Public Consultation – Scope 2

Contents

1 Letter from the Chair of the Independent Standards Board

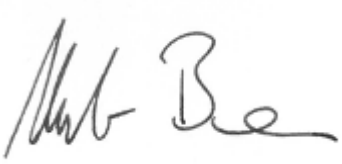
Dear Stakeholder,

I am delighted to welcome you to the first public consultation within the context of the updates being made to the corporate suite of GHG Protocol standards.

Collectively, these consultations focus on scope 2 as well as some additional topics which are set to inform the Actions and Market Instruments work. It is the result of a thoughtful, diligent and collaborative process involving the Scope 2 Technical Working Group (comprising a range of experts with diverse perspectives and experience) as well as continuous engagement with the Independent Standards Board in its role as independent arbiter on the GHG Protocol standards work.

Public consultation is a critical tool in shaping and strengthening standards, and in my role as Chair of the Independent Standards Board, I would like to thank you for your engagement and participation. I very much look forward to receiving your input, enabling us to progress towards the future Scope 2 standard.

With warm wishes,



Alexander Bassen

Chair, Independent Standards Board

2 Background, objectives and scope

Public consultation is a critical component of GHG Protocol's **Standard Development and Revision Procedure**, providing an opportunity for all stakeholders to contribute feedback on proposed revisions to GHG Protocol standards and guidance. It is one step of a broader process which is designed to support the development of robust, credible and trustworthy standards, leveraging the insights and expertise of stakeholders with a multitude of perspectives. This consultation constitutes the culmination of a process started in November 2022, with an **initial public consultation** including four surveys covering the suite of corporate standards. GHG Protocol received over 400 submissions to the scope 2 survey in particular, which are summarized in this **overview**. This input also served as a starting point in the development of the **Scope 2 Standard Development Plan**.

The present consultation period focuses on two distinct, but interrelated areas:

- **Scope 2 inventory topics** (*this document*)
- **Consequential Electricity-Sector Emissions Impacts -** Materials to inform the GHG Protocol's work on Actions and Market Instruments (AMI) (*separate consultation document*).

To access the survey link and other consultation materials please see this page: GHG Protocol Public Consultations | GHG Protocol

Scope 2 inventory

The Scope 2 Technical Working Group (TWG) has been working for over a year on the topics which form part of phase 1 of the public consultation. The recommendations were developed in accordance with the TWG Terms of Reference and shared with the Independent Standards Board (ISB) – the body which oversees the standards development process – for feedback on a rolling basis. Phase 1 of the consultation covers key updates to the location-based (LBM) and market-based methods (MBM) and related feasibility measures. It does not attempt to resolve every issue, additional topics are expected to be addressed in Phase 2. In July 2025, the ISB approved Phase 1 topic proposals to advance to public consultation. The details of this process are further explained here: **Scope 2 Standard Advances: ISB Approves Consultation on Market- and Location-Based Revisions**.

Scope 2 covers indirect greenhouse gas emissions from the generation of purchased and consumed electricity, steam, heat, and cooling. Within corporate inventories scope 2 uses attributional methods to assign emissions within defined organizational and operational boundaries and to maintain consistency with Scopes 1 and 3. Project or consequential approaches estimate system-wide impacts relative to a counterfactual baseline. Both have value but address different questions and should remain distinct in reporting to preserve like-for-like inventories.

This consultation seeks feedback to keep scope 2 corporate inventory accounting fit for purpose. Consistent with Phase 1 topics in the Scope 2 Standard Development Plan, the focus is on location-based and market-based methods within an attributional, value-chain framework.

Alignment with how inventories are used is central. Disclosure and target-setting programs depend on consistent scope definitions and comparable corporate totals. The revision seeks to reinforce scope 2 as an inventory method that works together with scopes 1 and 3 and supports decision-useful reporting.

The consultation aims to support interoperability with major disclosure and target-setting programs, integrate advances in science and research, and reflect current uses of the standard and of resulting inventory data, stakeholder feedback, and implementation experience since publication. The draft revisions seek to improve coherence across GHG Protocol standards and guidance, provide clarifications that reduce interpretation where possible, and strengthen structure and presentation to improve usability and assurance readiness.

Consistent with current practice, the revised Scope 2 Standard is intended to apply to companies and other organizations of all sizes, across sectors and geographies. Policymakers, assurance providers, and GHG programs may also reference the standard when designing reporting or target-setting requirements.

Additional topics to inform Actions and Market Instruments (AMI) work

A separate consultation document, *"Consequential Electricity-Sector Emissions Impacts",* covers questions to inform the GHG Protocol AMI work, which is developing standardized, sector-agnostic requirements for quantifying and reporting GHG impacts of actions. This covers avoided-emissions methods that estimate the system-wide effects of clean-energy procurement and investment outside corporate inventories. That consultation invites targeted electricity-sector input to support AMI's cross-sector work, while keeping the scope 2 inventory consultation focused on LBM and MBM topics. Publication and effective dates for Scope 2 and AMI are intended to be coordinated so that any new LBM/MBM requirements take effect alongside complementary AMI outcomes.

Outline of this document

Sections 3-7 of this document outline the topics for Scope 2 Public Consultation. Each section includes:

- Description of proposed updates
- Detailed rationale for proposed updates
- Consultation Questions designed to elicit specific, actionable feedback[1]

Participation and next steps

For each consultation, stakeholders are encouraged to review the documentation, any proposed updates, rationale as well as the consultation questions carefully and **submit their feedback via the online survey form on the consultation page** of the GHG Protocol website**.** The form will be open for submission for a **60-day period held between October 20 and December 19, 2025.** Please submit all feedback via the online survey form only. Feedback shared with GHG Protocol via other channels will not be considered as a part of the public consultation process.

For feedback on scope 2 inventory topics only: Following the consultation period, GHG Protocol will prepare a public summary of all comments, highlighting key themes and proposed areas for amendment. GHG Protocol will then work with the TWG to revise the draft standard. Revised proposals will be discussed with the ISB on an as-needed basis and the final draft Phase 1 content will then be submitted to the ISB as part of the final draft standard for approval. Once approved by the ISB, the GHG Protocol Steering Committee will be asked to ratify the revised text on key scope 2 requirements to ensure due process has been followed and following this, the revised standard will be published.

For both consultation areas, and in line with the **Standard Development and Revision Procedure**, the Secretariat will analyze the number and variety of stakeholders that have submitted feedback to determine whether these are representative of all key groups. If the Secretariat determines that insufficient input has been received from any key stakeholder group(s), the Secretariat will proactively seek feedback from the underrepresented stakeholder groups.

Please note that the public consultation period is not a voting exercise. Following the conclusion of the public consultation period, all feedback submitted via the public consultation process will be evaluated in line with the Standard Development and Revision Procedure and weighed against GHG Protocol's decision-making criteria and hierarchy detailed in Annex A of **GHG Protocol's Governance Overview**. The number of times a particular comment is submitted does not necessarily impact what will end up in the final draft of the new Scope 2 Standard nor how the input will be considered in the AMI TWG going forward.

Transparency objective

[1] Please note that questions in this document are for reference only. All questions must be answered through the official Public Consultation online form which may be accessed directly on the main Scope 2 Public Consultation webpage.

In line with the **Standard Development and Revision Procedure**, all feedback received during the public consultation period shall be made publicly available on the GHG Protocol website and shall, at minimum, identify the stakeholder type, sector, and region of the respondent. By participating in this consultation, you are agreeing to the terms in the Disclaimer and Notice of Rights for Voluntary Feedback Submission presented in the online survey form. This means that all feedback will be made publicly available, unless otherwise specified.

Anonymity: Transparency, accountability, and representation from key stakeholder groups are paramount to our standard development process and the future uptake of final standards. As such, the default is for all published feedback to be fully attributed to the respondent. In the exceptional circumstance that full attribution prohibits your ability to participate in the consultation, respondents may request that their name, organizational affiliation, and jurisdiction be redacted from the publicly available database of feedback. To request this anonymity, select the appropriate option in the demographics section at the start of the survey. If availing yourself of this option, it is the responsibility of the respondent to ensure that feedback does not contain any identifiable information. GHG Protocol will not redact or modify feedback outside of specifically identified fields when publishing feedback.

Confidentiality: In exceptional circumstances where good cause exists, a respondent may request that highly sensitive or confidential information not be made publicly available. This narrow exemption will typically only be granted for provision of commercially sensitive data or pre-publication research findings *in support of or as a supplement to feedback otherwise subject to public disclosure*. Requests for confidentiality are subject to review and not guaranteed. Therefore, all requests must be submitted via this form and approved in writing *prior* to submission of the affected feedback. Submission of sensitive or confidential information prior to receiving approval and instruction of how to submit the affected feedback may result in its publication.

To ensure sufficient time for review and adjudication of requests for confidentiality, potential respondents must submit their request prior to December 1, 2025. Requests after this date may be rejected. While GHG Protocol will endeavour to respond to requests as quickly as possible, response time is subject to the volume of requests. All feedback subject to disclosure must be submitted prior to the consultation deadline.

For additional insights on participation in the consultation, please see here: *GHG Protocol Public Consultations Now Open: Scope 2 and Electricity Sector Consequential Accounting*.

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

3.1 Description of proposed changes to scope 2 definitions

It is proposed that the definitions of scope 2, location-based method (LBM), and market-based method (MBM) be updated to reaffirm the place of scope 2 reporting within an attributional value-chain GHG inventory and to clarify these methods should reflect emissions from electricity generation processes physically connected to the reporter's value chain.

The following text outlines the current scope 2 definitions and proposes how they may be refined for clarity and boundary discipline in line with the changes outlined in this consultation. Updated definitions will be finalized alongside the location- and market-based method u4pdates in this consultation, with text refined through stakeholder input and ISB review.

Current scope 2 definition:

- "Scope 2: Electricity indirect GHG emissions - scope 2 accounts for GHG emissions from the generation of purchased electricity consumed by the company. Purchased electricity is defined as electricity that is purchased or otherwise brought into the organizational boundary of the company. Scope 2 emissions physically occur at the facility where electricity is generated."
    - *Corporate Standard, Chapter 4, pg. 25*

- "Scope 2 is an indirect emission category that includes GHG emissions from the generation of purchased or acquired electricity, steam, heat, or cooling consumed by the reporting company."
    - *Scope 2 Guidance, section 5.3, pg. 34*

Proposed scope 2 definition update: The proposed revision is to refine the definition of scope 2 emissions outlined above to emphasize its role within an attributional value chain GHG inventory. It would clarify that scope 2 must only include emissions from electricity generation processes that are physically connected to the reporter's value chain and exclude any unrelated emissions.

Current LBM definition:

- "A method to quantify scope 2 GHG emissions based on average energy generation emission factors for defined geographic locations, including local, subnational, or national boundaries."
    - *Scope 2 Guidance, Table 4.1, p. 26*

- "The location-based method is based on statistical emissions information and electricity output aggregated and averaged within a defined geographic boundary and during a defined time period."
    - *Scope 2 Guidance, section 4.1.1, p. 25*

Proposed LBM definition update: Previously defined by average generation factors across defined geographic boundaries, the proposed revision is to specify that emissions should reflect generation physically delivered at the times and locations where consumption occurs and explicitly recommend that imported electricity should be included in location-based emission factor calculations.

Current MBM definition:

- "A method to quantify the scope 2 GHG emissions of a reporter based on GHG emissions emitted by the generators from which the reporter contractually purchases electricity bundled with contractual instruments, or contractual instruments on their own."
    - *Scope 2 Guidance, Table 4.1, pg. 26*

Proposed MBM definition update: The proposed revision is to retain the contractual instrument as the basis for allocation while specifying temporal correlation and deliverability requirements for matching the underlying electricity to the reporter's consumption.

3.2 Rationale for proposed change

Under this proposal, revisions would aim to clarify the definitions of each method to reflect the proposed changes to the location- and market-based method outlined in this consultation. Clarifications would aim to improve accuracy and comparability by aligning reported scope 2 emissions with electricity that could plausibly be supplied within the reporter's value chain and by distinguishing inventory totals from broader impact claims reported separately. Clearer deliverability boundaries would also aim to support consistency with other scopes and emerging disclosure frameworks.

3.3 Consultation questions

Note: *Question numbering begins at 18 to maintain consistency with the online survey. Questions 1–17 appear in the survey as the acknowledgment and demographics section.*

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.

19. Please provide any feedback on the proposal to clarify 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.

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.

3.4 Description of proposed changes to scope 2 purposes

Stakeholder feedback in the 2023 Scope 2 Survey identified ambiguity in how the purposes of the location and market-based method are defined in the Scope 2 Guidance. Currently, there is no dedicated section of the Scope 2 Guidance to outline these purposes, and descriptions appear in varying forms throughout the document. (Excepts have been compiled for reference in the Scope 2 Discussion Paper, see pages 17 & 30).

The TWG process defined key overarching purposes for both the location- and market-based methods. Updated purposes will be finalized alongside the location- and market-based method updates in this consultation, with text refined through stakeholder input and ISB review.

Proposed purposes of the location-based method include:

- Allocating emissions based on a reporter's contribution to aggregate physical demand for grid electricity
- Risk and opportunity assessment related to consumption of grid electricity
- Enabling abatement planning and reduction target-setting
- Improving comparability

Proposed purposes of the market-based method include:

- Estimating emissions based on physical and contractual relationships to electricity supply
- Influencing electricity suppliers and generation resource supply mix across the grid
- Risk and opportunity assessment related to contractual relationships.
- Enabling abatement planning and reduction target setting
- Incentivizing policy engagement

3.5 Rationale for proposed change

Under this proposal, revisions would aim to clarify the intended purposes of each method to improve the alignment with GHG accounting and reporting principles, help ensure scope 2 inventories are internally consistent, and support a fair, accurate representation of electricity purchase and use claims.

3.6 Consultation questions

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.

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.

4 Location-based method

4.1 Description of proposed location-based method updates

Summary

Proposed updates to the location-based method would seek to strengthen the LBM in line with the GHG Protocol Decision Making Criteria and Hierarchy: integrity, impact and feasibility. These would include:

1. Update to the location-based emission factor hierarchy
2. Addition of definition for "accessible": publicly available, free to use, and from a credible source.
3. Requirement to use the most precise location-based emission factor accessible for which activity data is also available.
4. Include feasibility measures for location-based method updates: load profiles and phased implementation.

4.1.1 Update to the location-based emission factor hierarchy

Proposed updates to the location-based method requirements center on a new emission factor hierarchy, presented in the 'proposed revision text' below, that seeks to provides more guidance on spatial and temporal granularity. Reporting organizations would be directed to prioritize emission factors using the most precise location information (i.e., spatial boundary) first, followed by the most precise time matching (i.e., temporal granularity). For example, given the choice between two emission factors, the first one being a national emission factor with hourly temporal resolution, and the second one being a local emission factor with annual temporal resolution, the second emission factor should be selected.

In addition, the updated emission factor hierarchy distinguishes between 'production-based' factors and 'consumption-based' factors, with consumption-based factors prioritized. Production-based factors are calculated using an average of only the generating resources within a region, while consumption-based factors additionally account for imported and exported power between regions. By including imports and exports, consumption-based factors more accurately approximate the mix of resources used to deliver power to consumers, therefore these factors are prioritized above production-based factors.

Proposed revision text

- ***Spatial boundaries –*** *The specific geographic area used to set the parameters for the produced or consumed electricity included in the emission factor. The most appropriate spatial boundaries for consumption-based emission factors are the most granular boundaries for which accurate data is*

available. The most appropriate spatial boundaries for production-based emission factors are those that approximate regions of energy distribution and use.

- ***Temporal granularity –*** *The specific time period used to set the parameters for the produced or consumed electricity included in the emission factor. Production and consumption levels can vary significantly by season and time of day. The most appropriate temporal granularity for consumption-based and production-based emission factors is the smallest interval for which accurate data is available.*
- ***Emission factor type (production-based or consumption-based averages) –*** *"production-based" averages characterize all the GHG emissions associated with the quantity of electricity generation produced in a specific geographic area and time period. "Consumption-based averages" characterize the weighted-average GHG emission rate of the electricity generation consumed in a specific geographic area and time period. Consumption-based averages reflect electricity imports, exports, and stored electricity produced in a previous time period, whereas production-based averages do not.*

Proposed Location-based Emission Factor Hierarchy

Spatial Boundary	Temporal Granularity	Type
Local boundary Balancing area subregion as defined by the market operator*	Hourly	Consumed**
	Monthly	
	Annual	
Operational grid boundary Grid balancing area / control area / Independent System Operator (ISO) region / Load-Frequency Control (LFC) area. These options can sometimes align with national or subnational boundaries (e.g. province, state or territory boundary).	Hourly	Consumed
		Produced
	Monthly	Consumed
		Produced
	Annual	Consumed
		Produced
Grid-wide or national boundary Wide area synchronous Grid / Grid Interconnection (for countries made up of multiple synchronous grids)*** National (for rest of world)	Hourly	Consumed
		Produced
	Monthly	Consumed
		Produced
	Annual	Consumed
		Produced

* A subregion or zone that is defined by a market operator/balancing area for operational, planning, and/or reliability purposes. Examples include load zones, local balancing areas, reliability zones, congestion zones, etc. This level of spatial boundary may not exist in smaller balancing areas / markets.

**Note that production-based factors are not presented as options for the most granular spatial boundary, as there is a minimum geographic boundary required for production-based factors to be relevant.

***In countries that are made up of multiple synchronous grids, national emission factors should not be used. The following list of countries attempts to enumerate all countries where this is the case, but this may not be comprehensive: U.S., Canada, China, Australia, Japan, New Zealand, U.K., Indonesia; islands electrically separated from mainland nation.

4.1.2 Addition of definition for "accessible"

A new concept of accessibility has been proposed for location-based method emission factor sources. Accessible emission factors are defined as publicly available, free to use, and from credible sources. Reporting organizations are not required to use any factors above and beyond those that can be freely accessed in the public domain. More guidance and definitions for what constitutes a credible source will be further defined in future TWG and ISB deliberations.

Proposed revision text:

*Accessible emission factors are those that are: publicly available, free to use, and from a credible source (such as a government agency, system operator, or recognized registry). If a higher-quality factor exists but is not publicly available or requires payment, it **may** be used, but it is not required even if it ranks higher in the hierarchy.*

4.1.3 Requirement to use the most precise location-based emission factor accessible.

This proposed update clarifies that reporters must use the most precise location-based emission factors on the hierarchy accessible to them and matched to the same precision of their available activity data.

For example, if a company has access to hourly emission factors, but can only source annual activity data, the proposal is that they are not required to calculate location-based emissions on an hourly basis and can instead use annual emission factors. However, under this proposal, organizations who wish to utilize more temporally precise emission factors may use load profiles to account and report using hourly data. Load profiles approximate when power is typically consumed, depending on the type of organization (e.g. retail business, data center, or hospital) and can be used to translate annual activity data into hourly data for a full year.

Proposed revision text:

- *Under the location-based method, companies **shall** use the most appropriate, accurate, precise, and highest quality emission factors accessible as specified by the emission factor hierarchy, consistent with the precision of available activity data.*
- *Companies **shall** use the most accurate and most temporally granular activity data available (as shown in the table below). Less temporally granular data may be used if it matches the temporal resolution of the best accessible emission factor data.*
- *When actual hourly activity data is not available, load profiles **may** be used to estimate hourly activity data, but should not serve as a replacement for hourly accounting based on actual data. Load profiles may be useful if it is believed that lower resolution data may misrepresent the reporter's inventory total (e.g. if the reporter mostly uses electricity during a certain time of day).*

Proposed Hierarchy of Consumption Data for Location-based Method

Consumption data	Requirement	Indicative examples
Hourly Metered Consumption	**Shall** use if available	Metered electricity consumption or supplier bills specifying consumption in MWh or kWh units provided by reporting entity or supplier.
Estimated Hourly Consumption Based on similar facilities within the reporter's organizational boundary	**May** use if no higher resolution available	Based on actual meter reads or supplier bills and metered hourly data from a similar facility (e.g. same facility purpose, size, climate zone, etc).

Estimated Hourly Consumption Based on Supplier-provided Load Profiles		Based on actual reporting entity monthly meter reads or supplier bills and load profiles used by supplier to determine hourly retail supply obligations provided by supplier
Estimated Hourly Consumption Based on Standard Load Profiles		Based on actual reporting entity metered monthly or annual data and standardized load profiles for customer type and location*
Monthly Consumption	**Shall** use if available and no higher resolution metered data is available	From reporting entity supplier bills
Annual Consumption		From reporting entity supplier bills

*(e.g., NREL End-Use Load Profiles for the U.S. Building Stock; DOE Load Profiles data, ENTSO-E national hourly demand, EIA Form 930 Balancing Authority demand, Australian Energy Market Operator (AEMO) NEM demand data, UK Energy Dashboard, CAISO system load curves, Profiling - Elexon BSC, Normalized Demand Profiles for UK, Energy Charts (Germany), etc.).

*Companies **shall** use the most precise emission factor accessible based on the following order:*

1. *Start with the most detailed geographic area for which data is accessible.*
2. *Within that area, use the most temporally granular accounting interval accessible (e.g., hourly is more precise than annual). Where only emission factors older than the reporting period are accessible, the most recent accessible annual emission factors **shall** be used.*
3. *Within the best time resolution, choose factors based on consumption (what electricity users receive), rather than production (what generators produce), when those are accessible and appropriate.*
4. *If the temporal granularities of the activity data and emission factors do not match, the lowest (i.e. least precise) resolution granularity **shall** dictate the accounting interval to* use.

4.1.4 Feasibility measures for location-based method updates

To support feasible implementation by reporting organizations, this consultation presents feasibility options for the location-based method including load profiles and an option for phased implementation period that could provide multiple years between approval through the GHG Protocol governance process and any required adoption in the updated GHG Protocol Standard. These options are informed by the following considerations identified during the TWG revision development process:

Load profiles could enable organizations without access to hourly activity data to approximate hourly data from monthly or annual data. These profiles are commonly used by grid planners to estimate how much electricity demand is expected during specific hours of the day and could similarly be used by reporting organizations. Under this proposal, a hierarchy of load profiles would guide reporters. Use of these profiles could allow organizations that seek to report their location-based inventories on an hourly basis to do so whether or not hourly data are available.

Phased implementation rules are under consideration to facilitate a transition to any new requirements. Following approval through the GHG Protocol governance process and publication of the revised *Scope 2 Standard* (anticipated late 2027), implementation could phase in over multiple years. Staged effective dates would give organizations, data providers, utilities, and service platforms time to adapt and develop tools, with an option for early adoption.

4.2 Rationale for location-based method updates

Stakeholder feedback in the 2023 Scope 2 Survey identified ambiguity in how reporters identify the most appropriate location-based emission factor. The TWG process confirmed three determinative elements, spatial boundary, temporal granularity, and emission-factor type, and this proposal codifies them as explicit hierarchies with a clear order of precedence. Prioritizing the most granular spatial boundary available, then the most granular time interval, and preferring consumption-based over production-based factors where available seeks to provide a common decision path, reduce discretion in interpretation, and support more consistent, comparable selections across reporters and regions. While data availability will still vary, establishing a shared hierarchy aims to clarify expectations and limits divergence relative to the status quo, laying the foundation for consistent application in line with the updated Scope 2 framework.

To complement the proposed updated hierarchy, defining "accessible" seeks to establish a practical floor for applying it. Anchoring LBM to factors that are publicly available, free to use, and from credible sources would provide a feasible, low-cost baseline, support consistent application of the hierarchy, preserve continuity with current datasets, and encourage use of higher-precision factors when freely available. The proposal also recognizes regional differences in data access that will evolve over time.

Together with the clarified hierarchy and definition of "accessible," this proposal seeks to reduce uncertainty by clarifying that reporters must use the most precise location-based emission factors accessible to them, matched to the same level of precision as their available activity data.

Under this proposal, greater temporal and geographic granularity would be used to better align with how grids operate. Available evidence suggests that annual, broad-region averages may misstate reported emissions. As proposed, using factors that reflect the grid area that can deliver power to the load at the times and locations where consumption occurs could reduce known sources of misallocation. In some systems, hourly factors can materially change allocated results, and accounting for cross-border flows can significantly raise or lower emissions intensity. The proposed updates advanced to consultation, seek to strengthen accuracy, scientific integrity, and transparency of the LBM, while maintaining its role as a common, publicly verifiable baseline to support interoperability across disclosure frameworks that use LBM results.

Feasibility remains central. The level of precision required depends on two things: what is accessible (publicly available, free to use, and from a credible source), and the available resolution of activity data. If either one is less precise, that sets the level for what is required. Where hourly activity data are not available, load profiles may be used to approximate hourly consumption so more granular emission factors can be applied when accessible. Taken together, these updates seek to provide a consistent way to select factors and apply them in practice, preserve continuity with current practice, enable phased improvements as data availability expands, and provide a practical path for reporters to produce more decision-useful, comparable LBM results.

4.3 Consultation questions

4.3.1 Update to the location-based emission factor hierarchy

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)*?
    a. Scale of 1 (no support) – 5 (full support)

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

24. Please provide your reasons for support, if any (select all options that apply)

    a. Agree that guidance on selecting location-based emission factors should be presented as a hierarchy
    b. Enhances the accuracy and relevance of the location-based method

c. Enables use of emission factors that support abatement planning and target-setting
d. Improves use of location-based method to provide risk and opportunity assessment related to consumption of grid electricity
e. Aligns with emission factors used by your organization for location-based emissions reporting
f. Aligns with emission factors used for mandatory or voluntary reporting in your region
g. Prioritizes consumption-based factors that include imports/exports over production-based factors
h. Clarifies application of the EF hierarchy (spatial > temporal > consumption-based > production-based)
i. Agree with listing the most precise temporal granularity as "hourly"
j. Agree with listing the most precise spatial boundary as "local boundary"
k. Agree that the proposed spatial boundaries reflect electricity deliverability in your region
l. Other (please provide)

25. Please provide comments regarding your reasons for support.

26. Please provide your concerns or reasons for why you are not supporting, if any (select all options that apply)
    a. Prefer guidance on selecting location-based emission factors to be identified as a single globally applicable option to increase comparability
    b. Concern about increased administrative burden and complexity from identifying the most precise emission factors accessible
    c. Concern that the most precise temporal granularity "hourly" is too detailed
    d. Concern that the most precise spatial boundary, "local boundary", is too narrow
    e. Concern that the proposed spatial boundaries do not reflect electricity deliverability in your region
    f. Concern hierarchy does not align with emission factors used by your organization for location-based emissions reporting
    g. Concern hierarchy does not align with emission factors used for mandatory or voluntary reporting in your region
    h. Prefer a different order (e.g., consumption-based first, then spatial boundary, then temporal granularity)
    i. Unclear how the changes will affect your GHG emissions reporting
    j. Other (please provide)

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

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.

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).

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).

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?

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

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

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?
    a. No, different spatial boundaries are appropriate for the location-based and market-based methods
    b. Yes, include the MBM deliverability market boundaries in addition to the proposed LBM hierarchy (*explain why they should be added*)
    c. Yes, include the MBM deliverability market boundaries as a replacement for the proposed LBM hierarchy (*explain why they should replace the current hierarchy*)
    d. Other (explain)
    e. 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.

4.3.2 Addition of definition for "accessible"

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?
    a. Scale of 1 (no support) – 5 (fully support)

36. Please provide your reasons for support, if any. *Select all options that apply.*
    a. Definition supports feasibility and lower-cost reporting
    b. Supports transparency and public verifiability of emission factors
    c. Implements a common comparability baseline across reporters
    d. Creates data equity for smaller reporters and underserved regions
    e. Encourages open publication of emission factors
    f. High quality accessible emission factors already exist for most markets globally today
    g. Ensures reporters can immediately apply the updated LBM hierarchy
    h. Clarifies reporting requirements
    i. Other (please explain)

37. Please provide comments regarding your reasons for support.

38. Please provide your concerns or reasons for why you are not supporting (if any). *Select all options that apply*
    a. Definition needs further clarification about what is recognized as a credible source
    b. Definition should not exclude emission factors that are publicly available and credible even if they have a reasonable associated cost (i.e. not free)
    c. 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
    d. Definition should also consider level of administrative effort in addition to external costs for emission factor data

e. Another criterion should be added to the definition
f. Other (please explain)

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

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.

40. Which entities should qualify as credible sources (select all options that apply)
    a. Government agency
    b. System operator
    c. Recognized registry
    d. Accredited statistics body
    e. Independent methodology meeting minimum criteria (outlined in question 42)
    f. 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.

42. If you selected independent methodologies in question 40, please describe what documentation or assurance (if any) is needed for it to be recognised as a credible source? (select all that apply, then add brief detail):
    a. Publicly documented methods and system boundaries
    b. Update cadence (e.g., annual) and version control
    c. QA/QC procedures and uncertainty disclosure
    d. Governance/independence and conflict-of-interest safeguards
    e. Geographic/system boundary and temporal coverage fit for use
    f. Other (please explain)

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

4.3.3 Requirement to use the most precise location-based emission factor accessible.

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?
    Scale of 1 (no support) – 5 (fully support)

45. Please provide your reasons for support, if any (select all that apply).
    a. Improves accuracy and scientific integrity of LBM results
    b. Strengthens transparency and public verifiability
    c. Enhances comparability across reporters and frameworks
    d. Better reflects grid operation in time and space, reduces misallocation
    e. Enables emission changes from storage and demand-flexibility to be reflected more accurately
    f. Prioritizes consumption-based factors that include imports/exports
    g. Aligns emission factor precision with available activity data
    h. Aligns positively with mandatory or voluntary reporting requirements in your region
    i. Enables use of load profiles when hourly activity data are unavailable
    j. Provides a common, accessible baseline for inventories
    k. Supports phased improvement as data availability expands
    l. Improves decision-usefulness for external disclosures
    m. Other (please provide)

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

47. Please provide your concerns or reasons for why you are not supporting (select all that apply).
    a. Concern about negative impact on comparability, relevance and/or usefulness of LBM inventories
    b. Concern that administrative, data management, and audit challenges posed by this approach would place an undue burden and costs on reporters
    c. Concern that the most precise spatial boundary in the LBM emission factor hierarchy, "local boundary', is too narrow to require even when accessible
    d. Accessible factors may be less accurate than non-accessible options and primary users of emission reporting data may expect the most representative factors
    e. Material differences to inventory accuracy are too small to justify cost
    f. Concern about the update cadence or representativeness of datasets (hourly/monthly)
    g. Other (please provide)

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

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.

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?

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.

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.

52. 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?
    a. No meaningful improvement (unlikely to change decisions/interpretations)
    b. Minor improvement (noticeable but unlikely to change decisions)
    c. Moderate improvement (could change some decisions/assessments)
    d. Substantial improvement (likely to change decisions benchmarks)
    e. Not sure / no basis to assess

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

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?
    a. No meaningful improvement (unlikely to change comparability/interpretations)
    b. Minor improvement (noticeable but unlikely to change comparability)
    c. Moderate improvement (could change some comparability/assessments)
    d. Substantial improvement (likely to change comparability benchmarks)
    e. Not sure / no basis to assess

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

56. For questions 52-55, please provide the basis for your assessment.
    a. Direct empirical analysis (e.g., back-testing with hourly factors)
    b. Operational experience (e.g. applying hourly LBM emission factors)
    c. Professional judgment informed by literature/briefings
    d. General awareness (no direct analysis)
    e. Prefer not to say

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

57. At the Operational Grid Boundary level (of the proposed location-based emission factor hierarchy), what share of your load has hourly emission factors accessible: (select one)
    a. 0%
    b. 1–25%
    c. 26–50%
    d. 51–75%
    e. 76–100%
    f. Unsure
    g. Not applicable

58. Please provide additional context for the data sources included in your answer to question 57.

59. Please indicate the share of your load with hourly activity data available: (select one)
    a. 0%
    b. 1–25%
    c. 26–50%
    d. 51–75%
    e. 76–100%
    f. Unsure
    g. 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.

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.

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).

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

a. Scale of 1 (minimal) – 5 (high)
b. Not applicable (not a preparer)

63. Please select the main drivers of cost/effort (select all that apply).
    a. Data access/rights to granular emission factors
    b. Hourly activity data availability/metering rollout
    c. Tooling/IT integration or data pipelines
    d. Assurance/internal controls readiness
    e. Staffing/capacity/training
    f. Contracting/procurement or budget cycle constraints
    g. Third-party publication cadence (emission factors)
    h. Multi-jurisdiction complexity (many grids/regions)
    i. Policy/regulatory or commercial terms
    j. Other (specify)

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

65. Which two measures would most reduce burden in your context? (select up to 2)
    a. Standardized publication of consumption-based emission factors by grid/system operators
    b. Load profile hierarchy/templates to approximate hourly activity data when meters are unavailable
    c. Phased implementation (staged effective dates)
    d. API/automated access to emission factor datasets
    e. Example calculations and disclosure templates
    f. Assurance safe-harbors for estimates
    g. Other (specify)

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

67. For which reporting year would your organization be ready to apply the revised Scope 2 Standard 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:
    a. Earlier than reporting year 2027 (already aligned)
    b. Reporting year 2027 (inventory prepared in 2028)
    c. Reporting year 2028 (inventory prepared in 2029)
    d. Reporting year 2029 (inventory prepared in 2030)
    e. Reporting year 2030 (inventory prepared in 2031) or later
    f. Later than Reporting year 2030
    g. Not applicable

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

5 Market-based method

5.1 Description of proposed market-based method updates

Summary

Under this proposal, updates to the market-based method would seek to strengthen the MBM in line with the GHG Protocol Decision Making Criteria and Hierarchy, integrity, impact, and feasibility. As proposed, the revisions would:

1. Update the Scope 2 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.

2. Update Scope 2 Quality Criteria 5 to require that all contractual instruments used in the market-based method be sourced from the same 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.

3. Provide new guidance for Standard Supply Service (SSS) and a requirement that a reporting entity shall not claim more than its pro-rata share of SSS.

4. Update the 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.

5. Provide new requirement for use of fossil-based emission factors where no residual mix emission factor is available.

6. Include feasibility measures for market-based method updates: load profiles, exemption thresholds, phased implementation and a legacy clause.

5.1.1 Update to Scope 2 Quality Criteria 4

The proposed update would require organizations using contractual instruments to match them to electricity consumption hourly. This requirement would apply only to contractual instruments not to totals reported using residual mix or other default factors.

To make hourly matching practical and accessible, the proposal would allow organizations to use load profiles, hourly curves that show how electricity usage or generation rises and falls over the course of a day and throughout the year. Load profiles are frequently used by grid planners to estimate how much electricity demand is expected during specific hours of the day and can similarly be used by reporting organizations. Under this proposal, reporters could select from a hierarchy of options (e.g., facility-specific profiles, utility/customer-class or regulator-approved profiles, time-of-use averages, and a flat average across all hours). Note, the flat-average option is universally available and requires no specialized data. It spreads a site's total use evenly across hours, and research indicates it can approximate interval-data results closely enough to support credible hourly matching and comparability during transition periods.

These profiles could help organizations without access to hourly data:

- Approximate their hourly load from monthly or annual use data
- Approximate the hourly granularity of monthly or annual timestamped contractual instruments

In addition, exemptions to hourly matching are being evaluated to scale requirements proportional to organizational size (see section 6). This feasibility measure would exempt organizations under a threshold, while still requiring larger reporters to hourly match.

Proposed revision text:

***Criterion 4. Temporal correlation**. All contractual instruments used in the market-based method for scope 2 accounting **shall** be issued and redeemed for the same hour as the energy consumption to which the instrument is applied, except in certain cases listed in [Exemption to Quality Criteria 4].*

Temporal correlation reflects the simultaneity of the energy supply from which an emission factor is derived and the consumption to which the factor is applied.

*All contractual instruments used in the market-based method **shall** be derived from the highest precision data available (as shown in the hierarchy of temporal data for contractual instruments). Where hourly contractual instruments are not available production load profiles **shall** be combined with monthly or annual contractual instruments to estimate hourly data, except in certain cases listed in [Exemption to Quality Criteria 4].*

*When reporting contractual instruments, reporting entities **shall** use consumption data derived from the highest precision data available (as shown in the hierarchy of activity data for matching contractual instruments), if hourly consumption data is not available load profiles **shall** be used to estimate hourly activity data, except in certain cases listed in [Exemption to Quality Criteria 4].*

Proposed hierarchy of temporal data for contractual instruments

Temporal Granularity	Derived from	Applicable to:	Precision
Hourly	Hourly contractual instruments	Electricity consumption above exemption threshold	Higher
	Monthly or annual contractual instruments combined with hourly production meter data from the same production asset		
	Monthly or annual contractual instruments combined with hourly facility-specific production profile		
	Monthly or annual contractual instruments combined with hourly regional publicly available production profile		
Monthly	Monthly contractual instruments	Electricity consumption below exemption threshold	Lower
Annual	Annual contractual instruments		

Proposed hierarchy of activity data for matching contractual instruments

Data Granularity	Consumption Data Derived from	Applicable to	Precision
Hourly	Meter data Primary hourly meter data	Electricity consumption above exemption threshold	Higher
	Facility-specific load profile Total facility consumption scaled according to an estimated facility-specific load profile		
	Market-boundary publicly available load profile Total market-boundary consumption scaled according to a general or customer class-specific market-boundary load profile		
	Time-of-use average Total consumption for time-of-use billing periods (e.g., on-/off-peak hours) scaled to the proportion of electricity consumed during each time-of-use period, then		

	averaging by the number of hours within that time-of-use period		Lower
	Flat average Total consumption divided by the number of hours in the corresponding period for which data is available (e.g., if a reporting entity has annual consumption data, they would divide the yearly total by 8,760 hours to calculate an average hourly load)		
Monthly	Monthly bill or meter data	Electricity consumption below exemption threshold	
	Flat average Total annual consumption divided by 12 months		
Annual	Annual bill or meter data		

Proposed exemption to Quality Criteria 4

Exemption thresholds have been proposed to exempt organizations under a threshold from a requirement to use an hourly accounting interval for Quality Criteria 4. Exemptions to quality criteria 4 requirements will be evaluated in detail in section 6. Options for exemption eligibility under consideration:

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 *Proposed hierarchy of temporal data for contractual instruments.*

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 *Proposed hierarchy of temporal data for contractual instruments.*

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 *Proposed hierarchy of temporal data for contractual instruments*

Option 4. Companies with **annual consumption up to [X] GWh/year** in a deliverable market 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 *Proposed hierarchy of temporal data for contractual instruments.*

Stakeholder feedback is requested on specific elements of these options in section 6.

* The small- and medium-enterprise (SME) categorization exemption is also being explored, consistent with the Corporate Standard TWG's approach to differentiating by size, geography, and emissions; it could operate on its own or alongside a GWh threshold. For company size, the Corporate Standard TWG is evaluating the draft SBTi company categorization (pending finalization), which draws on the EU Corporate Sustainability Due Diligence Directive and considers size, geography, and an emissions cap for eligibility. See section 6 for details.

5.1.2 Update to Scope 2 Quality Criteria 5

The proposed updates to Scope 2 Quality Criteria 5 redefines the market boundary to reflect deliverability, which means that electricity from a generator could plausibly be part of the mix serving the reporting entity through an electrically connected grid. In some countries, national borders will still approximate the deliverable boundary, but in cases where grid operations or interconnections differ from national borders, the defined market boundaries would reflect this. Outside a defined boundary, deliverability may also be evidenced through (1) price-based indications of available transmission capacity between adjacent grids, or (2) contracts/instruments showing physical delivery from generation to load.

If advanced, the proposed updates would incorporate references and resources in the final Standard to support users in identifying the deliverable market boundaries for their operations.

Proposed revision text:

***Criterion 5. Market Boundaries and alternate methodology for deliverability**: All contractual instruments used in the market-based method **shall** be sourced from generation that is deemed deliverable to the consuming load. Deliverability **shall** be demonstrated using one of the approved methodologies listed in the table Proposed methodologies for demonstrating deliverability.*

To qualify under this criterion:

- *Contractual instruments **shall** clearly disclose the geographic location of the generation facility from which the associated attributes are derived.*
- *An electricity generating or consuming facility **shall** be considered as located at its first point of interconnection to a transmission network.*
- *Deliverability **shall** be demonstrated using one of the approved methods*

*Each approved methodology **shall** serve as a sufficient basis for demonstrating deliverability without requiring further evidence beyond what is specified. Where claims involve more complex or cross-border supply arrangements, companies **shall** apply one of the alternate methodologies that explicitly pair attributes with physical delivery or price-based indicators of transmission access.*

*A consistent and recognized mechanism for tracking and retiring certificates **shall** be in place to prevent double counting of GHG emission attributes within or across market boundaries.*

Proposed methodologies for demonstrating deliverability

Methodology for demonstrating deliverability	Description
Market boundaries: Attributes sourced from generating facilities located within the same deliverable market boundary as the demand to which they are applied	Companies with demand located in an electricity market that employs a zonal pricing structure **shall** use the market's defined zonal pricing boundaries as the market boundaries within which electricity is considered deliverable to this demand. Markets where this standard **shall** be applied include the following: 1. Australia's National Electricity Market 2. The electricity market operated by Brazil's Chamber of Electric Energy Commercialization 3. The electricity market operated by the European Network of Transmission System Operators for Electricity (ENTSO-E)* 4. The electricity market of Russia

	Companies with demand located in Canada, mainland China or the United States **shall** use the following as the market boundaries within which electricity is considered deliverable to this demand: 5. For Canada, provincial and territorial electricity grids defined by the Canada Electricity Regulator 6. For mainland China, the territories of the Inner Mongolia Power Company, the six branches of the State Grid Corporation of China, and the China Southern Power Grid 7. For the United States, grid regions defined by [**to be determined**] a. The US Environmental Protection Agency's Emissions & Generation Resource Integrated Database (eGRID) b. DOE Needs Study Regions (45V) c. Wholesale Market/ Balancing Authority 8. For countries across the African continent companies should prioritize demonstrating deliverability based on physical interconnection where possible. Where such demonstration is not feasible, companies shall use the borders of the applicable regional power pools as the market boundaries within which electricity is considered deliverable to this demand. Although physical interconnectivity may be limited in some cases, the existence of operational regional governance structures supports the treatment of these power pools as unified electricity markets for the purposes of defining deliverability. In cases where a country participates in more than one regional power pool, organizations may align with any of the recognized power pools that include the demand location, provided claims are consistently applied and transparently disclosed. Recognized power pools include: 1. East African Power Pool (EAPP) 2. Southern African Power Pool (SAPP) 3. West African Power Pool (WAPP) 4. Central African Power Pool (CAPP) 5. North African Power Pool (NAPP) 9. Companies with demand located in any other country or territory **shall** use the borders of the relevant country or territory, OR the borders of the wide-area synchronous grid where the reporting entity's demand is located, whichever is smaller, as the market boundaries within which electricity is considered deliverable to this demand. *Any ENTSO-E offshore bidding zone interconnected to a given spatial boundary is to be considered as within that boundary

	If a facility can be considered connected to two different market boundaries the reporter **may** claim contractual instruments from both markets.
Alternate methodology 1: Attributes paired with demonstration of excess transmission capacity via electricity price differentials between adjacent markets	A reporting entity with demand located in one of the market boundaries described above **may** claim delivery of power from a facility located in an adjacent and directly connected market in cases where hourly nodal or zonal locational marginal electricity prices are published at the points of both generation and consumption and the reporting entity demonstrates that the average price at the point of consumption is less than 1.05 times the average price at the point of generation in the hour for which a claim is made.
Alternate methodology 2: Attributes paired with contracts or market instruments demonstrating physical delivery from the point of generation to the point of consumption	A reporting entity **may** claim consumption of power delivered from any point in an interconnected transmission system if it demonstrates the existence of exclusive rights allocating to the reporting entity or its energy provider the transmission capacity necessary to deliver power bundled with associated energy attributes from the point of generation to the point of consumption. These rights may be allocated via regulatory practice, contracts, or market instruments, and must be recognized by the transmission operators of all markets through which power is delivered. Energy attribute tracking systems and standards used to support claims must also be mutually compatible and recognized within all markets through which power is delivered. Delivery of power and attributes must be demonstrated on an hourly or more frequent basis with no direct counterbalancing reverse transactions.

5.1.3 New guidance for Standard Supply Service (SSS).

The proposed new guidance for Standard Supply Service (SSS) builds on and formalizes concepts introduced in the original Scope 2 Guidance, seeking to provide globally applicable rules for how to account for electricity from publicly funded, mandated, or shared resources such as those delivered through default utility service or government clean energy programs.

This approach would clarify how companies may account for electricity from shared or publicly supported resources while ensuring that each customer claims only their rightful share. Because multiple customers financially contribute to these resources, SSS seeks to ensure that each reporting entity may only claim its fair, proportional share based on electricity use. If a reporting entity chooses not to claim its share, that portion shall not be transferred or used to substantiate claims by another reporting entity, helping prevent inflated or duplicative reporting.

As an example, consider a reporting organization located in a region where 20% of their deliverable power comes from clean energy resources included in their SSS. To claim zero scope 2 emissions under the market-based method this organization could claim 20% of their consumption as zero emissions electricity and would need to procure contractual instruments from clean energy resources for the remaining 80%. Both voluntary and SSS contractual instruments need to align with the updated scope 2 quality criteria.

Proposed revision text:

Criterion 6. Standard Supply Service: *Standard Supply Service emission factors **shall** convey the direct GHG emission rate associated with resources where there is a traceable and mandatory financial relationship with consumers.*

The defining characteristic of SSS resources is that there is a traceable and mandatory financial relationship between customers of a supplier or utility and the electricity and/or contractual instruments from deliverable generation resources (including both carbon-free and fossil resources) used to supply their load. The intent of the SSS designation is to ensure fair allocation of these resources among customers, such that nonparticipating customers are not harmed by the exercise of claim(s) for SSS resources by reporting companies. Examples of a financial relationship between customers and electricity supply and/or contractual instruments that constitute a designation 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).*
- *Competitive or regulated suppliers complying with government-mandated clean energy procurement programs through the procurement of certificates on behalf of the load they serve. Examples of such programs include Renewable Portfolio Standards (RPS), Clean Energy Standards (CES), and nuclear-support policies applied to state-level electricity supply in the United States, or Feed-in Tariff (FIT) mechanisms in countries such as Japan.*
- *Publicly owned facilities where the majority owner is a government entity and the facility is operated to serve domestic electricity load under a public service obligation or similar regulatory framework. This does not include new resources developed through competitive open tender processes where the government-owned entity receives no regulatory advantage or cost recovery not equally available to private developers.*

*Stakeholder feedback on what should be defined as a monopoly supplier is requested in section 5.3.3. For example, a monopoly supplier could be a vertically integrated investor-owned utility or a government entity operating in a service area without supplier choice or they could be a distribution utility in a restructured market where certain electricity supply and/or contractual instrument purchases are subject to non-by passable, regulated cost recovery.

Standard Supply Service allocation

*Suppliers **should** allocate SSS electricity supply and related EACs for energy used to serve customers on a pro rata load share basis. However, the GHG Protocol cannot require suppliers to allocate SSS electricity supply and related EACs to their customers.*

*When a supplier allocates their SSS to customers, EACs (or supplier attestations in markets without an EAC tracking system) related to SSS **shall** be retired, cancelled, and made ineligible for use in the voluntary market.*

*If a supplier does not allocate their Standard Supply Service resources to customers, reporting companies **may** still be able to claim their pro rata share using data from a centralized, credible third-party database anticipated to be developed by the GHG Protocol or another recognized body to support globally consistent implementation. This resource would provide verified SSS allocations or proxy pro rata thresholds based on public ownership, regulatory mandates, or non-bypassable charges, especially in monopoly supplier contexts. The intent is to simplify claims, ensure auditability, and avoid the need for companies to independently calculate their own share. Companies shall not self-calculate their SSS allocation outside of the protocols defined in this resource.*

Reporting entity claims

*A reporting entity **may** claim, up to its pro rata share, the electricity and associated attributes from SSS resources in the market-based method. Any claim of SSS must be supported by credible data that meets the*

Scope 2 Quality Criteria. It is the responsibility of each reporting entity to ensure that its claims do not exceed its proportional load share.

If a reporting entity opts not to exercise this claim: Contractual instruments from their pro rata share of SSS are ineligible for claims in the market-based inventories of other companies, meaning contractual instruments procured via resale, transfer, or concentrated allocation to a specific reporting entity or subset of companies from SSS beyond a reporting entity's pro rata share are ineligible to substantiate claims.

5.1.4 Updated definition of residual mix emission factors

A residual mix emission factor reflects a default value for any electricity use not covered by contractual instruments that meet the Quality Criteria. The proposed updated definition would address that Standard Supply Service should be excluded from the residual mix along with contractual instruments voluntarily claimed. The proposed update would clarify that while residual mix emission factors should reflect the highest temporal precision available for the relevant market boundary, hourly matching is not required.

Proposed revision text:

To prevent double counting of GHG emission rate claims, the market-based method requires an emission factor that reflects a default value for any electricity use not covered by contractual instruments that meet the Quality Criteria. The residual mix excludes generation already allocated through voluntary claims or Standard Supply Service. Additional requirements on residual mix composition, data boundaries, and interaction with Standard Supply Service are provided under Criterion 9.

Criterion 9. Residual mix. *A residual emission factor characterizing the GHG intensity of electricity, within the relevant market boundary and time interval, not claimed through contractual instruments or allocated via Standard Supply Service*

Residual Mix Composition and Boundaries

*The residual mix **shall** reflect electricity generation that remains unclaimed in a specific market-boundary after all voluntary contractual instruments and publicly allocated Standard Supply Service resources have been removed.*

*Where available, residual mix data **should** be based on all-generation tracking systems or similar jurisdictional grid operator data that accounts for imports, exports, and known contractual allocations.*

*Residual mix emission factors **should** reflect the highest temporal precision available for the relevant market boundary.*

5.1.5 Provide new requirement for use of fossil-based emission factors

Under the current Scope 2 Guidance market-based method, where activity data is not matched with either contractual instruments or a residual mix, a reporter may apply a grid average emission factor (e.g., the location-based average emission factor). The proposed update would eliminate the option to use a grid-average emission factor and proposes that for any consumption not matched with Standard Supply Service or voluntary contractual instruments, organizations would be required to either use a residual mix emission factor that excludes all claimed and SSS contractual instruments, or default to either a fossil-only grid-average or fossil emission factor, such as gas, oil, or coal.

Proposed revision text:

*In cases where a residual mix is not available, reporting organizations **shall** use a fossil-based emission factor that reflects electricity generation within the relevant market boundary.*

*Fossil-based emission factors **should** reflect the highest temporal precision available for the relevant market boundary.*

*If no such fossil-based emission factor is available, reporters **shall** use a default fossil emission factor from authoritative sources (e.g., IPCC or government-published values such as a coal*, gas, or other fossil generation *emission factor). Generic location-based average grid emission factors **shall not** be used.*

*When selecting a default fossil-based emission factor, reporters **should** use a value that reasonably reflects the predominant fossil fuel used for untracked electricity generation in the relevant market boundary. This determination may consider national or regional electricity generation profiles, historical fuel mix data, or grid operator disclosures. Where no clear information is available, reporters **should** use the most conservative applicable default (e.g., coal or oil) rather than the lowest-emitting option.*

5.1.6 Feasibility measures for market-based method updates

To ensure that changes to the market-based methods are feasible to implement for reporting organizations, several feasibility options have been proposed, including load profiles, thresholds, and a legacy clause, along with an anticipated phased implementation period providing multiple years between approval through the GHG Protocol governance process and required adoption in the updated GHG Protocol Standard. These are based on the following considerations during the revisions process:

Load profiles would enable organizations without access to hourly activity data or hourly contractual instruments to approximate hourly data from monthly or annual data. These load profiles are frequently used by grid planners to estimate how much electricity demand is expected during specific hours of the day and can similarly be used by reporting organizations. The proposed updates introduce a hierarchy of load profiles to guide reporters, including facility-specific load profiles, market-boundary load profiles scaled according to utility/customer-class profiles, time-of-use averages, and a flat average across all hours. The flat-average option is universally available and requires no specialized data. It spreads a site's total use evenly across hours, and research indicates it can approximate interval-data results closely enough to support credible hourly matching and comparability during transition periods. The use of these profiles ensures that organizations that want to use contractual instruments for their market-based inventories or report their location-based inventories on an hourly basis, can do so whether they have access to hourly data or not.

Phased implementation rules could help facilitate a smooth transition to new requirements. Following approval through the GHG Protocol governance process and publication of the revised *Scope 2 Standard* (anticipated late 2027), implementation will follow a transition period. A transition period would give organizations, data providers, utilities, and service platforms time to adapt and develop tools, with early adoption encouraged. LBM and MBM requirements are scheduled to take effect on a coordinated schedule with AMI complementary metrics and with other updates across the corporate suite (Corporate Standard, Scope 2, Scope 3). Such a phased approach could support a smooth transition while maintaining the credibility and comparability of inventories.

Exemption thresholds could exempt organizations under a threshold from hourly matching requirements. Current proposals under consideration include thresholds based on the volume of electricity consumption in a given grid region and/or on company size. Initial analysis on the application of load thresholds has shown that a majority of CDP reporting companies would be exempt from requirements to hourly match, while the vast majority of electricity load on the grid would still be subject to the hourly matching requirement. Proposed approaches are outlined in section 6.

A legacy clause is under consideration to recognize investments made under existing scope 2 accounting rules, with potential approaches and parameters outlined in section 7.

5.2 Rationale for market-based method updates

The proposed updates to the market-based method were developed by the Scope 2 Technical Working Group and advanced by the Independent Standards Board for public consultation. They reflect the perspective that closer alignment with how grids operate can strengthen accuracy, scientific integrity, and comparability in scope 2 inventory reporting and can support ambitious climate action, with the consideration that feasibility remains central. This consultation invites feedback on these proposals and the underlying perspective before any decisions are finalized.

Electricity is produced and consumed in near-real time on electricity grids. Under this proposal, a generator-specific claim is most accurate when the generation occurs at approximately the same time as the consumption to which it is matched. Further, electricity is distributed on distinct grids that do not always align with national boundaries. To maintain accuracy and credibility under this proposal, generator-specific claims would need to be sourced from resources on the same grid or from a grid linked by transmission that can physically deliver to the point of consumption.

In addition to proposed accuracy improvements, the proposal seeks to improve the alignment between scope 2 inventories results and physical emissions outcomes on the grid. The current approach, using annual matching and broad geographic regions, may not consistently ensure that reported reductions in scope 2 emissions recognize actions that genuinely contribute to overall emission reductions on the grid. Under this proposal, hourly and deliverability requirements would segment the supply of EACs into more granular times and locations, which could create price signals for renewable energy production in locations and times where it is not already abundant. Further, hourly price signals could create financial incentives for energy technologies (such as energy storage, clean firm power, demand response, etc.) that will be needed at scale to fully decarbonize grids.

These proposed revisions also involve accuracy trade-offs. Power systems often dispatch resources every few minutes (e.g., five-minute intervals), as conditions shift within an hour. For feasibility reasons and aligned with research, the revisions propose the use of hourly matching of certificates as a practical cadence for accurate market-based allocation. Likewise, adopting fixed deliverability regions acknowledges that demonstrating true deliverability requires considering complex transmission constraints that vary over time. The use of fixed deliverability regions seeks to provide a stable, physically grounded proxy for what can reasonably reach load. Consistent with ISB-aligned direction and the Decision-Making Criteria and Hierarchy, the proposed revisions aim to balance accuracy and feasibility.

For additional background, please see recap of hourly matching and deliverability, Scope 2 TWG Discussion Paper and The Brattle Group Report.

Feasibility remains central. Under this proposal, where hourly activity data or hourly contractual instruments are not available, reporters could use load profiles to approximate hourly data. Profiles could be sourced from established or program-approved references, or a simple flat-average profile could be used as a universally available option. This rationale reflects research indicating that using estimated demand profiles, including flat-average, can yield system-level and attributional results similar to those based on true hourly demand. The proposal also includes exemptions to hourly matching requirements for organizations under a threshold, with the aim of balancing accuracy, impact, and feasibility considerations.

Regarding new guidance for SSS resources, stakeholder feedback has identified ambiguity in the original Scope 2 Guidance on how to fairly account for electricity from publicly funded, mandated, or shared resources that customers financially contribute to. Under this proposal, defining guidance for SSS would aim to reduce discretion in interpretation and support more consistent treatment of shared supply across different market structures. It seeks to help address risks of overclaiming and double counting of attributes from shared or publicly supported generation, with the aim of supporting the integrity of market-based accounting.

Regarding updated rules on residual mixes, under this proposal the definition of residual mix would be updated to reduce any ambiguity about the interaction with the updated Scope 2 framework. Clarifying that the residual mix would exclude generation already allocated through voluntary claims or Standard Supply Service seeks to reduce the risk of double counting within the market-based method.

Finally, under this proposal, absent other available emission factors, the default requirement would be to use a fossil-based emission factor. Replacing the grid-average fallback would aim to avoid counting resources already

claimed by other reporting organizations a second time within the MBM. This is intended to strengthen the accuracy and scientific integrity of market-based method reporting and to support a more globally consistent application.

5.3 Consultation questions

5.3.1 Update to Scope 2 Quality Criteria 4

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

69. 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* above for references to these options):
    a. The US Environmental Protection Agency's Emissions & Generation Resource Integrated Database (eGRID)
    b. DOE Needs Study Regions (45V)
    c. Wholesale market/balancing authority
    d. Don't have operations or experience in the US

70. All respondents, please select your preferred exemption threshold per deliverable market boundary.
    a. 5 GWhs
    b. 10 GWhs
    c. 50 GWhs

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

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.
    a. Scale of 1 (no support) – 5 (fully support)

72. Please provide reasons for support, if any (select all that apply)
    a. Improves accuracy and scientific integrity of MBM results
    b. Strengthens transparency and supports public verification
    c. Enhances comparability across reporters and frameworks using GHG Protocol data
    d. Better reflects grid operation, reduces misallocation of generation (e.g., "solar at night")
    e. Reduces risk of greenwashing/time-shifting claims by aligning claims to time of use
    f. Improves decision-usefulness for external disclosures
    g. Helps create price signals for times and places where renewables are not already abundant
    h. Helps accelerate the development of technologies that will be needed at scale for fully decarbonized grids
    i. Enables emission changes from storage and demand-flexibility to be reflected more accurately
    j. Improves risk and opportunity assessment related to contractual relationships
    k. Other (please explain)

73. Please provide comments regarding your reasons for support.

74. Please provide concerns or reasons for why you are not supporting, if any (select all that apply)
    a. 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
    b. Hourly matching should follow an optional 'may' rather than a required 'shall' approach
    c. Hourly matching should follow a recommended 'should' rather than a require 'shall' approach
    d. Concern about negative impact on comparability, relevance and/or usefulness of MBM inventories
    e. 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
    f. Concern that administrative, data management, and audit challenges posed by this approach would place an undue burden and costs on reporters
    g. Concern that requiring hourly matching does not create meaningful improvements to inventory accuracy
    h. Concern that a requirement for hourly contractual instruments could discourage global participation in voluntary clean energy procurement markets
    i. Other (please explain)

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

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 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. They seek to understand how hourly matching would change your workload and implementation costs relative to current MBM practice after applying feasibility measures (load profiles, phased implementation, legacy

clause). 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 5.4.

77. What is the approximate share of your organization's total load that would be subject to hourly matching, excluding any exemptions:
    a. 0%
    b. 1–25%
    c. 26–50%
    d. 51–75%
    e. 76–100%
    f. 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.
    a. Scale of 1 (much less) – 5 (much more)

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.
    a. Scale of 1 (much less) – 5 (much more)

80. What are the feasibility measures you would anticipate relying on (select all that apply):
    a. Load profiles for activity data (facility-specific)
    b. Load profiles for activity data (utility/customer-class or regulator-approved)
    c. Load profiles for activity data (time-of-use averages)
    d. Load profiles for activity data (flat average across hours)
    e. Load profiles for contractual instruments (same production asset)
    f. Load profiles for contractual instruments (facility-specific)
    g. Load profiles for contractual instruments (regional publicly available)
    h. Phased implementation
    i. Legacy clause

81. What are the assumed main drivers affecting internal workload and external service costs after applying feasibility measures (select all that apply):
    a. Registry/market access for hourly EACs
    b. Vendor/platform upgrades or new tools
    c. Data integration (profiles, APIs), system configuration
    d. Assurance/internal controls and evidence trails
    e. Staff capacity/training
    f. Contracting/sourcing changes for hourly instruments
    g. Metering/interval data access arrangements
    h. Other (specify)

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

5.3.2 Update to Scope 2 Quality Criteria 5

83. 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?
    a. Scale of 1 (no support) – 5 (fully support)

84. Please provide reasons of support, if any (select all that apply).
    a. Improves accuracy and scientific integrity of MBM results
    b. Strengthens transparency and public verifiability
    c. Enhances comparability across reporters and frameworks using GHG Protocol data
    d. Improves decision-usefulness for external disclosures
    e. Better reflects grid operation, reduces misallocation
    f. Provides sufficiently flexible options for organizations to demonstrate deliverability outside of the defined deliverable market boundaries
    g. Defined market boundaries reflect a boundary your organization already uses for procuring contractual instruments
    h. Agree that the proposed market boundary for my region(s) accurately reflects deliverability
    i. Agree that the defined market boundaries align with mandatory or voluntary reporting requirements in your region
    j. Improves risk and opportunity assessment related to contractual relationships
    k. Helps create price signals for times and places where renewables are not already abundant
    l. Other (please explain)

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

86. Please provide reasons of concern or why you are not supporting, if any (select all that apply)
    a. Proposed deliverability requirements do not improve alignment with GHG Protocol Principles
    b. Concern that narrower market boundaries restrict companies' abilities to invest in areas where renewable energy development could yield the greatest decarbonization impact
    c. Concern that narrower market boundaries could prompt a shift away from long-term agreements (i.e., PPAs) to spot purchases (unbundled certificates)
    d. Sourcing contractual instruments within deliverable market boundaries should follow an optional "may" rather than a required "shall" approach
    e. Sourcing contractual instruments within deliverable market boundaries should follow a recommended "should" rather than a required "shall" approach
    f. Concern that the defined market boundaries do not align with mandatory or voluntary reporting requirements in your region
    g. Support deliverability in principle, but the proposed market boundary for my region does not reflect deliverability
    h. Market boundaries should be defined as the geographic boundaries of electricity sectors, which align with national, and under certain circumstances, multinational boundaries
    i. Exemptions to matching within deliverable market boundaries should be allowed for markets lacking sourcing options
    j. Other (please explain)

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

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

88. 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* above for references to these options):
    a. The US Environmental Protection Agency's Emissions & Generation Resource Integrated Database (eGRID)
    b. DOE Needs Study Regions (45V)
    c. Wholesale Market/Balancing Authority
    d. Unsure
    e. Other

89. If you selected options (a), (b) or (c) 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.

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.

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.

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.

92. 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.
    a. Scale of 1 (much less) – 5 (much more)

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.
    a. Scale of 1 (much less) – 5 (much more)

94. What are the feasibility measures you would anticipate relying on to report using deliverable market boundaries (select all that apply):
    a. Phased implementation
    b. Legacy clause

95. What are the assumed main drivers affecting internal workload and external service costs after applying feasibility measures (select all that apply):
    a. Data access/rights for EACs/registries aligned to deliverable market boundaries
    b. Vendor/platform upgrades or new tools
    c. Data integration (profiles, APIs), system configuration
    d. Assurance/internal controls and evidence trails
    e. Staff capacity/training
    f. Contracting/sourcing changes for contractual instruments within deliverable market boundaries
    g. Metering/activity data reporting configured to match deliverable market boundaries
    h. Other (specify)

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

5.3.3 New guidance for Standard Supply Service (SSS).

97. 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.
    a. Scale of 1 (no support) – 5 (fully support)

98. Please provide reasons of support, if any (select all that apply).
    a. Helps ensure that SSS resources are fairly allocated to all consumers and prevents procurement by specific organizations
    b. Clarifies the order of operations so that organizations may claim SSS first and then make voluntary procurements
    c. Supports consistent treatment of shared supply across different market structures
    d. Protects the integrity of market-based accounting by avoiding double counting of attributes from SSS
    e. Other (please explain)

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

100. Please provide concerns or why you are not supporting, if any (select all that apply).

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

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

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.

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.

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

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

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?

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?
    a. Yes
    b. No
    c. Unsure

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

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)
    a. Project age
    b. Technology or fuel type
    c. Project ownership (e.g. government owned projects)
    d. Projects tracked in compliance registries
    e. Combination of above criteria
    f. Other (please specify)

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

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?

112. Please provide any additional feedback on SSS.

5.3.4 Updated definition of residual mix emission factors

113. 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?
    a. Scale of 1 (no support) – 5 (fully support)

114. Please provide reasons of support, if any (select all that apply).
    a. Establishes clear definition for residual mix emission factors
    b. Improves accuracy and relevance of market-based reporting
    c. Protects the integrity of market-based accounting by avoiding double counting of attributes within the MBM
    d. Clarifies the market boundary a residual mix emission factor should be calculated for
    e. Improves comparability and transparency across organizations and regions
    f. Helps incentivize voluntary sourcing of contractual instruments
    g. Provides an option for reporters without access to an hourly residual mix emission factor
    h. Other (please explain)

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

116. Please provide reasons of concern or why you are not supporting, if any (select all that apply).
    a. Requiring a residual mix emission factor to be calculated per market boundary will further reduce availability of residual mix emission factors
    b. Allowing reporters to use different temporal precision of residual mix emission factors within a deliverable market boundary will negatively impact comparability
    c. 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
    d. Markets should self-determine if Standard Supply Service is included in a residual mix emission factor
    e. Increases administrative complexity of calculating a residual mix emission factor
    f. Other (please explain)

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

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): Please answer for up to three registries/markets you know well.

118. 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.)
    a. Scale of 1 (Far from ready) – 5 (largely ready)
    b. Insufficient basis to assess

119. Short comment (optional, ≤100 words): Name regions where this already works vs. does not, in your view.

120. Please indicate your expected lead-time to reach "ready" (score 4–5), based on your current trajectory:
    a. <12 months
    b. 12–24 months
    c. 24–36 months
    d. >36 months
    e. Unknown

121. Please indicate your expected lead-time to reach "ready" (score 4-5), if investment/coordination accelerate:
    a. <12 months
    b. 12–24 months
    c. 24–36 months
    d. >36 months
    e. Unknown

122. Please describe the basis for your assessment:
    a. Public roadmap/docs
    b. Operator/vendor commitments
    c. Pilot/production use
    d. Professional judgment
    e. Other (specify)

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

5.3.5 Provide new requirement for use of fossil-based emission factors

124. 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?
    a. Scale of 1 (no support) – 5 (fully support)

125. Please provide reasons for support, if any (select all that apply).
    a. Helps improve accuracy and scientific integrity of MBM by reducing the risk of double counting of carbon free electricity
    b. Provides an option for reporters without access to a residual mix emission factor
    c. Incentivises development and publication of residual mix emission factors by requiring use of a more conservative emission factor as a fallback option
    d. Other (please specify)

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

127. Please provide reasons for concern or why you are not supporting, if any (select all that apply).
    a. Defaulting to fossil-based emission factors is overly conservative and may overstate actual emissions
    b. Organizations that lack access to residual mix data due to systemic or regional limitations may be disproportionately impacted
    c. Undermines comparability between organizations that can access residual mix data and those that cannot
    d. Misaligned with the definition and/or purpose of the MBM
    e. Other (please specify)

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

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?

5.4 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

130. 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?
    a. Scale of 1 (insufficient) – 5 (highly sufficient)
    b. 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.

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.

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.

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.

134. 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?
    a. No meaningful improvement (unlikely to change decisions/interpretations)
    b. Minor improvement (noticeable but unlikely to change decisions)
    c. Moderate improvement (could change some decisions/assessments)
    d. Substantial improvement (likely to change decisions benchmarks)
    e. Not sure / no basis to assess

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

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?
    a. No meaningful improvement (unlikely to change comparability/interpretations)
    b. Minor improvement (noticeable but unlikely to change comparability)
    c. Moderate improvement (could change some comparability/assessments)
    d. Substantial improvement (likely to change comparability benchmarks)
    e. Not sure / no basis to assess

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

138. For questions 134-137, please provide the basis for your assessment (select all that apply).
    a. Direct empirical analysis (e.g., back-testing with hourly factors)
    b. Operational experience applying hourly MBM
    c. Professional judgment informed by literature/briefings
    d. General awareness (no direct analysis)
    e. 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.
    a. Scale of 1 (much less) – 5 (much more)

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

b. Contract tenor or credit/collateral requirements that increase all-in price
c. Need to structure multiple smaller PPAs instead of one large, aggregated contract, reducing economies of scale and increasing fixed transaction and development costs
d. 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
e. Procurement costs to purchase EACs in secondary/spot markets to cover residual hours
f. Other (please explain)
g. 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?

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.

142. 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)?
    a. Scale of 1 (No impacts) – 5 (Significant impacts)

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).

144. If mid–high impacts: select affected areas (select all that apply):
    a. Own-use
    b. Hedge accounting
    c. IAS 37
    d. 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).

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.

146. 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?
    a. Yes
    b. Somewhat
    c. No
    d. I do not support the development of impact metrics outside the scope 2 inventory.

147. If you answer "yes" or "somewhat" to question 146, which of the following rationale captures your views (select all that apply).
    a. Allows for continued investment in electricity projects outside of my deliverable market boundary
    b. Provides a complementary metric to quantify actions such as energy storage or demand response
    c. Causes less disruption of existing electricity procurement practices
    d. Provides additional relevant information for users of GHG data
    e. Provides additional approaches for target setting
    f. Other (please specify)

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

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.

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

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

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.

6 Exemptions – hourly matching exemption threshold

6.1 Description of proposed change

The revision proposes an exemption so organizations that meet defined eligibility thresholds are not subject to the proposed update to Quality Criteria 4, which would otherwise require all contractual instruments used in the market-based method to be issued and redeemed for the same hour as the electricity consumption they cover. Organizations that qualify for this exemption may use a monthly or annual accounting interval instead of hourly for Quality Criteria 4 for operations within the exempt boundary. The proposals under consideration for defining exemption eligibility includes thresholds based on the volume of electricity consumption in each grid region and/or based on company size. For company size, the Corporate Standard TWG is evaluating use of the SBTi draft company categorization (pending finalization), which draws on the EU *Corporate Sustainability Due Diligence Directive* and considers company size, geography, and an emissions cap to distinguish companies eligible for exemptions.

The exemption would only apply to hourly matching; organizations would still need to meet the deliverability rule. Specifically, the exemption does not change the proposed requirement in Quality Criteria 5 that contractual

instruments used in the market-based method be sourced from the same market boundary as the electricity-consuming operations they cover or otherwise meet criteria demonstrating deliverability to those operations.

Draft options for feedback

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*.

6.2 Rationale for proposed change

The exemption is intended to balance integrity and impact with feasibility. Hourly matching would be the default for material loads, so MBM results reflect electricity generated at approximately the same time as it is consumed in those instances. The proposal aims to align reporting effort with expected impact by allowing electricity users under the threshold to use a monthly or annual interval, while keeping larger loads on hourly matching to support integrity and impact.

CDP load distributions show many reporters have relatively modest electricity use while a small number of very large users account for most consumption. A GWh-based threshold could potentially exempt many organizations yet keep the vast majority of GWh subject to hourly matching, with the intention of preserving the integrity and impact of overall results. Guardrails such as not splitting a single contiguous site help prevent cherry-picking and support consistent application.

In parallel, an SME categorization exemption is being explored as a complementary or alternate lever. It builds on the Corporate Standard TWG's effort to differentiate companies by factors such as size, geography, and emissions. The Corporate Standard TWG favors this pathway for conformance on certain topics because it aligns with criteria deemed important (size, geography, emissions) and avoids introducing a new or conflicting size definition across programs (see Corporate Standard TWG slides 45-46). This could provide a pragmatic route to equitable application across diverse contexts and could be used on its own or alongside a GWh threshold to achieve a potentially similar outcome.

The exemption would apply only to hourly matching; the deliverability requirement in Quality Criterion 5 still applies. The goal is a balanced approach that preserves the integrity and impact of the MBM while maintaining participation and a practical transition path as registries, data, and controls mature.

6.3 Consultation questions

153. On a scale of 1-5 do you support allowing for exemptions to hourly matching using one of the options (1-4) described above?
Scale of 1 (no support) – 5 (fully support)

154. Please provide your reasons for support, if any (select all that apply).

a. 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
b. Encourages organizations under a threshold to continue to engage in voluntary procurement using an annual procurement approach
c. Provides a more equitable approach for reporting as hourly matching could be more challenging for organizations under a threshold
d. Reduces transition strain on the electricity market and hourly matching infrastructure.
e. Other (please provide)

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

156. Please provide your concerns or reasons for why you are not supporting, if any (select all that apply).
a. Reduces accuracy and relevance of MBM reporting
b. Introduces inconsistencies across companies, reducing transparency and comparability for users
c. Creates reputational risk and increases skepticism about MBM claims.
d. Fragments the voluntary market and may slow the transition to wider availability/use of hourly data
e. Feasibility is better addressed via temporary measures (e.g., phase-ins/legacy) rather than ongoing exemptions
f. Tools and infrastructure are improving rapidly, making broad exemptions increasingly unnecessary
g. Support an exemption, but a different criterion should be used for defining eligibility.
h. Other (please provide)

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

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

Load-based exemption threshold

159. 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

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?

a. Rationale (<300 words)

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)
    a. Number of employees
    b. Net annual turnover
    c. Balance sheet
    d. Emissions (scope 1 + LBM scope 2)
    e. Company location (high and upper-middle income countries and low- and lower-middle income countries)
    f. Other (please explain)

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

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.
    a. Option 1
    b. Option 2
    c. Option 3
    d. Option 4
    e. 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.

165. Please provide additional comments regarding your answer to question 164, including the main reasons why it is the most appropriate and any geographic or industry specific considerations that influenced your response. (≤300 words).

166. Should exemptions be time-limited (i.e. phased-out over time) or ongoing?
    a. Time-limited (i.e. phased out over time)
    b. Ongoing
    c. Unsure
    d. 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).

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?

169. In exercising the exemption, should the organization be considered in conformance with the Corporate Standard and Scope 2 Standard?
    a. Yes, organizations using the hourly matching exemption should be considered in conformance

b. No, organizations using the hourly matching exemption should NOT be considered in conformance
c. A separate conformance level should be defined for companies exercising the exemption
d. Unsure
e. Other (please explain)

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

7 Legacy clause considerations

7.1 Description of proposed change

Following a Scope 2 TWG recommendation and ISB support for development, a legacy clause is under consideration as a transition option. In connection with the proposed updates to MBM requirements, it could allow organizations to count, within scope 2 market-based accounting, contractual instruments (e.g., energy attribute certificates) from existing arrangements even when those instruments do not meet the proposed hourly matching and deliverability requirements. The intent is to preserve continuity in scope 2 market-based method reporting for qualifying legacy investments. Stakeholder feedback is invited on the appropriateness of including a legacy clause and on its potential design, including eligibility criteria (e.g., qualifying contract types and dates), approaches to allocate legacy instruments to consumption data (for example, proportionate allocation across all hours and relevant regions of consumption), treatment of contract extensions or amendments, time limits, and disclosure requirements.

An alternative that may be more aligned with climate-related financial risk disclosure programs is a single effective date with a defined lead time and disaggregated disclosure. Under this potential option, the updated Scope 2 Quality Criteria would apply to all contractual instruments from that effective date following a defined lead time. The lead time is intended to give companies time to consider changes to existing contracts. During this period, contracts executed before the effective date could continue to be used, with results affected by those contracts clearly and separately disclosed. This approach would be intended to support providing decision-useful MBM information for primary users of general-purpose financial reports (e.g., investors, lenders, and other creditors) by enabling greater comparability across entities and periods, while providing time for reporting organisations to adapt. Stakeholder feedback is invited on the appropriateness of including this option and on the effective-date and lead-time duration, the scope of contracts eligible for transitional treatment, and the specific disclosure mechanics.

Following the consultation period, GHG Protocol will work with the TWG to further develop a proposal for this transition tool. The draft will then be submitted to the ISB as part of the final draft standard for approval. Once approved by the ISB, the GHG Protocol Steering Committee will be asked to ratify the revised text.

7.2 Rationale for proposed change

Scope 2 TWG members have emphasised the need for a clear and equitable transition process to support organisations with contracts entered under the current Scope 2 Guidance within this proposal for updated MBM requirements. There is a wide spectrum of views on how a legacy clause or any alternative approaches could or should be applied and what risks need to be balanced.

A legacy clause is being explored to balance continuity for existing contracts with the integrity and comparability of scope 2 market-based reporting. Existing long-term contracts established under the current Scope 2 Guidance often reflect substantial financial and operational commitments and many of these contractual arrangements were established following the publication of the 2015 Scope 2 Guidance. Proposed updates to Quality Criteria 4 (hourly matching) and Quality Criteria 5 (deliverability) could mean that these existing long-term contracts may no longer qualify under the revised criteria, which some stakeholders believe could affect financing arrangements and confidence in long-term procurement.

At the same time, stakeholders focused on disclosure frameworks have cautioned that a legacy clause could inhibit primary users of general-purpose financial reports ability to compare market-based method reporting for an extended period. A concern is that this approach could result in economically identical arrangements appearing different solely because of when contracts were entered into. Stakeholders have cautioned that extended use of differing criteria could challenge inclusion of the market-based method in disclosure frameworks that prioritise comparability.

Stakeholder input reflects two priorities: recognising existing long-term contractual commitments made under current guidance, and providing decision-useful and comparable data for primary users of sustainability-related financial information. Stakeholders have provided a spectrum of options on how a legacy clause or alternative transition tools could be designed, as well as views on each option's fundamental rationale and need to exist. The examples below set out conceptual optimisation parameters intended to guide considerations on design trade-offs rather than prescribe detailed rules. For example, a transition tool could be designed to optimise:

- **Feasibility and market confidence** for organizations that have invested in long term contracts by prioritising scope 2 accounting continuity. Other considerations, including implications for comparability and external disclosure needs, would be treated as secondary. Under this optimisation parameter, eligible long-term contracts could continue to be counted in scope 2 market-based reporting without additional allocation rules or timeframes. This optimization aims to provide predictability for legacy investments, with relevance to buyers, sellers, and financiers of long-term power purchase agreements.
- **Allocation accuracy and comparability** by prioritising allocation approaches that reflect consumption patterns across hours and relevant regions, with predefined limits on how legacy contractual instruments may be applied. Under this optimisation parameter, instruments that do not meet proposed hourly matching or deliverability requirements could still be counted, but in ways that better align with the time and location of actual consumption and avoid selective use in the most challenging hours or regions. This seeks to increase allocation accuracy and reporting comparability relative to an unrestricted legacy approach, while acknowledging legacy investments.
- **Timely alignment** by prioritising convergence to consistent application of the revised hourly matching and deliverability requirements within a defined timeframe. This optimisation parameter prioritizes moving all contractual instruments onto the updated criteria at the same time, for example through a single effective date after a defined lead time, or by limiting the duration of any legacy clause so that it phases out predictably. The intent is to support decision-useful comparability across entities and periods while providing a clear path for transition.
- **Transparency** by prioritising clear, disaggregated and decision-useful disclosures when any transition tool is applied (including legacy-clause approaches, single-effective-date approaches with a defined lead time, or other options). This optimisation parameter focuses on providing enough information for users to understand what treatment was applied, which results it affects and how those results differ from application of the revised Scope 2 Quality Criteria. Disclosures could identify the portion of consumption covered, the affected periods and market regions, and the expected end or phase-out of the treatment, with presentation that enables side-by-side comparison with results prepared under the revised Scope 2 Quality Criteria to enable evaluation of comparability across entities and periods.

Stakeholder feedback is invited on how a transition tool could balance these priorities, including the appropriateness and potential design of a legacy clause to recognise existing contracts and the alternative of a single effective date with a defined lead time and disaggregated disclosure.

7.3 Consultation questions

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)?
    Scale of 1 (no support) – 5 (fully support)

172. Please provide your reasons for support, if any (select all that apply).

    a. Reflects a reasonable balance of integrity, impact and feasibility as existing long-term contracts reflect significant financial and operational commitments to energy resources

b. Encourages organizations with legacy contracts to continue to engage in voluntary procurement using an annual procurement approach
c. Provides a more equitable approach by ensuring that early adopters of Scope 2 Guidance are not disadvantaged
d. Helps maintain trust and market confidence in long-term contracts
e. Provides a pragmatic pathway for organizations to transition to updated Quality Criteria
f. Other (please provide)

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

174. Please provide your concerns or reasons for why you are not supporting, if any (select all that apply).

a. Reduces overall accuracy and relevance of MBM reporting
b. Introduces inconsistencies across companies, reducing transparency and comparability for users
c. Not aligned with MBM's purpose, weakens credible market signals and abatement planning, and may conflict with regulatory expectations
d. Creates reputational risk and increases skepticism about MBM claims
e. Fragments the voluntary market and may slow the transition to wider availability/use of hourly data
f. Other (please provide)

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

176. Which date should determine a contract's eligibility under a Legacy Clause?
a. Contract signed prior to implementation date of the Scope 2 Standard (post phase-in period)
b. Contract signed prior to publication date of the Scope 2 Standard
c. Other (please explain)
d. Do not support Legacy Clause

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

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.

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.

179. Does a legacy clause pose material implications for users of climate-related financial risk disclosure programs?
Scale of 1 (No material implications) – 5 (Significant implications)

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).

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.

181. Which transition approach best balances continuity and comparability for the scope 2 MBM whilst maintaining integrity, impact, and feasibility?
a. Legacy clause: allow existing contracts that meet the current Scope 2 Quality Criteria to continue to be reported under the MBM as described in your response to Question 178.
b. 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. The lead time would seek to facilitate companies having time to consider changes to existing contracts. Contracts executed before the effective date could continue to be used during the lead time, with separate, clearly labelled disclosure identifying results affected by those contracts.
c. 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.

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).

8 Thank you

GHG Protocol would like to thank you for your participation in this consultation and in particular for taking the time to submit feedback. This is a critical step in our process and will help strengthen the standards in development to ensure they are credible, reliable and fit-for-purpose.