



International Actuarial Association
Association Actuarielle Internationale

ISAP 8
International Standard of
Actuarial Practice 8
IFRS S2 Climate-Related
Disclosures

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ISAP 8

IFRS S2 Climate-Related Disclosures

(Final Review Draft)

Adopted by the IAA Council

[Date]



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TABLE OF CONTENTS

Preface.....	i
Introduction	ii
Section 1. General	1
1.1. Purpose	1
1.2. Scope	1
1.3. Relationship to ISAP 1	1
1.4. Relationship to IFRS S2 and IFRS S1	1
1.5. Defined Terms	1
1.6. Cross-References	1
1.7. Effective Date	1
Section 2. Appropriate Practices	2
2.1. Relevant Knowledge Requirements	2
2.2. Materiality	2
2.3. Proportionality	3
2.4. Use of Other Party Expertise and Data.....	3
2.5. Preparation of Climate-Related Disclosures	43
2.6. Considerations for Pension Funds	8
Section 3. Communication	109
3.1. Reporting to Principal.....	109

Preface

This International Standard of Actuarial Practice (ISAP) is a model for actuarial standard-setting bodies to consider.

The International Actuarial Association ([IAA](#)) encourages relevant actuarial standard-setting bodies to maintain a standard or set of standards that is substantially consistent with this ISAP to the extent that the content of this ISAP is appropriate for [actuaries](#) in their jurisdiction. This can be achieved in many ways, including:

- Adopting this ISAP as a standard with only the modifications in the Drafting Notes;
- Customizing this ISAP by revising the text of the ISAP to the extent deemed appropriate by the standard-setting body while ensuring that the resulting standard or set of standards is substantially consistent with this ISAP;
- Endorsing this ISAP by declaring that this ISAP is appropriate for use in certain clearly defined circumstances;
- Modifying existing standards to obtain substantial consistency with this ISAP; or
- Confirming that existing standards are already substantially consistent with this ISAP.

A standard or set of standards that is promulgated by a standard-setting body may be considered to be substantially consistent with this ISAP if:

- There are no material gaps in the standard(s) in respect of the principles set out in this ISAP; and
- The standard or set of standards does not contradict this ISAP.

If an actuarial standard-setting body wishes to adopt or endorse this ISAP, it is essential to ensure that existing standards are substantially consistent with [ISAP.1](#) as this ISAP relies upon [ISAP.1](#) in many respects. Likewise, any customization of this ISAP, or modification of existing standards to obtain substantial consistency with this ISAP, should recognize the important fact that this ISAP relies upon [ISAP.1](#) in many respects.

If this ISAP is translated for the purposes of adoption, the adopting body should select three verbs that embody the concepts of “must”, “should”, and “may”, as described in paragraph 1.6. Language of [ISAP.1](#), even if such verbs are not the literal translation of “must”, “should”, and “may”.

This ISAP is a model standard of actuarial practice and, as such, is not binding on any [actuary](#).

This ISAP was adopted by the [IAA](#) Council on [\[Date\]](#).

[Drafting Notes: When an actuarial standard-setting organization adopts this standard, it should:

1. *Replace “ISAP” throughout the document with the local standard name, if applicable;*
2. *Modify references to [ISAP.1](#) in paragraphs 1.3., 2.1., 2.2.1., 2.3., 2.4., and 3.1. to point to the local standard(s) that is/are substantially consistent with [ISAP.1](#), rather than referring to [ISAP.1](#) directly, if appropriate;*
3. *Choose the appropriate phrase and date in paragraph 1.7.;*
4. *Review this standard for, and resolve, any conflicts with the local [law](#) and code of professional conduct; and*
5. *Delete this preface (including these drafting notes) and the footnote associated with paragraph 1.7.]*

Introduction

This International Standard of Actuarial Practice (ISAP) provides guidance to [actuaries](#) when performing [actuarial services](#) in connection with the application of International Financial Reporting Standard S2 ([IFRS S2](#)) on Climate-Related Disclosures issued by the International Sustainability Standards Board (ISSB). [IFRS S2](#) was issued on 26 June 2023.

While responsibility for climate-related disclosures rests with the [entity](#) making the disclosures, the [actuary](#) may perform [work](#) supporting the preparation of the disclosures. The considerations in this standard apply to an [actuary](#) engaged in such [work](#).

The actuary should note that [IFRS S2](#) allows considerable flexibility to an entity in preparing the climate-related disclosures if the entity is constrained by the availability of information or resources. However, under [IFRS S2](#), an entity with a high degree of exposure to climate-related risks and opportunities, and with access to the necessary skills, capabilities or resources, is expected to apply more advanced quantitative approaches to preparing the climate-related disclosures.

The [IAA](#) intends this ISAP to:

- Facilitate consistent and appropriate standards of actuarial practice in connection with [IFRS S2](#);
- Increase public confidence in [actuarial services](#) provided in connection with [IFRS S2](#);
- Facilitate collaboration with other disciplines and relevant authorities; and
- Demonstrate the [IAA](#)'s commitment to support the work of the ISSB in achieving high-quality, sustainability-related standards.

Section 1. General

- 1.1. Purpose** – This ISAP provides guidance to [actuaries](#) when performing [actuarial services](#) to ~~support the preparation by an entity of climate-related disclosures in accordance~~[connection](#) with [IFRS S2](#) issued by the ISSB. Its purpose is to increase [intended users](#)' confidence that:
- [Actuarial services](#) are carried out professionally and with due care ~~and are consistent with IFRS S2~~;
 - The results of the [actuary](#)'s [work](#) are presented clearly;
 - The assumptions and methodology used in the [actuary](#)'s [work](#) on [IFRS S2](#) are disclosed appropriately; and
 - The [actuary](#) has applied an appropriate level of precision commensurate with the degree of reliability of the [data](#), assumptions, and [models](#).
- 1.2. Scope** – This ISAP applies to [actuaries](#) when performing [actuarial services](#) to ~~support the preparation by an entity of climate-related disclosures in accordance with~~[IFRS S2](#). The scope and nature of the [actuarial services](#) an [actuary](#) provides related to [IFRS S2](#) will depend on the specific requirements of the assignment. The [actuary](#) should apply the guidance in this ISAP to the extent relevant to the scope and nature of the assignment.
- 1.3. Relationship to ISAP 1** – Compliance with [ISAP 1](#) is a prerequisite to compliance with this ISAP.
- 1.4. Relationship to IFRS S2 and IFRS S1** – To the extent required to perform the [work](#) required under [IFRS S2](#), the guidance in this ISAP complements the guidance in [IFRS S2](#) and the International Financial Reporting Standard S1 ([IFRS S1](#)) on General Requirements for Disclosure of Sustainability-related Financial Information, which is not repeated in this ISAP. ~~This ISAP is not intended to contradict IFRS S1 and IFRS S2, and if there are inconsistencies, the wording of IFRS S1 and IFRS S2 takes precedence.~~
- 1.5. Defined Terms** – This ISAP uses various terms whose specific meanings are defined in the Glossary. These terms are highlighted in the text with a dashed underscore and in blue, which is a hyperlink to the definition (e.g., [actuary](#)).
- This ISAP also uses key terms from [IFRS S1](#) and [IFRS S2](#), in which case they have the same meaning as in [IFRS S1](#) and [IFRS S2](#). These terms are highlighted in the text with an underscore in orange colour (e.g., [climate-related risks and opportunities](#)).
- 1.6. Cross-References** – This ISAP refers to the content of [IFRS S2](#) and [IFRS S1](#). If [IFRS S2](#) and/or [IFRS S1](#) are subsequently amended, restated, revoked, or replaced after [June 2023](#) ~~[Date]~~, the [actuary](#) should consider the extent to which guidance in this ISAP is still applicable and appropriate.
- 1.7. Effective Date** – This ISAP is effective for {[actuarial services](#) performed/[actuarial services](#) commenced/[actuarial services](#) performed relevant to [IFRS S2](#) disclosures}¹ on or after [Date].

¹ Phrase to be selected and date to be inserted by standard-setter adopting or endorsing this ISAP.

Section 2. Appropriate Practices

2.1. Relevant Knowledge Requirements – In applying [ISAP.1](#) paragraph 2.2.,² the [actuary](#) should have or obtain sufficient knowledge and understanding of the information necessary to perform the assignment. Specific considerations may include, depending on the nature of the assignment:

- a. [IFRS S2](#) and [IFRS S1](#);
- b. Any local requirements, including local [law](#), relating to [IFRS S2](#) or climate-related disclosures;
- c. The business, financial and climate-related environment in which the entity operates;
- d. The entity's approaches to adapt to and mitigate the effects of climate-related risks and opportunities;
- e.e. The relevant methodologies and assumptions used by the [entity](#) for which the disclosures are being prepared;
- e.f. The skills, capabilities, and resources of the [entity](#) that are ~~available~~^{needed} to perform the assignment~~climate-related analysis~~; and
- e.g. Aspects of climate science, climate risk modeling, and enterprise risk management as required to perform the assignment, including but not limited to understanding;
 - How ~~climate-related risks and opportunities~~^{issues} could ~~affect~~^{impact} the [entity](#)'s [business model and value chain](#) in relation to its assets, liabilities, and cash-flows over the relevant time period.
 - The [entity](#)'s processes for identification, assessment, ~~prioritization~~^{management}, and monitoring of [climate-related risks and opportunities](#).
 - Risks and factors that could ~~affect~~^{impact} the pace and direction of climate change, such as political and social risks, and risks associated with the interconnection of changes in the natural environment.

2.2. Materiality – The [actuary](#) should understand the distinction between materiality with respect to the [actuarial services](#) and to the preparation of an [IFRS S2](#) disclosure:

2.2.1. When establishing materiality of the actuarial services, the actuary should:

- a. When appropriate for the [work](#), ~~the actuary should~~ seek guidance from the [principal](#) or the [entity](#) regarding materiality~~;- and~~
- b. ~~In applying [ISAP.1](#) paragraph 2.4.,³ the actuary's establish a~~ threshold ~~of for~~ materiality with respect to the [actuarial services](#) ~~should not be~~ greater than the [entity](#)'s threshold of materiality for its [IFRS S2](#) disclosures.
- e.b. ~~Materiality should be assessed both from the perspective of absolute projected impact and from the perspective of the projected impacts versus the impacts that a reasonably informed third party might expect. For example, material information might include a situation where a high impact is anticipated for carbon emissions, but a low impact is projected, so that this apparent~~

² Knowledge of Relevant Circumstances

³ Materiality

~~discrepancy should be explained.~~

2.2.2. In all following paragraphs of this ISAP, any use of “material” or “materiality” is with respect to the actuarial services carried out in accordance with this ISAP.

2.3. Proportionality – In applying ISAP.1 paragraph 1.5.,⁴ and in particular paragraph 1.5.2., the actuary should take into account materiality. In addition, the degree of refinement in specific assumptions or methods recommended by the actuary should be proportionate to the ~~uncertainties and the~~ potential impact on the results of the actuarial services. For example:

- The greater the entity’s exposure to climate-related risks or climate-related opportunities, the more likely it is that a more sophisticated form of climate-related scenario analysis will provide more useful disclosures.
- The greater the uncertainty in the underlying data and assumptions, the less likely that increasing the sophistication in the analysis will provide more useful disclosures.

2.4. Use of Other Party Expertise and Data

2.4.1. Work to support climate-related disclosures may involve significant reliance on information provided by other parties. This may include the use of the following:

- Others’ data;
- ~~Data from parties other than the entity;~~
- Opinions and supporting analyses of other professionals and experts; and
- Inputs and outputs from climate science, energy systems, socio/, and macroeconomic models, and the assumptions and methodologies underpinning these models.

The actuary should treat such reliance as being subject to ISAP.1, paragraph 2.3.⁵

2.4.2. In reference to ISAP.1 paragraph 2.3., in situations of particular climate-related disclosure work in which it is the actuary who selects the party on whom to rely, the actuary should ~~, to the extent practicable:~~

~~a. Identify and evaluate the pertinent criteria the party has adopted to select its sources of data, assumptions, and/or models.~~

~~a.b. Identify and assess the extent to which it is appropriate to rely on the party’s:~~

~~i. Data;~~

~~ii. Assumptions; and/or~~

~~i-iii. Models (e.g., climate science; energy systems; socio/macro-economic; catastrophe); and/or.~~

~~ii. Data; and/or~~

~~iii. Assumptions.~~

⁴ Reasonable Judgment

⁵ Reliance on Others

- b. ~~—~~ Maintain awareness of the evolving sources of data, assumptions, and models in the marketplace from which to choose.
- c. ~~Identify and evaluate the pertinent criteria the party has adopted to select its sources of data, assumptions, and/or models.~~

2.5. Error! Reference source not found.Error! Reference source not found.Error! Reference source not found. **Preparation of Climate-Related Disclosures**

For ease of reference, the section headings and topic order for this section 2.5. align with the section headings and topic order in IFRS S2. References to the relevant IFRS S2 paragraphs are also included.

2.5.1. Governance (IFRS S2 paragraphs 5-7) – Where the actuary is performing work for the principal to prepare, provide input to, or review disclosures with respect to the entity's governance processes, controls, and procedures the entity uses to monitor, manage, and oversee climate-related risks and opportunities, the actuary should consider how climate-related risks and opportunities:

- Affect understand the entity's business model, value chain, financial circumstances; and
- financial circumstances ~~Are reflected and considered in the entity's~~, risk appetite framework, ~~and the commercial environment in which it is operating.~~

2.5.1.2.5.2. Strategy (IFRS S2 paragraphs 8-9) – Where relevant, the entity's strategy to manage climate-related risks and opportunities should be considered in performing the climate-related disclosure work and incorporated into the work.

When the entity's disclosed strategy to manage climate-related risks and opportunities ~~affects~~ impacts the work being performed by the actuary and the actuary assesses the disclosed strategy and/or its effects on the work as not reasonable, the actuary should engage with the principal and/or the entity to resolve the material issues, and should disclose any unresolved concerns in their report to the principal on the work performed.

2.5.2.2.5.3. Climate-Related Risks and Opportunities (IFRS S2 paragraphs 10-12) –

When the actuary is performing work for the principal to prepare, provide input to or review disclosures with respect to the climate-related risks and opportunities that could reasonably be expected to affect the entity's prospects, the actuary should consider :

- a. ~~Whether The breadth of~~ the risks and opportunities identified by the entity that may apply are sufficiently broad in scope;
- b. The appropriateness of and uncertainties related to the appropriate time horizons and projected effects for the risks and opportunities; and
- e. ~~—~~ The significant ~~key~~ risks and opportunities that the actuary is aware of and/or is aware that other similar entities have disclosed; ~~and~~
- d.c. ~~The appropriateness and uncertainty of the projected impacts for the risks and opportunities.~~

2.5.3.2.5.4. Business Model and Value Chain (IFRS S2 paragraph 13) – When the actuary is performing work for the principal to prepare, provide input to, or review disclosures with respect to the current business model and anticipated effects value chain impacts of climate-related risks and opportunities on the entity's business

model and value chain, the actuary should consider the projected effect~~impact~~ of the entity's strategy to manage these risks.

2.5.4-2.5.5. Strategy and Decision-Making (IFRS S2 paragraph 14) – When the actuary is performing work for the principal to prepare, provide input to, or review disclosures with respect to the effects of climate-related risks and opportunities on strategy and decision making, the actuary should consider:

- a. The climate-related risk mitigation and adaptation strategies and the projected effects~~impacts~~ of such strategies incorporated into the entity's strategy to manage climate-related risks and opportunities; and
- b. Where an entity has climate-related targets and a plan to achieve these targets that are incorporated into the entity's strategy to manage climate-related risks and opportunities, the reasonableness and sensitivities of the significant assumptions incorporated into the plans to achieve the targets.

2.5.5-2.5.6. Financial Position, Financial Performance, and Cash Flows (IFRS S2 paragraphs 15-21) – When the actuary is performing work for the principal to provide input to disclosures required by an entity under IFRS S2 with respect to required quantitative information about the entity's financial position, financial performance, and cash flows:

- a. Where quantitative information is to be provided for the anticipated future effects of climate-related risks and opportunities, the actuary should provide range estimates reflecting the degree of measurement uncertainty and/or limitations associated with the data, assumptions, and models used for the quantitative information wherever feasible unless:
 - i. The principal requires point estimates; or
 - ii. The actuary believes providing a point estimate range would be more appropriate than providing a range of estimates inappropriate and discloses this opinion with the supporting rationale.
- b. In constructing models and performing analyses to determine the current or anticipated financial impact of the effects of climate-related risks and opportunities on the entity, the actuary should, where possible and meaningful, undertake this work in a manner that:
 - i. Allows the effect impacts of each individual climate-related risks and opportunities opportunity to be separably identifiable ~~where possible and meaningful~~; and
 - ii. Supplements the approach in 2.5.6.b.i with a view on the collective effect of groups of risks and opportunities; and
 - iii. Allows the effect impacts of climate-related risks and opportunities to be separated into the entity's adopted, short-term, medium-term, and long-term time horizons impacts where possible and meaningful.
- c. The actuary should assess and document the level of measurement uncertainty in the quantitative information provided on the effects of climate-related risks and opportunities. Such assessments should include the key sources of uncertainty and may be based on quantitative and/or qualitative analysis.

- d. Notwithstanding that the assessment of whether quantitative information is useful for disclosure is the responsibility of the entity, the actuary should provide the quantitative information to the principal along with the assessment of measurement uncertainty to help the entity to make this assessment, even where measurement uncertainty is high.
- ~~e. If asked to provide an opinion on whether the level of measurement uncertainty of quantitative information is so high that the resulting information would not be useful, a rationale should be provided for that opinion. Considerations in making this assessment should include:~~
- ~~i. The degree of statistical bias and/or inconsistency inherent in the calculation of the quantitative information;~~
 - ~~ii. Whether the modeling performed to produce the quantitative information is able to take into consideration the requirements of this standard;~~
 - ~~iii. Whether disclosure of specific limitations in the calculations would increase the usefulness of the disclosure of the financial information; and~~
 - ~~iv. If there is reason to believe that disclosure of the financial information would be misleading to users of the financial information.~~
- ~~f.e.~~ Where the actuary provides only qualitative information rather than quantitative information about the current or anticipated financial ~~on the effects of~~ climate-related risks and opportunities on the entity, the actuary should provide the rationale for providing only qualitative information.
- ~~g.f.~~ Where the actuary is performing work for the principal to review disclosures with respect to ~~required~~ quantitative information about the current or anticipated financial effects of climate-related risks and opportunities on the entity, the actuary should consider the relevant aspects of the above consideration (2.5.6.a., ~~fe.~~) in their review assessment.

~~2.5.6-2.5.7.~~ Climate Resilience (IFRS S2 paragraphs 22-23) – When the actuary is performing work for the principal on climate-related scenario analysis to assess climate resilience, the actuary should have regard to the circumstances of the entity (IFRS S2 paragraphs B2-B3 and B13):

- a. ~~When In~~ advising the principal ~~or the entity~~ on selecting or designing the scenarios, or performing a review of the scenarios proposed, the actuary should consider factors such as the following:
 - i. Application of a broad range of scenarios capturing different plausible pathways for future climate-related transition risks and climate-related physical risks, including considering:
 - A scenario aligned with the ~~The~~ latest international agreement on climate change and relevant national strategies;
 - ~~o~~Other relevant published scenarios from reputable bodies; and
 - Use of scenarios that capture different carbon net-zero transition pathways, taking into consideration different emission, socioeconomic, political, and technological pathways.
 - ii. ~~When In~~ using published scenarios:

- The level of relevance of such scenarios to the actuary's work; and
 - ~~Any material limitations and uncertainties of the published scenarios used, including when applying them to the entity. For example, considering whether there are reasonably foreseeable scenarios that may generate more adverse effectsimpacts to the entity than the range of effectsimpacts indicated in the published scenarios; and~~
 - ~~Disclosure of any material limitations and uncertainties when communicating outputs to the principal or users of the work.~~
- iii. The characteristics of climate change scenarios, including the following:
- Plausible variations in assumptions that could significantly affect future climate-related exposures;
 - The long-term nature of climate change where material risk exposures could emerge over time;
 - Interdependencies and interconnections between climate-related risks and other risks;
 - Potential for the advance of, and/or perception of, climate change to generate disruption ahead of longer-term effectsimpacts;
 - Potential non-linear effectsimpacts and feedback loops between different risk drivers; and
 - Implications of climate system tipping points.
- iv. Materiality for the entity's different time horizons (short term, medium term, long term).
- v. ~~Alignment of the scenario model to the risk profile of the entity.~~
- vi. The circumstances of the entity (IFRS S2 paragraphs B2-B3 and B13)
- vii. ~~Disclosure of any material limitations and uncertainties when communicating outputs to the principal or users of the work.~~
- b. When advising the principal or the entity on the modelling and outcome of the financial impact of the scenarios, or performing a review of the modelling and outcomes, the actuary should consider factors such as the following:
- i. The appropriate evaluation tools and metrics to assess the effectsimpacts on the financial position (effectimpact on assets and liabilities), financial performance (profitability), and cash flows as outlined in IFRS S2 paragraph 15;
 - ii. The type of climate-related scenario analysis to be performed (for example, quantitative or qualitative);
 - iii. Whether the starting point for model projections reflect current conditions and scientific consensus around climate change;
 - iv. The appropriate application of stress testing (for example, one-time versus recurring shocks);

- v. The ~~effect~~~~impact~~ of management actions under the scenarios;
- vi. ~~Model~~ limitations around ~~data~~~~inputs~~, assumptions, and/or ~~model~~ methodology;
- vii. Reliance on third-party ~~data~~, ~~assumptions~~, and/or ~~models~~;
- viii. Understanding the interconnectedness between multiple ~~models~~;
- ix. Ensuring that related assumptions across different ~~models~~ are consistent;
- x. The ability of the outputs from modeling to distinguish between ~~climate-related risk~~ drivers versus other risk drivers;
- xi. Ensuring the modeling of financial ~~effects~~~~impacts~~ is performed at a sufficiently granular level; ~~and~~
- xii. The need to identify and develop additional assumptions necessary for the entity; and
- ~~xii-xiii.~~ Disclosure of any material limitations and uncertainties when communicating outputs to the principal or users of the work~~Any material limitations in the modelling or outcomes and how to disclose them.~~

2.5.7-2.5.8. Risk Management (IFRS S2 paragraphs 24-26) – Where an ~~actuary~~ is ~~performing work for providing input to the principal entity~~ to prepare disclosures on the processes and related policies the ~~entity~~ uses to identify, assess, prioritize, and monitor ~~climate-related risks and opportunities~~, or is performing a review of these disclosures, the ~~actuary~~ should include in the aspects considered:

- a. The ~~entity~~'s tolerance for ~~climate-related risks~~ including how ~~climate-related risks~~ compare in magnitude against the ~~entity~~'s wider risks over different time horizons.
- b. The extent and effectiveness of ~~climate -related scenario analysis~~ including:
 - i. The extent to which scenario modeling is integrated into the overall risk assessment processes performed within the ~~entity~~;
 - ii. Any limitations of the ~~entity~~'s ~~climate-related scenario analysis~~, and the activities the ~~entity~~ is taking to address the limitations; and
 - iii. The extent to which the limitations of the ~~entity~~'s ~~climate-related scenario analysis~~ including any modelling limitations have been disclosed.
- c. How the ~~entity~~ monitors its current and ~~anticipated expected future~~ exposures to ~~climate-related risks~~ against its tolerance for ~~climate-related risks~~.

2.5.8-2.5.9. Metrics and Targets (IFRS S2 paragraphs 27-~~28~~~~37~~) – When performing ~~work~~ on climate-related ~~emissionsemission metrics~~, the ~~actuary~~ should be aware of common industry-wide climate-related emissions metrics and measurement approaches and should disclose if the metrics and measurement approaches used in the ~~actuarial services~~ deviate from common practice in the industry.

2.6. Considerations for Pension Funds

As there is no specific reference to pension funds in ~~IFRS S2~~, ~~the actuary advising a pension fund on IFRS S2 should consider the relevant guidance in IFRS S2 applicable to commercial banks, asset managers, and insurers.~~ when applicable to the engagement, the actuary should

~~consider the requirements in the Industry-Based Guidance on Implementing Climate-Related Disclosures, specifically Volume 15—Asset Management & Custody Activities, when applying IFRS S2 to a pension fund.~~

Final Review Draft

Section 3. Communication

3.1. Reporting to Principal – In addition to complying with [ISAP.1](#) Section 3. [Communication](#), ~~and satisfying reporting requirements in IFRS S2~~, the [actuary](#) should provide to the [principal](#), when appropriate to the engagement, the following:

- 3.1.1. For the effects of [climate-related risks and opportunities](#) on the [entity](#)'s financial position, financial performance, and cash flows, the following items:
 - a. Disclosure of the current and anticipated effects consistent with the scope of the assignment;
 - b. Disclosure of any limitations or known omissions in how current or anticipated effects of [climate-related risks and opportunities](#) are reflected in the analysis or disclosure information provided;
 - c. Where quantitative information is not provided, disclosure of the rationale for not providing quantitative information (see 2.5.6.f.);
 - d. Where quantitative information is provided as a point estimate only, disclosure of the rationale for not providing a range of ~~effects~~[impacts](#) (see 2.5.6.a.ii.); ~~and~~
 - ~~e. Where quantitative information is provided, disclosure of the level of uncertainty in the analysis or disclosure information provided, including the key sources of uncertainty (see 2.5.6.c., d.); and~~
 - ~~f.e. Where an opinion is provided on whether the level of measurement uncertainty of quantitative information is so high that disclosing such information would not be useful, disclosure of the rationale supporting the opinion (see 2.5.6.e.).~~
- 3.1.2. For [climate-related scenario analysis](#), the following items:
 - a. Disclosure of how the analysis has been conducted, including scope, methodology, time horizons used, selection of scenarios, [data](#) and assumptions;
 - b. Disclosure of the results of the [climate-related scenario analysis](#);
 - c. Disclosure of any limitations or known omissions in the analysis provided;
 - d. Discussion of key sources of uncertainty; and
 - e. Disclosures of the extent to which the scenarios selected do not include a scenario aligned with the [latest international agreement on climate change](#) or have departed from those outlined by relevant reputable bodies (~~e.g., IPCC – Intergovernmental Panel on Climate Change~~) and the rationale for such departures (see 2.5.7.a.iii.).
- 3.1.3. For climate-related emissions calculations, in disclosing the metrics and measurement approaches used, the [actuary](#) should disclose if they believe the metrics and measurement approaches used deviate from common practice in the industry (see 2.5.9.).
- 3.1.4. For all disclosure [work](#) performed, a summary of any un-resolved concerns regarding the incorporation of the [entity](#)'s strategy into the [work](#), including but not limited to the [entity](#)'s identification of [climate-related risks and opportunities](#), (see 2.5.3.), the portrayal of the [entity](#)'s [business model](#) and [value chain](#), (see 2.5.4.) and the [entity](#)'s strategies to manage [climate-related risks and opportunities](#) (see 2.5.5.).
- 3.1.5. For all disclosure [work](#) performed, a summary of the reliance on other party

expertise, [data](#), [assumptions](#) and [models](#) (see 2.4), -including the nature and extent of the reliance, the steps, if any, that were taken to determine the appropriateness of such expertise, [data](#), [assumptions](#) and [models](#), and any known gaps or concerns with respect to the other party expertise, [data](#), [assumptions](#) and [models](#) (see 2.4).

Final Review Draft