IFRS Sustainability

Staff paper

Agenda reference: 4A

ISSB Meeting

Date	**January 2023**
Project	**Climate-related Disclosures**
Topic	**Using scenario analysis to assess climate resilience**
Contacts	**Jing Zhang** (jing.zhang@ifrs.org) **Rommie Johnson** (rommie.johnson@ifrs.org)

Objective

1. This paper continues the International Sustainability Standards Board's (ISSB's) redeliberations of the requirements proposed in paragraph 15 of [draft] IFRS S2 *Climate-related Disclosures* ([draft] S2) for entities to disclose their resilience to climate-related changes, developments or uncertainties. The proposed requirements are summarised in Appendix A to this paper.

2. At its supplementary meeting in November 2022, the ISSB decided to require an entity to assess its climate resilience using climate-related scenario analysis. The ISSB also decided that entities be required to apply a method of climate-related scenario analysis commensurate with their circumstances. The ISSB asked the staff to do further work to clarify the criteria an entity would use to select a method of climate-related scenario analysis, including by developing application guidance for the requirements proposed in paragraph 15 of [draft] S2 based on guidance from the Task Force on Climate-Related Financial Disclosures (TCFD). In this paper, the staff recommends requirements that would enable an entity to determine the approach to climate-related scenario analysis it should apply.

3. The staff's recommendations are summarised in paragraph 7, and we will ask the ISSB to vote on those recommendations during this session. The questions for the ISSB are set out after paragraph 35.

Background

4. The likelihood, magnitude and timing of climate-related risks affecting an entity are often complex and uncertain. As a result, users of general purpose financial reporting need to understand the resilience of an entity's strategy (including its business model) to climate change, factoring in the associated uncertainties. Paragraph 15 of [draft] S2, therefore, proposed requirements related to an entity's assessment of the resilience of its strategy to climate-related risks. These proposed requirements, summarised in Appendix A to this paper, focus on:

   (a) what the results of the assessment should enable users to understand; and

   (b) how the assessment has been conducted.

5. At its supplementary meeting in November 2022, the ISSB decided that entities be required to use scenario analysis to prepare information about their resilience to climate change but

acknowledged that scenario analysis would encompass a range of practice from qualitative scenario narratives to complex statistical modelling. That range of practice has been described in guidance published by the TCFD.[1] The ISSB decided to require an entity to prepare the disclosures described in paragraph 4(a)-(b) using a method of climate-related scenario analysis commensurate with the entity's circumstances.

6. In taking this approach, the ISSB made clear its intention, as noted in AP4 *Climate resilience* (1 November 2022), to put entities 'on a path to the application of more sophisticated approaches,' which would 'encourage improvements in application and more robust information being provided over time … as entities' experience and market practice develops.'

Summary of staff recommendations

7. The staff recommends that the ISSB:

   (a) require an entity to use an approach to climate-related scenario analysis that enables the entity to consider all reasonable and supportable information that is available without undue cost or effort, at the reporting date, including information about past events, current conditions and forecasts of future economic conditions, taking into consideration:

      (i) the degree of the entity's exposure to climate-related risks and opportunities; and

      (ii) the skills, capabilities and resources available to the entity to conduct climate-related scenario analysis.

Structure of the paper

8. This paper is structured as follows:

   (a) staff analysis and recommendations (paragraphs 9–34);

   (b) questions for the ISSB (paragraph 35); and

   (c) appendices

      (i) Appendix A—summary of the relevant proposals in [draft] S2 and related ISSB decisions made during redeliberations

      (ii) Appendix B—approach considered but not recommended

Staff analysis and recommendations

9. As stated in paragraph 15 of [draft] S2, the objective of climate resilience disclosure is to enable users of general purpose financial reporting to understand the resilience of the reporting entity's strategy (including its business model) to climate-related changes, developments or uncertainties—taking into consideration the entity's identified climate-related risks and opportunities. In order to meet that objective, the ISSB decided that IFRS S2 will require an entity to assess its climate resilience using a method of climate-related scenario

[1] TCFD, *Technical Supplement: The Use of Scenario Analysis in Disclosure of Climate-Related Risks and Opportunities* (June 2017) and *Guidance on Scenario Analysis for Non-Financial Companies* (October 2020)

analysis commensurate with the entity's circumstances, as discussed in AP4 *Climate resilience* (1 November 2022).

10. Pursuant to that decision, the ISSB further directed the staff to develop guidance that would enable an entity to determine the appropriate approach to use when conducting its climate-related scenario analysis. This paper describes the staff's recommendations with respect to that guidance.

Selecting a 'commensurate' approach

11. The ISSB has acknowledged that climate-related scenario analysis encompasses a range of practice, that the optimal approach will vary from one entity or reporting period[2] to another and that preparers are therefore likely to need guidance on how to select an approach that is commensurate with their circumstances.

12. At its supplementary meeting in November 2022, the ISSB supported the staff's recommendation to develop (required) application guidance that would reflect the stages of progression described in guidance published by the TCFD. Descriptions of those three stages, derived from the TCFD guidance, are included in Figure 1.

Figure 1. Stages of progression in the use of climate-related scenario analysis

Just beginning	Gaining experience	Advanced experience
Qualitative scenario narratives to help management explore the potential range of climate-related implications, using a more focused boundary such as a critical business unit or specific commodity inputs	Scenarios and associated analysis using quantitative information to illustrate potential pathways and outcomes, ideally for the entity and its operations as a whole	Greater rigour and sophistication in the use of data sets and mathematical models to support statistical analysis and quantitative, entity-specific outputs

13. Considering these stages of progression as a starting point, the staff's recommendations are designed to guide preparers (and in turn benefit users of general purpose financial reporting) in two ways:

    (a) first, in identifying the appropriate stage of progression to use when conducting climate-related scenario analysis; and

    (b) second, to help them better understand and more effectively navigate the path toward a more robust resilience assessment and related disclosure in future reporting periods—in other words, to help them move from 'just beginning' to 'gaining experience' and 'advanced experience'.[3]

---

[2] The ISSB decided in its supplementary November 2022 meeting to clarify that, although entities are likely to perform climate-related scenario analysis as part of a multi-year strategic planning cycle, the information proposed in paragraph 15 of [draft] S2 would be required to be disclosed annually.

[3] The staff notes that the three stages of progression do not necessarily represent distinct or discrete 'steps' in a process. Rather they provide general descriptions of common practice along a continuum of maturity. The stage described as 'just beginning' may share some characteristics in common with the stage described as 'gaining experience', which may in turn

14. To achieve those objectives, the staff recommends that the ISSB rely on relevant concepts used in IFRS Accounting Standards. Specifically, the staff recommends that the ISSB require an entity to use the concept of 'reasonable and supportable information that is available without undue cost or effort', which is discussed more fully in AP3C and AP4D: *Reasonable and supportable information that is available at the reporting date without undue cost and effort* (January 2023). That concept is useful in situations when an entity is particularly challenged to apply judgement. The staff believes such situations could include those that involve ambiguity about what underlying information should be considered, where that information should be obtained or the process or method the entity should use to measure, calculate, evaluate or otherwise assess the information.

15. In the context of climate-related scenario analysis, that concept can add clarity to the objectives described in paragraph 13(a)-(b). In other words, it can help a preparer understand both the 'floor' and the 'ceiling' of what it is required to consider:

    (a) all **reasonable and supportable information** (ie the entity can neither ignore nor fabricate information that would inform its resilience assessment);

    (b) that is **available without undue cost or effort** (ie an exhaustive effort to obtain, develop or analyse information isn't necessary).

16. The staff believes it is important to emphasise a distinction made in AP4 *Climate resilience* (1 November 2022) between 'resilience assessment' (ie management's judgements about the implications of climate change for its strategy and business model and its capacity to respond to those implications) and 'scenario analysis' (an analytical exercise used to inform those judgments). This relationship is illustrated in Figure 2.

share some characteristics in common with the stage described as 'advanced experience'. Consequently, in its efforts to maximise its use of reasonable and supportable information, an entity's selected approach may not fall neatly into one stage or another, but rather somewhere in between.

Figure 2. Scenario analysis as an input to resilience assessment

	Scenario analysis		Resilience assessment	Reporting (IFRS S2)
Reasonable and supportable information that is available without **undue cost or effort** • e.g., scenarios, variables	Process to obtain, develop or analyse information (shall not involve **undue cost or effort**) • e.g., narratives, quantitative modelling and other analytical choices	**Reasonable and supportable** information that is available without **undue cost or effort** • e.g., forecasts, projections	Management's application of judgement • e.g., strategic implications, capacity to respond	Material information • e.g., required disclosure

17. The staff's recommendations are premised on the idea that the objective of an entity's scenario analysis is to establish the strongest basis that is reasonably possible to support the entity's assessment of its climate resilience—and in so doing, maximising the use of reasonable and supportable information. The starting point for such scenario analysis—which may take the form of publicly available, off-the-shelf scenarios—is likely to provide a minimum basis for the assessment at almost no cost or effort. The more challenging question for the preparer is how it should undertake its analysis of such climate-related scenarios and related information to support an assessment of its resilience.

Reasonable and supportable information

18. One benefit of using the concept of 'reasonable and supportable information that is available without undue cost or effort' is that many preparers will be familiar with the concept and how to apply it because the concept is already used in IFRS Accounting Standards, such as IFRS 9 *Financial Instruments* and IFRS 17 *Insurance Contracts*. For example, an entity is required to consider reasonable and supportable information—including that which is forward-looking—when applying the expected credit loss (ECL) model for impairment of financial assets in IFRS 9. That application is similar to what the staff recommends for use in the context of climate-related scenario analysis, as both would require an entity to assess forward-looking risk in preparing their disclosures. Although the various uses of the concept are not identical, important similarities will ease its application in the context of climate-related scenario analysis.

19. Due to the familiarity of the concept, preparers will understand that reasonable and supportable information may include historic, current and forward-looking information that is available at the reporting date. They will also understand that it may include both qualitative and quantitative information, as well as external (obtained) and internal (owned or developed) information. For example, an entity may consider publicly available, off-the-shelf scenarios—such as those developed and made available by the International Energy Agency (IEA), the Intergovernmental Panel on Climate Change (IPCC) and the Network of Central Banks and

Supervisors for Greening the Financial System (NGFS)—as an input to its climate-related scenario analysis, along with relevant variables (for example, sector-specific considerations) from credible third-party sources. At the same time, when using the findings of its scenario analysis to assess its climate resilience, the entity may also consider information available from its own information systems, including information that is produced through the mathematical modelling or statistical analysis it uses to conduct its analysis of selected scenarios.

20. Similarly, preparers will also better understand not only what 'reasonable and supportable' information *includes*, but also what it *excludes* and *does not exclude*. For example, as in IFRS 9, a 'best case' scenario would not necessarily be included in an entity's analysis unless the entity had sufficient evidence indicating that such a scenario has a reasonable likelihood of occurring. Meanwhile, a particular piece of information would not be excluded from consideration simply because it relates to an event or outcome that has a low likelihood of occurring or because its effect on the entity's financial condition, performance or prospects is uncertain.

21. Finally, preparers will recognise that information does not need to be quantitative or flow through a statistical model to be reasonable and supportable. One characteristic that is associated with an entity's advancement through the stages of progression described in Figure 1 is the degree of quantitative rigor it would be required to apply, including in the selection of its inputs, the design of its methodology and the calculation of the analytical estimates it uses to inform its resilience assessment. Quantification can lead to greater rigour and sophistication in the scenario analysis, and thus may help support more robust resilience assessment, risk identification and strategy formulation.

22. However, as the TCFD guidance referenced in paragraph 5 points out, it is also true that an excessive focus on quantification can impair strategic thinking. If an entity has not established a clear and logical scenario 'narrative' reflecting the conceptual relationships between the key drivers, constraints, pathways and potential outcomes, then a rush to quantification may serve only to put an ever-finer point on an ineffective tool. For that reason, the TCFD guidance suggests, 'companies should undertake quantification in line with their evolving and maturing experience using scenarios'. Although the TCFD acknowledges that quantification 'should be a goal in a mature scenario process', it also notes that 'not all companies necessarily need to elaborate on quantitative scenarios or use sophisticated quantitative models in order to achieve quantification at the outset'. That view is consistent with the staff's belief that qualitative information—including scenario narratives—either alone or in combination with quantitative data, can provide a reasonable and supportable basis for an entity's resilience assessment.

23. The staff notes that, when determining what information to obtain, develop and analyse, preparers are also likely to benefit from the wide range of market actors, jurisdictional authorities, scientific agencies, academic efforts, voluntary initiatives and other sources that have produced guidance on conducting climate-related scenario analysis, including what information to incorporate into such analysis and how to do so. The staff further notes that, as discussed in AP4 *Climate resilience* (1 November 2022), it also plans to consider developing educational materials to support preparers in selecting relevant scenarios when applying IFRS S2.

Undue cost or effort

24. While entities should have less difficulty applying a requirement to consider 'reasonable and supportable' information, they may need relatively more guidance assessing what constitutes 'undue cost or effort' in the context of climate-related scenario analysis. That is because climate-related scenario analysis is a relatively new and rapidly developing practice. An

entity's analytical choices—for example, whether it uses qualitative analysis or quantitative modelling—will help determine the cost and effort involved in obtaining, developing and analysing the body of reasonable and supportable information that will support its resilience assessment. As a result, an entity must consider whether—or at what point in the stages of progression derived from the TCFD guidance and described in Figure 1—its approach to climate-related scenario analysis involves 'undue cost or effort'.

25. As explained in *IFRS for SMEs*, the consideration of whether cost or effort is 'undue' depends on 'management's judgement of the costs and benefits from applying that requirement'. To make such a judgement in the context of climate-related scenario analysis, it is the staff's view that an entity should be required to consider two primary aspects of its circumstances. Those aspects are:

    (a) the degree of the entity's exposure to climate-related risks and opportunities; and

    (b) the skills, capabilities and resources available to the entity to conduct climate-related scenario analysis.

26. In the first instance, by considering the degree of its exposure to climate-related risks and opportunities, the entity can make a more informed judgement regarding the potential benefits of different approaches to climate-related scenario analysis. In the second instance, by considering the skills, capabilities and resources at its disposal, the entity can more effectively assess the relative cost or difficulty for the entity to achieve those benefits. These considerations are discussed in greater detail in paragraphs 29–33.

27. The staff acknowledges that considering the degree of the entity's exposure to climate-related risks in order to determine the approach to climate-related scenario analysis may be perceived as implying a 'circular logic'. In its October 2022 meeting, the ISSB decided to require entities to disclose whether and how they use climate-related scenario analysis to inform the identification of climate-related risks and opportunities. Although those two considerations may seem directionally opposed, the staff emphasises that risk management and strategic planning are not linear, sequential exercises but rather involve an ongoing, iterative process.

28. Indeed, such iteration is central to the staff's recommendations, as the recommendations are designed to require a company to apply climate-related scenario analysis in a way that reflects:

    (a) the established views of management at the time of reporting; and

    (b) the ability of the entity to interrogate, inform and potentially refine those views over time, recognising that the entity's internal and external circumstances—along with the reasonable and supportable information available to the entity—are dynamic and will continue to evolve.

Degree of exposure to climate-related risks and opportunities

29. An entity's approach to climate-related scenario analysis should be commensurate with its exposure to related risks and opportunities. If an entity has identified few or relatively insignificant climate-related risks and opportunities that could reasonably be expected to affect its ability to achieve its business objectives, the entity and its investors are less likely to benefit from a quantitatively complex or technically sophisticated exercise undertaken to inform the assessment of the entity's climate resilience.

30. An entity will have identified and disclosed information about its climate-related risks and opportunities outside the context of the requirement to provide an assessment of the resilience of its strategy (including its business model). In paragraph 9 of [draft] S2, an entity is required to identify the climate-related risks and opportunities that could reasonably be expected to affect the entity's business model, strategy and cash flows, its access to finance and its cost of capital, over the short, medium or long term. In paragraph 17 of [draft] S2, an entity is also required to disclose information that enables users to understand the process through which it has identified those risks and opportunities.[4]

31. Thus, for the purpose of informing the entity's approach to climate-related scenario analysis, the staff recommends that an entity be required to consider the degree of its exposure to climate-related risks and opportunities. That consideration would provide essential context for understanding the potential benefits of the information yielded by different approaches to the analysis and, therefore, what level of cost or effort is likely to be 'undue'.

The skills, capabilities and resources available to the entity

32. An entity's approach to climate-related scenario analysis should also be commensurate with its skills, capabilities and resources. Even if an entity determines that it has significant exposure to climate-related risks or opportunities, it may be challenged to use a quantitatively complex or technically sophisticated approach to climate-related scenario analysis. For example, while entities in some sectors—such as extractives and minerals processing—have used climate-related scenario analysis for many years, others—such as consumer goods or technology and communications—have only more recently begun to explore applying climate-related scenario analysis to their businesses. Meanwhile, smaller and medium-sized entities and/or those in particular jurisdictions may need more time to build their capacity and capability in this area because climate-related scenario analysis can be resource intensive, represent an iterative learning process and may take multiple planning cycles to develop and refine.

33. Thus, the staff recommends that an entity be required to consider the skills, capabilities and resources it has available to conduct climate-related scenario analysis. That consideration would provide essential context for understanding the potential cost and effort required by different approaches and, therefore, whether that cost or effort is likely to be 'undue' when weighed against the potential benefits of the information a particular approach would yield.

34. In summary, the staff recommends that the ISSB:

    (a) require an entity to use an approach to climate-related scenario analysis that enables the entity to consider all reasonable and supportable information that is available without undue cost or effort, at the reporting date, including information about past events, current conditions and forecasts of future economic conditions, taking into consideration:

        (i) the degree of the entity's exposure to climate-related risks and opportunities; and

        (ii) the skills, capabilities and resources available to the entity to conduct climate-related scenario analysis.

[4] Feedback received from stakeholders during the public comment period for the Exposure Draft indicated broad agreement with the requirements proposed in paragraphs 9 and 17 of [draft] S2 and thus the ISSB decided those requirements would not be subject to redeliberation.

Questions for the ISSB

35. The staff presents the following questions for the ISSB:

Questions for the IASB
1. Does the ISSB agree with the staff's recommendation (in paragraph 34) to require an entity to use an approach to climate-related scenario analysis that enables the entity to consider all reasonable and supportable information that is available without undue cost or effort, at the reporting date, including information about past events, current conditions and forecasts of future economic conditions? 2. Does the ISSB agree with the staff's recommendation (also in paragraph 34) that the guidance should require an entity to consider: (a) the degree of the entity's exposure to climate-related risks and opportunities; and (b) the skills, capabilities and resources available to the entity to conduct climate-related scenario analysis?

Appendix A—Summary of the proposals and related ISSB decisions

A1. Paragraph 15 of the Exposure Draft of IFRS S2 *Climate-related Disclosures* would require an entity to disclose information that enables users of general purpose financial reporting to understand the resilience of the entity's strategy (including its business model) to climate-related changes, developments or uncertainties—taking into consideration the entity's identified climate-related risks and opportunities and related uncertainties.

A2. At its supplementary meeting in November 2022, the ISSB decided to require an entity to assess its climate resilience and prepare the related disclosures using a method of climate-related scenario analysis commensurate with the entity's circumstances.

A3. Previously, at its October 2022 meeting, the ISSB decided to confirm the disclosures proposed in paragraph 15(a) of [draft] S2—that is, that an entity is required to disclose the results of its analysis of climate resilience and the particular information set out in that paragraph, which includes:

(a) the results of the [entity's assessment] of [its] climate resilience, which shall enable users to understand:

(i) the implications, if any, of the entity's findings for its strategy, including how it would need to respond to the effects identified in paragraph 15(b)(i)(8) or 15(b)(ii)(6);

(ii) the significant areas of uncertainty considered in the [assessment] of climate resilience;

(iii) the entity's capacity to adjust or adapt its strategy and business model over the short, medium and long term to climate developments in terms of:

1. the availability of, and flexibility in, existing financial resources, including capital, to address climate-related risks, and/or to be redirected to take advantage of climate-related opportunities;

2. the ability to redeploy, repurpose, upgrade or decommission existing assets; and

3. the effect of current or planned investments in climate-related mitigation, adaptation or opportunities for climate resilience.

A4. Also at its October 2022 meeting, the ISSB decided to confirm the disclosures in paragraph 15(b) of [draft] S2 that describe how the climate resilience assessment has been conducted, which include:

(a) how the scenario analysis has been conducted, including:

(i) which scenarios were used for the analysis and the sources of the scenarios used;

(ii) whether the analysis has been conducted by comparing a diverse range of climate-related scenarios;

(iii) *whether the scenarios used are associated with transition risks or increased physical risks;*

(iv) *whether the entity has used, among its scenarios, a scenario aligned with the latest international agreement on climate change;*

(v) *an explanation of why the entity has decided that its chosen scenarios are relevant to assessing its resilience to climate-related risks and opportunities;*

(vi) *the time horizons used in the analysis;*

(vii) *the inputs used in the analysis, including-but not limited to-the scope of risks (for example, the scope of physical risks included in the scenario analysis), the scope of operations covered (for example, the operating locations used), and details of the assumptions (for example, geospatial coordinates specific to entity locations or national- or regional-level broad assumptions); and*

(viii) *assumptions about the way the transition to a lower-carbon economy will affect the entity, including policy assumptions for the jurisdictions in which the entity operates; assumptions about macroeconomic trends; energy usage and mix; and technology.*

A5. Finally, at its October 2022 and supplementary November 2022 meetings, the ISSB made several related decisions that may influence an entity's application of the requirements, including:

(a) to add a requirement to IFRS S2 for an entity to disclose whether and how it uses climate-related scenario analysis to inform the identification of climate-related risks and opportunities;

(b) to amend the definition of 'climate resilience' in Appendix A to [draft] S2 to clarify that an entity's climate resilience includes both its strategic resilience and its operational resilience to uncertainties associated with climate change; and

A6. to clarify through drafting that, although entities are likely to perform climate-related scenario analysis as part of a multi-year strategic planning cycle, the information in paragraph 15 of [draft] S2 is required to be disclosed annually..

Appendix B—Approach considered but not recommended

B1. In AP4 *Climate-resilience* (1 November 2022), the staff recommended that the ISSB develop application guidance, drawing on and referring to the TCFD guidance on climate-related scenario analysis, to assist entities in applying the requirement. In making that recommendation, the staff suggested a possible approach that was structured after the approach used for the classification of financial assets in IFRS 9. After further consideration, the staff has recommended a different approach, as described in paragraphs 9–34.

B2. IFRS 9 requires an entity to classify its financial assets into three measurement categories (amortised cost, fair value through other comprehensive income, and fair value through profit or loss) on the basis of the entity's business model for managing assets and the contractual cash flow characteristics of the asset. For example, a financial asset is classified as being subsequently measured at amortised cost if the asset is held within a business model whose objective is to collect contractual cash flows, and the contractual terms of the financial asset give rise to cash flows that are solely payments of principal and interest.

B3. The staff originally envisioned requiring entities to use a similar approach to determine which of the three stages of progression described in Figure 1 is commensurate with their circumstances. For example, the staff had considered that an entity could be required to use the approach described as ‘advanced experience’ unless it is unable to do so, in which case it would be required to use the approach described as ‘gaining experience’, and so on.

B4. The staff ultimately developed and recommends a different approach due to various challenges with the original approach, including:

(a) although an entity is required to use judgment and consider all relevant evidence when assessing its business model (how an entity manages its financial assets in order to generate cash flows) in the application of IFRS 9, that assessment may be based on a number of observable activities such as how performance of the financial assets are evaluated and reported to key management personnel and how managers of the business are compensated. In contrast, an entity’s consideration of its skills, capabilities and resources in the context of climate-related scenario analysis is likely to be considerably more subjective and may not necessarily be associated with directly observable characteristics (for example, market capitalisation, industry participation, etc.).

(b) as referenced in the footnote to paragraph 13, the three stages of progression described in Figure 1 are not necessarily distinct, discrete sets of practice, but common phases of an entity’s maturity. Therefore, in seeking to match its circumstances with a commensurate approach to climate-related scenario analysis, an entity would be working high subjectivity on both counts.

(c) finally, the stakeholder response to the comment period on [draft] S1 and [draft] S2 indicated confusion among respondents regarding the meaning of ‘unable to do so’ and how it would be applied in the absence of further explanation. For example, some respondents said further guidance would be needed to help entities understand when or under which circumstances they would be considered unable to undertake climate-related scenario analysis.

B5. Where the staff’s original proposal would have set a high bar (ie ‘advanced experience’) as the starting point for consideration, with a cascading series of reliefs for those entities ‘unable’ to meet that bar, the recommended approach works in the opposite direction, requiring an entity to maximise its use of reasonable and supportable information—ie to the extent possible without incurring ‘undue cost or effort’). Thus, the staff believes its recommended approach is a more effective way to achieve the same objective and retain similar relief.