period, the consolidated statement of profit or loss and other comprehensive income (SoCI) would include the associated personnel costs from the date of the acquisition. For sustainability reporting purposes, using a different measurement period (that is, including the subsidiary's personnel cost from the start of the reporting period) could distort the consolidated group's gender pay gap for the reporting period.

### Pro forma information

Pro forma, or additional, information is required as part of financial reporting. IFRS 3, 'Business Combinations', requires a reporting entity to disclose the consolidated revenue and profit or loss for the period as if the acquisition date of a subsidiary occurred at the start of that period. This results in the reporting entity providing information related to that subsidiary for the full reporting period in the current year, even if it was not owned at the beginning of the year. This disclosure may also be provided in aggregate for acquisitions that are individually immaterial. US GAAP has similar requirements.

### PwC observation

An entity might choose to apply similar pro forma principles in sustainability reporting for specific sustainability-related disclosures. For example, a reporting entity might determine that providing pro forma water usage of the newly acquired subsidiary for the full reporting period results in useful information to its users. This is particularly true where intensity metrics (for example, amount of water used per unit of production) are relevant metrics. In all cases, when an entity provides this information, it should explain why the information is useful to its users and what assumptions and methodologies have been used.

### Disposals

Before a sale takes place, both IFRS and US GAAP require entities to consider if a component (not limited to subsidiaries, but including other investments) of the entity's business is 'held for sale' and/or would meet the definition of a discontinued operation. This assessment might result in the component potentially being disclosed as a single line item in a section identified as relating to discontinued operations in the consolidated SoCI and consolidated statement of financial position (SoFP) before it is sold. That is, the component's impact is disclosed separately from the rest of the reporting entity's operations.

### PwC observation

Since the principles of 'held for sale' and 'discontinued operations' are well established in financial reporting, we believe that a reporting entity should consider applying similar principles in sustainability reporting and provide consistent disclosure of the resulting impact.

## 7.3 Additional considerations

There might be additional considerations for entities that do not follow a simple group structure.

### Less than wholly owned entities

The reporting boundary, from a financial reporting perspective, would include all entities that the reporting entity controls. Typically the reporting entity records 100% of the assets, liabilities and SoCI of subsidiaries in the consolidated financial statements, regardless of the ownership percentage.

An adjustment is made to the reporting entity's equity section in the SoFP and at the bottom of the consolidated SoCI to reflect the ownership interests held by third parties. This is based on the principle that the controlling party (that is, the reporting entity) unilaterally makes the relevant decisions (for example, significant strategic decisions) that most significantly impact the balances presented in the SoFP and SoCI.

From an IFRS and US GAAP perspective, investments in other entities (that is, excluding subsidiaries) are typically disclosed as a single line item in the consolidated SoFP and the consolidated SoCI based on the reporting entity's percentage ownership. For material investees, key financial metrics such as debt are presented in a footnote.

#### FAQ 7.3.1 – How should a reporting entity disclose sustainability metrics related to less than wholly owned investments?

##### Question

How should a reporting entity disclose sustainability metrics related to less than wholly owned investments?

##### PwC response

#### General framework (financial reporting)

Under IFRS and US GAAP, there are various specific standards that provide guidance regarding the appropriate accounting treatment for less than wholly owned entities, which generally vary based on the entity's level of control.

#### Sustainability frameworks

None of the three main frameworks provides a framework for disclosures related to less than wholly owned investments. In some cases, the requirements are commingled with required disclosures related to the value chain. Where there is no explicit guidance in the standards or referenced guidance (for example, SASB, CDSB), it would be desirable for sustainability-related disclosures to be aligned with financial reporting to the greatest extent possible.

	EC	ISSB	SEC
Reference	ESRS 1 paras 62–67	IFRS S1 paras 20, 60, 63 and 64, App A (definition of 'general purpose financial reports');  IFRS S2 paras B26–B27, BC103	Financial statements – as determined by GAAP
Guidance	An entity uses the same reporting boundary for sustainability reporting	An entity's sustainability-related	Financial statement disclosure – would follow financial reporting.

as is used for financial statements (for example, if the reporting entity is a group and the parent is required to prepare consolidated financial statements, the sustainability reporting would include the parent and its subsidiaries). When associates or joint ventures, accounted for under the equity method or proportionally consolidated in the financial statements, are deemed to be material to the value chain, the entity should include information related to those entities. In this case, when determining impact metrics, the data of the associate or joint venture are not limited to the share of equity held, but taken into account on the basis of the impacts that are directly linked to the entity's products and services through its business relationships.

financial disclosures shall be for the same reporting entity as the related general purpose financial statements. The reporting entity should also disclose material information regarding activities, interactions and relationships and the use of resources along its value chain.

**The guidance included below does not apply to joint operations. Future guidance will be issued specifically addressing the treatment of joint operations.**

Although not explicitly required by the three main frameworks, we believe that, in order to provide useful information to the users of sustainability reporting, a reporting entity may separately disclose sustainability-related information in three categories:

1. entities within its reporting boundary (the parent and its subsidiaries);
2. non-controlled investments excluded from the reporting boundary (for example, joint ventures (JVs) and associates); and
3. other entities in the value chain.

Clearly disclosing this approach and consistently applying it might enhance the user's understanding of the relevant disclosures.

Our general approach to sustainability reporting is to follow financial reporting principles where the relevant sustainability standard (and referred standards) are silent. The ISSB is silent on how to disclose sustainability metrics for less than wholly owned investments. ESRS mandate that a reporting entity provides impact metrics not limited to the reporting entity's interest in the investment. [ESRS 1 para 67]. It is unclear whether paragraph 67 requires a reporting entity to follow the 100% approach (see below). [ESRS E1 para 50].

In the absence of authoritative guidance, similar to the financial statements, sustainability metrics can be categorised as either flow metrics (for example, water usage) or point in time metrics (for example, staff diversity).

Flow metrics are similar to the profit or loss a reporting entity generates in financial reporting. That is, the metric represents a usage of, or contribution to, a specific sustainability issue and it typically fluctuates based on the reporting entity's activities. For example, the reporting entity's water usage fluctuates based on the level of activity the entity undertakes. As a result, water usage could be considered a flow metric.

Point in time metrics do not represent the usage of, or contribution to, a specific sustainability issue and typically do not fluctuate based on an entity's level of activity. These metrics reflect an entity's specific position at a point in

time. For example, the reporting entity's percentage of staff diversity is unlikely to fluctuate based on the production output of the entity. As a result, staff diversity would be considered a point in time metric.

Unlike financial reporting, sustainability metrics do not net down to an income or equity amount. This means that the analogy to financial reporting is imperfect. It is certainly true that the party with financial control has the power to make the decisions that determine the water usage of a subsidiary. This would argue in favour of a 100% approach (see below) similar to financial reporting. There is, on the other hand, no metric equivalent to profit or equity that is reduced by the share attributed to the non-controlling interest (NCI). For point in time metrics, it is unclear how to present the NCI 'share' of a diversity metric. See the proportionate approach below. On balance, this would seem to argue in favour of a 100% consolidation approach for point in time metrics. For flow metrics, arguments can be made for either approach.

#### **The two different approaches that could be followed are:**

- 100% (or gross reporting) approach – The reporting entity would include 100% of the relevant sustainability metrics for a less than wholly owned investment. Depending on materiality, the reporting entity might want to include details of its ownership percentage interest in addition to the individual sustainability information of the investment.
- Proportionate approach – The reporting entity would include the portion of sustainability metrics attributable to the proportional ownership interest. This is a concept similar to the equity method of accounting.

As noted above, when applying the 100% approach, it will be important for users of sustainability reporting to understand how the disclosed metrics have been determined; the reported metrics might be greater than the portion subject to the control of, or attributable to, the ownership of the reporting entity.

Challenges also exist in applying the proportionate approach, including whether to use the percentage of voting rights, percentage of common stock or percentage of total capital. Generally, we recommend using the same percentage used to report proportionate earnings. However (as noted above), information such as board diversity, ratio of lost time to injuries, gender equality and similar metrics might not be meaningful as a percentage based on proportionate ownership. In this case, an approach similar to financial statements, where companies disclose KPIs such as debt for significant associates and JVs in a separate footnote, could be acceptable. An entity could therefore report key sustainability point in time metrics for these associates and JVs in the second category (non-controlled investments excluded from the reporting boundary).

Irrespective of the approach applied, separate and transparent disclosure of the method used per category would aid in understanding the disclosed metrics. The policy that the entity chooses to apply should be used consistently from period to period.

Application of the approach is considered in the following example.

#### **Example – sustainability disclosures related to joint ventures and associates**

Following the financial reporting approach, joint ventures and associates are distinguished between those that are individually material to a reporting entity and those that are individually immaterial. A similar approach might be considered for sustainability reporting. However, judgement will ultimately be required on what is material to a user of the information.

It is important to note that, under ESRS 1 and IFRS S1, entities are required to disclose only material sustainability-related information relating to associates and joint ventures. The following example assumes that the entity has chosen to report amounts for associates and joint ventures separately because it concluded that the difference in the degree of control would influence a user's decisions regarding such information.

Entity A separately discloses its sustainability-related information according to the three categories mentioned above. That is, the example is limited to entity A's separate disclosure of sustainability-related information for investments excluded from the reporting boundary. Entity A has interests in associates and joint ventures and, as a result, there is a need to consider whether the 100% or proportionate approach should be used.

From a reporting perspective, the water usage for a partially owned entity might be more clearly reported as a proportionate amount, because it represents a metric that can be understood at a proportionate level (being a flow metric, as referred to above). The disclosure would not result in less useful information to the users. The entity could report as follows:

Country	Water used by associate X (entity A's proportionate share of associate X's total water used)	Water used by all other associates (entity A's proportionate share of all other associates' total water used)	Water used by joint ventures (entity A's proportionate share of joint ventures' total water used)	Sum of water used by investments excluded from the reporting boundary
Country X	A cubic metres	Y cubic metres	Z cubic metres	A + Y + Z cubic metres
...				

Note: The water used by associate X was considered to be individually material and so it is separately disclosed. Materiality should also be considered in determining whether disaggregation is meaningful.

Where the sustainability metric (such as health and safety reported incidents) does not lend itself to reporting on a proportionate basis (that is, because half of a health and safety reported incident is not considered meaningful), the entity could report the 100% or gross figures as follows:

Country	Total health and safety reported incidents of associate X	Total health and safety reported incidents of all other associates	Total health and safety reported incidents of all joint ventures	Total health and safety reported incidents for investments excluded from the reporting boundary
Country X	A	Y	Z	A + Y + Z
...				

The above example shows that a different approach is required depending on the nature of the metric and the impact of the reporting on users of the report.

## 7.4 Leases

As part of assessing its reporting boundary, an entity with leased assets should assess whether to include or exclude sustainability-related disclosures in relation to these assets.

Through a contract, an entity might have the ability to determine the sustainability profile of an asset, facility or location, even though it is not owned by the entity. As a result, this contract might give rise to a lease for financial reporting purposes, in which case, from a lessee perspective, these leased assets are typically recognised as a right-of-use asset and a lease liability in the SoFP under IFRS and US GAAP.

Since these assets are included for financial reporting purposes, it might provide useful information to the users of sustainability reporting to include the sustainability-related disclosures associated with these assets.

This guidance does not extend to the treatment of GHG emissions from leased assets for the purpose of reporting GHG emissions. The three main sustainability reporting frameworks prescribe specific guidance as to how to determine organisational boundaries for measuring GHG emissions. The treatment of emissions from leased assets, and specifically their classification among the scopes, is dependent on the organisational boundary approach applied.

### FAQ 7.4.1 – Should a reporting entity include assets that are classified as a lease for financial reporting purposes within its sustainability reporting?

## Question

Should a reporting entity include assets that are classified as a lease for financial reporting purposes within its sustainability reporting?

## PwC response

### General framework (financial reporting)

A lease is a contract, or a part of a contract, that conveys the right to use an asset for a period of time in exchange for consideration. [IFRS 16 App A]. [ASC 842-10-15-3]. The analysis of whether a contract contains a lease can be complex. Lessees recognise a right-of-use asset and a corresponding lease liability for almost all lease contracts. [IFRS 16 para 22]. [ASC 842-20-25]. However, US GAAP distinguishes between finance and operating leases for lessees, which impacts the amount and timing of lease expense but not the SoFP presentation. [ASC 842-10-25-2]. [ASC 842-10-25-3].

Lessors classify all leases as either finance leases or operating leases, depending on whether or not the risks and rewards of ownership of the leased asset lie with the lessor [IFRS 16 para 61] or whether specified criteria are met at lease commencement. [ASC 842-10-25-2]. [[ASC 842-10-25-3]. [ASC 842-10-25-4].

### Sustainability frameworks

	EC	ISSB	SEC
<b>Reference</b>	ESRS 1 paras 62–67  ESRS E1 paras AR 67, AR 70, AR 73  ESRS E4 paras 24, 35	No specific guidance.	No specific guidance.
<b>Guidance</b>	The application requirements provide guidance on how leased assets should be considered when disclosing information on assets at material physical risk and material transition risk.  An entity is required to disclose the number and area (in hectares) of its sites (owned, leased or managed) that are located in or near biodiversity-sensitive areas and whether it has adopted a biodiversity and ecosystem protection policy covering these areas.	IFRS S2 does not prescribe specific requirements as to the treatment of sustainability metrics for leased assets.	

To the extent that an entity's applicable sustainability reporting framework provides guidance for leased assets (in general or as it relates to specific sustainability metrics), the entity should apply that guidance (even if it is in conflict with the guidance included in this FAQ).

Depending on an entity's specific facts and circumstances, the entity might have the ability to determine the sustainability profile of an asset, facility or location, even though it is not owned by the entity. Through a contract, an entity might operate the asset and exercise meaningful discretion over operating matters that impact sustainability metrics. This contract might give rise to a lease for financial reporting purposes, in which case, from a lessee perspective, these leased assets are typically recognised as a right-of-use asset and a lease liability in the SoFP.

Accordingly, in the absence of a standard that specifically indicates how entities should report on assets that it leases, inclusion of the sustainability metrics related to the use of leased assets in a lessee's sustainability reporting would be appropriate. The premise is that the entity has full discretion to determine which asset it will lease (for example, an older and cheaper building, or a newer and more expensive building able to accumulate and reuse rainwater) and, during the lease term, the entity has the ability to direct the use of the leased asset; both factors directly impact the entity's sustainability profile.

Since the lessee has the right to substantially all of the economic benefits from the use of the asset during the lease term (based on financial reporting principles), a possible approach would be to report 100% of the associated sustainability metrics related to the leased asset. The entity could disclose further explanatory information regarding these metrics associated with the leased asset – for example, if it uses a portion of an asset, albeit substantially all of the asset. Consider a power purchase arrangement that contains a lease for financial reporting purposes: in this case, the reporting entity would include in its sustainability reporting 100% of the actual water usage or pollution of the leased facility used to generate the power, together with further explanatory information if it does not actually take 100% of the power.





# 8. Business model and value chain

## 8.1 Background

The three main frameworks require the disclosure of material sustainability-related risks and opportunities. This includes material information related to the reporting entity's value chain.

### PwC observation

Although not explicitly required by the three main frameworks, we believe that, in order to provide useful information to the users of sustainability reporting, a reporting entity may separately disclose sustainability-related information for entities within its reporting boundary, investments excluded from the reporting boundary (for example, associates), and other entities in the value chain (refer to FAQ 7.3.1).

Clearly disclosing this approach and consistently applying it might enhance the user's understanding of the relevant disclosures.

The value chain is defined as the full range of activities, resources and relationships related to a reporting entity's business model and the external environment in which the reporting entity operates. This includes the activities, resources and relationships that the reporting entity uses and relies on to create its products or services from production to delivery, consumption and end-of-life. [ESRS Annex II]. [IFRS S1 App A].

This includes entities involved in the upstream and downstream activities related to the reporting entity's business model. An entity is considered downstream from the reporting entity where it receives products or services from the reporting entity (for example, distributors, customers). An entity is considered upstream from the reporting entity where it provides products or services that are used in the development of the reporting entity's own products or services (for example, suppliers). [ESRS Annex II].

The SEC's proposed rule defines the value chain in a consistent manner. [Item 1500 – Climate-Related Disclosure].

Relevant activities, resources and relationships, as referred to in the definition, include:

- a. those in the reporting entity's operations, such as human resources;
- b. those along the supply, marketing and distribution channels; and
- c. the financing, geographical, geopolitical and regulatory environments in which the reporting entity operates.

[ESRS Annex II]. [IFRS S1 App A].

### PwC observation

Some practical examples of sustainability risks and opportunities identified in the value chain include the following:

- a. Material human rights-related risks identified in the workforce of the distributor of the reporting entity's products.
- b. A supplier's annual tillage farming practices (that is, the practice of aerating the soil to permit moisture and air to permeate it) that might result in the material release of GHG emissions.
- c. Exposure to a water-scarce jurisdiction through a reporting entity's associate's work.

The EC has also requested EFRAG to develop guidance on the value chain, including a map of the extent of value chain information required by the different disclosures in the first set of ESRS.

It is not always clear which entities should be included in an entity's value chain. In some cases, depending on the financial reporting assessment, a reporting entity's charitable foundation may not be a part of the consolidated group. However, as a consequence of the charitable foundation's relationship with the reporting entity, it may be part of the reporting entity's value chain. This applies equally to an unconsolidated structured entity. Such entities/investments may be a material component of the reporting entity's sustainability strategy and, as a result, disclosing the impacts, risks and opportunities related to these entities/investments would result in useful information to stakeholders. This would be similar to the principles in paragraphs 21(b)(ii) and 24 of IFRS 12, 'Disclosure of interests in other entities', requiring disclosures related to material joint ventures, associates and unconsolidated structured entities. Such information should be clearly distinguished from information given about the consolidated group, so that users of sustainability reporting understand the context of the reporting.

Considering the extent of a value chain, a reporting entity may find providing value chain disclosures challenging from a practical perspective. Many reporting entities will not have previously needed to collect information from the different entities in their value chain.

This section includes the factors that entities should consider when determining the extent of disclosures to be provided regarding the value chain.

### FAQ 8.1.1 – What factors should an entity consider in determining the extent of disclosures regarding its value chain?

#### Question

What factors should an entity consider in determining the extent of disclosures regarding its value chain?

#### PwC response

##### General framework (financial reporting)

Financial reporting frameworks do not specifically define the value chain. However, some entities are required to disclose information about the extent of their reliance on their major customers, which form part of the value chain. [IFRS 8 para 34]. [ASC 280-10-50].

##### Sustainability frameworks

The three main sustainability frameworks include definitions of what constitutes an entity's value chain and what disclosures are required in relation to the value chain.

	EC	ISSB	SEC
Reference	ESRS 1 paras 63–67, 68–72, 132–135  ESRS E1 paras 20, 45, 56–60	IFRS S1 paras 2, 29(b), 32, 75(d), B2, B5–B6, B11–B12  IFRS S2 paras 9(b), 13, B19, B32, B34–B36, B40, B42, B45–B50, B55–B56, B65	Item 1500 – Climate-Related Disclosure
Guidance	Requires an entity to include information on material sustainability-related impacts, risks and opportunities connected to it through its direct and indirect business	Requires an entity to disclose the current and anticipated effects of sustainability-related risks and opportunities that could reasonably be expected to	Disclosures related to the value chain are required as they relate to (1) the actual and potential impacts of any climate-related risks identified as reasonably likely to have a material impact on

EC	ISSB	SEC
<p>relationships in the upstream and/or downstream value chain. This includes GHG emissions and other climate-related value chain disclosures.</p> <p>The standard contains a transitional provision regarding value chain information.</p>	<p>affect the entity's prospects on its value chain and where these risks and opportunities are concentrated. This includes disclosures related to climate-related risks and opportunities.</p> <p>An entity is required to reassess the scope of sustainability-related risks and opportunities throughout the value chain on the occurrence of a significant event or significant change in circumstances.</p>	<p>the registrant, including on its business or consolidated financial statements, which may manifest over the short, medium and long term, and (2) scope 3 GHG emissions.</p>

The three main frameworks require an entity to disclose information about all material sustainability-related risks and opportunities to which it is exposed. This includes the risks and opportunities related to activities, interactions and relationships and to the use of resources along its value chain, such as the entity's employment practices and those of its suppliers, wastage related to the packaging of the products that it sells, or events that could disrupt its supply chain. It is possible that the scope of an entity's value chain includes hundreds to thousands of other entities. For example, the producer of a complex piece of electronic equipment might have hundreds of suppliers of components, with each component in turn reliant on hundreds of suppliers of subcomponents.

An entity needs to determine what sustainability-related risks and opportunities along its value chain are considered material. Simply because an entity in its value chain is outside the reporting entity's financial reporting boundary does not relieve the reporting entity from providing disclosures regarding that entity. To provide useful information to the users of sustainability reporting, an entity may want to separately disclose these activities in addition to the activities of entities within the financial reporting boundary. Refer to FAQ 7.3.1 for more detail.

Factors that entities may consider in determining what is material information to include in their sustainability reporting regarding their value chain include the following non-exhaustive list:

- The potential impact that a supplier could have on an entity's brand. For example, some industries use fossil fuels for raw materials or for use in the transportation of goods or services. That is, the reporting entity should consider whether its use of fossil fuels could contradict its stated environmental policies and adversely impact the value of its brand.
- The potential impact of unconsolidated structured entities on a reporting entity's ability to create value (for example, the reputational risk related to a charitable foundation established by a reporting entity).
- The risks related to a sole source supplier for a significant input to a reporting entity's product or service are likely to be material to the reporting entity.
- The risks related to a significant customer are likely to be material to the reporting entity.
- The risks and opportunities in the value chain that management (for example, the chief executive officer/chief financial officer/chief operating decision-maker) actively monitor/assess in the conduct of the business and the board monitors in its oversight capacity.

These factors should be considered not in isolation but holistically.

## 8.2 Value chain example – fund manager

There are a wide range of financial products available for investment purposes specifically for asset management. Asset management companies are investment firms that pool investments or funds from different stakeholders (that is, institutional and individual investors). These firms manage investments in funds by investing in various assets such as equities, real estate, stocks, gold, bonds, and debt. In professional terms, these entities are known as fund managers, because they decide where to invest the pooled money. It is the responsibility of fund managers to identify suitable investment options to meet the investors' objectives, as well as to ensure compliance with all relevant legal and regulatory requirements.

Fund managers will typically not consolidate the majority of the funds that they manage. This in turn means that any investments held by these funds are also not consolidated. The degree of disclosures required about risks and opportunities within the value chain will be bound by materiality considerations.

Determining the value chain of an investment entity itself could also be particularly complex, because the ability to 'look through' to the value chain of individual subsidiaries held might be complicated. All fund managers will need to consider this issue when preparing sustainability reporting.

### FAQ 8.2.1 – Are underlying investments part of the value chain for a fund manager?

#### Question

Are underlying investments part of the value chain for a fund manager?

#### PwC response

Yes. A fund manager's business model depends on the underlying funds (and the investments within those funds) that it manages, and even when the funds are not consolidated, the fund manager can be impacted both directly and indirectly by those underlying funds. For example, a fund manager earns fees based on the performance of the underlying funds (direct) and might attract investors by offering green/sustainable investment funds (indirectly). It follows that sustainability-related risks and opportunities which impact the performance of the underlying funds would also impact the value of the fund manager, and are therefore core to its business model. As a result, we believe that an investment manager's portfolio investments are part of its value chain. This would be true for underlying funds that comprise equity or debt investments or any other type of investment.

Materiality should be considered when determining what sustainability-related risks and opportunities related to the value chain should be reported. Practically, a fund manager should also consider whether risks and opportunities in the underlying funds might be individually immaterial to the fund manager but might be material when considered cumulatively across its funds.

# 9. Carbon offsets

## 9.1 Background and terminology

The voluntary carbon market (VCM) drives investment in projects that deliver independently verified carbon reductions through the sale of carbon credits. Although VCMs are significantly smaller than the regulated compliance markets, the market is growing rapidly. Consistent sustainability reporting practices for carbon offsets are relevant for entities that use carbon offsets to achieve their emission reduction targets, entities that develop carbon offsets, and entities which trade or invest in carbon offsets. Carbon credits used to offset emissions voluntarily are often referred to as 'carbon offset credits' or 'carbon offsets'. For the purposes of this In depth, they are referred to as 'carbon offsets' or 'offsets'.

Carbon offsets typically represent an emission reduction, the removal of one metric tonne of CO<sub>2</sub>, or the removal of an equivalent amount of another of the six key greenhouse gases. They are uniquely serialised, issued, tracked and cancelled by means of an electronic registry. Certified carbon credits typically take the form of transferable or tradable instruments and are certified by governments or independent certification bodies.

An entity might use offsets, either purchased from a third party (typically a project developer or carbon offset retailer) or generated directly through its own reduction or removal projects.

A reduction project might involve avoiding emissions, such as developing renewable energy projects, or reducing expected emissions by avoiding damage to a specific ecosystem. A removal project might involve reforestation, ecosystem restoration, or carbon capture and storage.

As part of broader net zero ambitions and transition planning, entities might purchase carbon offsets to help to achieve these goals. Entities should be aware of relevant jurisdictional requirements or other relevant guidance in relation to the use, and classification, of carbon offsets in transition planning and sustainability reporting. For example, the UN's 2022 report on net zero emissions commitments notes that entities may use "high-integrity carbon credits, but these credits cannot be used to meet non-state actors' interim decarbonisation targets".

## 9.2 Carbon offset reporting

A core principle in the disclosure of carbon emissions is that emissions should in all cases be disclosed on a gross basis. That is to say, an entity should report its GHG emissions on a gross basis, before taking into account any carbon offsets. [ESRS E1 para 44]. [IFRS S2 para 29]. [SEC proposed rule SEC Item 1504(a)(2)].

In addition to the gross disclosure of emissions, an entity should make disclosures allowing users of sustainability reporting to understand the entity's strategy in relation to the use of carbon offsets. [IFRS S2 paras 33–36]. [ESRS E1 para 56]. [ESRS E1 para AR64(a)–(b)]. [SEC proposed rule SEC Item 1502(c)].

The quality of a carbon offset is important information for users of sustainability reporting, where its use is material. IFRS S2 and ESRS E1 both have requirements for an entity to give information about the qualitative nature of the carbon offsets used. [IFRS S2 para 36(e)(iv)]. [ESRS E1 para 61].

### FAQ 9.2.1 – When should the benefits of carbon offsets be recognised in sustainability emissions reporting?

#### Question

When should the benefits of carbon offsets be recognised in sustainability emissions reporting?

## PwC response

### General framework (financial reporting)

No specific guidance exists in financial reporting frameworks on the recognition of carbon offsets. A fundamental principle of financial reporting is that of accruals accounting, which shows the effect of transactions, events and circumstances in the period in which those effects occur, regardless of when the cash receipts or payments take place.

### Sustainability frameworks

From a sustainability reporting framework perspective, this is an area that lacks explicit guidance in the ISSB and SEC proposals.

	EC	ISSB	SEC
Reference	ESRS E1 paras 61, AR63(g), AR64	No relevant guidance given	No relevant guidance given
Summary of guidance	In the case of purchased carbon offsets, the entity should distinguish in its disclosure between carbon offsets that have been cancelled in the reporting period, and those planned to be cancelled in the future.	N/A	N/A

### Background

Many carbon offsets purchased in voluntary carbon markets are transferable – that is, the original purchaser may sell the offset to a third party instead of using it to offset its own emissions.

For this reason, only when the offset is cancelled and therefore can no longer be sold does the effect of ‘using’ the offset occur. Practically, this occurs when the offset is cancelled by the registry. Cancellation in relation to a purchased carbon offset refers to the process by which the carbon offset registry removes the specific offset from its active listing so that this offset cannot be sold or re-used by the project developer of the offset in the future. This cancellation process is sometimes called ‘retirement’.

### Answer

For the purposes of sustainability reporting, offsets should be recognised and disclosed as a reduction to emissions in the period in which they are cancelled or retired. Sometimes, judgement will be required to determine the precise timing of a cancellation, which might occur, for example, when an entity has given an irrevocable instruction to the registry to cancel an offset. In this instance, it is only the passage of time to execute the cancellation that needs to occur, in which case we believe that the cancellation can be reported once that irrevocable instruction has been given by the entity to the registry.

There is currently diversity in practice around when registries cancel carbon offsets. Some registries might process cancellations only once a year, while other registries might process cancellations more frequently. In addition, there might be a time lag between an entity finalising measurement of its own emissions for a reporting period and then purchasing and cancelling the offsets required under its strategy in respect of that reporting period. Reporting entities, under the ISSB and SEC frameworks, might therefore wish to disclose offsets that are planned to be cancelled in the future (but for which irrevocable instructions have not been given), so that the user might understand the reporting entity’s entire strategy with regard to offsetting emissions.

Paragraphs AR63(g) and AR64 of ESRS E1 require an entity to disaggregate the disclosure of carbon offsets between those cancelled in the period and those that are planned to be cancelled in the future. For preparers under IFRS Sustainability Disclosure Standards and the SEC’s proposed rule, while there is no explicit guidance provided on disaggregation, we believe that the same disclosure approach should be considered, in order to provide the most relevant and useful information to users.

## Illustrative disclosures

The illustrative disclosure shown below demonstrates one way in which a reporting entity might disclose its use of carbon offsets in respect of a period, including offsets that are planned to be cancelled in the future.

This is only intended as an illustrative example, it is not prescriptive guidance, and it might not take account of other relevant factors that might require the format to be adapted. In this example:

- There is only one category of offsets for emissions disclosed within the table; entities would need to consider separate disclosure by category where there are two or more categories of offsets, consistent with other disclosure requirements.
- The disclosure does not contemplate all situations. For example, an entity might have signed up to a Science Based Target initiative (SBTi) target, which precludes fully offsetting scope 1 and scope 2 emissions using offsets.
- During initial years of application, entities might not have all of the information necessary to populate such a disclosure.
- It might be appropriate to adapt the format of the disclosure so that it clearly links to other elements of an entity's sustainability reporting, such as its scenario analysis projections or strategy and risk management disclosures.
- For the purposes of the illustrative example, no comparatives have been included.
- The row 'Offsets cancelled in 20X1 but attributed to 20X0 emissions' is assumed to reconcile to the 20X0 reporting and any related commitments. Where there are any material deviations from 20X0 reporting (in particular, where the actual figure is lower so that the 20X0 reporting overstated the ultimate extent of carbon offset under the entity's risk management strategy), clear disclosure would help users to understand the reason(s) and impact on the entity's progress in meeting any carbon reduction commitments.

Entity A's strategy is to fully offset scope 1 and scope 2 emissions each year\*. Here is how we intend to offset them for 20X1:

	Metric tons CO <sub>2</sub> equivalent
20X1 scope 1 and scope 2 emissions*	1,000
Offsets cancelled in 20X1	(950)
Offsets cancelled in 20X1 but attributed to 20X0 emissions	100
Offsets already held and planned to be cancelled in 20X2 which will be attributed to 20X1	(50)**
Offsets to be purchased and cancelled in 20X2 which will be attributed to 20X1	(100)**
Planned 20X1 remaining emissions after attribution of offsets	0

\*Note: scope 1, scope 2 and scope 3 emissions are required to be shown gross under ISSB, ESRS and SEC (proposed) sustainability reporting, albeit under the SEC proposal with a staggered adoption timeline for scope 3. The above table assumes that this requirement is met elsewhere in the entity's reporting.

\*\*This would only ever be expected to be appropriate if it were due to practical reasons, whereby a 'grace' period is needed after the period-end to calculate the total actual emissions for the year, following which the amount of offsets cancelled is then subjected to a 'true up' adjustment. If a reporting entity has recognised a liability relating to offsets for future periods, it might be appropriate to make reference and disclosure to that effect. For example: "We have recognised a liability in our 20X1 financial statements of CUxx relating to these offsets as disclosed in Note xx".

An example disclosure is also provided in paragraph AR64 of ESRS E1 on how information on carbon credits cancelled in the reporting year and planned to be cancelled in the future might be presented in a tabular format.

## FAQ 9.2.2 – How should forward contracts for the purchase of carbon offsets in future periods be treated in sustainability reporting on emissions?

### Question

How should forward contracts for the purchase of carbon offsets in future periods be treated in sustainability reporting on emissions?

### PwC response

#### Sustainability frameworks

	EC	ISSB	SEC
Reference	No relevant guidance given	No relevant guidance given	No relevant guidance given
Guidance	N/A	N/A	N/A

#### (i) Current period reporting

Entities might enter into forward contracts to purchase carbon offsets at a future date. Therefore, for sustainability reporting purposes, there is a question as to the reporting period in which the carbon offsets to be delivered under a forward contract should be reported.

This is an area lacking explicit guidance in the three main frameworks. What is clear, however, is that, whenever possible, consistency between general purpose financial statements and sustainability reporting is important to users. It would generally be considered inconsistent to report an offset in an entity's sustainability reporting in the period in which a forward contract is executed, where the carbon offsets to be delivered have not yet been recognised within the entity's general purpose financial reporting (refer to PwC's In depth INT2023-02<sup>7</sup>).

On this basis, only carbon offsets that have been delivered in the current reporting period (that is, under a forward contract that has now matured) would be considered for possible reporting as an offset to carbon emissions in the current reporting period. Whether a delivered carbon offset is then *actually* reported as an offset in the current reporting period would depend on whether the carbon offset has been cancelled or retired (see FAQ 9.2.1 for further details).

#### (ii) Disclosure considerations in respect of future periods

##### Disclosures explaining the entity's progress in offsetting its own future emissions

The draft and issued sustainability reporting standards contain requirements to disclose quantitative and qualitative information about the intended use of carbon offsets in the achievement of climate-related targets and goals. Consistent with principles of fair presentation and comparability, we believe that a reporting entity should provide disclosure of forward contracts entered into for delivery in future reporting periods where that is necessary for a user to understand the sustainability-related risks and opportunities of the entity.

##### Alignment between sustainability and general purpose IFRS financial reporting

As noted in the table below, despite the preference for the principle of consistency across sustainability and general purpose financial reporting, this is an area in which there might not always be alignment.

IFRS Financial reporting	Purpose of offset	Sustainability reporting
Forward contract	The forward contract is not	It would not be appropriate to include

<sup>7</sup> [In depth INT2023-02](#) – IFRS Financial reporting considerations for entities participating in the voluntary carbon market.



accounted for as a derivative	entered into for the purpose of the receipt or delivery of the carbon offsets in accordance with the entity's expected purchase, sale or usage requirements – that is, the own use criteria are not met. For example, the carbon offsets are purchased for trading purposes.	the forward contract in disclosures explaining the entity's progress in offsetting its own future emissions; this is because, in the example, the carbon offsets are being purchased for trading purposes rather than the entity's own use.
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Change in intended use of the forward contract after initial purchase, such that the carbon offsets are now intended to be within the entity's expected purchase, sale or usage requirements.	<p>It might be appropriate to subsequently include the forward contract in explaining the entity's progress in offsetting its own emissions, because the intended use of the carbon offsets has subsequently changed to be for the entity's own use.</p> <p>In the absence of specific guidance, we would expect disclosure to allow users to understand the differences between sustainability reporting and general purpose financial reporting<sup>8</sup>.</p>
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Forward contract accounted for as an executory contract (that is, off balance sheet)	The forward contract was – and continues to be – entered into for the entity's own use.	It would be appropriate to include the forward contract in disclosures explaining the means by which the entity expects to achieve its emissions target, because the carbon offsets are being purchased for the entity's own use.
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**FAQ 9.2.3 – Illustrative example of how forward contracts for the purchase of carbon offsets in future periods might be presented in sustainability reporting**

**Illustrative disclosure: entity's progress in securing future carbon offsets and related price exposure**

The illustrative disclosure shown below leverages the type of structure often used for liquidity risk disclosures within general purpose financial reporting. The disclosure highlights the different types of carbon offset being purchased under forward contracts entered into (for example, carbon removal or reduction), and the reporting entity's resulting projected surplus/deficit of carbon offsets. This disclosure structure could help a user to determine the extent of the entity's exposure to future changes in prices of carbon offsets (that is, to evaluate the price risk exposure of an entity's transition planning). However, this is only intended as an illustrative example, it is not prescriptive guidance, and it might not take account of other relevant factors. For example:

This disclosure might not be appropriate for reporting entities that are not holding forward contracts to offset their own emissions (such as broker traders, developers, project developers, carbon offset retailers).

During initial years of application, entities might not have all of the information necessary to populate such a disclosure.

It might be appropriate to adapt the format of the disclosure so that it clearly links to other elements of an entity's sustainability reporting, such as its scenario analysis projections or strategy and risk management disclosures.

Amounts of offsets to be delivered by investments in offset projects or other sources might not always be known, and so assumptions or other supplemental information might need to be provided.

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<sup>8</sup> This disclosure should also include an explanation of how the entity has determined the classification for sustainability reporting purposes.

As at 31 December 20XX	Year 1 Metric tonnes CO <sub>2</sub> equivalent	Year 2 Metric tonnes CO <sub>2</sub> equivalent	Year 3 Metric tonnes CO <sub>2</sub> equivalent	Year 4 Metric tonnes CO <sub>2</sub> equivalent	Year 5 Metric tonnes CO <sub>2</sub> equivalent
<b>Projected carbon offsets to be used (A)</b>	(600)	(XXX)	(XXX)	(XXX)	(XXX)
<b>Carbon offsets secured:</b>					
Forward contracts over carbon offsets <sup>9</sup> :					
- [Category [X] offsets, eg removal]	200	XXX	XXX	XXX	XXX
- [Category [Y] offsets]	150	XXX	XXX	XXX	XXX
[Other sources - options, investments in offset projects, offsets already acquired etc]	0	XXX	XXX	XXX	XXX
<b>Total carbon offsets secured (B)</b>	350	XXX	XXX	XXX	XXX
<b>Current projected surplus/(deficit) of carbon offsets (B – A)</b>	(250)	XXX	XXX	XXX	XXX

The final row in the above table, showing the current projected surplus/(deficit) of carbon offsets, indicates the extent of exposure to future changes of carbon offset prices. For example, where there is a projected deficit, and the relevant future price of carbon offsets increases, that will result in a higher cost to purchase the remaining carbon offsets required.

FAQ 9.2.2 provides guidance on how forward contracts for the purchase of carbon offsets in future periods should be treated in sustainability reporting.

### 9.3 Carbon offset reversals

Annex II to ESRS defines a reversal of a carbon offset within the definition of a 'GHG removal and storage', where it states that "Removals can be subject to reversals, which are any movement of stored GHG out of the intended storage that re-enters the surface and atmosphere". How the reversal occurs in practice will depend on the type of project underpinning the offset. Both removal and reduction projects can experience reversals. A common example of a reversal is that of a wildfire burning down a forest. Originally, the forest removed and stored carbon emissions.

<sup>9</sup> It is assumed that delivery and utilisation of the carbon offsets will occur in the same reporting period. Entities might purchase offsets for use in later periods.

However, when a fire burns down the forest, the fire releases any previously sequestered carbon back into the atmosphere.

In many cases, an entity will purchase a carbon offset from a third party, and it will have no control over the removal or reduction project itself. A practical challenge arises in obtaining reliable information that purchased carbon offsets have not reversed in subsequent periods. Reporting entities might consider, when purchasing offsets, whether the provider or a related registry has processes in place to monitor the ongoing permanence of an offset, and whether that information will be available to the reporting entity in the future.

### PwC observation

There are certain local jurisdictional requirements where project developers, depending on the risk profile of the carbon offset project, will factor in a 'buffer' to mitigate the risk of reversals impacting purchased offsets. These are akin to an insurance policy in the event that there is an issue with the project. For example, a project developer might only sell 95% of the carbon offsets developed by a project, with the remaining 5% acting as a buffer against any future reversals, such as a forest fire in the above example. If the reversals in the project do not then exceed the 5% buffer held by the project developer, the carbon offsets sold will remain entirely supported by continuing carbon reductions. As such, there will be no reversals for the purchaser.

### FAQ 9.3.1 – When and how should reversals of previously recognised carbon offsets be disclosed in sustainability reporting on emissions?

#### Question

When and how should reversals of previously recognised carbon offsets be disclosed in sustainability reporting on emissions?

#### PwC response

##### General framework (financial reporting)

No specific guidance exists in financial reporting frameworks on reversals of previously recognised offsets. However, financial reporting guidance does provide a framework to consider events that occur subsequent to the period end. A reporting entity should adjust the amounts reported in the financial statements for events that provide evidence of conditions that existed at the end of the reporting period (adjusting events). The financial statements should not reflect events that are indicative of conditions that arose after the reporting period (non-adjusting events). [IAS 10 para 8]. [IAS 10 para 10]. [ASC 855-10-25-1]. [ASC 855-10-25-2]. [ASC 855-10-25-3].

##### Sustainability frameworks

From a sustainability reporting framework perspective, this is an area that lacks explicit guidance in the ISSB standards and SEC proposal.

	EC	ISSB	SEC
Reference	ESRS E1 paras AR58(f) and 95	No relevant guidance given	No relevant guidance given
Summary of guidance	In the case of reversals of carbon offsets, ESRS E1 requires an entity to account for the respective GHG emissions as a reduction of removals in the current reporting period.  ESRS 1 requires any information, received after the reporting period but before the management report is approved for	N/A	N/A

issuance that provides evidence or insights about conditions existing at period end, to be considered. Where appropriate, estimates and sustainability disclosures should be updated in the light of the new information.

If a reversal occurs, the reporting entity should report that reversal as a deduction from its recognised offsets in the reporting period in which the reversal is identified.

**For ESRS preparers, the above principle is required by ESRS E1.**

For preparers under IFRS Sustainability Disclosure Standards and the SEC's proposed rule, while there is no explicit guidance provided on reversals, we consider that presenting the removal as a reversal in the current year will generally provide the most relevant and useful information to users, and it is consistent with similar principles in financial reporting.

Alternative approaches are unlikely to provide clear information to the users of sustainability reporting. For example, an alternative approach would be to treat the reversal as an 'adjusting' subsequent event and to re-state the reported offsets for the period in which the benefit of the offset was recognised. In our view, this would not be appropriate, given that the reversal does not provide evidence of conditions that existed at the time when the offset was recognised, and so it is not appropriate to be treated as an 'adjusting' event.

In our view, the reporting entity should also consider disclosing the reversal – that is, in addition to reporting it. By not doing so, this might result in omitting information that could have an effect on the primary users' decisions about the entity.

**Other related disclosures**

Both paragraph 36(e) of IFRS S2 and paragraph 61 of ESRS E1 require disclosures about the credibility and integrity of carbon offsets used by the reporting entity. Paragraph 36(e) of IFRS S2 specifically notes that assumptions regarding the permanence of the carbon offset might be a factor necessary for users to understand the credibility and integrity of the offsets used.

Where carbon offsets represent a significant part of a reporting entity's plans towards achieving a net emission target, we consider that an important element of this disclosure would be information about the risk of reversal of the offsets used, and if/how that risk is managed.



# 10. Other considerations

## 10.1 Aggregation and disaggregation of information

In order to provide a better understanding of, and to enhance, an entity's sustainability reporting, disclosures of sustainability-related information can be provided on an aggregated or disaggregated basis in certain instances.

However, items of information should not be aggregated if they do not have shared characteristics and/or they are not of the same nature. Additionally, information should not be aggregated if doing so would obscure material information. Therefore, information about material sustainability-related risks and opportunities might need to be provided on a disaggregated basis. For example, sustainability-related information could be disaggregated by geographical location. [IFRS S1 App B paras B29 and B30]. [ESRS 1 paras 54–57].

The risks and opportunities that are identified and assessed as being material will differ between reporting entities. Therefore, the basis on which sustainability-related information is disaggregated will depend on the facts and circumstances specific to each reporting entity.

While the SEC's proposed rule on climate-related disclosures does not require information to be disaggregated, it does require material climate-related risks to be disclosed. In disclosing material climate-related risks, we believe that it will be useful for entities to consider the principles of disaggregation noted above.

### FAQ 10.1.1 – Should sustainability-related information be disaggregated on the same basis as segment reporting?

#### Question

Should sustainability-related information be disaggregated on the same basis as segment reporting?

#### PwC response

It depends. It might be appropriate, in some but not all instances, for sustainability-related information to be disaggregated on the same basis as segment reporting. The basis on which sustainability-related information is disaggregated will depend on the facts and circumstances specific to each reporting entity.

#### General framework (financial reporting)

Both IFRS and US GAAP require public entities to disclose information by segments. IFRS 8 and ASC 280 require an entity to first identify its 'operating segments', as defined in the standards. Operating segments could be identified, for example, on the basis of the entity's products and services, or its geographical regions.

#### Sustainability reporting frameworks

IFRS S1 and ESRS 1 contain guidance on the disaggregation of sustainability-related information. The SEC's proposed rule on climate-related disclosures does not require information to be disaggregated.

Although financial statement segment reporting might seem to be a logical basis for disaggregation, the three main frameworks do not require disaggregation of sustainability-related information on the same basis as segment reporting. Therefore, information about sustainability-related risks and opportunities might need to be disaggregated on a different basis to better reflect where the risks and opportunities of an entity are concentrated.

For example, assume that a reporting entity has identified the quality of water that it uses in its operations in various geographical locations as a material sustainability-related risk. For financial reporting purposes, the entity might disclose information about its operating segments based on its products or services. Disaggregating information by products or services for sustainability reporting purposes might not provide a sufficient understanding of where this

material risk is concentrated. Therefore, for sustainability reporting purposes, it might be appropriate to disaggregate information by geographical location for water-stressed operational areas.

## 10.2 Understandability of sustainability-related information

In order to assist with the understandability of sustainability-related information, information or standing information which remains unchanged (or changes very little) should be distinguished from new information. [ESRS 1 para QC18]. [IFRS S1 App D para 28].

Therefore, in addition to the required disclosures on material sustainability-related risks and opportunities, there could be other transactions, events, including subsequent events, or developments that it might be useful for an entity to disclose in its sustainability reporting. For example, an entity could separately describe features of its sustainability-related governance and risk management processes that have changed since the previous reporting period. [ESRS 1 para QC18]. [IFRS S1 App D para 28].

The SEC’s rules do not require new annual disclosures to be separately identified. A registrant’s Form 10-Q, however, would need to disclose any material changes to the climate-related disclosure in the registrant’s Form 10-K.

### FAQ 10.2.1 – How should subsequent events in sustainability reporting be treated?

#### Question

How should subsequent events in sustainability reporting be treated?

#### PwC response

##### General framework (financial reporting)

The concepts from generally accepted accounting principles provide a framework that can be considered in determining whether a subsequent event is an adjusting or non-adjusting event for sustainability reporting.

A reporting entity should adjust the amounts reported in the financial statements for events that provide evidence of conditions that existed at the end of the reporting period (adjusting or recognised events). The financial statements should not reflect events that are indicative of conditions that arose after the reporting period (non-adjusting or non-recognised events). [IAS 10 para 8]. [IAS 10 para 10]. [ASC 855-10-25-1]. [ASC 855-10-25-2]. [ASC 855-10-25-3].

##### Sustainability frameworks

In general, we would expect sustainability reporting to follow financial reporting in the area of subsequent events.

	EC	ISSB	SEC
Reference	ESRS 1 paras 93, 94	IFRS S1 paras 67, 68	No specific guidance; however, disclosures that impact the financial statements would be subject to the general subsequent events guidance in the relevant financial reporting framework.

	EC	ISSB	SEC
Guidance	<p>The guidance addresses the recognition and disclosure of subsequent events using a framework consistent with financial reporting. That is, undertakings, where appropriate, should adjust for and disclose information received “after the reporting period but before the management report is approved for issuance” that provides evidence or insights about conditions that existed at the end of the period. Information about conditions after the end of the period should not be adjusted; however, the entity should disclose information indicating the existence, nature and potential consequences of the post-year-end events.</p>	<p>Disclosure of subsequent events is required, but there are no explicit definitions explaining whether a subsequent event is an adjusting or non-adjusting event. However, if the reporting entity receives information after the reporting period end, but before the sustainability-related disclosures are authorised for issue, about conditions that existed at the end of the reporting period, disclosures need to be updated to reflect those conditions.</p>	<p>The proposed SEC climate disclosures do not address the treatment of subsequent events. The climate footnote disclosure would be subject to the guidance in ASC 855 or IAS 8.</p>

The guidance provided in the proposed sustainability standards and rules is either the same as the financial reporting guidance (ESRS) or does not contradict it (ISSB and SEC). As such, we believe that reporting entities should follow consistent guidelines for reporting subsequent events in their financial information and sustainability information. That is, an entity should adjust sustainability information for material events that provide evidence of conditions that existed as of the reporting date (adjusting events); other events would be narrative disclosure only. There might be situations when determining whether a subsequent event is adjusting or non-adjusting (recognised or non-recognised) requires judgement. In these instances, the reporting entity should disclose the judgement(s) exercised in distinguishing between adjusting and non-adjusting events.

**Examples**

Applying the principles in the financial reporting frameworks, sustainability-related examples of adjusting and non-adjusting (recognised and non-recognised) subsequent events might include, but are not limited to:

- Adjusting/recognised subsequent events:
  - Errors, fraud or irregularities occurred during the reporting period, but were only discovered after the reporting period.
  - Updated scope 1 GHG emissions data becomes available before issuance of the sustainability report (where original amounts were based on estimates).
- Non-adjusting/non-recognised subsequent events:
  - An announcement after the reporting period about a change to the composition of a reporting entity’s governance body or reporting boundaries that will occur in the new reporting period.
  - The destruction of a major production plant due to a natural disaster that occurred after the reporting period.
  - The issuance of regulations after the reporting period imposing higher levies or taxes on GHG emissions.
  - New developments in technology after the reporting period that could impact GHG emissions within the entity’s reporting boundary.

## 10.3 Practical challenges in collecting sustainability-related information

Given the requirements to report on information that must be obtained from entities within its reporting boundary and from its value chain, a reporting entity will generally be expected to build its processes to obtain access to necessary high-quality and accurate information, prepared on a timely basis.

There are likely to be practical challenges in obtaining the necessary information to be used in its sustainability reporting. These challenges may include, but are not limited to:

- limited access to information;
- poor quality of information obtained;
- timing delays in obtaining necessary information;
- decentralised nature of an organisation;
- different systems used for collecting and recording data throughout its value chain;
- information being prepared on a different basis by entities in the value chain; and
- low level of control over entities within the value chain that are providing the information.

The three main frameworks acknowledge that these challenges might be cost-prohibitive to overcome in some instances. This is evidenced by the concept of ‘undue cost or effort’ in IFRS Sustainability Disclosure Standards and ESRS, or the existing SEC rules’ reference to ‘reasonable effort’. If such practical challenges arise, a reporting entity should consider whether its applicable sustainability reporting framework allows it to exclude information that cannot be obtained without ‘undue cost or effort’ or ‘reasonable effort’. In all cases, reporting entities should provide any required disclosure when applying these thresholds, and they should be prepared to support their assessment of the level of effort needed against these thresholds.

Where the level of effort required does not rise to these thresholds, the reporting entity should develop a reasonable methodology to estimate the information required by the applicable sustainability reporting framework.

An entity might consider including in its sustainability reporting policies how it applied the ‘undue cost or effort’ or ‘reasonable effort’ consideration when faced with these practical challenges, where the disclosure would be useful to users. See ‘6. Sustainability reporting policies, sustainability reporting estimates and errors’.

### FAQ 10.3.1 – What should entities consider when faced with practical challenges when trying to obtain the necessary sustainability-related information to be used in sustainability reporting?

#### Question

What should entities consider when faced with practical challenges when trying to obtain the necessary sustainability-related information to be used in sustainability reporting?

#### PwC response

##### General framework (financial reporting)

Financial reporting requires disclosures that involve a high level of outcome or measurement uncertainty. In certain circumstances, GAAP uses the concept of “reasonable and supportable information that is available at the reporting date without undue cost or effort”. For example, the concept is used in the assessment of whether there has been a significant increase in credit risk since initial recognition and in the measurement of expected credit losses. [IFRS 9 App B para B5.5.49]. [IFRS 9 App B para B5.5.50]. [IFRS 9 App B para B5.5.51]. [ASC 326-20-30-7]. Disclosure of certain significant estimates is required as well. [IAS 1 para 125]. [ASC 275-10-50].



## Sustainability frameworks

	EC	ISSB	SEC
Reference	ESRS 1 paras 69, 71, 89 ESRS E1 para AR46	IFRS S1 para 79 IFRS S2 App B para 38	Item 1504(e)(4) and Item 1504(e)(7)
Guidance	<p>The use of reasonable assumptions and estimates does not undermine the usefulness of the information, provided that the assumptions and estimates are accurately described and explained.</p> <p>In situations where an entity cannot obtain sustainability-related information about its value chain (after making reasonable efforts to do so), it shall estimate the information by using all reasonable and supportable information.</p> <p>ESRS E1 requires the disclosure of estimates used in disclosing scope 3 emissions.</p>	<p>The use of reasonable estimates is an essential part of preparing sustainability-related metrics and does not undermine the usefulness of information if the estimates are accurately described and explained.</p> <p>IFRS S2 allows the use of estimation rather than direct measurement in disclosing scope 3 GHG emissions.</p>	<p>Financial statement disclosure – would follow financial reporting.</p> <p>GHG emissions – “A registrant may use reasonable estimates when disclosing its GHG emissions as long as it also describes the assumptions underlying, and its reasons for using, the estimates”.</p> <p>Further, “A registrant must disclose, to the extent material and as applicable, any gaps in the data required to calculate its GHG emissions. A registrant’s GHG emissions disclosure should provide investors with a reasonably complete understanding of the registrant’s GHG emissions in each scope of emissions. If a registrant discloses any data gaps encountered when calculating its GHG emissions, it must also discuss whether it used proxy data or another method to address such gaps, and how its accounting for any data gaps has affected the accuracy or completeness of its GHG emissions disclosure”.</p>

A reporting entity should provide any required disclosure considering whether its applicable sustainability reporting framework allows it to exclude information that cannot be obtained without ‘undue cost or effort’ or ‘reasonable effort’. Where the reporting entity is unable to provide the required disclosure (based on the result of direct measurement), it should develop a reasonable methodology to estimate the information required by the applicable sustainability reporting framework.

When developing estimates, entities may consider internal and external information. This includes data from indirect sources, sector-average data, sample analyses, market and peer groups data or other proxies. Further, to be helpful for stakeholders, a reporting entity may want to disclose its planned approach to obtain the actual information in future periods and, as a result, transition away from using estimates, even if not otherwise required.

In these situations, the reporting entity is likely to consider the fundamental and enhancing qualitative characteristics of information in developing its estimates. Faithful representation is a fundamental qualitative characteristic of sustainability reporting, and it requires disclosures to be neutral. Disclosures are neutral when not emphasised, de-emphasised or otherwise manipulated to make users of sustainability reporting receive information favourably or unfavourably. As a result, an entity should consider the risk of bias when developing and disclosing estimates or in using estimated versus direct measurements.

When an entity updates previously disclosed estimates, it may consider FAQ 6.2 to help distinguish between prior period errors, changes in sustainability reporting estimates and changes in sustainability reporting policies.

## 10.4 Reporting period

Sustainability reporting provides information for a specific period of time - that is, the reporting period. The three main frameworks require the reporting period for the entity's sustainability reporting to be consistent with that of its general purpose financial statements.

[ESRS 1 para 73]. [IFRS S1 para 64]. [draft SEC item 1504(a)].

Any changes to the reporting period for the entity's general purpose financial statements will result in a change to the reporting period for sustainability statements. For example, an entity changes its year end from 31 December to 30 September and presents financial statements that cover a nine-month period as a result. In this case, the sustainability reporting would cover the same nine-month period.

Where the entity has a shorter or longer current reporting period, the difference in length between the current and comparative period(s) may result in comparative information not being comparable to current period results.

Paragraph 66 of IFRS S1 has specific requirements that apply in this case for the entity to disclose "the fact that amounts disclosed in the sustainability-related financial disclosures are not entirely comparable". Neither ESRS nor the draft SEC rule have equivalent disclosure requirements, although preparers may consider whether providing a similar disclosure would be useful for users.

# Illustrative text

FAQ 3.2.1 – Where should sustainability-related information be disclosed?

FAQ 4.1 – How do laws and regulations impact sustainability reporting?

FAQ 4.2 – Should sustainability metrics that can impact the cash flows referenced in sustainability-linked loans or other similar financial instruments be reported by the borrower as part of their sustainability disclosures?

FAQ 6.1 – What is a sustainability reporting policy?

FAQ 6.2 – How does an entity distinguish between prior period errors, changes in sustainability reporting estimates and changes in sustainability reporting policies?

FAQ 7.3.1 – How should a reporting entity disclose sustainability metrics related to less than wholly owned investments?

FAQ 7.4.1 – Should a reporting entity include assets that are classified as a lease, for financial reporting purposes, within its sustainability reporting?

FAQ 8.1.1 – What factors should an entity consider in determining the extent of disclosures regarding its value chain?

FAQ 8.2.1 – Are underlying investments part of the value chain for a fund manager?

FAQ 9.2.1 – When should the benefits of carbon offsets be recognised in sustainability emissions reporting?

FAQ 9.2.2 – How should forward contracts for the purchase of carbon offsets in future periods be treated in sustainability reporting on emissions?

FAQ 9.2.3 – Illustrative example of how forward contracts for the purchase of carbon offsets in future periods might be presented in sustainability reporting

FAQ 9.3.1 – When and how should reversals of previously recognised carbon offsets be disclosed in sustainability reporting on emissions?

FAQ 10.1.1 – Should sustainability-related information be disaggregated on the same basis as segment reporting?

FAQ 10.2.1 – How should subsequent events in sustainability reporting be treated?

FAQ 10.3.1 – What should entities consider when faced with practical challenges when trying to obtain the necessary sustainability-related information to be used in sustainability reporting?

# 11. Other resources

As noted in '1.2 The purpose of this document', this In depth is not intended to be a comprehensive list of all questions that preparers might have when considering sustainability reporting.

## **Additional publications on this topic include:**

[GX In depth INT2023-05: IFRS Sustainability Disclosure Standards – Guidance, insights and where to begin](#)

[ESG reporting: Preparing for Tomorrow's Rules Today](#)

[Navigating the ESG landscape: Comparison of the 'big three' sustainability frameworks](#)

[Worldwide impact of CSRD – are you ready?](#)

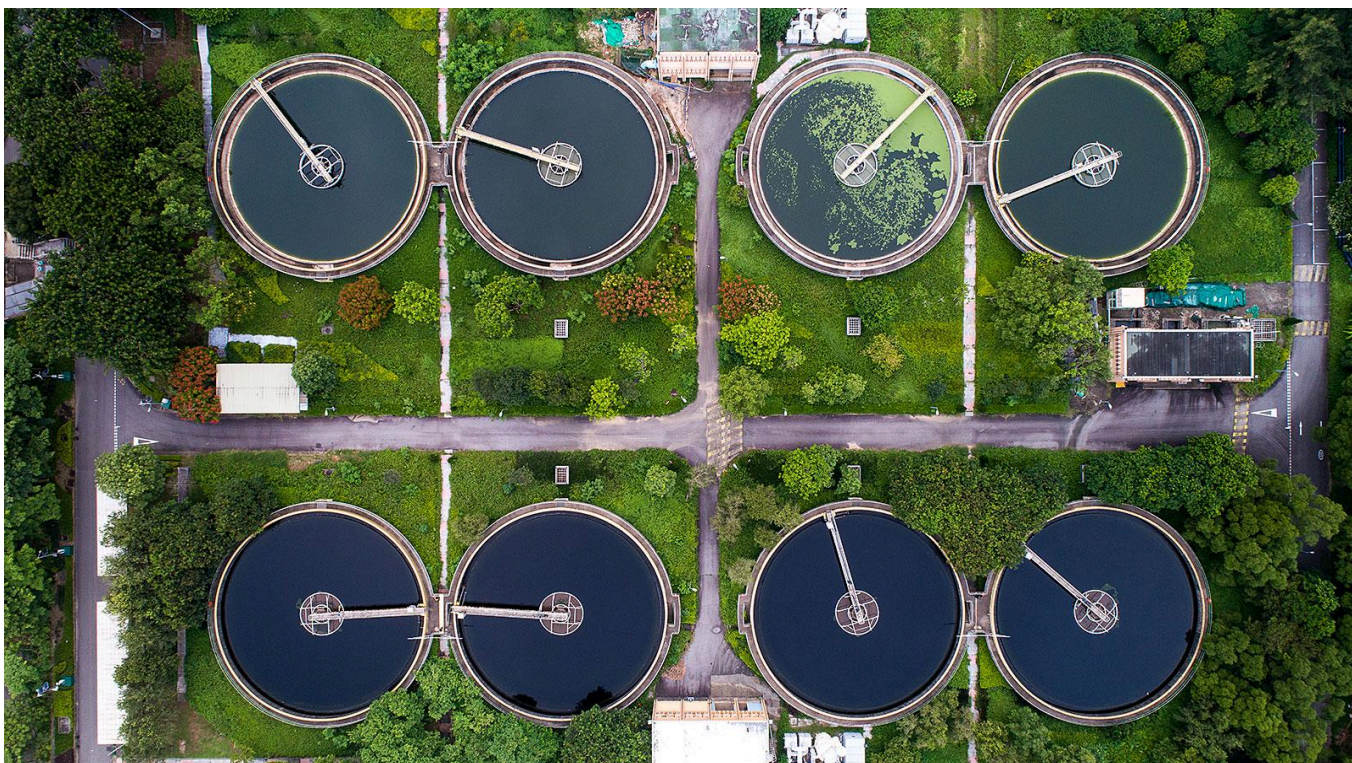
Further information on the three draft sustainability frameworks can be found at PwC's [Global Sustainability Reporting Landing Page](#).

## **Resources on related financial reporting guidance include:**

[GX In depth INT2021-11: Impact of ESG matters on IFRS financial statements](#)

[IFRS Manual of Accounting](#)

[GX In depth INT2023-02: IFRS Financial reporting considerations for entities participating in the voluntary carbon market.](#)



## 12. Acronyms

The table below summarises acronyms used throughout this In depth.

Term	Description
CDSB	Climate Disclosure Standards Board
CO <sub>2</sub>	Carbon dioxide
CSRD	Corporate Sustainability Reporting Directive
EC	European Commission
EFRAG	European Financial Reporting Advisory Group
ESG	Environmental, social and governance
ESRS	European Sustainability Reporting Standards
EU	European Union
FASB	Financial Accounting Standards Board
FSB	Financial Stability Board
GAAP	Generally Accepted Accounting Principles
GRI	Global Reporting Initiative
IAS	International Accounting Standards
IASB	International Accounting Standards Board
IFRS	International Financial Reporting Standards
ISSB	International Sustainability Standards Board – IFRS Foundation
KPI	Key performance indicator
NFRD	Non-Financial Reporting Directive
SASB	Sustainability Accounting Standards Board
SBTi	Science Based Targets initiative
SEC	Securities and Exchange Commission
SMEs	Small and medium-sized enterprises
TCFD	Task Force on Climate-Related Financial Disclosures
US GAAP	US Generally Accepted Accounting Principles

# 13. Defined terms

This table defines the terms to be used as reference for this In depth.

Term	Definition
<b>Equity share approach</b>	<p>The GHG Protocol – Under the equity share approach, an entity accounts for GHG emissions from operations according to its share of equity in the operation. The equity share reflects economic interest, which is the extent of rights that an entity has to the risks and rewards flowing from an operation.</p> <p>Typically, the share of economic risks and rewards in an operation is aligned with the entity's percentage ownership of that operation, and equity share will normally be the same as the ownership percentage. Where this is not the case, the economic substance of the relationship that the entity has with the operation always overrides the legal ownership form, to ensure that equity share reflects the percentage of economic interest.</p>
<b>Financial control</b>	<p>The GHG Protocol – Under the control approach, an entity accounts for 100% of the GHG emissions from operations over which it has control. It does not account for GHG emissions from operations in which it owns an interest but over which it has no control.</p> <p>The entity has financial control over an operation if the former has the ability to direct the financial and operating policies of the latter with a view to gaining economic benefits from its activities. For example, financial control usually exists if the entity has the right to the majority of benefits of the operation, irrespective of how these rights are conveyed. Similarly, an entity is considered to financially control an operation if it retains the majority risks and rewards of ownership of the operation's assets.</p> <p>The economic substance of the relationship between the entity and the operation takes precedence over the legal ownership status, so that the entity might have financial control over the operation even if it has less than a 50% interest in that operation.</p> <p>If this criterion is chosen to determine control, emissions from joint ventures where partners have joint financial control are accounted for based on the equity share approach.</p>
<b>General purpose financial reporting</b>	<p>IFRS S1 App A – General purpose financial reporting encompasses, but is not restricted to, an entity's general purpose financial statements and sustainability-related financial disclosures.</p>
<b>GHG</b>	<p>Greenhouse gas</p> <p>The seven GHGs listed in the Kyoto Protocol: carbon dioxide (CO<sub>2</sub>); methane (CH<sub>4</sub>); nitrous oxide (N<sub>2</sub>O); hydrofluorocarbons (HFCs); nitrogen trifluoride (NF<sub>3</sub>); perfluorocarbons (PFCs) and sulphur hexafluoride (SF<sub>6</sub>).</p>
<b>Scope 1 GHG emissions</b>	<p>Direct GHG emissions that occur from sources that are owned or controlled by an entity.</p>
<b>Scope 2 GHG emissions</b>	<p>Indirect GHG emissions from the generation of purchased or acquired electricity, steam, heating or cooling consumed by an entity.</p> <p>Purchased and acquired electricity is electricity that is purchased or otherwise brought into an entity's boundary. Scope 2 GHG emissions physically occur at the facility where</p>

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electricity is generated.

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**Scope 3 GHG emissions** Indirect GHG emissions (not included in scope 2 GHG emissions) that occur in the value chain of an entity, including both upstream and downstream emissions. Scope 3 GHG emissions include the scope 3 categories in the Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2011).

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**GHG Protocol** The Greenhouse Gas Protocol Initiative is a multi-stakeholder partnership of businesses, non-governmental organisations (NGOs), governments, and others convened by the World Resources Institute (WRI), a US-based environmental NGO, and the World Business Council for Sustainable Development (WBCSD), a Geneva-based coalition of 170 international companies. Launched in 1998, the Initiative's mission is to develop internationally accepted GHG accounting and reporting standards for business and to promote their broad adoption.

[\[LINK\]](#) to GHG Protocol

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**Impact materiality** ESRS Annex II Acronyms and glossary of terms, App A – “A sustainability matter is material from an impact perspective when it pertains to the undertaking's material actual or potential, positive or negative impacts on people or the environment over the short-, medium- and long-term. A material sustainability matter from an impact perspective includes impacts connected with the undertaking's own operations and upstream and downstream value chain, including through its products and services, as well as through its business relationships”.

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**Management commentary** IFRS S1 para 61 – Management commentary or a similar report is a required report in many jurisdictions. It might be known by, or included in reports with, various names, such as ‘management report’, ‘management's discussion and analysis’, ‘operating and financial review’, ‘integrated report’ or ‘strategic report’.

Management commentary provides insights into what has affected an entity's financial position and performance, and it complements an entity's financial statements.

Further information can be found in the [IFRS practice statement on management commentary](#) and the [IASB project on management commentary](#), including an [exposure draft](#) published in May 2021.

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**Operational control** Both the GHG Protocol and ESRS define operational control.

Chapter 3 of the GHG Protocol states that, under the operational control approach, an entity accounts for 100% of the GHG emissions from operations over which it has control. It does not account for GHG emissions from operations in which it owns an interest but over which it has no control.

An entity has operational control over an operation if the former or one of its subsidiaries has the full authority to introduce and implement its operating policies at the operation. It is expected that, except in very rare circumstances, if the entity or one of its subsidiaries is the operator of a facility, it will have the full authority to introduce and implement its operating policies, and thus it has operational control.

If the operation itself will introduce and implement its own operating policies, the partners with joint financial control over the operation will not report any emissions under operational control.

ESRS define operational control slightly differently:

“Operational control (over an entity, site, operation or asset) is the situation where the

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undertaking has the ability to direct the operational activities and relationships of the entity, site, operation or asset.”

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**Sustainability - related financial disclosure** IFRS S1 App A – A particular form of general purpose financial reports that provide information about the reporting entity’s sustainability-related risks and opportunities 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, including information about the entity’s governance, strategy and risk management in relation to those risks and opportunities, and related metrics and targets.

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**Sustainability reporting framework** Sustainability reporting standards include the ISSB's IFRS S1 and IFRS S2 standards, the EC's ESRS and the SEC's proposed rule on climate disclosures.

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**Value chain** IFRS S1 App A – 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 that 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.

ESRS Annex II Acronyms and glossary of terms and the SEC’s proposed rule define the value chain in a consistent manner. For more detail, see ‘8. Business model and value chain’.



# 14. Contact us

To have a deeper discussion, contact your local PwC Sustainability specialist or:

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