

Scope 2 Public Consultation Summary

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1.0	29 July 2026	
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1 Introduction

This document provides a comprehensive summary of feedback received through the Scope 2 public consultation. This comprehensive summary is intended to support the Technical Working Group (TWG) and other interested stakeholders in reviewing feedback received in response to the original [GHG Protocol Scope 2 Public Consultation proposal](#), which outlined the proposed revisions, rationale, and consultation questions addressed through the consultation process.

This summary may be read together with the accompanying Executive Summary, which provides a high-level overview of the consultation process, key themes emerging from stakeholder feedback, and next steps in the Scope 2 revision process. While the Executive Summary is intended to orient readers to the main considerations raised through the consultation, this document provides a more detailed synthesis of quantitative results and qualitative feedback across the consultation questions, organized by topic area and relative to GHG Protocol's decision-making criteria.

The consultation received nearly 1,100 responses from stakeholders across 56 countries. Feedback reflected differing perspectives on how scope 2 reporting should balance integrity, impact, interoperability, and feasibility, including on proposed updates to both the location-based and market-based methods. Across the feedback, stakeholders emphasized the importance of improving accuracy, consistency, and credibility while also raising concerns related to implementation burden, regional data availability, assurance, and alignment with existing reporting requirements. This feedback will directly inform the next phase of TWG development and Independent Standards Board (ISB) review as GHG Protocol continues the Scope 2 revision process.

AI tools were used to assist with summarizing and analyzing feedback submitted through the Scope 2 public consultation. Personally identifiable information (PII) was removed from the data prior to AI-assisted review. AI outputs were used to support thematic analysis and synthesis only. The Secretariat verified all the labels and made final decisions on which themes to include. GHG Protocol is responsible for final analysis and synthesis.

2 Document Guidance

Language to describe number of respondents

The paper uses the term 'respondents' to refer to stakeholders who filled out the consultation survey.

The paper uses the following terms to describe the extent to which feedback was provided by respondents.

Table 1: Language to describe number of respondents

Term	Extent of response among respondents
Almost All	All except a very small minority
Most	A large majority, with more than a few exceptions
Many	A small majority or large minority
Some	A small minority, but more than a few
A few	A very small minority

Respondents did not always comment on every question in the survey. Consequently, we have used the terms listed in Table 1 to describe the proportion of the respondents that commented on a particular question. This is not necessarily a proportion of all respondents that filled out the consultation survey.

Document structure

Each section is organized by:

1. **Summary of key feedback:** Background on the proposal and a high-level summary of key feedback relative to the decision-making criteria.
2. **Quantitative summary (where applicable):** an overview of 1-5 support ratings (from 1=no support to 5=full support) organized by organization type and geographical region.
3. **Detailed feedback:** a detailed analysis of feedback provided for each question (i.e. reasons for support, reasons for concern, etc.).

3 Demographic information

Geographic and Regional Distribution of Responses

The consultation received nearly 1100 responses from 56 countries. Survey respondents primarily represented companies, industry groups, and consultants (62%), with lower representation from NGOs and academia (13%), energy suppliers/retailers or utilities (8.5%), and others (16.5%).

Figure 1: Respondents by stakeholder type

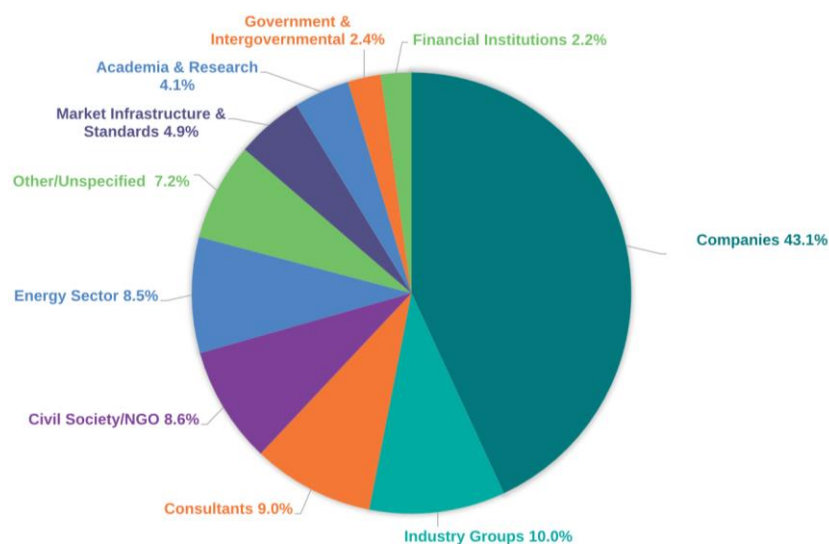


Figure 2: Respondents by geographic region

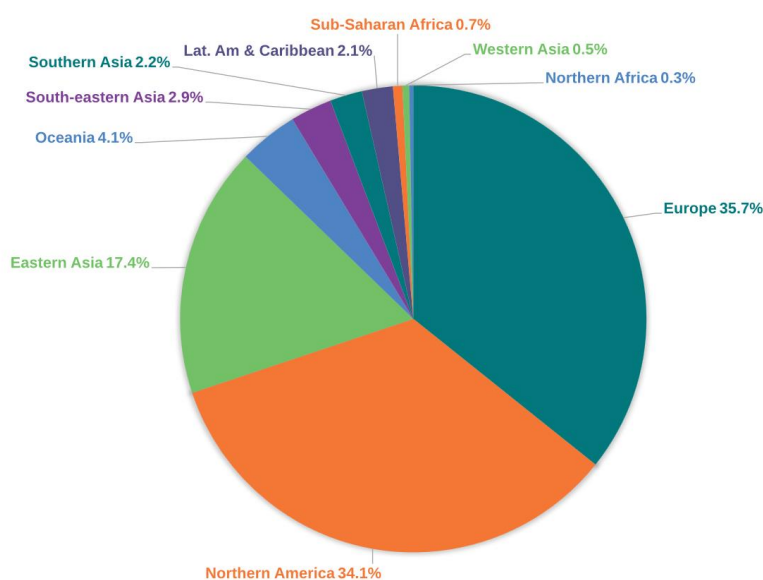


Table 2: Responses by geographic region

Geographic Region	Total (N)	Share (%)
Europe	383	35.7%
Northern America	366	34.1%
Eastern Asia	186	17.4%
Oceania	44	4.1%
South-eastern Asia	31	2.9%
Southern Asia	24	2.2%
Lat. Am. & Caribbean	23	2.1%
Sub-Saharan Africa	7	0.7%
Western Asia	5	0.5%
Northern Africa	3	0.3%
TOTAL	1,072	100.0%

Organization Type Breakdown

Table 3 presents the distribution of responses across the 15 organization type categories as offered in the consultation survey. Respondents self-selected their organization type.

Table 3: Responses by organization type (self-selected survey category)

Organization Type (survey category)	N	Share
Company	466	43.5%
Industry group	103	9.6%
Consultant supporting organizations with GHG inventories/strategies	96	9.0%
Non-profit organization/NGO/civil society	92	8.6%
Energy supplier/retailer or utility	91	8.5%
Other (please specify below)	77	7.2%
Academia/research	44	4.1%
Data/analytics or software provider related to GHG inventories	25	2.3%
Financial Institution	24	2.2%
Government institution	20	1.9%
Certificate registry/tracking system operator	13	1.2%
Verification/assurance provider	8	0.7%
GHG account/reporting program or initiative	7	0.7%
Electric Grid Operator	4	0.4%
International agency	2	0.2%
TOTAL	1,072	100.0%

4 Definition and Purpose of the Location- and Market-based Methods

Background on proposal: The consultation proposed updated definitions and purposes for both the location-based and market-based methods to clarify these methods should reflect emissions from electricity generation physically connected to the reporter’s value chain. The survey asked respondents to provide feedback on whether they agree with the proposed revisions, including whether the updated framing appropriately reflects the intended roles of each method in Scope 2 accounting.

4.1 Summary of Consultation Feedback Relative to the Decision-Making Criteria

Table 4: Summary of consultation feedback

	Support	Concerns
Integrity	Updated definition anchors Scope 2 in attributional accounting.	Lack of consensus on whether physical connection is important for integrity across location- and market-based methods.
Impact	Updated definitions may strengthen Scope 2 as a tool for decision-making, including operational optimization (LBM) and procurement strategy (MBM).	Lack of consensus on purpose of Scope 2 with some emphasizing its role in supporting system change and impact, while others described it as a neutral attributional metric.
Feasibility	Varied perspectives on whether existing infrastructure supports implementation of the updated definitions and whether additional complexity could introduce administrative and financial burdens.	

4.2 Definitions and Purposes (Q. 18-22)

862 respondents provided feedback on questions 18-22, relating to the proposed updates to the definitions and purposes of the location- and market-based methods, and their feedback captures most of the overarching themes observed throughout the consultation including physical connection, equity and access, and methodological alignment.

This section summarizes feedback from the 862 respondents to these questions. All frequency terms refer to this subset rather than to all consultation respondents.

Many respondents identified physical connection or deliverability as an important consideration for integrity across both methods for grounding accounting in grid conditions. Others noted technical questions regarding whether direct tracking of electricity flows is feasible or meaningful within interconnected grid systems.

On equity and access, many respondents indicated that increasing temporal and spatial granularity could result in differential access, particularly for organizations with more limited data capabilities, including SMEs and tenants in leased spaces.

Finally, many respondents discussed the role of the location- and market-based methods within the broader reporting ecosystem. Many respondents described a role for Scope 2 methods in supporting impact and broader system changes, while others described Scope 2 accounting as primarily serving a neutral, attributional function.

4.3 Definition of Scope 2 (Q. 18)

Question 18 asked respondents to provide feedback on the proposed definition of scope 2, focused on the updated language around the attributional nature, and on the closer ties to physical connection. This section summarizes feedback from the 770 respondents to this question; all frequency terms refer to this subset rather than to all consultation respondents.

Attributional Accounting

Of respondents who answered question 18, most expressed support for anchoring the updated definition of scope 2 in attributional accounting, noting that this framing helps clarify the foundation of both scope 2 and inventory accounting more broadly. While a few respondents raised concerns, they did not indicate disagreement with the attributional premise itself; rather, they noted a potential structural tension in its application. Specifically, these stakeholders indicated that strict interpretation of physical deliverability may be difficult to reconcile with the contractual nature of market-based accounting.

Physical Connection

Of respondents who answered question 18, many indicated support for the inclusion of physical connection language in the definition of scope 2. Many of these respondents described the physical connectivity language as a necessary update to better reflect the physical characteristics of electricity grids.

Some respondents raised concerns regarding the update. Most of these respondents indicated that physical connectivity considerations could affect certain applications of market-based accounting, while some noted that such requirements may be difficult to reconcile with the underlying physics of interconnected grid systems.

4.4 Definitions and Purposes of LBM and MBM (Q. 19-22)

Questions 19-22 asked respondents to provide feedback on the proposed updates to the definitions and purposes of the location- and market-based methods. This section summarizes feedback from the 839 respondents to these questions. All frequency terms refer to this subset rather than to all consultation respondents.

Physical Reality of Grids (Location and Market-based Method)

Of respondents that answered questions 19-22, some indicated that reflecting emissions from generation physically delivered at the times and locations of consumption could address perceived limitations in prior approaches, such as the attribution of clean energy from geographically disconnected regions or from periods when resources were not available to deliver power to end users.

For the location-based method, these respondents noted that this approach could enable location-based factors to more closely reflect the carbon intensity of the local grid, including the role of imported electricity, and provide a more representative view of a reporter's footprint.

For the market-based method, respondents with favorable impressions of the updated language described the proposed changes as strengthening the connection between corporate procurement and decarbonization outcomes in the regions where electricity is consumed. Across both methods, respondents with favorable impressions of updated language on physical grids noted its potential role in improving the accuracy of scope 2 accounting.

Other respondents raised questions regarding the proposed updates, also referencing the physics of electricity grids. These respondents described physical delivery as difficult to define within modern, interconnected systems. In particular, they noted that in systems governed by market coupling algorithms (including in Europe and the United States), power flows are determined by economic dispatch rather than traceable physical paths. Based on this framing, they indicated that the proposed definitions may not align with how electricity systems operate in practice. These respondents described an alternative view in which the location-based method functions as a market modeling construct rather than a literal representation of electricity flows.

With respect to the market-based method, these respondents indicated that the proposed changes could reduce the distinction between the market-based and location-based methods. These respondents described the role of the market-based method as reflecting legal ownership of attributes and enabling corporate demand signals that are independent of physical flow constraints.

Cost and Administrative Burden (Location and Market-based Method)

Of respondents that answered questions 19-22, many evaluated the updated definitions and purposes primarily through the lens of downstream operational impacts. Many respondents indicated that existing digital infrastructure makes the updated definitions technically feasible. Other respondents noted that the resulting complexity could introduce administrative and financial burdens, particularly for small and medium enterprises (SMEs). A comprehensive analysis of stakeholder feedback regarding these operational impacts is provided in Section 9 and Section 16.

Improving Decision-Making (Location and Market-based Method)

Of respondents that answered questions 19-22, many expressed favorable views of the updated definitions and purposes, highlighting the implications for decision-making related to both the LBM and MBM.

Regarding the location-based method, some respondents indicated that increased temporal and spatial precision could enhance its usefulness for internal decision-making and operational strategy. These respondents noted that granular data may allow organizations to adjust load profiles to coincide with periods of lower grid intensity, potentially encouraging energy efficiency that reflects real-time grid conditions. They described this as enabling the LBM to function not only as a reporting metric but also as a tool that may inform the timing of energy-intensive activities.

For the market-based method, some respondents provided the perspective that the updated definition could influence procurement behavior by encouraging investment in a broader mix of renewable technologies, including options such as long-duration storage or geothermal, in addition to lower-cost

certificates. These respondents noted that such shifts could affect the role of the MBM in shaping generation portfolios and influencing supplier offerings.

Some respondents also indicated that the updated definitions could support decision-making for external users of emissions data. By introducing clearer parameters for matching and deliverability, these respondents noted that the changes may improve transparency and auditability for stakeholders and investors. Across both methods, some respondents described a potential objective of reducing variability in estimation approaches and establishing a more consistent framework to support comparison of corporate environmental performance.

A comprehensive analysis of stakeholder feedback regarding improving decision-making is provided in Sections 8.2 and 16.3.

Influencing Grids (Location and Market-based Method)

Of respondents that answered questions 19-22, there was repeated mention of each method's role in influencing changes on the grid.

As it relates to the location-based method, some respondents noted its role in linking individual corporate inventories to the success of regional and national grid decarbonization efforts. These respondents indicated that this alignment may provide companies with a link to developments in public policy, allowing them to reflect the benefits of system-wide infrastructure improvements. This purpose was described as helping to bridge private sector reporting and the broader transition to a low-carbon energy system, reflecting the reporter's share of a shared resource.

For the market-based method, some respondents noted the updated purpose of using the MBM to influence the generation mix and encourage supplier engagement. These respondents indicated that framing the MBM as a tool for strategic influence could incentivize companies to seek higher-quality renewable products from utilities. This purpose was described as supporting a shift beyond certificate purchasing toward approaches where corporate demand contributes more directly to the development of new clean energy infrastructure.

Boundaries of Control and Responsibility (Location and Market-based Method)

Of respondents that answered questions 19-22, some who did not express favorable views on the updated purposes of the location-based method noted concerns regarding the inclusion of language around risk and opportunity assessments. These respondents indicated that the LBM's purpose should be limited to accounting for emissions over which companies have little or no direct control. They noted that framing the LBM as a tool for risk assessments may be misleading in cases where the reporting entity has no physical means to influence the utility's generation mix or grid infrastructure. From this perspective, these respondents preferred the LBM to serve as a passive, conservative baseline, rather than as a tool for managing locational exposure.

In contrast, the updated purpose of risk and opportunity assessments for the market-based method was viewed more favorably by many respondents. These respondents noted that MBM reporting can help companies identify where their portfolios are exposed to the residual mix or fossil fallback during periods of low renewable generation. They indicated that this may support risk-informed decision-making related to portfolio construction, including investments in firming, shaping, and storage.

Comparability (Location-based Method)

Of respondents that answered questions 19-22, some addressed the updated purpose of the location-based method (LBM) regarding comparability. Some respondents who expressed favorable views indicated that the LBM is intended to provide a level playing field for benchmarking performance across organizations within the same grid region. A few noted that because the LBM removes the influence of diverse and often complex contractual instruments, it may enable more direct comparisons of organizational efficiency for investors and other stakeholders. Some respondents described this standardization as contributing to transparency and trust within the GHG reporting ecosystem by providing a consistent metric for all reporters. Some respondents also provided the perspective that grounding the LBM in power that is physically connected to reporting organizations may further support the objective of improving comparability of emissions data.

Some respondents who raised concerns regarding the updated purpose of comparability noted that the LBM primarily reflects the carbon intensity of electricity grids rather than the performance of individual companies. These respondents noted that because LBM emissions are largely determined by a company's geographic location, the method may have limited usefulness for comparing company performance and therefore may not be well suited as a basis for comparability-focused updates. Some respondents also noted that other proposed updates to the definitions and purposes of the LBM may affect comparability. They noted that introducing optional layers of additional detail could result in uneven reporting outcomes. These respondents indicated that if companies apply different levels of temporal or spatial resolution based on varying data availability, comparability across organizations may be reduced. They also noted the potential for scenarios in which two companies with similar electricity use report different inventories due to differences in methodology or emission factor (EF) selection.

5 Location-based Emission Factors Hierarchy

Background on proposal: Proposed updates to the location-based method requirements centered on a new emission factor hierarchy that provided more guidance on how to select the most precise emission factor. 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). In addition, the updated emission factor hierarchy distinguished between ‘production-based’ factors and ‘consumption-based’ factors (i.e. emission factor type), with consumption-based factors prioritized.

5.1 Summary of Consultation Feedback Relative to the Decision-Making Criteria

Table 5: Summary of consultation feedback

	Support	Concerns
Integrity	Defining spatial boundaries, temporal granularity, and prioritizing consumption-based emission factors would better align GHG accounting with the physical grid and reflect emissions intensity at the time and place of consumption.	The most granular emission factor may not guarantee it is the most accurate for all locations or consumption patterns.
Impact	Granular data may support demand response and load-shifting, and could inform longer-term strategic decisions, including capital allocation.	Resources required for administrative processes may reduce resources available for other renewable energy procurement or energy efficiency initiatives.
Feasibility	Defining spatial boundary, temporal granularity, and emission factor type in a hierarchy could reduce ambiguity in emission factor selection.	The proposed hierarchy may introduce misalignment with some existing mandatory reporting requirements.

5.2 Quantitative Summary of Feedback

Question 23 asks respondents to provide a 1-5 support for the proposed location-based emission factor hierarchy, including its approach to spatial boundaries, temporal granularity, and emission factor type.

Table 6: Responses to Question 23 by organization type

Organization Type	Count	Rating 4-5 (Support)	Rating 3 (Neutral)	Rating 1-2 (No/Low Support)
Academia/research	23	78%	17%	4%
Certificate registry/tracking system operator	10	30%	20%	50%
Company	310	28%	19%	52%
Consultant supporting organizations with GHG inventories/strategies	77	58%	17%	25%
Data/analytics or software provider related to GHG inventories	22	91%	9%	0%
Electric Grid Operator	1	100%	0%	0%
Energy supplier/retailer or utility	62	29%	16%	55%
Financial Institution	18	56%	22%	22%
GHG account/reporting program or initiative	5	60%	0%	40%
Government institution	12	33%	33%	33%
Industry group	65	20%	14%	66%
International agency	2	50%	50%	0%
Non-profit organization/NGO/civil society	56	70%	11%	20%
Other (please specify below)	46	41%	9%	50%
Verification/assurance provider	6	33%	0%	67%
Grand Total	715	40%	17%	44%

Table 7: Responses to Question 23 by geographical region

Geographical Region	Count	Rating 4-5 (Support)	Rating 3 (Neutral)	Rating 1-2 (No/Low Support)
Eastern Asia	100	23%	17%	60%
Southern Asia	18	50%	22%	28%
South-eastern Asia	23	35%	39%	26%
Western Asia	4	75%	25%	0%
Europe	282	40%	15%	45%
Northern America	226	43%	15%	42%
Latin America and the Caribbean	19	32%	26%	42%
Northern Africa	3	100%	0%	0%
Sub-Saharan Africa	6	50%	17%	33%
Oceania	34	53%	15%	32%
Grand Total	715	40%	17%	44%

5.3 Reasons for Support (Q. 24, 25, & 28-34)

Questions 24, 25 & 28-34 ask respondents to provide feedback on support for the proposed location-based emission factor hierarchy, including its approach to spatial boundaries, temporal granularity, and emission factor type.

This section summarizes feedback from the 494 respondents to these questions. All frequency terms refer to this subset rather than to all consultation respondents.

Improved Accuracy and Relevance

Of respondents who answered questions 24, 25, & 28-34, many indicated that the proposed hierarchy enhances the method's accuracy and relevance. A few respondents noted that defining spatial boundaries, temporal granularity, and prioritizing consumption-based emission factors better aligns GHG accounting with the physical grid, helping to ensure that reporting reflects the emissions intensity of generation at the time and place of consumption. Some respondents provided feedback on how specific elements of the proposed hierarchy improve accuracy and relevance, outlined below.

Spatial Boundaries (Improved Accuracy & Relevance)

Of respondents who answered questions 24, 25, & 28-34, some noted that aligning EF spatial boundaries with physical grid infrastructure is important for capturing the mix of generation that serves a load. A few observed that applying a single average EF across broad regions may mask differences in policy, infrastructure, and transmission constraints across a grid, and that increasing spatial granularity may help reduce these inaccuracies.

Regarding the levels of granularity the hierarchy should define, some respondents indicated a preference for local boundaries as the most precise spatial boundary. Conversely, a few respondents who provided higher ratings for the hierarchy overall indicated that this level of precision may not improve accuracy and that only a less precise spatial boundary may be more appropriate (outlined in *Local boundary limitations in section 5.4*).

Temporal Granularity (Improved Accuracy & Relevance)

Of respondents who answered questions 24, 25, & 28-34, many indicated that hourly data may more accurately reflect grid dynamics, particularly in renewable-heavy grids. These respondents noted that annual averages may be less precise because they do not account for the timing of consumption particularly in systems where emissions intensity fluctuates throughout the day. Empirical research (Miller et al., 2022) was referenced, indicating that annual-average accounting can overestimate emissions by up to ~33% or underestimate them by up to ~22% relative to hourly accounting.

Regarding the levels of granularity the hierarchy should define, many respondents identified hourly as the most precise temporal granularity. Conversely, a few respondents who provided higher ratings for the hierarchy overall indicated that this level of precision may not improve accuracy and that a less granular temporal approach may be more appropriate. In addition, a few respondents suggested that more granular temporal intervals should be considered (outlined in *Hourly granularity and load profile limitations in section 5.4*).

Emission Factor Type (Improved Accuracy & Relevance)

Of respondents who answered questions 24, 25, & 28-34, many indicated a preference for prioritizing consumption-based emission factors. Drawing on their understanding of grid operations, some respondents noted that electricity grids are interconnected systems with regular import and export of power. They observed that energy flows extend beyond jurisdictional boundaries, and that relying exclusively on production-based metrics may not fully capture the carbon impact of imported electricity. These respondents suggested that prioritizing a consumption-based approach may help ensure corporate inventories more accurately reflect the carbon intensity of the electricity mix delivered to consumers at the system level.

Hierarchy Order (Improved Accuracy & Relevance)

Of respondents who answered questions 24, 25, & 28-34, some noted a preference for prioritising spatial granularity first, followed by temporal granularity and emission factor type. They noted that spatial boundaries are a key factor in determining which generation can realistically serve a given load, and that temporal precision may have limited relevance without also applying an appropriate spatial boundary. These respondents noted that prioritizing consumption-based factors first could elevate non-deliverable emission factors over more representative local averages. Some respondents who provided higher ratings for the hierarchy overall indicated a preference for an alternative order that prioritizes consumption-based emission factors as the first step (outlined in *Adjustments to hierarchy order in section 5.4*).

Clarity and Standardization

Of respondents who answered questions 24, 25, & 28-34, many noted that establishing a clear hierarchy for selecting emission factors provides additional structure and consistency to location-based method Scope 2 reporting. These respondents indicated that explicitly ranking spatial boundary, temporal granularity, and emission factor type may help reduce ambiguity when organizations are faced with multiple available data sources, thereby reducing variability in interpretation that has historically affected LBM results. Some respondents noted that this standardized accounting approach could improve data comparability across different companies. Finally, a few respondents noted that establishing a universal decision-making pathway may streamline assurance and auditing processes by reducing the number of subjective choices available to reporters.

Improved Decision-Making Tool

Of respondents who answered questions 24, 25, & 28-34, some noted that highly granular spatial and temporal data may enhance the use of the location-based method as a decision-useful tool for internal abatement planning. A few respondents provided direct operational testimony describing how this data can support demand response and operational load-shifting in their organizations. Beyond daily operations, a few respondents noted that this level of granularity may inform long-term strategic decision-making, including corporate capital allocation and facility siting. In addition, a few respondents indicated that the proposed hierarchy may enable companies to identify when and where the grid is most carbon-intensive, highlighting its potential to inform decarbonization investments towards the highest emitting regions.

Pathway to Data Improvement

Of respondents who answered questions 24, 25, & 28-34, some noted that the hierarchy provides a clear pathway to incentivize the development and use of more granular data. They noted that explicitly ranking the precision of emission factor elements may create a transparent mechanism for organizations to progressively enhance their inventories over time. Some respondents predicted that the push for higher precision data could contribute to the development of new emissions datasets and tracking infrastructure, serving as a potential market signal that encourages governments and operators to publish more granular, publicly available datasets.

5.4 Reasons for Concerns (Q. 26, 27, & 28-34)

Questions 26, 27 & 28-34 ask respondents to provide feedback on concerns for the proposed location-based emission factor hierarchy, including its approach to spatial boundaries, temporal granularity, and emission factor type.

This section summarizes feedback from the 593 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents

Methodological Disagreement with Proposed Hierarchy

Of respondents who answered questions 26 & 27 & 28-34, almost all identified methodological considerations. A few expressed a preference not to integrate concepts of deliverability into the location-based method, noting that it may blur the distinction between location-based and market-based reporting and that the LBM should remain a simple tool to reflect the average emissions of a geographic region. Respondents also raised questions about whether higher granularity consistently leads to more accurate and relevant data, and noted considerations related to the levels of precision in the hierarchy and the proposed order.

Local Boundary Limitations

Of respondents who answered questions 26 & 27 & 28-34, many indicated that the "local boundary" may be narrower than the physical reality of power delivery in interconnected or unified grids. Some of these respondents noted that electricity is physically mixed across large synchronous systems, which may limit the ability of localized emission factors to represent how electricity is managed and delivered at scale. A few respondents highlighted that narrow spatial boundaries could result in outcomes where companies are influenced by their geographic proximity to legacy fossil-fuel plants or regional grid congestion pockets, which may reflect infrastructure constraints beyond their control.

Hourly Granularity and Load Profiles Limitations

Of respondents who answered questions 26 & 27 & 28-34, many noted that hourly temporal matching and the reliance on load profiles may diverge from physical grid dynamics. A few indicated that temporal matching may not fully account for grid energy storage and the emissions associated with time-shifted power. Additionally, a few respondents noted that using estimated load profiles as proxies for metered data may create an impression of greater precision than is not warranted, as these are grid-balancing tools rather than precise allocation instruments. See additional feedback on load profiles in Section 8.5

Adjustments to Hierarchy Order

Of respondents who answered questions 26 & 27 & 28-34, some indicated a preference for changing the proposed order to prioritize consumption-based emission factors as the first step. A few respondents noted that prioritizing emission factor type may help ensure methodological integrity, as it may reduce the likelihood of selecting a highly granular but methodologically incomplete factor.

Comparability and Consistency Limitations

Of respondents who answered questions 26 & 27 & 28-34, some identified risks regarding the proposed LBM hierarchy, with a focus on the potential implications for comparability and consistency. They predicted that the proposed hierarchy could introduce misalignment with existing mandatory frameworks such as Europe's CSRD/ESRS, the UK's SECR, and Australia's NGERs. These respondents noted that if the data hierarchy differs from the approaches used in government frameworks, organizations may need to report differing Scope 2 figures across voluntary GHG Protocol reporting and mandatory statutory filings. A few respondents noted that this divergence may reduce Scope 2's utility as a universal baseline, as stakeholders could encounter inconsistent data across public disclosures. A few respondents predicted that managing disparate datasets could increase the administrative burden of reconciliation, particularly where identical electricity consumption results in differing emissions results.

A few respondents also noted that allowing varied spatial boundaries within a single grid may introduce risks of double-counting. They observed that preventing overlap could require subtracting emissions associated with smaller local regions from broader national datasets; however, the development of such a "locational residual mix" was described as infeasible in practice. Some respondents predicted that applying different granularities across sites will may reduce overall comparability, as the location-based method may produce less consistent results if organizations apply different emission factor sets to the same physical grid. Finally, some respondents noted that these comparability challenges may be further influenced by differences in access to public versus proprietary data. They noted that granular data is often not "publicly available, free to use, or from a clearly defined credible source," which may contribute to variation in application of the standard where access to higher-quality data is uneven.

Consequences for Decarbonization

Of respondents who answered questions 26 & 27 & 28-34, many indicated that the proposed hierarchy may redirect organizational effort away from decarbonization. Many respondents raised concerns related to capital allocation, noting that resources spent on administrative processes, IT upgrades, and complex auditing requirements could otherwise be directed toward renewable energy procurement or energy efficiency initiatives. A few respondents noted that the complexity of the hierarchy may affect participation or influence its adoption as a global framework.

6 Definition of “Accessible”

Background on proposal: The proposed updates introduced a definition of ‘accessible’ to clarify when a location-based emission factor is reasonably obtainable and suitable for use, with the intent of guiding consistent selection of data sources. The survey asked stakeholders to evaluate the clarity and applicability of the definition, including whether it can be applied consistently across regions and whether it provides sufficient guidance for determining which emission factors should be used in practice.

6.1 Summary of Consultation Feedback Relative to the Decision-Making Criteria

Table 8: Summary of consultation feedback

	Support	Concerns
Integrity	Almost all respondents indicated a preference for defining “credible sources” through established and authoritative sources.	Ambiguity around “credible source” could introduce subjectivity and audit risk, reducing comparability across reporters.
Impact	Definition of accessible may encourage increased public data availability by signaling demand for free, credible emission factors.	Definition of accessible may impact data selection behavior, where preferences for “free” data could influence procurement or reporting decisions.
Feasibility	- Definition of accessible could limit financial barriers to implementation and align with existing practices that rely on public datasets. - Suggestions for aligning the definition of accessibility with established assurance standards.	A definition of accessible may cause administrative complexity, particularly for global organizations managing fragmented datasets and audit requirements.

6.2 Quantitative Summary of Feedback

Question 35 asks respondents to provide a 1-5 support rating regarding the new definition of accessible: publicly available, free to use, and from a credible source.

Table 9: Responses to Question 35 by organization type

Company type	Count	Rating 4-5 (Support)	Rating 3 (Neutral)	Rating 1-2 (No/Low support)
Academia/research	18	83%	17%	0%
Certificate registry/tracking system operator	8	88%	0%	13%
Company	269	76%	16%	9%
Consultant supporting organizations with GHG inventories/strategies	71	89%	8%	3%
Data/analytics or software provider related to GHG inventories	19	89%	0%	11%
Electric Grid Operator	1	100%	0%	0%
Energy supplier/retailer or utility	49	84%	14%	2%
Financial Institution	12	75%	17%	8%
GHG account/reporting program or initiative	5	100%	0%	0%
Government institution	11	91%	9%	0%
Industry group	46	74%	11%	15%
International agency	1	100%	0%	0%
Non-profit organization/NGO/civil society	49	92%	2%	6%
Other (please specify below)	39	67%	26%	8%
Verification/assurance provider	4	75%	0%	25%
Grand Total	602	80%	13%	7%

Table 10: Responses to Question 35 by geographical area

Geographical area	Count	Rating 4-5 (Support)	Rating 3 (Neutral)	Rating 1-2 (No/Low support)
Eastern Asia	83	75%	17%	8%
Europe	241	79%	13%	7%
Latin America and the Caribbean	13	92%	8%	0%
Northern Africa	3	100%	0%	0%
Northern America	188	80%	11%	9%
Oceania	28	86%	11%	4%
South-eastern Asia	21	90%	10%	0%
Southern Asia	14	86%	14%	0%
Sub-Saharan Africa	6	83%	17%	0%
Western Asia	5	60%	20%	20%
Grand Total	602	80%	13%	7%

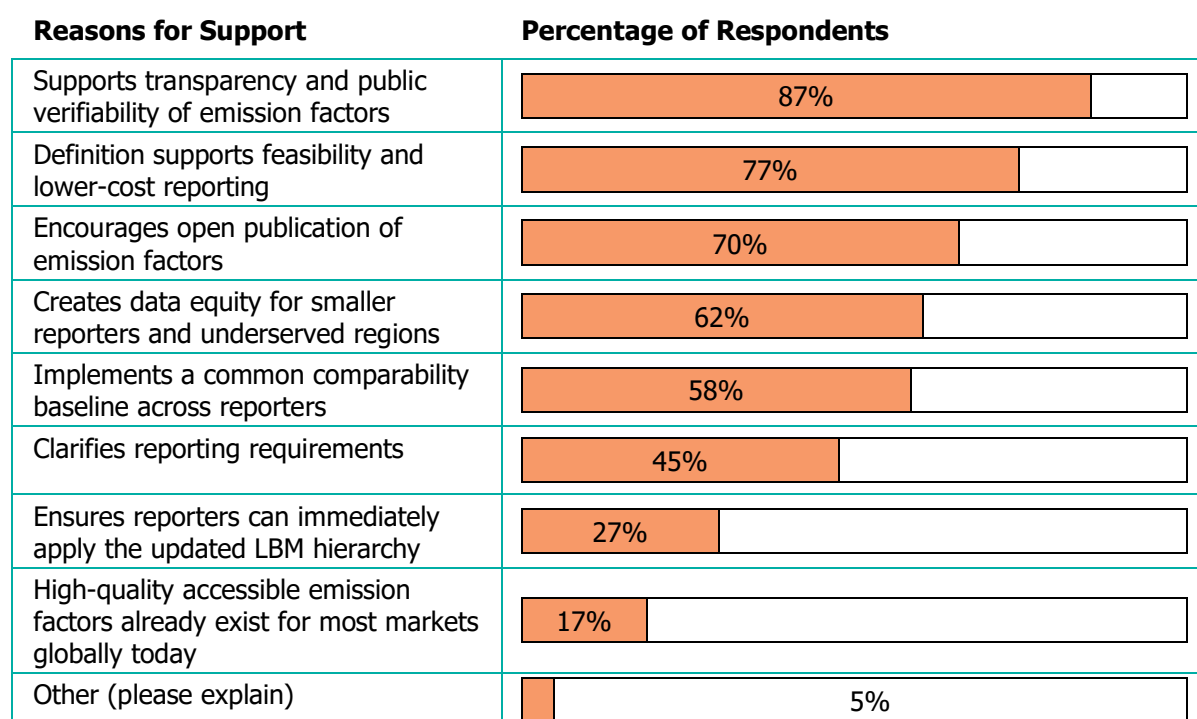
6.3 Reasons for Support (Q. 36 & 37)

Questions 36 & 37 ask respondents to identify and explain their reasons for supporting the proposed definition of “accessible.” This section summarizes feedback from the 549 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents.

Note on interpretation of use of paid factors: Many respondents interpreted the proposal as a strict, universal requirement that all emission factors used under the LBM be “free to use.” The proposal does not prohibit paid datasets; rather, it uses the “accessible” criteria to guide progression through the hierarchy, requiring reporters to adopt a more granular emission factor only when that higher-quality data is both “free to use,” publicly available, and from a credible source.

Among respondents who answered question 36, the below figure shows the most and least commonly selected answers.

Figure 3: Responses to Question 36



Feasibility and Alignment with Existing Practices.

Of respondents that answered questions 36 and 37, many noted that the definition enables reporters to apply the updated LBM hierarchy without financial obstacles. Many respondents indicated that a “free to use” requirement clarifies that compliance does not depend on purchasing proprietary datasets or engaging specialist data providers, thereby avoiding implicit capability or cost thresholds. By removing these financial barriers and maintaining an equitable baseline for organizations of all sizes, respondents noted that the definition lowers barriers to entry and promotes global data equity. A few respondents indicated that the

definition reflects existing practices rather than creating new reporting burdens, noting that standard practice in major regions already relies on free, reliable public sources that meet these criteria.

Market Signaling and Advocacy for Data Availability

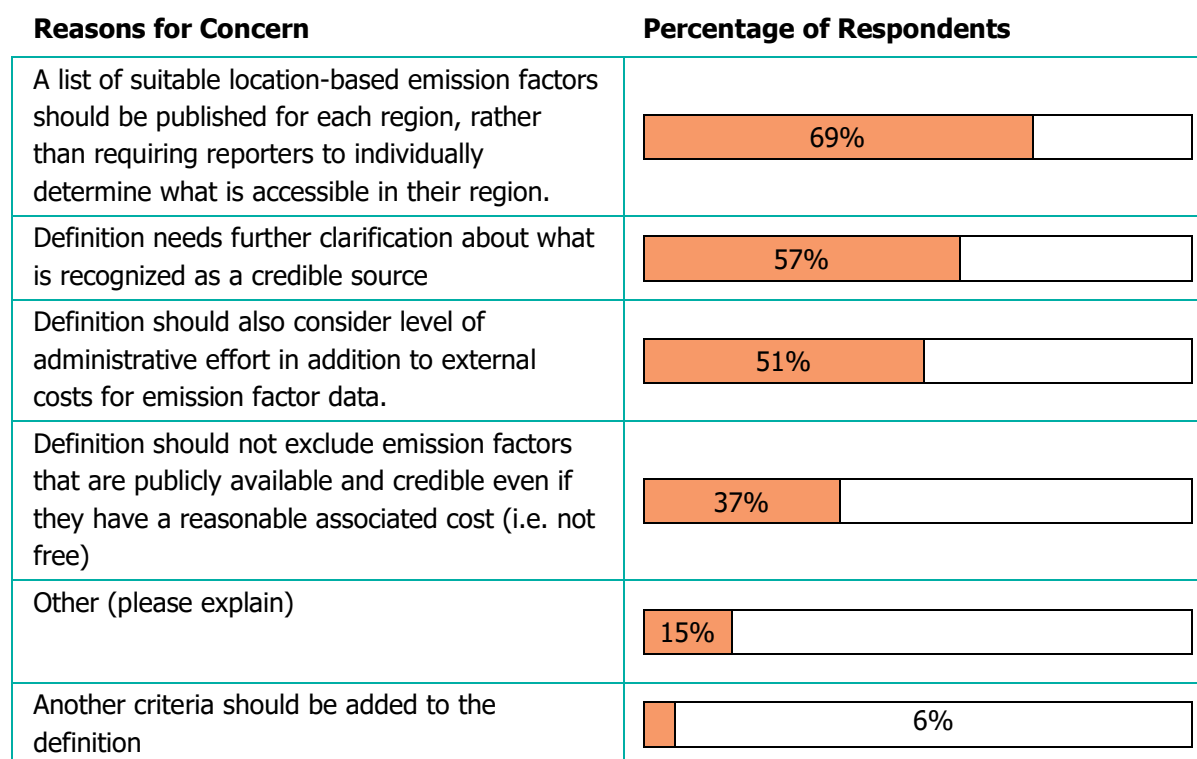
Of respondents that answered questions 36 and 37, many noted that the definition of accessible may function as a mechanism for market signaling to improve global emissions data availability. A few respondents indicated that a "free to use" requirement for accessibility could incentivize governments and grid operators to publish verified emission factors. A few respondents also noted that this requirement may influence organizations such as the IEA to provide cost-free factors. Some respondents observed that, at present, only a limited number of national governments publish free, credible location-based factors, and noted that this type of requirement could contribute to an increase in the availability of high-quality datasets as a public good. In addition, a few respondents noted that increased data availability may support broader decarbonization efforts over time.

6.4 Reasons for Concern (Q. 38 & 39)

Questions 36 & 37 ask respondents to identify and explain their reasons for concern with the proposed definition of "accessible." This section summarizes feedback from the 382 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents.

Among respondents who answered question 38, the below figure shows the most and least commonly selected answers.

Figure 4: Responses to Question 38



Ambiguity of "Credible Source"

Of respondents that answered questions 38 and 39, many noted that the definition is incomplete and would benefit from additional clarification regarding what types of entities, governance structures, methodological transparency, or update frequencies qualify a source as "credible". They noted that determining credibility without explicit criteria may introduce subjectivity. In the absence of a centralized list of "approved" sources published by the GHG Protocol, some respondents highlighted potential audit risks, including the possibility that a third-party assurance provider may differ in its assessment, which could lead to variations in judgments across regions. A few respondents requested that the standard include minimum metadata requirements for any credible source, including the disclosure of transparent methodologies, spatial and temporal boundaries, QA/QC approaches, and auditable source files with timestamps.

Most who raised concerns regarding the proposed definition of "accessible" recommended that the GHG Protocol establish a centralized, globally curated list of pre-vetted regional emission factors.

Administrative Complexity and Regulatory Alignment

Of respondents that answered questions 38 and 39, many noted that the definition of "accessible" should account for the administrative effort and technical resources required to manage data, rather than focusing solely on direct financial cost. They noted that for global organizations, the fragmented nature of regional datasets may make the individual sourcing and validation of site-specific factors difficult to sustain, particularly when moving toward more granular reporting. A few respondents highlighted that a focus on direct cost may not fully reflect the ISSB and IFRS concept of "undue cost or effort", which could introduce differences in interpretation for organizations subject to multiple frameworks. A few respondents also noted that the internal time required to document the rationale for specific data selections to satisfy third-party auditors represents an additional resource consideration.

To improve auditability and support global alignment, these respondents recommended replacing the strict "free" requirement with an approach aligned to the concept of "undue cost or effort", and aligning the definition of "credibility" with established assurance standards to help auditors support verification of data suitability.

Reporting Integrity and Data Quality

Of respondents that answered questions 38 and 39, some expressed concerns regarding reporting integrity. For a few respondents, these concerns were based on an interpretation that the proposed revisions would exclusively allow the use of free data. Other respondents noted that, even when the guidance is interpreted as intended, the explicit phrasing that paid data is "not required" may create a risk of misinterpretation. They noted that this could lead some companies to prefer lower-integrity, free data in order to avoid the administrative complexity and effort associated with justifying sources that do not meet the definition of "accessible" to auditors.

6.5 Credible Sources (Q.40-43)

Questions 40-43 ask respondents to provide feedback on how credible sources should be defined. This section summarizes feedback from the 538 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents.

The table below shows the most and least commonly selected answers to which organization types should qualify as a credible source, question 40.

Table 11: Responses to Question 40

Organization Type	Count	Support for organization type qualifying as a 'credible source'
Government agency	484	92%
System operator	413	78%
Recognized registry	364	69%
Accredited statistics body	331	63%
Independent methodology meeting minimum criteria	212	40%
Other	53	10%

Defining "Credibility" through Authority

Of respondents that answered questions 40-43, almost all addressing this topic indicated a preference for defining "credible sources" through established authorities, identifying government agencies and system operators as the most credible sources for emission factors. Many noted that institutions such as national environmental agencies and regional transmission organizations provide impartial and verifiable baselines for emissions data.

"Independent Methodologies" as Credible Sources

Of respondents that answered questions 40-43, some noted the use of independent methodologies and direct electricity suppliers as credible alternatives, particularly to address gaps where official public data is unavailable or lacks sufficient granularity. A few respondents provided operational examples indicating that, in some contexts, private entities and specialized flow-tracing platforms may be the only sources currently able to provide the high-resolution, decision-useful data required for advanced regional accounting. Many respondents also noted that recognizing these alternatives may require minimum criteria, including publicly documented methodologies, quality assurance procedures, and transparent version control. These respondents indicated that, without appropriate governance safeguards or GHG Protocol accreditation, the use of independent methodologies may introduce risks related to consistency and comparability within the reporting ecosystem.

7 Requirement to use most precise emission factor “accessible”

Background on proposal: The proposed updates to the location-based method introduced a requirement 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. The survey asked stakeholders to evaluate the integrity, impact and feasibility of this requirement and its implementation across different regions.

7.1 Summary of Consultation Feedback Relative to the Decision-Making Criteria

Table 12: Summary of consultation feedback

	Support	Concerns
Integrity	- The required use of the most granular emission factor accessible would improve accuracy and scientific integrity by better reflecting temporal and geographic variation in grid emissions. - Strengthen transparency and comparability particularly for assurance and external reporting.	Reporters on the same grid may use different emission factors (e.g., monthly or annual) based on their varying levels of access to granular data.
Impact	Use of the most granular emission factor accessible may improve decision-usefulness of the LBM, enabling more precise risk assessment and emissions management.	Increased complexity or cost of LBM reporting could affect the allocation of effort toward renewable energy procurement or efficiency projects.
Feasibility	- Linking precision to accessibility may help balance ambition with real-world constraints on data accessibility. - Suggestions for flexible implementation approaches to improve feasibility.	- May introduce additional administrative and assurance burden. - May introduce misalignment with existing mandatory reporting requirements.

7.2 Quantitative Summary of Feedback

Question 44 asks respondents to provide a 1-5 support rating for the update to the requirement to use the most precise location-based emission factor accessible for which activity data is also available.

Table 13: Responses to Question 44 by organization type

Organization Type	Count	Rating 4-5 (Support)	Rating 3 (Neutral)	Rating 1-2 (No/low support)
Academia/research	18	72%	22%	6%
Certificate registry/tracking system operator	3	33%	67%	0%
Company	251	30%	23%	47%
Consultant supporting organizations with GHG inventories/strategies	66	59%	14%	27%
Data/analytics or software provider related to GHG inventories	19	79%	5%	16%
Electric Grid Operator	1	100%	0%	0%
Energy supplier/retailer or utility	46	35%	9%	57%
Financial Institution	14	43%	21%	36%
GHG account/reporting program or initiative	5	60%	0%	40%
Government institution	11	82%	9%	9%
Industry group	48	25%	13%	63%
International agency	1	0%	100%	0%
Non-profit organization/NGO/civil society	46	76%	11%	13%
Other (please specify below)	36	31%	31%	39%
Verification/assurance provider	5	40%	0%	60%
Grand Total	570	40%	18%	42%

Table 14: Responses to Question 44 by geographical region

Geographical area	Count	Rating 4-5 (Support)	Rating 3 (Neutral)	Rating 1-2 (No/Low Support)
Eastern Asia	77	19%	18%	62%
Europe	229	41%	19%	40%
Latin America and the Caribbean	15	60%	7%	33%
Northern Africa	3	100%	0%	0%

Northern America	181	43%	17%	40%
Oceania	23	65%	30%	4%
South-eastern Asia	20	55%	20%	25%
Southern Asia	15	60%	20%	20%
Sub-Saharan Africa	4	50%	25%	25%
Western Asia	3	67%	33%	0%
Grand total	570	40%	18%	42%

7.3 Reasons for Support (Q. 45 & 46)

Questions 45 & 46 ask respondents to identify and explain their reasons for supporting the proposed requirement to use the most precise location-based factor available. This section summarizes feedback from the 406 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents.

Among respondents who answered question 45, the below figure shows the most and least commonly selected answers.

Figure 5: Responses to Question 45

Reasons for Support	Percentage of Respondents
Improves accuracy and scientific integrity of LBM results	69%
Strengthens transparency and public verifiability	58%
Better reflects grid operation in time and space, reduces misallocation	56%
Aligns emission factor precision with available activity data	49%
Supports phased improvement as data availability expands	45%
Enhances comparability across reporters and frameworks	38%
Prioritizes consumption-based factors that include imports/exports	38%
Enables emission changes from storage and demand-flexibility to be reflected more accurately	35%
Provides a common, accessible baseline for inventories	31%

Enables use of load profiles when hourly activity data are unavailable	28%
Improves decision-usefulness for external disclosures	23%
Aligns positively with mandatory or voluntary reporting requirements in your region	12%
Other (please provide)	7%

Physical Accuracy and Scientific Integrity

Of respondents that answered questions 45 and 46 (reasons for support), most noted that the requirement may improve the accuracy and scientific integrity of Location-Based Method results by addressing temporal and spatial accounting differences. Many respondents indicated that granular emission factors can reduce the misallocation of emissions by more closely reflecting grid operations across time and location. Additionally, many noted that prioritizing precise, consumption-based factors may enable inventories to better reflect the electricity delivered to end users, while some indicated that this approach may also capture the effects of storage and demand-flexibility interventions. Some respondents noted that hourly resolution may be important for reflecting temporal dynamics and preserving the accounting's physical integrity as grids become increasingly dynamic.

Decision-Usefulness for Stakeholders

Of respondents that answered questions 45 and 46 (reasons for support), some noted that requiring the most precise emission factor accessible may improve decision-usefulness for external disclosures. Many respondents indicated that prioritizing precise factors may strengthen transparency and comparability, which a few respondents identified as relevant for assurance processes and investor confidence. A few respondents noted that granular data may enable more accurate risk assessments and abatement planning, recognizing that broad national averages can mask regional differences in grid intensity and the impact of local energy efficiency measures or behavioral changes. A few respondents noted that prioritizing more accurate, consumption-based factors may align with increasing regulatory demand for standardized, verifiable data and may enhance reporting quality under emerging frameworks such as the EU's CSRD and ESRS E1.

Pathway to Data Improvement

Of respondents that answered questions 45 and 46 (reasons for support), a few noted that requiring the most precise emission factor accessible may establish a framework for continuous data improvement. They noted that linking precision to accessibility may help balance ambition with real-world constraints on data accessibility. Some respondents indicated that the allowance of standardized load profiles may serve as a feasibility bridge, enabling organizations to report with higher temporal precision where primary hourly activity data is not yet available. Finally, a few respondents noted that the requirement may incentivize broader data improvement over time by supporting gradual progress as granular grid data become more

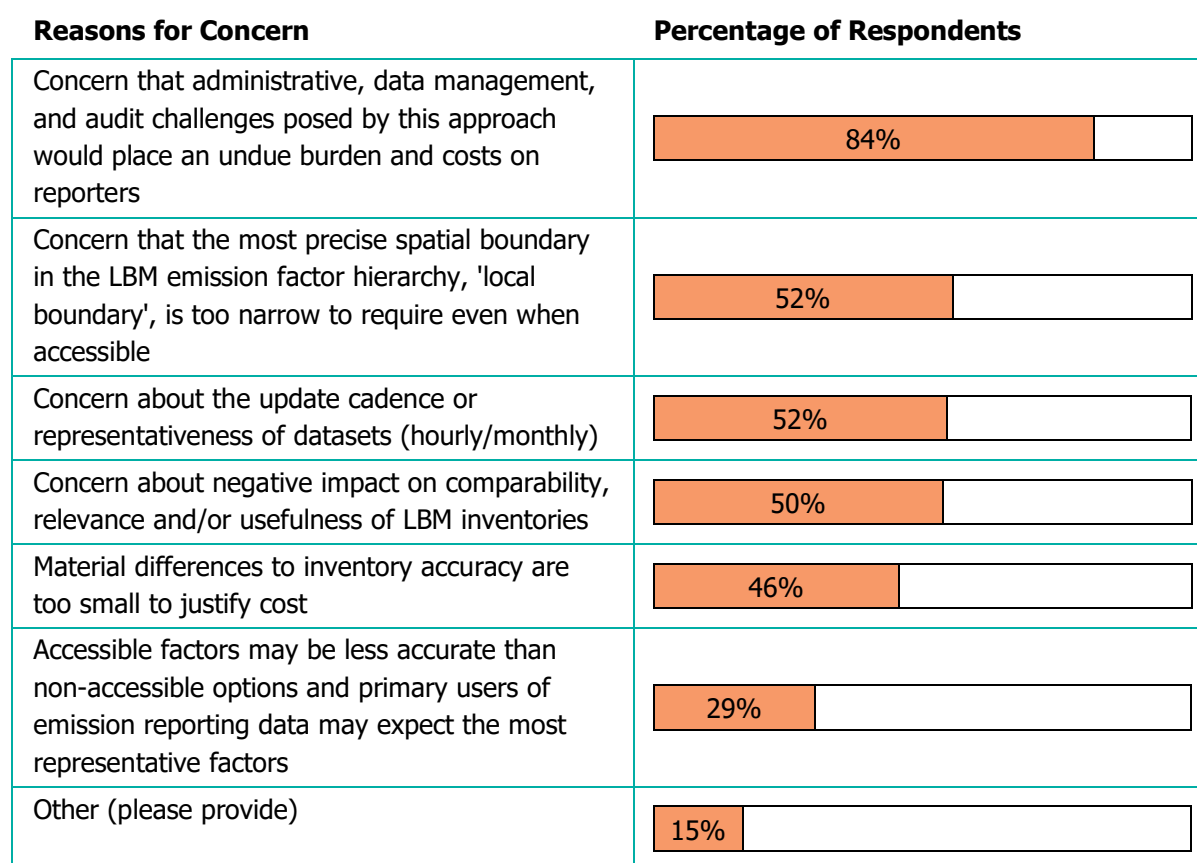
widely available, and by signaling to governments and authorities the need to develop high-quality regional emissions data.

7.4 Reasons for Concern (Q. 47-51)

Questions 47-51 ask respondents to identify and explain their reasons for concern with the proposed required to use the most precise location-based factor available. This section summarizes feedback from the 513 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents.

Among respondents who rated the requirement to use the most precise LB emission factor accessible 1 or 2 (No or Low Support), the below figure shows the most and least commonly selected answers to question 47.

Figure 6: Responses to Question 47



Administrative Burden

Of respondents that answered questions 47-51 (reasons for concern), many noted that a requirement to use the most precise emission factor accessible may introduce administrative, financial, and assurance-related complexity. Some respondents indicated that managing highly granular data may require significant administrative investment and could create audit and assurance challenges relative to the need to

demonstrate the inaccessibility of more precise data to verifiers. Some respondents also noted that these resource requirements may affect the allocation of effort toward renewable energy procurement or efficiency projects.

Integrity Concerns

Of respondents that answered questions 47-51 (reasons for concern), some noted that variation in data access and the use of estimated load profiles may affect comparability of the LBM across regions and organizations. A few respondents indicated that this may introduce challenges for interpretation by investors or influence confidence in the LBM. A few respondents also noted aligning the LBM more closely with the level of granularity used in the MBM may affect its role as a simplified, stable average that serves as a broad reference point across Scope 2 totals. Finally, a few respondents noted that this shift in methodology may have implications for the continuity of long-term climate strategies, including potential impacts on base year inventories and the tracking of progress toward targets, with a few indicating this may influence participation in the standard over time.

Conflicts with Regional Standards & Other Reporting Frameworks

Of respondents that answered questions 47-51 (reasons for concern), a few noted that the proposed revisions may conflict with established regional energy policies, as requirements for spatial and temporal matching may exceed existing regulatory approaches and could create misalignment with government-mandated reporting. A few respondents provided operational examples to illustrate this dynamic. For instance, in Canada, provincial grid factors serve as the legal and regulatory standard. Similarly, a few European stakeholders noted that a requirement to use local emission factors where they are the most precise accessible may limit the use of recognized, legally compliant national defaults, such as those required for EU RED III compliance, which could introduce inconsistencies in alignment with regional energy policies.

A few respondents also noted that these revisions may lead to divergence from major global frameworks, including the IFRS Sustainability Disclosure Standards. They indicated that if the requirements become technically complex for implementation in regulatory contexts, this may contribute to variation in adoption across jurisdictions. In addition, a few respondents noted that if jurisdictions such as the EU standardize on a specific level of granularity (e.g., national annual factors), the requirement to use a more precise factor when accessible may result in organizations calculating location-based emissions using different approaches for different reporting purposes.

Data Privacy

Of respondents that answered questions 47-51 (reasons for concern), a few noted considerations related to the potential exposure of confidential corporate information, indicating that granular, hourly activity data may act as a proxy for sensitive operational patterns. These respondents indicated that requiring this level of reporting precision may introduce privacy risks, as it could reveal proprietary production cycles and facility occupancy patterns to external audiences.

Definition of "Available" Data

Of respondents that answered questions 47-51 (reasons for concern), a few noted that the definition of "available" may need further clarification, indicating that without a consistent, standardized definition, the

requirement may involve a time-consuming process to identify data that may not be readily obtainable, which may not represent the most efficient use of organizational resources.

Use of Non-Accessible Emission Factors

Of respondents that answered questions 47-51 (reasons for concern), in response to question 51 about any conditions under which a non-accessible factor should be required, a few respondents noted that mandating paid, "non-accessible" datasets may introduce additional reporting costs for companies. They also noted that this approach may raise considerations related to conflicts of interest if it results in consistent reliance on third-party data providers.

7.5 Suggested Compromises on Use of Most Precise Emission Factor Accessible (Q. 45-51)

This section summarizes feedback from the 596 respondents engaging with some or all of questions 45-51; all frequency terms refer to this subset rather than to all consultation respondents.

Phased Implementation Timelines

Of respondents that answered questions 45-51, many proposed a staged approach to the new requirements. They noted that an immediate requirement for hourly or local matching where accessible may exceed the current capacity of data infrastructure and corporate accounting teams. As a result, they suggested adopting the structural framework of the hierarchy in the near term, while applying a phased timeline that delays the required use of the most granular temporal and spatial data until regional datasets and registries become more widely available.

Guidance Rather Than "Shall" Requirement

Of respondents that answered questions 45-51, many suggested modifying the "shall" language within the standard to "should" or "may." They noted that by reframing the top tiers of the hierarchy (such as hourly intervals and local boundaries) as advanced best practices rather than requirements, organizations with access to high-quality data may improve their reporting precision on a voluntary basis without introducing additional complexities for all reporters.

Safe Harbors for Assurance

Of respondents that answered questions 45-51, a few recommended establishing explicit "safe harbors" to streamline assurance processes. Under this approach, the GHG Protocol would define an acceptable baseline default, such as a national or regional annual consumption-based factor. Respondents noted that explicitly defining this baseline may help reduce the need for extensive assurance processes requiring reporters to demonstrate the inaccessibility of higher-tier data.

Materiality Thresholds and Exemptions

Of respondents that answered questions 45-51, a few noted the potential use of materiality thresholds to support management of the administrative load across numerous small or leased facilities. They indicated that the highest levels of the hierarchy could be applied to large, energy-intensive operations, or in cases where applying a non-accessible factor would result in a material misrepresentation of emissions. Smaller sites, SMEs, and minor loads could be permitted to use lower-tier default factors.

8 Feasibility of LBM

Background on proposal: The proposed updates to the location-based method introduced a new emission factor hierarchy and a requirement that reporters must use the most precise location-based emission factors on the hierarchy accessible (free, publicly available, from a credible source) and matched to the same precision of their available activity data.

Where organizations have access to hourly emission factors but not hourly activity data, the proposal would allow organizations to approximate hourly activity data from monthly or annual data using load profiles.

The survey asked stakeholders to evaluate how the proposed LBM revisions affect comparability and decision-usefulness relative to incremental cost and complexity the availability of hourly activity data for their organization and accessibility of hourly emission factors in their region and the impact of allowing the use of load profiles to approximate hourly activity data.

8.1 Summary of Consultation Feedback Relative to the Decision-Making Criteria

Table 15: Summary of consultation feedback

	Support	Concerns
Integrity	Standardized implementation pathways for load profiles may improve auditability.	Load profiles may introduce representativeness challenges, particularly where modelled profiles do not reflect actual consumption or where different profiles yield different results for similar loads.
Impact	- More granular LBM data may enhance risk visibility, enabling investors and external users to better assess transition risk, peer performance, and decarbonization strategies. - Load profiles within the LBM may improve decision-usefulness compared to annual average emission factors.	Added complexity may provide limited incremental value, particularly where Scope 2 is immaterial or consumption patterns are stable.
Feasibility	Varied perspectives on the availability of both hourly activity data and corresponding emission factors, reflecting differences in regional metering infrastructure, data systems, and market-level transparency.	

8.2 Comparability & Decision-usefulness Relative to Cost & Complexity (Q. 52-56)

Questions 52-56 ask respondents to provide feedback on how the proposed LBM revisions affect comparability and decision-usefulness relative to incremental cost and complexity.

Respondents were asked to rate how the proposed location-based method revisions change the extent to which information is decision-useful and comparable for users relative to incremental cost and complexity for preparers (A being the lowest – no meaningful improvement and D being the highest – substantial improvement).

This section summarizes feedback from the 501 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents.

Potential Improvements to Decision-usefulness/Comparability

Of respondents that answered questions 52-56, some responded that these updates provide “moderate to substantial improvement” to decision-usefulness or comparability. The following themes emerged from their feedback.

Improved Consistency and Streamlined Assurance

Of respondents that answered questions 52 and 54 that these updates provide “moderate or substantial improvement”, many noted that a standardized hierarchy may improve methodological consistency by reducing broad regional aggregation errors and may streamline assurance by reducing the number of discretionary choices and areas of interpretation. A few respondents noted that this structure may provide auditors with clear verification criteria and more consistent audit trail, which may help reduce ambiguity and improve the credibility of assessments. A few respondents also noted that while the revisions may encourage more consistent data selection among companies operating on the same grid, comparability may still be affected where organizations have differing levels of access to granular data.

Enhanced Risk Visibility

Of respondents that answered questions 52 and 54 that these updates provide “moderate or substantial improvement”, some noted that aligning reporting with how electricity is generated and delivered at specific times may provide investors with more detailed information to evaluate transition risk and peer performance. A few respondents indicated that time-aligned emission factors may contribute to a more uniform baseline for external evaluators. In addition, a few noted that this approach may support more comparable assessments across organizations, enabling benchmarking of decarbonization strategies under major disclosure frameworks such as CDP, ISSB, and SBTi.

Benefits Justify Cost and Complexity

Of respondents that answered questions 52 and 54 that these updates provide “moderate or substantial improvement”, a few noted that the resulting improvements to comparability and decision-usefulness may be proportionate to the associated cost, while acknowledging that implementation may require initial effort. These respondents indicated that the incremental costs and complexities for preparers may be manageable

primarily as one-time adjustments, noting that in regions with established digital reporting systems, the required data may already be available, resulting in relatively limited ongoing effort.

Limited Improvement in Decision Usefulness/Comparability

Of respondents that answered questions 52-56, many responded that these updates provide “no or minor improvement” to decision-usefulness or comparability. The following themes emerged from their feedback.

Misalignment with Stakeholder Needs

Of respondents that answered questions 52 and 54 that these updates provide “no or minor improvement”, a few responses from companies noted that the proposed level of detail may exceed what their stakeholders typically request or find most relevant. They indicated that investors may prioritize clarity on strategic direction, long-term targets, and transition risk management rather than the highly granular operational detail, such as hourly or sub-national emission factors.

Reduces Consistency and Comparability

Of respondents that answered questions 52 and 54 that these updates provide “no or minor improvement”, some noted that while the proposed location-based revisions may conceptually improve comparability, practical implementation may result in cross-company comparability remaining uneven or, in some cases, decrease. These respondents indicated that the requirement to use the “most precise accessible” emission factor may lead to variation in reporting, as high-resolution data is not uniformly available globally. For example, neighboring companies may report different emissions for similar operations due to differences in access to hourly utility data. In addition, these respondents noted that allowing the use of local datasets, non-standardized load profiles, or proprietary calculation methods may introduce additional sources of variability. They indicated that, in the absence of standardized safeguards such as default load profiles, these revisions may contribute to variation in data quality that ultimately could affect comparability for investors and assurance providers.

Benefits Outweighed by Cost and Complexity

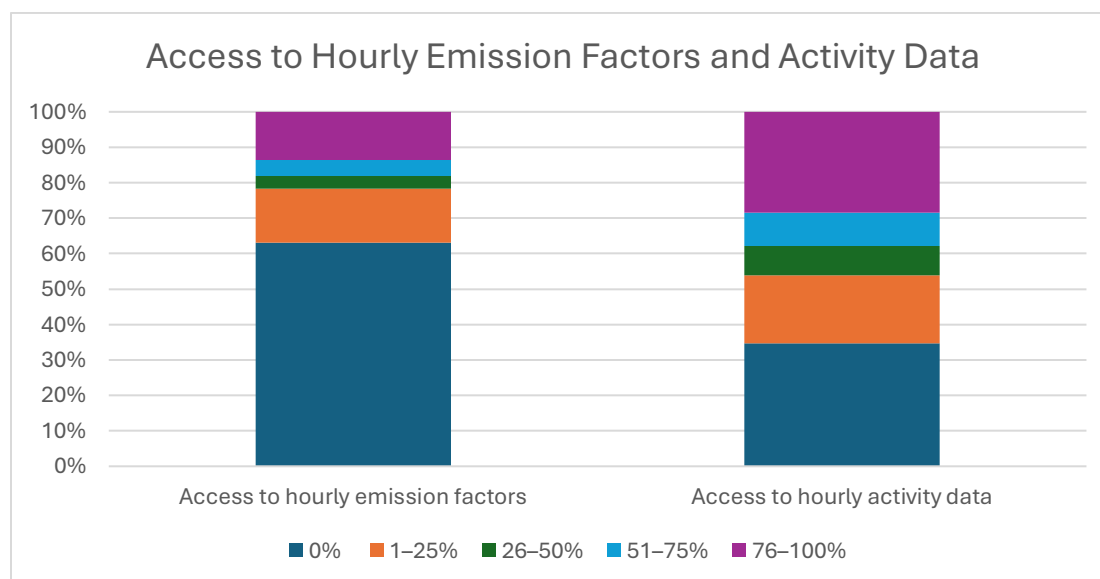
Of respondents that answered questions 52 and 54 that these updates provide “no or minor improvement”, some noted that the significant administrative burden and technical costs of highly granular reporting may outweigh the associated improvements in accuracy for data users. These respondents indicated that for many organizations, particularly those with stable, continuous power consumption, differences in emissions results between hourly and annual approaches may be limited, while the effort required to aggregate and audit large volumes of data may be greater. A few respondents also noted that for organizations where Scope 2 is immaterial to the total footprint, the additional effort associated with hourly or local tracking may not provide material value for investors. Consequently, a few respondents indicated that increasing granularity may introduce additional complexity and cost without proportionate increases in decision-usefulness, noting that overall energy consumption remains the primary driver for investment analysis.

8.3 Hourly Emission Factor Data Accessibility (Q. 57 & 58)

Questions 57 & 58 ask respondents to assess the availability of hourly emission factors in the grids where they operate. This section summarizes feedback from the 471 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents.

The below figure shows respondent feedback on question 57, percentage of load with hourly emission factors accessible (answer to question 59, availability of hourly activity data, also shown for comparison).

Figure 7: Responses to Questions 57 and 59



Accessible Hourly Emission Factors - Public, Regulatory and Institutional Channels

Of respondents that answered questions 57 and 58, some noted that hourly emission factors are increasingly available through public and institutional channels, including system operators and public transparency platforms (such as ENTSO-E in Europe, RTE in France, and various ISOs in the U.S.), which publish grid data in liberalized markets. A few respondents also noted that emerging regulatory mandates and institutional programs may contribute to making this data more widely available, citing examples such as Europe's Renewable Energy Directive (RED III), the International Energy Agency's (IEA) pilot for an international hourly factor set to support emerging markets, and the potential for the U.S. EIA to develop and publish hourly grid average factors.

Accessible Hourly Emission Factors - Third-Party Platforms and Digital Registries

Of respondents that answered questions 57 and 58, a few report successfully accessing and validating hourly emission factors through independent third-party platforms, digital MRV (Measurement, Reporting, and Verification) registries, or specialized software. Respondents referenced global aggregators, such as Electricity Maps, that provide high-granularity factors via API by modeling system operator data across

more than 200 countries. In the United States, respondents note the availability of open datasets such as Singularity's Open Grid Emissions. In other markets, such as Australia and New Zealand, respondents mention automated digital registries (such as PATtech) that ingest and verify operational grid factors directly from system operators, providing audit-ready data. In markets where formal government databases are limited, a few respondents noted that open platforms (such as OpenElectricity) and independent consultants may provide this data, with some limitations related to accessibility.

Limited Accessibility of Hourly Emission Factors

Of respondents that answered questions 57 and 58, many noted structural limitations regarding the accessibility of hourly emission factors in some regions. Geographically, some respondents indicated that high-resolution data may be concentrated primarily in developed, liberalized markets (such as North America, Europe, Australia, and Singapore), where third-party platforms largely surface data published by system operators. In contrast, a few respondents noted that in some regions (including parts of Africa, Asia, and Latin America), limitations in grid infrastructure for temporal reporting may restrict the availability of actionable data. Even within data-rich countries such as the United States and Brazil, some respondents reported that data availability remains uneven, noting that official, auditable, ready-to-use CO₂ datasets for compliance are not consistently available across grid operators. In addition, a few respondents indicated that some specialized third-party software may not meet the definition of "accessible," as these tools may not be free or open-source. Additionally, a few respondents also noted that available data may lack methodological transparency or may focus on generation rather than consumption factors.

Time-lag in Published Data

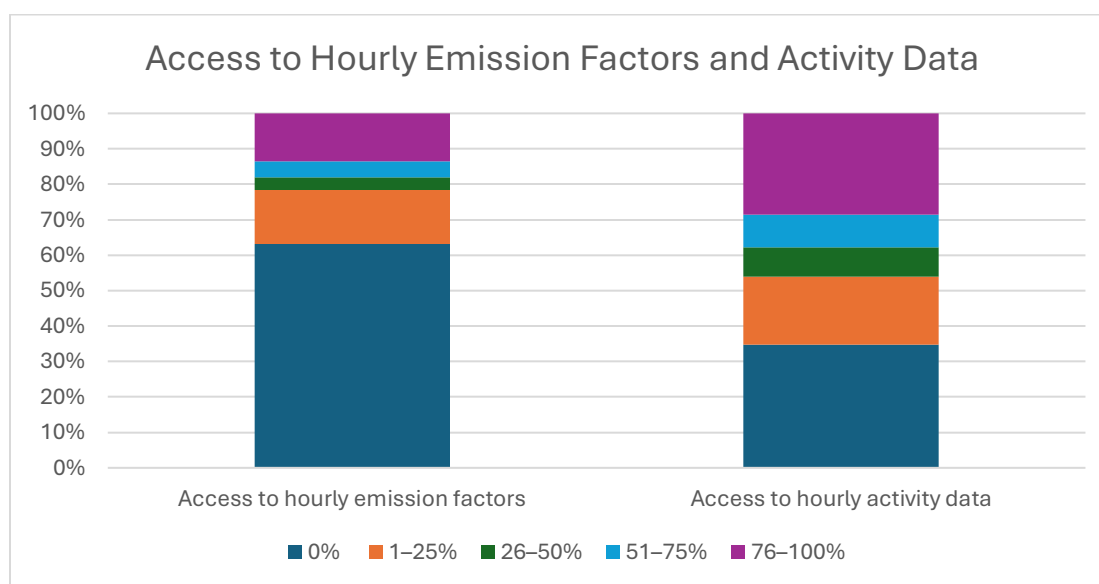
Of respondents that answered questions 57 and 58, some noted that hourly emission factors may be functionally unavailable due to significant data lags and variation in transparency from grid operators across regions. A few respondents indicated that authoritative datasets often feature a one- to two-year lag due to required QA/QC processes, which may limit their use for timely inventory reporting. A few respondents also noted that this temporal lag may introduce challenges for maintaining consistency in reporting, including the potential need to update historical data once revised factors become available.

8.4 Hourly Activity Data Availability (Q. 59 & 60)

Questions 59 & 60 ask respondents to assess the availability of hourly activity data for their organization. This section summarizes feedback from the 460 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents.

The below figure shows respondent feedback on question 59, percentage of load with hourly activity data available (answer to question 57, access to hourly emission factors, also shown for comparison).

Figure 8: Responses to Questions 57 and 59



Available Hourly Metering Infrastructure

Of respondents that answered questions 59 and 60, Some report direct operational experience indicating that advanced metering infrastructure is widely deployed and capturing granular interval data across multiple regions. These respondents noted that smart meter rollouts enable the automatic capture of hourly activity data for most consumers in Japan, and Advanced Metering Infrastructure (AMI) is deployed across a large share of commercial and industrial customers in the United States, with the capability to record consumption at hourly or sub-hourly intervals, although access to this data for customers may vary.

Some respondents also reported that Northern and Western Europe, as well as the United Kingdom, have a high penetration of hourly or standard half-hourly metering setups. One respondent noted that European markets have access to 15-minute load data, attributed to the implementation of the EU Electricity Regulation (EU/2019/943).

A few respondents noted ongoing progress in other regions, indicating that electricity providers in Hong Kong are rolling out smart metering with half-hourly readings, and that a significant portion of metering infrastructure in Australia supports hourly interval data, with some variation across the country.

Finally, some respondents indicated that even in regions where smart meter deployment is less widespread, large industrial and data center facilities may have access to hourly data through internal, behind-the-meter energy management systems.

Limited Hourly Metering Infrastructure

Of respondents that answered questions 59 and 60, some identified barriers to hourly metering infrastructure, noting that many facilities lack the Advanced Metering Infrastructure (AMI) or "revenue-grade" smart meters required for high-resolution reporting. For small and medium enterprises (SMEs), as well as commercial, office-based, and service-oriented activities, electricity consumption data is typically limited to monthly or annual resolution, making direct metered hourly data logistically challenging and outside the reporter's immediate control.

This challenge is more pronounced in markets where utilities do not provide interval data for retail meters as a standard service, resulting in a disparity where larger facilities may have metered data while many sites lack granular access. Additional technical considerations include data integrity and assurance requirements, as internal metering may not meet revenue-grade standards required for formal auditing, and a few respondents noted limitations in the accuracy of third-party sub-metering at an hourly resolution.

Administrative factors, such as the use of third-party bill-pay services or the restriction of interval data to specific Time of Use (TOU) tariffs, may also limit access to available data. In addition, upgrading legacy meters in manufacturing facilities to enable hourly data capture was described as resource intensive and technically challenging for older equipment.

A few respondents noted that these challenges may be more significant for companies operating in leased spaces where utilities are managed by property owners. In these cases, respondents indicated that tenants may have limited ability to install sub-meters or obtain landlord cooperation, resulting in limited visibility into hourly electricity consumption for leased assets.

8.5 Load Profiles in the Location-based Method (Q. 61)

Question 61 asks respondents how the use of load profiles to approximate hourly activity data from monthly or annual data would affect the comparability, relevance, and usefulness of LBM inventories. This section summarizes feedback from the 331 respondents to this question; all frequency terms refer to this subset rather than to all consultation respondents.

Pragmatic Transition Tool

Of respondents that answered question 61, a few noted that the inclusion of load profiles in the emission factor hierarchy may serve as a pragmatic transition tool. They indicated that load profiles may enable broader participation in granular reporting, particularly for smaller organizations or tenants in leased spaces who lack direct access to interval metering. A few respondents noted that this approach may help address data gaps in regions where grid digitalization is less developed, such as parts of Africa, Asia, or Latin America, and may support a gradual transition towards hourly emission factors as infrastructure matures. A few respondents indicated that load profiles may provide a feasibility pathway for large organizations managing mixed-data environments, allowing for a consistent methodology across global portfolios where only a subset of sites have access to hourly activity data. A few respondents noted that the use of load profiles could be framed as a transitional approach until hourly activity data becomes more widely available.

Decision Usefulness

Of respondents that answered question 61, a few noted that the use of simplified load profiles may enhance the decision-usefulness and relevance of the location-based method compared to annual average emission factors. They indicated that more granular reporting may allow demand flexibility and storage impacts to be more clearly reflected. Beyond internal operations, a few respondents noted that standardized load profiles may support improved comparability, relative to annual averages, across sectors or similar building types.

Accuracy and Comparability Challenges

Of respondents that answered question 61, some noted that generic load profiles may not fully reflect actual consumption and may limit the representativeness of reported emissions. A few indicated that these limitations may be more pronounced for energy-intensive industrial sectors, complex grids involving battery storage, or operations that do not align with standardized models. Many respondents noted that the methodology may affect comparability relative to an annual aggregate total, as identical loads could yield different emissions results depending on the profile selected, and may also introduce challenges for historical baseline tracking. A few respondents indicated that these considerations may be more pronounced in emerging markets with limited data, while some noted practical considerations related to data assurance during technical failures or meter outages.

Regulatory Alignment

Of respondents that answered question 61, a few noted that the use of load profiles may affect auditability where new methods are not aligned with national regulatory frameworks. This was cited as a consideration in regions such as Australia and Japan, where some respondents indicated potential administrative and governance challenges associated with diverging from regulator-endorsed annual metrics in favor of more granular approaches.

Load Profile Assurance and Verification

Transparent Disclosure

Of respondents that answered question 61, a few noted that organizations may be required to disclose whether an inventory relies on hourly-measured data, modeled profiles, or flat annual averages to support transparency for investors and assurance providers. A few respondents also noted that clear guidance may be needed to avoid potential perception that flat averages are sufficient when more representative data is available.

Create Standardized Databases and Templates

Of respondents that answered question 61, a few noted that load profiles may be applied through standardized templates and centrally governed by regulators or grid operators to provide a consistent reference point. They indicated that this approach may support cross-company consistency and reduce the administrative audit burden on individual reporters.

Optional Use of Load Profiles

Of respondents that answered question 61, a few expressed concern that the inclusion of load profiles in the location-based data hierarchy may create implicit expectations to move toward hourly reporting where data is not accessible.

9 Overall LBM Considerations

Background on proposal: The proposed updates to the location-based method introduced a new emission factor hierarchy and a requirement that reporters must use the most precise location-based emission factors on the hierarchy accessible (free, publicly available, from a credible source) and matched to the same precision of their available activity data.

The survey asked stakeholders to provide feedback on the costs, implementation effort, and feasible adoption timeline of the proposed updates to the location-based method.

9.1 Summary of Consultation Feedback Relative to the Decision-Making

Criteria

Table 16: Summary of consultation feedback

	Support	Concerns
Integrity	Centralized, vetted emission factor resources could support more consistent factor selection and external assurance processes.	Uneven access to hourly activity data and emission factors may result in varied calculation methods across facilities, companies, and reporting years.
Impact	Utility-provided data and centralized resources could reduce implementation effort associated with obtaining, managing, and documenting granular data.	Additional costs for data collection, software, assurance, and administration could affect resources available for decarbonization activities.
Feasibility	Phased implementation, centralized datasets, utility-provided data, and assurance safe harbors could reduce implementation effort.	Implementation may require significant investment in data collection, IT systems, staffing, training, and assurance.

9.2 Cost and Effort of Proposed Revisions to the LBM (Q. 62-64)

Question 62 asked respondents to provide a 1-5 rating to indicate incremental preparer cost/effort to implement the proposed revisions to the LBM. 458 respondents provided a rating of 1-5. Of respondents rating this proposal, 86% provided a rating of 4-5 (high), while 8% provided a rating of 3 (neutral), and 6% provided a rating of 1-2 (minimal).

Questions 63 and 64 asked respondents to provide additional feedback on the main drivers of cost/effort. This section summarizes feedback from the 482 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents.

Sourcing and Managing Hourly Activity Data

Of respondents that answered questions 63 and 64, many emphasized that moving from monthly data (12 data points per year per location) to hourly data (8,760 data points per year per location) would fundamentally affect their existing processes and carbon accounting tools. For organizations with dozens, hundreds, or thousands of facilities globally, respondents noted that implementing the proposed changes could require physical upgrades, such as installing smart interval meters where they are not currently available, or coordinating with landlords to obtain utility data.

Some respondents acknowledge that their utilities track hourly or sub-hourly electricity consumption data, but indicated that accessing this information may require navigating complex portals, paying additional fees, or entering into new data-sharing agreements with their utility providers.

Some respondents mentioned that companies operating in multi-tenant buildings often do not have access to electricity consumption information at all, and that obtaining even monthly data can be challenging. These respondents indicated that reliance on landlords to obtain such information could increase administrative effort.

Availability of Granular Emission Factors

Of respondents that answered questions 63 and 64, many noted that hourly emission factors are not published or publicly available from system operators in many regions across the globe. Where these datasets do exist, respondents indicated that access may be limited to third-party providers or subscription-based services, potentially introducing additional costs to the reporting process. Respondents also noted that multinational organizations may face added administrative effort associated with researching, verifying, and integrating emission factor methodologies across multiple jurisdictions. In addition, respondents indicated that the volume of data required could increase the complexity of internal data management processes and external assurance activities.

Some respondents acknowledged that the proposed definition of “accessible” could, in principle, help address some concerns related to obtaining granular emission factors. However, these respondents noted that identifying, evaluating, and documenting appropriate datasets may itself require ongoing effort. They further indicated that organizations may need to regularly reassess and justify their selected emission factors as data sources and availability evolve over time.

Internal IT and Staffing Costs

Of respondents that answered questions 63 and 64, many noted that integrating new hourly activity data streams and hourly emission factor datasets could require significant IT investment. Respondents indicated that these investments may include API connections to grid operators or upgrades to enterprise management software to enable the collection, processing, summarization, and assurance of larger volumes of data. These respondents observed that, in the absence of automated solutions, managing data at this level of granularity could increase administrative effort and present challenges for maintaining consistent reporting practices. Respondents representing companies with geographically dispersed facilities noted that these considerations may be particularly relevant for their organizations.

In addition to potential IT investments, some respondents noted that the proposed changes could require additional staffing, expanded training for existing personnel, or both. These respondents noted that organizations may need personnel with technical expertise to develop and maintain automated data pipelines, analyze load profiles, and support quality assurance activities. Respondents also noted that the proposed requirements could introduce additional methodological considerations, including assessing the accessibility of emission factors across multiple jurisdictions and documenting supporting evidence for assurance providers. As a result, respondents indicated that organizations may need to invest in training and capacity building to support implementation. Some respondents noted that these investments could

be particularly challenging for SMEs, which may have more limited human and financial resources available to support these activities.

Audit and Assurance Costs

Of respondents that answered questions 63 and 64, a distinct but related cohort noted that these IT system upgrades may be necessary to support auditable and assurance-ready emissions reporting. These respondents referenced upcoming regulatory requirements that may require limited or reasonable assurance of emissions disclosures as a factor influencing their assessment of implementation needs.

In addition to the internal effort associated with more granular location-based reporting, some respondents suggested that external audit costs could also increase due to the added complexity associated with more granular reporting.

Reduced Comparability

Of respondents that answered questions 63 and 64, a few noted that accessible hourly data is only available in select regions and for select facility types, which could result in companies applying different calculation methods across portions of their operations. These respondents indicated that this variation could affect the ability of both internal and external users to compare emissions data across facilities, companies, and reporting years.

Diversion of Resources Away from Decarbonization Projects

Of respondents that answered questions 63 and 64, a few noted that increased administrative costs and implementation effort could affect the resources available for decarbonization projects. While respondents did not provide specific examples, a few indicated that sustainability budgets are limited and that additional administrative costs could affect how resources are allocated across sustainability initiatives.

9.3 Burden Reduction for Implementation of the LBM (Q. 65-66)

Questions 65 and 66 asked respondents to provide additional feedback on measures that would most reduce burden for implementation of the LBM. This section summarizes feedback from the 476 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents.

Shifting Burden to Utilities and Grid Operators

Of respondents that answered questions 65 and 66, many indicated that utilities and grid operators may be well positioned to provide hourly emission factors directly to electricity consumers. These respondents suggested that electricity suppliers could calculate and provide hourly emission factors on monthly utility bills or via standardized API feeds. Respondents noted that utilities already possess much of the underlying hourly data needed to generate this information, which they indicated could help reduce some of the software implementation and assurance costs associated with obtaining and managing these datasets.

Standardized Global Database

Of respondents that answered questions 65 and 66, a related cohort noted that a centralized database of vetted emission factor sources could help reduce implementation effort. These respondents indicated that identifying and evaluating granular emission factor sources across multiple regional authorities may require significant administrative effort and could affect comparability where different organizations select different data sources. Some respondents suggested that the GHG Protocol (or a designated partner) could publish standardized, pre-verified consumption-based emission factor datasets. These respondents noted that a centralized approach could reduce the effort associated with identifying and documenting data sources and support consistency in external assurance processes.

Assurance Safe-Harbors

Of respondents that answered questions 65 and 66, some suggested the use of assurance safe-harbors to provide greater clarity regarding acceptable estimation methods and reduce the effort associated with documenting and justifying methodological choices. Respondents who discussed this theme primarily focused on the use of load profiles, noting that organizations using load profiles to estimate hourly activity data may face additional review during assurance processes.

A few respondents expressed concerns regarding the use of safe harbors, noting that they could affect the integrity of reported results or questioning whether assurance providers would recognize safe harbors established by the GHG Protocol.

Phased Implementation

Of respondents that answered questions 65 and 66, some noted that the infrastructure required for hourly calculation of location-based emissions, such as widespread smart meter deployment and automated data pipelines, is not yet widely available across all companies or regions. These respondents suggested a phased implementation approach, with effective dates based on organizational size, region, or data availability.

Additional feedback on phased implementation is provided in section 9.4.

9.4 Implementation Timeline (Q. 67-68)

Questions 67 and 68 asked respondents to provide additional feedback on the reporting year that their organization would be ready to apply the proposed LBM updates. This section summarizes feedback from the 474 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents. The below table summarizes respondent answers to question 67.

Table 17: Responses to question 67

Reporting Year	Count	% Selected
Earlier than reporting year 2027 (already aligned)	27	7%
Reporting year 2027 (inventory prepared in 2028)	41	10%
Reporting year 2028 (inventory prepared in 2029)	41	10%
Reporting year 2029 (inventory prepared in 2030)	28	7%
Reporting year 2030 (inventory prepared in 2031)	80	20%
Later than reporting year 2030	187	46%

Timeline implications

Of respondents that answered questions 67 and 68, many indicated that the implementation timelines contemplated in question 67 may not be achievable. These respondents suggested implementation dates beyond 2030, citing the multi-year capital planning cycles associated with advanced metering infrastructure, the time required for staff training, and potential implications for existing corporate climate targets.

Mechanisms for Phasing

Of respondents that answered questions 67 and 68, four potential approaches were offered for phasing implementation over time:

1. **Phasing by region or geography.** Some respondents noted that the rollout could be staggered based on the maturity of local power grids. Regions like the UK and parts of Europe, which already have advanced interval metering and transparent grid data, would implement first (e.g., 2027 or 2028). Emerging markets or vertically integrated monopoly grids (like parts of Asia and Africa) could be given until 2030 or later to transition.
2. **Phasing by sector or industry context.** Some respondents noted that certain industries face unique regulatory or infrastructure hurdles. For example, data centers and telecommunications companies face large, continuous electricity loads and concurrent EU regulations (like the Energy Efficiency Directive), which respondents indicated could affect implementation timelines. Other respondents highlighted that public infrastructure projects (like UK heat networks) have 40-year investment cycles that may make rapid transitions challenging.
3. **Phasing via data availability triggers.** Rather than setting a fixed calendar date (like 2027), some respondents suggested tying the compliance deadline to data milestones. For example, organizations would only be required to transition to more granular accounting requirements three years after their national grid operator begins publishing free, standardized hourly emission factors.
4. **Phasing by organization size.** Some respondents proposed a tiered rollout based on electricity consumption or revenue. Large buyers (e.g., those consuming > 50 GWh annually) would be required to implement the rules first. Respondents noted that this approach would allow the vendor and software ecosystem to mature. SMEs would observe the first wave and be given an additional 3–5 years to comply using established, cheaper tools.

In addition to these concepts, many respondents repeated some of the ideas summarized in section 9.3, such as requiring utilities and grid operators to provide more granular data or providing a central resource for emission factors and load profiles. These respondents noted that measures intended to reduce implementation effort could also affect implementation timelines, and vice versa.

10 Market-based Quality Criteria 4 (Hourly Matching)

Background on proposal: The proposed updates to Scope 2 Quality Criteria 4 (hourly matching) would require organizations using contractual instruments to match them to electricity consumption hourly, except in cases of exemption. Where hourly data is unavailable, organizations could use a hierarchy of load profiles to approximate hourly consumption and contractual instrument data. The survey asked stakeholders to evaluate the integrity, impact and feasibility of this requirement.

10.1 Summary of Consultation Feedback Relative to the Decision-Making Criteria

Table 18: Summary of consultation feedback

	Support	Concerns
Integrity	- Hourly matching requirements could make MBM reporting more accurate and relevant by better matching claims to when electricity is used. - May improve comparability between reporting companies.	Absence of consensus that hourly matching is a prerequisite for MBM integrity.
Impact	Hourly matching requirements could help create more targeted price signals for clean energy investment for times where supply and flexibility are needed.	- Without an incrementality requirement (i.e., only newer resources) updates may limit the emissions impact of hourly matching. - Hourly matching may have market participation effects, which could negatively affect its overall impact on emissions.
Feasibility	- Key market infrastructure for hourly matching is under active development in some regions. - Respondent suggestions included: - Optional approach (e.g. “may”) - Phased implementation - Size and regional exemptions - Transition protections (legacy clause).	- Key market infrastructure for hourly matching is not currently available in all regions. - Hourly matching requirements may increase transaction costs, internal reporting effort, and overall complexity of MBM calculations.

10.2 Quantitative Summary of Feedback

Question 71 asks respondents to provide a 1–5 support rating for updating Quality Criteria 4 to require hourly matching for market-based claims.

Table 19: Responses to question 71 by organization type

Organization Type	Count	Rating 4-5 (Support)	Rating 3 (Neutral)	Rating 1-2 (No/Low Support)
Academia/research	31	48%	6%	45%
Certificate registry/tracking system operator	10	30%	10%	60%
Company	429	12%	7%	82%
Consultant	81	33%	7%	59%
Data/analytics or software provider	21	81%	0%	19%
Electric Grid Operator	2	50%	0%	50%
Energy supplier/retailer or utility	81	26%	12%	62%
Financial Institution	19	26%	11%	63%
GHG account/reporting program or initiative	5	60%	20%	20%
Government institution	14	21%	7%	71%
Industry group	76	12%	7%	82%
International agency	1	0%	0%	100%
Non-profit organization/NGO/civil society	71	49%	6%	45%
Other	62	24%	10%	66%
Verification/assurance provider	6	0%	17%	83%
Grand Total	909	22%	7%	70%

Table 20: Responses to question 71 by geographic region

Geographical Region	Count	Rating 4-5 (Support)	Rating 3 (Neutral)	Rating 1-2 (No/Low Support)
Eastern Asia	156	15%	3%	81%
Southern Asia	16	31%	13%	56%
South-eastern Asia	28	14%	14%	71%
Western Asia	4	50%	25%	25%
Europe	332	30%	9%	61%
Northern America	312	16%	6%	78%
Latin America and the Caribbean	17	18%	18%	65%
Northern Africa	3	67%	0%	33%
Sub-Saharan Africa	7	29%	14%	57%
Oceania	34	41%	9%	50%
Grand total	909	22%	7%	70%

10.3 Reasons for Support (Q. 72 & 73)

Questions 72 and 73 ask respondents to identify and explain their reasons for supporting the proposed revision to Quality Criteria Four. This section summarizes feedback from the 427 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents.

Among respondents who rated the proposed hourly matching requirement 4 or 5 (Support), the below table shows the most and least commonly selected answers to question 72.

Figure 9: Responses to question 72

Reasons for Support	Percentage of Respondents
Better reflects grid operation, reduces misallocation of generation (e.g. "solar at night")	96%
Improves accuracy and scientific integrity of MBM results	93%
Reduces risk of greenwashing/time-shift claims by aligning claims to time of use	89%
Strengthens transparency and supports public verification	83%
Helps accelerate the development of technologies that will be needed at scale for fully decarbonized grids	82%

Helps create price signals for times and places where renewables are not already abundant	82%
Enables emission changes from storage and demand-flexibility to be reflected more accurately	76%
Enhances comparability across reporters and frameworks using GHG Protocol data	70%
Improves decision-usefulness for external disclosures	66%
Improves risk and opportunity assessment related to contractual relationships	52%
Other (please explain)	4%

Integrity and Credibility

Of respondents who answered questions 72 and 73 (reasons for support), almost all framed the proposed requirement as a necessary correction to prevent claims of using power at times when it is not physically possible to do so, and most cited it as necessary to reduce perceived greenwashing risk. Almost all respondents highlighted the “solar power at night” case as exemplary of this, which allows reporting organizations to apply renewable energy from solar power to electricity consumption that occurs at night.

Many respondents noted that hourly matching tightens the temporal interval in a way that may be more understandable to external audiences, including investors, customers, civil society, and assurance providers. They indicated that aligning claimed emissions reductions more closely with the timing of electricity generation and consumption may strengthen the relationship between reported inventory results and grid operations. Most respondents who discussed integrity and credibility also referenced the GHG Protocol reporting principle of accuracy, noting that greater temporal precision may improve confidence in reported inventory results.

Most respondents also noted that current annual matching approaches can allow companies to claim zero emission electricity use regardless of when renewable generation occurs. These respondents indicated that hourly matching may strengthen the alignment between reported inventory outcomes and the timing of electricity generation. Some of these respondents cited research from the Princeton Zero Lab, TU Berlin, and IEA, noting that these grid modeling studies conclude that hourly matching can influence the extent to which renewable electricity procurement is associated with measurable changes in grid emissions.

Decision-Usefulness, Comparability, and Verifiability

Of respondents who answered questions 72 and 73 (reasons for support), many described hourly matching as enhancing the decision-usefulness of market-based method outputs for management decisions and disclosures by more closely reflecting grid conditions and emissions impacts. These respondents indicated that the proposed hourly matching requirement may increase the precision of reported inventory values, particularly during periods when the grid is constrained, marginal emissions are elevated, or clean electricity supply is limited. Most respondents noted that this additional granularity may enable organizations to make more informed decisions regarding electricity procurement, electricity demand management, and the

dispatch of stored energy. These respondents also noted that annual matching provides less information about the timing of electricity generation and consumption, which may limit its usefulness for these types of decisions. Most respondents further noted that hourly matching may improve comparability and verifiability by applying a consistent temporal accounting interval across reporters. They suggested that requiring reporters to match with consistent temporal granularity would make it easier to interpret differences in procurement strategy.

System-Shaping

Of respondents who answered questions 72 and 73 (reasons for support), most indicated that hourly matching may create stronger market signals for the technologies and behaviors associated with highly decarbonized electricity systems, including clean firm power, long-duration energy storage, demand flexibility, and procurement strategies aligned with periods when clean energy is less abundant. Within this group, most noted that existing generation technologies such as wind, solar, and hydropower are widely available and frequently utilized under annual matching frameworks, but that their value within an hourly matching framework may be affected by intermittency and daily or seasonal generation patterns. These respondents indicated that technologies such as clean firm power and energy storage may help address periods of lower clean energy availability, and that market signals during those periods could influence investment in those resources. Some respondents who raised these points cited systems modeling research from organizations such as Princeton, TU Berlin, or IEA. Most respondents expressing these views did not cite specific studies.

Respondents expressing this view often framed the discussion in terms of broader electricity system transformation, noting that these technologies may play an important role in achieving deep grid decarbonization. Some respondents distinguished between mature and emerging electricity markets and indicated that hourly matching may be particularly impactful in grids that have already undergone substantial decarbonization.

Existing Market Infrastructure

Of respondents who answered questions 72 and 73 (reasons for support), some noted that existing power market structures may provide infrastructure that could support an hourly matching framework. A few referenced sub-hourly electricity market settlement and tracking systems as examples of relevant infrastructure. A few respondents also indicated that while such infrastructure is not currently available in all regions, increased demand for hourly matching could contribute to its broader development over time.

Evidence of Active Market Evolution

Of respondents who answered questions 72 and 73 (reasons for support), some noted ongoing efforts to expand hourly EAC issuance and tracking systems globally, indicating that hourly matching may be feasible in a growing number of markets. Some respondents referenced the Registry Acceleration Fund led by LevelTen Energy, which aims to support hourly certificate issuance across 70 countries. Some respondents also referenced the Center for Resource Solutions' Clean Energy Tracking Collaborative as an example of current initiatives to expand hourly EAC tracking capabilities in the United States, while platforms such as EnergyTag and Matched.energy were cited as examples of existing technical frameworks. Respondents also identified Australia, Taiwan, and the UK as markets where progress has been made toward hourly EAC issuance.

A few respondents noted that initial application of hourly matching by large organizations could contribute to broader market development. These respondents indicated that demand from major buyers may encourage utilities, registries, and software providers to develop supporting infrastructure, such as automated matching platforms and hourly EAC trading systems, which could improve the feasibility of hourly matching for a broader range of reporting organizations over time.

Alignment with Developing Regulation

Of respondents who answered questions 72 and 73 (reasons for support), many referenced regulations that incorporate hourly matching, noting that these developments may reflect increasing interest in more granular approaches to electricity sourcing and reporting. Some of these respondents referenced the US 45V Clean Hydrogen Standard and the EU Hydrogen Standard as examples, while a few also referenced the RFNBO regulations in the EU and the EU Carbon Border Adjustment Mechanism (CBAM).

10.4 Reasons for Concern (Q. 74 & 75)

Questions 74 and 75 ask respondents to identify and explain their reasons for concern for the proposed revision to Quality Criteria Four. This section summarizes feedback from the 821 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents.

Among respondents who rated the proposed hourly matching requirement 1 or 2 (Oppose) the below table shows the most and least commonly selected answers to question 74.

Figure 10: Responses to question 74

Reasons for Concern	Percentage of Respondents
Concern that a requirement for hourly contractual instruments could discourage global participation in voluntary clean energy procurement markets	87%
Concern that administrative, data management, and audit challenges posed by this approach would place an undue burden and costs on reporters	86%
Hourly matching should follow an optional 'may' rather than a required 'shall' approach	84%
Concern that requiring hourly matching does not create meaningful improvements to inventory accuracy	71%
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	47%
Concern about negative impact on comparability, relevance and/or usefulness of MBM inventories	43%
Other (please explain)	33%

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

Reporting Burden and Cost

Of respondents who answered questions 74 and 75 (reasons for concern), most described the proposed approach as a significant change in internal data management, controls, and assurance complexity. This trend is evident in questions 78 and 79, which asked respondents to rate the internal administrative effort and external service cost of the proposed hourly matching requirement on a 1-5 scale. Of respondents who answered question 78, most rated internal administrative effort as much higher than current level of effort (rating 5). Of respondents who answered question 79, most rated external service costs as much higher than current costs (rating 5). In addition, respondents who anticipated greater increases in effort and cost were less likely to provide a 4–5 support rating for hourly matching, indicating a negative relationship between support for hourly matching (question 71) and anticipated effort and cost increases (questions 78 and 79).

Alongside increased reporting burden, most respondents cited cost increases as a consideration. Cost increases were described in terms of both internal process costs (e.g., additional staff, software, and consulting support) and procurement costs. Many respondents who discussed burden and cost considerations made note of the trade-off between implementation costs and expected benefits, noting that the anticipated benefits of hourly may not be proportional to the associated costs. Some respondents also noted that restricting procurement options to hourly EACs could affect market dynamics and potentially increase procurement costs.

Immature Infrastructure

Of respondents who answered questions 74 and 75 (reasons for concern), some respondents pointed to markets outside of North America and Europe, noting that these markets may face constraints in supporting an hourly matching framework. Many of these respondents indicated that implementation could be challenging in a global standard where (a) utilities do not provide interval data in a consistent way, (b) registries and certificate systems are not universally capable of issuing and trading hourly attributes at scale, and (c) the supply of eligible hourly instruments is limited. A few respondents described hourly matching as more readily achievable for large energy consumers and organizations with substantial procurement and data management capabilities. Respondents who discussed this theme referenced markets in Africa and Asia as areas where supporting infrastructure may be the least developed. Countries mentioned by respondents included China, Japan, Nigeria, Ghana, Kenya, South Africa, Egypt, Chad, Ethiopia, Haiti, Sierra Leone, Somalia and South Sudan. Respondents referenced their experience in these markets when describing current infrastructure limitations.

Market Participation Risk

Of respondents who answered questions 74 and 75 (reasons for concern), many indicated that a mandatory hourly matching requirement could affect participation in voluntary procurement markets, either because some organizations may view the approach as too complex or because procurement activity may become concentrated in specific geographies and hours where costs are lower. These respondents frequently noted considerations related to market fragmentation (e.g., lower liquidity for hourly products), price premiums, and the possibility that procurement decisions could shift in ways that differ from the intended objectives of the proposed revisions. Some respondents referenced grid-modeling studies that project higher costs under hourly matching scenarios and suggested these costs could influence future levels of market participation. Other respondents referenced white papers from WattTime, GHG Management Institute, and RMI, which discuss the potential for market contraction from hourly matching requirements.

Some respondents also highlighted potential implications for long-term renewable energy contracts, such as power purchase agreements (PPAs). These respondents noted that hourly matching could increase the complexity of PPA procurement for corporate offtakers and could affect participation in this portion of the voluntary market. A few respondents indicated that, even if organizations continue participating in voluntary procurement, some buyers may shift a greater share of procurement toward unbundled EACs rather than long-term contracts. These respondents noted that such an outcome may differ from the objectives of the proposed revisions.

These respondents also mentioned a legacy clause as a potential mechanism to provide continuity for existing long-term contracts and to support considerations of future long-term agreements by energy buyers. *This topic is explored in further detail in Section 17.*

Materiality and Accuracy Skepticism

Of respondents who answered questions 74 and 75 (reasons for concern), respondents expressing reservations about the accuracy benefits of hourly matching described a range of perspectives. Most indicated that, while they consider the market-based method useful, increasing temporal granularity may not materially improve its accuracy. Some described the market-based method as having broader conceptual limitations that may not be addressed through stricter time-matching requirements. A few respondents within this group noted that consequential accounting could replace or complement the market-based method.

Some respondents indicated that hourly matching may improve the temporal resolution of reported data but may not materially change the representativeness of emissions results. These respondents noted that, in their view, the relationship between electricity systems, emissions, and inventory accounting is not substantially altered by increasing temporal granularity. They also noted that the additional complexity associated with implementing hourly matching may not be proportionate to the expected improvements in reported outcomes.

Some respondents described market-based accounting as having limitations that extend beyond temporal matching. These respondents noted that electricity cannot be traced through interconnected grids at any temporal resolution and indicated that allocating emissions through contractual instruments may not maintain a direct physical connection between electricity consumption and emission sources.

Some respondents who expressed this perspective referenced consequential accounting, including marginal emissions approaches, as an alternative means of assessing the impacts of electricity procurement decisions. These respondents noted that consequential approaches may provide additional insight into the effects of emissions interventions and suggested that discussions of inventory accuracy could consider both attributional and consequential perspectives. A few respondents recommended that consequential accounting replace the market-based method, while others suggested it could be reported alongside inventory-based approaches as a complementary metric.

Incrementality and the Three Pillars Critique

Of respondents who answered questions 74 and 75 (reasons for concern), a few referenced research on the “three pillars” approach to carbon-free electricity procurement, which indicates that a combination of hourly matching, deliverability, and incrementality (defined as new projects in grid modelling studies) is associated with system wide decarbonization of the electric grid. These respondents noted that the proposed market-based method revisions do not include an incrementality requirement and suggested that without this third pillar, the approach may limit the extent to which the proposed revisions achieve the intended emissions reduction outcomes.

10.5 Suggested Compromises for Hourly Matching (Q.72-75)

This section summarizes feedback from the 952 respondents engaging with some or all of questions 72-75; all frequency terms refer to this subset rather than to all consultation respondents.

“May” Rather Than “Shall” Language

Of respondents who answered questions 72-75, the most frequently suggested alternative among those who provided lower ratings for the proposed revision (1-2) was that hourly matching should be framed as an optional “may” rather than a required “shall.” This perspective was often accompanied by suggestions for voluntary 24/7 programs, optional disclosure of hourly matching, or the use of separate impact or consequential metrics rather than a requirement within the market-based method. Most respondents expressing this view indicated that an optional framework could allow organizations with the capability to implement hourly matching to do so, while providing flexibility for organizations facing implementation challenges.

Load and Size-Based Exemptions

Of respondents who answered questions 72-75, respondents across a range of positions suggested that the hourly matching requirement need not apply uniformly. Some respondents who rated the proposed revision 4-5 conditioned their support on exemptions for small and medium enterprises or sites with low annual consumption. Some respondents who raised feasibility concerns also identified load-based thresholds as a condition under which the requirement could become more feasible. This solution was considered and discussed by the Scope 2 TWG and included in the Public Consultation Survey for feedback. *Further discussion of exemptions can be found in section 11.*

Regional Exemptions

Of respondents who answered questions 72-75, respondents across a range of perspectives noted differences in grid infrastructure and registry maturity across regions. To address these differences,

respondents suggested several forms of regional or readiness-based exemptions. Some suggested that a mandatory hourly matching requirement could be linked to defined level of market or technical readiness, while others suggested a phased approach in which regions with more established infrastructure would transition earlier than other markets. A few respondents suggested measurable criteria to guide these regional exemptions, such as the percentage of the population with access to electricity, or the percentage of power delivered by existing clean firm resources.

Standardized Load Profiles

Of respondents who answered questions 72-75, many noted the use of standardized load profiles as a potential approach to address limitations in the availability of granular hourly metering data. These profiles allow organizations to approximate hourly consumption by applying facility-specific, utility-approved, or regional average usage patterns to their monthly or annual consumption data. Many respondents suggested that the GHGP develop standardized guidelines for these profiles to ensure consistency and enhance comparability.

In addition, some respondents point to load profiles as a potential mechanism to address the availability of hourly EACs in some markets. These respondents noted that, when combined with load profiles, monthly or annual EACs could be used to derive hourly EAC allocations.

Other respondents noted that the use of load profiles may affect some of the intended benefits of hourly matching, including accuracy and comparability. The use of load profiles was considered by the Scope 2 TWG and included in the Public Consultation Survey for feedback. *Further discussion of load profiles can be found in section 12.*

11 Market-based Hourly Matching Exemptions

Background on proposal: The proposed update to Quality Criteria 4 would require all contractual instruments used in the market-based method to be matched to electricity consumption within the same hour. The revision proposed an exemption from this hourly requirement for organizations that meet defined eligibility thresholds. Within the exempt boundary, qualifying organizations may instead match instruments to consumption on a monthly or annual basis. The survey asked stakeholders to evaluate the integrity, impact and feasibility of hourly matching exemptions.

11.1 Summary of Consultation Feedback Relative to the Decision-Making Criteria

Table 21: Summary of consultation feedback

	Support	Concerns
Integrity	Exemptions may assist as a transitional tool to enable market maturation.	Size-based exemptions may impact the consistency and credibility of MBM reporting.
Impact	Exemptions may help maintain participation in the voluntary renewable energy market by smaller and medium sized entities or those with low electricity consumption.	Exemptions may weaken price signals intended to incentivize investments in grid decarbonization.
Feasibility	- Varied suggestions on the design of exemptions to support feasibility, including load-based threshold, SME categorization design, and time length for exemptions. - Suggestions for exemptions based on: - Market readiness - Materiality - Other alternative criteria	

11.2 Quantitative Summary of Feedback

Question 153 asks respondents to provide a 1-5 support rating regarding allowance of exemptions to hourly matching as described in options 1 through 4.

Table 22: Responses to question 153 by organization type

Organization type	Count	Rating 4-5 (Support)	Rating 3 (Neutral)	Rating 1-2 (No/Low Support)
Academia/ research	21	71%	14%	14%
Certificate registry/tracking system operator	10	50%	40%	10%
Company	371	78%	7%	16%
Consultant supporting organizations with GHG inventories/strategies	72	78%	10%	13%
Data/analytics or software provider related to GHG inventories	18	72%	0%	28%
Electric Grid Operator	2	100%	0%	0%
Energy supplier/retailer or utility	56	77%	16%	7%
Financial Institution	16	88%	0%	13%
GHG account/reporting program or initiative	5	60%	20%	20%
Government institution	8	88%	13%	0%
Industry group	58	67%	7%	26%
International agency	1	0%	0%	100%
Non-profit organization/NGO/civil society	58	84%	12%	3%
Other (please specify below)	46	72%	20%	9%
Verification/assurance provider	6	67%	17%	17%
Grand total	748	76%	9%	14%

Table 23: Responses to question 153 by geographic area

Geographic area	Count	Rating 4-5 (Support)	Rating 3 (Neutral)	Rating 1-2 (No/Low Support)
Eastern Asia	122	78%	8%	14%
Europe	279	75%	10%	15%
Latin America and the Caribbean	7	57%	29%	14%
Northern Africa	2	100%	0%	0%
Northern America	252	79%	8%	13%
Oceania	34	71%	24%	6%
South-eastern Asia	24	79%	8%	13%
Southern Asia	19	58%	5%	37%
Sub-Saharan Africa	6	83%	0%	17%
Western Asia	3	67%	0%	33%
Grand total	748	76%	9%	14%

11.3 Reasons for support (Q. 154, 155 & 158)

Questions 154, 155 and 158 ask respondents to identify and explain their reasons for supporting the proposed Exemptions to Hourly Matching (Quality Criteria 4). This section summarizes feedback from the 618 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents.

Among respondents who rated exemptions to hourly matching 4 or 5 (Support), the below table shows the most and least commonly selected answers to question 154.

Figure 11: Responses to question 154

Reasons for Support	Percentage of Respondents
Provides a more equitable approach for reporting as hourly matching could be more challenging for organizations under a threshold	75%
Encourages organizations under a threshold to continue to engage in voluntary procurement using an annual procurement approach	71%
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	59%
Reduces transition strain on the electricity market and hourly matching infrastructure	46%
Other (please provide)	23%

Preference for Optional Hourly Matching

Of respondents who answered questions 154, 155, and 158 (reasons for support), many respondents expressed support for exemptions not because they viewed them as a preferred solution, but due to reservations about making hourly matching mandatory. These respondents suggested that hourly matching and deliverability be treated as optional reporting pathways ("may" rather than "shall"), asserting that an optional approach would preclude the need for exemptions. Respondents indicated that if hourly matching is implemented as proposed, appropriately designed exemptions may be necessary to address feasibility challenges.

Proportionate Effort vs. Impact

Of respondents who answered questions 154, 155, and 158 (reasons for support), most respondents expressing support for exemptions indicated that the financial and operational effort to implement and verify hourly matching may be disproportionately high for smaller entities or those with low electricity consumption. Some respondents, drawing on their experience in renewable energy procurement, noted that increased complexity could introduce market inefficiencies by shifting resources toward management

and intermediaries rather than supporting renewable capacity expansion. They also observed that smaller sites lack the staff and systems to manage granular purchasing, which could result in higher administrative overhead and a reduction in the potential funding available for procurement activities.

Some respondents emphasized that the level of effort should be proportional to the reporter's overall climate impact. A respondent citing the CDP Energy Report 2024 noted that a subset of only 7% of reporting companies accounts for more than 76% of electricity purchasing, illustrating that exemptions can relieve burdens on the vast majority of reporters with the bulk of systemic electricity demand remaining subject to hourly matching requirements. Some respondents suggested that this approach focuses complex accounting requirements for the largest consumers, who are more likely to have the resources to pave the way for markets and infrastructure.

Prevention of Market Disruption and Loss of Voluntary Action

Of respondents who answered questions 154, 155, and 158 (reasons for support), many respondents positioned exemptions as a means to maintain participation in the voluntary renewable energy market. Citing data from the CDP Energy Report 2024 (pages 10, 13-14, 43, and 44), some respondents indicated that corporate ambition and the quality of environmental claims vary significantly regardless of an organization's size. They noted that voluntary participation in renewable energy procurement may be sensitive to changes in reporting complexity or flexibility, and could discourage engagement across all consumer types, with the greatest impact likely felt by smaller companies lacking specialized in-house expertise. Some respondents suggested that reduced participation in voluntary reporting could affect the total pool of voluntary capital available to support new renewable projects. Some respondents suggested that a smaller buyer base could influence the overall market signal for new clean energy development and the pace of grid-wide decarbonization.

11.4 Reasons for Concern (Q. 156 & 157)

Questions 156 and 157 ask respondents to identify and explain their reasons for concern with the proposed Exemptions to Hourly Matching (Quality Criteria 4). This section summarizes feedback from the 258 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents.

Among respondents who rated exemptions to hourly matching 1 or 2 (No or Low Support), the below table shows the most and least commonly selected answers to question 156.

Figure 12: Responses to question 156

Reasons for Concern	Percentage of Respondents
Introduces inconsistencies across companies, reducing transparency and comparability for users	51%
Support an exemption, but a different criterion should be used for defining eligibility	36%
Creates reputational risk and increases skepticism about MBM claims	31%
Reduces accuracy and relevance of MBM reporting	28%
Feasibility is better addressed via temporary measures (e.g., phase-ins/legacy) rather than ongoing exemptions	27%
Other (please provide)	27%
Fragments the voluntary market and may slow the transition to wider availability/use of hourly data	24%
Tools and infrastructure are improving rapidly, making broad exemptions increasingly unnecessary	12%

Implications for Comparability, Transparency and Reporting System Structure

Of respondents who answered questions 156 and 157 (reasons for concern), many respondents, encompassing all perspectives on the proposal of hourly matching, suggested that size-based exemptions could change the structure of the reporting system, in such a way as to affect the credibility of Market-Based Method (MBM) claims. A few respondents suggested that this dynamic introduces a 'two-tier' reporting system, whereby organizations with nearly identical consumption could report materially different outcomes, leading to concerns over credibility of MBM claims. A few respondents highlighted that the physics of emissions remain constant regardless of corporate scale, noting that a ton of carbon emitted by a small entity is physically identical to one emitted by a large entity. A few respondents referenced financial accounting frameworks like IFRS and GAAP, noting that high-quality disclosure within these frameworks depends on uniform application across all entities and prohibits size-based carve-outs. Conversely, a few respondents used those same financial frameworks to indicate support *for* proportional exemptions (discussed further in *Section 11.10 Alternative Exemptions*).

Threshold Effects and Behavior Responses

Of respondents who answered questions 156 and 157 (reasons for concern), a few who did not support hourly matching or exemptions noted that load thresholds create step changes in reporting requirements, with organizations just above the cutoff subject to different requirements than those just below it. A few respondents indicated that this could create operational uncertainty, as companies would need to carefully monitor changes in consumption, e.g. due to acquisition or divestiture, to assess potential changes in

reporting obligations. As a directional consideration, a few respondents observed this could create a disincentive for certain decarbonization initiatives, for example, delaying the installation of EV chargers or electrification of buildings to avoid crossing the threshold. A few respondents who supported hourly matching but did not support exemptions also suggested it could incentivize behavior changes, such as splitting consumption across corporate entities or restructuring accounting boundaries, to affect reported load.

To mitigate these risks, a few respondents suggested making hourly matching entirely optional. If hourly matching is required, a few conditioned their support on replacing aggregate market thresholds with site-level "de minimis" exemptions (e.g., under 500 MWh) or adopting buffer zones to accommodate corporate growth without causing sudden change in requirements.

Aggregate Demand Signals and Market Scale

Of respondents who answered questions 156 and 157 (reasons for concern), a few who supported hourly matching but did not support broad or permanent exemptions noted that volumetric exemptions may weaken price signals intended to incentivize investments in renewable storage, 24/7 generation portfolios, and advanced hourly data systems, which characterize one of the objectives for introducing an hourly matching approach. A few respondents suggested that exempting large portions of load may discourage suppliers from developing aggregated retail products and slow the growth of granular certificate trading, which they identified as contributors to reducing market-wide costs. These perspectives were generally based on respondents' energy market expertise and reflected directional predictions about market outcomes; one respondent cited external academic modeling from Princeton Zero Lab regarding the systemic benefits of robust granular certificate trading.

These respondents suggested that feasibility challenges could be addressed alternately through transitional phase-ins, legacy provisions, or supplier aggregation rather than permanent exemptions, further stipulating that any adopted exemptions be time-limited and designed to phase out as infrastructure matures.

11.5 Eligibility Criteria for Hourly Matching Exemption (Q. 163-165)

Questions 163-165 ask respondents to select from four proposed eligibility designs for the hourly matching exemption, varying by whether qualification is based on a GWh load threshold (Option 1), SME categorization (Option 2), Load threshold *or* SME categorization (Option 3), Load threshold *and* SME categorization or SME categorization only (Option 4). This section summarizes feedback from the 482 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents.

Table 24: Responses to question 163

Exemption type	Count	Support
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.	103	22%

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.	12	3%
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.	187	40%
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.	83	18%
None of the above.	90	19%

Load Threshold *or* SME Categorization (Most Frequent Preference)

Of the respondents who selected a preferred option in question 163, most preferred option 3: where an exemption could be based on either a load threshold or SME categorization. Many of these respondents viewed the load-based component as a pragmatic and objective metric that reflects an organization's physical impact on the power grid. Respondents indicated that metered energy data is already a fundamental, verified requirement for baseline Scope 2 reporting, making a load threshold measurable, transparent, and globally consistent. However, many respondents suggested that a load threshold alone would not capture the full range of constraints that drive feasibility challenges, supporting the inclusion of SME categorization to account for more limited internal organizational capacity, staffing, and financial resources that may exist regardless of the electricity volume consumed.

Load Threshold Only

Of the respondents who selected a preferred option in question 163, some preferred option 1: load-based exemption threshold only. These respondents suggested this load-based approach may reduce the reporting burden associated with tracking numerous small, distributed sites within large multinational corporations, while limiting the potential for highly energy-intensive SMEs to avoid more detailed reporting requirements. Respondents also indicated that relying on objective electricity data avoids the administrative challenges of navigating varying legal definitions of an SME globally.

Load Threshold *and* SME Categorization

Of the respondents who selected a preferred option in question 163, some preferred option 4: a hybrid approach combining a load threshold *and* an SME categorization. Many of these respondents suggested that large multinational corporations capable of hourly matching might also operate small facilities that fall under a load-based threshold in some market boundaries. By requiring the entity to also be an SME, the framework ensures that companies with consumption under the threshold but with resources to facilitate hourly matching still do so for all their facilities.

SME Categorization Only

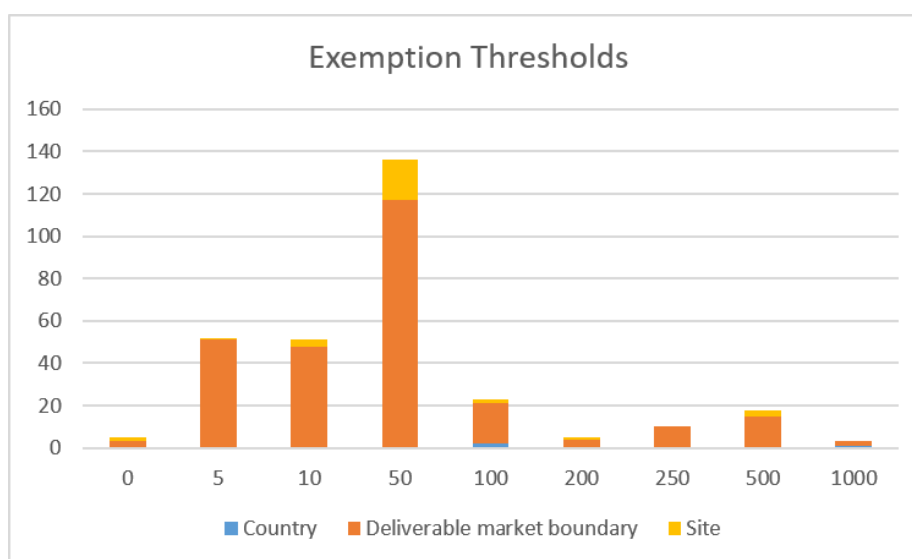
Of the respondents who selected a preferred option in question 163, a few preferred option 2: SME-only exemption. Of these respondents, most suggested it equitably protects smaller entities from being priced out of voluntary procurement due to high administrative burdens.

11.6 Load-based Exemption Threshold (Q. 70, 159 & 160)

Questions 70, 159, and 160 invite respondents expressing support for a load-based eligibility criterion to provide feedback on the specific GWh threshold at which the exemption should apply and the geographic unit to which it should be measured. This section summarizes feedback from the 677 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents.

The below chart shows the most and least commonly selected answers to question 159, the specific GWh threshold at which the exemption should apply and the geographic unit to which it should be measured.

Figure 13: Responses to question 159



Note: Threshold levels with 2 or fewer mentions removed from chart.

50 GWh (Most Frequent Preference). Of the respondents who answered question 159, most recommended a threshold of 50 GWh. They suggested it represents a pragmatic cutoff targeting entities large enough to possess dedicated energy management resources. In support of this perspective, a few respondents cited CDP global self-reported data and internal operational metrics which indicated that lower thresholds (5–10 GWh, equating to roughly 0.6–1.1 MW average load) could include single hospitals, college campuses, and many fragmented mid-sized facilities that for which advanced hourly metering or sophisticated procurement instruments would be a significant challenge.

10 GWh. Of the respondents who answered question 159, some recommended a 10 GWh threshold. They suggested it strikes the best balance between materiality and feasibility, noting it excludes very small, low-

impact loads while reasonably large industrial or commercial consumers would be subjected to hourly matching.

5 GWh. Of the respondents who answered question 159, some recommended a 5 GWh threshold. These respondents suggested the exemption acts as a necessary transition tool that protects vulnerable supply chains from immediate, prohibitive reporting burdens. They noted that the largest, well-resourced consumers would be subjected to hourly matching, which could support development of early market infrastructure. Most respondents that supported a 5GWh exemption conditioned their support, indicating that any exemption should be viewed as a short-term transition tool to be phased out over time as registries mature

100-500 GWh. Of the respondents who answered question 159, some advocated for higher thresholds of between 100-500GWh. These respondents suggested that the hourly matching proposal was most appropriate for "hyperscalers" (e.g., large tech companies and new data centers), and that the threshold should be set so that the mandate applies only to the absolute largest consumers who possess the market leverage, capital, and localized demand to influence grid-level changes.

Alternative Boundary Perspectives

Of the respondents who answered questions 70, 159, and 160, a few advocated for applying the exemption thresholds at boundaries different from the proposed market boundaries. A few suggested that individual site or facility level boundaries would be more appropriate, noting that this alternative would enable organizations with highly distributed loads which surpass the aggregate load threshold, such as retail chains, property management portfolios, or telecommunication networks, to qualify for the exemption.

A few respondents conversely advocated for wider boundaries, noting that a "per country" or "national" boundary could better align with geopolitical boundaries and common company organizational structures.

11.7 SME Categorization Design (Q. 161 & 162)

Questions 161 and 162 invite respondents expressing support for an SME-based eligibility criterion to provide further input on the specific criteria that should be used to define small and medium companies. This section summarizes feedback from the 372 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents.

Harmonization with Existing Statutory Frameworks

Of respondents who answered questions 161 and 162, some respondents proposed that the GHG Protocol harmonize its SME categorization with established global regulatory frameworks. Respondents pointed to the EU's Corporate Sustainability Reporting Directive (CSRD), the International Sustainability Standards Board (ISSB), and Japan's SSBJ as examples. They noted that utilizing existing statutory criteria could streamline compliance and reduce the administrative burden on reporters who must already navigate these regulations. For example, respondents noted that ISSB and SSBJ rely heavily on market capitalization to determine non-financial disclosure applicability, making it a reasonable metric for the GHGP to adopt. Another respondent suggested that utilizing a combination of these established criteria would allow the GHGP to build a multi-layered definition of an SME giving a fuller picture than a single, narrow metric could.

Delegation to Local Jurisdictional Definitions

Of respondents who answered questions 161 and 162, a few suggested that adoption of a single SME definition could clash with the diverse legal definitions established by local regulators worldwide. Respondents noted that the GHG Protocol is increasingly codified into mandatory statutory disclosure rules, citing California's SB 253, the EU's CSRD, and IFRS standards. Noting that these legal frameworks rely on the GHG Protocol as a baseline, implementing conflicting exemptions or classifying companies that utilize a local exemption as "non-conforming," could impact their ability to comply with regional climate laws. These respondents suggested providing flexible guardrails such that definitions can be set by local jurisdictions to align with their regulatory frameworks. These respondents also raised this concern as a position against size-based exemptions more broadly, noting the risk of unnecessary administrative complexity from conflicting legal and voluntary definitions.

11.8 Time Limited or Ongoing Exemptions (Q. 166, 167 & 168)

Questions 166, 167, and 168 invite respondents to provide input on potential time-limitations for proposed exemptions, and how any phase-out should be designed. This section summarizes feedback from the 493 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents.

Time Limitation of Exemptions

Of respondents that answered questions 166-168, Most expressing support for time-limited exemptions suggested they should function as a temporary transition mechanism to allow nascent market infrastructure sufficient time to scale and mature. Some of these respondents suggested a phase-out could be applied via a global sunset date or a phased reduction of the exemption threshold. Some respondents suggested structured transition periods could be contingent on markets reaching readiness milestones. A few respondents indicated this phase-out would be necessary to prevent a two-tier reporting standard that might undermine overall system integrity over the long term.

Ongoing Exemptions

Of respondents that answered questions 166-168, Most expressing support for ongoing exemptions suggested that the fundamental barriers to hourly matching are permanent structural realities rather than short-term transition challenges. Most of these respondents indicated that hourly matching should remain optional for all organizations, noting that it is inherently too costly and complex, so if hourly matching is required any exemptions to improve feasibility should be permanent. Some respondents who supported ongoing exemptions did not outright oppose hourly matching for large consumers, but instead considered the administrative burden of hourly tracking to outweigh the climate benefit for small or highly distributed electrical loads. Some noted that applying a global sunset date unfairly penalizes companies operating in regional grids with structural limitations outside their control. Some respondents further noted that time-limited exemptions could lead to continued uncertainty in the market as organizations anticipate final rules.

11.9 Conformance Status for Organizations Utilizing Exemptions (Q. 169 & 170)

Questions 169 and 170 of the consultation asked for feedback on whether organizations exercising an exemption should be considered in full conformance with the GHG Protocol Corporate Standard, or whether a separate conformance level should apply. This section summarizes feedback from the 475 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents.

Feedback in Support of Full Conformance Status

Of respondents that answered questions 169-170, most indicated that organizations utilizing an exemption should be considered in full conformance with the Corporate and Scope 2 Standards. They noted that if the GHG Protocol explicitly defines and authorizes an exemption, following that pathway is, by definition, compliant with the standard and that requirement of a different conformance status could be perceived as penalizing these companies, and could further undermine the purpose of defining a feasibility exemption. Respondents citing structural market limitations indicated that companies should not be deemed non-compliant for utilizing transition measures to manage constraints outside of their control. Some suggested that the standard should require organizations to explicitly disclose their use of an exemption, allowing the market and investors to independently determine the weight and significance of the claim.

Feedback in Support of an Alternative Conformance Status

Of respondents that answered questions 169-170, some suggested that the standard should define a separate conformance tier for companies exercising an exemption or that exempted organizations should not be considered in conformance at all. Some of these respondents noted grouping reporters using exemptions identically with those doing hourly matching would reduce transparency and comparability to data users as they utilize different accounting methods and procurement strategies. A few noted that investors and ESG data vendors may not consistently distinguish between different classes of conformance, meaning that any "in conformance" label for exempted entities could affect how stakeholders interpret disclosures. Some respondents suggested that a separate conformance tier could strike the right balance by explicitly acknowledging that exempt entities are following an accepted pathway. They suggest that this approach could avoid reputational penalties or signalling non-conformance, while still distinguishing the accounting approach from hourly matching reporters. A few respondents further suggested that a distinct, potentially lower tier of conformance could provide a structural, reputational incentive for organizations to invest in their data systems and waive their exemptions sooner.

11.10 Alternative Suggestions for Exemptions (Q.163, 164 & 165)

Questions 163-165 ask respondents to select from four proposed eligibility designs for the hourly matching exemption, varying by whether qualification is based on a GWh load threshold (Option 1), SME categorization (Option 2), Load threshold *or* SME categorization (Option 3), Load threshold *and* SME categorization or SME categorization only (Option 4). Respondents could also select "None of the above"

and provide additional information in questions 164 and 165. This section summarizes feedback from the 482 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents.

Market Readiness Exemptions

Of respondents who answered questions 164 and 165, some suggested that feasibility is fundamentally constrained by the maturity of local electricity markets, availability of advanced metering infrastructure, and the existence of energy attribute registries. They indicated that exemptions could therefore be based on market readiness, noting that a reliance on volume-based exemptions alone may not fully account for regional differences and could present challenges for alignment with hourly matching requirements based on market dynamics outside of their control.

Materiality Exemptions

Of respondents who answered questions 164 and 165, a few proposed materiality-based exemptions, suggesting this directs administrative resources towards a company's most significant emission sources. A few respondents recommended adoption of a proportionality mechanism derived from established financial reporting frameworks, including ESRS and the IFRS Sustainability Disclosure Standards. These respondents noted that a framework outlining factors to be considered assessing "materiality of information" or data that cannot be obtained without "undue cost or effort" could provide a more equitable and practical framework than fixed consumption limits. A few respondents suggested linking thresholds to economic activity, while also indicating that materiality-based exemptions should be phased out over time. Referencing academic research (e.g., Scholta and Blaschke, 2025), they noted that hourly matching becomes increasingly critical as a company's share of renewables grows.

Other Alternative Exemption Bases

Of respondents who answered questions 164 and 165, a few suggested exemptions could reflect operational or strategic circumstances such as tenant status in leased buildings, variable industrial loads, or existing long-term PPAs that support renewable capacity. A few respondents noted that exemptions could be differentiated by market conditions, such as regions with relatively high renewable penetration. A few respondents suggested refinements to the proposed exemption design, including opt-in approaches targeting the largest facilities, as well as the use of multi-year averaging or buffer ranges to reduce the likelihood of frequent changes to exemption status due to typical annual energy fluctuations.

12 Load Profiles

Background on proposal: Load profiles are proposed to enable organizations without access to hourly activity data or hourly contractual instruments to approximate hourly data from monthly or annual data. The survey asked respondents to provide feedback on the use of load profiles and how they might affect comparability, relevance, usefulness, or overall implementation feasibility of MBM inventories.

12.1 Summary of Consultation Feedback Relative to the Decision-Making

Criteria

Table 25: Summary of consultation feedback

	Support	Concerns
Integrity	Hourly load profiles may improve the accuracy and comparability of inventories relative to annual or monthly averaging.	Standardization of load profiles are important to ensure consistency in their application.
Impact	Some respondents referenced external research suggesting that load profiles, when combined with additional proposed requirements, may deliver similar system-level benefits to hourly data.	Reliance on load profiles could reduce incentives to expand access to actual metered data.
Feasibility	Hourly load profiles may be practical interim approach to enable more granular reporting, particularly in contexts where hourly data is not widely available.	Potential administrative, technical, and cost-related implications of using load profiles may be significant relative to perceived benefits.

12.2 Reasons for Support (Q. 76 & 131)

This section summarizes feedback from the 536 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents.

Enhancing Comparability Through Standardization

Of respondents who answered questions 76 and 131, many expressing support emphasize that the use of load profiles, if properly standardized, could improve the comparability of GHG inventories. They advocate for a clear hierarchy of data – ranging from utility-approved customer-class profiles to standardized sector averages – to ensure that all reporters are using consistent assumptions. In this view, a centralized, well-

governed system of load profiles could support standardization and provide a level playing field for auditing and assurance.

Providing a Bridge to Broad Adoption

Of respondents who answered questions 76 and 131, most who indicated support for load profiles highlighted its usefulness as a bridge between the present reporting environment and a future in which hourly data could be available more broadly. Respondents mentioned the limited availability of smart-meter technology as well as more granular data from utilities as two significant roadblocks that load profiles can help alleviate. They suggested that the use of load profiles reduces barriers to entry for companies that want to adopt more granular accounting but lack the direct interval data to do so. By providing a modeled alternative, load profiles support an immediate transition to more granular reporting across diverse markets.

A few respondents described load profiles as temporary measures that should not remain in perpetuity. These respondents often referenced similar considerations presented in *Reasons for Concern* section 12.3, such as potential risks to comparability and assurance. However, this group generally felt that in the near-term, the benefits of load profiles outweigh the possible negative impacts.

Enabling Inclusivity and Participation

Of respondents who answered questions 76 and 131, most who indicated support for load profiles also viewed it as an important inclusivity tool for implementing hourly matching, particularly for SMEs and organizations in less-developed markets. These respondents point out that without these profiles, high-precision reporting would become an academic exercise available primarily to the largest, most data-sophisticated entities, and may be less available to organizations in regions with less access to high-quality consumption data. By allowing for standardized estimations, these respondents believe that the updated standard can foster broader participation in voluntary renewable energy markets globally.

Improvement Over Annual Averaging

Of respondents who answered questions 76 and 131, a theme mentioned by some indicating support is that even though load profiles are approximations, they provide an improvement in accuracy compared to the current process of annual or monthly averaging. They suggest that capturing the general temporal reality of the grid, even though models, would better reflect the time-value of energy and the typical emissions profile of electricity consumption. This increased granularity is seen as making market-based disclosures more decision-useful for both the reporting company and its stakeholders.

Some respondents cited research from Princeton Zero Lab, which found that load profiles, when combined with hourly matching, deliverability, and incrementality (“three pillars”), delivered similar system-level benefits to hourly metered data. Some respondents further noted that even the use of a flat load profile showed improvements over frameworks based on annual matching. However, these respondents also noted that shaped profiles are preferred, and flat profiles should only be used as a last resort.

12.3 Reasons for Concern (Q. 76 & 131)

Risks to Comparability and Assurance

Of respondents who answered questions 76 and 131, the most common theme among respondents who expressed concern with the use of load profiles was the need for standardization to support comparability of organization's inventories. Since different organizations might use different profile sources, assumptions, or flat averages, two very similar facilities could report vastly different emissions. Furthermore, the lack of clear criteria for auditors creates verification barriers, making it difficult for companies to achieve the reasonable assurance required for regulatory reporting. Risks to assurance and verification are expanded upon in section 12.4.

Administrative Burden

Of respondents who answered questions 76 and 131, another theme mentioned by most who expressed concern with the use of load profiles was the administrative and/or reporting burden for organizations. These respondents suggest that the technical and economic costs of developing and maintaining load profiles would be disproportionate to the benefit they could provide. Small sustainability teams noted that this approach could redirect limited time and resources from decarbonization projects. Larger organizations, as well as respondents who collaborate with these organizations on inventories or assurance, also noted that the reporting effort tends to increase with size. For organizations with many global sites, the data management and assurance effort is seen as a significant barrier that could discourage companies from participating in voluntary procurement markets.

Precision without Accuracy

Of respondents who answered questions 76 and 131, some noted that load profiles may create a veneer of precision without corresponding performance data. These respondents suggest that because profiles are statistical averages or synthetic models, they would not capture the operational dynamics of a specific facility, such as maintenance cycles, weather impacts, or production shifts. This could lead to a modeled uncertainty that affects the credibility of the GHG inventory, replacing verifiable activity data with assumptions.

Disconnect with Contractual Inventory

Of respondents who answered questions 76 and 131, some suggested that load profiles are incompatible with the Market-Based Method. They point out that the MBM is designed to reflect specific contractual procurement rather than modeled or inferred customer behavior. These respondents suggested that the introduction of estimation through load profiles could alter the intended representation of the MBM. Respondents who expressed concern suggested that if actual hourly data isn't available, using a simpler method based on actual data, like monthly or annual matching, would be preferable to a model-based approach that doesn't reflect contracting structures.

Impact on Market Infrastructure

Of respondents who answered questions 76 and 131, some suggested that the use of load profiles in perpetuity may remove the market driver for utilities and grid operators to evolve data availability. These respondents suggest that GHG Protocol could prioritize expanding access to actual metered data rather

than institutionalizing a workaround. They noted that reliance on models could lock in a lower-quality data ecosystem and delay the transition to the high-integrity digital monitoring, reporting, and verification systems needed for a decarbonized grid.

A subset of these respondents would be willing to accept load profiles as a temporary bridge to facilitate adoption of hourly matching over time, while noting that their use should be phased out to incentivize market development.

12.4 Assurance and Verification Concerns (Q. 76 & 131)

Of respondents who answered questions 76 and 131, the impact of load profiles on the assurance of scope 2 inventories was expressed as a common concern. While load profiles are seen by some as a necessary bridge to enable hourly matching, they are also viewed as a potential source of audit risk and administrative complexity. To support mitigation of these risks, respondents suggested several governance and technical solutions.

Establishment of Safe Harbors

Of respondents who answered questions 76 and 131, some respondents suggested that the GHG Protocol and other bodies (like SBTi) could develop assurance safe harbors such as pre-approved templates and criteria for load profiles that support clarity during limited assurance review for inventories that leverage modeled profiles.

Standardized Data Hierarchy

Of respondents who answered questions 76 and 131, some respondents advocated for a clearly defined hierarchy of data quality (e.g., Metered > Utility-Class Profile > Time of Use (TOU) Average > Flat Average). This approach would provide a clear benchmark for what constitutes the best available data for both inventory development and audit review.

Centralized Governance

Of respondents who answered questions 76 and 131, some respondents suggested that data could be governed and published centrally by regulators or grid operators, rather than individual companies determining their own profiles. This approach would support clarity of approach and reduce the audit burden for companies.

Transparent Disclosure Requirements

Of respondents who answered questions 76 and 131, some respondents suggested that an inventory using load profiles be required to include a justification flag and detailed disclosures on the profile source, vintage, geography, and uncertainty. This transparency would allow auditors to test the reasonableness of the methodology.

13 Market-based Quality Criteria 5 (Deliverability)

Background on proposal: The proposed updates to Scope 2 Quality Criteria 5 would redefine 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. Outside a defined boundary, deliverability may also be evidenced through (Alternate Methodology 1) price-based indications of available transmission capacity between adjacent grids, or (Alternate Methodology 2) contracts/instruments showing physical delivery from generation to load. The survey asked stakeholders to evaluate the integrity, impact, and feasibility of this requirement.

13.1 Summary of Consultation Feedback Relative to the Decision-Making Criteria

Table 26: Summary of consultation feedback

	Support	Concerns
Integrity	Deliverability may strengthen accuracy, transparency, and consistency by aligning market-based claims with the physical realities of electricity supply.	Absence of consensus that deliverability is a prerequisite for MBM accuracy.
Impact	Deliverability requirements could help create more targeted price signals for clean energy investment in regions where supply and flexibility are needed.	- Requiring deliverability as proposed may prevent organizations from aggregating consumption across distributed facilities to justify large-scale, impactful PPAs. - Requiring deliverability as proposed may disincentivize investment where marginal emissions reductions are greatest across regions. - Without an incrementality requirement (i.e., only newer resources) the proposed revisions may achieve limited emissions impact.
Feasibility	- Suggestions for: - Region-specific exemptions - Wider market boundaries - Optional requirement (i.e. "may") - Support for legacy clause and phased implementation	May increase cost and administrative workload driven by updating data systems, assurance processes, additional contracting needs, and internal capacity requirements.

13.2 Quantitative Summary of Feedback

Question 83 of the consultation asked respondents to provide a 1-5 support rating regarding the proposed update to Quality Criteria 5.

Table 27: Responses to question 83 by organization type

Organization Type	Count	Rating 4-5 (Support)	Rating 3 (Neutral)	Rating 1-2 (No/Low Support)
Academia/research	28	46%	14%	39%
Certificate registry/tracking system operator	11	36%	36%	27%
Company	413	19%	10%	71%
Consultant	82	48%	11%	41%
Data/analytics or software provider	20	80%	5%	15%
Electric Grid Operator	2	50%	50%	0%
Energy supplier/retailer or utility	76	29%	11%	61%
Financial Institution	19	32%	5%	63%
GHG account/reporting program or initiative	5	80%	0%	20%
Government institution	11	73%	27%	0%
Industry group	72	13%	17%	71%
International agency	1	0%	0%	100%
Non-profit organization/NGO/civil society	69	55%	9%	36%
Other	60	35%	10%	55%
Verification/assurance provider	6	33%	33%	33%
Grand Total	875	30%	11%	59%

Table 28: Responses to question 83 by geographic region

Geographical Region	Count	Rating 4-5 (Support)	Rating 3 (Neutral)	Rating 1-2 (No/Low Support)
Eastern Asia	144	9%	10%	81%
Southern Asia	14	43%	14%	43%
South-eastern Asia	29	45%	17%	38%
Western Asia	3	100%	0%	0%
Europe	326	43%	11%	46%
Northern America	303	20%	7%	74%
Latin America and the Caribbean	13	38%	46%	15%
Northern Africa	3	100%	0%	0%
Sub-Saharan Africa	6	50%	17%	33%
Oceania	34	47%	38%	15%
Grand Total	875	30%	11%	59%

13.3 Reasons for Support (Q. 84 & 85)

Questions 84 and 85 ask respondents to identify and explain their reasons for supporting the proposed revision to Quality Criteria Five. This section summarizes feedback from the 451 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents.

Among respondents who answered question 84, the below figure shows the most and least commonly selected answers.

Figure 14: Responses to question 84

Reasons to Support	Percentage of Respondents
Improves accuracy and scientific integrity of MBM results	85%
Better reflects grid operation, reduces misallocation	85%
Strengthens transparency and public verifiability	74%
Enhances comparability across reporters and frameworks using GHG Protocol data	64%
Helps create price signals for times and places where renewables are not already abundant	62%
Improves decision-usefulness for external disclosures	55%

Provides sufficiently flexible options for organizations to demonstrate deliverability outside of the defined deliverable market boundaries	48%
Improves risk and opportunity assessment related to contractual relationships	45%
Agree that the proposed market boundary for my region(s) accurately reflects deliverability	42%
Defined market boundaries reflect a boundary your organization already uses for procuring contractual instruments	42%
Agree that the defined market boundaries align with mandatory or voluntary reporting requirements in your region	34%
Other (please explain)	6%

Aligning Scope 2 Claims with Physical Electricity Supply

Of respondents who answered questions 84 and 85 (reasons for support), most who expressed support for the proposed updates to deliverability indicated that Scope 2 market-based inventories are intended to allocate emissions associated with electricity that plausibly serves a reporter's load. Most of these respondents noted that when contractual instruments originate from regions with no physical connection to the reporting entity's grid, the link between claimed attributes and the electricity system serving consumption may be weakened, thereby reducing inventory accuracy. These perspectives were often framed in terms of GHG Protocol accounting principles, with respondents noting that deliverability requirements can help ensure market-based inventories remain relevant, accurate, consistent, and transparent by grounding claims in the physical realities of electricity supply. A few of these respondents highlighted that, while tracing individual electrons is not possible, the standard does not require this level of granularity, but rather that generation and consumption occur on the same grid where delivery is plausible. Most respondents noted that power markets already use grid regions to schedule and dispatch electricity, providing well-established proxies for deliverability. A few respondents characterized deliverability as an established regulatory concept in resource adequacy and reliability frameworks, noting that voluntary attribute markets are an outlier in the electricity industry for not incorporating geographic constraints. A few respondents from regions including Egypt, Morocco, South Africa, and Chile similarly noted that deliverability could help ensure market-based claims reflect the electricity systems actually operating in their countries.

Aligning Procurement Incentives with Grid Decarbonization Needs

Of respondents who answered questions 84, and 85 (reasons for support), some suggested that current broad boundaries may concentrate procurement in regions where clean energy is already abundant and certificates are comparatively inexpensive, while grids with less decarbonization investment receive less attention. To illustrate this perspective, some respondents cited specific examples, including reports that certificate exports from Norway to the rest of Europe exceed Norway's physical electricity export capacity

by a significant multiple, and that Texas represents a disproportionately large share of US voluntary renewable procurement relative to its share of national electricity demand, despite limited interconnection with other states. A few respondents referenced analysis from EnergyTag, an EU study on Guarantee of Origin oversupply, and NREL to support these observations. Some respondents predicted that deliverability requirements could create more targeted price signals for clean energy investment in regions where supply and flexibility are needed, rather than where attributes are lowest cost. Additionally, some respondents predicted that narrower boundaries would encourage investment in interregional transmission, if demonstrating physical connectivity between markets becomes a necessity for cross-boundary claims. A few respondents noted that some grid operators share these expectations, citing ENTSO-E's view that deliverability would introduce an incentive for developing, producing, and consuming renewable electricity at efficient geographical locations.

A few respondents indicated that procurement in distant, high-emitting grids may not represent the most impactful strategy, noting that grids with low renewable penetration may present fewer intermittency challenges and lower costs, thereby potentially reducing the ambition of these investments. Respondents also noted that, in the absence of transparent principles to evaluate these claims, reporters risk pursuing procurement where it is easiest rather than most impactful.

Distinguishing the Attributional Inventory from Consequential Impact

Of respondents that answered questions 84 and 85 (reasons for support), a few acknowledged that corporate procurement in non-deliverable, high-emitting grids can produce valuable system-wide reductions, but suggested that these represent avoided emissions rather than attributional inventory accounting. These respondents further suggested that using an attributional inventory to capture consequential impact could conflate two distinct objectives and undermine the conceptual clarity of the Scope 2 framework. A few respondents proposed that the GHG Protocol signal its intent to develop a complementary impact-based method, enabling companies to transparently report these contributions alongside, but separate from, their attributional Scope 2 results.

Credibility, Transparency, and Legal Defensibility of Reported Claims

Of respondents that answered questions 84 and 85 (reasons for support), many noted that claims based on certificates from physically disconnected grids may face increased scrutiny and could affect confidence in the GHG Protocol and in corporate climate disclosures more broadly. Some respondents suggested that deliverability requirements could strengthen comparability across reporters and improve alignment with emerging disclosure frameworks. Additionally, a few respondents indicated that clearer criteria could reduce ambiguity during external assurance and enhance decision-usefulness for investors and regulators. A few respondents further noted that clearly defined boundaries could reduce variation in certificate selection, which could otherwise lead to different market-based results among reporters on the same grid. Finally, a few respondents referenced emerging litigation trends and evolving regulatory expectations as indicators of the evolving credibility of market-based claims.

Feasibility through Existing Data and Market Infrastructure

Of respondents that answered questions 84 and 85 (reasons for support), a few suggested that the locations of electricity generation and consumption are data points already available within existing

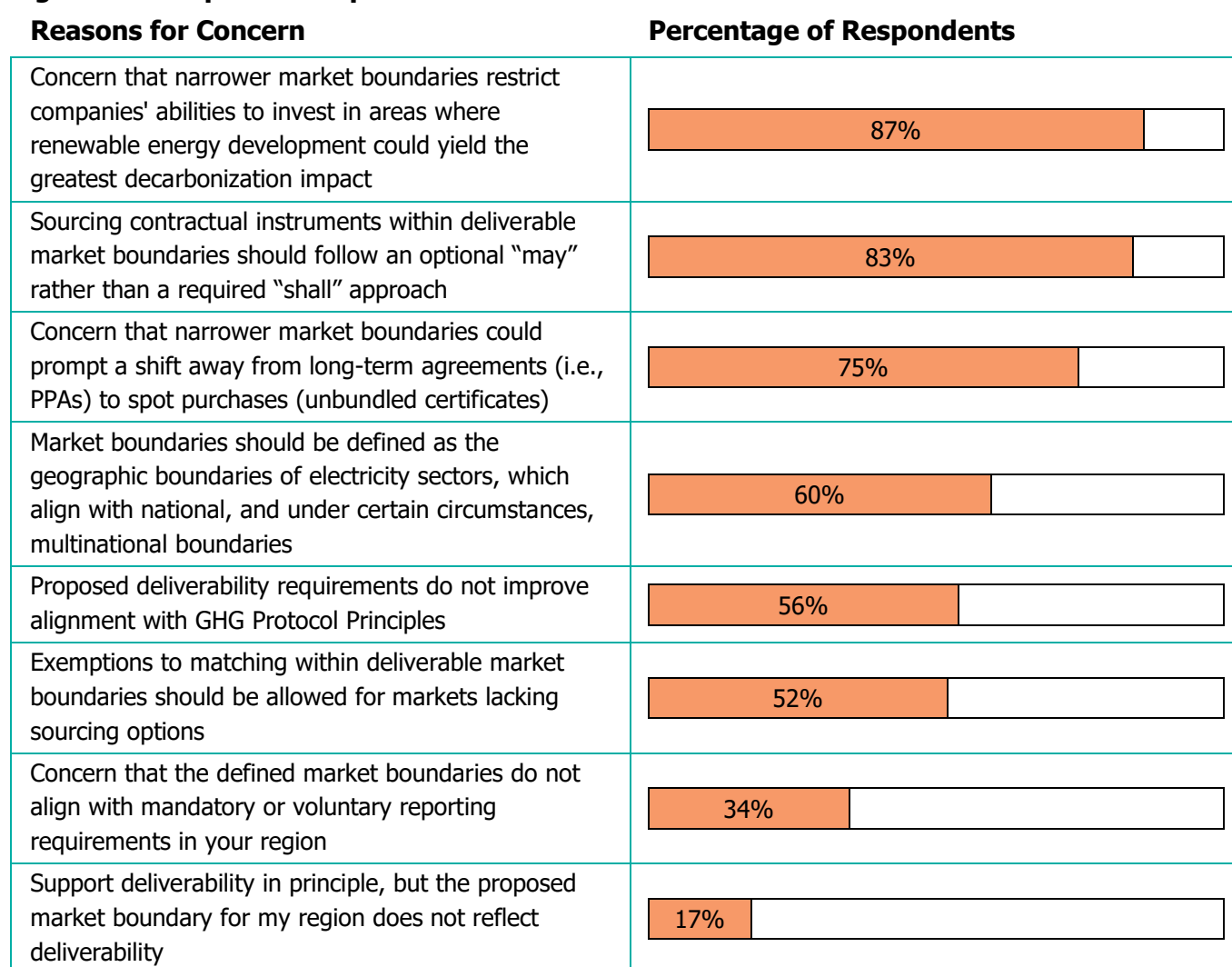
registries and tracking platforms, and that contractual instruments already identify the generation resource from which attributes are derived. They indicated that aligning these known data points with defined market boundaries is a straightforward matching exercise that leverages existing market architecture. A few respondents further suggest that clearly defined boundaries would reduce rather than increase assurance complexity, by replacing the current ambiguity around "same market" with explicit, verifiable criteria.

13.4 Reasons for Concern (Q. 86 & 87)

Questions 86 and 87 ask respondents to identify and explain their reasons for not supporting the proposed revision to Quality Criteria Five. This section summarizes feedback from the 754 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents.

Among respondents who answered question 86 and rated question 83 as low support (1-2 rating), the below figure shows the most and least commonly selected answers.

Figure 15: Responses to question 86



Other (please explain)	14%	
Sourcing contractual instruments within deliverable market boundaries should follow a recommended “should” rather than a required “shall” approach	14%	

Impact on Corporate Procurement Scale

Of respondents that answered questions 86 and 87 (reasons for concern), many suggested that the proposed boundaries would prevent organizations from aggregating consumption across distributed facilities to justify large-scale PPAs. They predicted that tying EAC eligibility to deliverability constraints would fragment this aggregated demand leaving individual facilities (particularly retailers and organizations with highly dispersed operations) with insufficient load to support the credit structures required for utility-scale project financing. Most of these respondents predicted that this loss of scale could contribute to a shift away from long-term contracts toward short-term, unbundled certificates.

Offering operational testimony from specific markets, a few respondents noted that narrower boundaries could compound existing, policy-driven supply constraints. They referenced EAC issuance restrictions under Germany’s Renewable Energy Act and vertically integrated utility monopolies in parts of the United States, indicating that broader market access may be important to sustain voluntary procurement.

Some respondents noted that managing multiple regional procurement strategies, upgrading data systems, and meeting assurance requirements across fragmented boundaries could increase administrative costs.

A few respondents indicated that fragmenting markets into smaller boundaries could reduce certificate market liquidity and increase price volatility, particularly in European and Japanese certificate markets where cross-border trading underpins current market function. A few respondents noted that these combined factors could lead organizations to reduce or cease voluntary procurement altogether, with implications for achievement of the targets and frameworks that currently drive corporate renewable energy investment. A few respondents, particularly European electricity suppliers and balance responsible parties, suggested that boundary restrictions may have broader cost implications beyond voluntary participants, as changes to registry and supplier compliance requirements could be reflected in retail pricing. Finally, a few respondents noted that the proposed revisions could affect the value of long-term investments made under current rules.

Prioritizing Emissions Displacement over Deliverability Requirements

Of respondents that answered questions 86 and 87 (reasons for concern), most indicated that deliverability requirements could limit their ability to invest in areas with the greatest decarbonization impact. These respondents suggested that companies should be able to direct capital to high-emitting grids where each unit of investment could achieve greater marginal emissions reduction. A few respondents referenced external analysis, including modeling by WattTime and a market study by Baringa to demonstrate that renewable energy investment in higher-emitting regions can yield greater climate benefits than equivalent investment in already-decarbonizing grids. Some respondents from developing economies, particularly in Africa and Southeast Asia, framed this in relation to energy access and equity, noting that deliverability requirements could divert capital away from regions most in need of clean energy investment.

Conceptual Objections to Applying Deliverability Requirements within the Market-based Method

Of respondents that answered questions 86 and 87 (reasons for concern), some raised concerns with proposed deliverability, noting that it introduces physical delivery logic into what they view as an inherently contractual accounting framework. A commonly expressed perspective across most respondents who addressed this theme was that electricity cannot be physically traced from a specific generator to a specific consumer on an interconnected grid. Based on this view, these respondents suggested that the use of grid-based boundaries to approximate deliverability may introduce a false sense of precision without necessarily improving inventory accuracy. From this shared premise, respondents reached a variety of conclusions about the appropriate path forward.

Many suggested that the integrity of market-based claims should be ensured through robust certificate tracking and prevention of double counting rather than through deliverability constraints. These respondents viewed the MBM as operating through a contractual book-and-claim system in which geographic proximity between generation and consumption is not relevant to the accounting function the method performs. A few European respondents referenced EU legislation as an example, including RED III, which establishes Guarantees of Origin as tradable instruments transferable independently of the physical electricity to which they relate. Similarly, many respondents from Japan noted that Japan's Non-Fossil Certificate system prevents double counting on a nationwide scale, supporting integrity and suggesting that deliverability constraints may be unnecessary where robust tracking infrastructure already exists. A few respondents suggested that imposing physical deliverability requirements on the MBM narrows the conceptual distinction between the market-based and location-based methods, since both would then incorporate physical grid constraints, reducing the distinction between dual reporting. A few respondents suggested that the attributional accounting framework is not valid and should be replaced by marginal or consequential methods (outlined further in section 16.6).

Regional Feasibility and Market Maturity Constraints

Of respondents that answered questions 86 and 87 (reasons for concern), some suggested that implementing deliverability would be infeasible in markets where the necessary renewable energy supply or tracking infrastructure does not yet exist. Respondents from Bangladesh, Singapore, Indonesia, the Philippines, and parts of Africa described scenarios where local renewable generation is insufficient to meet even a fraction of corporate demand within proposed boundaries. For instance, respondents found that locally available EACs in Bangladesh fell 65% short of consumption.

A few respondents noted that in other regions, the issue was not supply but the absence of systems needed to demonstrate conformance with the Alternate Methodologies as proposed in the consultation. Respondents noted that many markets with vertically integrated utilities do not publish the price differentials required to assess Alternate Methodology 1. Further, a few respondents described Alternate Methodology 2's requirement for firm point-to-point transmission rights as impractical or unavailable across most markets, with respondents noting that such rights have been phased out, are incompatible with open-access transmission regimes, or do not exist in their region's market structure. In some markets, the concern was redundancy rather than feasibility. A few Brazilian respondents posited that deliverability is inherently ensured at the national level through centrally dispatched systems such as Brazil's National

Interconnected System (SIN), and that imposing additional boundary requirements where all generation is already operationally deliverable to all consumption adds administrative burden without improving accuracy.

Disagreement with Proposed Boundary Definitions

Of respondents that answered questions 86 and 87 (reasons for concern), some accepted, or conditionally accepted, the principle of plausible deliverability, but suggested that the specific boundaries proposed in the consultation may be too narrow. These respondents generally indicated that boundaries should be grounded in grid and transmission characteristics rather than in policy frameworks or administrative pricing constructs, while differing in their views on the appropriate scale of such boundaries. Proposals ranged from ISO/RTO-level or wide-area dispatch regions to full synchronous interconnections in which all generators and loads operate at the same frequency. Some respondents suggested that the proposed sub-national boundaries may not reflect the degree of interconnection and power exchange that exists within certain national or multinational grid systems. While these respondents did not reject deliverability in principle, they noted that the proposed boundaries may not align with the physical grid and transmission characteristics that could inform how deliverability is defined in practice. For example, some Chinese respondents noted that the proposed regional grid structure is misaligned with China's national unified power market strategy and cross-regional transmission programs.

13.5 Suggested Compromises for Deliverability (Q. 84-96)

This section summarizes feedback from the 934 respondents engaging with some or all of questions 84-96; all frequency terms refer to this subset rather than to all consultation respondents.

Legacy Clause and Phased Implementation

Of respondents that answered questions 84-96, respondents across positions suggested that existing long-term contracts entered under current rules should be honoured for their full contractual duration, with new requirements applying only to new agreements or renewals after an appropriate transition period. Most respondents who answered the feasibility measures question (question 94) selected both a legacy clause and phased implementation. Both measures drew support from respondents across positions relative to the deliverability proposal. Some respondents proposed specific phasing mechanisms, such as beginning with larger consumers and extending to smaller operations over time or beginning with regions where mature registries exist and extending to other markets as infrastructure develops. See *Legacy Clause and Uniform Effective Date* section 17 for more details.

Exemptions for Constrained and Emerging Markets

Of respondents that answered questions 84-96, some who raised feasibility concerns proposed specific mechanisms to enable the adoption of deliverability in markets where conformance is not currently possible. Proposals included safe harbors for regions that meet specified criteria, and allowances to use broader regional instruments such as I-RECs until local registries and supply chains mature. A few respondents conditioned their support on the availability of such mechanisms, noting that deliverability could encourage positive changes if organization size thresholds and regional exemptions are appropriately designed.

Wider Boundaries Grounded in Grid and Transmission Characteristics

Of respondents that answered questions 84-96, many accepted the principle of plausible deliverability but proposed wider boundary definitions, suggesting that these could be grounded in region-based grid and transmission characteristics. These ranged from ISO/RTO footprints to regional interconnection frameworks such as the ASEAN Power Grid.

Wider Boundaries Grounded in Regulatory and Policy Frameworks

Of respondents that answered questions 84-96, many proposed wider boundaries grounded in regulatory and policy frameworks rather than physical grid characteristics, suggesting that established market integration mechanisms already provide the infrastructure for credible cross-border attribute tracking. This position was most prominent among European respondents citing the EU Single Market, though respondents in other regions similarly suggested that existing national or multinational market frameworks could be similarly recognized.

Separate Impact Metric outside the Scope 2 Inventory

Of respondents that answered questions 84-96, a few across positions proposed developing a complementary metric outside the Scope 2 inventory to recognize the emissions displacement impact of procurement that would be outside of the proposed quality criteria. Respondents who supported deliverability saw this as resolving the tension between a tightened attributional inventory and recognition of cross-boundary climate investment. Respondents who raised concerns about the proposed revisions saw it as preserving a pathway to account for impact-driven procurement strategies in high-emitting grids. Respondents converged on the position that attributional and consequential accounting serve different purposes and should be maintained as independent methods.

Recommended or Optional rather than Mandatory "Shall," with Local Flexibility in Boundary Definitions

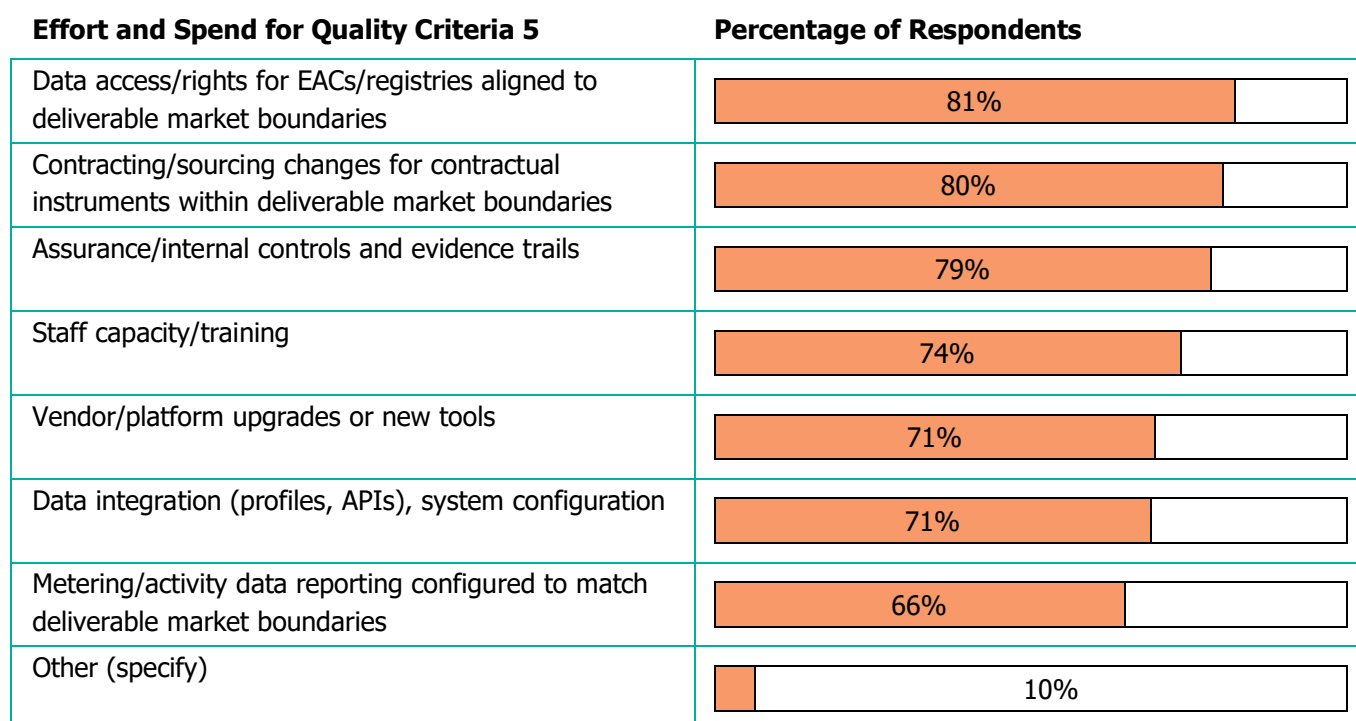
Of respondents that answered questions 84-96, many proposed that deliverability be framed as a recommended or optional practice rather than a mandatory requirement. Interest in this approach was expressed across respondents, including some supporters who suggested it could establish a clear direction of travel while accommodating diverse market conditions. A few respondents expressing this position also proposed that the GHG Protocol establish deliverability as a principle but defer to national regulators, grid operators, or sovereign governments to define what constitutes a deliverable market in their jurisdiction. This could reference external standards or criteria that would enable sovereign actors to signal where cross-border transactions are acceptable. This proposal was particularly prominent among respondents from ASEAN, Africa, and Latin America, who offered the perspective that their regional grid development trajectories require locally informed boundary definitions.

13.6 Effort and Spend for Deliverability (Q. 92-96)

This section summarizes feedback from the 560 respondents engaging with some or all of questions 92-96; all frequency terms refer to this subset rather than to all consultation respondents.

The below figure shows the most and least commonly selected answers to question 95, the assumed main drivers affecting internal workload and external service costs after applying feasibility measure. Almost all of these respondents selected multiple drivers rather than identifying a single dominant cost.

Figure 16: Responses to question 95



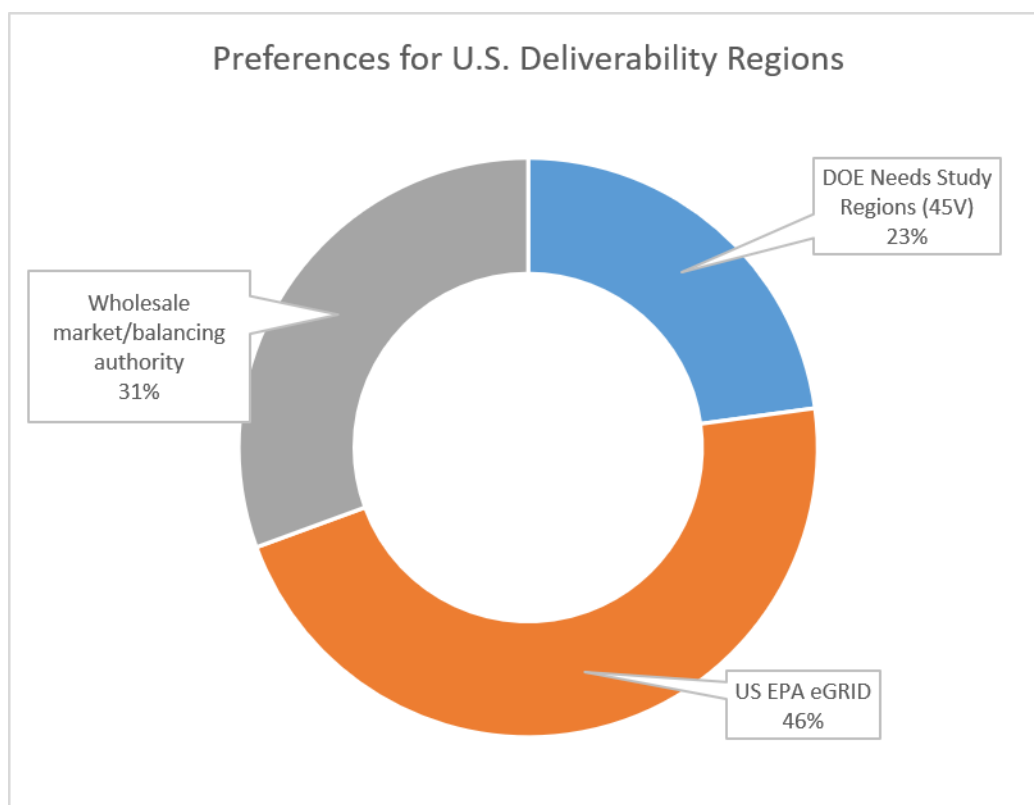
Respondents that indicated 1-2 on the level of support for deliverability were more likely to answer these questions and rated increases higher than respondents indicating 4-5, though many of these respondents also anticipated meaningful increases.

Many respondents indicating support described the change as building on existing processes, whereas most respondents expressing concern described new categories of expenditure. Most respondents across positions selected both a legacy clause and phased implementation as anticipated feasibility measures they would rely on.

13.7 Additional quantitative data (Q. 88)

Respondents were asked to select which of three options for deliverability regions in the U.S. best upholds the principle of deliverability and aligns with the decision-making criteria. Of respondents who selected one of the three regions, the below chart summarizes their preferences.

Figure 17: Responses to question 88



14 Market-based Standard Supply Service

Background on proposal: The proposed updates would introduce guidance on a new term, Standard Supply Service (SSS), to clarify 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. The survey asked respondents to provide feedback on the proposed updates guidance on SSS.

14.1 Summary of Consultation Feedback Relative to the Decision-Making

Criteria

Table 29: Summary of consultation feedback

	Support	Concerns
Integrity	Incorporating Standard Supply Service (SSS) may help prevent double counting and strengthen transparency.	In the absence of credible SSS data, allowing default approaches to allocate SSS may reduce accuracy and comparability.
Impact	SSS could shift demand toward new clean energy projects, by removing legacy resources from the voluntary market.	- SSS could be disruptive in voluntary markets particularly in regions where subsidized supply dominates. - Reduced access to voluntary instruments could increase costs and influence corporate procurement decisions and climate ambition.
Feasibility	Existing regulatory structures, publicly available data, and current utility reporting practices may provide a foundation for SSS implementation.	- Potential data availability challenges, if utilities or registries cannot provide reliable SSS data. - SSS may introduce additional administrative complexity.

14.2 Quantitative Summary of Feedback

Question 97 of the consultation asked respondents to provide a 1-5 support rating regarding the proposed new guidance for SSS.

Table 30: Responses to question 97 by organization type

Organization Type	Count	Rating 4-5 (Support)	Rating 3 (Neutral)	Rating 1-2 (Oppose)
Academia/research	22	77%	14%	9%
Certificate registry/tracking system operator	9	22%	11%	67%
Company	217	45%	25%	30%
Consultant	56	63%	20%	18%
Data/analytics or software provider	17	76%	24%	0%
Electric Grid Operator	3	33%	67%	0%
Energy supplier/retailer or utility	47	32%	13%	55%
Financial Institution	7	86%	14%	0%
GHG account/reporting program or initiative	3	33%	33%	33%
Government institution	10	50%	20%	30%
Industry group	49	31%	20%	49%
International agency	1	0%	100%	0%
Non-profit organization/NGO/civil society	39	72%	13%	15%
Other (please specify below)	38	45%	24%	32%
Verification/assurance provider	4	50%	0%	50%
Grand Total	522	49%	21%	30%

Table 31: Responses to question 97 by geographic region

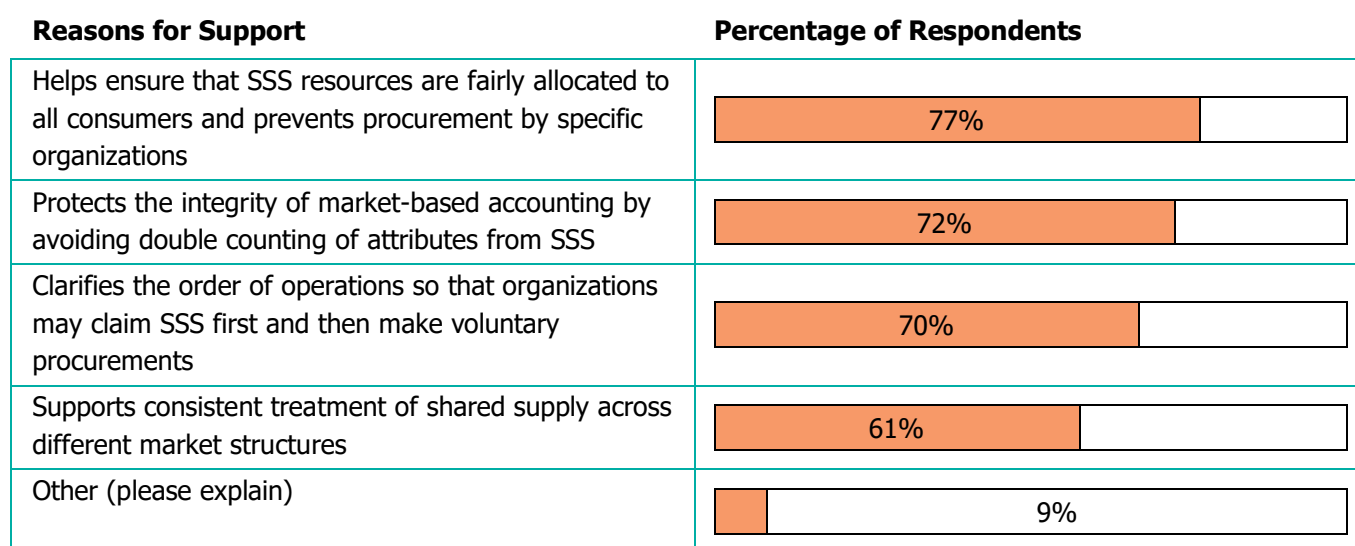
Geographical Region	Count	Rating 4-5 (Support)	Rating 3 (Neutral)	Rating 1-2 (Oppose)
Eastern Asia	95	19%	15%	66%
Southern Asia	8	50%	13%	38%
South-eastern Asia	19	26%	47%	26%
Western Asia	4	50%	0%	50%
Europe	201	54%	23%	23%
Northern America	158	59%	22%	19%
Latin America and the Caribbean	7	71%	14%	14%
Northern Africa	3	100%	0%	0%
Sub-Saharan Africa	2	50%	50%	0%
Oceania	25	60%	12%	28%
Grand Total	522	49%	21%	30%

14.3 Reasons for Support (Q. 98 & 99)

Questions 98 and 99 ask respondents to identify and explain their reasons of support for the SSS proposal. Use of respondents in this section refers to the subset of respondents who engaged with these questions. This section summarizes feedback from the 367 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents.

Among respondents who answered question 98, the below figure shows the most and least commonly selected answers.

Figure 18: Responses to question 98



Fair Allocation

Of respondents that answered questions 98 and 99 (reasons for support), many indicated that if a clean energy resource (like a large legacy hydro dam) is funded through a regulated tariff or a general levy paid by all customers, it should be considered shared public supply. Many respondents noted that there are potential integrity concerns due to resource shuffling when a single company claims a disproportionate share of that energy due to greater administrative capacity. They described pro-rata allocation as ensuring no single entity disproportionately benefits unfairly from a collectively funded resource.

Market Integrity and Double Counting

Of respondents that answered questions 98 and 99 (reasons for support), many indicated that without clear SSS rules, there is a risk that the same carbon-free megawatt-hour could be counted more than once: for example, by a company claiming it via a specific contract and by other companies claiming standard-delivered carbon-free power. Clear delineation of what qualifies as standard supply is described as helping to improve the consistency and integrity of reported emissions values. In addition, a few respondents noted that formalizing the SSS framework could promote greater standardization across corporate disclosure practices and support more streamlined data collation by aligning the MBM with existing national regulatory regimes and voluntary market norms.

Incentivizing Investment in New Projects

Of respondents that answered questions 98 and 99 (reasons for support), some indicated that SSS designations may remove a large share of legacy carbon-free energy projects from the pool available to companies in the voluntary market, with the potential to encourage greater investment in new projects. This approach is described as establishing a baseline level of renewable energy, prompting companies seeking additional procurement to source from newer projects. Other respondents noted that there is a substantial body of research supporting the “three pillars” concept, a framework for carbon-free energy claims built on hourly matching, deliverability, and incrementality (defined as new projects). These respondents noted that the revision does not include incrementality as a separate requirement, but that SSS could serve a similar function by removing much of the existing generation an incrementality test would also exclude.

At the same time, several respondents who expressed interest in the SSS proposal noted that its implementation could be complex. They suggested that GHGP could consider alternative or complementary approaches, such as incorporating incrementality requirements or introducing a default option based on facility age limits.

Order of Operations

Of respondents that answered questions 98 and 99 (reasons for support), some noted that corporate reporters often struggle with whether to apply their utility's grid mix (also known as standard-delivered power) before or after their own voluntary purchases (like RECs or PPAs). These respondents noted that SSS rules are helpful in clarifying that organizations should claim their pro-rata share of SSS first and then apply voluntary procurements on top of that.

14.4 Reasons for Concern (Q. 100 & 101)

Questions 100 and 101 ask respondents to identify and explain their reasons for not supporting the SSS proposal. Use of respondents in this section refers to the subset of respondents who engaged with these questions. This section summarizes feedback from the 404 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents.

Among respondents who answered question 100, the below table shows the most and least commonly selected answers.

Figure 19: Responses to question 100

Reasons for Concern	Percentage of Respondents
Unclear rules/definition of SSS	73%
Concern of regionally applicable challenges to implementation	70%
Unclear how partial subsidies affect SSS classification	56%

Markets should self-determine how resources that fall under SSS are allocated to customers	30%	
All contractual instruments should be eligible for voluntary procurement.	24%	
Other (please explain)	21%	

Impact on Voluntary Certificate Markets and Procurement Incentives

Of respondents that answered questions 100 and 101 (reasons for concern), many indicated that classifying publicly supported generation as SSS would remove a significant share of available certificates from the voluntary market, fundamentally changing the supply landscape for corporate renewable energy procurement. Some respondents, particularly in Asian markets such as Japan, Taiwan, and Malaysia, noted that Feed-in Tariff programs account for the majority of available renewable certificates, and that reclassifying these as SSS could leave only a narrow pool of eligible instruments for voluntary buyers. Some respondents described a potential outcome in which the remaining non-SSS supply consists primarily of legacy assets such as large hydropower, where reduced availability could contribute to price increases without corresponding new investment, or new unsubsidized projects at higher cost. A few respondents indicated that increases in the cost of voluntary procurement could lead companies to scale back or reconsider ambitious renewable energy targets, potentially affecting demand for new clean energy investment. A few also noted that the reclassification could affect companies with existing long-term contracts or public commitments made under current rules, altering the conditions under which those investments were made.

Administrative Difficulties

Of respondents that answered questions 100 and 101 (reasons for concern), most described the SSS concept as a complex new administrative layer that may be difficult for companies to calculate or verify on their own. Some of these respondents noted that in many regions, utilities may not yet have the institutional frameworks or granular data tracking needed to provide SSS emission factors to their customers, leaving reporters dependent on data they cannot control or audit.

Respondents in this category cite administrative challenges at the utility level, the company level, and the governmental level.

14.5 Situations Requiring Further Definitional Clarity (Q. 102-105)

Questions 102-105 ask respondents to provide additional feedback on potential regional differences that might affect the resources to be included in the proposed definition of SSS. This section summarizes feedback from the 319 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents.

Legacy Assets that Have Been Fully Repaid

Of respondents that answered questions 102-105, some flagged that the proposed SSS definition does not clearly address how legacy clean energy facilities should be treated once their original public funding or regulated cost recovery has been fully retired. Two interpretations emerged.

Some respondents indicated that, because these assets no longer require active financial support from ratepayers or taxpayers, they should exit SSS classification and return to the residual mix, making them available for voluntary procurement.

Others indicated that these assets continue to provide a zero-carbon baseline funded historically by all customers, and that removing them from SSS would reintroduce the resource shuffling problem SSS is designed to prevent.

Feed-in Tariff (FIT) Programs

Of respondents that answered questions 102-105, some identified that FIT programs present a classification challenge because their funding and attribute mechanisms point in different directions. The generation is funded through mandatory surcharges paid by all customers, which suggests SSS treatment, but the environmental attributes are separately packaged into certificates and sold to willing buyers, which suggests voluntary market treatment. Respondents noted that further guidance is needed on which characteristic, funding source or attribute transaction mechanism, should determine SSS classification.

Government-owned Entities that Operate Commercially

Of respondents that answered questions 102-105, some identified that the proposed SSS definition does not clearly resolve whether government ownership or commercial market behavior should determine classification. In some markets, government-owned generators operate in fully competitive environments where customers choose their electricity supplier, yet their ownership structure could trigger SSS classification. Some respondents noted that market behavior, not ownership, could be considered the determining criterion, observing that applying SSS to government-owned commercial generators while excluding privately owned competitors operating in the same market could create an uneven playing field. Some respondents pointed to New Zealand as illustrative, where three of the four largest generators (Genesis Energy, Meridian Energy, and Mercury) are 51% government-owned but operate commercially in a competitive market, collectively accounting for more than two-thirds of the country's retail market share.

Facilities with Partial Public Support

Note: The proposed SSS definition identifies triggering criteria based on a traceable and mandatory financial relationship between customers and generation resources, with specific examples including regulated cost recovery from monopoly suppliers, government-mandated procurement programs such as RPS and FIT, and publicly owned facilities operated under a public service obligation.

Of respondents that answered questions 102-105, a few indicated that if any form of public financial support triggers SSS classification, effectively the entire grid mix could qualify, leaving no room for market-based differentiation.

Many respondents called for more clarity in situations involving mixed funding streams, where generation assets receive a combination of support types that may or may not meet the proposed triggering criteria.

14.6 Default or Fallback Options for SSS (Q. 106-110)

Questions 106-110 ask whether the absence of SSS data from electricity providers or credible third-party registries is an acceptable outcome, and if not, what kinds of alternative options they would support to enable SSS allocation. This section summarizes feedback from the 358 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents.

Acceptance of Interim Inability to Claim SSS

Many respondents indicated that it may be acceptable, in the short term, for companies not to be able to claim SSS if no credible tracking or registry exists. They noted that integrity and the prevention of double-counting are important considerations relative to ensuring every company can make a claim. In these cases, respondents suggested that companies could transparently disclose the absence of SSS data and rely on conservative fallbacks (e.g., residual mix or fossil-based factors).

Utilizing Public Data and Alternative Methodologies

Some respondents argued that a formal registry may not need to be a strict prerequisite for claiming SSS. Because SSS represents a shared baseline of renewable energy allocated to everyone, they noted that it could be calculated using public data. Respondents suggested several acceptable approaches whereby companies would use public data to calculate their own pro-rata share of standard supply resources.

Project Age

Some respondents suggested project age as a conservative backstop for designating resources in the absence of a registry. If no registry exists to track SSS, older legacy resources (e.g., assets commissioned more than 10 or 15 years ago) could potentially be classified as SSS. Additionally, some respondents noted the possibility of placing a cap on the percentage of power a company could voluntarily claim from these older assets. Suggestions for determining this cap included calculating the percentage of existing baseload CFE on a given grid, or applying a common percentage defined by GHG Protocol.

Maintaining Regional Flexibility

Some respondents noted the importance of avoiding a one-size-fits-all registry requirement that does not reflect existing regional mechanisms. For instance, responses from Australia referenced existing approaches such as their Renewable Energy Target. These respondents suggested that existing regulatory tracking and cost-recovery schemes could be considered as potential equivalents to a centralized SSS registry.

14.7 Default SSS Criteria (Q. 107-110)

347 respondents answered question 107 on whether they would support a default or fallback 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 for SSS. Of these 347 respondents, 41% answered “yes”, 32% answered “no”, and 27% answered “unsure”.

Question 109 asks respondents who answered “yes” to question 107 to select criteria to designate resources as SSS. Among respondents who answered question 109, the below figure shows the most and least commonly selected answers.

Figure 20: Responses to question 109

Default SSS Criteria	Percentage of Respondents
Combination of criteria	60%
Projects tracked in compliance registries	53%
Project ownership (e.g. government-owned projects)	51%
Technology or fuel type	49%
Project age	39%
Other	17%

Question 110 offers respondents who selected “other” to question 109 to provide additional feedback. Among the 28 respondents who selected “other”, a few themes emerged in their responses.

- **Definition concerns and applicability.** Several respondents expressed confusion or concern about the overall concept of SSS. They noted that the proposed standard seems designed with specific markets in mind (e.g., North America) and does not map well to other regions, such as the European or ASEAN electricity markets. They stressed that SSS should only be based on documented rules regarding regulated cost recovery, not proxy characteristics like project age or technology type, which conflict with core market-based accounting principles.
- **Opposition to age limits.** Several respondents who selected “other” used this question to express concern about age limits. They noted that age may not be directly related to market-based accounting principles. Restricting eligible supply based on age could potentially distort the market, increase the cost of clean energy, and discourage companies from signing contracts with older, yet highly functional, carbon-free resources that provide baseload power, these respondents suggested.
- **The need for clear methodologies.** Rather than suggest alternative criteria, several respondents called for the GHG Protocol to provide much clearer, standardized guidance. Examples of guidance suggested by respondents included decision trees, generator-level audits, and relying on established data sources (like EPA or IEA) to provide SSS data.

Feedback on question 108 - Concerns with a default option

Question 108 offers respondents who selected “no” to question 107 to provide additional comments on this response. 105 respondents provided commentary to support their choice, and a number of common themes emerged.

- **Undermines market-based accounting principles.** Some respondents noted that applying default criteria may not align with the core principles of market-based accounting. They suggested that market-based accounting requires claims to be tied to transparent, traceable contractual

instruments and that automatically assigning resources as SSS introduces a risk that the method may not fully align with its principles.

- **Reduces reliability, credibility, and comparability.** Some respondents noted that assigning default SSS without an official verification body or concrete data introduces highly unverifiable assumptions into the greenhouse gas inventory. They suggested this could create a reporting environment where calculations lose their reliability and outcomes become inconsistent, even among entities operating within the same market.
- **Preference for no allocation over defaults.** Some respondents suggested that, rather than creating a default option, an alternative approach could be to not allocate SSS when verifiable data is absent. They noted that if a supplier attestation or a global registry cannot be provided, the concept of a default claim may be difficult to apply while maintaining reporting integrity.

15 Market-based Residual Mix & Fossil-based EFs

Background on proposal: The proposed updates to the market-based method included revisions to the definition of residual mix emission factors to exclude Standard Supply Service from the residual mix emission factor calculation along with contractual instruments voluntarily claimed. The proposed update would further clarify that hourly matching is not required for application of the residual mix.

Where activity data is not matched with either contractual instruments or a residual mix, the proposed updates would replace the use of a grid average factor with a fossil-only grid-average or fossil emission factor, such as gas, oil, or coal. 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. Fossil-based emission factors should reflect the highest temporal precision available for the relevant market boundary.

The survey asked respondents to provide feedback on the proposed definition of residual mix emission factors and on the proposed replacement of the use of a grid average factor with a fossil-only grid-average or fossil emission factor.

15.1 Summary of Consultation Feedback Relative to the Decision-Making Criteria

Table 32: Summary of consultation feedback

	Support	Concerns
Integrity	Changes to the proposed residual mix and fossil-based default factor may improve methodological consistency and transparency while reducing the risk of double counting.	- Variation in temporal precision, and in residual mix or fossil-fallback access across regions, may reduce comparability between reporting organizations and between regions. - Fossil-based emission factor may not reflect the physical reality of the grid in all regions.
Impact	Fossil-based factor could encourage organizations to pursue actions connected to lower emission factor options.	In developing markets with limited data, a fossil-based fallback may raise reported emissions in ways that affect financing conditions for clean energy investment.
Feasibility	- Access to hourly residual mix data may be limited globally so an annual option offers a necessary practical pathway. - Suggestions to address potential data availability challenges: - Phased implementation of revisions - Clear hierarchy of emission factor sources	Differences in data infrastructure across regions may affect the ability to track and publish residual mix data for a deliverable market boundary.

- Centralized publication of acceptable factors.

15.2 Quantitative Summary of Feedback

Question 113 of the consultation asked respondents to provide a 1-5 support rating for the proposed changes to the definition of residual mix.

Table 33: Responses to question 113 by organization type

Organization Type	Count	Rating 4-5 (Support)	Rating 3 (Neutral)	Rating 1-2 (No/Low Support)
Academia/research	18	83%	17%	0%
Certificate registry/tracking system operator	9	56%	44%	0%
Company	225	48%	22%	30%
Consultant	66	71%	15%	14%
Data/analytics or software provider	19	84%	5%	11%
Electric Grid Operator	3	33%	67%	0%
Energy supplier/retailer or utility	47	53%	17%	30%
Financial Institution	8	100%	0%	0%
GHG account/reporting program or initiative	5	60%	20%	20%
Government institution	8	50%	13%	38%
Industry group	38	47%	18%	34%
International agency	1	0%	100%	0%
Non-profit organization/NGO/civil society	47	81%	9%	11%
Other	40	68%	18%	15%
Verification/assurance provider	3	100%	0%	0%
Grand total	537	59%	18%	23%

Table 34: Responses to question 113 by geographic region

Geographical Region	Count	Rating 4-5 (Support)	Rating 3 (Neutral)	Rating 1-2 (No/Low Support)
Eastern Asia	66	29%	18%	53%
Southern Asia	10	50%	10%	40%

South-eastern Asia	16	44%	38%	19%
Western Asia	2	50%	0%	50%
Europe	235	66%	17%	17%
Northern America	165	61%	18%	22%
Latin America and the Caribbean	8	75%	25%	0%
Northern Africa	2	100%	0%	0%
Sub-Saharan Africa	4	75%	0%	25%
Oceania	29	66%	28%	7%
Grand total	537	59%	18%	23%

15.3 Reasons for Support (Q. 114 & 115)

Questions 114 and 115 ask respondents to identify and explain their reasons for supporting the proposed revision to residual mix. This section summarizes feedback from the 432 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents.

Among respondents who answered question 114, the below figure shows the most and least commonly selected answers.

Figure 21: Responses to question 114

Reasons for Support	Percentage of Respondents
Establishes clear definition for residual mix emission factors	82%
Protects the integrity of market-based accounting by avoiding double counting of attributes within the MBM	80%
Improves accuracy and relevance of market-based reporting	67%
Clarifies the market boundary a residual mix emission factor should be calculated for	57%
Improves comparability and transparency across organizations and regions	55%
Helps incentivize voluntary sourcing of contractual instruments	50%
Provides an option for reporters without access to an hourly residual mix emission factor	49%
Other (please explain)	5%

Market-based Method Integrity

Of respondents that answered questions 114 and 115 (reasons for support), most considered the updated definition as a way to help protect the integrity of the MBM by preventing double counting. Almost all certificate registries, government institutions, and electric grid operators who provided reasons for support cited preventing double counting as a core benefit. Some respondents indicated that a precise residual mix definition is an important component of the MBM to support differentiation between claimed and residual electricity attributes.

Enhancing Transparency and Comparability

Of respondents that answered questions 114 and 115 (reasons for support), many considered the updated definition of residual mix emission factors as a way to address historical uncertainty. A few certificate registry and tracking system operators across Oceania, Asia, and Europe noted that ambiguity in the current process may contribute to inconsistent practices between reporters and auditors, leading to reduced confidence in claims based on contractual instruments. These respondents suggested the new guidance could provide a standardized framework that reduces varying interpretations and facilitates comparison of Scope 2 inventories across regions.

Balancing Accuracy with Feasibility

Of respondents that answered questions 114 and 115 (reasons for support), many noted the updated definition could support clarity of the specific market boundary and time interval for calculation of the residual mix.

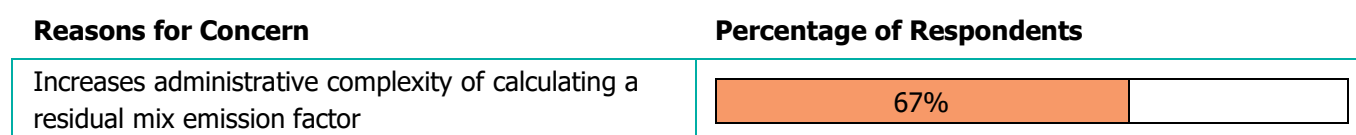
Within this group, some respondents supported aligning the residual mix to market boundaries to facilitate consistency across the MBM. Some respondents noted that anchoring the residual mix to explicit market boundaries and time intervals may be necessary to facilitate alignment with the grid remainder. Some respondents highlighted the inclusion of an annual calculation option as an important and pragmatic mechanism to facilitate the standard's global feasibility. They suggested that access to hourly residual mix data may be limited globally and that an annual option offers a necessary practical pathway.

15.4 Reasons for Concern (Q. 116 & 117)

Questions 116 and 117 ask respondents to identify and explain their reasons for concern with the proposed revision to residual mix. This section summarizes feedback from the 321 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents.

Among respondents who answered question 116, the below figure shows the most and least commonly selected answers.

Figure 22: Responses to question 116



Requiring a residual mix emission factor to be calculated per market boundary will further reduce availability of residual mix emission factors	51%
Allowing reporters to use different temporal precision of residual mix emission factors within a deliverable market boundary will negatively impact comparability	46%
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	41%
Markets should self-determine if Standard Supply Service is included in a residual mix emission factor	20%
Other (please explain)	19%

Alignment of Residual Mix with Deliverable Market Boundaries

Of respondents that answered questions 116 and 117 (reasons for concern), most noted limited data availability for a residual mix calculated in alignment with market boundaries. Some of these respondents noted that, if deliverable market boundaries become a requirement, there may be regions where reporters are unable to access a compliant residual mix emission factor. A few participants noted that differences in data infrastructure across regions may affect the ability to track and publish residual mix data at a granular level. They indicated that organizations operating in less data-developed markets could face additional challenges in meeting the proposed requirements compared to those in more established markets. To mitigate this potential outcome, some stakeholders recommended that market boundaries instead be defined as the regulatory and policy frameworks of electricity sectors, aligning with established national (and under certain circumstances, multinational) borders.

Mixed Temporal Boundaries and Comparability

Of respondents that answered questions 116 and 117 (reasons for concern), some noted that variations in temporal precision within residual mix definitions may contribute to a divergence in reported Scope 2 totals in a way that reflects data access rather than operational differences. For example, these respondents suggested that comparability may be compromised between a reporting entity applying an hourly residual mix factor and another entity applying an annual average within the same market. To maintain market integrity these respondents suggested that time intervals be standardized and synchronized across reporting entities within a given boundary.

Treatment of Standard Supply Service (SSS)

Of respondents that answered questions 116 and 117 (reasons for concern), some noted methodological concerns regarding the proposed exclusion of Standard Supply Service (SSS) from the residual mix calculation, suggesting that a uniform global mandate could challenge diverse regional market structures. A few respondents emphasized that jurisdictional variations in SSS design and cost recovery could lead to misclassification and double counting if held to a single global approach. Consequently, these respondents

recommended determining SSS treatment locally or regionally to support accuracy and reflection of specific utility practices.

15.5 Quantitative Summary of Feedback

Question 124 of the consultation asked respondents to provide a 1-5 support rating for the proposed requirement to apply a fossil-based emission factor where no residual mix factor is available.

Table 35: Responses to question 124 by organization type

Organization Type	Count	Rating 4-5 (Support)	Rating 3 (Neutral)	Rating 1-2 (No/Low Support)
Academia/research	17	59%	29%	12%
Certificate registry/tracking system operator	7	43%	14%	43%
Company	226	32%	17%	51%
Consultant	60	63%	13%	23%
Data/analytics or software provider	18	78%	11%	11%
Electric Grid Operator	2	50%	0%	50%
Energy supplier/retailer or utility	40	45%	13%	43%
Financial Institution	7	100%	0%	0%
GHG account/reporting program or initiative	4	50%	25%	25%
Government institution	8	75%	13%	13%
Industry group	43	30%	14%	56%
International agency	1	0%	0%	100%
Non-profit organization/NGO/civil society	45	80%	7%	13%
Other	40	45%	13%	43%
Verification/assurance provider	4	50%	0%	50%
Grand total	522	46%	14%	39%

Table 36: Responses to question 124 by geographic region

Geographical Region	Count	Rating 4-5 (Support)	Rating 3 (Neutral)	Rating 1-2 (Oppose)
Eastern Asia	75	25%	13%	61%
Europe	222	56%	15%	29%
Latin America and the Caribbean	10	30%	10%	60%

Northern Africa	2	100%	0%	0%
Northern America	155	38%	15%	47%
Oceania	25	56%	8%	36%
South-eastern Asia	17	53%	24%	24%
Southern Asia	10	50%	10%	40%
Sub-Saharan Africa	4	75%	25%	0%
Western Asia	2	100%	0%	0%
Grand Total	522	46%	14%	39%

15.6 Reasons for Support (Q. 125-126)

Questions 125 and 126 ask respondents to identify and explain their reasons for supporting the proposed use of a fossil-based emission factor where no other priority factor option is available. This section summarizes feedback from the 371 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents.

Preventing Double Counting and Protecting Integrity

Of respondents that answered questions 125 and 126 (reasons for support), most suggested that use of a fossil-based factor for unmatched electricity could reduce the risk of double counting and preserve the verifiable integrity of Scope 2 accounting. These respondents noted applying a standard grid average to unmatched consumption could result in double counting of clean electricity attributes already claimed by other entities. A few of these respondents also indicated that applying a universal fossil fallback may reduce variability in how reporter select emission factors, particularly where data gaps exist, and could support consistency and comparability across inventories.

Incentivizing Data Transparency and Active Procurement

Of respondents that answered questions 125 and 126 (reasons for support), most acknowledged that a fossil-only factor is conservative and may serve as a mechanism to support broader systemic improvements over time. These respondents noted that use of a fossil-only fallback may create an incentive for authorities and data providers to develop residual mix factors and improve data availability. A few respondents noted a fossil-only fallback could encourage more active corporate procurement by reducing reliance on grid average factors, thereby prompting companies to move from passive consumption to active clean energy procurement.

15.7 Reasons for Concern (Q. 127-128)

Questions 127 and 128 ask respondents to identify and explain their reasons for not supporting the proposed use of fossil emission factors. This section summarizes feedback from the 347 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents.

Global Equity Considerations

Of respondents that answered questions 127 and 128 (reasons for concern), most suggested that the requirement for a fossil-based fallback could have greater effects in regions with less mature registries. These respondents noted that a uniform factor may affect reporting entities differently depending on systemic data availability and the surrounding regulatory context. Some respondents noted that the proposed update could create additional challenges for companies in developing markets where access to unbundled certificates may already be limited. A few respondents from these markets suggested that resulting changes in reported emissions could influence ESG ratings, with potential implications for access to international green finance and the cost of capital for renewable projects.

Characterization of Highly Renewable Jurisdictions

Of respondents that answered questions 127 and 128 (reasons for concern), some, particularly those operating in jurisdictions with highly renewable electricity systems such as New Zealand and Canada, indicated that the proposed fossil emission factor fallback may not reflect the physical reality of these grids. Respondents noted that in markets where a compliant residual mix is not available, clean energy resources that remain unclaimed by voluntary instruments and fall outside the proposed definition of SSS, may not be reflected in the fossil-only fallback emission factor. Citing specific grid profiles, some of these respondents suggested that this interaction could systematically overstate Scope 2 emissions.

15.8 Suggested Compromises for Residual Mix Update and Fossil-only Default (Q.113-129)

This section summarizes feedback from the 616 respondents engaging with some or all of questions 113-129; all frequency terms refer to this subset rather than to all consultation respondents.

Across perspectives, respondents suggested the following implementation measures to improve feasibility related to the topics of residual mix and default fossil factors.

Phased Implementation and Transitional Timelines

Of respondents engaging with questions 113-129, some proposed a phased implementation of the proposed residual mix definition and fossil fallback requirement. To support deliverability, some recommended leveraging national-level residual mix factors as a baseline, with a transition to higher precision factors as local tracking systems mature. Further, where a residual mix factor is not available, a few respondents advocated for a defined transition period during which the national grid average would remain an option.

Hierarchy of Fallback Options

Of respondents engaging with questions 113-129, a few advocated for a permanent hierarchy of fallback options instead of a single fossil default option within the methodology. Under this model, if a deliverable residual mix is unavailable, reporters would then look to national or regional grid averages as a proxy. By formally permitting these averages, some respondents suggested the standard could better support equity among markets with limited data availability while preserving the overall usability and credibility of the market-based method.

Centralized Database

Of respondents engaging with questions 113-129, some, particularly corporates and consultants, suggested that a centralized database could serve as a useful addition to the proposed updates. These respondents recommended that the GHG Protocol publish a standardized database of pre-calculated residual mix and default factors to help reduce the technical burden on multinational and emerging market entities. Respondents noted that a centralized and transparent database could lower administrative effort while supporting more consistent and robust accounting than a generic global fossil average.

16 Overall MBM Considerations

Background on proposal: The proposed revisions outlined feasibility measures intended to support reporters with the transition to an updated standard, including exemptions from hourly matching, phased implementation, load profiles to estimate hourly data and a legacy clause.

The survey asked respondents to evaluate the sufficiency of feasibility measures, how the proposed MBM revisions affect comparability and decision-usefulness relative to incremental cost and complexity, procurement cost impacts and financial reporting impacts. Respondents were also asked about their overall preferred revision approach.

16.1 Summary of Consultation Feedback Relative to the Decision-Making Criteria

Table 37: Summary of consultation feedback

	Support	Concerns
Integrity	Proposed updates to hourly matching and deliverability could enhance transparency towards investor evaluation of corporate climate risk and ambition.	- Proposed updates may go beyond the levels of granularity and transparency that are necessary for investors or decision-usefulness. - Proposed feasibility measures may limit comparability.
Impact	- Cost of carbon-free energy procurement may better align market price signals with real-world grid conditions. - A separate consequential impact metric could support transparency and incentivization of additional market action.	Cost of carbon-free energy procurement may increase and slow down corporate renewable procurement.
Feasibility	- Suggestions for: - Alternative phase-in schedules or milestone-based timelines for implementation - Additional resources to support market wide adoption - Introduction of the proposed revisions as optional	- Proposed feasibility measures may be insufficient for organizations to take action to reduce their market-based emissions. - Potential financial reporting implications of changing contract design as corporate buyers may adopt more complex contract features to meet proposed MBM updates.

16.2 Sufficiency of Feasibility Measures (Q. 130-133)

Question 130 of the consultation asked respondents to identify their perspective on the level of sufficiency for the proposed feasibility measures to support implementation. 592 respondents provided a rating of 1-5. Of respondents rating this proposal, 24% provided a rating of 4-5 (moderately or highly sufficient), while 9% provided a rating of 3 (sufficient), and 60% provided a rating of 1-2 (somewhat sufficient or insufficient). This section summarizes feedback on phased implementation (question 132) as well as overarching comments on the sufficiency of the proposed feasibility measures overall (questions 130-133). Feedback on load profiles specifically (question 131) is outlined in section 12.

Many of the respondents to question 130 indicated that the proposed feasibility measures may be insufficient, highlighting four areas for further development. This section summarizes feedback from the 623 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents.

Alignment with Internal and External Reporting Cycles

Of respondents that answered questions 130-133, some noted that any phased implementation timeline would need to be carefully synchronized with both internal corporate investment cycles and the broader ecosystem of external reporting frameworks to help minimize strategic and administrative disruption. A few respondents suggested that a mid-cycle shift in accounting rules could affect the financial and strategic foundations of current decarbonization roadmaps. A few respondents suggested a delay in the implementation of the proposed revisions until after 2030, reflecting a common target date for existing corporate climate goals. A few suggested that a lead time of at least 3 to 5 years may be required to synchronize with internal IT roadmap cycles and energy contract renewal periods. Some respondents noted that feasibility may be impacted by coordination with major reporting standards like RE100, SBTi, CDP, and ISSB, suggesting that diverging from the target horizons of these frameworks could lead to management of dual accounting systems, increasing administrative burden and impacting audit processes.

Alignment with Market Readiness

Of respondents that answered questions 130-133, some suggested that rather than a fixed phase-implementation timeline, mandatory requirements could be phased in based on market readiness milestones such as registry availability of hourly instruments, residual mix publication, and hourly data access. A few respondents noted the potential for market disruption if implementation dates are set before supporting infrastructure is mature. A few respondents suggested an extended implementation timeline for emerging markets, noting that a single global phase-in period may present challenges for organizations operating in these regions.

Resource Support

Of respondents that answered questions 130-133, some suggested that implementation of the proposed requirements could require the availability of standardized, high-quality data and a comprehensive suite of support tools. A few respondents suggested that the GHG Protocol or relevant authorities publish official datasets for residual mixes, load profiles, and deliverable market boundaries. A few respondents noted that publication of these datasets in standardized, machine-readable formats with API access could further support automated integration of these data sets with corporate software platforms. To support

management of audit costs and technical barriers, a few respondents suggested the designation of "safe-harbor" provisions to support more streamlined assurance processes. These respondents suggested that provisions include standardized evidence packages defining the minimum documentation requirements for hourly matches and clear sampling guidance to support consistent and manageable auditing processes. A few respondents noted that successful adoption of the proposed revisions could be supported by capacity building resources, including multilingual training programs, free calculation tools and a dedicated helpdesk to support organizations in emerging markets.

Progressive Adoption and Testing

Of respondents that answered questions 130-133, some suggested a progressive rollout where the requirements are initially introduced as an optional framework before transitioning to a mandatory standard. A few respondents suggested a "may/should" transition phase to support building organizational experience and data capacity alongside existing commitments. A few respondents suggested a formalized testing phase for new requirements through an official pilot, indicating this transitional step could support testing the practical feasibility and identification of unintended consequences on accuracy and procurement behavior. A few respondents advocated for a hierarchy that progressively tightens matching requirements from annual to monthly and eventually hourly resolution, allowing the market to adapt in a predictable and orderly way.

16.3 Decision-usefulness & Comparability (Q. 134-137)

Questions 134-137 ask respondents to rate how well the proposed market-based method revisions change the extent to which information is decision-useful and comparable for users relative to incremental cost and complexity for preparers (A being the lowest – no meaningful improvement and D being the highest – substantial improvement).

This section summarizes feedback from the 474 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents.

Feedback Indicating Potential Improvements to Decision-usefulness/Comparability

Of respondents that answered questions 134-137, few responded that these updates provide "moderate to substantial improvement" to decision-usefulness or comparability. The following themes emerged from their feedback.

Enhanced Risk Visibility

Of respondents that answered questions 134-137 that these updates provide "moderate to substantial improvement", some suggested that hourly matching and deliverability boundaries could enhance transparency by aligning reporting with physical delivery conditions. Some respondents suggested that these changes could enhance how investors evaluate corporate climate risk and ambition. They noted this could allow users to better identify a company's exposure to clean energy coverage gaps and future carbon liabilities, while differentiating between different procurement strategies that are currently presented equally in the methodology. A few respondents added that standardizing the treatment of the residual mix could reduce risk of double-counting, supporting more consistent interpretation and higher confidence for users relying on audited disclosures.

Benefits Justify Cost and Complexity

Of respondents that answered questions 134-137 that these updates provide “moderate to substantial improvement”, a few suggested that the increase in administrative burden and compliance costs would be an acceptable transition cost compared to the long-term benefits the revisions enable.

Feedback Indicating Limited improvement in Decision Usefulness/Comparability

Of respondents that answered questions 134-137, many responded that these updates provide “no meaningful or minor improvement” to decision-usefulness or comparability. The following themes emerged from their feedback.

Misalignment with Real-World Investor Demands

Of respondents who that answered questions 134-137 that these updates provide “no meaningful or minor improvement” in decision-usefulness, some noted that the proposed revisions introduce a level of detail that is not typically requested or reviewed by investors. A few respondents noted that investors primarily seek clarity on macro-level transition risk and long-term targets, indicating that hourly matching may offer only limited additional insight into core investment decisions. A few respondents indicated that the revisions may not provide sufficient information to differentiate between the impacts of different procurement options, such as signing a long-term PPA, or buying existing certificates on a liquid market.

Reduces Comparability and Decision-Usefulness

Of respondents that answered questions 134-137 that these updates provide “no meaningful or minor improvement” in decision-usefulness, a few suggested that the complexity of the proposed MBM updates could reduce comparability and decision-usefulness, as inventories could be increasingly shaped by data availability and exemption provisions rather than emissions performance. A few respondents noted that the proposed feasibility exemptions (such as load profiles and legacy clauses) could introduce variation in calculation methods and reporting granularity, suggesting it may become more challenging for investors to consistently interpret results and assess information to inform investment decisions.

Benefits Constrained by Cost and Complexity

Of respondents that answered questions 134-137 that these updates provide “no meaningful or minor improvement” in decision-usefulness, a few suggested that the value to investors and decision-makers could remain largely unrealized until the necessary global infrastructure fully matures to support implementation. These respondents noted that uneven data and infrastructure readiness globally could result in fragmented adoption, limiting comparability.

Benefits Outweighed by Cost and Complexity

Of respondents that answered questions 134-137 that these updates provide “no meaningful or minor improvement” in decision-usefulness, many suggested that the administrative burden of the proposed updates may exceed the incremental benefits for users. A few respondents suggested that the operational expenditures required to implement the proposed changes may be diverted from actions that contribute to a company's direct climate impact, which may limit the decision-useful of the resulting data for assessing real-world progress.

16.4 Procurement Cost Impacts (Q. 139-141)

Questions 139-141 asked respondents to provide feedback on the anticipated price changes associated with transitioning to hourly-matched, deliverable EACs/PPAs compared to current sourcing approaches. These questions address the primary drivers of procurement costs and how potential price changes may influence future carbon-free electricity investment strategies. This section summarizes feedback from the 495 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents.

Feedback Indicating Anticipated Cost Increases & Impact on Procurement Strategy

Of respondents that answered questions 139-141, almost all provided a 4-5 response to question 139, expressing that they anticipate procurement costs for hourly-matched, deliverable EACs and PPAs to increase. Respondents identified a combination of intersecting drivers as likely contributors to these anticipated changes.

Higher Costs for Hard-to-Match Hours

Of respondents that answered questions 139-141, some suggested that the requirement to align electricity consumption with renewable generation on the same grid and at the same hour could introduce logistical complexity. They suggested that availability of hourly-matched attributes and firming technologies may be limited, which could contribute to anticipated cost increases. A few respondents noted as an example that during periods where the available supply of clean energy is lower than the demand from all participating buyers, organizations may encounter more limited and costly certificates or may procure firming services such as battery storage at increased cost. These respondents noted that battery-backed contracts can be complex to value and negotiate, reflecting considerations such as round-trip energy loss and physical degradation into the buyer's costs. A few respondents noted the cost implications that could arise due to standard PPAs not aligning to load profiles, which could lead organizations to procure more renewables than their total consumption, or rely on spot markets to align with residual hours.

Of respondents that answered questions 139-141, a few noted external models indicating that these cumulative factors could increase corporate procurement costs by 50% to 200% (RMI, WattTime and Princeton); these references noted a range of potential associated cost impacts, ranging from a \$21–\$1,210/MWh increase on a delivered customer cost basis or \$1 to \$255/MWh increase relative to annual matching (Brattle Group); this could equate to future values of \$68/MWh to \$181/MWh depending on the region and load profile (TCR). A few other respondents referred to independent estimates, noting more generally that modelled data suggests cost increases from hourly matching.

Reduced Economies of Scale and System Inefficiencies

Of respondents that answered questions 139-141, some indicated that the proposed revisions could affect organizations' renewable procurement strategies in a way that may reduce system-wide efficiencies and economies of scale, which could contribute to higher procurement costs overall. Many suggested that the proposed deliverability and hourly matching requirements could influence the economies of scale that support large-scale Virtual Power Purchase Agreements (VPPAs). They suggested that reduced aggregation of demand across broad regions may lead companies to pursue multiple smaller, region-specific contracts. They suggested this fragmentation could increase fixed legal and administrative fees, which may be more

pronounced for mid-size buyers and organizations with highly distributed loads. In addition to this potential impact on contracting, a few respondents noted the potential for physical infrastructure inefficiencies. They indicated that capital allocated toward localized battery energy storage systems could, in some cases, be deployed more efficiently in centralized applications to support broader system-wide outcomes.

Implications for Project Finance and Additionality

Of respondents that answered questions 139-141, some suggested that financial and technological considerations of the proposed revisions could affect long-term project financing. A few respondents characterized long-term contracts as a well-established mechanism for demonstrating additionality, suggesting a shift from long-term PPAs to unbundled spot-market RECs could reduce new clean energy development. A few respondents noted that a potential corporate shift away from long-term agreements could affect developers' ability to secure financing for new developments. Consequently, a few respondents suggested that the proposed revisions could affect the business case for voluntary climate action, potentially impacting renewable energy market participation or use of the GHG Protocol.

Feedback Challenging Anticipated Cost Increases & Impact on Procurement Strategy

Of respondents that answered questions 139-141, a few provided a response of 1-3 to question 139, indicating expectations of no change or potential reduction in costs. These respondents noted the following themes in their responses.

Assumption of 100% Matching

Of respondents that answered questions 139-141, a few suggested that anticipated cost impacts may depend, in part, on assumptions regarding the level of hourly matching that companies may seek to achieve. These respondents noted that the proposed revisions do not inherently require a specific procurement strategy; a company could report its hourly, deliverable match based on existing procurement. A few respondents noted that the cost of hourly matching may be dependent on the overall level of matching achieved, suggesting that relatively high levels of matching could be achieved without substantial cost premiums. One respondent cited multiple models, including studies from TU Berlin, Princeton University, Transition Zero, and the IEA, which indicate that 70% to 95% hourly matching could be achieved in certain markets at a relatively small premium, or in some cases lower costs, compared to annual matching.

Systematic Cost Assessment

Of respondents that answered questions 139-141, a few suggested that the financial impact of granular procurement may be dynamic and warrants systemic evaluation. One respondent suggested that deliverable certificates may not result in uniformly higher prices, but could instead reshape pricing structures; for instance in solar-heavy markets daytime certificates may become lower in cost, where certificates generated during fossil-heavy evening periods may have an increased cost. Another respondent suggested that the cost of hourly matching be weighed against its value as a financial hedge. Citing a study by Eurelectric and Pexapark, they indicated that higher levels of hourly procurement could function as a hedge relative to wholesale power prices. They noted that higher levels of hourly procurement may reduce exposure to wholesale price volatility and could influence a company's effective electricity costs over time.

Higher Costs Reflect Transition Costs

Of respondents that answered questions 139-141, a few suggested that anticipated cost increases may not represent a barrier, but rather as a reflection of the cost associated with grid balancing during the transition to decarbonization. They suggested that the current system may include artificially low costs, enabling companies to more easily claim 100% carbon free electricity. These respondents also indicated that such conditions may not fully reflect underlying system dynamics, including continued reliance on fossil-based generation. By contrast, they suggested that an initial cost increase could provide market signals that support investment in technologies such as battery storage and flexible demand. They further noted that procurement costs may stabilize over time as these technologies mature and the market aligns with overall system value.

16.5 Financial Reporting Implications - IFRS/GAAP (Q. 142-145)

Questions 142-145 ask respondents whether the proposed Market-based Method criteria, specifically hourly matching and deliverability, trigger material IFRS/GAAP financial-reporting impacts for PPAs. It explores potential risks to "own-use" eligibility, hedge accounting, and onerous contract provisions (IAS 37/IFRS 9), alongside the specific contract terms driving these accounting complexities. This section summarizes feedback from the 155 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents.

Feedback Indicating Low or No Impacts to Financial Reporting

Question 142 asked respondents to provide a 1-5 rating of whether the proposed MBM criteria (hourly matching, deliverability, inclusive of feasibility & transition design) pose material IFRS/GAAP financial-reporting impacts for PPAs or similar instruments. Of respondents that answered question 142, a few responded with a rating of 1-2, indicating that proposed MBM revisions are not expected to pose material financial-reporting impacts for PPAs and similar instruments under frameworks like IFRS and GAAP. The following themes emerged from their responses.

Stability of Financial Assessments

Of respondents that answered questions 142-145, a few suggested that the proposed market-based method revisions would likely not trigger material financial reporting implications under IFRS or GAAP. These respondents suggested that the proposed MBM revisions may not lead to changes from a financial accounting perspective, suggesting that virtual power contracts could still be recorded as financial derivatives, while direct physical contracts could continue to operate under standard accounting exemptions. These respondents noted that, while the revisions do not inherently force changes to existing accounting assessments, organizations might voluntarily restructure future contracts to align with the revised MBM, meaning only those new contracts would require accounting re-evaluation.

Legacy Clause

Of respondents that answered questions 142-145, Some suggested that a legacy clause could help limit impacts of the proposed revisions

Feedback Indicating Significant Impacts to Financial Reporting

Question 142 asked respondents to provide a 1-5 rating of whether the proposed MBM criteria (hourly matching, deliverability, inclusive of feasibility & transition design) pose material IFRS/GAAP financial-reporting impacts for PPAs or similar instruments. Of respondents that answered question 142, most responded with a 4-5 rating, indicating that the proposed MBM revisions could present material financial-reporting impacts for PPAs and similar instruments under frameworks like IFRS and GAAP. The following themes emerged from these responses.

"Own Use" Implications

Of respondents that answered questions 142-145, most suggested that that complex settlement mechanisms used to align with proposed hourly matching and deliverability requirements (e.g., shaping, financial close-outs) could be interpreted by auditors as creating a disconnect between the generation asset and the entity's physical load profile. These respondents noted that such contract structures may not meet the "own-use" exemption under IFRS 9 or the "normal purchases and normal sales" scope exemption under US GAAP. As a result, may require fair value (market-to-market) measurement through profit or loss. Respondents indicated that this outcome could affect income statement stability, which may in turn influence future corporate investment in clean energy. Note, own use exemptions typically apply primarily to physical PPAs based on the contractual requirement of an entity to purchase and take delivery of the electricity.

Hedge Accounting

Of respondents that answered questions 142-145, many suggested that structural mismatches could impact the perceived benefits of hedge accounting. If "own-use" exemptions cannot be applied, entities may choose to apply hedge accounting in order to separate fair-value changes from the profit and loss statements. However, many respondents suggest that hourly matching and deliverability could increase the likelihood of volume and basis mismatches between contracted supply and actual consumption, which may make it more challenging to substantiate a "highly probable" or highly effective hedge. A few respondents suggested that the projected increase of administrative effort towards tracking localized, hourly price risks could be significant for corporate treasury functions, potentially impacting their capacity to assess hedge effectiveness in order to maintain the hedge accounting designation.

IAS37 Onerous Contracts

Of respondents that answered questions 142-145, many suggested that the proposed criteria could trigger IAS 37 provisions for onerous contracts based on two factors. First, the economic utility of legacy PPAs may be challenged if MBM rules are applied retroactively, if these contracts were signed at a premium specifically to secure zero-emission claims. Second, a few respondents suggested that the cost of storage or firming services for hard to match hours could alter the balance between total procurement costs and expected benefits. Consequently respondents suggested the costs of fulfilling these long-term contracts could exceed the expected economic benefits of the contract, which may result in companies recognizing balance sheet provisions (liabilities) and leaving renewable energy investments stranded.

Data Limitations Elevate Financial Reporting Risks

Of respondents that answered questions 142-145, many suggested that limited availability of granular grid data could affect the valuation and risk of hourly-matched instruments. These respondents note that

accounting standards prioritize the use of observable inputs in asset valuations, suggesting that the limited maturity of data infrastructure needed to support hourly tracking at scale could increase uncertainty in valuation assessments and contribute to additional audit complexities.

16.6 Impact Metric Outside Scope 2 (Q. 146-151)

Questions 146-151 asks respondents to provide views on whether the development of a separate, non-inventory metric to quantify the "emissions impact" of electricity procurement would alter their perspective on the proposed Scope 2 revisions. Feedback explores the rationale for supporting or not supporting such metrics, specifically focusing on whether impact-based reporting should complement, replace, or be excluded from the market-based accounting framework. This section summarizes feedback from the 517 respondents to these questions; all frequency terms refer to this subset, or the smaller subsets described in subsections below, rather than to all consultation respondents.

Feedback Indicating an Additional Impact Metric Does Not Change View on Proposed Scope 2 Revisions (Q. 146 & 149)

Of respondents that answered question 146, 234 answered "no", indicating that the existence of an impact metric outside of Scope 2 would not alter their perspective on the proposed MBM revisions. Question 149 offered an opportunity for respondents to explain their "no" response.

Independence of MBM and Impact Metric

Of respondents that answered question 149, some suggested that the MBM would benefit from the proposed revisions independent of whether a separate impact metric is introduced. These respondents suggested that the proposed revisions may support future credibility of the MBM, and that development of a separate impact metric need not impact the timeline for these updates. Respondents also noted that existing impact methodologies may not fully align with integrity and feasibility requirements, and that external metrics may not meet auditability thresholds to prevent greenwashing and support further climate action.

Retain Flexibility of the MBM

Of respondents that answered question 149, some suggested that a separate impact metric may not address certain feasibility concerns associated with the proposed MBM revisions. A few respondents noted that impact metrics could serve as useful supplemental indicators, though these respondents would not consider them a substitute for a verifiable MBM inventory. Respondents considered it important that the MBM remains flexible towards achievable, auditable reporting. A few respondents in highly renewable regions expressed support for maintaining a flexible MBM, as they suggested the proposed changes may not drive further behavior in their specific markets. They noted that while a separate metric could capture additional climate action, flexibility in the MBM itself could prevent unnecessary complexity.

Potential Limitations of an Independent Metric

Of respondents that answered question 149, some pointed to corporate goals and target-setting frameworks which are commonly tied to Scopes 1–3, suggesting that reporting procurement through a separate metric may not receive appropriate value or attention. A few respondents noted that the proposed metric (as described in the *Electricity Sector Consequential Accounting Consultation*) may be incomplete,

as it is focused on avoided emissions from procurement and does not include induced emissions from load. They suggested that a one-sided metric may not provide a viable alternative to the inventory, leaving their perspectives on the MBM proposed revisions unchanged.

Feedback Indicating an Additional Impact Metric Does Change View on Proposed Scope 2 Revisions (Q. 146, 147, & 148)

Of respondents that answered question 146, 157 answered “Yes” or “somewhat”, expressing support for an impact metric that could provide additional context, thereby impacting the core structure of MBM rules. Questions 147 and 148 offered an opportunity for respondents to provide additional feedback on these perspectives.

Balancing Attributional Rigor with Consequential Impact

Of respondents that answered questions 147-148, some suggested that a separate impact metric could support alignment between inventory accuracy and climate impact. They suggested that tracking consequential impacts separately could support tracking of causality or additionality tests outside of the inventory, while maintaining independence between avoided emissions claims and attributional accounting. Some respondents also suggested that a dual-reporting approach of the inventory alongside an impact metric could support increased transparency regarding clean energy decisions that fall outside of the MBM, such as procurement outside of a deliverable market boundary in under-electrified regions, or the recognition of surplus carbon-free electricity from corporate PPAs. A few respondents further noted that this approach may support transparency around the addition of new fossil generation to the grid. Additionally, a few respondents noted that a separate reporting space could help preserve the core inventory as a straightforward and attributional approach.

Feedback Indicating No Support for a Separate Impact Metric (Q. 146, 150 & 151)

Of respondents that answered question 146, 126 answered that they do not support the development of impact metrics outside the Scope 2 inventory. Questions 150 and 151 offered an opportunity for respondents to provide additional feedback on these perspectives.

Increased Reporting Effort

Of respondents that answered questions 150 and 151, some noted that a separate impact metric could increase reporting effort, affect compliance costs, and impact resources focused on climate action. One respondent noted that corporate resources are finite, which may lead organizations to focus primarily on investments that impact Scope 2 emissions, potentially limiting the usefulness of a separate metric.

Considerations Related to Consequential Metrics

Of respondents that answered questions 150 and 151, a few noted that adopting separate impact metrics could affect the GHG Protocol’s credibility. They suggested that consequential methodologies’ current level of market maturity and reliance on counterfactuals may not align with the needs of corporate reporting, further noting that this approach may present additional opportunities for organizations to overstate the emissions reductions associated with their actions. A few respondents suggested that a shifting towards a “net emissions” metric could impact the integrity of Scopes 1–3. They suggested that the GHG Protocol could provide a comprehensive framework for netting against the inventory or remove the impact metric to maintain reporting clarity.

16.7 Overall Revision Approach (Q. 152)

Question 152 asks respondents which combination of Scope 2 revisions would be most appropriate. Respondents are asked to evaluate how various proposals balance the three foundational pillars of the revision process: scientific integrity, climate impact, and administrative feasibility. This section summarizes feedback from the 423 respondents to this question; all frequency terms refer to this subset rather than to all consultation respondents.

Alignment with Proposed MBM Revisions

Of respondents that answered question 152, some noted their support for hourly matching and deliverability in the MBM. A few respondents noted that this shift could support alignment with physical grid operations, reduce double counting and support the physical and temporal plausibility of claims. A few suggest it could shift procurement signals toward times and places where clean generation is scarce and drive targeted investments into new grid technologies. Some respondents suggested that the proposed revisions support feasibility through phased implementation, legacy clauses, and load profiles.

Add Increased Flexibility

Of respondents that answered question 152, many emphasized the importance of retaining a flexible, accessible, and feasible framework. To preserve broad market participation, many respondents suggested that the proposed revisions be introduced as a voluntary ('should') guidance rather than a strict requirement ('shall'). A few indicated that strict boundaries could affect investment equality, particularly in developing regions, noting that a flexible approach could facilitate support for projects outside of deliverable market boundaries. Alternatively, a few respondents suggested that while hourly matching should not be required, the framework's introduction of deliverability criteria could address credibility concerns with the current method.

Add Financial Additionality or Incrementality Requirement

Of respondents that answered question 152, some suggested that temporal and spatial matching criteria alone may not be sufficient to ensure climate impact. These respondents suggested that the Scope 2 standard could be complimented by more explicit guidance around financial investments towards new, consequential decarbonization. Some respondents suggest that an incrementality requirement (often termed a "third pillar") may be a relevant consideration in supporting the intended climate impact. A few respondents noted modelling studies by Princeton University Zero Lab in support of this position.

Add Complementary Impact Metric

Of respondents that answered question 152, some indicated interest in the introduction of a separate impact metric alongside the core Scope 2 inventory, suggesting that this could provide a dual-purpose system that maintains an attributional baseline while allowing for separate consequential claims. A few respondents noted that an impact metric could also provide an avenue to recognize decarbonization investments that may not fit into current or proposed inventory allocation rules, such as energy storage, demand-side response, and out-of-boundary projects. A few respondents suggested that supplementary metrics could support companies in regions with nascent data infrastructure report climate impacts in a credible way.

Preference For Consequential or Marginal Emissions Approach

Of respondents that answered question 152, a few indicated a preference for a marginal emissions approach, suggesting that the GHG Protocol move away from proposed physical matching requirements. These respondents noted that linking individual contracted load to specific generation within a grid may not reflect the physical characteristics of electricity systems. Instead, they indicated that accounting methods such as system marginal emissions or carbon pricing could be considered. These respondents further noted that this approach may support climate impact by enabling companies to prioritize investments that contribute to greater total emissions reduction, rather than focusing primarily on deliverable matching.

17 Legacy Clause and Uniform Effective Date

Background on proposal: The survey asked how existing contracts should be treated under the proposed updates to the Scope 2 market-based method, presenting two transition mechanisms for input: a legacy clause that would allow qualifying pre-existing contracts to continue counting toward market-based results even if they do not meet the updated hourly matching and deliverability requirements, and a uniform effective date (UED) that would apply the updated criteria to all instruments from a single date following a defined lead time, with disaggregated disclosure during the transition. The survey asked respondents to provide feedback on each of these transition mechanisms.

17.1 Summary of Consultation Feedback Relative to the Decision-Making Criteria

Table 38: Summary of consultation feedback

	Support	Concerns
Integrity	- Uniform effective date supports consistency and comparability by applying updated criteria to all reporters from a single date. - Disaggregated disclosure of results with and without legacy instruments could preserve transparency during the transition.	- Legacy Clause could reduce comparability and transparency, since similar companies could report market-based results under different rules that are not distinguishable to users. - Legacy Clause may reduce the overall accuracy and relevance of market-based reporting by producing emissions values that deviate from actual grid impact.
Impact	- Legacy Clause supports continued investment and climate action by preserving market confidence and avoiding procurement delays. - Uniform transition date may align more effectively with the technical requirements of major disclosure standards.	Legacy Clause may slow transition to higher-impact approaches, reducing incentives to adopt more granular procurement methods.
Feasibility	Legacy Clause reduces legal and financial barriers to modifying existing agreements.	Uniform effective date may be difficult to implement globally, given contract timelines and regional market differences.

17.2 Quantitative Summary of Feedback

Question 171 of the consultation asked respondents to provide a 1-5 support rating for the proposed introduction of a Legacy Clause.

Table 39: Responses to question 171 by organization type

Organization Type	Count	Rating 4-5 (Support)	Rating 3 (Neutral)	Rating 1-2 (No/Low Support)
Academia/research	23	91%	4%	4%
Certificate registry/tracking system operator	10	90%	0%	10%
Company	384	93%	3%	4%
Consultant	76	87%	8%	5%
Data/analytics or software provider	16	75%	13%	13%
Electric Grid Operator	2	100%	0%	0%
Energy supplier/retailer or utility	72	94%	1%	4%
Financial Institution	15	87%	0%	13%
GHG account/reporting program or initiative	4	25%	75%	0%
Government institution	11	73%	9%	18%
Industry group	71	93%	4%	3%
International agency	1	100%	0%	0%
Non-profit organization/NGO/civil society	56	84%	11%	5%
Other	56	84%	11%	5%
Verification/assurance provider	4	75%	0%	25%
Grand Total	801	90%	5%	5%

Table 40: Responses to question 171 by geographic region

Geographical Region	Count	Rating 4-5 (Support)	Rating 3 (Neutral)	Rating 1-2 (No/Low Support)
Eastern Asia	145	92%	2%	6%
Europe	283	86%	7%	6%
Latin America and the Caribbean	15	93%	7%	0%
Northern Africa	2	100%	0%	0%
Northern America	286	95%	2%	2%
Oceania	32	81%	6%	13%
South-eastern Asia	22	73%	23%	5%
Southern Asia	10	70%	10%	20%
Sub-Saharan Africa	3	100%	0%	0%

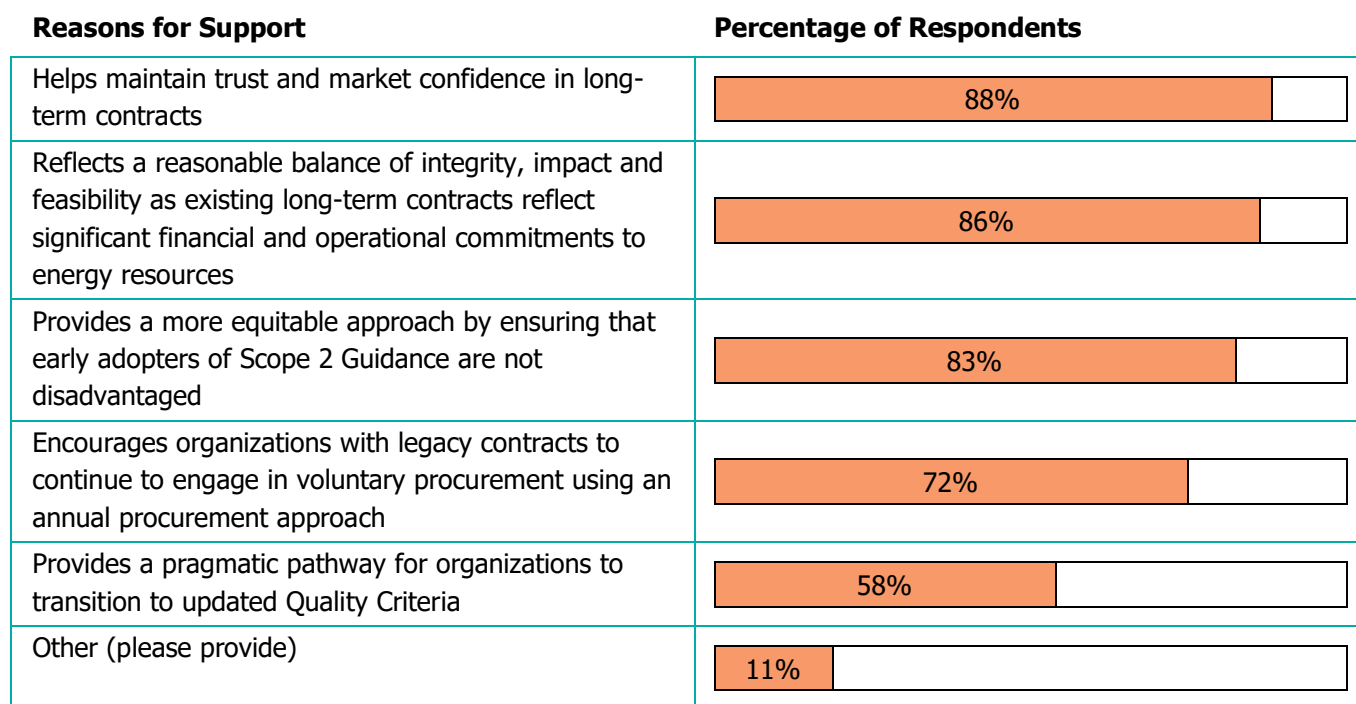
Western Asia	3	67%	33%	0%
Grand Total	801	90%	5%	5%

17.3 Reasons for Support (Q. 172 & 173)

This section summarizes feedback from the 766 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents. Almost all respondents favored the inclusion of the legacy clause, noting that protecting existing long-term contracts is important to preserve market trust, honor historical capital allocations and avoid pausing or delaying new renewable energy procurement. Responses centered on four themes.

Question 171 of the consultation asked respondents to provide a 1-5 support rating for the proposed introduction of a Legacy Clause. Among respondents who rated the introduction of a legacy clause 4 or 5 (Support) in question 171, and answered question 172, the below figure shows the most and least commonly selected answers.

Figure 23: Responses to question 172



Maintaining Credibility and Market Trust

Of respondents that answered questions 172 and 173 (reasons for support), most stated that a legacy clause helps maintain market trust and ensure early adopters are not disadvantaged. Many stated that existing contracts were executed in good faith under the rules in force at the time of signing, noting that the GHG Protocol should avoid undermining those commitments after the fact, with some noting that retroactive application of updated Quality Criteria to existing contracts could be inconsistent with principles of legal certainty and non-retroactivity.

Some respondents noted that the GHG Protocol's value as a framework for making investment decisions depends on the stability of its rules. They noted that mid-contract rule changes create policy uncertainty that may discourage future investment in emissions reduction. They suggested that future investors and corporate buyers may factor this regulatory risk into procurement decisions, which could make commitments more tentative or lead to shorter contract durations.

Financial Impact of Excluding Existing Contracts

Of respondents that answered questions 172 and 173 (reasons for support), a few indicated that without a legacy clause, long-term agreements could become stranded assets. A few respondents described substantial exposure within their organizations, citing significant sunk costs and the hundreds of thousands of dollars and thousands of person-hours required to execute and manage 10- to 15-year contracts. Respondents also noted the scale of existing corporate portfolios, with some citing active contracts valued in the hundreds of millions of dollars or hundreds of billions of Korean Won and extending to 2040. Some respondents linked this directly to project finance, observing that long-term PPAs are foundational to renewable energy financing and that excluding these instruments from Scope 2 reporting could weaken the economic basis for the projects themselves.

Some respondents claimed that renegotiating existing contracts to incorporate new requirements may be impractical, citing the necessity of counterparty consent, significant legal costs, and the risk of triggering termination clauses. This operational testimony was mirrored by a few users of climate-related financial risk disclosure programs who noted that retroactively changing the eligibility of legacy contracts could trigger asset impairments and fundamentally alter the economic value of signed agreements, creating unexpected financial reporting risks. (*Financial reporting implications are discussed further in section 16.5*)

Impact on Procurement Decisions

Of respondents that answered questions 172 and 173 (reasons for support), a few noted that the ongoing consultation process itself, independent of any final decision, may be causing some companies to pause or delay new renewable energy procurement. Respondents who mentioned this suggested that the GHG Protocol should publicly commit to a clear legacy clause as soon as practicable, before the full standard is finalized.

Conditional Position: Legacy Clause Necessary Only if Hourly Matching and Deliverability Become Mandatory

Of respondents that answered questions 172 and 173 (reasons for support), many viewed the legacy clause as a necessary contingency only if the new criteria become mandatory, noting that an optional framework would make transition protections less necessary.

17.4 Legacy Clause Design (Q. 176-178)

This section summarizes feedback from the 692 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents. Where respondents supported a legacy clause, the consultation invited respondents to provide feedback on their preferred implementation design.

Scope of Eligibility

Of respondents that answered questions 176-178, many reasoned that legacy eligibility should broadly encompass any contractual instrument recognized under current rules, including utility green tariffs, supplier-specific contracts, and community choice electricity programs.

Among respondents who suggested restrictions on eligibility, positions formed a spectrum: a few proposed limiting legacy eligibility to long-term fixed-price PPAs with additionality; some suggested exclusion of spot and short-term unbundled EACs; and a few put forth a tiered-duration approach that would make all instruments eligible but assign shorter legacy periods to instruments they characterized as lower-integrity.

Transferring Legacy Status

Of respondents that answered questions 176-178, many stated that legacy status should be non-transferable, remaining strictly tied to the original offtaker to prevent market gaming. However, some respondents supported transferability, stating that it is important to maintain market liquidity and support the development of secondary forward markets. They noted that allowing transfers may be necessary for merger and acquisition (M&A) activity, corporate restructurings, and the "fractionalization" of offtake for smaller corporate buyers. To manage integrity risks, they suggested that transfers be conditioned on the preservation of original contract terms and materiality, noting that established verification procedures (such as Green-e certification) already exist to prevent double-counting.

Contract Extensions and Amendments

Of respondents that answered questions 176-178, most treated extensions and material amendments as new contracts that must comply with updated criteria. Conversely, some respondents suggested that extensions retain legacy status to honor the underlying contractual relationship. Within this group, a specific middle-ground proposal suggested that extensions be permitted for up to five years, provided the terms do not "materially and adversely" modify the contract's benefits to the clean energy project – specifically by maintaining or increasing the price and volume of energy attributes purchased.

Asset-Level vs. Contract-Level Protection

Of respondents that answered questions 176-178, a few energy-sector respondents noted, based on project finance considerations, that protecting only a single contract's duration may be insufficient for regional market stability. They reasoned that because renewable assets (such as wind farms) are financed based on 20–30-year lifespans, legacy protection could be applied at the asset level and remain valid through multiple re-contracting cycles. Without this multi-cycle continuity, they noted that the loss of market-based claims at the end of a first contract could create stranded assets and weaken the original financial rationale of the project.

Disclosure Requirements and Additional Design Constraints

Of respondents that answered questions 176-178, most who addressed transition design supported enhanced disclosure, though their specific recommendations for reporting varied. Some respondents proposed a comprehensive reporting suite, including separate market-based results with and without legacy instruments, the share of load covered, affected geographies, and expected end dates. Regarding the effectiveness of these measures, some respondents suggested that disclosure could address comparability issues, while others noted that it may serve only as a partial mitigation.

A few respondents noted that a legacy clause may not require additional design constraints, indicating that existing 2015 Scope 2 Quality Criteria may be sufficient. Within this group, a few specifically expressed reservations about separate reporting, noting that disaggregation may undermine the validity of the conformance claim and impose non-value-added administrative burden.

Allocation Rules

Of respondents that answered questions 176-178, some proposed result-based constraints such as proportionate allocation across hours and regions. To preserve reporting integrity, these respondents reasoned that legacy instruments should be applied proportionally across total load, preventing the selective use of attributes to cover only high-emission hours or locations.

Regarding allocation, a few respondents noted that legacy instruments could be exempt from new temporal or geographic rules, remaining subject only to the provisions of the original 2015 Guidance.

Eligibility Cutoff Date

Of respondents that answered questions 176-178, most favored the implementation date as the legacy eligibility cutoff, noting that it would honor good-faith contracts and provide a practical transition window. Within this cohort, many preferred determining eligibility by the contract signature date rather than the commercial operation date (COD), as projects often experience multi-year lead times. Additionally, some suggested extending coverage to contracts in advanced negotiation at the time of the cutoff.

Alternately, some respondents proposed the publication date as the cutoff to prevent "strategic gaming." They raised the risk that a legacy clause could trigger a "rush-to-sign" period where companies lock in grandfathered status for lower-quality instruments. However, a few respondents noted that any accelerated procurement during the transition period would represent a positive outcome by stimulating immediate renewable project development.

Legacy Duration

Of respondents that answered questions 176-178, many who favored a legacy clause supported a time-bounded sunset, while some indicated that protection should last for a contract's entire natural lifespan.

Proposals for the specific sunset length varied with the most common suggestion being between 10 and 15 years, but some respondents suggested a short 3–5 year window, while a few proposed 20 years or longer.

From a financial reporting perspective, respondents provided an experience-informed prediction that the length of this period directly impacts data integrity. They noted that while shorter durations result in manageable complexity, indefinite legacy treatment would create structural comparability problems for data users.

Regional-equity and Market-maturity Guardrails

Of respondents that answered questions 176-178, some conditioned their support for a legacy clause on the inclusion of design mechanisms to address regional market asymmetries. They reasoned that because eligible long-term contracts are heavily concentrated in developed markets, a one-size-fits-all legacy clause would reinforce existing structural advantages. To mitigate this, a few respondents proposed tiered legacy expiry dates based on market development levels, granting lower-income regions longer transition timelines

before legacy protection expires. Additionally, a few respondents proposed requiring region-specific notes in legacy disclosures to help explain differences in local market infrastructure.

However, a few respondents did not agree with the inequity framing, noting that the concentration of eligible contracts in developed regions reflects market maturity rather than structural unfairness. They suggested that this imbalance may be better addressed through focused efforts to expand financial and technical support in emerging markets rather than through shorter legacy durations for early actors.

17.5 Reasons for Concern (Q. 174, 175, 179 & 180)

This section summarizes feedback from the 297 respondents to these questions; all frequency terms refer to this subset rather than to all consultation respondents. A few respondents expressed reservations about the legacy clause, while some others, including respondents who otherwise favored it, raised concerns that dual-track reporting could compromise reporting accuracy, reduce comparability, and risk misalignment with financial disclosure frameworks such as ISSB and CSRD.

Question 171 of the consultation asked respondents to provide a 1-5 support rating for the proposed introduction of a Legacy Clause. Among respondents who rated the introduction of a legacy clause 1 or 2 (No or Low Support) in question 171, and answered question 174, the below figure shows the most and least commonly selected answers.

Figure 24: Responses to question 174

Reasons for Concern	Percentage of Respondents
Introduces inconsistencies across companies, reducing transparency and comparability for users	88%
Creates reputational risk and increases skepticism about MBM claims	69%
Not aligned with MBM's purpose, weakens credible market signals and abatement planning, and may conflict with regulatory expectations	58%
Reduces overall accuracy and relevance of MBM reporting	50%
Fragments the voluntary market and may slow the transition to wider availability/use of hourly data	50%
N/A	3%

Comparability and Alignment with Disclosure Frameworks

Of respondents that answered questions 174, 175, 179, and 180, many expressed concern that a legacy clause would reduce comparability for investors, regulators, and disclosure frameworks, with a few noting that it could create a dual-track system in which similar companies report results under different rules. A few respondents noted that during the transition period, benchmarking across entities could become less reliable because differences in reported emissions would reflect rule changes rather than actual

performance. Drawing on professional expertise, a few practitioners noted that auditors and assurance providers may face significant difficulty assuring market-based method (MBM) results that blend legacy and updated criteria, complicating the verification process.

Some respondents noted that if legacy contracts reduce comparability, the MBM may face challenges as an input to financial reporting frameworks. Specifically, a few respondents, primarily from Japan and the UK, referenced the ISSB (IFRS S2) standards; a few European respondents cited the CSRD and its focus on regulatory alignment; and a few Japanese respondents highlighted potential conflicts with the SSBJ.

A few respondents extended this concern to the broader voluntary ecosystem, noting that the coexistence of legacy and updated rules could reduce confidence in the MBM among wider disclosure frameworks and certificate programs (such as CDP or RE100).

Credibility Concerns

Of respondents that answered questions 174, 175, 179, and 180, many emphasized that the Market-Based Method should reflect physical reality as accurately as possible. They noted that legacy exemptions are not aligned with the MBM's purpose and may reduce the accuracy and relevance of MBM reporting by producing emissions values that deviate from actual grid impact.

Some respondents noted that legacy exemptions could reduce the MBM's external credibility, creating exposure to greenwashing claims and public skepticism about market-based reporting.

Barriers to Entry for New Market Participant

Of respondents that answered questions 174, 175, 179, and 180, a few noted that a legacy clause could create different transition conditions for established market participants and newcomers. They reasoned that because new entrants must immediately comply with more demanding criteria while established players continue to benefit from legacy instruments, the clause could create competitive asymmetry during the transition period.

Slowing Transition to Hourly, Deliverable Contractual Instruments

Of respondents that answered questions 174, 175, 179, and 180, some expressed concern that legacy protections would reduce the urgency to upgrade to hourly-matched, deliverable instruments and may slow the market transition to higher-quality data. Drawing on professional expertise, a few practitioners noted that the technology already exists to convert legacy contracts into hourly-aligned, deliverable instruments; they reasoned that this technical readiness could make a prolonged legacy delay less necessary and may slow broader market progress.

17.6 Reasons for Support of Uniform Effective Date (Q. 181-183)

Question 181 ask which transition approach best balances continuity and comparability, with respondents selecting "Legacy Clause", "Uniform Effective Date (UED)", or "Other". This section summarizes feedback from the 46 respondents who selected a Uniform Effective Date (UED).

Methodological Consistency

Of respondents that answered questions 181-183, many who supported a UED instead of a legacy clause viewed a single effective date as important for ensuring methodological consistency and data comparability.

They noted that because a UED requires all reporters to apply the same criteria from the same point in time, it avoids fragmentation of the market into parallel accounting tracks.

Market Fairness and Transition Predictability

Of respondents that answered questions 181-183, a few described a uniform date as providing a clearer transition with a defined endpoint and greater market predictability. A few respondents emphasized equity considerations, expressing the view that a UED would treat new and existing market participants more consistently. They noted that this approach could help address the competitive asymmetry concern described in Section 17.5 by limiting continued use of legacy instruments that would not be available to new market entrants.

Comparability and Alignment with Disclosure Standards

Of respondents that answered questions 181-183, a few described a UED as offering greater operational clarity and market predictability than a legacy clause. They noted that a clean transition point may be easier to manage and audit than a system dependent on individual contract terms. A few practitioners indicated that a UED may align more effectively with the technical requirements of major disclosure standards. Specifically, they noted that a UED supports compliance with the ISSB's IFRS S2 (Climate-related Disclosures) and the EU's CSRD (specifically the ESRS reporting rules), both of which prioritize consistency and comparability across entities to support effective benchmarking.

Competitive Fairness and Equity

Of respondents that answered questions 181-183, a few described a UED as a more equitable transition tool than a legacy clause. They noted that a uniform date would treat new and existing market participants more consistently. By requiring all participants to shift to the updated criteria at the same time, this approach would avoid allowing established players to continue using instruments that would no longer be available to new market entrants.

Uniform Effective Data Timeframe

Of respondents that selected Uniform Effective Date in question 181, question 183 asked for feedback on the appropriate date organizations should be required to apply the updated quality criteria to all contractual instruments, and suggestions varied between 2028 and 2035 with the highest frequency suggestion being 2030.

17.7 Reasons for Concern of Uniform Effective Date (Q. 181-183)

Question 181 ask which transition approach best balances continuity and comparability, with respondents selecting "Legacy Clause", "Uniform Effective Date (UED)", or "Other". This section summarizes feedback from the 466 respondents who selected a "Legacy Clause" or "Other".

Treatment of Existing Long-Term Contracts

Of respondents that answered questions 181-183, most who raised concerns about a UED referenced points similar to those made in support of a legacy clause (see Section 3). Almost all indicated that any realistic lead time would be too short for long-duration contracts, making a fixed date difficult to align with existing

contract timelines. Many noted that a UED could disadvantage good-faith early procurement, and a few suggested it could lead some reporters to move away from MBM reporting entirely.

Disaggregated disclosure and Legacy Classification

Of respondents that answered questions 181-183, a few raised concerns about the UED's proposed transitional measure, noting that although disaggregated disclosure is intended as a safeguard during the lead time, it may still effectively classify those contracts as non-conforming – an outcome some respondents who favored a legacy clause viewed unfavorably.

Regional Exemptions

Of respondents that answered questions 181-183, some noted that a Uniform Effective Date may be difficult to apply consistently in a global standard, particularly given variations in regional market maturity. They observed that, because a UED establishes a single transition date for full compliance, some markets may not yet have the technical prerequisites—such as granular metering or hourly certificate registries—needed to meet the updated criteria. (Further consideration of regional exemptions is detailed in *section 13.45*)

17.8 Alternative Suggestions for Feasibility (Q. 181 & 182)

Question 181 ask which transition approach best balances continuity and comparability, with respondents selecting "Legacy Clause", "Uniform Effective Date (UED)", or "Other". This section summarizes feedback from the 39 respondents who selected "Other".

Stakeholders selecting "Other" in question 181 were invited to provide additional details in question 182, and respondents proposed the following measures to improve feasibility of the proposed MBM updates.

Optional Hourly Matching and Deliverability

Of respondents that answered questions 181 and 182, a few suggested making the proposed updates to hourly matching and deliverability optional, thereby eliminating the need for any transition mechanism.

Percentage-Based Phase In

Of respondents that answered questions 181 and 182, a few proposed replacing the binary legacy/non-legacy distinction with phased compliance aligned with SBTi methodologies. This approach would require organizations to apply the updated criteria to an increasing percentage of their energy portfolio over time. For instance, allowing companies to maintain the existing annual accounting rules for 50% of their load while requiring the remaining 50% to meet the new granular matching requirements.

Delegate Legacy Clause Design to Jurisdictions

Of respondents that answered questions 181 and 182, a few proposed that the GHG Protocol should delegate legacy clause design and standard-setting authority to regional or national bodies under the principle of subsidiarity. A few respondents suggested that demand for a legacy clause reflects tension between prescriptive proposals and local market realities. They noted that a flexible, jurisdiction-agnostic framework could reduce the need for such protections and that decisions on legacy eligibility could be left to individual jurisdictions.

Regional Considerations

Of respondents that answered questions 181 and 182, a few noted that a legacy clause alone may be insufficient to address global equity concerns because it primarily protects companies that already have long-term contracts. They suggested that, to support emerging markets without such contracts, a legacy clause could be implemented alongside broader transition tools, such as phased compliance or boundary-readiness pathways.

Annex: Scope 2 Public Consultation Summary Corrections Log

Tables

Page 27, Table 11: Responses to Question 40

Updated to correct errors.

Page 29, Table 13: Responses to Question 44 by organization type

Grand Total row edited to correct "neutral" rating and "no/low support" rating.

Page 29, Table 14: Responses to Question 44 by geographical region

Grand Total row edited to correct "neutral" rating and "no/low support" rating.

Page 49, Table 19: Responses to question 71 by organization type

Updated to correct rounding errors.

Page 87, Table 30: Responses to question 97 by organization type

Organization counts corrected for Company, Energy Supplier/Retailer or Utility, GHG Accounting/Reporting Program, Industry Group, and Non-profit organization/NGO.

Page 96, Table 33: Responses to question 113 by organization type

Updated to correct rounding errors.

Figures

Page 62, Figure 12: Responses to question 156

Row "Tools and infrastructure are improving rapidly, making broad exemptions increasingly unnecessary" was corrected.

Page 79, Figure 15: Responses to question 86

Minor adjustments to correct rounding errors.

Page 84, Figure 16: Responses to question 95

Erroneous row "Proposed deliverability requirements do not improve alignment with GHG Protocol Principles" was removed.

Row "Metering/activity data reporting configured to match deliverable market boundaries" corrected to 66 percent.

Page 85, Figure 17: Responses to question 88

Pie chart updated to correct errors.

Page 118, Figure 23: Responses to question 172

Adjusted for correct denominator.

Page 122, Figure 24: Responses to question 174

Adjusted for correct denominator.

Count of respondents**Page 41: count of respondents to question 61**

Corrected to 331

Page 46: count of respondents to question 67-68

Corrected to 474

Page 63: count of respondents to questions 163-165

Corrected to 482

Page 92: count of respondents to question 106-110

Corrected to 358

Page 122: count of respondents to question 174, 175, 179 and 180

Corrected to 297