

Section 3

Proposed revisions to definitions and purpose of the location-based method and market-based method

18. Please provide any feedback on the proposal to refine the **definition of scope 2**, to emphasize its role within an attributional value chain GHG inventory and clarify that scope 2 must only include emissions from electricity generation processes that are physically connected to the reporter's value chain, excluding any emissions from unrelated sources?

Please note that feedback on specific changes to the location- and market-based method can be provided in sections 4 and 5.

(<300 words)

The proposed revisions to emphasise the attributional nature of scope 2 accounting and the requirement for physical deliverability are in line with the objective of the GHG Protocol standard and guidance to help companies prepare a GHG inventory that represents a true and fair account of their emissions, through the use of standardised approaches and principles.

However, it is unclear what the specification to "exclude any unrelated emissions" is meant to address, as it is intuitive not to include any unrelated emissions in the first place.

19. Please provide any feedback on the proposed clarification to the **LBM definition** to reflect scope 2 emissions from generation physically delivered at the times and locations of consumption, with imports included in LBM emission factor calculations where applicable?

Please note that feedback on specific changes to the location-based method can be provided in section 4.

(<300 words)

Based on the proposed revisions, in addition to consumption-based factors, production-based factors, which do not account for imported and exported power between regions, are permitted under the location-based emission factor hierarchy. Therefore, mentioning the inclusion of imports in LBM emission factor calculations might create confusion.

20. Please provide any feedback on the proposal to clarify the **MBM definition** to retain its existing basis, quantifying Scope 2 from contractually purchased electricity via contractual instruments, while specifying temporal correlation and deliverability when matching instruments to consumption?

Please note that feedback on specific changes to the market-based method can be provided in section 5.

(<300 words)

The proposal to clarify the MBM definition does not appear inappropriate.

21. Please provide any feedback on the proposed purposes of the location-based method.

Please note that feedback on specific changes to the location-based method can be provided in section 4.

(<300 words)

GHG Protocol should take the opportunity to briefly explain in its purpose why both the LBM and MBM are required, e.g. section 4.3 of the GHG Protocol Scope 2 Guidance, and could be misleading if either is disclosed in isolation. This is relevant to understanding the purposes of both LBM and MBM.

Improving comparability – Both the LBM and MBM seek to improve the comparability of what they aim to measure. It is unclear why this is an objective of the LBM, but not the MBM, and more clarification is required.

22. Please provide any feedback on the proposed purposes of the market-based method.

Please note that feedback on specific changes to the market-based method can be provided in section 5.

(<300 words)

GHG Protocol should take the opportunity to explain in its purpose why both the LBM and MBM are required, e.g. section 4.3 of the GHG Protocol Scope 2 Guidance, and could be misleading if either is disclosed in isolation. This is relevant to understanding the purposes of both LBM and MBM.

Improving comparability – Both the LBM and MBM seek to improve the comparability of what they aim to measure. It is unclear why this is an objective of the LBM, but not the MBM, and more clarification is required.

Section 4

Location-based method

23. On a scale of 1 - 5, do you support the update to the location-based emission factor hierarchy *to identify the most precise location-based emission factor accessible according to spatial boundaries, temporal granularity, and emission factor type (consumption or production)?*

Please note this question only relates to the structure of the hierarchy, subsequent questions will address its intended use.

1 - No Support, 2 - Little Support, 3 - Neutral, 4 - General Support, 5 - Full Support

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24. Please provide your reasons for support, if any.

Select all options that apply

- ☐ Agree that guidance on selecting location-based emission factors should be presented as a hierarchy
- ☐ Enhances the accuracy and relevance of the location-based method
- ☐ Enables use of emission factors that support abatement planning and target-setting.
- ☒ Improves use of location-based method to provide risk and opportunity assessment related to consumption of grid electricity.
- ☐ Aligns with emission factors used by your organization for location-based emissions reporting
- ☐ Aligns with emission factors used for mandatory or voluntary reporting in your region
- ☐ Prioritizes consumption-based factors that include imports/exports over production-based factors.
- ☒ Clarifies application of the EF hierarchy (spatial > temporal > consumption-based > production-based)
- ☐ Agree with listing the most precise temporal granularity as "hourly"

- ☐ Agree with listing the most precise spatial boundary as "local boundary"
- ☐ Agree that the proposed spatial boundaries reflect electricity deliverability in your region
- ☐ Other (please provide)

25. Please provide comments regarding your reasons for support.

In general, the update would increase the accuracy of LBM results and provide additional clarity and standardisation over which emission factors to use to calculate scope 2 emissions consistently and comparably using LBM.

26. Please provide your concerns or reasons for why you are not supporting, if any.

Select all options that apply

- ☐ Prefer guidance on selecting location-based emission factors to be identified as a single globally applicable option to increase comparability
- ☒ Concern about increased administrative burden and complexity from identifying the most precise emission factors accessible
- ☐ Concern that the most precise temporal granularity "hourly" is too detailed
- ☐ Concern that the most precise spatial boundary, "local boundary", is too narrow
- ☐ Concern that the proposed spatial boundaries do not reflect electricity deliverability in your region
- ☐ Concern hierarchy does not align with emission factors used by your organization for location-based emissions reporting
- ☒ Concern hierarchy does not align with emission factors used for mandatory or voluntary reporting in your region
- ☐ Prefer a different order (e.g., consumption-based first, then spatial boundary, then temporal granularity)
- ☐ Unclear how the changes will affect your GHG emissions reporting



Other (please provide)

27. Please provide comments regarding your reasons for why you are not supporting (if any).

The more precise the temporal granularity emission factors identified, the more complex it becomes to calculate scope 2 emissions using the LBM. The difficulty is further compounded for entities with global operations, where subsidiaries may have access to emission factors of varying levels of precision. We anticipate that entities may struggle with the infrastructure and resources needed to implement these proposed revisions effectively.

IFRS S2 Climate-related Disclosures, which is adopted or in the process of being adopted by several jurisdictions including Singapore, currently requires the entity to measure its GHG emissions in accordance with the 2004 edition of the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard. The differences in calculation methods in the 2004 edition and proposed revisions could result in unnecessary duplicative reporting. The proposed revisions in this public consultation also stand the risk of not being adopted at a meaningful scale if jurisdictions mandate their entities to adopt the IFRS Sustainability Disclosure Standards but not the GHG Protocol.

Information availability is highly dependent on the suppliers. We anticipate that availability of the required information, e.g. hourly emission factors and consumption-based factors, would be very limited in many jurisdictions, hence hindering the effective implementation of the proposed revisions.

Furthermore, for entities without significant scope 2 emissions exposure, collecting more granular data may not yield the same level of benefits. Using the most precise factors may be overly narrow and introduce additional complexity without proportionate gains in representativeness. Mandatory use of newly available but less representative "local" datasets could also introduce volatility without improving decision-usefulness, so the hierarchy may be better applied as guidance.

28. For different views on the order the hierarchy should be applied (e.g. preference for consumption-based emission factors, then spatial boundary, then temporal granularity) please explain the preferred order.

Please enter at most 4000 characters

29. Regarding regions that you operate in or have experience in, please provide comments on whether the LBM emission factor hierarchy allows you to identify an accessible emission factor that appropriately reflects how electricity is delivered in that region.

Please clearly identify the region you are referring to in your answer

To our understanding, there are the following options in Singapore:

- Singapore Emission Factors Registry, a reference point for localised emission factors data for Singapore
- Grid Emission Factor (GEF) published by Singapore's Energy Market Authority (EMA) which measures the average CO2 emissions emitted per unit of net electricity generation in the system by all grid-connected power units

We understand these emission factors to correspond to annual, production-based emission factors in the proposed location-based emission factor hierarchy (page 10).

30. Regarding regions that you operate in or have experience in, please provide comments on whether the LBM emission factor hierarchy is likely to cause any region-specific challenges in its application.

Provide specific examples, and clearly identify the region you are referring to in your answer

Information availability is highly dependent on the suppliers. There is a current lack of hourly or monthly consumption-based emission factors, which are the emission factors highest in the hierarchy, for the region. In addition, the entities' current infrastructure may not be ready to collect hourly activity data.

31. Do you agree that "local boundary" should be listed as the most precise spatial boundary for LBM emission factors? If not, select which should be listed as the most precise spatial boundary?

- ☒ Yes, I support local boundary as the most precise spatial boundary
- ☐ No, a more precise spatial boundary should be added
- ☐ No, a less precise spatial boundary should be used. Use Operational grid boundary
- ☐ No, a less precise spatial boundary should be used. Use Grid-wide or national boundary
- ☐ Other (describe)

32. If you selected "Other" in question 31, please describe

Please enter at most 4000 characters

33. Should the LBM emission factor hierarchy be adjusted to include the deliverable market boundaries outlined in the proposed *MBM Methodologies for demonstrating deliverability* where they do not already overlap? If so, should they be included in addition to, or as a replacement for, the spatial boundaries currently proposed in the hierarchy?

- ☒ No, different spatial boundaries are appropriate for the location-based and market-based methods
- ☐ Yes, include the MBM deliverability market boundaries in addition to the proposed LBM hierarchy (*explain why they should be added*)
- ☐ Yes, include the MBM deliverability market boundaries as a replacement for the proposed LBM hierarchy (*explain why they should replace the current hierarchy*)
- ☐ Other (explain)
- ☐ Do not support boundaries as proposed in either method (*explain alternative boundaries for the location-based emission factor hierarchy and how they support integrity, impact, and feasibility for a value chain inventory*)

34. Please provide additional explanations or further details regarding your answer to question 33

The use of different spatial boundaries is appropriate for the different definitions and purposes of the LBM and MBM. The LBM merely calculates emissions based on the defined geographic locations of consumption which naturally includes the grid connected to the entity. In contrast, the MBM seeks to estimate emissions based on physical or contractual electricity supply, which requires demonstrating that the electricity can be physically received by the entity.

However, the terms should be consistently applied, as applicable, to reduce confusion. For example, if "market" boundary (page 23) in the MBM corresponds to any of the spatial boundaries (page 10) in the LBM, the same term should be used.

35. On a scale of 1-5 do you support the new definition of accessible: publicly available, free to use, and from a credible source?

1 - No Support 2 - Little Support 3 - Neutral 4 - General Support 5 - Fully Support

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36. Please provide your reasons for support, if any

Select all options that apply

- ☒ Definition supports feasibility and lower-cost reporting
- ☐ Supports transparency and public verifiability of emission factors
- ☐ Implements a common comparability baseline across reporters
- ☐ Creates data equity for smaller reporters and underserved regions
- ☐ Encourages open publication of emission factors
- ☐ High quality accessible emission factors already exist for most markets globally today
- ☐ Ensures reporters can immediately apply the updated LBM hierarchy
- ☒ Clarifies reporting requirements
- ☐ Other (please explain)

37. Please provide comments regarding your reasons for support.

The definition addresses the considerations of cost and effort that are important to entities with limited resources, encouraging implementation by them. At the same time, it maintains the minimum requirement that emission factors be credible. Therefore, it provides relief without compromising the decision-usefulness of the results.

38. Please provide your concerns or reasons for why you are not supporting (if any).

Select all options that apply

- ☒ Definition needs further clarification about what is recognized as a credible source
- ☐ Definition should not exclude emission factors that are publicly available and credible even if they have a reasonable associated cost (i.e. not free)

- ☐ A list of suitable location-based emission factors should be published for each region, rather than requiring reporters to individually determine what is accessible in their region.
- ☐ Definition should also consider level of administrative effort in addition to external costs for emission factor data.
- ☐ Another criteria should be added to the definition
- ☐ Other (please explain)

39. Please provide comments regarding your reasons for concern (if any).

There should be clarification over how to determine the credibility of a source. Specifying the types of entities that would qualify as credible sources would be helpful. However, GHG Protocol should also consider reducing subjectivity and publishing additional criteria for determining credibility when emission factors from those sources of emission factors are not available in certain jurisdictions. In this aspect, criteria to consider should be aligned with relevant assurance standards when testing the relevance and reliability of external information. Ideally, reliability may be demonstrated by obtaining assurance over the emission factors, e.g. information has been subject to review or verification by an external party.

Such clarification could be especially critical when considering that free-to-use emission factors – the other aspect of accessible per the proposed definition – might come from sources that are typically considered to be less credible. This would also help to improve the auditability of the source for assurance providers regarding the suitability of the emission factors used during assurance of scope 2 disclosures.

The approach to introduce the concept of accessibility but still permit the use of a higher-quality factor that is not publicly available or requires payment appears to be an effort to make the requirements proportionate to the range of capabilities of entities around the world. We encourage GHG Protocol to also consider how this reconciles with the concept of “reasonable and supportable information available without undue cost or effort” in the IFRS Sustainability Disclosure Standards (ISSB Standards). As it is plausible for the ISSB Standards to make reference to the requirements in the GHG Protocol, we believe there should be some alignment between these two concepts to facilitate implementation. Furthermore, we note that many corporate users of the GHG Protocol would already be familiar with this concept in the ISSB Standards.

40. The following questions (40-43) concern which entities should qualify as credible sources for accessible LBM emission factors to ensure transparency, faithful representation, and comparability.

Which entities should qualify as credible sources:

Select all options that apply

- ☒ Government agency
- ☒ System operator
- ☒ Recognized registry
- ☐ Accredited statistics body
- ☐ Independent methodology meeting minimum criteria (outlined in question 42)
- ☐ Other (please specify and explain)

41. Please provide additional comments concerning your selected credible sources, including at least one example per region you operate in or have experience with, if possible.

These entities are independent and have oversight of the electricity generated from various energy sources and the relevant metrics.

The Energy Market Authority is the government agency tasked with building a clean energy future that is resilient, sustainable and competitive for Singapore. It is also the power system operator of Singapore.

Another source that might be considered credible is emission factors registries that are supported or endorsed by government agencies. These essentially aggregate emission factors into a single source for convenient reference. One example is the Singapore Emission Factors Registry.

42. If you selected independent methodologies in question 40, please describe what documentation or assurance (if any) is needed for it to be recognized as a credible source?

Select all that apply, then add brief detail:

- ☐ Publicly documented methods and system boundaries
- ☐ Update cadence (e.g., annual) and version control
- ☐ QA/QC procedures and uncertainty disclosure
- ☐ Governance/independence and conflict-of-interest safeguards

☐ Geographic/system boundary and temporal coverage fit for use

☐ Other (please explain)

43. Please provide any additional comments concerning your selected minimum criteria in question 42.

Please enter at most 4000 characters

44. On a scale of 1-5 do you support the update to the requirement to use the most precise location-based emission factor accessible for which activity data is also available?

1 - No Support 2 - Little Support 3 - Neutral 4 - General Support 5 - Fully Support

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45. Please provide your reasons for support, if any.

Select all that apply

☒ Improves accuracy and scientific integrity of LBM results

☐ Strengthens transparency and public verifiability

☐ Enhances comparability across reporters and frameworks

☐ Better reflects grid operation in time and space, reduces misallocation

☐ Enables emission changes from storage and demand-flexibility to be reflected more accurately

☐ Prioritizes consumption-based factors that include imports/exports

☒ Aligns emission factor precision with available activity data

☐ Aligns positively with mandatory or voluntary reporting requirements in your region

☐ Enables use of load profiles when hourly activity data are unavailable

- ☐ Provides a common, accessible baseline for inventories
- ☒ Supports phased improvement as data availability expands
- ☐ Improves decision-usefulness for external disclosures
- ☐ Other (please provide)

46. Please provide any additional comments regarding your reasons for support.

In general, the increased rigour in the methodology increases the decision-usefulness and comparability of scope 2 reporting. It also accommodates situations in which data may be less precise in certain jurisdictions.

47. Please provide your concerns or reasons for why you are not supporting.

Select all that apply

- ☐ Concern about negative impact on comparability, relevance and/or usefulness of LBM inventories
- ☒ Concern that administrative, data management, and audit challenges posed by this approach would place an undue burden and costs on reporters
- ☒ Concern that the most precise spatial boundary in the LBM emission factor hierarchy, 'local boundary', is too narrow to require even when accessible
- ☐ Accessible factors may be less accurate than non-accessible options and primary users of emission reporting data may expect the most representative factors
- ☐ Material differences to inventory accuracy are too small to justify cost
- ☐ Concern about the update cadence or representativeness of datasets (hourly/monthly)
- ☐ Other (please provide)

48. Please provide any additional comments regarding your concerns or reasons why you are not supporting (if any).

We anticipate that entities may struggle with the infrastructure and resources needed to implement these proposed revisions effectively.

49. For concerns or support for alignment with mandatory or voluntary reporting requirements in your region, please provide an example of the programmatic requirements and the impacts of these changes on alignment.

IFRS S2 Climate-related Disclosures, which is adopted or in the process of being adopted by several jurisdictions including Singapore, currently requires the entity to measure its GHG emissions in accordance with the 2004 edition of the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard. The differences in calculation methods in the 2004 edition and proposed revisions could result in unnecessary duplicative reporting. The proposed revisions in this public consultation also stand the risk of not being adopted at a meaningful scale if jurisdictions mandate their entities to adopt the IFRS Sustainability Disclosure Standards but not the GHG Protocol.

50. For concerns that the most precise spatial boundary (local boundary) is too granular to be required even if emission factors are accessible, please outline why and identify whether reporting at this level of granularity should be a "may", "should" or "shall not" requirement?

Please refer to our response to question 39 on the need to align to the concept of "reasonable and supportable information available without undue cost or effort" in the ISSB Standards.

51. For concerns that choosing an accessible factor over a more accurate "non-accessible" one can reduce accuracy and decision-usefulness please describe the conditions when a non-accessible factor should be required to be used over an accessible one (e.g., material difference threshold, investor relevance), and what transparency/assurance is needed (public methods, QA/QC, independent assurance). Please note any cost/effort implications.

Please enter at most 4000 characters

52. External programs that use GHG Protocol generally support improving the accuracy and comparability of LBM results while balancing feasibility considerations. To help assess benefits relative to cost and effort in practice, please answer for your primary reporting/oversight context.

Considering investor and assurance needs, how do the proposed location-

based method revisions change the extent to which information is decision-useful to users relative to incremental cost and complexity for preparers?

- ☐ No meaningful improvement (unlikely to change decisions/interpretations)
- ☐ Minor improvement (noticeable but unlikely to change decisions)
- ☐ Moderate improvement (could change some decisions/assessments)
- ☐ Substantial improvement (likely to change decisions benchmarks)
- ☒ Not sure / no basis to assess

53. Please provide additional context for your answer to question 52.

Please enter at most 4000 characters

54. Considering investor and assurance needs, how do the proposed location-based revisions change the comparability of information relative to incremental cost and complexity for users?

- ☐ No meaningful improvement (unlikely to change decisions/interpretations)
- ☐ Minor improvement (noticeable but unlikely to change decisions)
- ☐ Moderate improvement (could change some decisions/assessments)
- ☐ Substantial improvement (likely to change decisions benchmarks)
- ☒ Not sure / no basis to assess

55. Please provide additional context for your answer to question 54

Please enter at most 4000 characters

56. For question 52-55, please provide the basis for your assessment.

- ☐ Direct empirical analysis (e.g., back-testing with hourly factors)
- ☐ Operational experience (e.g. applying hourly LBM emission factors)
- ☐ Professional judgment informed by literature/briefings
- ☐ General awareness (no direct analysis)
- ☐ Prefer not to say

57. The following questions refer to the availability of hourly data for LBM reporting.

At the Operational Grid Boundary level (of the proposed location-based emissions factor hierarchy), what share of your load has hourly emission factors accessible:

- ☐ 0%
- ☐ 1–25%
- ☐ 26–50%
- ☐ 51–75%
- ☐ 76–100%
- ☐ Unsure
- ☒ Not applicable

58. Please provide additional context for your answer to question 57

Please enter at most 4000 characters

59. Please indicate the share of your load with hourly activity data available:

(select one)

- ☐ 0%
- ☐ 1–25%
- ☐ 26–50%
- ☐ 51–75%
- ☐ 76–100%
- ☐ Unsure
- ☒ Not applicable

60. If your answer to questions 57 & 59 includes significant geographical differences (some regions with hourly emission factor and higher volumes of hourly activity data, other regions with minimal hourly activity data and/or no hourly emission factors), please include additional context.

Please enter at most 4000 characters

61. When actual hourly activity data are unavailable, and solely to enable use of more precise LBM emission factors, the proposed revisions allow a reporter to use load profiles to approximate hourly data from monthly or annual load data. How would the use of load profiles affect the comparability, relevance, and usefulness of LBM inventories relative to your current practice? Please describe potential advantages, limitations, and any conditions under which impacts may differ.

The proposed text states that load profiles may be used instead when actual hourly activity data is “not available”. It is not clear how ‘not available’ should be interpreted. For example, data could also be perceived as not available if hourly activity is simply not collected despite having the means. There could potentially be diversity in practice if there are different interpretations of this requirement.

Based on the proposed hierarchy of consumption data for the LBM (page 11), hourly consumption may be estimated based on similar facilities within the entity’s organisational boundary, supplier-provided load profiles or standard load profiles, in this order of priority.

Based on the proposed hierarchy of activity data for matching contractual instruments (page 21), entities could select from facility-specific load profile, market-boundary publicly available load profile, time-of-use average and flat average to derive hourly consumption data.

While both hierarchies address the estimation of hourly consumption data, there appears to be significant differences between both approaches. For example, time-of-use average and flat average methods are permitted for the MBM. In this regard, both hierarchies should be aligned if they are for the same purpose.

In particular, it was noted (page 20) that research indicates the flat-average option can approximate interval-data results closely enough to support credible hourly matching and comparability during transition periods. It is unclear why this option is not provided to estimate hourly consumption for the LBM, since the data is used in a similar way.

More importantly, if this option is sufficient to support credible hourly matching and comparability for the MBM, it does not appear that using load profiles offers clear advantages in comparability, relevance and usefulness over simply using the flat average method.

We suggest that GHG Protocol conduct further studies about how well the use of load profiles approximates hourly data. For example, it is counter-intuitive for the same supplier-provided load profile to be applicable to facilities in different industries.

GHG Protocol should also provide guidance on the identification of credible and suitable load profiles and direct entities to these sources.

62. To help assess feasibility across geographies and company sizes, please answer from the same perspective you indicated in the Demographics section (e.g., your role and whether you're responding for a small/medium/large organization and your primary country). If you represent a multinational, answer from the primary country/entity you reported in Demographics (or note the specific business unit/country in comments).

On a scale of 1-5, please indicate the incremental preparer cost/effort to implement the proposed revisions to the location-based method.

- ☐ 1 - Minimal effort
- ☐ 2 - Low effort
- ☐ 3 - Neutral effort
- ☐ 4 - Moderate effort
- ☐ 5 - High effort
- ☒ Not applicable (not a preparer)

63. Please select the main drivers of cost/effort.

Select all that apply

- ☐ Data access/rights to granular emission factors
- ☒ Hourly activity data availability/metering rollout
- ☒ Tooling/IT integration or data pipelines
- ☐ Assurance/internal controls readiness
- ☐ Staffing/capacity/training
- ☐ Contracting/procurement or budget cycle constraints
- ☐ Third-party publication cadence (emission factors)
- ☒ Multi-jurisdiction complexity (many grids/regions)
- ☐ Policy/regulatory or commercial terms
- ☐ Other

64. Please provide additional context on the main drivers of cost/effort.

We understand that entities may struggle with the infrastructure and resources needed to implement these proposed revisions effectively.

65. Which two measures would most reduce burden in your context?

- ☒ Standardized publication of consumption-based emission factors by grid/system operators
- ☐ Load profile hierarchy/templates to approximate hourly activity data when meters are unavailable
- ☐ Phased implementation (staged effective dates)

- ☐ API/automated access to emission factor datasets
- ☒ Example calculations and disclosure templates
- ☐ Assurance safe-harbors for estimates
- ☐ Other (specify)

66. Please provide additional context on the measures that would most reduce burden in your context.

The provision of relevant emission factors, calculation templates and sample disclosures would allow entities to focus on tracking and measuring their activity data to meet the disclosure requirements. Specifically, examples should illustrate the new concepts and definitions and bring common practical challenges to life, clarifying the new requirements.

Please also refer to our response to question 39 on how alignment to the concept of “reasonable and supportable information available without undue cost or effort” in the ISSB Standards could help.

67. For which reporting year would your organization be ready to apply the revised LBM requirements based on these proposed changes in its GHG inventory?

For example, if the Standard is published in 2027, the reporting year 2027 inventory is typically prepared and reported in 2028:

- ☐ Earlier than reporting year 2027 (already aligned)
- ☐ Reporting year 2027 (inventory prepared in 2028)
- ☐ Reporting year 2028 (inventory prepared in 2029)
- ☐ Reporting year 2029 (inventory prepared in 2030)
- ☐ Reporting year 2030 (inventory prepared in 2031) or later
- ☐ Later than Reporting year 2030
- ☒ Not applicable

68. Please provide additional context regarding how this timeline could be shortened and note any region or sector-specific context.

Please enter at most 4000 characters

Section 5

Market-Based Method

69. To answer some of the questions throughout section 5 about changes to the market-based method, respondents need to know what is specifically meant by an 'exemption to hourly matching'.

As the criteria for an exemption is being developed through this consultation process, please use the **default exemption conditions** when responding to questions that reference an exemption.

Default exemption conditions: Companies with annual consumption up to [X] GWh/year in a deliverable market boundary may use a monthly or annual accounting interval for Criteria 4 for all operations within that market boundary. To apply this default please identify the:

Deliverable market boundary for your region of operation

- For all regions outside of the US please use the deliverable market boundary defined in the table *Proposed methodologies for demonstrating deliverability*
- For the US, where a deliverable market boundary has not yet been defined in the table *Proposed methodologies for demonstrating deliverability*, please select your preferred market boundary from the list in question 69

Exemption threshold in GWh

- For all respondents, please select your preferred exemption threshold from the list in question 70

Subsequent sections will ask specific questions about deliverable market boundaries and exemption thresholds, so you may submit detailed feedback in those sections.

If you have operations or experience in the US, please select your preferred

deliverable market boundary for the US (Please see the table *Proposed methodologies for demonstrating deliverability* for references to these options):

- ☐ The US Environmental Protection Agency's Emissions & Generation Resource Integrated Database (eGRID)
- ☐ DOE Needs Study Regions (45V)
- ☐ Wholesale market/balancing authority
- ☒ Don't have operations or experience in the US

70. All respondents, please select your preferred exemption threshold per deliverable market boundary.

- ☐ 5 GWhs
- ☐ 10 GWhs
- ☐ 50 GWhs

71. On a scale of 1-5 do you support an update to Quality Criteria 4 to require that all contractual instruments used in the market-based method be issued and redeemed for the same hour as the energy consumption to which the instrument is applied, except in certain cases of exemption.

1 - No Support 2 - Little Support 3 - Neutral 4 - General Support 5 - Fully Support

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72. Please provide reasons for support, if any.

Select all that apply

- ☒ Improves accuracy and scientific integrity of MBM results
- ☐ Strengthens transparency and supports public verification
- ☐ Enhances comparability across reporters and frameworks using GHG Protocol data

- ☒ Better reflects grid operation, reduces misallocation of generation (e.g., "solar at night")
- ☐ Reduces risk of greenwashing/time-shifting claims by aligning claims to time of use
- ☐ Improves decision-usefulness for external disclosures
- ☒ Helps create price signals for times and places where renewables are not already abundant
- ☐ Helps accelerate the development of technologies that will be needed at scale for fully decarbonized grids.
- ☐ Enables emission changes from storage and demand-flexibility to be reflected more accurately.
- ☐ Improves risk and opportunity assessment related to contractual relationships.
- ☐ Other (please explain)

73. Please provide comments regarding your reasons for support.

In general, the update would drive good corporate behaviour if entities can only claim clean energy in hours when clean generation actually occurred. This could also incentivise suppliers to provide renewable energy generation or storage to cover existing supply gaps.

74. Please provide concerns or reasons for why you are not supporting, if any.

Select all the apply

- ☐ More information is necessary to understand how investments not matched on an hourly basis will be accounted for and reported via the framework under development by the Actions & Market Instrument TWG
- ☐ Hourly matching should follow an optional 'may' rather than a required 'shall' approach
- ☒ Hourly matching should follow a recommended 'should' rather than a require 'shall' approach

- ☐ Concern about negative impact on comparability, relevance and/or usefulness of MBM inventories
- ☒ Concern that a phased implementation would be insufficient for development of the infrastructure necessary (e.g., registries, trading exchanges, etc.) to support hourly contractual instruments
- ☒ Concern that administrative, data management, and audit challenges posed by this approach would place an undue burden and costs on reporters
- ☐ Concern that requiring hourly matching does not create meaningful improvements to inventory accuracy
- ☐ Concern that a requirement for hourly contractual instruments could discourage global participation in voluntary clean energy procurement markets
- ☐ Other (please explain)

75. Please provide comments regarding your concerns or reasons for why you are not supportive.

While we agree that the update would increase the accuracy of MBM results and promote transparency and positive corporate behaviour, we are concerned that entities may struggle with the infrastructure and resources needed to implement the hourly matching effectively. Moving towards hourly matching materially increases ongoing costs and complexity across data systems, assurance, procurement and portfolio management.

Moreover, information availability is highly dependent on the suppliers. In ASEAN, where renewable instruments are typically monthly time-stamped and hourly infrastructure is not yet available, these changes could divert resources from new renewable capacity towards compliance activities, potentially slowing near-term carbonisation and distorting market behaviour.

Given the constraints outlined above, we recommend that hourly matching be included in the standard as a "comply-or-explain" best practice rather than as a mandatory requirement. This would provide relief to entities that currently have no means of implementing the requirement.

Alternatively, GHG Protocol may consider drawing from the ISSB concept of "reasonable and supportable information available without undue cost or effort" as shared in our response to question 39. This would allow the market to develop and when data is available without undue cost or effort, entities may apply the new requirement without GHG Protocol changing the standard.

Notwithstanding the above, we anticipate that entities with more advanced climate reporting

capabilities and more sophisticated networks of external stakeholders would still elect to implement the more stringent requirements.

76. Load profiles enable organizations without access to hourly activity data or hourly contractual instruments to approximate hourly data from monthly or annual data. How would the use of load profiles affect the comparability, relevance, and usefulness of MBM inventories relative to your current practice? Please describe potential advantages, limitations, and any conditions under which impacts may differ.

The proposed text states that load profiles shall be used instead when actual hourly activity data is "not available". It is not clear how 'not available' should be interpreted. For example, data could also be perceived as not available if hourly activity is simply not collected despite having the means. There could potentially be diversity in practice if there are different interpretations of this requirement.

Based on the proposed hierarchy of consumption data for the LBM (page 11), hourly consumption may be estimated based on similar facilities within the entity's organisational boundary, supplier-provided load profiles or standard load profiles, in this order of priority.

Based on the proposed hierarchy of activity data for matching contractual instruments (page 21), entities could select from facility-specific load profile, market-boundary publicly available load profile, time-of-use average and flat average to derive hourly consumption data.

While both hierarchies address the estimation of hourly consumption data, there appears to be significant differences between both approaches. For example, time-of-use average and flat average methods are permitted for the MBM. In this regard, both hierarchies should be aligned if they are for the same purpose.

In particular, it was noted (page 20) that research indicates the flat-average option can approximate interval-data results closely enough to support credible hourly matching and comparability during transition periods. It is unclear why this option is not provided to estimate hourly consumption for the LBM, since the data is used in a similar way.

More importantly, if this option is sufficient to support credible hourly matching and comparability for the MBM, it does not appear that using load profiles offers clear advantages in comparability, relevance and usefulness over simply using the flat average method.

We suggest that GHG Protocol conduct further studies about how well the use of load profiles approximates hourly data. For example, it is counter-intuitive for the same supplier-provided load profile to be applicable to facilities in different industries.

GHG Protocol should also provide guidance on the identification of credible and suitable load profiles and direct entities to these sources.

77. The following set of questions (77-82) applies to sites or business units above the exemption threshold, assume the default exemption conditions selected in Section 5.3.1.

Who should answer: This item is optional and intended primarily for reporters (or service providers responding on behalf of a reporter/client) with direct knowledge of implementation effort and spend. If you are not preparing or overseeing a scope 2 inventory for a specific organization, you may skip this item or answer only where relevant.

Note: This section is about administrative implementation (internal effort and external service costs). Please do not include procurement price differences for hourly EACs/PPAs; those are covered in the "combined questions for updates to MBM" section.

What is the approximate share of your organization's total load that would be subject to hourly matching, excluding any exemptions:

- ☐ 0%
- ☐ 1–25%
- ☐ 26–50%
- ☐ 51–75%
- ☐ 76–100%
- ☐ Unsure

78. Please indicate your best estimate of the internal administrative effort (people/process/controls) of the proposed hourly matching requirement relative to your current MBM process using annual matching. Assume 3 is your current level of effort.

1 - Much less 2 - Slightly less 3 - Same 4 - More 5 - Much more

1

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79. Please indicate your best estimate of the external service cost (cash outlays to vendors, data, assurance) of the proposed hourly matching requirement relative to your current MBM process using annual matching. Assume 3 is your current external cost.

1 - Much less 2 - Slightly less 3 - Same 4 - More 5 - Much more

1

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80. What are the feasibility measures you would anticipate relying on:

Select all that apply

- ☐ Load profiles for activity data (facility-specific)
- ☐ Load profiles for activity data (utility/customer-class or regulator-approved)
- ☐ Load profiles for activity data (time-of-use averages)
- ☒ Load profiles for activity data (flat average across hours)
- ☐ Load profiles for contractual instruments (same production asset)
- ☐ Load profiles for contractual instruments (facility-specific)
- ☐ Load profiles for contractual instruments (regional publicly available)
- ☒ Phased implementation
- ☒ Legacy clause

81. What are the assumed main drivers affecting internal workload and external service costs after applying feasibility measures:

Select all that apply

- ☒ Registry/market access for hourly EACs
- ☐ Vendor/platform upgrades or new tools

- ☒ Data integration (profiles, APIs), system configuration
- ☐ Assurance/internal controls and evidence trails
- ☐ Staff capacity/training
- ☒ Contracting/sourcing changes for hourly instruments
- ☐ Metering/interval data access arrangements
- ☐ Other (specify)

82. Please provide any additional comments regarding your response to questions 77 - 81

We anticipate that the flat-average option will be widely used to estimate hourly load profile. As such, we expect more effort would be spent on matching the hourly load profile to hourly contractual instruments, which entails sourcing for suitable contractual instruments and obtaining the necessary data.

83. **Update to Scope 2 Quality Criteria 5**

On a scale of 1-5 do you support an update to scope 2 Quality Criteria 5, to require that all contractual instruments used in the market-based method be sourced from the same deliverable market boundary in which the reporting entity's electricity-consuming operations are located and to which the instrument is applied, or otherwise meet criteria deemed to demonstrate deliverability to the reporting entity's electricity-consuming operations?

1 - No Support 2 - Little Support 3 - Neutral 4 - General Support 5 - Fully Support

1

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84. Please provide reasons of support, if any.

Select all that apply

- ☒ Improves accuracy and scientific integrity of MBM results
- ☐ Strengthens transparency and public verifiability

- ☐ Enhances comparability across reporters and frameworks using GHG Protocol data
- ☐ Improves decision-usefulness for external disclosures
- ☒ Better reflects grid operation, reduces misallocation
- ☐ Provides sufficiently flexible options for organizations to demonstrate deliverability outside of the defined deliverable market boundaries
- ☐ Defined market boundaries reflect a boundary your organization already uses for procuring contractual instruments
- ☐ Agree that the proposed market boundary for my region(s) accurately reflects deliverability
- ☐ Agree that the defined market boundaries align with mandatory or voluntary reporting requirements in your region
- ☒ Improves risk and opportunity assessment related to contractual relationships
- ☒ Helps create price signals for times and places where renewables are not already abundant
- ☐ Other (please explain)

85. Please provide comments regarding your selected reasons for support.

In general, the update would increase the accuracy of MBM results, since it is intended for scope 2 accounting to be attributional, and it is only plausible for the contracted renewable energy to be consumed if they can be delivered physically to the facility. This also provides better alignment to the proposed purpose of the MBM and how it relates to the proposed purpose of the LBM.

Please also refer to our response to question 22 that suggests explaining why both the LBM and MBM are required – this would provide clarity on why deliverability is a necessary consideration under both approaches.

86. Please provide reasons of concern or why you are not supporting, if any.

Select all that apply

- ☐ Proposed deliverability requirements do not improve alignment with GHG Protocol Principles

- ☒ Concern that narrower market boundaries restrict companies' abilities to invest in areas where renewable energy development could yield the greatest decarbonization impact
- ☐ Concern that narrower market boundaries could prompt a shift away from long-term agreements (i.e., PPAs) to spot purchases (unbundled certificates)
- ☐ Sourcing contractual instruments within deliverable market boundaries should follow an optional "may" rather than a required "shall" approach
- ☐ Sourcing contractual instruments within deliverable market boundaries should follow a recommended "should" rather than a required "shall" approach
- ☐ Concern that the defined market boundaries do not align with mandatory or voluntary reporting requirements in your region
- ☐ Support deliverability in principle, but the proposed market boundary for my region does not reflect deliverability
- ☐ Market boundaries should be defined as the geographic boundaries of electricity sectors, which align with national, and under certain circumstances, multinational boundaries
- ☒ Exemptions to matching within deliverable market boundaries should be allowed for markets lacking sourcing options
- ☐ Other (please explain)

87. Please provide comments regarding your selected reasons for why you are not supporting.

The update would shift demand for contractual instruments towards those sourced from generating facilities located within the same deliverable market boundary. This could lead to the underpricing of contractual instruments that are unable to meet these requirements but nonetheless deliver significant decarbonisation impact. In turn, this could disincentivise project development in underserved areas, which are often precisely the areas that fall outside the market boundaries of company facilities.

Moreover, we note that currently, the supply of contractual instruments that demonstrate deliverability may be limited for certain regions and could remain so when the standard takes effect in 2027 or after phased implementation. The size and geography of a jurisdiction may impose inherent limitations on the extent of renewable energy investment. This limits supply of physically deliverable renewable energy, and an entity could face higher prices for RECs in its market due to a natural cap on availability. With the proposed update, entities could face inherent challenges in reducing their scope 2 emissions using the MBM, while still seeking to

stop investments in contractual instruments since they cannot be used as renewable energy claims.

Other than higher prices, companies may be disincentivised to make future investments because it will be more difficult and potentially impossible for companies to meet their existing targets as such investments may no longer meet its intended use to achieve net zero targets.

Therefore, the proposed requirements could be highly restrictive in practice.

In ASEAN, regional interconnections and trading corridors are still evolving, and strict application of national or fully integrated electricity system boundaries risks limiting decarbonisation options.

Particularly for Singapore, we understand that some companies may rely heavily on RECs sourced from overseas producers which are not supplied directly to the premises of those companies or to the Singapore grid. Instead, these RECs are redeemed on behalf of the companies as a proof of production or supply of electricity generated from a renewable energy source for the company's premises. Under this proposal, RECs will need to be physically deliverable and time-matched to each hour of electricity consumption, hence these RECs may no longer qualify to be used for scope 2 MBM emissions.

The above could potentially slow down renewable energy investment. We understand that the consequential accounting approach contemplated by GHG Protocol via its Actions and Market Instruments (AMI) workstream is intended to provide a path for continued investment in renewable energy generation projects that has impact. However, without clarity on how this 'impact' reporting would be integrated with an annual GHG inventory, or whether 'impact' investments would be acceptable under current target setting approaches, it is difficult to understand the extent of a potential market slowdown in investment in projects with impact.

88. Please answer the following questions 88-91 in regard to regions that you operate in or have experience in.

For the United States, which of the following market boundaries would best uphold the principle of deliverability and align with the decision-making criteria? (Please see the table *Proposed methodologies for demonstrating deliverability* for references to these options):

- ☐ The US Environmental Protection Agency's Emissions & Generation Resource Integrated Database (eGRID)
- ☐ DOE Needs Study Regions (45V)
- ☐ Wholesale Market/Balancing Authority
- ☐ Unsure

☐ Other

89. If you selected 'eGRID', 'DOE Needs Study Regions', 'Wholesale Market/Balancing Authority', or 'Other' for question 88 please explain why this option best upholds the principle of deliverability and balances integrity, impact, and feasibility of the MBM. Please also provide comments on the relative feasibility challenges of applying the other options.

Please enter at most 4000 characters

90. For deliverable market boundaries (outside of the United States) identified in the table *Proposed methodologies for demonstrating deliverability: Deliverable Market Boundaries*, please provide comments on whether these market boundaries:

- Appropriately reflect the deliverability of electricity in that region
- Align with mandatory or voluntary reporting requirements in that region, please provide an example of the programmatic requirements and the impacts of these proposed changes on alignment
- Are likely to cause any region-specific feasibility challenges (provide specific examples)
- If you prefer a different deliverable market boundary than identified in the table *Proposed methodologies for demonstrating deliverability: Deliverable Market Boundaries*, please describe this boundary

Please clearly identify the region you are referring to in your comments.

There are a number of initiatives under development to interconnect the ASEAN region's national electricity networks or account for RECs that have been bought and sold across borders, e.g. the ASEAN Power Grid or an ASEAN REC framework. These initiatives are not the same as the electricity market operated by the European Network of Transmission System Operators for Electricity, which is stated as an example on page 23, and do not appear to fall under the market boundaries method for demonstrating deliverability.

It is not clear whether systems that are specially built to track, measure, report and verify RECs could be used to demonstrate deliverability. Corridor-based or bilateral interconnection boundaries where physical delivery can be demonstrated should also be recognised. If these approaches fall under alternate methodology 2, explicit mention should be made of such approaches.

91. For regions not specified in the table *Proposed methodologies for demonstrating deliverability: Deliverable Market Boundaries*, please provide examples of market boundaries that uphold the principle of deliverability and balance integrity, impact, and feasibility of the MBM.

ASEAN Power Grid (under development), ASEAN's collective effort to connect the region's electricity networks and strengthen energy cooperation by 2045, which includes the Lao PDR-Thailand-Malaysia-Singapore Power Integration Project

92. The following questions concern how a requirement to use deliverable market boundaries would change your workload and implementation costs relative to current MBM practice after applying feasibility measures (e.g., phased timing and legacy clause)? Please answer with respect to the deliverable boundary requirement only, the combined impact of market-based method changes on feasibility will be evaluated in the "combined questions for updates to MBM" section. Please also assume the default exemption conditions selected in Section 5.3.1.

Note: This section is about administrative implementation (internal effort and external service costs). Do not include procurement price differences for EACs/PPAs; those are covered in the "combined MBM questions" section 5.4.

Who should answer: This item is optional and intended primarily for reporters (or service providers responding on behalf of a specific reporter/client) with direct knowledge of implementation effort and spend. If you are not preparing or overseeing a scope 2 inventory for a specific organization, you may skip this item or answer only where you have direct experience.

Please estimate the anticipated internal administrative effort (people/process/controls) of the proposed deliverability requirement relative to your current MBM process using broad market boundaries. Assume 3 is your current level of effort.

1 - Much less 2 - Slightly less 3 - Same 4 - More 5 - Much more

1

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93. Please estimate the anticipated external service cost (cash outlays to vendors, data, assurance) of the proposed deliverability requirement relative to your current MBM process using broad market boundaries. Assume 3 is your current external cost.

1 - Much less 2 - Slightly less 3 - Same 4 - More 5 - Much more

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94. What are the feasibility measures you would anticipate relying on to report using deliverable market boundaries:

Select all that apply

☒ Phased implementation

☒ Legacy clause

95. What are the assumed main drivers affecting internal workload and external service costs after applying feasibility measures:

Select all that apply

☒ Data access/rights for EACs/registries aligned to deliverable market boundaries

☐ Vendor/platform upgrades or new tools

☒ Data integration (profiles, APIs), system configuration

☐ Assurance/internal controls and evidence trails

☐ Staff capacity/training

☒ Contracting/sourcing changes for contractual instruments within deliverable market boundaries

☐ Metering/activity data reporting configured to match deliverable market boundaries

☐ Other (specify)

96. Please provide any additional comments regarding your response to questions 92-95.

We expect more effort would be spent on matching the hourly load profile to hourly contractual instruments, which entails sourcing for suitable contractual instruments and obtaining the

necessary data.

In addition, we note that currently, the supply of contractual instruments that demonstrate deliverability may be limited for certain regions and could remain so when the standard takes effect in 2027 or after phased implementation.

97. New guidance for Standard Supply Service (SSS)

On a scale of 1-5 do you support the new guidance for Standard Supply Service (SSS) and requirement that a reporting entity shall not claim more than its pro-rata share of SSS.

1 - No Support 2 - Little Support 3 - Neutral 4 - General Support 5 - Fully Support

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98. Please provide reasons of support, if any.

Select all that apply

- ☐ Helps ensure that SSS resources are fairly allocated to all consumers and prevents procurement by specific organizations
- ☐ Clarifies the order of operations so that organizations may claim SSS first and then make voluntary procurements
- ☐ Supports consistent treatment of shared supply across different market structures
- ☐ Protects the integrity of market-based accounting by avoiding double counting of attributes from SSS
- ☐ Other (please explain)

99. Please provide comments regarding your selected reasons for support.

Please enter at most 4000 characters

100. Please provide concerns or why you are not supporting.

Select all that apply

- ☐ Markets should self-determine how resources that fall under SSS are allocated to customers
- ☐ Concern of regionally applicable challenges to implementation
- ☐ Unclear how partial subsidies affect SSS classification
- ☒ Unclear rules/definition of SSS
- ☐ All contractual instruments should be eligible for voluntary procurement.
- ☐ Other (please explain)

101. Please provide comments regarding your selected reasons for why you are not supportive.

There needs to be greater clarity on why and how the treatment of SSS differs in practice from that of the residual mix. Furthermore, it is not clear what constitutes a "traceable and mandatory financial relationship with consumers".

For example, where two scenarios share the same underlying energy mix, the practical treatment of a Standard Supply Service (SSS) may be effectively equivalent to that of the residual mix, making the distinction between the two unclear without further guidance.

102. Are there resources in your region that do not fit clearly within the outlined examples of SSS but **should** be allocated to all customers under this framework? If so, please provide examples and explanations for each.

Please enter at most 4000 characters

103. Are there resources in your region that fit within the outlined examples of SSS but **should not** be allocated to all customers under this framework? If so, please provide examples and explanations for each.

Please enter at most 4000 characters

104. Proposed examples of SSS include 'facilities and/or supply that are subject to regulated cost recovery from a monopoly supplier as part of default service in a

particular service area and are not part of a resource-specific supplier product (e.g. a green tariff)'. In this context, should a monopoly supplier include:

Select all that apply

- ☐ Vertically integrated investor-owned utility
- ☐ Government entity operating in a service area without supplier choice
- ☐ Distribution utility in a restructured market where certain electricity supply and/or contractual instrument purchases are subject to non-by passable, regulated cost recovery
- ☐ Other (please explain)
- ☒ Unsure

105. Please provide any additional comments regarding your response to question 104.

Please enter at most 4000 characters

106. Allocation of SSS requires either suppliers allocating their SSS resources to customers or the development of a credible centralized registry or third-party registries that track SSS in order for organizations to claim their share. Is it acceptable that some reporters may be unable to claim SSS prior to a credible centralized registry or third-party registries being established? If not, how else might SSS be allocated in the absence of a registry?

Yes, it is acceptable that they may not be able to claim SSS prior to credible registries being established. This is consistent with the concept of credibility in using accessible emission factors in the LBM.

107. Would you support a default option in cases where SSS data is not supplied by electricity providers, and no third-party registry is available, to designate certain resources as automatically qualifying as SSS?

- ☐ Yes
- ☒ No

☐ Unsure

108. If you answered "No" to question 107, please provide any additional comments on why you would not support a default option

Any such list would not be exhaustive, which raise questions about the consistency of treatments for those with registry, designated resources and those without. Simplicity of hierarchy.

109. If you answered "yes" to question 107, which of the following criteria, if any, would you support as a method of designating resources as SSS.

Select all that apply

- ☐ Project age
- ☐ Technology or fuel type
- ☐ Project ownership (e.g. government owned projects)
- ☐ Projects tracked in compliance registries
- ☐ Combination of above criteria
- ☐ Other (please specify)

110. If you answered 'Other' please provide additional feedback.

Please enter at most 4000 characters

111. If SSS is not uniformly available across regions, how would this affect comparability of scope 2 MBM reporting? What interim solutions or disclosures would reduce inconsistency?

As mentioned in question 101, there needs to be greater clarity on why and how the treatment of SSS differs in practice from that of the residual mix. Without such clarity, it is unclear whether the results of scope 2 MBM reporting would be materially different when using SSS as opposed to the residual mix, let alone whether the results would be comparable across different entities.

112. Please provide any additional feedback on SSS.

Please enter at most 4000 characters

113. Updated definition of residual mix emission factors

On a scale of 1-5 do you support the updated definition of residual mix emission factors to reflect the GHG intensity of electricity, within the relevant market boundary and time interval, that is not claimed through contractual instruments, including voluntary purchases or Standard Supply Service allocations?

1 - No Support 2 - Little Support 3 - Neutral 4 - General Support 5 - Fully Support

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114. Please provide reasons of support, if any.

Select all that apply



Establishes clear definition for residual mix emission factors



Improves accuracy and relevance of market-based reporting



Protects the integrity of market-based accounting by avoiding double counting of attributes within the MBM



Clarifies the market boundary a residual mix emission factor should be calculated for



Improves comparability and transparency across organizations and regions



Helps incentivize voluntary sourcing of contractual instruments



Provides an option for reporters without access to an hourly residual mix emission factor



Other (please explain)

115. Please provide comments regarding your selected reasons for support.

In general, the update would increase the accuracy of MBM results and provide additional clarity and standardisation to calculate scope 2 emissions consistently and comparably using MBM.

116. Please provide reasons of concern or why you are not supporting, if any.

Select all that apply

- ☐ Requiring a residual mix emission factor to be calculated per market boundary will further reduce availability of residual mix emission factors
- ☐ Allowing reporters to use different temporal precision of residual mix emission factors within a deliverable market boundary will negatively impact comparability
- ☐ Market boundaries used for calculating a residual mix emission factor should be defined as the geographic boundaries of electricity sectors, which align with national, and under certain circumstances, multinational boundaries
- ☒ Markets should self-determine if Standard Supply Service is included in a residual mix emission factor
- ☐ Increases administrative complexity of calculating a residual mix emission factor
- ☐ Other (please explain)

117. Please provide comments regarding your selected reasons for why you are not supporting.

As mentioned in question 101, there needs to be greater clarity on why and how the treatment of SSS differs in practice from that of the residual mix.

118. The following questions refer to the availability of residual mix emission factor data in global markets.

Who should answer: Respondents with direct operational knowledge (users, operators, vendors, auditors).

In the regions/markets you follow, how close are certificate

systems/registries/data providers to being able to publish residual mix emission factors within deliverable market boundaries? For the US, please answer in regard to your preferred deliverable market boundary as outlined in Section 5.3.1 question 69. For all other regions please answer in regard to the deliverable market boundaries defined in the table *Proposed methodologies for demonstrating deliverability*.

- ☐ 1 - Far from ready
- ☐ 2 - Somewhat ready
- ☐ 3 - Neutral
- ☐ 4 - Mostly ready
- ☐ 5 - Largely ready
- ☐ Insufficient basis to assess

119. Please indicate the main registry you are most familiar with and are referencing when answering questions 118 and 120-122. If you're familiar with other registries, briefly describe (for up to three registries) whether their level of readiness is notably different.

Please enter at most 4000 characters

120. Please indicate your expected lead-time to reach "ready" (score 4–5), based on your current trajectory:

- ☐ <12 months
- ☐ 12–24 months
- ☐ 24–36 months
- ☐ >36 months
- ☐ Unknown

121. Please indicate your expected lead-time to reach "ready" (score 4-5), if investment/coordination accelerate:

- ☐ <12 months
- ☐ 12–24 months
- ☐ 24–36 months
- ☐ >36 months
- ☐ Unknown

122. Please describe the basis for your assessment:

- ☐ Public roadmap/docs
- ☐ Operator/vendor commitments
- ☐ Pilot/production use
- ☐ Professional judgment
- ☐ Other (specify)

123. Please provide any additional feedback on residual mix emission factors.

Please enter at most 4000 characters

124. Provide new requirement for use of fossil-based emission factors

On a scale of 1-5, do you support the requirement that for any portion of electricity consumption not covered by a valid contractual instrument and where no residual mix emission factor is available, a reporter shall apply a fossil-based emission factor?

1 - No Support 2 - Little Support 3 - Neutral 4 - General Support 5 - Fully Support

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125. Please provide reasons for support, if any.

Select all that apply

- ☒ Helps improve accuracy and scientific integrity of MBM by reducing the risk of double counting of carbon free electricity
- ☒ Provides an option for reporters without access to a residual mix emission factor
- ☐ Incentivises development and publication of residual mix emission factors by requiring use of a more conservative emission factor as a fallback option
- ☐ Other (please specify)

126. Please provide comments regarding your selected reasons for support.

In general, the update would increase the accuracy of MBM results and provide additional clarity and standardisation to calculate scope 2 emissions consistently and comparably using MBM.

127. Please provide reasons for concern or why you are not supporting, if any.

Select all that apply

- ☐ Defaulting to fossil-based emission factors is overly conservative and may overstate actual emissions
- ☐ Organizations that lack access to residual mix data due to systemic or regional limitations may be disproportionately impacted
- ☐ Undermines comparability between organizations that can access residual mix data and those that cannot
- ☐ Misaligned with the definition and/or purpose of the MBM
- ☒ Other (please specify)

128. Please provide comments regarding your selected reasons for why you are not supporting.

Region-specific fossil-based emission factors might not be available.

129. Please provide feedback regarding whether the requirement to apply a fossil-based emission factor, where no residual mix emission factor is available, should incorporate global equity considerations given the different levels of residual mix emission factor data available globally? And if so, how?

No. Fossil-based emission factor should reflect only region-specific considerations. This ensures that Scope 2 MBM results accurately reflect the emissions associated with electricity consumption in each region, enhancing comparability across entities. At the same time, it creates a clear signal for electricity producers in higher-emission regions to improve efficiency or adopt low-carbon technologies, thereby encouraging innovation at the point of fossil-based generation.

130. Combined questions on updates to the market-based method

The following questions refer to the complete set of proposed market-based revisions and feasibility measures, inclusive of:

- Hourly matching requirement
- Deliverability requirement
- Standard supply service
- Updated guidance on residual mix factors
- Fossil-based emission factor default
- Threshold exemptions
- Legacy clause
- Phased implementation

Responses to questions should focus on the impact of these combined revisions, and not specific components of the market-based revision. Please assume the default exemption conditions selected in Section 5.3.1

Are the proposed feasibility measures (e.g., use of load profiles for matching, exemptions to hourly matching, legacy clause, and phased implementation) sufficient to support implementation of the proposed market-based revisions at scale?

☐ 1 - Insufficient

☒ 2 - Somewhat sufficient

☐ 3 - Sufficient

☐ 4 - Moderately sufficient

☐ 5 - Highly sufficient

☐ No basis to assess

131. Please provide any additional comments regarding **load profiles** that need adjustment to support implementation of the proposed market-based revisions at scale. Explain how changes would make implementation feasible without undermining accuracy and integrity of the MBM.

The example on using the flat average method (page 22) states that if a reporting entity has annual consumption data, they would divide the yearly total by 8,760 hours to calculate an average hourly load.

GHG Protocol should clarify whether the denominator should comprise the total number of hours in that period or the operating hours only.

132. Please provide any additional comments regarding **phased implementation** that need adjustment to support implementation of the proposed market-based revisions at scale. Explain how changes would make implementation feasible without undermining accuracy and integrity of the MBM.

The period for phased implementation should consider whether the infrastructure for effective implementation would be set up by then. As mentioned in our earlier responses, it is necessary for contractual instruments that meet the revised criteria for temporal correlation and deliverability to be in greater supply and for information to be available before the proposed revisions can be implemented effectively. This would allow hourly matching or sourcing of high-quality regional RECs to be adopted progressively as data availability, registries and regional grid integration mature.

133. Please provide any additional comments on other feasibility measures (not outlined in questions 131-132) that need adjustment to support implementation of the proposed market-based revisions at scale. Note, any comments on exemptions to hourly matching and the legacy clause should be provided in sections 6 and 7.

Please enter at most 4000 characters

134. Feedback from programs that are based on or use GHGP data has been to pursue improvements in accuracy and comparability of the market-based method, while balancing feasibility considerations. To help assess benefits relative to cost and effort in practice, please answer for your primary reporting/oversight context.

Considering investor and assurance needs, how do the proposed market-based method revisions change the extent to which information is decision-useful to users relative to incremental cost and complexity for preparers?

- ☐ No meaningful improvement (unlikely to change comparability/interpretations)
- ☐ Minor improvement (noticeable but unlikely to change comparability)
- ☐ Moderate improvement (could change some comparability/assessments)
- ☐ Substantial improvement (likely to change comparability benchmarks)
- ☐ Not sure / no basis to assess

135. Please provide additional context for your answer to question 134.

Please enter at most 4000 characters

136. Considering investor and assurance needs, how do the proposed market-based revisions change the comparability of information relative to incremental cost and complexity for users?

- ☐ No meaningful improvement (unlikely to change comparability/interpretations)
- ☐ Minor improvement (noticeable but unlikely to change comparability)
- ☐ Moderate improvement (could change some comparability/assessments)
- ☐ Substantial improvement (likely to change comparability benchmarks)

☐ Not sure / no basis to assess

137. Please provide additional context for your answer to question 136.

Please enter at most 4000 characters

138. For questions 134-137, please provide the basis for your assessment

Select all that apply

- ☐ Direct empirical analysis (e.g., back-testing with hourly factors)
- ☐ Operational experience applying hourly MBM
- ☐ Professional judgment informed by literature/briefings
- ☐ General awareness (no direct analysis)
- ☐ Prefer not to say

139. Please estimate the anticipated change in procurement cost (i.e., price paid) for hourly-matched, deliverable EACs and/or PPAs relative to your current sourcing strategy. Assume 3 is your current external cost.

1 - Much less 2 - Slightly less 3 - Same 4 - More 5 - Much more

1 2 3 4 5

140. What are the assumed main drivers affecting procurement price differences for hourly/deliverable EACs/PPAs relative to your current sourcing strategy:

Select all that apply

- ☒ Hourly matching and deliverability requirements may change prices due to supply available at specific times and locations of demand
- ☐ Shaping/firming or storage products required to align hourly supply with load

- ☐ Contract tenor or credit/collateral requirements that increase all-in price
- ☐ Need to structure multiple smaller PPAs instead of one large, aggregated contract, reducing economies of scale and increasing fixed transaction and development costs
- ☐ If an entity elects to self-supply hourly matched, deliverable EACs exclusively via PPAs (and not use secondary/spot EAC markets), over-procurement may be needed to ensure full hourly coverage across deliverable sites and periods
- ☐ Procurement costs to purchase EACs in secondary/spot markets to cover residual hours
- ☐ Other (please explain in next question)
- ☐ None

141. Please provide any additional comments on the anticipated change in costs for hourly-matched, deliverable EACs, PPAs, etc. relative to current practices. If applicable, please include comments if and how this would impact your procurement strategy for carbon free electricity?

Please refer to our response to questions 75 and 87 which suggests how the following might affect procurement strategies:

- Lack of hourly infrastructure in ASEAN renewable instruments
- Inherent limitations on the extent of renewable energy investment
- Higher prices due to natural cap on availability
- Inadequacy in helping entities achieve net zero targets

142. These questions seek input on potential financial-reporting implications, beyond scope 2 reporting, arising from the proposed MBM criteria. Please only respond to this section if these issues are relevant to your organization, or you have direct expertise or experience with financial reporting under IFRS or GAAP.

Beyond Scope 2 reporting, do the proposed MBM criteria (hourly matching, deliverability, inclusive of feasibility & transition design) pose material IFRS/GAAP financial-reporting impacts for PPAs or similar instruments (e.g., IFRS 9 own-use/hedge accounting, IAS 37 onerous contracts)?

1 - No impacts 2 - Low impacts 3 - Neutral impacts 4 - Moderate impacts 5 - Significant impacts

1

2

3

4

5

143. Please briefly explain your rating: identify which accounting areas could be affected and why (for example, IFRS 9 own-use eligibility, hedge accounting, IAS 37 onerous-contract risk), and note the main factors driving the impact (for example, hourly matching, deliverability, contract terms such as tenor, penalties, or close-out provisions).

Based on ISCA's FRB 13: Accounting for Renewable Power Purchase Agreements (PPAs) and Renewable Energy Certificates (RECs): From the perspective of a buyer/holder:

Under the IFRS Accounting Standards, there is currently no specific accounting standard or interpretation that directly addresses the accounting for PPAs and RECs. The appropriate accounting treatment depends on the specific terms attached to each PPA and REC and the entity's facts and circumstances.

A physical PPA is accounted for as an executory contract, if the own-use criterion is met. A virtual PPA is accounted for as a derivative under IFRS 9 Financial Instruments.

If a PPA can no longer be used in scope 2 MBM accounting because it no longer meets the deliverability criteria, the contract might become an onerous one, i.e. the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received under it. The entity would have to recognise and measure the present obligation under the contract as a provision in accordance with IAS 37 Provisions, Contingent Liabilities and Contingent Assets.

If a physical PPA does not meet the delivery criteria, it might not meet the own-use criteria in IFRS 9. If so, it would have to be accounted for as a derivative under IFRS 9 and measured at fair value through profit or loss unless it qualifies as a hedging instrument in an effective hedging relationship.

Hedging can be complex and such transactions are highly dependent on the facts and circumstances, as well as the terms and conditions attached. The same arrangement could be accounted differently depending on the circumstances. For example, if a physical PPA does not meet the own-use criteria due to the new deliverability criteria, the entity may choose to apply hedge accounting and designate the physical PPA as a hedging instrument for its forecast electricity purchases.

144. If mid–high impacts: select affected areas:

Select all that apply

☒ Own-use

☐ Hedge accounting



IAS 37



Other (please explain)

145. For each area selected in question 144, briefly note key drivers (e.g., main contract or accounting features driving the impact).

Long-term nature of PPAs that stipulate a pricing structure over the contractual term and early termination payments

146. The following section of questions focuses on principle-based considerations for the reporting of emissions associated with electricity within and outside of the scope 2 inventory.

Considering the full set of proposed revisions to the market-based method as discussed previously in this consultation, would the existence of a separate metric outside of scope 2 to quantify the emissions impact of electricity-related actions change your perspective on the proposed revisions?



Yes



Somewhat



No



I do not support the development of impact metrics outside the scope 2 inventory.

147. If you answered "yes" or "somewhat" to question 146, which of the following rationale captures your views?

Select all that apply



Allows for continued investment in electricity projects outside of my deliverable market boundary



Provides a complementary metric to quantify actions such as energy storage or demand response



Causes less disruption of existing electricity procurement practices

- ☐ Provides additional relevant information for users of GHG data
- ☐ Provides additional approaches for target setting
- ☐ Other (please specify)

148. Please provide comments regarding your selected choices in question 147.

Please enter at most 4000 characters

149. If you answered "no" to question 146, please explain why a separate impact metric for electricity projects does not change your view of the proposed market-based inventory revisions.

The proposed revisions should focus on enhancing the attributional nature of scope 2 reporting, regardless of whether there is a separate impact metric for electricity projects.

150. If you answered "I do not support the development of impact metrics outside the scope 2 inventory" to question 146, which of the following rationale captures your views?

Select all that apply

- ☐ There is no agreed-on methodology for calculating these impact metrics
- ☐ The existence of impact metrics would divert investment from time-matched and deliverable electricity procurement
- ☐ These metrics are not currently required in mandatory disclosure frameworks
- ☐ These metrics are not currently part of target setting programs
- ☐ These metrics may not be appropriately auditable
- ☐ These metrics could result in greenwashing
- ☐ Other (please specify)

151. Please provide comments regarding your selected choices in question 150.

Please enter at most 4000 characters

152. In your view, balancing scientific integrity, climate impact, and feasibility, what scope 2 revisions or combination of revisions are most appropriate? Please address each of the three core decision-making criteria: integrity, impact, and feasibility in your answer, and describe how the approach satisfies each criterion.

Depending on the resolution of our concerns highlighted in our earlier responses, including but not limited to those on the inherent limitations in the supply of renewable energy in certain jurisdictions, the combination of revisions for the deliverability requirement, updated guidance on residual mix factors, fossil-based emission factor default and all four feasibility measures is most appropriate.

These revisions would increase the scientific rigour of the MBM by matching the load profile to hourly contractual instruments, ensuring that contractual instruments are used to in the MBM only for hours that are covered by renewable energy production while hours that cannot be substantiated default to residual mix or fossil-based factors.

They also consider possible resource limitations in implementing the proposed revisions by allowing hourly load profiles to be estimated, including the use of the flat average method.

Section 6

Exemptions - Hourly Matching Exemption Threshold

153. **Option 1.** Companies with annual consumption up to [X] GWh/year in a deliverable market boundary may use a monthly or annual accounting interval for Criteria 4 for all operations within that market boundary in accordance with the contractual instruments temporal data hierarchy.
- Option 2.** Companies that meet the small and medium company categorization may use a monthly or annual accounting interval for Criteria 4 for all operations within that market boundary in accordance with the contractual instruments temporal data hierarchy.
- Option 3.** Companies with annual consumption up to [X] GWh/year in a deliverable market boundary or meet the small and medium company categorization may use a monthly or annual accounting interval for Criteria 4 for all operations within that market boundary in accordance with the contractual instruments temporal data hierarchy.
- Option 4.** Companies with annual consumption up to [X] GWh/year in a

deliverable boundary and meet the small and medium company categorization may use a monthly or annual accounting interval for Criteria 4 for all operations within that market boundary in accordance with the contractual instruments temporal data hierarchy.

On a scale of 1-5 do you support allowing for exemptions to hourly matching using one of the options (1-4) described above?

1 - No Support 2 - Little Support 3 - Neutral 4 - General Support 5 - Fully Support

1

2

3

4

5

154. Please provide your reasons for support, if any.

Select all that apply

- ☒ Reflects a reasonable balance of integrity, impact and feasibility as organizations under a threshold collectively contribute to fewer Scope 2 emissions than the largest consumers
- ☐ Encourages organizations under a threshold to continue to engage in voluntary procurement using an annual procurement approach
- ☒ Provides a more equitable approach for reporting as hourly matching could be more challenging for organizations under a threshold
- ☐ Reduces transition strain on the electricity market and hourly matching infrastructure
- ☐ Other (please provide)

155. Please provide any additional comments regarding your reasons for support.

It might be onerous for entities to implement the hourly matching requirements if their scope 2 MBM emissions calculated are not materially different quantitatively with or without hourly matching. On this basis, their scope 2 MBM emissions calculated without hourly matching would still be reasonable and comparable to those of their peers.

As smaller entities usually have a smaller carbon footprint due to the scale of their operations, we anticipate that exempting entities below annual consumption thresholds would also be beneficial to them. These entities have limited resources and must prioritise competing operational and reporting needs.

156. Please provide your concerns or reasons for why you are not supporting, if any.

Select all that apply

- ☐ Reduces accuracy and relevance of MBM reporting
- ☐ Introduces inconsistencies across companies, reducing transparency and comparability for users
- ☐ Creates reputational risk and increases skepticism about MBM claims
- ☐ Fragments the voluntary market and may slow the transition to wider availability/use of hourly data
- ☐ Feasibility is better addressed via temporary measures (e.g., phase-ins/legacy) rather than ongoing exemptions
- ☐ Tools and infrastructure are improving rapidly, making broad exemptions increasingly unnecessary
- ☐ Support an exemption, but a different criterion should be used for defining eligibility
- ☐ Other (please provide)

157. Please provide any additional comments regarding your concerns or reasons for why you are not supporting.

Please enter at most 4000 characters

158. What evidence and/or reasoned rationale supports the need for exemptions (e.g., data access, costs, feasibility)?

The cost to implement the proposed revisions should be weighed against the extent to which hourly matching improves the accuracy of the scope 2 MBM calculation. There is a need for exemptions if the improvement in accuracy is not meaningful and does not justify the associated infrastructure and manpower costs to implement hourly matching.

159. Load-based exemption threshold

Options 1, 3, and 4 introduce a GWh load threshold applied within a defined boundary. In section 5.3.1 question 70 you selected an exemption threshold of either of 5, 10, or 50 GWh per deliverable market boundary. If you prefer a GWh load threshold based on a different amount, propose a single threshold amount in GWh per boundary and explain why.

a. Threshold [enter number] GWh per [deliverable market boundary/site/other]

b. Preferred option selected in section 5.3.1, question 70

Please enter at most 4000 characters

160. If you provided a different threshold amount in (a), how does your proposed threshold better fit the intent of the exemption (reducing reporting burden while maintaining MBM integrity and impact)? How would this exemption threshold impact the administrative and cost burden of the proposed MBM requirements compared to an exemption threshold of 5, 10, or 50 GWh per deliverable market boundary?

Please enter at most 4000 characters

161. Exemption options 2, 3, and 4 introduce a criterion based on a reporter meeting the small and medium company categorization. This categorization framework is being developed by the Corporate Standard Technical Working Group. What specific criteria should be considered to define Small and Medium Companies?

Select all that apply

☐ Number of employees

☒ Net annual turnover

☒ Balance sheet

☐ Emissions (scope 1 + LBM scope 2)

☐ Company location (high and upper-middle income countries and low- and lower-middle income countries)

☐ Other (please explain)

162. Please provide any additional comments regarding the criteria to define Small and Medium Companies.

These quantitative criteria sufficiently capture the scale of an entity's operations. For your reference, the benchmarks used in Singapore to determine if non-listed company is large for the purpose of scoping them in for climate reporting are annual revenue and total assets.

The number of employees may not represent the size of a business in which operations are highly automated or outsourced. Furthermore, this criteria is not required to be reported in the financial statements and could be difficult to determine or verify.

163. Which of the four draft eligibility options for an exemption to hourly matching reflect the most reasonable balance of integrity, impact and feasibility of the MBM? Apply the exemption threshold selected in question 159.

☒ Option 1

☐ Option 2

☐ Option 3

☐ Option 4

☐ None of the above (please explain)

164. If you selected "None of the above" in question 163, please describe your preferred eligibility conditions to apply an exemption to hourly matching and outline how this reflects a reasonable balance of integrity, impact and feasibility of the MBM.

Please enter at most 4000 characters

165. Please provide additional comments regarding your answer to question 163, including the main reasons why it is the most appropriate and any geographic or industry specific considerations that influenced your response.

As mentioned in our response to question 155, it might be onerous for entities to implement the hourly matching requirements if their scope 2 MBM emissions calculated are not materially different quantitatively with or without hourly matching. This is independent of whether the entity is small or not.

Option 1 would not exempt smaller companies from hourly matching if their annual consumption is significant. If it is determined that the gains in accuracy for scope 2 MBM calculations is not proportionate to the increase in complexity for smaller entities, they should be exempted separately, i.e. "Companies with annual consumption up to [X] GWh/year in a deliverable market boundary AND companies that meet the small and medium company categorisation".

166. Should exemptions be time-limited (i.e. phased-out over time) or ongoing?

☐ Time-limited (i.e. phased out over time)

☒ Ongoing

☐ Unsure

☐ Do not support exemptions

167. If you selected that exemptions should be time-limited in question 166, please explain how this phase-out should be implemented and why this suggestion fits the intent of the exemption (i.e., reducing reporting burden while maintaining integrity and impact of the MBM).

Please enter at most 4000 characters

168. Aside from any suggestions provided in question 167, please describe any safeguards needed to ensure exemptions are not misused and that comparability across reporting organisations is maintained?

The exemption could be given only if the annual consumption had been below a certain level for a fixed number of years. For example, only entities with annual consumption below a certain level for the preceding two financial years would be exempted from hourly matching for the current financial year. This would ensure that a one-off dip in consumption would not preclude an entity from the hourly matching requirements.

169. In exercising the exemption, should the organization be considered in conformance with the Corporate Standard and Scope 2 Standard?

- ☒ Yes, organizations using the hourly matching exemption should be considered in conformance
- ☐ No, organizations using the hourly matching exemption should NOT be considered in conformance
- ☐ A separate conformance level should be defined for companies exercising the exemption
- ☐ Unsure
- ☐ Other (please explain)

170. Please provide any additional comments regarding your response to question 169.

The hourly matching requirement, exemption relief and the criteria to use the relief should all be considered part of implementing the GHG Protocol standard. Therefore, the entity would still be complying with the standard by applying the relief and making the relevant disclosures.

Section 7

Legacy clause considerations

171. On a scale of 1-5 do you support introduction of a Legacy Clause to exempt existing long-term contracts that comply with the current Scope 2 Quality Criteria from being required to meet updated Quality Criterion 4 (hourly matching) and Quality Criterion 5 (deliverability)?

1 - No Support 2 - Little Support 3 - Neutral 4 - General Support 5 - Fully Support

1

2

3

4

5

172. Please provide your reasons for support, if any.

Select all that apply

- ☒ Reflects a reasonable balance of integrity, impact and feasibility as existing long-term contracts reflect significant financial and operational commitments to energy resources
- ☐ Encourages organizations with legacy contracts to continue to engage in voluntary procurement using an annual procurement approach
- ☒ Provides a more equitable approach by ensuring that early adopters of Scope 2 Guidance are not disadvantaged
- ☐ Helps maintain trust and market confidence in long-term contracts
- ☒ Provides a pragmatic pathway for organizations to transition to updated Quality Criteria
- ☐ Other (please provide)

173. Please provide any additional comments regarding your reasons for support.

Entities should not be penalised for the energy procurement decisions they have made in the past just because there is a change in the standards, especially if they supported positive outcomes in the development of renewable energy projects. As such, any contractual instruments that they have entered into to use in scope 2 MBM reporting before the effective date of the revisions should continue to be permitted for such use until they are terminated.

The proposed revisions should be applied prospectively for new contractual instruments. This would facilitate a clean transition into the revised requirements.

174. Please provide your concerns or reasons for why you are not supporting, if any.

Select all that apply

- ☐ Reduces overall accuracy and relevance of MBM reporting
- ☐ Introduces inconsistencies across companies, reducing transparency and comparability for users
- ☐ Not aligned with MBM's purpose, weakens credible market signals and abatement planning, and may conflict with regulatory expectations
- ☐ Creates reputational risk and increases skepticism about MBM claims

- ☐ Fragments the voluntary market and may slow the transition to wider availability/use of hourly data
- ☐ Other

175. Please provide any additional comments regarding your concerns or reasons for why you are not supporting.

Please enter at most 4000 characters

176. Which date should determine a contract's eligibility under a Legacy Clause?

- ☒ Contract signed prior to implementation date of the Scope 2 Standard (post phase-in period)
- ☐ Contract signed prior to publication date of the Scope 2 Standard
- ☐ Other (please explain)
- ☐ Do not support Legacy Clause

177. Please provide any additional comments regarding your response to question 176.

The effective date of the Scope 2 Standard would be a suitable cut-off date to transition to the revised requirements.

178. If a Legacy Clause is included, please provide comments on the following design elements to balance integrity, impact, and feasibility of the MBM. Respond only to items relevant to your context.

a) Eligibility by instrument type and term: Define which instruments qualify (e.g., PPAs, utility green tariffs, supplier-specific contracts, unbundled certificates) and any minimum original term, including treatment or eligibility of perpetual or undefined-term contracts.

b) Duration of legacy treatment: Specify the time limit or maximum remaining term after which updated Scope 2 Quality Criteria apply to all contracts.

- c) Allocation rules to prevent legacy contractual instruments being used to target the most challenging hours or locations.
- d) Transfers and resale requirements when legacy instruments are sold or transferred to third parties.
- e) Extensions and amendments: Define how contract extensions or material amendments after the cutoff affect eligibility (e.g., whether the extended or modified portion is treated as a new contract subject to updated Scope 2 Quality Criteria).
- f) Disclosures: Scope and granularity of disclosures for any use of a Legacy Clause (for example separate presentation of MBM results with and without legacy-treated instruments, percentage of contracts covered, share of load covered, expected end date of legacy status).
- g) Pre-effective-date guardrails: Approaches to discourage contracting intended solely to expand legacy eligibility before the cutoff (for example, disclosure of execution date and negotiation timeline).
- h) Global equity: Approaches to address regional concentration of eligible contracts and related equity considerations.

For transparency, if an entity uses legacy clauses, additional disclosures should be provided, e.g. the fact that legacy clauses are used, the expected end date as some contracts may be long term and quantitative information if material.

179. Questions 179-180 seek input on potential challenges for users of climate-related financial risk disclosure programs arising from a legacy clause. Please only respond to this section if these issues are relevant to your organization or you have direct expertise or experience with climate-related financial risk disclosure programs.

Does a legacy clause pose material implications for users of climate-related financial risk disclosure programs?

1 - No implications 2 - Minimal implications 3 - moderate implications 4 - many implications
5 - Significant implications

1

2

3

4

5

180. Please briefly explain your rating: identify what the potential impacts could be and the main factors driving the impact (for example, comparability, transparency etc.).

Enter your answer

181. Some stakeholders have outlined a preference for transition tools other than a legacy clause as a way to balance continuity and comparability for the scope 2 MBM.

Which transition approach best balances continuity and comparability for the Scope 2 MBM whilst maintaining integrity, impact, and feasibility?

☒ Legacy clause: allow existing contracts that meet current quality criteria to continue to be reported under the MBM as described in Question 178.

☐ Uniform effective date: rather than using a legacy clause, instead apply the updated quality criteria to all contractual instruments from a specific date following a defined lead time. Include a separate disclosure that disaggregates results affected by contracts signed prior to this date.

☐ Other (please specify)

182. If you selected "Other" in question 181 please provide details of an alternative transition approach that better balances continuity and comparability for the scope 2 MBM whilst maintaining integrity impact and feasibility.

Please enter at most 4000 characters

183. If a uniform effective date was applied rather than a legacy clause, what would be an appropriate date for organizations to be required to apply the updated quality criteria to all contractual instruments?

Enter in 20XX format

Number must be between 2000 ~ 2099



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