IFRS® Sustainability

June 2023

Effects Analysis

IFRS® Sustainability Disclosure Standards

IFRS S1 *General Requirements for Disclosure of Sustainability-related Financial Information*
IFRS S2 *Climate-related Disclosures*

This Effects Analysis accompanies, but is not part of, IFRS S1 *General Requirements for Disclosure of Sustainability-related Financial Information* and IFRS S2 *Climate-related Disclosures*.

What is the purpose of this Effects Analysis?

This Effects Analysis describes the likely benefits and costs of IFRS S1 and IFRS S2. The benefits and costs are collectively referred to as 'effects'. The International Sustainability Standards Board (ISSB) gains insight into the likely effects of new IFRS Sustainability Disclosure Standards through its exposure of proposals to stakeholders and through its analysis and consultation with them. This document describes the ISSB's considerations of the effects of IFRS S1 and IFRS S2.

Background

The ISSB was created to develop standards that will establish a comprehensive global baseline of sustainability-related financial disclosures for capital markets. IFRS S1 and IFRS S2 are the first two IFRS Sustainability Disclosure Standards developed by the ISSB.

Jurisdictional authorities decide whether to require companies to apply IFRS Sustainability Disclosure Standards, which are designed to work with any accounting standards used to prepare financial statements, including IFRS Accounting Standards.[1]

The ISSB does not have the right to mandate the application of IFRS Sustainability Disclosure Standards. Companies can choose to apply them.

Glossary

Many terms used in this document are specific to sustainability-related matters. See the Glossary on page 69 for definitions of those terms.

1 In this document, the term 'company' refers to an entity that provides sustainability-related financial disclosures. In this document, companies and preparers are used interchangeably.

Executive summary

The International Sustainability Standards Board (ISSB) aims to develop standards that will provide a comprehensive global baseline of high-quality sustainability-related financial disclosures to meet the information needs of users of general purpose financial reports (primary users).[2] These standards, which are referred to as IFRS Sustainability Disclosure Standards, set out requirements for disclosures about a company's sustainability-related governance, strategy, risk management and metrics and targets. IFRS S1 and IFRS S2 are the first two IFRS Sustainability Disclosure Standards developed by the ISSB.

IFRS S1 and IFRS S2

IFRS S1 sets out overall disclosure requirements for sustainability-related financial information.

IFRS S2 sets out disclosure requirements for climate-related financial information.

Why has the ISSB developed IFRS S1 and IFRS S2?

The fragmented landscape of sustainability reporting comprises both voluntary standards and growing requirements, adding cost, complexity and risk for companies and investors.

Investors find it difficult to obtain decision-useful, reliable and comparable sustainability-related information to assist them in understanding sustainability-related risks and opportunities when making investment decisions and comparing companies.

The ISSB expects companies that apply IFRS S1 and IFRS S2 will benefit from using a global disclosure baseline that:

- improves interoperability among other sustainability reporting frameworks, helping companies streamline their sustainability reporting processes; and
- enables greater transparency of information, resulting in improved access to capital, governance and strategy for companies.

Importantly, this information is expected to help investors make better investment decisions.

IFRS S1 and IFRS S2 are designed to set a global baseline to enable companies to provide information about sustainability-related risks and opportunities that is useful for investors' decision-making.

2 Primary users are existing and potential investors, lenders and other creditors that use a company's general purpose financial reports, which include sustainability-related financial disclosures, in making decisions relating to providing resources to the company. Throughout this document the term 'investors' is used to describe these users.

Evolution of corporate sustainability disclosures

The ISSB considered voluntary and mandatory sustainability-related disclosure practices and requirements in its analysis of the effects of IFRS S1 and IFRS S2. These practices and requirements are numerous and vary both in their content and in their objectives (including their intended audience).

> More than 300 mandatory reporting schemes and more than 200 voluntary reporting schemes are in use.[3]

The most common voluntary frameworks and standards are the Global Reporting Initiative (GRI) Standards, the Integrated Reporting Framework, the Sustainability Accounting Standards Board (SASB) Standards and the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD Recommendations). Additionally, several jurisdictions have proposed or adopted mandatory disclosure requirements for sustainability-related information.

To reduce implementation costs for companies that already report information using other frameworks or standards, IFRS S1 and IFRS S2:

- incorporate the TCFD Recommendations; and
- build on materials from the Climate Disclosure Standards Board (CDSB), the SASB, the International Integrated Reporting Council (IIRC) and the International Accounting Standards Board (IASB).

> The SASB's approach is valued by investors for producing decision-useful information and by preparers for producing cost-effective disclosures. For this reason, the ISSB has embedded the SASB's industry-based approach to sustainability disclosure into its standard-setting process.

Requirements in IFRS S1

IFRS S1 sets out requirements for disclosing material sustainability-related financial information to provide investors with a complete set of sustainability-related financial disclosures. The Standard sets out requirements for the content of those disclosures, including that a company provide information on the sustainability-related risks and opportunities that could reasonably be expected to affect the company's prospects.[4] IFRS S1 also sets out how those disclosures relate to a company's financial statements, including that the sustainability-related financial disclosures be included as part of the general purpose financial reports.

The ISSB developed IFRS S1 in response to calls from investors and bodies (including the International Organization of Securities Commissions (IOSCO), the Financial Stability Board, the G20 and the G7) for more consistent, complete, comparable and verifiable sustainability-related financial information to inform investors' decisions about providing resources to companies.

3 C. van der Lugt, P.P. van de Wijs and D. Petrovics, *Carrots & Sticks: Sustainability Reporting Policy: Global Trends in Disclosure as the ESG Agenda Goes Mainstream*, Amsterdam and Stellenbosch, Global Reporting Initiative and the University of Stellenbosch Business School, 2020.

4 In this document, 'sustainability-related risks and opportunities that could reasonably be expected to affect a company's prospects' refer to sustainability-related risks and opportunities that could reasonably be expected to affect the company's cash flows, its access to finance or cost of capital over the short, medium or long term.

Requirements in IFRS S2

IFRS S2 sets out requirements for disclosing material information about climate-related matters. The Standard incorporates the TCFD Recommendations and includes illustrative metrics tailored to industry classifications derived from the industry-based SASB Standards.

IFRS S2 sets out specific disclosure requirements for climate-related risks and opportunities and thus supplements the general requirements in IFRS S1. In particular, when meeting the requirements in IFRS S1 to provide information about sustainability-related risks and opportunities, a company applies IFRS S2 to disclose information about climate-related risks and opportunities that could reasonably be expected to affect the company's prospects.

Climate change creates both risks and opportunities for business: many companies and economic sectors face physical risks from climate change and from the transition to a lower-carbon economy. At the same time, climate change and related economic changes can create opportunities for companies.

Objectives of this Effects Analysis

This Effects Analysis describes the likely benefits and costs in relation to IFRS S1 and IFRS S2, including those identified by stakeholders commenting on the IFRS S1 and IFRS S2 exposure drafts, as well as the nascent experiences of companies disclosing information using various voluntary or mandatory standards.[5] In considering the responses to the exposure drafts, the ISSB provided clarifications, guidance, relief measures and modified time frames, and took other measures to reduce the costs of initially applying and continuing to apply IFRS S1 and IFRS S2.

Assessing the effects of IFRS S1 and IFRS S2 is made more challenging in two respects.

First challenge

IFRS S1 and IFRS S2 are the first efforts to create a global baseline of sustainability disclosures. There is no similar precedent that can be used to compare the effects of these Standards.

Second challenge

Any assessment of benefits and costs inherently faces challenges in the identification of specific, quantitative benefits and costs.

Costs of applying disclosure standards tend to fall largely on preparers in the form of direct costs. These costs accrue both in the near term and over time and are easier to attribute and observe than benefits. Costs can also vary significantly between companies and jurisdictions. These effects are expected to be more pronounced in the case of IFRS S1 and IFRS S2 because the preparedness of companies and jurisdictions is highly variable.

Benefits, on the other hand, develop over time and are often more subtle and implicit.

Especially for the disclosure of new sustainability-related information, the effects may need to be evaluated over the longer term.

Some costs and benefits might be interrelated. For example, some costs might be the result of investments in systems and processes that deliver efficiency and other benefits.

5 Under its due process requirements, the ISSB will also assess the implementation of IFRS S1 and IFRS S2 periodically through its post-implementation review process. This review process will address some stakeholder suggestions that the ISSB continuously evaluate and ensure interoperability with jurisdictional initiatives and other sustainability-related standards over time to minimise likely ongoing costs.

Due to the lack of precedent and quantitative challenges, this analysis considers effects in a qualitative manner at the level of aggregate preparers and aggregate users of information.

Taking into consideration these factors and the requirements in IFRS S1 and IFRS S2, this analysis discusses likely benefits and costs for companies in applying IFRS S1 and IFRS S2 relative to three broad reporting starting points:

- no or minimal sustainability reporting (Case 1);
- voluntary sustainability reporting (Case 2); and
- mandatory sustainability reporting (Case 3).

Likely benefits

Although companies will incur costs related to the implementation and ongoing application of IFRS S1 and IFRS S2, many respondents to the exposure drafts, including most investors, indicated that the benefits of implementing IFRS S1 and IFRS S2 are likely to outweigh the costs.

Main benefits for investors

Investors are likely to benefit from the application of IFRS S1 and IFRS S2 by avoiding costs, such as the inefficiencies of manual data collection, management and analysis of sustainability-related financial disclosures. Many of these benefits for investors stem from the greater consistency, comparability and verifiability of disclosures when IFRS S1 and IFRS S2 are applied.

Main benefits for companies

Likely benefits for companies are related to improved data quality, including higher quality of information from companies that are in the value chain of a reporting company. Improved data quality is expected to have a positive effect on areas such as governance, strategy, access to capital, cost of capital, reputation, and employee and stakeholder engagement. Applying IFRS S1 and IFRS S2 might also help companies streamline their sustainability reporting processes for meeting the needs of investors. These benefits are largely confirmed by academic and market research and by the voluntary standard-setters whose materials form the foundation of the Standards.

Respondents to the exposure drafts suggested, for example, that using IFRS S1 and IFRS S2 would:

- reduce fragmented disclosure requirements and complexity for preparers and investors;
- encourage companies with less mature disclosure practices to improve, enhancing the information available to capital markets;
- promote transparent capital markets that better reflect the cost of risk and support transition and adaptation efforts; and
- improve companies' monitoring of sustainability-related risks and opportunities, enabling more informed internal decision-making, providing a framework for strategic review of the business model and supporting better performance and longer-term value creation.

The improved identification and mitigation of risks, as well as the timely grasping of opportunities, especially climate-related, that arise beyond the company and across its value chain, are expected to enhance business resilience and prospects.

The ISSB also found that many companies are already disclosing sustainability-related information to investors, applying voluntary disclosure frameworks, which implies that those companies perceive a benefit to such disclosures.

Other benefits

Benefits are also likely to include improved market transparency, improved risk-adjusted cost of capital and reduced difficulties in processing sustainability information, which can reduce investor disagreements and investment uncertainties. Improved transparency about sustainability-related risks is also expected to contribute to long-term financial stability by revealing useful information that will enable more informed decision-making and better management of such risks.

Likely costs

The likely costs of applying IFRS S1 and IFRS S2 could arise in several forms.

Main costs for investors

Investors might face costs to establish or modify internal systems, data collection or data analysis processes.

Main costs for companies

Depending on their starting point, companies might face costs relating to:

- recruiting additional staff or acquiring necessary expertise;
- changing data collection and analysis;
- establishing or modifying internal systems; and
- producing or modifying production of reported information.[6]

Almost all preparers who commented on the IFRS S1 and IFRS S2 exposure drafts said that the costs of initially applying the proposals were likely to be substantial, citing the one-time costs of developing and implementing systems for reporting and internal controls on data, and personnel costs to source the appropriate talent to manage data collection and disclosure processes. These costs might be new for many first-time preparers of sustainability-related financial disclosures. However, many respondents to the exposure drafts said that ongoing costs were likely to decrease over time, as preparers set up systems and become familiar with the disclosure requirements.

6 Costs relating to producing information might include costs to obtain assurance for reported information.

Efforts to mitigate costs

The ISSB has introduced several measures that mitigate the overall costs of disclosing sustainability-related information applying IFRS S1 and IFRS S2.

1 Building on well-established frameworks and standards

IFRS S1 and IFRS S2 incorporate and build upon the core elements of widely used sustainability frameworks and standards, thus reducing the implementation costs and learning curve for the several thousand companies already applying those frameworks and standards. For example, IFRS S1 and IFRS S2 incorporate the TCFD Recommendations.

The ISSB has used pre-existing terminology and concepts, including the concept from IFRS Accounting Standards requiring a company, in specific cases, to use only information that is reasonable and supportable and is available without undue cost or effort.

2 Interoperability with jurisdictional requirements

The ISSB has worked to improve the interoperability of IFRS S1 and IFRS S2 with the European Sustainability Reporting Standards (ESRS) and other major jurisdictional requirements, and plans to work to improve the interoperability of IFRS S1 and IFRS S2 with the GRI Standards, to reduce reporting burdens. For example, efforts have been made to ensure that common climate disclosures in IFRS S2 and ESRS are aligned to reduce the burden for companies to produce several disclosures on similar topics. Furthermore, in the absence of specific disclosure requirements in an IFRS Sustainability Disclosure Standard, a company is permitted to use disclosures set out in ESRS and GRI Standards to the extent they meet investors' information needs and the objectives in IFRS S1.

3 Guidance and illustrative examples

The ISSB has clarified requirements in IFRS S1 and IFRS S2 to assist companies with applying the Standards, in response to comments received on the exposure drafts.

The ISSB has provided illustrative examples and application guidance for several areas of IFRS S1 and IFRS S2, including:

- guidance to help a company assess its resilience to climate change and use of scenario analysis in the context of the company's resilience assessment;
- guidance to help a company identify material information and apply the requirements for comparative information;
- sources of guidance that a company is permitted to use to identify sustainability-related risks and opportunities and disclosures in the absence of a specific applicable IFRS Sustainability Disclosure Standard;
- reference to the GHG Protocol Corporate Standard for the measurement of greenhouse gas (GHG) emissions, which is already in use by many companies; and
- guidance on how to measure Scope 3 GHG emissions, including when a company can use estimation and how to estimate these emissions.

4 Reliefs to assist all companies

The ISSB has introduced temporary and permanent targeted relief measures to reduce the challenges and costs of initially applying IFRS S1 and IFRS S2.

For example, the ISSB:

- provided a relief allowing a company to report on only climate-related risks and opportunities in the first year it applies IFRS S1 and IFRS S2;
- provided a relief for the requirement that annual financial statements and annual sustainability-related disclosure be reported at the same time in the first year a company applies IFRS S1 and IFRS S2; and
- exempted a company from disclosing information about Scope 3 GHG emissions in its first year of application of IFRS S2.

5 Proportionality for companies with fewer resources

The ISSB has considered the specific circumstances of emerging and developing economies and smaller companies, many of which operate within global value chains. It has sought to reduce costs:

- by introducing targeted relief measures for some requirements; and
- by scaling some requirements specifically for those with fewer resources, which could include small companies, companies new to sustainability reporting, and companies operating in jurisdictions where capital markets and legal and enforcement systems are less developed or that have had little exposure to (or experience with) sustainability reporting.

For example, IFRS S2 takes into consideration a company's available skills, capabilities and resources in determining the approach to scenario analysis the company is required to apply.

6 Capacity building

The ISSB has established a Partnership Framework for capacity building to support companies, investors and other capital market stakeholders as they prepare to use IFRS S1 and IFRS S2.

The framework focuses on supporting the introduction of IFRS Sustainability Disclosure Standards across all economic settings so that all market participants can access its benefits, including the 'phasing and scaling' of requirements in consideration of smaller companies and of companies operating in developing and emerging economies.

Contents

1—Introduction

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What is an Effects Analysis?

The ISSB has assessed the likely costs of implementing IFRS S1 and IFRS S2 and the likely ongoing associated benefits and costs of each Standard for both preparers and investors. This assessment also considers the benefits of better economic decision-making that might result from the implementation of IFRS S1 and IFRS S2. These benefits and costs are collectively referred to as 'effects'.

The ISSB also considered that preparers can often develop information that investors need at less cost and with greater accuracy than those investors would be able to if they had to estimate that information themselves.

The Effects Analysis looks at the likely effects of IFRS S1 and IFRS S2 rather than the actual effects, which cannot be known until after the Standards have been applied. The actual effects are one aspect that will be considered during the ISSB's post-implementation review process.[7]

Sources of information used in this Effects Analysis

The ISSB gains insight into the likely effects of new IFRS Sustainability Disclosure Standards through its exposure of proposals to stakeholders and its engagement with them through outreach activities.

The ISSB received more than 1,400 comment letters and completed surveys from stakeholders on the IFRS S1 and IFRS S2 exposure drafts. The ISSB also held more than 300 meetings, round tables and other outreach activities involving more than 30,000 stakeholders. The consultation process included extensive discussions with preparers, investors, regulators, standard-setters and accounting firms worldwide.

In addition, the ISSB was informed by the work of its advisory bodies, which included advisory bodies for jurisdictional authorities, investors and other stakeholders.

Consultation process

- IFRS S1 and IFRS S2 exposure drafts published in March 2022 and open for comment for 120 days
- More than 1,400 comment letters and survey responses received
- Engagement with more than 30,000 stakeholders through more than 300 events around the world: 29% companies, 25% investors, 13% accounting firms, 8% regulators, 5% standard-setters and 20% others
- Meetings with ISSB advisory bodies

7 The ISSB carries out a post-implementation review of each new Standard. Such reviews are normally limited to consideration of important issues identified as contentious during the development of the requirements and any unexpected costs or implementation problems encountered.

The ISSB also considered:

- feedback on the *Consultation Paper on Sustainability Reporting*, published by the Trustees of the IFRS Foundation in September 2020;
- comments and effects analyses of standards proposed by other organisations (for example, the European Financial Reporting Advisory Group (EFRAG) and the US Securities and Exchange Commission (US SEC));
- information on the effects of disclosure under other relevant frameworks or standards (for example, the TCFD Recommendations, the SASB Standards and the CDSB Framework Application Guidance); and
- a review of relevant literature on the benefits and costs of corporate sustainability disclosure and reporting standards.

Methodology used for this Effects Analysis

In this Effects Analysis, the evaluation of effects is mainly qualitative, rather than quantitative, for several reasons.

1 **Technical limitations make it difficult and highly subjective to quantify and monetise all relevant effects.**

In considering the benefits associated with the new global baseline of disclosures developed by the ISSB, there are no similar standards against which to compare and evaluate their marginal effects. As this Effects Analysis discusses, the situation in the market for sustainability disclosure standards is a diverse set of voluntary and mandatory standards with varied requirements, focuses and emphases. Benefits are likely to be more difficult to attribute and value across a diverse set of stakeholders.

2 **Benefits and costs are distributed unevenly across a wide, diverse range of companies and investors and arise at various points in time.**

Benefits of new disclosure standards are expected to develop gradually. It will take time for sustainability-related disclosures to be changed in companies and markets as IFRS S1 and IFRS S2 are adopted and for the information to be used in investors' decision-making. Costs, on the other hand, are likely to be highest when the Standards are initially applied and to be experienced mostly by companies applying the Standards. Costs are expected to reduce over time as companies learn to apply and integrate the Standards into their business activities and external sustainability reporting. Arriving at a quantitative net benefit bottom line is technically challenging and is dependent on the experience of using the Standards.

3 **Sustainability disclosure standards may also have broader effects.**

Effects on the business processes of companies applying IFRS S1 and IFRS S2 and on investments of users of information provided by these companies can collectively result in emergent benefits such as improvements in market transparency and functioning, in information about sustainability-related risks, in business resilience and in financial stability. These benefits are expected to emerge over time and therefore are difficult to assess before the Standards are applied.

The ISSB has sought to capture qualitatively the relevant likely effects of the Standards. Future research is necessary to determine the actual changes in companies' sustainability reporting and effects on the overall functioning of capital markets.

Specifically, the focus of this Effects Analysis explicitly considers the objectives and requirements of IFRS S1 and IFRS S2 compared to the diverse voluntary and mandatory sustainability disclosure frameworks and standards prevalent in the market. Therefore, when analysing the effects of IFRS S1 and IFRS S2, the ISSB compared the potential effects to the status quo base case—that is, the current situation of corporate sustainability disclosure involving many voluntary frameworks and protocols, and various emerging national and regional disclosure regulations.

This Effects Analysis considers the likely benefits and costs for:

- companies applying IFRS S1 and IFRS S2 for their disclosures—**preparers**; and
- the primary users of these disclosures—**investors**.

The analysis includes consideration of how benefits and costs might vary among preparers and investors in terms of roles, size, location and previous experience using other sustainability reporting frameworks.

Matters considered

In evaluating the likely effects of IFRS S1 and IFRS S2, the ISSB has considered:

(a) how the ability of investors to assess the amount, timing and uncertainty of a company's future cash flows, as well as the company's financial position and performance, might be affected by:

- increased transparency, comparability and verifiability of disclosed information about sustainability-related risks and opportunities over time and between companies; and
- whether economic decision-making will be affected as a result of improved reporting about sustainability-related risks and opportunities;

(b) how costs for preparers might be affected, both on the initial application of the Standards and on an ongoing basis, including:

- costs of collecting data, identifying how data has been measured, and adjusting data for purposes of particular valuation models or approaches;
- costs incurred by the lack of data about sustainability-related risks and opportunities; and
- the comparative advantage of preparers in developing information versus investors developing their own sustainability information; and

(c) how market outcomes, such as financial stability and the allocation of capital, might be affected, taking into consideration sustainability-related risks and opportunities within the context of improving transparency to inform investment decisions.

Comparison of the potential effects to the status quo base case

This Effects Analysis discusses likely benefits and costs for companies relative to three broad reporting starting points:

- no or minimal sustainability reporting (Case 1);
- voluntary sustainability reporting (Case 2); and
- mandatory sustainability reporting (Case 3).

Section 5 *Analysis of benefits and costs for investors* and Section 6 *Analysis of benefits and costs for preparers* provide more details. When applicable, the analysis:

- includes summaries of comments on the IFRS S1 and IFRS S2 exposure drafts;
- discusses reports, academic literature and results of third-party surveys; and
- provides examples based on analysis of sustainability reporting practices.

Limitations of this Effects Analysis

The main objective of IFRS S1 and IFRS S2 is to deliver a global baseline of sustainability-related financial disclosures to report decision-useful information to investors. The benefits, costs and overall effects of IFRS S1 and IFRS S2 on individual companies and investors are a combination of many factors, including:

- the starting point for a company's sustainability reporting;
- how difficult it is to obtain information;
- investors' experience and resources;
- a company's size and resources;
- a company's business and supply chain complexity; and
- a company's location of operations.

Effects will also be influenced by the degree of adoption of IFRS S1 and IFRS S2 around the world and by broader institutional characteristics, such as the legal and enforcement systems of individual adopting jurisdictions.

This Effects Analysis is subject to some assumptions and limitations:

- larger preparers tend to lead when it comes to adopting new reporting practices including sustainability disclosure practices. Therefore, a portion of this cost–benefit analysis is based on observations of disclosure practices for larger preparers.
- developed economies tend to lead when it comes to sustainability reporting. Therefore, the analysis is largely based on observations of disclosure practices for preparers operating in developed economies.
- some of the referenced results were documented in smaller samples and might not generalise to all affected companies.
- evidence on companies' mandatory financial and sustainability disclosures gives insights into relative benefits and costs of specific disclosure mandates and might not extend to the likely benefits and costs of IFRS S1 and IFRS S2.
- evidence on companies' voluntary sustainability disclosures and standards application only gives insights into relative benefits and costs for companies applying those materials. In addition, the effects on companies might not be the same if those disclosures became mandatory.
- the analysis discusses the expected effects overall and might not be representative of unique reporting situations and/or effects on individual preparers and investors.
- although many companies use the Integrated Reporting Framework, the TCFD Recommendations and the SASB Standards to prepare their sustainability disclosures, no companies have yet prepared disclosures applying IFRS S1 and IFRS S2. Therefore, the actual benefits, costs and effects of IFRS S1 and IFRS S2 might differ from observed effects of individual reporting approaches.
- the effects of IFRS S1 and IFRS S2 will depend on the strength of a jurisdiction's overall reporting system and enforcement regime, which are not under the control of the IFRS Foundation or the ISSB. Therefore, the effects might be different depending on where a company operates and reports, and the associated regulatory reporting and assurance regimes.
- the analysis reflects market conditions and the current state of sustainability reporting. Actual effects will be influenced by changes in market conditions.

The following sections of this document describe the ISSB's analysis of the effects that are likely to result from the application of IFRS S1 and IFRS S2.

2—Overview of disclosure deficiencies addressed by IFRS S1 and IFRS S2

2—Overview of disclosure deficiencies addressed by IFRS S1 and IFRS S2

The ISSB developed IFRS S1 and IFRS S2 in response to calls from investors and others for more consistent global standards that require companies to provide information about sustainability-related risks and opportunities. In part, these calls are driven by the growing importance of, and demand for, sustainability-related information and the need to address current deficiencies in disclosure practices. This section discusses the drivers and deficiencies in sustainability-related disclosures.

Sustainability-related risks and opportunities are important to investors in assessing a company's performance and value creation over time.

Drivers in sustainability-related disclosures

Sustainability-related risks and opportunities for a company arise from the company's dependencies on resources and relationships and its impacts on resources and relationships. Such dependencies and relationships might include a company's workforce, the specialised knowledge a company has developed, its relationships with suppliers and local communities, or its dependencies on resources and services derived from nature.

When a company's business model depends, for example, on a natural resource—such as water—it might be affected by changes in the quality, availability or pricing of that resource. When a company's activities result in adverse impacts on those resources, it might be subject to reputational damage, fines, penalties or stricter government regulation. When a company's business partners and suppliers face sustainability-related risks and opportunities, the company itself might be exposed to related consequences. Such dependencies, relationships and impacts can create or erode the company's financial performance and financial position. A company's ability to remain viable and resilient will, therefore, rely increasingly on a range of non-financial sources of value.

Responses to the consultation of the IFRS Foundation in 2020 on sustainability reporting highlighted the urgent demand for high-quality international standards on sustainability-related matters to meet the needs of global capital markets. In particular, investors, as well as bodies such as the G20, the G7, the Financial Stability Board and the International Organization of Securities Commissions (IOSCO), called on the ISSB to develop sustainability-related standards—starting with, but not limited to, climate disclosure. These stakeholders sought more consistent, complete, comparable and verifiable sustainability-related disclosures to enable them to assess the financial position and performance of a company, inform their capital allocation decisions, and understand the company's resilience to current and future sustainability-related risks and opportunities.

Investors are increasingly demanding disclosure about sustainability-related matters.

A company's management of sustainability-related risks and opportunities is increasingly seen as an important factor in investors' decision-making and their investment strategy.

According to the 2021 Global Investor Survey by PwC, 79% of investors see sustainability-related matters as a critical component of investment decision-making.[8] A 2022 TCFD survey indicated that 90% of investors and other users drew on climate-related disclosures in their financial decision-making and 66% of investors factor these disclosures into the way they price financial assets.[9]

The 2022 Sustainability Survey of the World Federation of Exchanges (WFE) noted that investor demand for sustainability-related disclosure among WFE member exchanges and affiliates increased from 70% in 2018 to 96% in 2022.[10]

The current state of sustainability disclosures

Disclosure of sustainability-related information is growing, but the coverage is uneven and reporting is largely restricted to large companies in developed markets.

Several studies provide insights into the state of corporate sustainability reporting. Although these studies offer only a snapshot of current practice using select samples of companies, the ISSB concluded that the studies—considered together—provide a useful and relatively comprehensive snapshot of global practice.

KPMG's 2022 review of corporate sustainability reporting also points to an increase in the proportion of companies disclosing sustainability information. The review found that, of the top 100 companies by revenue in each of the 58 countries considered (5,800 companies), 79% disclosed sustainability information—an increase from 64% in 2012.[11] This percentage was even higher—96%—for the 250 largest companies globally.

Disclosure rates vary by company size

Although the number of companies disclosing sustainability-related information is growing, many sources indicate that these companies are generally concentrated among the large companies (>US$10 billion in market capitalisation) in developed economies.[12]

The TCFD noted in its 2022 Status Report that disclosures varied by company size, with larger companies (>US$12.2 billion in market capitalisation) most likely to disclose information along the lines of the TCFD Recommendations. These larger companies represented about 86% of companies surveyed that used the TCFD Recommendations in their disclosures (see Table 3 in Section 6 *Analysis of benefits and costs for preparers*).

Similarly, as shown in Figure 1, the majority of companies applying the SASB Standards are large (>US$10 billion in market capitalisation) and medium-sized (US$2–10 billion in market capitalisation) companies, but the reporting rate among small (<US$2 billion in market capitalisation) companies is also substantial.

8 C. Chalmers, E. Cox and N. Picard, 'The Economic Realities of ESG', London, PwC, 2021.

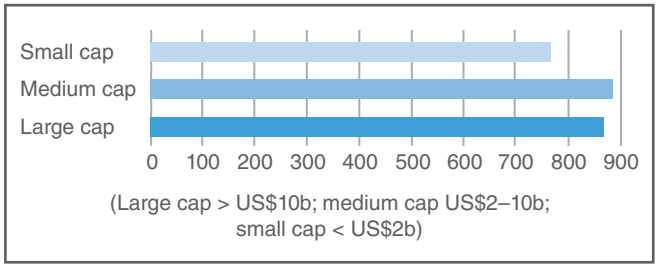
9 Task Force on Climate-related Financial Disclosures, *2022 TCFD Status Report*, New York and Basel, 2022, p. 5.

10 World Federation of Exchanges, *Exchanges Keep Up Efforts to Support a Sustainable Recovery*, London, 2022.

11 KPMG, *Big Shifts, Small Steps: Survey of Sustainability Reporting 2022*, London, 2022.

12 KPMG, *Big Shifts, Small Steps*, found that corporate disclosure of sustainability information has grown over the last 20 years. In 2002, only 18% of companies reviewed disclosed sustainability information compared to 79% in 2020.

Figure 1—Number of companies applying the SASB Standards since 2021 by market capitalisation

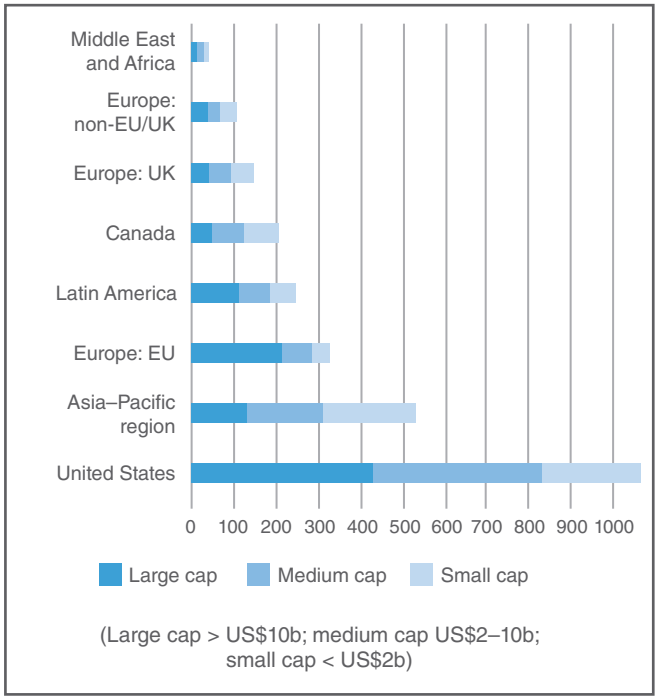


Source: ISSB's analysis.

Disclosure rates vary by region

Disclosures also vary by region, with companies predominantly operating in developed economies. Most of the 2,750 companies applying the SASB Standards, for instance, are located in North America, the Asia–Pacific region and Europe.

Figure 2—Number of companies applying the SASB Standards since 2021 by market capitalisation and region



Source: ISSB's analysis.

Similarly, companies applying the TCFD Recommendations are predominately located in Europe, followed by the Asia–Pacific region, North America, Latin America, and the Middle East and Africa (see Table 3 in Section 6 *Analysis of benefits and costs for preparers*).[13]

KPMG's 2022 review of corporate sustainability reporting found that, of the 100 largest companies in each of the 58 countries considered, disclosure rates were highest in North America (97%), the Asia–Pacific region (89%) and Western Europe (85%).

Other regions and their disclosure rates included Eastern Europe (72%), Latin America (69%), and the Middle East and Africa (56%).

Disclosure content varies by company

The content of sustainability disclosures varies widely. According to the 2022 KPMG study:

- 64% of sustainability disclosures covered environmental risk;
- 49% of sustainability disclosures covered social risks; and
- 44% of sustainability disclosures covered governance.

13 As illustrated in Table 3 in Section 6 *Analysis of benefits and costs for preparers*, 60% of European companies have used the TCFD Recommendations to provide disclosures on governance, strategy, risk management and climate-related metrics and targets. The TCFD Recommendations have been used similarly by companies in other regions, including the Asia–Pacific region (36%), North America (29%), Latin America (28%), and the Middle East and Africa (25%).

In the environmental risk category, companies mostly disclosed climate-related risks. Of the companies surveyed by KPMG:

- 71% discussed carbon targets; and
- 40% considered biodiversity risk.

This uneven coverage of sustainability topics was also reflected in companies' disclosure around the 17 United Nations (UN) Sustainable Development Goals (SDGs). The majority of companies focused only on three SDGs relating to climate, responsible production and consumption, and decent work and economic growth.

Other surveys of sustainability disclosures have noted the prevalence of qualitative narratives and the lack of quantitative metrics, particularly regarding the financial implications of sustainability issues.

Sustainability disclosure rates also vary by industry depending on an industry's perceived risk exposures and the significance of those exposures. Climate-related disclosures tend to be most prevalent in the energy, mining, technology and automobile industries. Biodiversity-related disclosures are often most prevalent in the mining, forest and paper, food and beverages, energy, utilities and chemical industries.[14]

The landscape of sustainability reporting standards, frameworks and disclosure requirements

Companies and investors face a challenging reporting environment that involves many reporting frameworks and standards.

For example, the 2020 Carrots & Sticks report found 266 voluntary and 348 mandatory sustainability reporting schemes in 60 countries.[15] The Reporting Exchange found about 215 voluntary and more than 980 mandatory sustainability reporting schemes globally.[16] These schemes covered varying aspects of environmental, social, governance and economic disclosure themes in various industries. Sources of these reporting schemes included public law and regulation, stock exchanges or industry bodies, standards and guidelines for non-financial reporting, and index questionnaires for preparing ratings.

Voluntary frameworks

Many companies disclose voluntarily using frameworks and standards developed by non-governmental bodies or market-led groups. The most common voluntary frameworks are the GRI Standards, the Integrated Reporting Framework, the SASB Standards and the TCFD Recommendations.[17]

A global benchmarking study by the International Federation of Accountants (IFAC) and the Association of International Certified Professional Accountants (AICPA) examined 1,350 companies in 2020. The study found that the GRI Standards were used by 999 companies, the TCFD Recommendations by 851 companies and the SASB Standards by 662 companies.[18]

KPMG found in 2022 that among the top 100 companies in each of 58 countries (5,800 companies), 68% used the GRI Standards, 34% used the TCFD Recommendations and 33% used the SASB Standards.

These percentages increased to 78% for the GRI Standards, 61% for the TCFD Recommendations and 49% for the SASB Standards among the 250 largest companies globally.[19]

14 KPMG, *Big Shifts, Small Steps*.

15 Van der Lugt, van de Wijs and Petrovics, *Carrots & Sticks*.

16 ESG Book, *The Reporting Exchange—Global Source for Sustainability Reporting* [database], London, 2023.

17 Several further frameworks and standards are also used to disclose sustainability-related information, including the CDSB Framework, UN Global Compact Principles, ISO Standards and WEF Common Metrics.

18 International Federation of Accountants and Association of International Certified Professional Accountants, *The State of Play in Sustainability Assurance*, New York and Durham, NC, 2023. This study reviewed 1,350 companies in 21 jurisdictions. The report is based on the review of the largest companies in each jurisdiction by market capitalisation as of approximately 21 March 2021, for fiscal years 2019 and 2020, and 21 March 2022, for fiscal year 2021.

19 Percentages do not add to 100 because many companies use more than one reporting scheme.

The Center for Audit Quality (CAQ) looked at the environmental, social and governance (ESG) reporting of the S&P 500 companies in 2020 and found that 410 companies used the SASB Standards, 329 companies used the GRI Standards and 302 companies used the TCFD Recommendations, with more than 230 companies using three or more frameworks.[20]

However, the use of voluntary frameworks does not necessarily mean a company complies with all the disclosure recommendations of the particular framework. For example, only about half of the companies applying the SASB Standards report on all metrics the industry standards specify and many companies do not fully disclose all the information in the TCFD Recommendations. The CAQ study also found that S&P 500 companies used these frameworks and standards to varying degrees, with some companies having fully applied a framework or standard, some companies having partly applied it, and others having used the framework or standard only as a reference.

Mandatory frameworks

Mandatory disclosure of sustainability information exists in many jurisdictions, as shown by the number of reporting schemes identified by the 2020 Carrots & Sticks report and the Reporting Exchange database, but the sustainability-related matters covered and the disclosure requirements differ.

Sustainability-related disclosure requirements mostly relate to several topics that are often categorised as environmental, social and governance matters. Dominant themes among mandatory disclosure requirements include issues relating to climate change, human rights, labour and anti-corruption.

Following the issuance in 2017 of the TCFD Recommendations, several jurisdictions have adopted, or plan to adopt, mandatory climate-related disclosure requirements aligned to the TCFD Recommendations. These jurisdictions include Brazil, Canada, Egypt, the European Union, New Zealand, Singapore, Switzerland, the United Kingdom and the United States.[21]

Stock exchange requirements

Disclosure requirements from stock exchanges also drive sustainability-related disclosure. The UN Sustainability Stock Exchange (SSE) Initiative has identified 34 exchanges with 19,929 listed companies that require sustainability disclosure as part of their listing rules and 70 exchanges with 48,182 listed companies that issue voluntary sustainability reporting guidance.[22] KPMG found in 2022 that approximately 23% of the top 100 companies in each of 58 countries use stock exchange guidance to disclose sustainability information.

Listing rules and voluntary guidance from stock exchanges reference several disclosure frameworks and standards, as shown in Table 1.

Table 1—Disclosure frameworks referenced by stock exchange guidance

GRI Standards	96%
SASB Standards	79%
Integrated Reporting Framework	76%
CDP	70%
TCFD Recommendations	63%
CDSB Framework	36%

Source: SSE Initiative data.

20 Center for Audit Quality, *S&P 500 ESG Reporting*, Washington, DC, 2022.

21 Task Force on Climate-related Financial Disclosures, *2022 TCFD Status Report*.

22 Sustainable Stock Exchanges Initiative, 2023, https://sseinitiative.org/.

The form of sustainability disclosures required or suggested by stock exchanges varies considerably. For example, as observed in the 2022 WFE Sustainability Survey, most stock exchanges do not specify a format for reporting, but some stock exchanges encourage standalone sustainability reports or integration with annual reports.

This lack of standardisation among stock exchanges contributes to overall inconsistencies in form and content of disclosures, affecting the comparability, quality and reliability of disclosed information.

Deficiencies in disclosures

The many sustainability disclosure frameworks, inefficiencies in the current preparation of disclosures and the lack of comparability between the disclosures of companies can contribute to pressures to deliver quality disclosures in capital markets.

Quality-related effects

The approaches taken to preparing and disclosing sustainability-related information are wide ranging. The multiplicity of frameworks and requirements contribute to the challenges of ensuring the quality of disclosures, both in terms of a company's internal controls and assurance processes and engaging investors effectively with the information they need. The PwC 2021 Global Investor Survey found 33% of investors identified the quality of current disclosure as 'poor'. Respondents to this survey noted a lack of quality in what they described as 'fundamental' areas of disclosure, specifically in relation to information that indicates the relevance of sustainability-related factors to a company's business model.

Similarly, the PwC 2022 Global Investor Survey found that 87% of investors think that corporate reporting contains unsupported claims about sustainability performance.

A global baseline for sustainability-related financial disclosure as embodied in IFRS S1 and IFRS S2 is important to improve the quality of disclosures.

Importantly, IFRS S1 and IFRS S2 have been developed with assurance in mind. Assurance, as the PwC survey suggests, gives investors confidence in corporate reporting on sustainability. The IFAC-AICPA study found that 64% of the 1,350 companies examined obtained assurance/verification over at least some of the information they disclosed in 2021 (an increase from 51% in 2019). The CAQ study of S&P 500 companies found a similar level of assurance in 2020 (more than 60%). However, the KPMG study found that only about half or fewer of the companies it surveyed had some level of assurance for their sustainability-related disclosures. The IFAC-AICPA study found that 97% of audit firm-related engagements and 58% of other service provider engagements resulted in limited assurance reports.

Although the IFRS Foundation has no mandate to develop assurance standards or to determine the level of assurance required by those applying IFRS S1 and IFRS S2, it appreciates the importance of assurance in providing high-quality information to investors to inform their decision-making. Accordingly, the IFRS Foundation is working with the International Auditing and Assurance Standards Board (IAASB) to address this important issue (see Section 5 *Analysis of benefits and costs for investors*).

Use of various report types

The IFAC-AICPA study also showed that companies disclose sustainability-related information through a variety of report types—annual reports, integrated reports, sustainability reports and others. The variation in report types and formats can affect transparency by exacerbating investors' efforts to gather relevant sustainability-related information and compare it effectively. The use of many voluntary reporting regimes also might make it harder to verify companies' claims regarding their sustainability-related efforts, contributing to 'greenwashing' problems.

Use of more than one framework

Faced with many disclosure frameworks, companies may also choose to disclose information using more than one framework. The IFAC-AICPA study found that more than 1,000 of the 1,350 companies surveyed reported using more than one framework. The study highlighted the use of more than one framework as a growing trend, with 68% of companies using more than one framework in 2019, 80% in 2020 and 86% in 2021.

> *'The need for a harmonized, global system for reporting decision-useful information is clearer than ever before given 86% of the companies reviewed employed multiple standards and frameworks to prepare and present sustainability information.'*
>
> *The State of Play in Sustainability Assurance*, IFAC-AICPA, February 2023

Although reporting using more than one framework is more comprehensive, it also adds to the complexity and cost of disclosure for both those preparing information and those using it. The 2022 KPMG study found implicitly that surveyed companies used more than one framework, with 68% using the GRI Standards, 34% using the TCFD Recommendations, 33% using the SASB Standards and 23% using stock exchange guidance (totalling 158%). Of 1,385 companies using the SASB Standards in 2021, 638 (46%) of them also used the TCFD Recommendations, according to the SASB.

Lack of comparability

The existence and use of many voluntary and mandatory frameworks, different reporting types and different sustainability-related measures add to the difficulties users of that information face in comparing company performance and aggregating information across industries and sectors. As a result, the comparability of sustainability-related disclosures across companies and jurisdictions is limited. This lack of comparability increases the costs for investors and other users of information and reduces the efficiency and effectiveness of their processes when using disclosures to assess and compare companies.

These factors also add to the disclosure challenges and burdens of companies, and are likely to bring inefficiencies and increased marginal costs to these companies.

Case study—Comparison of sustainability-related disclosures from two steel companies

To illustrate the issues that arise from these factors, the ISSB compared the 2021 sustainability disclosures of two companies of similar size operating in the steel industry. Each of these companies had disclosures of similar total page length, quality and level of assurance but used different frameworks, approaches, metrics and reporting formats.

Table 2 compares each company on four factors: disclosure framework(s) used, report types, disclosure content and assurance of disclosed information.

Most noticeably, the two companies differed in the indicators and metrics used to develop targets and measure performance, and reported this information in different types of reports. For example, although each company discussed the United Nations Sustainable Development Goals (UN SDGs), the companies interpreted and treated the UN SDGs in different ways.

The companies also used different metrics and benchmarks to measure and characterise performance, despite being in the same industry and most likely being exposed to similar sustainability-related risks and opportunities.

Table 2—Comparison of disclosures from two steel companies

	Company A	Company B
Disclosure framework(s) or standards	GRI Standards, United Nations Global Compact (UN GC), SASB Standards, EU Non-Financial Reporting Directive (NFRD)	TCFD Recommendations
Report types	Integrated Report (61 pages), Climate Action Report (67 pages), Basis for Reporting (26 pages), Factbook with Sustainability Performance section	Integrated Report (54 pages), Sustainability Report (33 pages), Carbon Neutral Vision (54 pages)
Disclosure content	**Integrated Report** • provides in-depth content on ESG sustainable strategy and performance, including a roadmap to net zero greenhouse gas emissions • discusses social factors such as diversity, culture and community outreach • discusses 17 SDGs to inform 10 specific outcomes that the company believes are the most relevant to the company and discusses further with regards to the outcomes rather than the goals • uses ESG sustainability performance indicators in line with the ISAE 3000 Revised[23] **Climate Action Report** • provides an in-depth decarbonisation strategy, a discussion of climate-related risks and opportunities and carbon performance metrics • uses the Climate Action Net-Zero benchmark for self-assessment	**Integrated Report** • discusses overall strategy and business model, including risks • identifies and discusses material sustainability issues, including initiatives on safety, environment, promotion of climate change measures, efficient use of resources and energy, human rights, diversity and inclusion, and human resources development **Sustainability Report** • covers ESG strategy and performance • provides in-depth information on environmental performance with specific goals and policies to achieve net zero greenhouse gas emissions (supplemented by its Carbon Neutral Vision, an in-depth 54-page decarbonisation strategy) • provides in-depth information on social aspects such as safety, diversity, human rights and human resources development • discusses 17 SDGs to report initiatives the company has taken to achieve each individual SDG • provides information about progress against specific metrics and targets
Assurance of disclosed information	Yes—Limited assurance by other service provider of some environmental performance indicators	Yes—Limited assurance by audit firm of some environmental performance indicators

23 International Auditing and Assurance Standards Board, *International Standard on Assurance Engagements 3000 (Revised)*, New York, 2013.

Summary

Investors are demanding high-quality and comparable information on companies' sustainability-related risks and opportunities. The current state of sustainability disclosure, however, is fraught with many reporting frameworks and standards, and various sources of thematic and industry-based guidance. This situation often results in uneven and disparate corporate sustainability disclosures of variable quality that differ in their form, focus and coverage. In this context, it is difficult for investors to effectively and efficiently compare companies in terms of their sustainability-related risks and opportunities.

The development of IFRS S1 and IFRS S2 as a global baseline for sustainability-related disclosures is intended to address these deficiencies and challenges.

IFRS S1 and IFRS S2 are designed to work with any accounting standards used to prepare financial statements. As such, they are applicable across jurisdictions.

Companies potentially affected by IFRS S1 and IFRS S2

Although all public and private companies can apply IFRS S1 and IFRS S2, the ISSB does not have the right to mandate the application of the Standards. Companies can voluntarily apply these Standards and jurisdictional authorities can decide whether to require companies to apply them.

IFRS S1 and IFRS S2 are the first two IFRS Sustainability Disclosure Standards developed by the ISSB, which was created in 2021. The ISSB has significant government and jurisdictional support, as indicated by feedback on the *Consultation Paper on Sustainability Reporting*, published by the Trustees of the IFRS Foundation in September 2020. However, most jurisdictions have yet to determine whether and how to adopt the Standards, whether to require or allow companies to apply the Standards and for which companies, and the approach to adoption (for example, the date from which a jurisdiction would require the Standards to be applied by companies). The IFRS Foundation is supporting jurisdictions in their journey to the adoption of the Standards, including by making available an adoption guide.

IFRS S1 and IFRS S2 are likely to be implemented initially by companies that already voluntarily disclose sustainability-related information or comply with other mandatory reporting requirements. Companies that apply IFRS Accounting Standards may also implement IFRS S1 and IFRS S2 because these companies have previously supported a globally comparable reporting system with an investor focus. The ISSB acknowledges the work required for companies and jurisdictions in this category to ultimately apply the Standards.

About IFRS Accounting Standards

IFRS Accounting Standards play a role in corporate disclosure in more than 160 jurisdictions:

- 146 jurisdictions require IFRS Accounting Standards for all or most domestic publicly accountable companies in their capital markets (listed companies and financial institutions);
- 14 jurisdictions permit, rather than require, IFRS Accounting Standards; and
- IFRS Accounting Standards are commonly used voluntarily by listed companies and financial institutions in four jurisdictions that have not made any commitment to use IFRS Accounting Standards.

3—Overview of IFRS S1 and IFRS S2

3—Overview of IFRS S1 and IFRS S2

Main concepts in IFRS S1

Description of the concept of sustainability

A company's ability to generate cash flows over the short, medium and long term is inextricably linked to the interactions between the company and its stakeholders, society, the economy and the natural environment throughout the company's value chain. Together, the company and the resources and relationships throughout its value chain form an interdependent system in which the company operates. The company's dependencies and impacts on those resources and relationships give rise to sustainability-related risks and opportunities for the company.

A company must ensure the preservation, regeneration and development of its resources and relationships (such as financial, human and natural) over time to achieve its goals.

IFRS S1 builds on concepts from the Integrated Reporting Framework, which helps a company articulate how it uses and affects resources and relationships for creating, preserving and eroding value over time. By referring to this articulation of the value creation process, a company will be better placed to explain to its investors how it is working within its business model and value chain to manage the sustainability-related risks and opportunities that can affect its performance and ability to deliver financial value for investors over the short, medium and long term.

Objective of IFRS S1

The objective of IFRS S1 is to require a company to disclose material information about its sustainability-related risks and opportunities that is useful to investors in making decisions about providing resources to the company. The information required covers the material aspects of a company's governance, strategy, risk management, and metrics and targets for sustainability-related risks and opportunities.

Disclosure requirements

A company applying IFRS S1 is required to disclose material information about the sustainability-related risks and opportunities that could reasonably be expected to affect the company's prospects, particularly current and anticipated financial effects.

IFRS Sustainability Disclosure Standards use the same definition of 'material' as IFRS Accounting Standards to ensure that the information provided is focused on that necessary to inform investor decisions.

'Information is material if omitting, misstating or obscuring it could reasonably be expected to influence investor decisions.'

IFRS S1 requires a company to provide disclosures about:

- **governance**—the governance processes, controls and procedures the company uses to monitor, manage and oversee sustainability-related risks and opportunities;
- **strategy**—the approach for managing sustainability-related risks and opportunities that could affect the company's prospects, business model and value chain;
- **risk management**—the processes the company uses to identify, assess, prioritise and monitor sustainability-related risks and opportunities; and
- **metrics and targets**—information used to measure and monitor the company's performance in relation to sustainability-related risks and opportunities, including progress towards any company-set and mandated targets.

IFRS S1 creates a global baseline to meet investors' needs. The Standard allows a 'building block' approach to enable incremental disclosures to be added by others to what the ISSB has identified—as long as the global baseline is not obscured—to enhance interoperability with other international and jurisdictional sustainability-related standards.

Sources of guidance

To identify sustainability-related risks and opportunities to report on, a company applying IFRS S1:

(a) uses IFRS Sustainability Disclosure Standards;

(b) is required to consider the SASB Standards; and

(c) is permitted to consider:

- the CDSB Framework Application Guidance;
- industry practice; and
- the materials of investor-focused standard-setters.

The SASB Standards, which were designed to meet investors' fundamental information needs, provide industry-specific disclosures across a range of sustainability matters.

Requiring consideration of SASB Standards when applying IFRS S1 can improve the comparability of disclosures.

For climate-related risks and opportunities a company uses IFRS S2 to determine the disclosures to provide. For disclosures about other sustainability-related risks and opportunities (including metrics), IFRS S1 points to other standards and frameworks. In particular, IFRS S1:

(a) requires a company to consider the SASB Standards; and

(b) permits a company to consider:

- the CDSB Framework Application Guidance;
- industry practice;
- the materials of investor-focused standard-setters;
- the GRI Standards; and
- the European Sustainability Reporting Standards (ESRS).

Interoperability with GRI Standards

The IFRS Foundation and the Global Reporting Initiative (GRI) signed a Memorandum of Understanding seeking to coordinate work programmes and standard-setting activities.

GRI Standards are well-established sustainability reporting standards focusing on reporting impacts. Companies that apply the GRI Standards are geographically diverse, and many of these companies are in emerging markets.

IFRS Sustainability Disclosure Standards and GRI Standards can be viewed as two interconnected reporting pillars that can work together to form a comprehensive corporate reporting regime for the disclosure of sustainability information.

Interoperability with European Sustainability Reporting Standards (ESRS)

The ISSB and the European Commission are working towards a shared objective to maximise interoperability of their standards with the aim of reducing duplication in reporting.

The Integrated Reporting Framework

The Integrated Reporting Framework provides principles-based guidance for reporting structure and content.

When used together with IFRS Sustainability Disclosure Standards, including the sources of guidance referred to in IFRS S1 (such as the SASB Standards), the Integrated Reporting Framework can support a holistic view of the value creation process through governance and business model disclosure to drive connectivity between financial statements and sustainability-related financial disclosures.

Main concepts in IFRS S2

A company applying IFRS S1 applies IFRS S2 to provide material information about its climate-related risks and opportunities.

Objective of IFRS S2

The objective of IFRS S2 is to require a company to disclose material information about its climate-related risks and opportunities that is useful to investors in making decisions relating to providing resources to the company.

In preparing and disclosing climate-related information in accordance with IFRS S2, a company is required also to apply IFRS S1, which sets out relevant requirements such as the timing of the reporting, the need to apply assumptions that are consistent with the financial statements to the extent possible, how to disaggregate information and the required characteristics of the information.

Governance

IFRS S2 requires disclosure of material information about the governance processes, controls and procedures a company uses to monitor, manage and oversee climate-related risks and opportunities, including a description of the governance body—such as a board or committee, or individual—with oversight of climate-related risks and opportunities.

Strategy

IFRS S2 requires a company to disclose material information about the company's strategy for managing climate-related risks and opportunities, including information that enables investors to understand the current and anticipated financial effects of climate-related risks and opportunities on the company's financial position, financial performance and cash flows over the short, medium and long term.

IFRS S2 also requires a company to use climate-related scenario analysis to inform its disclosures about its resilience to climate change.

Risk management

IFRS S2 requires a company to disclose material information about the processes the company uses to identify, assess, prioritise and monitor climate-related risks and opportunities, including whether and how those processes are integrated into and inform the company's overall risk management process.

Metrics and targets

IFRS S2 requires a company to disclose metrics and targets to enable investors to understand the company's performance in relation to its material climate-related risks and opportunities, including progress towards any climate-related targets it has set and is required to meet by law or regulation.

These metrics and targets include disclosure of a company's absolute greenhouse gas (GHG) emissions, expressed as metric tonnes of carbon dioxide equivalent (CO_2e) and calculated using the GHG Protocol Corporate Standard. The disclosure is classified as Scope 1, Scope 2 and Scope 3 GHG emissions.

Scope 1—emissions that a company makes directly

Scope 2—indirect emissions from the generation of purchased energy consumed by the company

Scope 3—all other indirect emissions that occur in the company's value chain

The requirement to disclose material information about Scope 3 GHG emissions reflects the importance of providing information related to a company's value chain.

IFRS S2 also requires asset managers, commercial banks and insurers to disclose GHG emissions that are financed through their loans and other investments (financed emissions) to help stakeholders of these companies, including prudential regulators, understand risks and opportunities related to the GHG emissions associated with the activities of companies participating in financial activities.

IFRS S2 requires a company to provide industry-specific metrics. To support this requirement, illustrative guidance about industry-specific metrics, taken from the SASB Standards, accompany IFRS S2.

Reliefs and guidance

In developing IFRS S1 and IFRS S2, the ISSB has provided temporary or permanent relief from some requirements and included illustrative examples and application guidance to assist companies.

Use of reasonable and supportable information

The ISSB introduced in IFRS S1 and IFRS S2 the concept of 'reasonable and supportable information that is available at the reporting date without undue cost or effort'. This concept is intended to help companies in applying disclosure requirements that involve a high level of measurement or outcome uncertainty.

For example, for a company that is more resource constrained the costs of obtaining particular information may be proportionately higher than for a company with fewer resource constraints. The concept enables the resource-constrained company to develop its disclosures using information that is less costly to obtain as long as that information is reasonable and supportable.

Quantitative test

In specified circumstances, rather than providing quantitative information about the current and anticipated effects of sustainability-related risks and opportunities on its financial position, financial performance and cash flows, a company can instead provide qualitative information.

A company need not provide quantitative information about the current or anticipated effects of its sustainability-related risks and opportunities if:

- those effects are not separately identifiable; or
- the level of measurement uncertainty involved in estimating those effects is so high that the resulting quantitative information would not be useful.

Additionally, a company need not provide quantitative information about anticipated financial effects if the company does not have the skills, capabilities and resources to provide that quantitative information.

Reliefs

The ISSB has provided several reliefs in applying IFRS S1 and IFRS S2, including:

- a relief available in the first year a company reports in accordance with IFRS S1 that permits the company to report its sustainability-related financial disclosures after the publication of its financial statements.
- a relief from providing comparative information in the first annual reporting period in which a company applies IFRS S1 and IFRS S2.
- a relief allowing a company to report on only climate-related risks and opportunities in the first year it applies IFRS S1 and IFRS S2. A company applying this relief would be required to provide information about its other sustainability-related risks and opportunities in the second year it applies the two Standards.
- an exemption from the requirement to disclose information about Scope 3 GHG emissions in the first year a company applies IFRS S2.
- a relief from applying the GHG Protocol Corporate Standard, in specific circumstances.
- a relief from reassessing the scope of a company's value chain and the categories included in the measurement of the company's Scope 3 GHG emissions, unless a significant event or change of circumstances occurs.
- a relief allowing a company to measure its GHG emissions using information for reporting periods that are different from the company's own reporting period. This relief applies when the information arises from companies in its value chain with reporting periods that are different from the company's own reporting period, in specific circumstances.

Guidance

The ISSB has provided application guidance for IFRS S1 and IFRS S2. The Application Guidance for IFRS S1 covers guidance on sustainability-related risks and opportunities, materiality, connected information, interim reporting and comparative information.

The Application Guidance for IFRS S2 covers scenario analysis, GHG emissions, financed emissions, cross-industry metrics and climate-related targets. In particular, the guidance provides a framework for how a company determines its Scope 3 GHG emissions.

The Application Guidance for IFRS S2 also provides guidance about climate-related scenario analysis to support companies' assessment of their climate resilience. The guidance builds on materials published by the TCFD and puts companies on a path to develop their capabilities and strengthen their disclosures over time. As part of this guidance, a company is required to use a climate-related scenario approach commensurate with its circumstances at its reporting date, taking into consideration the company's exposure to climate-related risks and opportunities and the skills, resources and capabilities available to the company, enabling those less able to comply with the requirement to use a less complex approach to scenario analysis. The Application Guidance for IFRS S2 also covers aspects of determining an approach such as selecting inputs, making analytical choices and other considerations.

Capacity building

The ISSB will also assist companies and others by working on capacity building. The ISSB has established a Partnership Framework for capacity building to support companies, investors and other capital market stakeholders as they prepare to use IFRS S1 and IFRS S2. The framework focuses on supporting the introduction of IFRS Sustainability Disclosure Standards across all economic settings, including the 'phasing and scaling' of requirements in consideration of smaller companies and of companies operating in developing and emerging economies.

The ISSB has noted that 'safe harbours', which give companies protection from, or reduce, liability on information disclosed to investors, could be helpful to support those providing sustainability-related financial disclosures. Although such protection is within the remit of jurisdictions and cannot be provided by the ISSB, the ISSB has noted that such protection is something that jurisdictions could consider for those applying IFRS S1 and IFRS S2.

4—General evidence on benefits and costs of corporate sustainability disclosure

4—General evidence on benefits and costs of corporate sustainability disclosure

The effects of reporting standards

High-quality reporting standards can provide benefits by inducing companies to disclose information (increased transparency) and by improving the comparability of disclosed information.

Standards generally impose costs on capital markets through the costs of standard-setting and costs to preparers and investors, but these costs can result in benefits.

Such benefits would not be achievable in an alternative scenario in which:

- preparers individually decide what information to report (content) and how to report it (quantitative measures, qualitative content and frequency of reporting); and
- investors individually acquire and integrate diverse information sets into their decision-making.

Improvements in transparency reduce uncertainties about a company and lower information asymmetry between the company's insiders and users of financial reports, as well as between types of users (for example, sophisticated and unsophisticated investors). In turn, there will be less demand among users for seeking a higher price when uncertainty and information asymmetry risks are high.

> Improved transparency allows companies to raise capital at a lower cost, opening up greater opportunities for investment, which in turn leads to economic growth and development.

Improved transparency not only has direct economic effects but also enables better monitoring of companies by investors, which in turn can lead to improvements in how companies are run and their performance through improved governance.

Investors and other stakeholders rely on information about one company to draw inferences about the performance and prospects of other companies. Increased comparability of companies reduces investors' information processing costs—for example, costs associated with acquiring information and incorporating it into relevant forecasts and investment decisions—leading to more efficient functioning of capital markets. Similarly, commonly applied standards help increase comparability across jurisdictions, lowering barriers to cross-border investment.

Academic insights

As mentioned previously, the main purpose of corporate general purpose financial reports is to reduce the amount of information asymmetry between companies and users of financial reports, and between types of users. More and better financial disclosure can lead to improved liquidity, lower cost of capital, higher asset prices and better corporate decisions.[24]

24 See A. Goss and G.S. Roberts, 'The Impact of Corporate Social Responsibility on the Cost of Bank Loans', *Journal of Banking and Finance*, vol. 35, no. 7, 2011; S. El Ghoul et al., 'Does Corporate Social Responsibility Affect the Cost of Capital?', *Journal of Banking and Finance*, vol. 35, no. 9, 2011; D.S. Dhaliwal et al., 'Voluntary Nonfinancial Disclosure and the Cost of Equity Capital: The Initiation of Corporate Social Responsibility Reporting', *The Accounting Review,* vol. 86, no. 1, 2011; S. Chava, 'Environmental Externalities and Cost of Capital', *Management Science*, vol. 60, no. 9, 2014; B. Cheng et al., 'Corporate Social Responsibility and Access to Finance', *Strategic Management Journal*, vol. 35, no. 1, 2014; M. Plumlee et al., 'Voluntary Environmental Disclosure Quality and Firm Value: Further Evidence', *Journal of Accounting and Public Policy*, vol. 34, no. 4, 2015; R.J. Casey and J.H. Grenier, 'Understanding and Contributing to the Enigma of Corporate Social Responsibility (CSR) Assurance in the United States', *Auditing: A Journal of Practice & Theory*, vol. 34, no. 1, 2015; E.M. Matsumura, R. Prakash and S.C. Vera-Munoz, 'To Disclose or Not to Disclose Climate-change Risk in Form 10-K: Does Materiality Lie in the Eyes of the Beholder?', 2017; P. Bonetti, C.H. Cho and G. Michelon, 'Environmental Disclosure and the Cost of Capital: Evidence from the Fukushima Nuclear Disaster', 2018; J. Jung, K. Herbohn and P. Clarkson, 'Carbon Risk, Carbon Risk Awareness and the Cost of Debt Financing', *Journal of Business Ethics*, vol. 150, 2018; and H.B. Christensen, L. Hail and C. Leuz, 'Mandatory CSR and Sustainability Reporting: Economic Analysis and Literature Review', *Review of Accounting Studies*, vol. 26, no. 3, 2021, for review.

Global reporting standards play a critical role in information supply and information consumption in capital markets because they can improve the transparency of corporate reporting and can help reduce the information gap between companies and their stakeholders.

One example of global standards is IFRS Accounting Standards, which are used in more than 140 jurisdictions. A review of about 200 academic studies on the effects of mandatory adoption of IFRS Accounting Standards in the EU found that, although benefits were not experienced in all cases, on average there were benefits to applying IFRS Accounting Standards across jurisdictions.[25] These benefits included increased transparency and comparability, lower cost of capital, increased market liquidity, improved corporate investment efficiency and improved international capital flows.

Prior academic research on voluntary and mandatory sustainability reporting has highlighted benefits of sustainability reporting on average. For example, improved sustainability disclosures result in the lower cost of capital and lower cost of debt.[26] More recently, academic research found that carbon disclosure has a material effect on companies' cost of capital and stock returns.[27]

The evidence from research is consistent with stakeholder comments on the IFRS S1 and IFRS S2 exposure drafts: some respondents stated that the application of the Standards would likely reduce the cost of capital and lead to better functioning of capital markets over time.

The ISSB expects IFRS S1 and IFRS S2 to improve the transparency and quality of information available to investors and to benefit the functioning of capital markets in general.

Academic research also provides insights into information processing costs, such as costs of collecting and analysing data:[28]

- information processing costs have implications for the quality and speed of decision-making; and
- mandatory reporting standards help reduce some of the processing costs.

With the multiplicity of sustainability reporting frameworks, standards and approaches, investors' processing costs associated with collecting and analysing sustainability-related information are currently substantial—investors can either look through lengthy sustainability disclosures to identify relevant information and determine its comparability to other companies' disclosures, or rely on costly products of information intermediaries who collect, aggregate and standardise the reported sustainability information.

25 B. Singleton-Green, *The Effects of Mandatory IFRS Adoption in the EU: A View of Empirical Research*, Information for Better Markets, London, Institute of Chartered Accountants in England and Wales, 2015.

26 However, some studies found no association between the cost of capital or cost of debt and sustainability performance and disclosure (for example, P. M. Clarkson et al., 'The Relevance of Environmental Disclosures: Are Such Disclosures Incrementally Informative?', *Journal of Accounting and Public Policy*, vol. 32, no. 5, 2013 and C. Stellner, C. Klein and B. Zwergel, 'Corporate Social Responsibility and Eurozone Corporate Bonds: The Moderating Role of Country Sustainability', *Journal of Banking and Finance*, vol. 59, 2015).

27 P. Bolton and M.T. Kacperczyk, 'Carbon Disclosure and the Cost of Capital', 2021, and 'Global Pricing of Carbon-Transition Risk', *Journal of Finance*, forthcoming, last revised 5 August 2022.

28 See E. Blankespoor, E. deHaan and I. Marinovic, 'Disclosure Processing Costs, Investors' Information Choice, and Equity Market Outcomes: A Review', *Journal of Accounting and Economics*, vol. 70, no. 2–3, 2020, p. 101344, for review.

A 2022 survey of US institutional investors and companies by the SustainAbility Institute by Environmental Resources Management (hereafter, the ERM survey) estimated that large investors spend an average of US$993,000 annually on collecting and analysing climate-related data to inform their investment decisions, of which:

- US$473,000 is spent on external sustainability ratings, data providers and consultants;
- US$226,000 is spent on collecting climate data related to assets; and
- US$294,000 is spent on internal climate-related investment analysis.[29]

Although these amounts are for a small sample of users and likely do not generalise to all users—especially those lacking the resources and sophistication to process unstandardised sustainability information—they are indicative of the high information processing costs faced by investors. Establishing standardised sustainability reporting can reduce costs associated with the acquisition and production of information.

Several academic studies have examined the impact of sustainability standards and mandatory reporting on disclosures and company actions. Specifically, recent studies examined the role of voluntary SASB Standards for corporate sustainability reporting and sustainability-related actions in the US and pointed to the benefits of sustainability standards.[30] Specifically, the studies found that following the release of SASB Standards, publicly traded companies in the US improved their disclosures of material sustainability information on average. There were also significant improvements in companies' sustainability performance (for example, reduced GHG emissions, pollution levels and workplace injuries) among companies applying the SASB Standards.

Several research studies have examined the information and real effects of mandatory sustainability-related disclosures. For instance, one academic study found there were fewer mining-related violations and injuries, and lower labour productivity—consistent with an increased organisational focus on safety—following the introduction of a new requirement in the US to include mine-safety records in financial reports (Section 1503 of the Dodd–Frank legislation).[31]

An analysis of sustainability disclosure mandates around the world found mandatory ESG disclosures have beneficial informational and real effects.[32] The analysis included a sample of 17,680 companies across 65 countries and found that mandating ESG disclosures increases the availability and quality of ESG reporting (especially for poorly performing companies) and reduces the likelihood of negative ESG-related incidents and the risk of stock price crash.

Academic evidence of improved disclosures and improved sustainability performance after the application of sustainability reporting mandates and/or voluntary standards highlights the role of sustainability standards in the reporting process and sustainability performance.

29 SustainAbility Institute by ERM, *Costs and Benefits of Climate-Related Disclosure Activities by Corporate Issuers and Institutional Investors*, https://www.sustainability.com/thinking/costs-and-benefits-of-climate-related-disclosure-activities-by-corporate-issuers-and-institutional-investors/.

30 See for example, K. Bochkay, J. Hales and G. Serafeim, 'Disclosure Standards and Communication Norms: Evidence of Voluntary Disclosure Standards as a Coordinating Device for Capital Markets', Miami, Florida, University of Miami Business School Research Paper no. 3928979, 2021; K. Bochkay, S. Choi and J. Hales, '"Mere Puffery" or Credible Disclosure? The Real Effects of Adopting Voluntary ESG Disclosure Standards', 2022; E. Rouen, K. Sachdeva and A. Yoon, 'The Evolution of ESG Reports and the Role of Voluntary Standards', 2022; and M. Goettsche et al., 'Materiality Indications as a Double-Edged Sword: Real Effects of Sustainability Disclosure Standards', 2023.

31 See H.B. Christensen et al., 'The Real Effects of Mandated Information on Social Responsibility in Financial Reports: Evidence from Mine-safety Records', *Journal of Accounting and Economics*, vol. 64, no. 2–3, 2017, pp. 284–304.

32 See P. Krueger et al., 'The Effects of Mandatory ESG Disclosure Around the World', European Corporate Governance Institute—Finance Working Paper no. 754, Brussels, 2021, pp. 21–44.

There is limited academic research on the costs to preparers of applying sustainability standards, primarily because such proprietary company-level data is generally unavailable. The ERM survey found that companies spend an average of US$533,000 annually on climate-related disclosure. Although this amount is for a small sample of US companies and likely does not generalise to other companies—especially smaller companies and/or companies operating in developing markets—it is indicative of the substantial costs involved in providing sustainability disclosures to the market.

Most preparers that commented on the IFRS S1 and IFRS S2 exposure drafts said the costs of implementing the Standards would be substantial and would depend on many factors, such as the starting point of sustainability reporting, company size, business and supply chain complexity, and location. Preparers said many of the costs involved would be one-time investments with permanent benefits, and the costs after the initial year would substantially decrease. Many respondents from emerging markets and developing economies, as well as preparers from smaller companies, said they would face relatively higher implementation and ongoing application costs compared to companies operating in advanced economies. These higher costs relate to available social and public goods, data and expertise.

Considering recent academic insights on sustainability reporting and standards application, as well as prior experience with mandating general purpose financial reporting standards (for example, the adoption of IFRS Accounting Standards in many jurisdictions), the ISSB anticipates the application of IFRS S1 and IFRS S2 will result in more transparent, consistent and higher-quality sustainability reporting.

Greater transparency and consistency of sustainability-related information is likely to:

- enable investors and other stakeholders to make decisions based on improved information about sustainability-related risks and opportunities; and
- enable companies to improve their own understanding of sustainability-related risks and opportunities, which might result in improved focus on sustainability-related actions and performance.

The increasing application of sustainability standards and frameworks around the world (see Section 2 *Overview of disclosure deficiencies addressed by IFRS S1 and IFRS S2*) suggests the benefits of applying global sustainability standards are likely to exceed the costs. However, the ISSB acknowledges that implementation costs will be substantial, and some companies and jurisdictions might experience greater benefits and/or lower compliance costs than others.

The overall reporting ecosystem matters in determining whether IFRS S1 and IFRS S2 achieve their objectives. The success or net benefits of the Standards depend not only on company compliance with the requirements, but also on legal and enforcement systems, assurance and the extent to which the Standards are used by companies internationally.

Benefit analysis by the US SEC and EFRAG

US SEC's economic analysis of the proposed climate-related disclosure

The US SEC's economic analysis of its proposed climate-related disclosure for investors pointed out effects similar to those discussed in the previous paragraphs of this section. The US SEC expects the proposed rule to improve investor protection and market efficiency and facilitate capital allocation.

With the mandatory climate-related disclosures, investors would have access to more consistent, comparable, transparent and reliable information, enabling them to make more informed decisions. This information access will, in turn, reduce the information asymmetry among investors and between companies and investors, leading to improved stock liquidity and lower cost of capital.

The US SEC found there would be increased compliance costs in meeting the proposed new disclosure requirements. For companies that already voluntarily provide information similar to that required, the compliance cost would be relatively small, but in other cases the cost would be larger. The US SEC noted other potential costs such as increased litigation exposure and the disclosure of proprietary information about companies' operations.

The US SEC's quantitative estimate of climate disclosure burden is similar to the ERM's estimate and is equal to US$530,000 in annual issuer costs after the first year of implementation.[33] However, the US SEC found difficulties in quantifying climate disclosure costs for preparers, highlighting that such costs are generally private information known only to a company.

Disclosure costs depend on a given company's size, industry, complexity of operations and other characteristics, which makes comprehensive estimates difficult to obtain.

Overall, the US SEC believes the current disclosure system is not providing consistent, comparable and reliable information on the potential impacts of climate-related risks on preparers' businesses and on strategies to manage those risks. The US SEC expects that, although costly in many ways, the proposed requirements would generate net benefits in the form of increased transparency and comparability in climate-related disclosures.

EFRAG's cost–benefit analysis of ESRS

EFRAG conducted a cost–benefit analysis of the first set of draft European Sustainability Reporting Standards (ESRS). ESRS are being moved into legislation in the EU, and the cost–benefit analysis was conducted in the knowledge that it will be mandatory for all major companies in the EU to apply ESRS in due course.

The analysis was based on the results of survey-based shareholder consultations between July and September 2022, a study of the EU Non-Financial Reporting Directive and a review of the academic literature.[34]

EFRAG's analysis identified direct costs in the form of administrative costs to prepare the reports and assurance costs to obtain limited or reasonable assurance for reported information. Administrative costs in the first year of applying ESRS were estimated to be 90% higher than the costs in subsequent years. Company complexity, size and the extent of previous sustainability reporting were the most important determinants of these costs.

Indirect costs, such as litigation costs and costs associated with disclosures of proprietary or sensitive information, were also identified in the analysis. Preparers with more complex value chains and those operating in foreign markets are expected to face higher competition costs.

In addition to direct and indirect costs, EFRAG's analysis identified direct and indirect benefits in the form of users' cost savings to find and process sustainability information, increased efficiencies and improved sustainability performance of preparers, and other changes in preparers' internal processes and policies.

Overall, EFRAG's cost–benefit analysis concluded that sustainability reporting costs will likely be realised in the short term, but the benefits will be visible in the medium-to-long term, depending on legislative and non-legislative developments and other factors.

33 The US SEC's estimate of climate-related reporting cost is based on six sources: (a) a comment letter from the Society for Corporate Governance that provided some hour and cost estimates for climate reporting by large-cap companies; (b) a report by the Climate Risk Disclosure Lab at Duke University School of Law's Global Financial Markets Center that presents survey results of climate-related disclosure costs for three unnamed companies; (c) an impact assessment conducted by the United Kingdom's Department for Business, Energy and Industrial Strategy for a rule that, similar to the US SEC's proposed rules, would require TCFD-aligned disclosures from all listed companies; (d) two cost estimates from a data analytics company—one that covered primarily risk assessment and analysis pursuant to the TCFD Recommendations and the other for calculating GHG emissions; and (e) cost estimates for GHG emissions measurement and reporting from two climate management companies (see US SEC Release nos. 33–11042; 34–94478; file no. S7–10–22).

34 EFRAG's shareholder survey on benefits and costs of the draft ESRS generated 89 responses from preparers, 11 responses from users, seven responses from value chain companies, four responses from assurers and four responses from other standard-setters and rating agencies.

5—Analysis of benefits and costs for investors

5—Analysis of benefits and costs for investors

This section discusses investors' likely benefits and costs (or effects) of sustainability reporting applying IFRS S1 and IFRS S2 relative to the status quo of a diverse set of voluntary and mandatory standards with differing requirements, focuses and emphases. The section discusses likely benefits and costs relative to three broad reporting starting points:

- no or minimal sustainability reporting (Case 1);
- voluntary sustainability reporting (Case 2); and
- mandatory sustainability reporting (Case 3).

When applicable, the section summarises investors' comments on the IFRS S1 and IFRS S2 exposure drafts, discusses the results of third-party surveys and academic literature, and provides examples based on the experiences of investors in collecting and using sustainability information. The ISSB uses insights from these sources to assess likely effects of IFRS S1 and IFRS S2 on investors.

Public nature of disclosure

The ISSB believes IFRS S1 and IFRS S2 will:

- improve the efficiency and effectiveness of capital markets through the disclosure of sustainability-related financial information that informs investors' decision-making (increased transparency); and
- help improve the comparability of disclosed information.

The ISSB expects the Standards to enable transparent and consistent sustainability reporting across companies.

All users of sustainability-related information will have a consistent basis for analysing the sustainability-related risks and opportunities of companies and their peers, improving access to information and reducing the costs of obtaining information.

Even if IFRS S1 and IFRS S2 address the needs of specific users (primary users of general purpose financial reports), once sustainability information is disclosed, other parties such as regulators and members of the public other than investors may also access this information and use it. However, the disclosed sustainability-related information is not primarily targeted to these other groups.

Improved consistency over time and among companies

Current difficulties and costs for investors

In the current state of sustainability reporting, which comprises many sustainability frameworks and approaches, it is costly for investors to monitor the publication of sustainability disclosures, gather unstructured sustainability data and transform the information into measures that can be integrated into capital allocation and stewardship decisions. The main contributing factors to these costs are inconsistency and the wide variety in the quality of sustainability information reported by individual companies.

When sustainability standards are not mandated, companies can choose:

- which standard to apply, if any;
- what sustainability topics to report on and the information to provide; and
- how frequently to report the information.

For investors, this situation creates an information processing challenge because it becomes hard to reliably determine a company's sustainability performance, risks and opportunities, to assess their implications for future operations and prospects of the company, and to compare companies.

In mandatory sustainability reporting settings like Case 3, a company provides periodic disclosures on issues as required, which significantly improves information consistency across time and facilitates comparability between companies. However, because of the substantial differences in sustainability frameworks and standards around the world, investors continue to face substantial costs associated with information inconsistency.

Illustration using sustainability ratings

Difficulties in sustainability information processing can drive investor disagreements. These difficulties can be illustrated using sustainability ratings by different rating providers. By applying their expertise, figuring out data gaps, and transforming reported data into measurable categories, sustainability data and ranking providers can offer investors and other stakeholders insights into a company's relative sustainability performance, risks and opportunities, both historical and current.

However, when collecting and interpreting sustainability data, information intermediaries and data analysts face the same challenges as other company stakeholders in terms of diverse sustainability reporting, or lack of reporting.

Data inconsistencies, combined with diverse methodologies to deal with data-quality problems and to process the information, lead to low correlations of sustainability performance ratings across rating agencies.

More than 20 academic studies and media commentaries discuss the effects of disagreement in ESG ratings, such as reduced informativeness for investors. For example, one study found greater ESG rating disagreement is associated with higher return volatility, larger stock price movements and a lower likelihood of issuing external financing.[35] Another study found that ESG reporting divergence among companies is a contributing factor to ESG rating disagreement.[36] Business press shares similar views. For instance, a *Wall Street Journal* article titled 'Why It's So Hard to Be an "Ethical" Investor' concluded that: 'Environmental, social and governance criteria are hard to define. When we measure how different ESG providers rate companies in the S&P 500, there's often little overlap.'[37]

The application of IFRS S1 and IFRS S2 is expected to improve the consistency and comparability of reported sustainability-related risks and opportunities, which in turn can enhance the quality and availability of data.

35 D.M. Christensen, G. Serafeim and A. Sikochi, 'Why is Corporate Virtue in the Eye of the Beholder? The Case of ESG Ratings', *The Accounting Review,* vol. 97, no. 1, 2022, pp. 147–175.

36 Q. Cheng, Y. Lou and M. Yang, 'ESG Reporting Divergence', Asian Bureau of Finance and Economic Research 10th Annual Conference, Singapore Management University, 2023.

37 J. Sindreu and S. Kent, 'Why It's So Hard to Be an "Ethical" Investor', *The Wall Street Journal*, 1 September 2018.

Improved consistency of sustainability-related financial disclosures

Almost all respondents to the IFRS S1 and IFRS S2 exposure drafts supported the ISSB's aim to develop a comprehensive global baseline for sustainability-related disclosures. These stakeholders strongly welcomed the intention to consolidate the many different frameworks and standards into a single set of high-quality sustainability disclosure standards.

In particular, respondents agreed with and welcomed the development of IFRS S2 to enable a comprehensive global baseline for climate-related financial reporting.

For example, the disclosure of Scope 3 GHG emissions in addition to Scope 1 and Scope 2 GHG emissions will provide investors with a comprehensive picture of a company's transition risk exposure. A 2020 CDP Global Supply Chain Report found Scope 3 GHG emissions are on average 11.2 times higher than Scope 1 and Scope 2 GHG emissions.[38]

This statistic highlights that, although reporting on Scope 3 will be more challenging for companies, the omission of such information from sustainability disclosures can significantly misrepresent companies' sustainability-related risks and misguide investors.

The disclosure of Scope 1, Scope 2 and Scope 3 GHG emissions will also provide more information about a company's GHG emissions performance over time, including whether a company reduces its Scope 1 and Scope 2 GHG emissions by outsourcing emissions (thereby increasing its Scope 3 GHG emissions) or by actually reducing emissions.

In addition, the disclosure of Scope 3 GHG emissions will aid in the comparability of companies' GHG emissions across business models (for example, between a company that relies on outsourcing versus a company that does not). Similarly, the disclosure of the categories included in the measurement of Scope 3 GHG emissions will enable investors to understand a company's Scope 3 GHG emissions. IFRS S2 will also aid investors by requiring disclosures about the inputs, assumptions and estimation techniques a company has used to measure its Scope 3 GHG emissions.

As a result of such disclosure, IFRS S2 is expected to improve the consistency over time and comparability across companies of Scope 3 GHG emissions disclosures. Measurement uncertainty in Scope 3 GHG emissions estimates would be reduced (acknowledging that a range of inputs is required).

Many investors commenting on the IFRS S1 and IFRS S2 exposure drafts agreed that IFRS S1 and IFRS S2 should build on the SASB Standards, highlighting that sustainability-related risks and opportunities vary by industry. These investors noted that:

- industry-specific disclosures enable better comparisons between companies, which is aligned with how investors conduct research and make investment decisions;
- the SASB Standards were specifically developed to meet investors' information needs rather than the needs of broader stakeholders; and
- the SASB disclosure topics and associated metrics were designed to identify material information that would help an investor determine whether to provide resources to a company, or would affect an investor's assessment of a company's creation of value over time.

The ISSB believes IFRS S1 and IFRS S2 can improve the comparability of sustainability-related disclosures relative to the status quo, leading to a common basis of understanding about the effects of sustainability-related risks and opportunities on companies' performance and prospects.

38 Carbon Disclosure Project, *Transparency to Transformation: A Chain Reaction*, London, 2021.

Improved data collection, aggregation and application

The ISSB believes IFRS S1 and IFRS S2 can substantially improve investors' data collection, aggregation and application processes. In the light of the current state of sustainability reporting—the multiplicity of disclosure frameworks and standards, the diversity of topics and measurements, the varying timing of sustainability reports, and the highly inconsistent and unstructured nature of sustainability reports—information acquisition costs for sustainability data are substantial.

The ISSB expects:

- the application of IFRS S1 will benefit investors by improving their ability to monitor, acquire and aggregate material sustainability-related information;
- the application of IFRS S2 will benefit data collection efforts for climate-related financial information; and
- the application of the Standards will improve connectivity with financial statements, including the identification of current and anticipated financial effects.

Furthermore, the release of sustainability-related information together with general purpose financial statements is expected to improve investors' ability to jointly monitor and understand disclosures, leading to more timely and better informed decision-making.

The effect on sustainability data and rating providers

The application of IFRS S1 and IFRS S2 might affect information intermediaries such as private ESG data and rating providers. With the Standards expected to improve data collection and aggregation, ESG data and rating providers are likely to benefit from increased comparability, completeness and verifiability of sustainability-related information. The improved access to and collection of data might lead to:

- greater ESG rating agreement and consistency;
- costs savings on data verification procedures;
- improved modelling and estimation procedures; and
- continued and greater innovation among ESG data and rating providers.

However, the application of IFRS S1 and IFRS S2 might impose costs on some sustainability data and rating providers as they might need to adapt their business models to respond to user needs. It is likely that some investors will begin to process sustainability data internally instead of relying on information intermediaries.

The role of digital taxonomy and digital reporting

As well as determining the content of sustainability reporting, the ISSB plans to prioritise the development of a digital taxonomy and digital reporting of sustainability-related financial information. The ISSB believes the primary benefit of digital reporting, compared to paper-based reporting, is the improved ability to access, extract and compare reported information.

The approach to sustainability reporting currently not only requires a substantial input of time and money to prepare the reports but also imposes substantial information processing constraints on providers of assurance on the reported information, as well as on investors, analysts, data providers and others who consume the information. Currently, sustainability data providers need to develop solutions to deal with unstructured non-machine-readable sustainability disclosures and convert information into more useful formats, resulting in greater investor reliance on such secondary sources.

Digital reporting is expected to enhance the accessibility, searchability, presentation and structure of sustainability information and facilitate digital consumption of sustainability-related disclosures.

Digital access to tagged sustainability-related disclosures is expected to enable investors to collect, aggregate, compare and analyse individual companies, peer groups and portfolios. A digital taxonomy is likely to democratise access to the data for investors with fewer resources. It could also bring opportunities for smaller companies and for companies operating in developing and emerging economies by making it easier for investors to follow these companies.

The ISSB believes that developing a digital taxonomy for sustainability reporting in accordance with IFRS S1 and IFRS S2 that is interoperable with other digital taxonomies could support companies and investors in identifying information that is consistent and comparable between sustainability reporting regimes.

Most respondents to the IFRS S1 and IFRS S2 exposure drafts supported the development of a digital taxonomy, emphasising that it would contribute to the global availability and accessibility of data. Respondents suggested that, with the increase in textual or narrative data, tagging would help to consistently synthesise varied sustainability and climate-related disclosures.

However, the ISSB acknowledges that the benefits of a digital taxonomy and digital reporting depend on the full adoption of the taxonomy by jurisdictions and the availability of tools to collect and analyse tagged sustainability-related information.

Improved quality of sustainability-related information

The ISSB believes IFRS S1 and IFRS S2 can improve the quality and verifiability of sustainability-related information due to:

- required explanations of inputs, assumptions, estimates and judgements that will support assurance and provide a basis for higher-quality estimated and forward-looking information;
- improved transparency regarding the governance processes, controls and procedures used to monitor and manage sustainability-related risks and opportunities;
- enhanced standardisation regarding what information to disclose and how to disclose it;
- increased review by assurance providers; and
- greater investor reliance on and scrutiny of reported sustainability-related information, leading to improved market discipline.

Even though the ISSB cannot require external assurance for reported information, both IFRS S1 and IFRS S2 are designed to make the reported information assurable. The ISSB believes the quality and reliability of reported sustainability-related information will be higher if it is verified and/or assured by auditors or other independent parties. The ISSB acknowledges that preparers might incur costs to obtain assurance for the reported sustainability-related information.

For general purpose financial reports, external auditors play an important role in assuring that companies comply with accounting standards, which in turn improves the quality and credibility of financial reports. Recent surveys by PwC in the EU, the UK, the US and other jurisdictions found that 76–79% of investors place more trust in sustainability information if it is independently verified and assured.[39] Investors value independent assurance on quantitative metrics and key performance indicators more than on narrative disclosures, and do not want companies to select which parts of reporting are subject to assurance.

39 Copies of the surveys can be found at https://www.pwc.com/gx/en.

A 2023 report by the International Federation of Accountants (IFAC) and the Association of International Certified Professional Accountants (AICPA) examined the state of assurance of sustainability information, based on 2021 reporting. The report found that the percentage of companies with assurance on some of their sustainability information increased from 51% in 2019 to 58% in 2020, and to 64% in 2021. Some jurisdictions—such as China, Hong Kong, India, Japan, Singapore, Spain, South Africa, Turkey and the UK—experienced increases in sustainability assurance. Companies reporting on sustainability obtained assurance primarily for their GHG metrics. About 53% of companies obtained assurance on information in four examined categories: GHG, other environmental, social and governance matters.

Improvements in transparency and standardisation from the application of IFRS S1 and IFRS S2, combined with increased external scrutiny of sustainability disclosures, are expected to enhance the quality of sustainability-related information.

This enhancement can improve the reliability of the information for the benefit of investors in their decision-making.

Improved information to assess company risk and sustainability performance

Improved risk transparency

The main objective of IFRS S1 and IFRS S2 is to provide investors with information on sustainability-related risks and opportunities.

The ISSB believes that having disclosures on sustainability-related risks and opportunities will enable investors to understand a company's dependency on various resources and assess the company's impacts on those resources. For example:

- when a company's business model or the business models of its partners largely depend on natural resources (for example, oil, water and forests), they are likely to be affected by favourable or unfavourable changes in the quantity, quality and pricing of those resources;
- when a company or its business partners operate in geographies with a high likelihood of extreme weather events, their operations could be unexpectedly disrupted, leading to production delays, loss of assets, loss of revenue and other adverse consequences; and
- when a company's activities result in adverse external impacts on, for instance, local communities, the company could be subject to more stringent government regulations or reputational damage.

Current sustainability-related financial disclosures vary depending on jurisdictional requirements. In reporting regimes like Case 1 and Case 2, disclosures about sustainability-related risks are either missing, reported jointly with disclosures of other risks (for example, market risks, economic risks and competitive risks), or inconsistently reported by companies due to the voluntary nature of disclosures and application of different disclosure frameworks and standards.

The ERM survey identified that investor respondents found the 'reduced risk of owning a company' to be the third most important benefit of sustainability disclosures, after benefits like being able to meet investor and customer demands, and improved sustainability performance.

The ISSB believes the global baseline of sustainability-related information required by IFRS S1 and IFRS S2 can facilitate investors' understanding of risks and opportunities of companies with different business models, exposure to climate risks based on locations of operations, and supply-chain dependencies.

Improved disclosures of sustainability-related risks are also likely to reduce information asymmetry between companies and investors and make it easier for investors to predict future cash flows and uncertainties around those cash flows, leading to lower risk of owning a company and, as a result, lower cost of capital.

Improved forward-looking strategy transparency

As well as requiring companies to identify and report on sustainability-related risks and opportunities, IFRS S1 and IFRS S2 require disclosures on a company's strategy to respond to those risks and opportunities. Specifically, a company is required to disclose how it is responding to the identified sustainability-related risks and opportunities and provide periodic updates on the progress of plans disclosed in prior reporting periods.

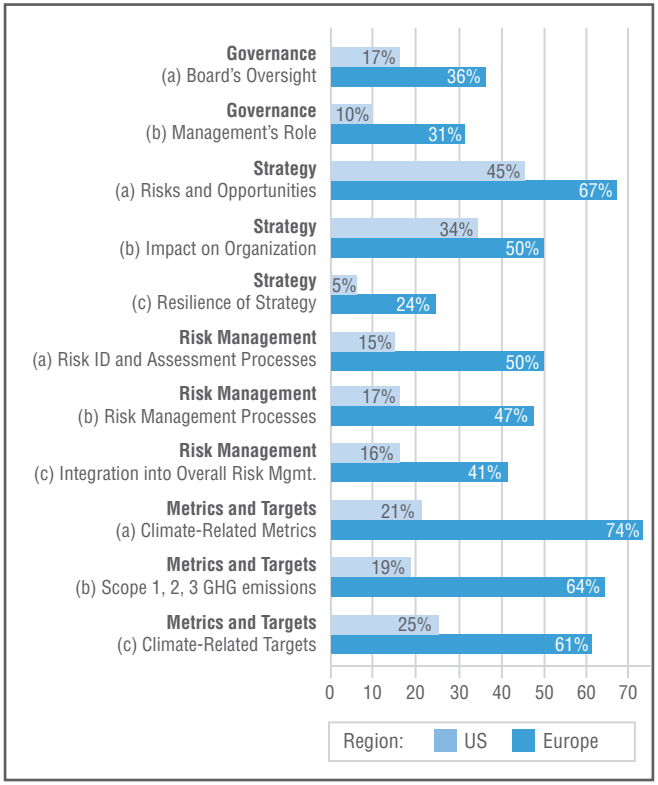
Compared to no disclosure or inconsistent disclosure on sustainability-related plans and strategies, enhanced disclosure on strategy as per IFRS S1 and IFRS S2 will enable investors to understand those aspects of the preparers' management of sustainability-related risks and opportunities.

The ERM survey found that investors consider 'better access to data capable of enhancing corporate strategy' to be one of the top five benefits of improved sustainability reporting.

A Moody's assessment looked at how a sample of companies applied the TCFD Recommendations (see Figure 3). About 47% of European companies and 17% of US companies already reported on risk management processes and strategy. However, there was a large variation in disclosure levels across industries, with technology and media companies having the lowest rate of risk management and strategy reporting (4.5%) and insurance companies having the highest rate of reporting (77.8%).[40] Among the larger companies (>US$5 billion in market capitalisation), 53% in Europe and 27% in the US reported on risk management processes and strategies. Reporting among smaller companies (<US$5 billion in market capitalisation) was 27% and 10% for European and US companies, respectively.

The ISSB believes that disclosures of sustainability-related plans and strategies would benefit investors by improving transparency regarding companies' forward-looking strategy and reducing gaps in disclosure by companies and across industries. The ISSB acknowledges the difficulties with comparability of information due to the qualitative nature of such disclosures.

Figure 3—Application of TCFD Recommendations by US and European companies



Source: Moody's Report on TCFD-aligned Reporting by Major US and European Corporations.

40 S. Gaur et al., 'TCFD-aligned Reporting by Major US and European Corporations', Moody's Analytics White Paper, New York, Moody's Analytics, 2022. The sample for analysis consisted of 659 US and 424 European companies. For these companies, Moody's conducted an artificial intelligence-based analysis of all public filings, including financial filings, annual reports, integrated reports, sustainability reports and other publicly available reports associated with companies' annual reporting or sustainability.

Improved metrics

IFRS S1 and IFRS S2 require disclosures of metrics and targets to enable investors to understand a company's performance in relation to its sustainability-related risks and opportunities. The Standards include many specific disclosure requirements that are quantitative. Disclosures will be subject to an assessment of materiality and industry-specific disclosure requirements to ensure the information is relevant and representationally faithful to warrant disclosure to investors.

However, relative to the current situation of no metric reporting (for example, Case 1 and some instances of Case 2) or heterogeneous reporting of sustainability-related metrics (as in Case 2 and Case 3),[41] investors are expected to gain a clearer understanding of companies' current sustainability performance, specific targets and how to periodically assess progress in achieving those targets. Investors are also expected to be able to compare companies more readily, particularly peer companies that operate in similar industries.

The public consultation carried out by the European Commission on the Review of the Non-Financial Reporting Directive in 2020 shows about 82% of respondents believe standardisation would resolve the problems of reliability, comparability and companies not reporting all relevant information. The Moody's assessment on the application of the TCFD Recommendations for a sample of companies found that about 74% of European companies and 21% of US companies already provide some information on climate-related metrics and targets. However, the proportion of companies that report metrics varies greatly, across industries and companies of all sizes.

The ISSB expects standardised metric reporting to significantly reduce data analysis costs for investors who currently go through large amounts of sustainability-related disclosures to find comparable information relevant for their decision-making.

As well as standardised reporting of metrics and targets across companies, the ISSB expects that digital reporting using the ISSB's digital taxonomy would enable investors to automatically collect and process relevant data for many companies at a time.

As discussed in Agenda Paper 25A *A digital financial reporting strategic framework* for the December 2022 IASB meeting, benefits of digital reporting include improved capital market efficiency and transparency, improved information processing for investors, an expanded population of companies in investors' portfolios and greater access to capital.[42]

Most respondents to the IFRS S1 and IFRS S2 exposure drafts agreed with, and welcomed, the development of a digital taxonomy, saying it would contribute to the global availability and accessibility of data. Referring to the increase in textual or narrative data, respondents said tagging would help to consistently synthesise varied sustainability-related financial disclosures.

41 The case study on the comparability of sustainability disclosures in Section 2 *Overview of disclosure deficiencies addressed by IFRS S1 and IFRS S2* and the analysis of employee health and safety disclosures of 50 large companies by S. Kotsantonis and G. Serafeim, 'Four Things No One Will Tell You About ESG Data', *Journal of Applied Corporate Finance*, vol. 31, no. 2, 2019, pp. 50–58, demonstrate the extent of metric heterogeneity in companies' sustainability disclosures.

42 For a summary of academic evidence, see I. Troshani and N. Rowbottom, 'Digital Corporate Reporting: Research Developments and Implications', *Australian Accounting Review*, vol. 31, no. 3, pp. 213–232.

6—Analysis of benefits and costs for preparers

6—Analysis of benefits and costs for preparers

This section discusses preparers' likely benefits and costs (or effects) of sustainability reporting applying IFRS S1 and IFRS S2. The section discusses likely benefits and costs relative to three broad reporting starting points:

- no or minimal sustainability reporting (Case 1);
- voluntary sustainability reporting (Case 2); and
- mandatory sustainability reporting (Case 3).

When applicable, the section summarises preparers' comments on the IFRS S1 and IFRS S2 exposure drafts, discusses the results of third-party surveys and academic literature and provides examples based on the experiences of preparers in collecting and using sustainability information. The ISSB uses these sources to qualitatively assess the effects of IFRS S1 and IFRS S2 on companies.

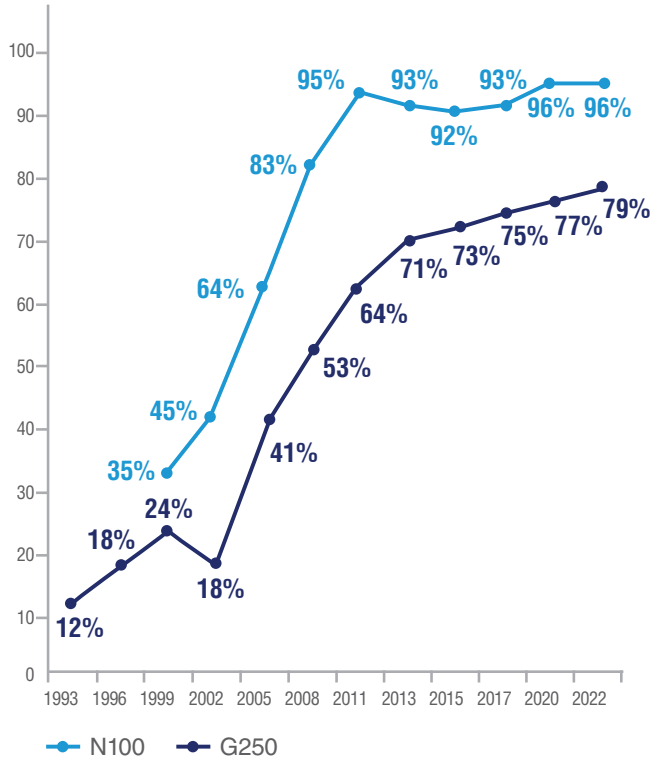
Cost reductions or savings, including increased efficiency, of disclosure processes

The growing demand for sustainability information is generating a growing supply of sustainability reporting. For instance, the KPMG Survey of Sustainability Reporting indicates that, in 2020, 80% of large companies worldwide engaged in sustainability reporting, which is four times higher than the 20% reporting rate in 2002 (see Figure 4).

At the same time, disclosures vary by company, driven by the multiplicity of sustainability reporting frameworks, standards and approaches, the many sustainability topics to report on, differences in sustainability topics based on industry, the lack of sustainability reporting oversight and jurisdictional differences in sustainability reporting requirements around the world.

As an example, one academic study examined employee health and safety disclosures of 50 large (Fortune 500) publicly traded companies in several industries.[43] The study found more than 20 ways that companies diverge in how they report on the topic (such as terminology and units of measurement).

Figure 4—Engagement in sustainability reporting



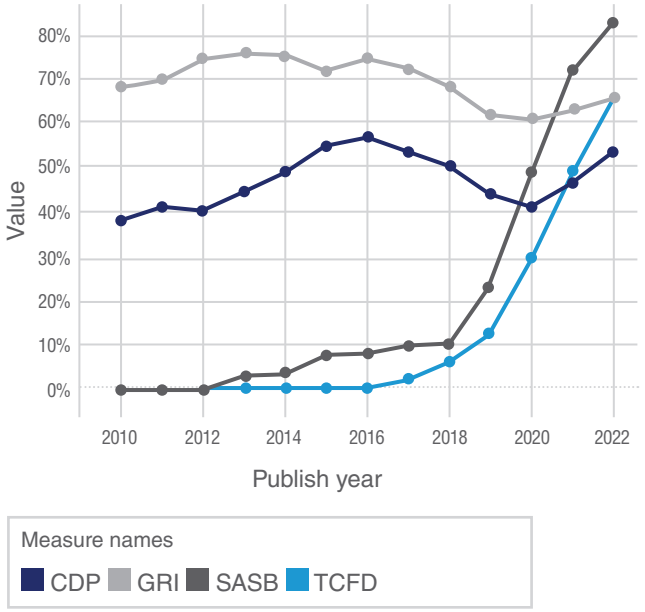
Source: KPMG Survey of Sustainability Reporting 2020.

43 See Kotsantonis and Serafeim, 'Four Things No One Will Tell You About ESG Data'.

A 2023 analysis of global sustainability disclosures of 1,350 companies in 21 jurisdictions by IFAC and AICPA also demonstrated a wide variation in sustainability reporting practices.[44] For example, the analysis found that 86% of companies applied different sustainability reporting standards and frameworks, and there was a large variation in standard and framework adoption practices within jurisdictions. Similarly, there was a large variation in assurance of sustainability reports, with 64% of sustainability reports receiving some level of assurance.

The ISSB's analyses of voluntary sustainability reporting practices among large (S&P 500) US companies confirm a large variation in the sustainability frameworks and standards used across companies and over time, with many companies using the SASB Standards and the TCFD Recommendations in recent years (see Figure 5).

Figure 5—Sustainability reports of US S&P 500 companies, 2010–2022



Source: ISSB's analysis.

Sustainability reporting using different frameworks and standards with varying measures and outcomes poses challenges when processing the information and making comparisons across companies and over time. This situation can cause confusion for investors and preparers. Moreover, it requires many resources and imposes substantial costs on companies to provide sustainability disclosures applying different frameworks and standards.

To illustrate the process of reporting using different frameworks and standards, consider the data impact cycle outlined in the book *Win with Advanced Business Analytics: Creating Business Value from Your Data* (see Figure 6):[45]

- ***I**dentify the objectives of sustainability reporting.*
- ***M**aster the data.*
- ***P**erform a test plan.*
- ***A**ddress and refine the results.*
- ***C**ommunicate results.*
- ***T**rack outcomes.*

Standards and frameworks can have different audiences for the information, objectives, scores and measurements for sustainability reporting.

44 International Federation of Accountants and Association of International Certified Professional Accountants, *The State of Play in Sustainability Assurance*.

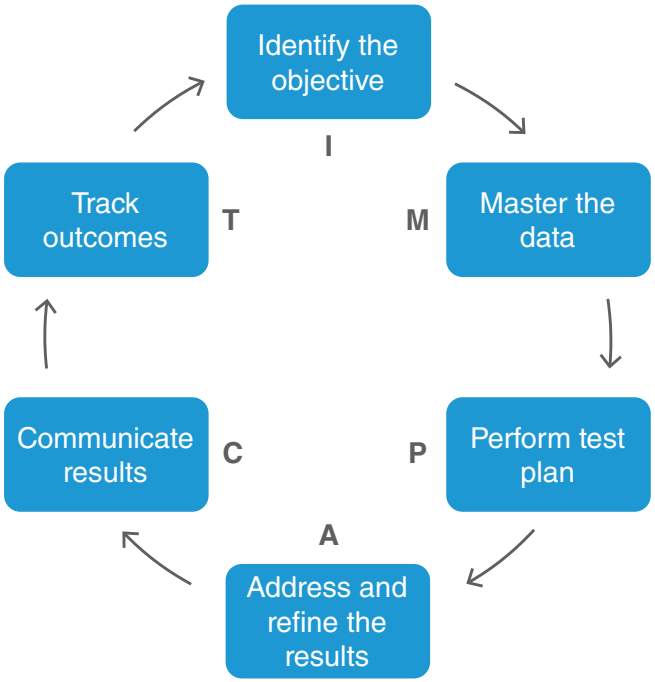
45 See J.P. Isson and J. Harriott, *Win with Advanced Business Analytics: Creating Business Value from Your Data*, Hoboken, NJ, John Wiley & Sons, 2013, for details.

The steps in the data impact cycle become complex if a company chooses to apply different frameworks or standards for its sustainability reporting. Increased complexity imposes substantial costs on the company and its employees.

Companies' uncertainty over which frameworks and standards to use to meet investors' needs, along with the substantial costs associated with applying different frameworks and standards, can result in either no disclosure of relevant sustainability information or a confusing mix of disclosures.

Preparers face substantial costs associated with frequent external requests (through surveys or other means) for sustainability-related information. Standardisation and consistent reporting of sustainability-related information can help satisfy investor demands and eliminate some of these costs for preparers.

Figure 6—Data impact cycle



Source: Isson and Harriott, 2013.

The proposals in the IFRS S1 and IFRS S2 exposure drafts were developed in response to calls from investors, preparers and others to simplify the process of sustainability disclosure by developing global standards for reporting consistent, complete, comparable and verifiable sustainability-related information. This information can be used to assess a company's:

- financial position and performance;
- strategy and business;
- future cash flows and uncertainty around them; and, therefore,
- creation of value over time.

Preparers represented the single largest group that provided feedback on the IFRS S1 and IFRS S2 exposure drafts. Most preparers agreed with, and welcomed, the development of IFRS S1 and IFRS S2 to provide a comprehensive global baseline of sustainability-related financial disclosures for capital markets.

Respondents also said they supported the ISSB's approach of building on well-established sustainability reporting frameworks and standards, including the SASB Standards, the CDSB Framework and the TCFD Recommendations.

The ISSB expects that building on these frameworks and standards will assist companies in the transition to applying IFRS S1 and IFRS S2 and help mitigate the costs of implementing these Standards.

Companies that have been reporting sustainability-related information (either on a voluntary basis (see Case 2) or because of a disclosure mandate (see Case 3)) should be able to leverage their disclosure platforms to collect and report relevant sustainability-related information when applying IFRS S1 and IFRS S2.

Support from digital taxonomy and digital reporting

The ISSB plans to prioritise developing a digital taxonomy and digital reporting of sustainability-related information. Paper-based and/or manual sustainability reporting by companies involves a greater deal of time and money to prepare the report, and often results in less timely disclosures. The ISSB believes digital reporting and digital taxonomies, despite being costly investments at the beginning of implementation, will improve the efficiency of disclosure processes and lead to sustainability reporting that is more timely, more accurate and easier to process.

A PwC report on the automation of corporate reporting titled 'Disclosure management: Streamlining the Last Mile' highlights that 'leading practices for Disclosure Management application implementations have resulted in approximately 30% reductions in cost and time while enhancing reporting control environments, improving information quality and timeliness. Streamlining and automating pervasive manual reporting processes and controls allows professionals to spend more time on the analysis and interpretation of a company's performance drivers and results.'[46]

Efforts and costs are expected to vary by company

The ISSB recognises that the effort and costs of transition to IFRS S1 and IFRS S2 will be greater for companies that have not previously undertaken sustainability reporting, and especially for companies that have also not monitored or measured sustainability-related risks and opportunities for internal management purposes. The ISSB also acknowledges that companies that are smaller in size and/or operating in emerging markets are likely to have fewer resources and/or require more time to prepare to comply with IFRS S1 and IFRS S2. Even companies with enough resources will require additional investments to improve their data collection and estimation processes (for example, access to skills and expertise, technology and organisational structure).

ISSB's implementation support

The ISSB has included mechanisms within IFRS S1 and IFRS S2 to help all companies implement the Standards and improve their reporting over time (using the concept of 'undue cost or effort'). The ISSB has also provided specific reliefs to assist companies with fewer resources (see Section 3 *Overview of IFRS S1 and IFRS S2*).

Improved performance and lower cost of capital

Sustainability performance

Academic literature has examined how companies' commitments to disclosure can influence real activities such as internal capital allocation decisions and other operating decisions.[47]

Several non-mutually exclusive factors can contribute to companies' decisions to take actions once they begin reporting applying IFRS S1 and IFRS S2.

46 PwC, *Disclosure Management: Streamlining the Last Mile*, London, PwC, 2012.

47 See C. Leuz and P.D. Wysocki, 'The Economics of Disclosure and Financial Reporting Regulation: Evidence and Suggestions for Future Research', *Journal of Accounting Research*, vol. 54, no. 2, 2016, and Christensen, Hail and Leuz, 'Mandatory CSR and Sustainability Reporting', for review.

1

As discussed in Section 3 *Overview of IFRS S1 and IFRS S2*, the Standards provide detailed guidance for companies on what sustainability-related information to report on and how to report it. Therefore, the application of IFRS S1 and IFRS S2 will likely reduce deficiencies in sustainability-related disclosures by reducing management reporting discretion and by shifting management focus towards sustainability matters relevant to investors. From the perspective of investors, IFRS S1 and IFRS S2 will likely decrease disclosure processing costs and hence increase reliance on and scrutiny of reported sustainability information. Greater monitoring of disclosure by investors can in turn result in greater management actions, leading to improvements in sustainability performance and the fulfilment of sustainability goals.

2

The application of IFRS S1 and IFRS S2 can lower the costs of benchmarking by introducing greater standardisation of reporting practices in companies. As a result, companies can meaningfully assess their own sustainability performance relative to a peer group and set relevant targets. Several academic papers have provided evidence of across-company learning. For example, one study found that disclosing work safety violations led other geographically close facilities to substantially improve their work safety measures, resulting in fewer occupational injuries.[48] Similarly, facilities have used disclosures of the GHG emissions of their peers to assess their own relative GHG performance, leading to reductions in GHG emissions.[49]

3

When preparing sustainability-related disclosures applying IFRS S1 and IFRS S2, companies will need to consistently quantify and keep track of their sustainability performance (see the data impact cycle in Figure 6). Having a measurement system in place could help companies uncover inefficiencies and identify areas for potential improvement. For example, after completing the 2006 Carbon Disclosure Project questionnaire, Walmart found the refrigerants used in grocery stores accounted for a larger percentage of the company's GHG footprint than its truck fleet and that 92% of emissions in the value chain were outside the company's direct control. Such insights helped Walmart to focus on reducing its refrigerant footprint and its supply chain GHG emissions.[50]

The ERM survey found preparers believe that 'better performance in meeting sustainability, climate, ESG, and SDG goals' is the top benefit of climate-related disclosures and impact assessments.

A recent academic study of companies' voluntary use of the SASB Standards provides empirical evidence of the benefits of standard-based reporting, such as improved sustainability performance.[51] Specifically, the study found companies that reported applying the SASB Standards had fewer adverse sustainability-related incidents and violations, lower Scope 1 and Scope 2 GHG emissions, lower toxic releases and fewer work-related injuries after applying the SASB Standards. Similarly, one study found mandating mine-safety disclosures in financial reports

48 M.S. Johnson, 'Regulation by Shaming: Deterrence Effects of Publicizing Violations of Workplace Safety and Health Laws', *American Economic Review*, vol. 110, no. 6, 2020.

49 S. Tomar, 'Greenhouse Gas Disclosure and Emissions Benchmarking', SMU Cox School of Business Research Paper no. 19–17, European Corporate Governance Institute—Finance Working Paper no. 818/2022, 1 January 2023.

50 N. Topping, 'How Does Sustainability Disclosure Drive Behavior Change?', *Journal of Applied Corporate Finance*, vol. 24, no. 2, 2012.

51 See Bochkay, Choi and Hales, '"Mere Puffery" or Credible Disclosure? The Real Effects of Adopting Voluntary ESG Disclosure Standards'.

(as per Section 1503 of the Dodd–Frank legislation) resulted in fewer mining-related violations and injuries, and lower labour productivity, consistent with an increased focus on safety.[52] The study concluded that increased awareness of safety issues is a likely explanation for the observed real effects.

The ISSB expects that application of IFRS S1 and IFRS S2 by companies can lead to changes in operations and governance that are likely to result in improvements in sustainability performance and achievements of sustainability goals.

Cost of capital

In addition to improved comparability, the objectives of IFRS S1 and IFRS S2 are to provide investors with information on sustainability-related risks and opportunities. The status quo of disclosures of sustainability-related risks varies depending on jurisdictional requirements. In reporting regimes like Case 1 and Case 2, disclosures of sustainability-related risks are either missing, reported jointly with disclosures of other risks (for example, market risks, economic risks and competitive risks) or inconsistently reported by companies due to the voluntary nature of disclosures and application of various disclosure frameworks and standards.

52 See Christensen et al., 'The Real Effects of Mandated Information'.

The ISSB believes the global baseline of sustainability-related financial disclosures can facilitate investors' understanding of risks and opportunities of companies, depending on the business model, exposure to climate risks based on geographical exposure, and supply-chain complexities and dependencies.

If investors have an improved understanding of the sustainability-related risks and opportunities of a company and its peers, it will be easier for them to predict future cash flows and the uncertainties associated with future cash flows, leading to lower risk of owning the company, and, as a result, lower cost of capital. Some respondents to the IFRS S1 and IFRS S2 exposure drafts stated that applying the Standards would likely lead to a lower cost of capital and better functioning of capital markets over time.

The ERM survey examined the expected cost of capital implications of climate-related disclosures. The survey found preparers ranked 'lower cost of capital' as the least likely benefit of climate-related disclosures and impact assessments. Although preparer respondents rated this benefit the lowest on average, some preparers ranked it highly. The survey also found companies that spend more on sustainability disclosures are more likely to recognise higher cost of capital benefits.

Enhanced integration with other corporate strategies

Although IFRS Sustainability Disclosure Standards do not require companies to manage their business in a particular way, consistent gathering and analysis of sustainability-related information is likely to raise awareness and enhance the overall strategic planning of preparers.

Companies spend substantial resources on budgeting and setting up long-term goals. Consistent periodic assessment of sustainability-related risks and opportunities is likely to enhance companies' information sets and lead to better strategic planning, such as use of limited resources, efficiency of operations, resilience to unexpected risks, innovation, research and development, and employee retention.

Setting up sustainability-related reporting strategies and objectives is likely to improve coordination and cooperation between departments and employees, leading to improved efficiency and effectiveness in a company's operations. Similarly, sustainability reporting will require increased coordination and cooperation of companies in the value chain, which is likely to result in better functioning, increased sustainability focus and increased transparency of value chains.

The application of IFRS S1 and IFRS S2, especially if subject to regulatory mandates, is likely to encourage senior managers and board members to give greater attention to sustainability issues, helping to improve governance and oversight of these issues and to improve performance.

According to the ERM survey, preparers listed 'better access to data capable of enhancing corporate strategy' as the second-highest benefit of sustainability reporting, followed by benefits such as 'increased ability to attract and retain employees' and 'improved operational performance'. Investor respondents also ranked these benefits highly in their responses to the survey.

As part of general purpose financial reporting, companies produce analyses such as management commentary on factors that have affected the company's performance and financial position, and factors that could affect the company's ability to create value and generate cash flows in the future. These factors span across the value chain, including the activities of diverse subsidiaries and dependencies. Although IFRS S1 and IFRS S2 introduce new specific disclosures about governance and strategy for sustainability-related risks and opportunities, they do not require a radically new approach to the strategic business model analysis.

The ISSB expects applying IFRS S1 and IFRS S2 to improve internal decision-making processes, aid the governance and oversight of sustainability-related risks, and enhance corporate strategic planning and coordination among employees, suppliers and customers.

Ability to leverage current protocols, frameworks and standards

Companies that report sustainability-related information using current protocols, frameworks and standards will have the ability to leverage these materials in selected areas, such as:

- disclosure of governance, strategy and risk management;
- disclosure of transition plans;
- use of carbon credits;
- reporting of GHG emissions; and
- setting of GHG emission reduction targets.

TCFD Recommendations and SASB Standards

For example, according to a 2022 TCFD report, about 60% of European companies have used the TCFD Recommendations to provide disclosures on governance, strategy, risk management and climate-related metrics and targets. The TCFD Recommendations have been used similarly by companies in other regions, including the Asia–Pacific region (36%), North America (29%), Latin America (28%), and Middle East and Africa (25%) (see Table 3).

The reporting rate using TCFD Recommendations was higher among large companies (>US$12.2 billion in market capitalisation) at 49%, followed by 37% for medium-sized companies (US$3.4–12.2 billion in market capitalisation) and 29% for small listed companies (<US$3.4 billion in market capitalisation).

Table 3—TCFD Recommendations application rates

Average percentage of disclosure by company size

Market capitalisation	Percent
<US$3.4 billion	29%
US$3.4–12.2 billion	37%
>US$12.2 billion	49%

Average percentage of disclosure by region

Region	Percent
Europe	60%
Asia–Pacific region	36%
North America	29%
Latin America	28%
Middle East and Africa	25%

Source: 2022 TCFD Report.

The ISSB's analysis of the use of the SASB Standards around the world shows that more than 70% of companies in the S&P Global 1200 Index, representing 69 markets, had reported sustainability-related information applying the SASB Standards.

Table 4 outlines the rates of application of the SASB Standards by company market capitalisation and by region. Although the highest rates of application of the SASB Standards, about 32%, were among large (>US$10 billion in market capitalisation) and medium-sized (US$2–10 billion in market capitalisation) companies, the rate was also relatively high among small (<US$2 billion in market capitalisation) companies, at 28%.

About 8% of companies that applied the SASB Standards for sustainability reporting were privately held. In terms of SASB Standards applications, 42% of applications were by US companies, followed by 19% by companies in the Asia–Pacific region and 12% by companies in the EU. The Middle East and Africa had the lowest application rate at about 1%.

The 2023 IFAC-AICPA analysis of global sustainability disclosures by 1,350 companies in 21 jurisdictions found application rates of the TCFD Recommendations and the SASB Standards has increased significantly over the last few years. Application rates of the TCFD Recommendations increased from 24% in 2019 to 48% in 2020 to 63% in 2021. For the SASB Standards, the application rates increased from 15% in 2019 to 38% in 2020 and to 49% in 2021.

Table 4—Application rates of the SASB Standards by company market capitalisation and by region

(As of March 2023)	Large cap	Medium cap	Small cap	Private companies	Total	%
United States	433	397	247	85	**1,162**	**42%**
Asia–Pacific region	124	176	202	19	**521**	**19%**
Europe: EU	136	89	67	29	**321**	**12%**
Latin America	30	76	100	42	**248**	**9%**
Canada	49	62	73	17	**201**	**7%**
Europe: UK	47	52	46	10	**155**	**6%**
Europe: non-EU/UK	38	19	31	18	**106**	**4%**
Middle East and Africa	11	15	9	1	**36**	**1%**
Total	**868**	**886**	**775**	**221**	**2,750**	
%	32%	32%	28%	8%		

Source: ISSB's analysis.

The application rates of the TCFD Recommendations and the SASB Standards around the world indicate many companies, especially larger companies and those operating in developed economies, will not be starting their IFRS S1 and IFRS S2 reporting from scratch and will be able to leverage their current reporting processes and systems to comply with the Standards. Smaller companies and those operating in developing economies will face greater challenges in applying IFRS S1 and IFRS S2 and are expected to need more guidance than other companies. Disclosure practices of larger companies may serve as a starting point to obtain such guidance.

As discussed in Section 3 *Overview of IFRS S1 and IFRS S2*:

- IFRS S1 requires a company to use IFRS Sustainability Disclosure Standards and to consider the SASB Standards to identify sustainability-related risks and opportunities to report on.
- for climate-related risks and opportunities a company uses IFRS S2 to determine the disclosures to provide. For disclosures about other sustainability-related risks and opportunities (including metrics), IFRS S1 points to other sources of guidance, including a requirement for the company to consider the SASB Standards.

If the company determines that the other sources of guidance are not relevant to its operations, it is not required to use them.

Many respondents to the IFRS S1 and IFRS S2 exposure drafts recognised benefits of the requirement to consider the SASB Standards. For example, many respondents said the widespread market use of the SASB Standards supports the usefulness of these disclosures and facilitates the forthcoming transition to IFRS Sustainability Disclosure Standards. Respondents also highlighted that the ability to leverage industry-specific metrics in the SASB Standards will allow companies to provide details on the unique ways sustainability issues affect their specific industries.

Other protocols, frameworks and guidance

As well as disclosure practices following the TCFD Recommendations and/or the SASB Standards, the GHG Protocol Corporate Standard and the Partnership for Carbon Accounting Financials (PCAF) provide detailed methodologies for companies to determine their GHG emissions for their value chain and financed emissions, respectively. Rapidly expanding support of the GHG Protocol Corporate Standard and membership in the PCAF show that many companies and financial institutions are, or will be, measuring and reporting their GHG emissions and financed emissions to help their internal and external stakeholders (including prudential regulators) understand the climate impact of their business activities. These companies might face lower costs of implementing IFRS S1 and IFRS S2 by virtue of already having the necessary processes and systems in place to prepare such disclosures.

Similarly, the Science Based Targets initiative (SBTi) provides companies with methodologies for determining their emission reduction targets and pathways, which are relevant to providing disclosures applying IFRS S2. The Glasgow Financial Alliance for Net Zero (GFANZ) and UK Transition Plan Taskforce (TPT) provide guidance on transition plans, and the Voluntary Carbon Markets Integrity (VCMI) and the Integrity Council for the Voluntary Carbon Market (IC-VCM) will provide assurance processes to assess the quality of carbon credits. These materials are relevant to disclosures required by IFRS S2 and thus companies familiar with these materials are expected to find them helpful in applying IFRS S2.

When preparing their sustainability-related disclosures applying IFRS S1 and IFRS S2, companies will be able to leverage pre-existing disclosure practices, protocols and guidelines, and learn from their peers.

Costs associated with producing disclosures

The ISSB expects companies will face enhanced initial investments to prepare the disclosures required by IFRS S1 and IFRS S2.

The costs are expected to be the highest:

- in the first year of application, and to gradually decrease over time as companies learn the necessary steps to produce sustainability-related disclosures;
- for larger companies with complex operations, and for companies with no prior or minimal sustainability reporting experience; and
- for companies operating in developing economies.

The disclosure preparation steps adopted from the book *Win with Advanced Business Analytics: Creating Business Value from Your Data* illustrate the likely costs associated with the application of IFRS S1 and IFRS S2:[53]

1 Identify the objective of sustainability reporting

This step involves identifying the objectives, outlining the expected qualitative and quantitative content of sustainability reports, and determining relevant measurements.

2 Master the data

This step includes the collection, extraction, transformation, loading and validation of sustainability-related data (as per IFRS S1) and climate-related data (as per IFRS S2).

3 Perform a test plan

This step comprises descriptive analyses of collected data to arrive at accurate measures of sustainability performance.

4 Address and refine the results

This step involves addressing identified issues with collected sustainability-related data and refining the end measures.

5 Communicate results

This step involves communicating the results of sustainability performance measurements to investors. Applying IFRS S1 and IFRS S2, this step would include:

- discussing the governance processes, controls and procedures a company used to identify and monitor sustainability-related risks and opportunities;
- discussing the company's strategy to address sustainability-related risks and opportunities;
- discussing how the company identifies, assesses and manages sustainability-related risks and opportunities; and
- summarising the quantitative metrics and targets the company uses to measure and monitor sustainability-related risks and opportunities.

6 Track outcomes

This step involves the continual tracking and verification of sustainability-related information.

53 The steps are adopted from Isson and Harriott, *Win with Advanced Business Analytics*.

One-time implementation costs

This six-step sustainability reporting system is likely to impose substantial one-time implementation costs. Specifically, companies will likely face one-time costs relating to:

- finding qualified employees and/or consultants;
- employee education and training;
- setting up new processes and information-gathering systems;
- the design and implementation of new internal controls;
- integration into internal controls; and
- integration between new sustainability-related data-collection processes and current data-collection processes for general purpose financial reporting.

Ongoing application costs

Companies will also face ongoing costs associated with period-to-period sustainability reporting, including costs relating to:

- data collection, aggregation and application;
- interpretation of information, analysis and determinations of materiality and which sustainability-related matters to report on;
- compliance and assurance for reported sustainability-related information;
- the production, digital tagging and dissemination of sustainability reports; and
- employee hiring, termination and retention.

It is difficult to provide more detailed quantitative assessments of preparers' costs associated with sustainability reporting because these costs are unique to individual companies and companies generally do not publicly disclose how much they spend on specific steps to provide disclosures.

To provide evidence on climate-related disclosure costs from the preparers' perspective (which is 'generally private information'), the ERM survey examined 39 companies representing a range of industries in the US. These companies represented more than US$3.8 trillion in combined market capitalisation, with market capitalisation ranging from less than US$1 billion to more than US$200 billion for individual preparers. The companies' employee counts ranged from fewer than 1,000 to more than 250,000 employees.

According to this survey, preparers listed costs associated with GHG analysis and/or disclosures as the largest, with all preparer respondents reporting these costs. Costs related to 'climate scenario analysis and/or disclosures' were ranked as the second highest (about 80% of respondents reported these costs). Other costs identified in the survey included:

- 'additional climate-related analysis and/or disclosures' (reported by 77% of respondents);
- costs of 'internal climate risk management controls' (reported by 69% of respondents);
- costs associated with 'assurance/audits related to climate' (reported by 72% of respondents); and
- costs of 'proxy responses to climate-related proposals' (reported by 49% of respondents).

Feedback from preparers

In their comment letters on the IFRS S1 and IFRS S2 exposure drafts, almost all preparers said the costs of implementing IFRS S1 and IFRS S2 were likely to be substantial. Costs of developing and implementing systems for reporting and internal controls on data would be new for many preparers. Some respondents said personnel costs were likely to be substantial because preparers would have to source the appropriate talent, many for the first time, to manage data collection and disclosure. Some respondents said the costs associated with assurance were likely to be significant.

Preparers expressed concerns about potentially high ongoing application costs. Many of these respondents said costs were likely to decrease over time, as preparers set up appropriate systems and become familiar with the disclosure requirements. However, some respondents argued that costs were unlikely to decline after first-time implementation, pointing out that costs, such as those for personnel and assurance, were likely to remain unchanged and perhaps even increase over time.

Many respondents mentioned ongoing costs associated with discrepancies between disclosure requirements released by the US SEC, EFRAG and the ISSB. Respondents said these discrepancies would increase costs to preparers that need to comply with standards from two or all three of these bodies.

Many respondents said implementation costs were likely to be lower if the ISSB could facilitate the interoperability of its proposals with jurisdictional initiatives, including with proposals being developed by EFRAG and the US SEC. A few respondents said they expected costs to be lower for those already using well-established standards and frameworks, including the TCFD Recommendations, the SASB Standards or the GRI Standards. In contrast, many respondents said the costs would be relatively high for smaller companies and companies with minimal experience of preparing sustainability-related financial disclosures.

The ISSB expects the highest sustainability disclosure costs in the short term, driven primarily by one-time costs to set up data collection systems and related undertakings. The ISSB also expects a gradual reduction in compliance costs over time as companies gain experience of applying the Standards and learn the steps necessary to produce high-quality disclosures.

Changes in litigation risk

Application of IFRS S1 and IFRS S2 is expected to increase the transparency of companies' sustainability-related risks and opportunities and associated actions. Investors are expected to increase reliance on and scrutiny of sustainability disclosures. As the result, the risk of regulatory actions and litigation by investors and other users of information could increase. Conversely, reporting on sustainability applying IFRS S1 and IFRS S2 could strengthen the quality and reliability of disclosures, decreasing the likelihood of litigation—for example, by ensuring material information is provided to investors.

The extent of litigation risk depends on many factors, including a jurisdiction's sustainability disclosure enforcement regime, the strength of the legal system, the company's actions and the content of the disclosure itself.

Many respondents to the IFRS S1 and IFRS S2 exposure drafts raised concerns about increased litigation risk. Some respondents said the nature of forward-looking statements and information about likely effects to be disclosed applying IFRS S1 and IFRS S2 might give rise to liability for misleading and deceptive disclosures. Some respondents raised concerns about the inclusion of scenario analysis and disclosures on Scope 3 GHG emissions, indicating that companies could be held financially liable for alleged misstatements on future scenarios, future global developments, future weather events and hard-to-estimate measures. Some respondents raised concerns that identifying specific individuals responsible for the oversight of sustainability reporting could expose those individuals to litigation.

The *Global Trends in Climate Change Litigation: 2022 Snapshot* report underlines the increased litigation risk for companies.[54] The report found there had been an increase in litigation from stakeholders regarding omissions, misstatements and obfuscation of reported sustainability information.

54 J. Setzer and C. Higham, *Global Trends in Climate Change Litigation: 2022 Snapshot*, London, Grantham Research Institute on Climate Change and the Environment and Centre for Climate Change Economics and Policy, London School of Economics and Political Science, 2022.

IFRS S1 and IFRS S2 are not unique in requiring consideration of forward-looking information and the use of estimates. Many amounts in financial statements give rise to similar considerations. The Standards require information be provided to enable those using the information to understand sources of significant judgement, estimates and assumptions.

Disclosure and competitive effects

Many respondents to the IFRS S1 and IFRS S2 exposure drafts raised concerns that the disclosure of opportunities and strategic decisions could lead companies to disclose commercially sensitive information that could be exploited by competitors.

According to the cost–benefit analysis of the first set of draft European Sustainability Reporting Standards (ESRS) by EFRAG, 72% of preparers indicated some (likely limited) competitive advantages of applying the standards and 19% and 9% of preparers said there would be no effect or an adverse effect on competitiveness, respectively. Respondents that indicated the favourable effects of sustainability disclosure on a company's competitive position listed reasons like greater likelihood to win tenders, the ability to attract new customers and investors, and easier or cheaper access to financing as potential competitive advantages of improved sustainability reporting.

The ISSB expects companies to benefit from ensuring investors understand the opportunities available to them, particularly to balance information provided about their risk exposures. As a result, companies may prefer to provide such disclosure. However, the ISSB acknowledges the potential harmful effects of disclosing commercially sensitive information related to opportunities. In response, the ISSB introduced an exemption in IFRS S1 that permits a company, in limited circumstances in which information is not already publicly available, to omit information about a sustainability-related opportunity when the information is commercially sensitive—that is when disclosure can be expected to prejudice seriously the economic benefits the company is able to realise in pursuing the opportunity. The company is required to identify a specific reason for the non-disclosure of information, disclose the fact that information has been omitted for each item omitted, and reassess whether the information qualifies for exemption from disclosure at each reporting date.

This exemption is provided in the context of IFRS S1 but, given the overarching nature of the Standard, this relief will be applicable in other IFRS Sustainability Disclosure Standards unless otherwise expressly provided. Therefore, this relief is applicable for climate-related opportunities when a company applies IFRS S2.

Market exit

IFRS S1 and IFRS S2 can be applied by both public and private companies. Imposition of sustainability-related disclosure requirements on only a portion of a market, or differential requirements between markets in various jurisdictions, might generate complex and subtle incentives for how and where companies raise capital. For example, if disclosure is imposed on publicly listed companies only, some companies might wish to avoid the increased disclosure by listing in another jurisdiction or delisting entirely. Companies can do so whenever the costs imposed by the application of IFRS S1 and IFRS S2 are perceived to outweigh the benefits. This incentive might vary by industry and company size, depending on a company's assessment of the benefits and costs associated with additional disclosure.

Countering the incentives to avoid additional disclosure are the benefits from being a publicly listed company, such as access to larger, more liquid and lower cost pools of capital. This access is possible because of the increased transparency required of listed companies, including transparency about sustainability-related risks and opportunities. Such transparency can increase investor confidence.

In addition to having more limited access to capital, even if the Standards are not required to be applied by them, private companies might not entirely avoid being affected by new disclosure requirements. Private companies might still be required to disclose relevant sustainability-related information if they are part of the value chain of a (larger) company and/or because they are required to comply with regulatory requirements aligned with IFRS Sustainability Disclosure Standards.

Private firms seeking large strategic financing through private equity firms or other private financing sources might still be required to disclose relevant sustainability-related information as part of financing parties' due diligence processes. Without adequate disclosure by private companies when raising capital, investors in the private market would be faced with opaque, volatile and uncertain investment risks, resulting in a smaller and less liquid pool of financing and a higher cost of capital. Thus, companies will face competing incentives when faced with new disclosure requirements for public companies and might respond differently to that change.

Academic research has documented evidence of at least some public market exit in response to regulation. As an example, one study examined whether the development and implementation of the Sarbanes-Oxley Act 2002 (SOX) in the US drove companies out of the public capital market.[55] Although this study found that SOX induced smaller companies to exit the public capital market, it found less evidence that SOX resulted in larger companies going private. Other academics also examined the effects of SOX on capital markets, concluding that the regulation imposed costs on companies, but there were also many benefits, including increased scrutiny of disclosure by investors.[56] A 2021 academic study found regulatory costs have a greater impact on private companies' listing decisions than on public companies' decisions to go private.[57]

Companies' market exit decisions after they have expanded their sustainability disclosures have not been well researched. A 2020 study found companies in the oil, gas and mining sector reduced their investments in response to mandatory extraction payment disclosures and reallocated some of the investments from jurisdictions with required disclosure to jurisdictions with no such regulation.[58] A 2022 study also highlighted that the contribution of private companies to climate change, the relevance of climate risks for them, and the practice of public companies selling their highly polluting assets to private companies cannot be ignored.[59] These studies suggest that uneven disclosure regulation across jurisdictions and across public and private companies can distort capital allocation decisions and the management of sustainability-related risks and opportunities.

The ISSB acknowledges a possibility of market shifts due to the burden of increased sustainability disclosure. A global consensus on sustainability reporting policymaking is important.

55 E. Kamar, P. Karaca-Mandic and E. Talley, 'Going-private Decisions and the Sarbanes-Oxley Act of 2002: A Cross-country Analysis', *Journal of Law, Economics, and Organization*, vol. 25, no. 1, 2009, pp. 107–133.

56 See for example C. Leuz, 'Was the Sarbanes-Oxley Act of 2002 Really This Costly? A Discussion of Evidence from Event Returns and Going-Private Decisions', *Journal of Accounting and Economics*, vol. 44, no. 1–2, 2007, pp. 146–165.

57 M. Ewens, K. Xiao and T. Xu, 'Regulatory Costs of Being Public: Evidence from Bunching Estimation', NBER Working Paper no. 29143, Cambridge, MA, National Bureau of Economic Research, 2021.

58 T. Rauter, 'The Effect of Mandatory Extraction Payment Disclosures on Corporate Payment and Investment Policies Abroad', *Journal of Accounting Research*, vol. 58, no. 5, 2020, pp. 1075–1116.

59 A. Gözlügöl and W.G. Ringe, 'Private Companies: The Missing Link on the Path to Net Zero', European Corporate Governance Institute—Law Working Paper no. 635/2022, Brussels, 2022.

7—Wider market effects

7—Wider market effects

Effect on the overall functioning of capital markets

As discussed in earlier sections of this document, sustainability reporting varies greatly by company and jurisdiction, and companies can apply many frameworks, standards and approaches.

This situation can impose excessive costs on:

- companies to prepare sustainability-related disclosures; and
- investors and other users to collect and interpret the disclosures.

The lack of useful and reliable sustainability-related information in the marketplace undermines the ability of companies and investors to monitor and adequately manage risks, and to seize opportunities associated with sustainability matters like climate change.

Applying a set of global sustainability disclosure standards such as IFRS S1 and IFRS S2 to report on a company's sustainability-related risks and opportunities can help deliver consistent and comparable disclosures, resulting in better-functioning capital markets and a stronger global financial system in general.

For example, the Financial Stability Board (FSB) and the Network for Greening the Financial System (NGFS) highlighted the need for disclosures of financed emissions to assess climate systemic risk in the banking sector. To date, IFRS S2 is the only standard that supports these objectives (for example, through disaggregation by nature of gas and by industry). Therefore, a wider market effect of the Standards is the ability of banking supervisors to assess the climate risks underlying the lending portfolios of banks, which in turn can affect the cost of capital of banks and their customers.

It remains difficult for investors and other market participants to discern meaningful sustainability reporting because of the quality of disclosure, which exacerbates the problem of capital misallocation. Global alignment of sustainability reporting practices would limit companies' choices regarding which information to provide and help deliver consistent and comparable disclosures.[60] This alignment, combined with strong regulatory oversight, robust corporate governance and increased public oversight, can lead to greater management focus on relevant sustainability issues and more effective actions to address those issues.

Although the role of the ISSB is to deliver a global baseline of sustainability-related disclosures for global capital markets, this information might also be useful for other stakeholders.

As well as providing direct benefits to capital markets, improved sustainability reporting can benefit employees, customers, local communities in which companies operate and others. These parties will be able to understand and monitor the sustainability-related risks and opportunities and the associated actions of individual companies.

Other effects

The ISSB acknowledges that IFRS Sustainability Disclosure Standards might influence the development of similar requirements for specific sectors and has an ongoing dialogue with other standard-setters.

The International Public Sector Accounting Standards Board (IPSASB) is working to advance public sector sustainability reporting.

60 To increase coordination of work programmes and standard-setting activities, the IFRS Foundation and the Global Reporting Initiative (GRI) signed a Memorandum of Understanding (see Section 3 *Overview of IFRS S1 and IFRS S2*).

Appendix A—References

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Appendix B—Glossary

Glossary

This glossary contains short definitions of terms used in this document.

Term	Definition
CDSB	Climate Disclosure Standards Board.
ESG	Environmental, social and governance.
ESRS	European Sustainability Reporting Standards.
GHG emissions	Greenhouse gas emissions. The disclosure is classified as Scope 1, Scope 2 and Scope 3 GHG emissions. Scope 1 refers to emissions that a company makes directly. Scope 2 refers to indirect emissions from the generation of purchased energy consumed by the company. Scope 3 refers to all other indirect emissions that occur in the company's value chain.
GHG Protocol Corporate Standard	The GHG Protocol Corporate Accounting and Reporting Standard provides requirements for companies preparing a corporate-level GHG emissions inventory. The standard covers the accounting and reporting of seven greenhouse gases covered by the Kyoto Protocol—carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PCFs), sulphur hexafluoride (SF_6) and nitrogen trifluoride (NF_3). The standard was updated in 2015 with the Scope 2 Guidance, which allows companies to measure and report emissions from purchased or acquired electricity, steam, heat and cooling.
GRI	Global Reporting Initiative.
Investors	Primary users of general purpose financial reports.
Prospects	Sustainability-related risks and opportunities that could reasonably be expected to affect a company's prospects refer to sustainability-related risks and opportunities that could reasonably be expected to affect the company's cash flows, its access to finance or cost of capital over the short, medium or long term.
SASB Standards	SASB Standards identify a subset of environmental, social and governance issues most relevant to financial performance in 77 industries. The SASB Standards have been developed by the SASB and are now maintained by the IFRS Foundation, via the ISSB, which has committed to building on the industry-based SASB Standards and adopting SASB's industry-based approach to develop its standards.
TCFD	Task Force on Climate-related Financial Disclosures. IFRS S2 incorporates the recommendations of the TCFD and IFRS S1 incorporates the core elements and the framework of TCFD.
WFE	World Federation of Exchanges.

Important information

This Effects Analysis accompanies, but is not part of, IFRS S1 *General Requirements for Disclosure of Sustainability-related Financial Information* and IFRS S2 *Climate-related Disclosures*.

Other relevant documents

IFRS S1 *General Requirements for Disclosure of Sustainability-related Financial Information*—specifies the requirements for the disclosure of sustainability-related financial information.

IFRS S2 *Climate-related Disclosures*—specifies the requirements for the disclosure of climate-related financial information.

Basis for Conclusions on IFRS S1—summarises the ISSB's considerations in developing the requirements in IFRS S1.

Basis for Conclusions on IFRS S2—summarises the ISSB's considerations in developing the requirements in IFRS S2.

Accompanying Guidance on IFRS S1—illustrates aspects of IFRS S1 but provides no interpretative guidance.

Accompanying Guidance on IFRS S2—illustrates aspects of IFRS S2 but provides no interpretative guidance.

Project Summary of IFRS S1 and IFRS S2—provides an overview of the project to develop IFRS S1 and IFRS S2.

Feedback Statement for IFRS S1 and IFRS S2—summarises feedback on the proposals that preceded IFRS S1 and IFRS S2 and the ISSB's response.

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