
ISSB Meeting

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This paper has been prepared for discussion at a public meeting of the International Sustainability Standards Board (ISSB). This paper does not represent the views of the ISSB or any individual ISSB member. Any comments in the paper do not purport to set out what would be an acceptable or unacceptable application of IFRS[®] Sustainability Disclosure Standards. The ISSB's technical decisions are made in public and are reported in the ISSB *Update*.

Objective

1. This paper continues the International Sustainability Standards Board's (ISSB's) redeliberations of the proposed requirements set out in paragraph 21(a) of [Draft] IFRS S2 *Climate-related Disclosure* ([draft] S2) for an entity to disclose its Scope 1, Scope 2 and Scope 3 greenhouse gas (GHG) emissions generated during the reporting period. In particular, this paper addresses the following matters:
 - (a) disclosure of GHG emissions intensity for all Scopes;
 - (b) disclosure of GHG emissions by its constituent gases for all Scopes;
 - (c) inputs used to measure GHG emissions, including global warming potential (GWP) and emission factors; and
 - (d) disclosure of market-based and location-based Scope 2 GHG emissions.
2. The objective of this paper is to provide:
 - (a) a summary of the feedback received in comment letters and outreach on the proposals related to the matters described in paragraph 1; and
 - (b) the staff's analysis and to **seek decisions from the ISSB** on the staff's recommendations.
3. This paper builds upon previous redeliberations by the ISSB on various aspects of the proposed GHG emissions requirements. For the purpose of this paper, the staff plans to limit the scope of the discussion to the matters described in paragraphs 1–2. This paper complements Agenda Paper 4B: *Climate-related Disclosures—Scope 3 greenhouse gas emissions*.

Summary of staff recommendations

4. The staff recommends that the ISSB:
 - (a) **remove** the proposed requirement to disclose emissions intensity from paragraph 21(a)(ii) of [draft] S2.
 - (b) **confirm** that disclosure of GHG emissions is not explicitly required to be disaggregated by constituent gases.

- (c) **introduce** a requirement for entities to use GWP values based on the latest Intergovernmental Panel on Climate Change (IPCC) assessment.
- (d) **introduce** a requirement for entities to disclose information that enables users of general purpose financial reporting to understand the inputs, assumptions and estimation techniques an entity has used to measure its GHG emissions and why these inputs, assumptions and estimation techniques are relevant to its GHG emissions. As part of this, the staff recommends that the ISSB require an entity to also disclose information about changes in the estimation techniques or significant assumptions made during the reporting period.
- (e) **clarify** that entities are required to disclose their Scope 2 GHG emissions based on both a market-based and location-based approach.

Structure of the paper

- 5. This paper is structured as follows:
 - (a) background (paragraphs 6–21);
 - (i) summary of proposals in [draft] S2 (paragraphs 6–7);
 - (ii) summary of ISSB decisions in October 2022 (paragraphs 8–11);
 - (iii) summary of responses (paragraphs 12–21);
 - (b) staff analysis and recommendations (paragraphs 22–55); and
 - (c) questions for the ISSB (paragraphs 56).

Background

Summary of proposals in [draft] S2

- 6. In March 2022, the Chair and Vice-Chair published [draft] S2, setting out proposed requirements for the disclosure of climate-related information including the disclosure of Scope 1, Scope 2 and Scope 3 GHG emissions generated during the reporting period.
- 7. Specifically, paragraph 21(a)(i)–(vi) of [draft] S2 proposes that an entity disclose:
 - (a) its absolute gross GHG emissions, classified as Scope 1, Scope 2 and Scope 3, generated during the reporting period, measured in accordance with the Greenhouse Gas Protocol: *A Corporate Accounting and Reporting Standard* (the GHG Protocol *Corporate Standard*), expressed as metric tonnes of CO₂ equivalent (CO₂e);
 - (b) the intensity of each GHG emissions Scope, expressed as metric tonnes of CO₂e per unit of physical or economic output;
 - (c) its Scope 1 and Scope 2 GHG emissions separately for the consolidated accounting group and unconsolidated investees (associates, joint ventures, unconsolidated subsidiaries or affiliates not included in the consolidated accounting group);
 - (d) the approach it used to include GHG emissions for those unconsolidated investees based on the GHG Protocol *Corporate Standard*;

- (e) the reasons for that approach and how they relate to the disclosure objective for the metrics and targets requirements ([draft] S2 paragraph 19); and
- (f) further information about the measurement of its Scope 3 GHG emissions.

Summary of ISSB decisions in October 2022

8. In its October meeting, the ISSB discussed several staff recommendations associated with the proposed requirements on the disclosure of GHG emissions including the basis for measurement. Specifically in relation to Scope 1 and Scope 2, the ISSB decided to proceed with the proposed requirements for an entity to disclose:
 - (a) its absolute gross GHG emissions generated during the reporting period, expressed as metric tonnes of CO₂e, for its Scope 1 and Scope 2 GHG emissions;
 - (b) the approach it used to include its Scope 1 and Scope 2 GHG emissions for the unconsolidated investees (ie associates, joint ventures, unconsolidated subsidiaries or affiliates not included in paragraph 21(a)(iii)(1) of draft S2); and
 - (c) the reason, or reasons, for the entity's choice of approach required by paragraph 21(a)(iv) of draft S2, and how that relates to the disclosure objective in paragraph 19 of draft S2.
9. Furthermore, the ISSB decided to proceed with, but clarify, the proposed requirements for an entity to disclose its Scope 1 and Scope 2 GHG emissions disaggregated by for:
 - (a) the consolidated accounting group (ie the entity's parent and its subsidiaries); and
 - (b) the unconsolidated investees.
10. The ISSB also made decisions with regards to the proposed requirements for Scope 3 GHG emissions, which are summarised in Agenda Paper 4B: *Climate-related Disclosures—Scope 3 greenhouse gas emissions*.
11. This paper focuses on additional recommendations that address specific feedback received during the comment period.

Summary of responses

12. The following summary of responses provides further detail to the summary provided in the [Agenda Paper 4A Climate-related Disclosures —Summary of comments](#) at the September 2022 ISSB meeting.

Scope 1, Scope 2 and Scope 3 GHG emissions intensity disclosures

13. There was not a specific question in the Invitation to Comment of [draft] S2 on GHG emissions intensity. Therefore, only a few respondents provided feedback with regards to GHG emissions intensity. These few respondents provided mixed feedback on the GHG emissions intensity disclosure. Because of the limited and diverging feedback to the consultation, the staff has also conducted targeted outreach with users of general purpose financial reporting to understand the relevance and decision-usefulness of the disclosure and the challenges, as well as with preparers to understand current disclosure practices. The staff has learned that the preferred denominators by users for the calculation of GHG emissions intensity are revenue or a physical output metric.

Furthermore, the staff found that users often prefer to calculate intensity metrics themselves or obtain this information from a third-party data provider.

Disaggregation of gases for Scope 1, Scope 2 and Scope 3 GHG emissions

14. Many respondents agreed that disclosing an aggregated total of all seven greenhouse gases for Scope 1, Scope 2, and Scope 3 GHG emissions, expressed in CO₂e, is sufficiently decision-useful to users of general purpose financial reporting and cost-effective for preparers.
15. However, among those who agreed, most respondents further suggested that disaggregation may be helpful in the following situations:
 - (a) if there are sector-specific requirements, for example methane emissions in the oil and gas industry; and
 - (b) if information about a specific component gas is material or if there is a significant portion from gases other than CO₂.
16. Some respondents, notably policymakers and respondents from North America, said they prefer disaggregated disclosure of component gases if the data is readily available, since each gas has a different lifetime and impact in the atmosphere.
17. Some users of general purpose financial reporting said that disaggregated data would help users assess and manage the unique risk-return profile associated with different gases, including exposure to regulations that limit specific gas emissions.

Inputs to measure Scope 1, Scope 2 and Scope 3 GHG emissions

18. As part of question 9(c) in the consultation about the requirement to use the GHG Protocol to define and measure Scope 1, Scope 2 and Scope 3 GHG emissions, a few respondents provided feedback on the use of inputs such as GWP and emission factors.
19. Of those that provided feedback on GWP, many respondents asked the ISSB to require a standardised GWP to be used in an entity's calculation of Scope 1, Scope 2 and Scope 3 GHG emissions on a CO₂e basis, based on those defined by the IPCC.
20. Of those that provided feedback on emission factors and other inputs to measure Scope 1, Scope 2 and Scope 3 GHG emissions, most respondents asked the ISSB to require an entity to disclose the inputs, assumptions and approach used.

Market-based and location-based approaches for Scope 2 GHG emissions

21. There was not a specific question in the Invitation to Comment of [draft] S2 about the calculation methods for Scope 2 GHG emissions. However, some respondents requested further clarity as to whether entities would be expected to use a market-based or location-based approach to calculating Scope 2 GHG emissions. These respondents suggested the ISSB should explicitly require both market-based and location-based disclosure of Scope 2 GHG emissions.

Staff analysis and recommendations

Scope 1, Scope 2 and Scope 3 GHG emissions intensity disclosures

22. Paragraph 21(a)(ii) of [draft] S2 proposes that entities shall disclose GHG emissions intensity for each Scope, expressed as metric tonnes of CO₂e per unit of physical or economic output.
23. GHG emissions intensity disclosures are helpful to users of general purpose financial reporting as they normalise an entity's GHG emissions, enabling comparative analysis between different entities. A larger entity is likely to have higher GHG emissions, without that necessarily meaning that the entity is emitting more CO₂e than its competitor per unit of revenue or physical output. GHG emissions intensity disclosures are also used together with absolute GHG emissions disclosures for a more complete picture of an entity's GHG emissions profile over time. For example, an entity's absolute GHG emissions may be increasing with expanding operations, but the GHG emissions intensity may be falling (ie per unit of revenue or output, the entity is becoming more emission-efficient).
24. The staff notes that the combination of absolute GHG emissions and their intensity could provide mixed signals from an information perspective. In the example above, the entity's GHG emissions intensity is falling, but its absolute GHG emissions is increasing, which still presents risk to the entity (for example through current, or future, regulation). However, in this example, the disclosure of an entity's absolute GHG emissions may not communicate the effects an entity has achieved in reducing GHG emissions (as operations are expanding). As such, information about both an entity's absolute GHG emissions and GHG emissions intensity is useful in order to understand the related risks and opportunities.
25. The staff has learned, through the targeted outreach, that the preferred denominators by users of general purpose financial reporting for the calculation of GHG emissions intensity are revenue or a physical output metric. For example, GHG emissions intensity disclosures might include emissions per unit of revenue (eg tonnes of CO₂e per total \$m sales revenue) or emissions per tonne of steel for a mining company (eg tonnes of CO₂e per tonne of steel). [Draft] S2 does not specify a denominator to use for the disclosure of GHG emissions intensity. This is because it is difficult to prescribe one standardised approach that will be relevant to users—the relevant denominator will depend on several industry-specific characteristics, including an entity's business model as well as investor preferences. However, the comparability of these disclosures between entities can only be achieved if the denominator is consistent across entities. Therefore, not prescribing a denominator means comparability among entities may not be achieved.
26. Further research conducted by the staff confirmed that users of general purpose financial reporting often calculate intensity metrics themselves or obtain this information from a third-party data provider. This calculation is usually based on data that is already disclosed or will be required by S2. This includes:
 - (a) an entity's absolute gross GHG emissions, which the ISSB confirmed as a requirement of IFRS S2 in its October meeting;
 - (b) financial data already available in an entity's financial statement, which can be used to calculate economic output; and
 - (c) industry-based activity metrics which, in time, will be required as part of Appendix B industry-based requirements and initially will be available as examples of relevant disclosures when S2 is published.

27. The ISSB may wish to consider in the future to what extent the activity metrics in Appendix B could support calculations of an entity's GHG emissions intensity. This could include considering developing additional educational materials to illustrate how metrics included in Appendix B could be useful to assist users of general purpose financial information to calculate relevant intensity measures.
28. Based on the staff analysis, the staff observes that GHG emissions intensity disclosures are relevant to users of general purpose financial reporting when the denominator used in the calculation of these disclosures is consistent over time and across entities. However, it is challenging to prescribe one specified denominator that is relevant and will provide a faithful representation of an entity's GHG emissions intensity at a cross-industry level. Furthermore, based on current practice (ie users calculating the entity's GHG emissions intensity themselves or obtaining it from a third-party provider) the staff observes that this may not be necessary. In addition, arguably the most important piece of information necessary to facilitate the calculation of intensity measures is disclosure of absolute GHG emissions. The disclosure of absolute GHG emissions in accordance with [draft] S2 should enable users of general purpose financial reporting to conduct their own calculation of GHG emissions intensity when combined with other information.
29. **Therefore, the staff recommends that the ISSB remove the proposed requirement to disclose emissions intensity from paragraph 21(a)(ii) of [draft] S2.**

Disaggregation of gases for Scope 1, Scope 2 and Scope 3 GHG emissions

30. According to the United Nations Framework Convention on Climate Change (UNFCCC), and agreed upon as part of the Kyoto Protocol, there are seven gases that are collectively referred to as GHGs. These are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF₆) and nitrogen trifluoride (NF₃). Each gas contributes to climate change in different ways, and each has a different lifespan. When presenting data on these gases, it is common to convert each gas to a standardised metric – carbon dioxide equivalent (CO₂e) – to enable comparison and to determine their individual and total contributions to global warming.
31. [Draft] S2 proposes that Scope 1, Scope 2 and Scope 3 emissions disclosures be provided 'measured in accordance with the Greenhouse Gas Protocol *Corporate Standard*, expressed as metric tonnes of CO₂ equivalent'. [Draft] S2 does not propose that entities be required to disaggregate GHG emissions by each constituent gas.
32. In [draft] S2, the ISSB asked whether respondents agreed with the proposal that an entity be required to provide an aggregation of all seven GHGs, or whether GHG emissions should be disaggregated by constituent gas. The U.S. Securities and Exchange Commission (SEC)'s Proposed Rules included a requirement that entities disclose their emissions both disaggregated by each constituent greenhouse gas and in aggregate. The question of whether GHG emissions should be disaggregated by constituent gas was thus asked in the consultation of [draft] S2 to enable the ISSB to assess feedback on the matter from its stakeholders, in particular users of general purpose financial reporting, in the light of other proposed jurisdictional requirements. Due to the different characteristics of each gas (notably their contribution to climate change and different lifespans), some respondents noted that GHG emissions data disaggregated by each gas would be helpful. For example, there may be some instances where disaggregation by gas is important when non-CO₂ gas emissions are material for an entity. For example, Appendix B of [draft] S2 includes the disclosure of the percentage of gross global Scope 1 emissions from methane for Oil & Gas—Exploration & Production (Volume B11) As noted in Volume B11:

With natural gas production from shale resources expanding, the management of the emission of methane, a highly potent GHG, from oil and gas E&P systems has emerged as a major operational, reputational, and regulatory risk for companies.

33. Aside from these specific situations when disaggregation by gas could be important, it is not relevant in all instances. The staff notes that in these cases, the entity would not be required to disclose the breakdown, even if it is required, as all requirements are subject to materiality. However, similarly, when disaggregation is important, entities are still required to disclose the disaggregation of the relevant gases. Paragraphs 48-49 in IFRS S1 *General Requirements for Disclosure of Sustainability-related Financial Information Exposure Draft* ([draft] S1) describes requirements for the aggregation or disaggregation of relevant data. These paragraphs note (bold added for emphasis):

48. When applying this [draft] Standard and other IFRS Sustainability Disclosure Standards, an entity, after it has considered all relevant facts and circumstances, shall decide how to aggregate the information in its sustainability-related financial disclosures. **An entity shall not reduce the understandability of its sustainability-related financial disclosures by obscuring material information with immaterial information or by aggregating material items that are dissimilar.**

49. Information shall not be aggregated if doing so would obscure information that is material. Rather, aggregation and disaggregation shall be based on the characteristics of the sustainability-related risks and opportunities. Information shall be aggregated when it shares those characteristics and disaggregated when it does not share them. Information about sustainability-related risks and opportunities might need to be disaggregated, such as by geographical location or in consideration of the geopolitical environment. For example, to ensure that material information is not obscured, an entity might need to disaggregate disclosures about its use of water to distinguish between water drawn from abundant sources and water drawn from high-stress sources.

34. While there may be some instances when disaggregation of GHG emissions data by constituent gas would provide material information, these circumstances should be determined by the entity (as per paragraphs 48-49 in [draft] S1). As described above, in those instances S1 would in fact *require* disaggregation when providing only an aggregate measure obscures information material for investors. An entity could reference Appendix B of [draft] S2 to identify when the disaggregation of GHG emissions data is likely to be relevant.
35. **Therefore, the staff recommends that the ISSB confirm that disclosure of GHG emissions is not explicitly required to be disaggregated by constituent gas¹.** The staff will consider whether to include language in the IFRS S2 Basis for Conclusions noting that disaggregating gases may be necessary to provide material information and that Appendix B of S2 could be a useful reference to identify when the disaggregation of GHG emissions data is likely to be relevant. The staff will also consider during drafting, whether to include an explicit cross-reference to the aggregation and disaggregation paragraphs in [draft] S1.

Inputs to measure Scope 1, Scope 2 and Scope 3 GHG emissions

36. As discussed in Agenda Paper 4C *Climate-related Disclosures—Greenhouse gas emissions measurement methods*, while requiring the use of the GHG Protocol Standards as a common basis for measurement improves comparability by narrowing the range of possible measurement

¹ The reference to 'explicitly' acknowledges that the disaggregation requirements in S1 may result in an entity determining that disaggregation is necessary to provide material information to users of their information.

approaches, the GHG Protocol Standards (and other measurement methods) allow entities to make assumptions and choose particular inputs in their GHG emissions calculations. An entity can:

- (a) measure its GHG emissions through direct measurement and multiply that with its associated GWP; or
- (b) estimate its emissions by multiplying activity data with an emission factor and multiply that with its associated GWP.

37. [Draft] S2 does not specify which inputs preparers should use in their calculation of GHG emissions. Below, staff analyse these different inputs, to understand whether the ISSB can and should enhance comparability in the disclosure of an entity's GHG emissions.

Global warming potential

38. GWP values are multipliers applied to constituent GHGs (listed in paragraph 30) to convert them into a standardised metric (CO₂e) to facilitate comparative analysis of the different gases and to enable aggregation of the gases into absolute gross GHG emissions data across all seven GHGs. The most frequently used GWP values are defined by the IPCC and are redefined in the periodic IPCC assessment report to account for updated scientific understanding of the characteristics of each GHG and how they contribute to climate change. The latest GWP values are defined in the IPCC Sixth Assessment Report (IPCC AP6).

39. GWP values are intended to enable an entity to convert constituent greenhouse gases into a standardised metric. **Therefore, the staff recommends that the ISSB require an entity to use standardised GWP values in calculating its GHG emissions in CO₂e.** This will enhance the comparability of the disclosed GHG emissions information across entities. It will also result in information about GHGs that incorporates the most up-to-date scientific information about the contribution of the gases to climate change. As the most frequently used GWP values are derived from the IPCC assessment reports, the staff recommend that the ISSB introduce a requirement for entities to use updated GWP value based on the latest IPCC assessment (currently based on IPCC AP6).

Activity data and emission factors

40. Activity data is a quantitative measure of an entity's activity that results in GHG emissions. Emission factors are conversion factors that enable entities to convert activity data into GHG emissions. For example, when assessing the Scope 1 GHG emissions from an entity's delivery fleet, the entity may use fuel consumption data or the distance of the journey which is then converted to GHG emissions data using emission factors. Emission factors can be obtained through direct measurements (from activities in an entity's value chain as inputs to measure the entity's Scope 3 GHG emissions) or can be estimated based on a number of published sources, including the International Energy Agency (IEA) or jurisdictions where GHG emissions disclosure is mandatory.

41. As discussed in further detail in Agenda Paper 4B: *Climate-related Disclosure—Scope 3 greenhouse gas emissions*, the emission factors that are associated with the lowest measurement uncertainty are those that are as granular as possible and which best represent the activity the entity is using as its basis for measuring its GHG emissions. In the case of Scope 3 GHG emissions, this may be through direct measurement of emissions from activities in the value chain. Therefore, the staff does not believe that users of general purpose financial reporting will benefit from entities being required to use

specific emission factors as these may not be those most relevant given the entity's activities and their approach to measurement of emissions. Instead, users will benefit from preparers being able to select and use the most appropriate emission factors based on their activities.

42. **Therefore, the staff recommends that the ISSB introduce a requirement that an entity disclose information that enables users of general purpose financial reporting to understand the inputs, assumptions and estimation techniques an entity has used to measure its GHG emissions and why these inputs, assumptions and estimation techniques are relevant to its GHG emissions and provide a faithful representation.** This would require an entity to disclose information that enables users to understand the (measurement uncertainty of the) emission factors and activity data. For activity data, this could include information such as whether the activity data is based on economic or physical output and what the data represents (for example, for Scope 3 GHG emissions category 1, this could be quantities or units of goods or services purchased by the entity). For emission factors, this could include information such as the source of the data (for example, direct measurement, supplier-specific or industry-based) or the level of the data (for example, facility-level or corporate level).
43. The staff notes that the level of granularity of this disclosure will be subject to paragraph 49 in [draft] S1, and that entities would not be expected to disclose information about every input. Such a level of granularity would not only result in information being provided that is immaterial but also would risk obscuring information that is material. For example, when an entity measures its Scope 3 GHG emissions, it may use many different emission factors and activity data inputs in order to capture GHG emissions in different parts of the value chain.
44. **As part of this disclosure requirement, the staff recommends that ISSB specifically require an entity to disclose information about its inputs, assumptions and estimation techniques and changes in the estimation techniques or significant assumptions made during the reporting period and the reasons for those changes.** These disclosures would enable users of general purpose financial reporting to understand what changes an entity has made to estimation techniques and significant assumptions, and why. The staff considers this requirement particularly important with regards to Scope 3 GHG emissions disclosures as the estimation techniques used by preparers are still developing. When the staff was speaking to preparers as part of the targeted outreach, many were advancing their techniques and assumptions annually.
45. This is consistent with the approach taken by the International Accounting Standards Board (IASB) in IFRS 7 *Financial Instrument: Disclosures*, paragraph 35G(c) in relation to expected credit losses. Paragraph 35G of IFRS 7 requires an entity to 'explain the inputs, assumptions and estimation techniques used to apply the requirements in Section 5.5 of IFRS 9'. As part of this, 35G(c) requires an entity to disclose 'changes in the estimation techniques or significant assumptions made during the reporting period and the reasons for those changes'.
46. The staff considered an alternative approach not to introduce a requirement for an entity to disclose information about changes in the estimation techniques or significant assumptions made during the reporting period and the reasons for those changes. In this approach, the staff would have recommended clarifying, and potentially cross-referencing, to the requirements in paragraph 63-65 and paragraph 79 of [draft] S1 on comparative information. Paragraph 64 of [draft] S1 requires an entity to disclose 'comparative information that reflects updated estimates. When the entity reports comparative information that differs from the information reported in the previous period it shall disclose (a) the **difference between the amount reported in the previous period and the revised comparative amount**; and (b) **the reasons the amounts have been revised.**' However, this is

different to disclosing **information about changes in the estimation techniques or significant assumptions and the reasons for those changes**. Paragraph 79 of [draft] S1 requires that when a metric has significant estimation uncertainty it is identified and the sources and nature of the estimation uncertainty and the factors affecting the uncertainties are disclosed.

47. The staff notes that the general requirements in S1 noted above are derived from IFRS Accounting Standards. However, to ensure that appropriate disclosures are provided about important areas of measurement uncertain, explicit requirements that are tailored to the relevant Accounting Standard are typically included. This reflects the importance of the disclosure and facilitates more comparability in what is disclosed. In short, in the IFRS Accounting Standards it would be more usual for specific disclosures to be required when there is a high level of measurement uncertainty—this is reflected in the IFRS 7 reference above in the context of expected credit losses and is also true in IFRS 13: *Fair Value Measurement* (IFRS 13) and IFRS 17: *Insurance Contracts* (IFRS 17).
48. The information that an entity would be specifically required to disclose would benefit users of general purpose financial reporting as they are assessing how the entity measures, monitors and manages its GHG emissions-related risks and opportunities. Asking for this specific disclosure would also facilitate greater understanding by users about the way in which an entity has approached the measurement and also facilitate comparability in that differences in approach between entities and/or over time would be more readily apparent. For Scope 3 GHG emissions in particular, given the importance of the information, the measurement uncertainty and indeed the proposed measurement framework in Agenda Paper 4B: *Climate-related Disclosures—Scope 3 greenhouse emissions*, which uses a range of approaches to measurement, the staff recommend that the ISSB introduce the requirements in paragraph 42 and 44.
49. The staff notes that illustrative examples accompanying the disclosure requirements could be useful to support preparers in understanding the disclosure requirements and as a guide to the development of appropriate disclosures.

Market-based and location-based approaches for Scope 2

50. Respondent feedback to the consultation suggested a need for ISSB to clarify whether the entity was intended to disclose its Scope 2 GHG emissions based on a market-based and/or location-based approach. Users of general purpose financial reporting and other respondents favoured disclosure of both methods.
51. A market-based approach measures emissions from electricity that an entity has undertaken essentially as a result of contractual arrangements. It derives emission factors from contractual instruments, which include any type of contract between two parties for the sale and purchase of energy bundled with attributes about the energy generation, or for unbundled attribute claims. A location-based approach measures the average GHG emissions intensity of grids on which energy consumption occurs (using mostly grid-average emission factor data).
52. The two approaches are useful for different purposes. Together, they provide a fuller documentation and assessment of risks, opportunities, and changes to emissions from electricity supply over time. A location-based approach enables users of general purpose financial reporting to understand the risks and opportunities associated with local grid resources and GHG emissions, and a market-based approach enables users of general purpose financial reporting to understand the risks and opportunities conveyed by contractual relationships, and the procurement actions of an entity.

53. The GHG Protocol *Scope 2 Guidance* require that an entity disclose its Scope 2 GHG emissions both based on a location-based approach and a market-based approach, which furthermore is common practice amongst preparers today. According to the CDP Climate Change 2022 Questionnaire, nearly 50% of all entities that disclosed their Scope 2 GHG emissions as part of their climate change performance, report using both approaches. The prevalence of entities disclosing using both approaches vary by region, with Asian entities being more likely to disclose Scope 2 GHG emissions based on a market-based approach only. The staff also notes that variation exists within regions. For example, most Japanese entities disclose using both approaches, whereas most Indian entities disclose using market-based only.
54. Finally, the staff also notes that the [draft] European Sustainability Reporting Standards E1 (ESRS E1) paragraph 46(a)–(b) require an entity to disclose its Scope 2 GHG emissions base on a location-based and a market-based approach.
55. Based on the above analysis, in particular, because of the relevance of both approaches for users of general purpose financial reporting, **the staff recommend that the ISSB require entities to disclose Scope 2 GHG emissions based on both a market-based and location-based approach.**

Questions for the ISSB

56. The staff present the following questions for the ISSB.

Questions for the ISSB

1. Does the ISSB have any questions on the matters raised in this paper?
2. Does the ISSB agree with the staff recommendation to remove the requirement to disclose emissions intensity from paragraph 21(a)(ii) of [draft] S2?
3. In reference to disaggregation of GHG emissions by constituent gases, does the ISSB agree with the staff recommendations to confirm that disclosure of GHG emissions does not need to be disaggregated by constituent gases?
4. In reference to GWP values and emission factors, does the ISSB agree with the staff recommendations to introduce a requirement for entities:
 - (a) to use updated GWP values based on the latest IPCC assessment.
 - (b) to disclose information that enables users of general purpose financial reporting to understand the inputs, assumptions and estimation techniques an entity has used to measure its GHG emissions and why these inputs, assumptions and estimation techniques are relevant to its GHG emissions. As part of this, does the ISSB agree with the staff recommendations to introduce a requirement for entities to also disclose information about changes in the estimation techniques or significant assumptions made during the reporting period?

5. Does the ISSB agree with the staff recommendation to clarify that entities are required to disclose their Scope 2 GHG emissions based on both a market-based and location-based approach?