



This document reproduces Center for Resource Solutions' (CRS's) responses to the Greenhouse Gas Protocol's first Scope 2 Public Consultation Survey in January 2026. The survey sought stakeholder input on proposed updates and clarifications to the Scope 2 Guidance (2015), which addresses the accounting and reporting of greenhouse gas (GHG) emissions from purchased or acquired electricity, steam, heat and cooling. The responses presented here reflect CRS's perspectives and recommendations as submitted during the consultation process and are shared publicly to support transparency and informed discussion.

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

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

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

CRS does not support the proposed revision to define scope 2 as including only emissions from electricity generation processes that are “physically connected” to a reporter's value chain. Imposing a physical-connection requirement would fundamentally alter scope 2 accounting and directly conflict with the conceptual basis of the market-based method.

Requiring physical connection is inappropriate for grid electricity because electricity purchased from specific generators is not physically delivered to specific users; it cannot be physically tracked or directed on a shared network. Market-based accounting exists precisely because physical delivery of specified power is unknowable. In the U.S., both contracts for power and [energy attribute certificates/renewable energy certificates] EACs/RECs are recognized, legal mechanisms for conveying the emissions attributes of generation—neither of which represent physical delivery. Proposed hourly matching or “deliverability” requirements likewise do not create a physical connection to the value chain.

Where attributes are conveyed contractually, the attributes of the electricity physically serving a load may be contractually allocated to someone else. In this case, physical connection does not determine attribute ownership. This is a foundational feature of attribute accounting in many markets. The

market-based method is designed to reflect this contractual allocation, not the physical mix serving the facility at the time of consumption. For this reason, redefining scope 2 around physical connection is incongruous with the purpose and logic of the market-based method.

The proposed definition may prohibit reporting of any specified power purchases where there is a shared grid, since physical connection of the electricity generation process to the value chain cannot be verified. Under this definition, neither a contract for power nor an EAC/REC purchase could be used for scope 2 reporting, because neither guarantees physical connection. Yet these are the primary mechanisms through which specified generation attributes are conveyed in the U.S. The proposed definition would therefore exclude the very instruments that define attribute ownership in markets that recognize them.

The consultation draft also uses the phrase “purchased and consumed” electricity in describing scope 2. This wording appears in the existing Scope 2 Guidance as shorthand, but it is not used in the formal definitions of scope 2 in either the Corporate Standard or the Scope 2 Guidance, which refer to “purchased” or “purchased or acquired” electricity. The latter explicitly accommodates circumstances where a company may not directly purchase electricity (e.g., tenants). “Purchased and consumed” is not equivalent and should not be adopted implicitly or in parallel with a physical-connection requirement.

CRS Recommendation: Retain the existing scope 2 definition, which correctly reflects attributional accounting for purchased or acquired electricity, and avoid introducing “physical connection” language that misrepresents the nature of specified electricity transactions and attribute ownership. A definition tied to physical delivery is incompatible with electricity markets in which attributes are allocated contractually, not physically, and would undermine the established market-based method.

19. Please provide any feedback on the proposal to clarify the [location-based method] LBM definition to reflect scope 2 emissions from generation physically delivered at the times and locations of consumption, with imports included in LBM emission factor calculations where applicable?

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

CRS does not support the proposed revision to define the LBM as reflecting emissions from “generation physically delivered” at the times and locations of consumption, or to specify in the definition that imported electricity should be included in LBM emission factor calculations. Even using the most precise available data, the LBM does not necessarily represent the generation that is physically delivered on a shared grid. The current definition in section 4.1.1 of the 2015 Scope 2 Guidance is more accurate: “The location-based method is based on statistical emissions information and electricity output aggregated and averaged within a defined geographic boundary and during a defined time

period.” This existing language already captures the concepts of time and location without implying that physical delivery can be known or measured.

As a rule, elements of the data hierarchy should not be embedded in the definition itself. The definition should remain a description of what the method measures, rather than a prescriptive list of data inputs. The data hierarchy exists to allow flexibility in the types of data that can be used based on data availability. However, if the data hierarchy allows for different categories of generation to be included—such as generation occurring within, or imported into, a defined geographic boundary—this can be reflected in a minor change to the definition without “explicitly recommending” particular data sources or duplicating the role of the data hierarchy. For example, the current definition could be slightly modified as follows: “The location-based method is based on statistical emissions information and electricity output representing generation occurring within, or imported into, a defined geographic boundary, aggregated and averaged within that boundary over a defined time period.” This accurately describes the scope of generation that may be included in the aggregated emissions and output data under the location-based method while preserving the function of the data hierarchy.

In short, the definition of the LBM should describe the aggregation of statistical or modeled emissions and generation data within a defined geographic and temporal boundary. The data hierarchy should determine whether and how imported electricity is included, consistent with the existing structure and intent of the Scope 2 Guidance.

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

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

CRS does not agree with the proposed changes to the MBM definition that would incorporate temporal correlation and deliverability requirements when matching contractual instruments to consumption. We disagree with these requirements, and our detailed feedback on the proposed MBM changes is provided in Section 5. Here, we emphasize that the GHG Protocol should retain the existing basis of the MBM.

The market-based method is essential for credible scope 2 accounting because it reflects how specified electricity is bought and sold in liberalized electricity markets, including the U.S. In these markets, contractually purchased attributes of electricity generation define specified electricity transactions (i.e., from specific electricity suppliers or generators). Contracts for power and Energy Attribute Certificates (EACs/RECs) are the accepted and legally recognized mechanisms for conveying generation attributes

where physical delivery cannot indicate source and where source is defined contractually. The existing MBM definition appropriately reflects this reality by quantifying scope 2 emissions from contractually purchased electricity via contractual instruments.

The MBM captures supplier and buyer behavior, linking emissions outcomes directly to consumer purchasing decisions. This enables companies to take responsibility for their procurement choices and ensures that consumer behavior can drive clean energy deployment. Without the market-based method, scope 2 accounting would not reflect real-world electricity purchasing mechanisms and would be misaligned with systems where contractual specification forms the basis of electricity transactions.

For these reasons, we support retaining the existing basis of the MBM, and we do not support changes to the definition that embed temporal correlation or deliverability requirements, as explained further in our responses to Section 5.

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

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

CRS has concerns about the proposed purposes of the LBM as presented in the consultation document. The proposed purposes differ from those described in earlier Discussion Papers presented to the Technical Working Group, creating confusion about the intended function of the LBM and how it relates to its existing definition in the Scope 2 Guidance.

For example, the first purpose listed in the Discussion Paper—“estimating and reflecting emissions based on grid data”—is consistent with the current Scope 2 Guidance, which describes the LBM as “providing a method of estimating emissions based on statistical emissions information and electricity output aggregated and averaged within a defined geographic area and time period” (Section 4.1.1, p. 25–26). In contrast, the consultation document replaces this with a different concept: “allocating emissions based on a reporter’s contribution to aggregate physical demand for grid electricity.” These statements do not convey the same purpose.

The shift in framing creates misalignment between the proposed purposes, the existing definition, the proposed LBM definition update, and the actual function of the LBM as a statistical, averaged representation of emissions from generation occurring within, or imported into, a local or operational grid geographic boundary.

CRS recommends that the purposes of the LBM remain aligned with the definition in the Scope 2 Guidance and the formulation in the prior Discussion Papers.

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

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

CRS has concerns about the proposed purposes of the MBM as outlined in the consultation document. Several of the proposed purposes differ from those presented in earlier Discussion Papers, and these changes shift the emphasis of the MBM in ways that are not well explained or fully aligned with its foundational role in scope 2 accounting.

First, the proposed purposes for the MBM in the consultation document include “estimating” emissions, while the proposed LBM purposes use the term “allocating” emissions. This terminology appears reversed. Estimating is more appropriate for the LBM, which relies on aggregated grid and modeling data to estimate an average emissions intensity for a defined geographic area. Allocating, by contrast, is more appropriate for the MBM, which uses contractual instruments to allocate the attributes of specific generation resources to specific customers. The MBM does not estimate generation source; it assigns emissions attributes based on contractual specification. The purposes should reflect this distinction.

Second, the first proposed purpose for the MBM is to estimate (or rather allocate) emissions “based on physical and contractual relationships to electricity supply.” The words “physical and” have been added to the purpose derived from the existing Scope 2 Guidance, which in the Discussion Papers was described simply as “estimating emissions based on contractual relationships to electricity supply.” This was supported by a relevant excerpt from the Guidance: “[The MBM] allocates emission attributes based on a company’s contractual relationships, or what a company is paying for” (Scope 2 Guidance, section 2.4, p. 19). We assume that “physical and” was added to align with proposed changes to the definitions of scope 2 and the MBM, and to correspond with proposed physical deliverability requirements—changes with which we disagree, as explained in our responses to Questions 18 and 20. This purpose should therefore remain “allocating emissions based on contractual relationships to electricity supply.”

Third, the consultation document replaces the purpose “enabling decision-making for consumers and companies,” which appeared in earlier Discussion Papers, with “enabling abatement planning and reduction target-setting.” This is a substantial change with no explanation. Reflecting consumer and buyer choice is one of the defining purposes of the MBM and is central to its value in corporate GHG accounting. The MBM links emissions directly to procurement decisions, enabling companies to influence their suppliers and shift demand toward lower-emitting resources—an effect the location-based method cannot provide. Because reflecting purchasing behavior is core to the MBM’s role, it should not be omitted from the stated purposes.

Finally, CRS reiterates its strong support for the MBM and its existing basis. The MBM is essential for representing how specified electricity is transacted in markets such as the U.S., where contractual instruments define the attributes of purchased electricity. Its purposes should clearly articulate this role and remain aligned with its established function in scope 2 accounting.

Section 4. Location-based method

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

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

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

4

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

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

a

25. Please provide comments regarding your reasons for support.

CRS generally supports the proposed updates to the location-based emission factor hierarchy and agrees with the objective of identifying the most precise location-based emission factor available according to spatial boundaries, temporal granularity, and emission factor type.

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

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

j

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

CRS recommends clearly defining “imports and exports” within the new “consumption-based” emission factors that are meant to approximate the mix of resources used to deliver power to consumers and are prioritized above production-based factors.

The consultation document does not define what constitutes imports and exports for these consumption-based factors. To maintain the distinction between the LBM and the MBM, these imports and exports should reflect only physical or modeled net transfers of energy across boundaries—i.e., interchange data representing the net of injections and withdrawals at each interface—not contractual imports and exports conveyed through power contracts or EACs/RECs. Including contractual imports and exports in the LBM would blur the separation between the LBM and MBM and undermine the purpose of the MBM in capturing contractual specification. Clarifying that “imports and exports” in

consumption-based emission factors exclude contractual imports and exports, on the other hand, would preserve the intended boundaries and ensure consistent application of the two methods.

--No answer to questions 28-32--

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

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

a

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

CRS does not support incorporating the proposed MBM “deliverable” market boundaries into the LBM emission factor hierarchy. As noted in our responses to questions in Section 5, we disagree with the proposed deliverability requirements within the MBM. We have instead recommended the use of sectoral market boundaries for the MBM, which are appropriate for contractual attribute allocation but distinct from the spatial boundaries used in the LBM.

In general, the location-based and market-based methods may appropriately use different spatial boundaries because they rely on fundamentally different assumptions about how generation attributes are conveyed to load. The LBM assumes that attributes (emissions) are tied to physical power and therefore reflects generation occurring within, or imported into, a defined grid region in which the reporting entity is physically consuming electricity, using aggregated statistical data. The MBM, by contrast, reflects attributes conveyed through contractual mechanisms, separately from the grid. Because the two methods serve different purposes and rely on different mechanisms of attribute conveyance, it is reasonable—and expected—that their spatial boundaries differ.

For these reasons, we do not support replacing or supplementing the spatial boundaries in the LBM hierarchy with the deliverability boundaries proposed for the MBM.

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

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

5

36. Please provide your reasons for support, if any. Select all options that apply.

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

b, d, e, and h

--No answer to questions 37-43--

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

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

5

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

- a. Improves accuracy and scientific integrity of LBM results
- b. Strengthens transparency and public verifiability
- c. Enhances comparability across reporters and frameworks
- d. Better reflects grid operation in time and space, reduces misallocation
- e. Enables emission changes from storage and demand-flexibility to be reflected more accurately
- f. Prioritizes consumption-based factors that include imports/exports
- g. Aligns emission factor precision with available activity data

- h. Aligns positively with mandatory or voluntary reporting requirements in your region
- i. Enables use of load profiles when hourly activity data are unavailable
- j. Provides a common, accessible baseline for inventories
- k. Supports phased improvement as data availability expands
- l. Improves decision-usefulness for external disclosures
- m. Other (please provide)

g

--No answer to questions 46-60--

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

CRS generally agrees with the proposal that when a company has access to hourly location-based emission factors but only has monthly or annual electricity consumption data, it should not be required to calculate location-based emissions on an hourly basis. We agree that reporters should instead use the most precise location-based emission factors accessible to them in the hierarchy that can be “matched to the same precision of their available activity data.”

Because hourly reporting and the use of load profiles are not mandatory, it is reasonable to permit organizations that wish to utilize more temporally precise emission factors to apply load profiles to approximate hourly activity data. However, it is important to note that using load profiles increases precision but decreases accuracy relative to using actual consumption data. Actual (primary) load data aligned with measured generation data is inherently more accurate than estimated hourly load derived from profiles. In this case, less granular matching based on actual consumption data is more accurate because it reflects measured activities rather than estimated ones. The effect of the optional use of load profiles on comparability, relevance, and usefulness of LBM inventories depends on a variety of factors.

Overall, allowing optional use of load profiles in the LBM is reasonable, and the LBM data hierarchy remains appropriately structured, with more temporally precise emission factors—when based on actual data—at the top.

--No answer to questions 62-68--

Section 5. Market-based method

69. If you have operations or experience in the US, please select your preferred deliverable market boundary for the US. (Please see the table Proposed methodologies for demonstrating deliverability above for references to these options):

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

No answer.

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

- a. 5 GWhs
- b. 10 GWhs
- c. 50 GWhs

c

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

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

1

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

No answer.

73. Please provide comments regarding your reasons for support.

No answer

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

- a. More information is necessary to understand how investments not matched on an hourly basis will be accounted for and reported via the framework under development by the Actions & Market Instrument TWG

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

c, d, g, h, and i

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

CRS does not support the proposed requirement for hourly matching of contractual instruments under the MBM. Our concerns center on (1) the misplacement of temporal-matching requirements within the quality criteria; (2) that requiring hourly matching before hourly data and REC systems are ready would force reliance on estimated or incomplete datasets; and (3) that the proposal results in over-reliance on load profile information, prioritizing secondary data over primary data. These represent a significant departure from historical norms and best practices in GHG accounting and warrants explicit attention. CRS recommends instead addressing temporal precision in the market-based method's data hierarchy, which would result in hourly matching being recommended where possible, while maintaining annual and monthly matching as valid forms of matching when hourly data are not available. Guidance on hourly matching can and should be revisited in future update cycles once data systems are mature and globally accessible.

Hourly or annual matching does not change the physical electricity customers use. Power at any hour comes from the local grid mix, regardless of renewable or other specified purchases. Because all specified power use is contractual—not physical—hourly matching increases the *precision* of market-based reporting by narrowing the temporal alignment between generation and consumption, but it does not increase *accuracy*. Differences between annual, monthly, and hourly matching reflect different accounting timeframes, not inaccuracies. Therefore, disqualifying legitimate monthly or

annual purchases is unjustified. Data precision should be addressed in the data hierarchy and accuracy in the quality criteria; accordingly, temporal matching should be addressed in the data hierarchy.

Hourly generation data are not widely available, and very few EAC/REC tracking systems yet support hourly tracking in the U.S. or globally. These systems are necessary for credible and transparent tracking of all generation attributes. Requiring hourly matching before these systems are available at scale would force reliance on estimated or incomplete data, or default to residual mix or fossil-only emission factors. This would exclude valid annual or monthly renewable purchases and result in inconsistent and inaccurate disclosure, and also less relevant and useful disclosure, where renewable and other specified purchases would not be counted and renewable generation would be underreported.

While hourly matching can sharpen renewable energy demand signals during hours of scarcity, its system-wide environmental benefits are highly context dependent. Introducing this, or any, requirement that makes purchasing more complex or expensive risks reducing overall participation. Addressing temporal precision in the data hierarchy would avoid reliance on exemptions, legacy clauses, or estimation frameworks, and would naturally allow for evolution as hourly systems mature.

Like in the location-based method, reporters should have to use the most precise market-based emission factor *accessible* to them that match the precision of available activity data. This approach enables improvement overtime without invalidating existing legitimate procurement mechanisms. CRS's Clean Energy Tracking Collaborative is currently working with U.S. tracking systems and market stakeholders to develop recommendations and guidance for enhanced tracking system functionality that supports hourly energy attribute certificates (hourly EACs) and related data flows to increase the availability of hourly generation data in the future.

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

CRS has concerns about the use of load profiles to approximate hourly activity data under the market-based method. Using load profiles introduces additional estimation and secondary data into market-based reporting, reducing accuracy relative to current practice. This is especially true given that the market-based method is designed to reflect specified, contractually purchased electricity rather than modeled or inferred customer behavior. Requiring estimation methods for the purpose of deriving approximate hourly activity data is not appropriate for the MBM and only makes activity data less accurate when other less granular and more accurate data sources (e.g. monthly/annual) exist.

Under CRS's recommended approach (discussed in question 75), hourly matching would be encouraged but not required, and temporal precision would be addressed in the market-based hierarchy, consistent with the location-based method. This would eliminate the need for using load profiles. However, to the extent that the proposed hourly temporal updates are adopted, CRS recommends that load profile only be used in the data hierarchy as an estimation method where *no* better data is available.

--No answer to questions 77-82--

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

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

1

84. Please provide reasons of support, if any (select all that apply).

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

No answer.

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

No answer.

86. Please provide reasons of concern or why you are not supporting, if any (select all that apply)

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

a, b, c, f, and h

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

(a) The proposed requirement that RECs be sourced from generators whose electricity is “physically deliverable” to the reporting entity’s grid region is not more accurate than the current criterion limiting the procurement boundary to the same attribute market, and the physical proximity of generation to the reporting entity within the same attribute market is not functionally relevant information to the reporting entity’s emissions. While neither of these principles would be improved by the transition to physical deliverability, the requirements would dramatically shrink REC markets and undermine voluntary clean energy procurement.

Specified power is not physically delivered through the grid. In the U.S. and other markets, emissions attributes are tracked contractually—this is the foundation of REC systems and the principle that the

market-based method is designed to reflect. Because attributes are delivered outside the grid, REC market boundaries can legitimately extend beyond a single grid interconnection.

Market-based accounting and physical deliverability are conceptually incompatible. Restricting contractual allocation to physically deliverable regions conflates the logic of the location-based and market-based methods—where attributes are tied to energy on the grid in the location-based method and attributes are conveyed in contractual instruments outside of the grid in the market-based method. These are two distinct approaches to attribute allocation that cannot be true simultaneously. Outside of the location-based method, physical deliverability may be appropriate for policies like the hydrogen production tax credit in the U.S., which aims to mitigate *induced emissions from new load*, but not for market-based scope 2 accounting.

(b) In the U.S., introducing physical deliverability would restrict RECs and other attribute transactions to smaller regions, excluding legitimate purchases and discouraging participation. Vibrant voluntary markets depend on geographic flexibility. National and multi-regional attribute markets allow investment where renewable generation is most efficient and cost-effective, driving faster decarbonization.

Limiting claims to physically deliverable regions could create substantial regulatory, geographic, and logistical barriers to renewable energy procurement, especially for companies in vertically integrated utility territories.

(c) All contractual instruments support credible market-based scope 2 claims equally and unbundled EACs are not less valid than EACs conveyed through a PPA. However, PPAs can be impactful tools in voluntary clean energy markets. They are challenging to execute and often require that a customer have sufficient aggregated load to justify a direct contract for a developer. Physical deliverability requirements limit customer's ability to aggregate their load across operations and close the door to PPAs with new generation that may not otherwise be built.

(f) In the U.S., most EAC compliance markets recognize procurement from outside of their state. Although the GHG Protocol has not yet selected a definition of physical deliverability in the U.S., none of the provided options will align with all US-based compliance programs. These transactions will continue to follow the requirements set by state regulators, which will create additional data challenges for standard supply service and utility green tariff. Customers of compliance entities will be receiving more renewable energy than they will be able to claim under the GHG Protocol's proposal.

(h) CRS recommends defining market boundaries based on electricity sectors, not grid interconnections. Electricity sectors typically align with national boundaries, or multinational regions with active trade and shared governance (e.g., the E.U.). This approach maintains integrity, consistency,

and scalability while avoiding arbitrary geographic limitations. See our response to question 89 for more information.

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

- a. The US Environmental Protection Agency's Emissions & Generation Resource Integrated Database (eGRID)
- b. DOE Needs Study Regions (45V)
- c. Wholesale Market/Balancing Authority
- d. Unsure
- e. Other

e

89. If you selected options (a), (b) or (c) for question 88 please explain why this option best upholds the principle of deliverability and balances integrity, impact, and feasibility of the MBM. Please also provide comments on the relative feasibility challenges of applying the other options.

CRS disagrees with the proposed requirement for physical deliverability for the MBM and does not support any of the market boundaries listed in question 88. Rather, we recommend that market boundaries be based on defined electricity sectors—not because that would best represent “physical deliverability,” but because that would be most appropriate for the MBM. As explained in our response to question 87, use of specified power is contractual, not physical, and “physical deliverability” conflicts with the integrity of market-based accounting. Exclusive claims to generation attributes are made through EACs and the legal/regulatory systems that issue and enforce them. Adding geographic proxies for physical distinctiveness does not improve the scientific validity of attribute claims.

Instead, market boundaries for the MBM should be defined based on the geographic boundaries of the electricity sector(s) in which the reporting entity's electricity-consuming operations are located, inclusive of linked electricity sectors, where adjacent countries share physical electricity infrastructure and trade energy and attributes across borders.

An electricity sector encompasses the entire system of physical infrastructure, markets, and regulatory frameworks involved in the generation, transmission, distribution, and consumption of electricity. The decision-making authority that establishes the boundaries of an electricity sector is vested in national governments such that electricity sectors follow national borders. Where national governments share electricity regulatory frameworks, markets, and physical infrastructure, multinational electricity sectors

are established. National and multinational sector boundaries already support credible trading (e.g., U.S.–Canada, intra-EU) with established tracking systems and clear legal parameters.

Sector-scale boundaries have enabled renewables to scale by allowing development where resources are best and costs lowest, increasing investment and total renewable output. Broader, credible purchasing options also increase voluntary demand. Because renewables are not always available near load, allowing sector-wide transactions supports project finance and new clean generation. Beyond these clear advantages to the sectoral market boundary approach, there are significant feasibility concerns associated with the proposed options.

First, under the proposed physical deliverability approaches, many buyers—especially those with limited resources or in low-renewable regions—would be unable to reflect procurements in scope 2. Utilities providing standard supply service or green tariffs would also be asked to communicate to their customers that they could not credibly claim the emissions attributes of the electricity they are purchasing. Such messaging risks contradicting mandated customer disclosures as defined by power source or environmental disclosure labels.

Second, in some regions of the U.S., unbundled energy attribute certificates from generation resources located in other regions are the only voluntary clean energy procurement options available to buyers. Narrowing market boundaries for these companies would not merely challenge their ability to mitigate their scope 2 emissions, it would eliminate it.

Finally, in the U.S., residual mix data is not yet widely available. While there are efforts to better reflect these unallocated EACs, these are best facilitated by EAC tracking systems, which are not likely to further sub-divide unallocated generation information to meet definitions of regions set by external parties. If residual mix data cannot be credibly provided at least at the selected region level, reporters who cannot procure and lack accepted SSS data, or who have procured from different regions, will have to report that they are purchasing fossil electricity. This will lead to unequivocally inaccurate disclosure and an underreporting of renewable generation.

--No answer to questions 90-96--

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

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

4

98. Please provide reasons of support, if any (select all that apply).

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

b

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

CRS supports the proposal to clarify rules for allocating and claiming SSS, and feels the proposal strengthens the integrity, consistency, and transparency of market-based accounting. It also helps ensure customers receive the clean energy attributes they pay for and reduces the risk of double counting across entities.

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

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

b, d, and f

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

CRS has concerns with the statement that “any claim of SSS must be supported by credible data that meets the scope 2 quality criteria” (page 26) As written, this would require SSS to meet the proposed hourly matching and deliverability requirements. CRS does not support these proposed requirements and recommends against requiring hourly matching or physical deliverability for any purchased electricity reported in the MBM, including SSS. However, challenges associated with hourly data availability and tracking can be expected to be even more significant for non-voluntary purchases and data, especially where they may conflict with existing disclosure programs and regulations for electricity suppliers. See our response to question 87.

CRS is also concerned that the definition and treatment of SSS remain unclear. SSS must be narrowly and clearly defined to include only generation for which customers have a financial or regulatory claim to the attributes. Critically, SSS claims must be based on attribute ownership, including the retirement of contractual instruments (e.g., EACs) where they exist for a given resource in a given area. Without this requirement, there is a significant risk of double counting. Generation regulated under 'source-based' policies—i.e., policies that regulate what is generated but not what is consumed or delivered—or under financial arrangements that do not convey attribute ownership should not qualify as SSS. Allowing such resources to be deemed SSS while their EACs are sold to voluntary buyers would create a significant risk of double counting and undermine valid voluntary claims.

Furthermore, customers should be able to determine their SSS allocation using appropriate information already provided by electricity suppliers, such as certain power source disclosure data. These disclosures should qualify as a supplier allocation under the proposal even when not explicitly labeled as SSS. This approach is practical, consistent with existing reporting practices, and avoids unnecessary dependence on centralized registries in regions where supplier allocation is already feasible.

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

No response.

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

Any generation for which the associated EACs or attributes have been otherwise transacted to specific parties should not be allocated as SSS. In addition, while this is not explicitly included in outlined examples, any compliance credit toward a mandatory procurement program that may be awarded based on alternative compliance payments or mechanisms or multipliers instead of certificate or other verified delivery, should not be allocated to customers as a part of SSS.

--No answer to questions 104-105--

106. Allocation of SSS requires either suppliers allocating their SSS resources to customers or the development of a credible centralized registry or third-party registries that track SSS in order for organizations to claim their share. Is it acceptable that some reporters may be unable to claim SSS

prior to a credible centralized registry or third-party registries being established? If not, how else might SSS be allocated in the absence of a registry?

It is unfortunate, but acceptable that some reporters may be unable to claim SSS due to a lack of SSS data or data that meets quality criteria. The same is generally true with respect to access to high quality voluntary purchase instruments and options. Data improvements will be critical to address these inequities, and clearer standards and guidance around SSS should support these improvements. At the same time, CRS does not believe it is acceptable for reporters to be unable to claim SSS solely because a centralized registry or third-party registry has not yet been established. These registries, while helpful, are not required for credible SSS claims and reporting. Customers can receive credible SSS data from suppliers and other authoritative sources, even where it is not explicitly labeled as such. As we say in our response to question 101, customers should be able to determine their SSS allocations using appropriate information provided by their electricity suppliers, which should qualify as “suppliers allocating their SSS resources” under the proposal, even where not explicitly identified or labeled as SSS allocations (e.g., power source disclosure information). This enables customers to claim attributes they pay for through regulated or policy-mandated mechanisms and prevents delays in SSS recognition. A centralized registry may eventually improve consistency, but SSS allocation should not be contingent on its creation.

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

- a. Yes
- b. No
- c. Unsure

b

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

CRS does not support a default option to automatically designate resources as SSS when electricity providers do not supply SSS data and no credible third-party registry exists. Default qualification would materially increase the risk of double counting, particularly in markets where specified generation and associated attributes can be sold to voluntary purchasers. Automatically deeming resources as SSS without confirming attribute ownership or retirement could result in the same attributes being claimed by multiple buyers.

109. If you answered “yes” to question 107, which of the following criteria, if any, would you support as a method of designating resources as SSS. (select all that apply)

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

No answer.

110. If you answered ‘Other’ please provide additional feedback.

No answer.

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

CRS recognizes that SSS will not be uniformly available across all regions and agrees that this may result in some differences in comparability across reporters. This is acceptable and consistent with long-standing practice where variation in market structures, data availability, and procurement options has always influenced the level of detail reporters can provide under the market-based method. The role of the market-based method is to reflect contractual and regulatory realities, not to force uniformity where market conditions or data access differ.

112. Please provide any additional feedback on SSS.

CRS emphasizes that SSS claims must be grounded in clear attribute ownership. This includes the retirement of contractual instruments on behalf of customers wherever such instruments exist. Without a requirement for attribute ownership and retirement, SSS claims risk overlapping with voluntary market claims, creating significant double counting concerns. As previously stated, the definition of SSS must be narrowly and clearly scoped to include only generation for which customers have a financial or regulatory claim to the attributes. For example, the existence of source-based policies (i.e., regulating what is generated rather than what is consumed or delivered) or financial arrangements that do not convey attribute ownership should not impact SSS. Allocating such generation to SSS while their EACs are sold into voluntary markets would undermine the integrity of both SSS and voluntary markets.

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

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

4

114. Please provide reasons of support, if any (select all that apply).

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

b, c, e, and f

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

CRS supports the updated definition of residual mix emission factors because it improves the accuracy, integrity, and transparency of market-based reporting. Eliminating the use of simple grid-average emission factors under the market-based method is appropriate. When electricity consumption is not matched with SSS allocations or voluntary contractual instruments, reporters should use a residual mix. Where no residual mix is available, they should use a fossil-only factor to avoid overstating renewable consumption and prevent implicit double counting of attributes. Using an accurate residual mix clarifies which generation has been claimed through contractual instruments and which remains unclaimed. This strengthens the integrity of the market-based method and improves comparability across regions.

116. Please provide reasons of concern or why you are not supporting, if any (select all that apply).

- a. Requiring a residual mix emission factor to be calculated per market boundary will further reduce availability of residual mix emission factors
- b. Allowing reporters to use different temporal precision of residual mix emission factors within a deliverable market boundary will negatively impact comparability

- c. Market boundaries used for calculating a residual mix emission factor should be defined as the geographic boundaries of electricity sectors, which align with national, and under certain circumstances, multinational boundaries
- d. Markets should self-determine if Standard Supply Service is included in a residual mix emission factor
- e. Increases administrative complexity of calculating a residual mix emission factor
- f. Other (please explain)

f

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

CRS notes two concerns with the proposed definition of the residual mix.

- 1) The definition functions correctly only if SSS allocations themselves are based on clear attribute ownership and retirement of contractual instruments where they exist. If SSS were to include resources whose attributes are sold into voluntary markets or not retired on behalf of customers, the residual mix would no longer accurately represent unclaimed generation. This would undermine the integrity of both the residual mix and market-based accounting by introducing double counting risks.
- 2) As currently drafted, the residual mix is not subject to the same hourly granularity requirements as SSS and other voluntary procurement instruments. CRS maintains that quality criteria for the residual mix should be aligned with those applied across all elements of the market-based method. CRS therefore requests clarification on the rationale for exempting the residual mix from hourly matching requirements. While CRS acknowledges that hourly residual mix factors are not widely available and may not be reasonably obtainable at this time, CRS notes that the unavailability of such data raises broader questions about the feasibility of requiring hourly matching across the market-based method as a whole. Applying hourly matching requirements inconsistently across components of the market-based method risks creating further confusion regarding the order of operations and may undermine overall comparability and credibility.

118. In the regions/markets you follow, how close are certificate systems/registries/data providers to being able to publish residual mix emission factors within deliverable market boundaries? (For the US, please answer in regard to your preferred deliverable market boundary as outlined in Section 5.3.1 question 69.)

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

a. 3

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

In the U.S., residual mixes are published for the New England Power Pool (NEPOOL) by the NEPOOL-Generation Information System (GIS), for the PJM Interconnection by the PJM-Generation Attribute Tracking System (GATS), and for New York by the New York Generation Attribute Tracking System (NYGATS), which are all-generation certificate tracking systems that calculate residual mix based on certificates tracked in their systems. The California Independent System Operator (CAISO) and the Southwest Power Pool (SPP) may also soon provide residual mix information for their new western regional wholesale market offerings—the Extended Day Ahead Market (EDAM) and Markets+, respectively. As planned, these will reflect market transactions, but as of now, not all EAC transactions, and neither will they be coordinated with the Western Renewable Energy Generation Information System (WREGIS). As a result, these CAISO and SPP market residual mixes may double count renewable energy—i.e., they will not be truly “residual.” Other U.S. regions remain in earlier stages of readiness, with limited or no residual mix data availability.

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

- a. <12 months
- b. 12-24 months
- c. 24-36 months
- d. >36 months
- e. unknown

c

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

- a. <12 months
- b. 12-24 months
- c. 24-36 months
- d. >36 months
- e. unknown

b

122. Please describe the basis for your assessment:

- a. Public roadmap/docs

- b. Operator/vendor commitments
- c. Pilot/production use
- d. Professional judgment
- e. Other (specify)

d

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

Residual mix readiness varies significantly across regions. In the U.S., most certificate tracking systems do not track all generation. Federal agencies positioned to create residual mix databases are unlikely to prioritize this in the near term. Therefore, a transition to all-generation tracking and the production of consistent residual mix data within the next 36 months is also unlikely. Without all-generation certificate tracking, some ISOs/RTOs could publish residual mixes, but most are unlikely to do so. Non-RTO regions lack the comprehensive transaction data needed for accurate residual mix calculation. CRS has produced residual mix calculation guidance for the U.S., for a variety of different use cases, including consumer-level emissions reporting (available at: <https://resource-solutions.org/document/030624/>). This could be used to develop regional residual mixes for the U.S. CRS is also running the Clean Energy Tracking Collaborative, which may focus on all-generation tracking and residual mixes in the future. In summary, North America has foundational infrastructure to support consistent and credible residual mix information nationwide, but at this point in time, there is no single source for residual mix information nationally and inconsistency and insufficient alignment regionally. This is in contrast with both Europe, on the one hand, which has established registries and residual mix methodologies, and Asia-Pacific and Latin America, on the other, which remain in early stages, with incomplete or inconsistent data infrastructure and coverage.

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

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

5

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

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

d. Other (please specify)

a, b, and c

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

CRS supports the requirement to apply a fossil-based emission factor when no contractual instrument or residual mix is available. Eliminating simple grid-average emission factors under the market-based method is appropriate, as grid averages can overstate renewable use and create implicit double counting. Using a residual mix, or where one is unavailable, a fossil-only factor, ensures that market-based scope 2 figures reflect exclusive attribute ownership. This improves the accuracy and scientific integrity of market-based inventories and creates an incentive for the development and publication of more robust residual mix emission factor data.

--No answer to questions 127-129--

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

- a. Scale of 1 (insufficient) – 5 (highly sufficient)
- b. No basis to assess

a. 3

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

CRS reiterates that load profiles would not be necessary if the GHG Protocol adopts the recommendations we have provided elsewhere in this consultation. We do not support the proposed hourly matching and physical deliverability requirements, and it is these proposed requirements that create the need for organizations to derive hourly load data from profiles in the first place. If these proposals are not adopted, load profiles would only be used optionally, not as a requirement for market-based reporting.

We generally support the optional use of load profiles as a way for organizations to align their load data with more temporally precise generation data if they choose to report using hourly emission factors. However, where load profiles are used, they must incorporate site-specific information and reflect the actual shape of consumption at the facility, rather than relying on flat or generic profiles that further

reduce accuracy. This should only be permitted—not required—because using load profiles necessarily reduces the accuracy of scope 2 reporting. Actual (primary) metered load data aligned with measured generation data is inherently more accurate than estimated hourly load derived from profiles. In many cases, less granular matching based on actual consumption data is more accurate, because it reflects measured activities rather than estimates.

For these reasons, widespread reliance on load profiles is not a desirable long-term solution for market-based accounting. The key to enabling accurate, scalable hourly matching would not be broader use of load profiles, but rather broader availability of actual hourly load data from utilities and grid operators. Load profiles should therefore be viewed as a temporary or interim tool, not a primary mechanism for enabling market-based reporting at scale.

In summary, load profiles can be allowed on an optional basis, but implementation at scale should focus on expanding access to actual hourly consumption data, which is essential for maintaining accuracy and integrity in the MBM.

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

CRS agrees that phased implementation is necessary and supports the use of a transition period for any revisions to the Scope 2 Standard. A phased approach will allow organizations, utilities, data providers, and service platforms sufficient time to adapt systems and develop the tools needed to implement new requirements without compromising accuracy or comparability.

Phased implementation becomes especially important if the larger proposed changes—such as hourly matching and physical deliverability requirements—are adopted, as these would require substantial new data availability, new contractual practices, and significant changes to existing reporting systems. A transition period would be essential to avoid unintended misreporting and to ensure that market-based inventories remain credible during the transition.

At the same time, adoption of the recommendations we have offered throughout this consultation would reduce the burden and complexity of implementation. Our proposed approach provides stronger continuity with the existing Scope 2 standard, meaning phased implementation would still be helpful but less critical to maintaining accuracy and integrity in the MBM.

Overall, we support phased implementation and view it as an important tool to ensure feasibility, comparability, and high-quality reporting under any revised Scope 2 requirements.

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

No answer.

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

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

a

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

CRS does not believe the proposed MBM revisions—principally the hourly matching and physical deliverability requirements—would produce a meaningful improvement in decision-useful information for investors relative to the additional cost and complexity they introduce.

The MBM is already the scope 2 result most relevant to investors because it reflects companies' actual choices and market activity related to electricity supply. As the current Scope 2 Guidance notes, the MBM "reflects emissions from electricity that companies have purposefully chosen (or their lack of choice)." Investors seek consistent, standardized information about a company's climate-related risks, responsibilities, and actions—particularly its procurement decisions, market transactions, and engagement with clean energy supply. The existing MBM already provides this by capturing how suppliers and purchasers interact contractually and by enabling companies to demonstrate accountability for their purchasing behavior.

Proposed hourly matching and physical deliverability requirements do not meaningfully enhance the relevance of MBM information for these investor uses. They do not inherently increase a company's impact on emissions or clean energy supply, nor do they materially change the insights investors gain about a company's procurement strategy. In many contexts, hourly matching only marginally sharpens

demand signals and does not reliably lead to system-wide emissions reductions. At the same time, these requirements would substantially increase reporting burden, data needs, and compliance costs.

More importantly, the proposed changes may reduce the options, flexibility, and participation available to companies in clean energy markets, which could diminish—not enhance—the usefulness of the MBM to investors seeking to understand how companies exercise choice and influence clean energy deployment.

For these reasons, CRS does not expect the proposed MBM revisions to improve the decision-usefulness of information for investors and assurance providers in a way that justifies the incremental cost and complexity they would impose.

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

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

a

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

CRS does not expect the proposed market-based revisions to produce a meaningful improvement in comparability relative to the significant cost and complexity they introduce. Companies are still likely to use a wide variety of procurement approaches—including short-term unbundled RECs from existing projects and long-term investments in new projects. In addition, the proposed hourly matching and physical deliverability requirements, combined with the lack of widespread supplier-specific and residual-mix data, could result in many companies reporting the fossil-only mix. While this outcome would significantly decrease accuracy, it may *appear* to increase comparability across reporters—though this is not a desirable or meaningful trade-off. Moreover, the continued reliance on estimation techniques (such as modeled hourly load or deliverability approximations)—which can vary by party and are not always transparent—would counteract any perceived gains in comparability and, in many cases, further reduce it. Taken together, the proposed revisions would add cost and complexity without materially improving the comparability of market-based scope 2 information for investors and assurance providers.

138. For questions 134-137, please provide the basis for your assessment (select all that apply).

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

c

--No answer to questions 139-145--

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

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

c

147. If you answer “yes” or “somewhat” to question 146, which of the following rationale captures your views (select all that apply).

- a. Allows for continued investment in electricity projects outside of my deliverable market boundary
- b. Provides a complementary metric to quantify actions such as energy storage or demand response
- c. Causes less disruption of existing electricity procurement practices
- d. Provides additional relevant information for users of GHG data
- e. Provides additional approaches for target setting
- f. Other (please specify)

No answer.

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

No answer.

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

While CRS generally supports calculation of a separate metric outside of scope 2 to quantify the emissions impact of electricity-related actions (see our responses to the Consequential Electricity-Sector Emissions Impacts survey), this would not change our view of the proposed market-based revisions because our concerns relate to the integrity of scope 2 accounting itself and the effects these revisions could have on clean energy markets (see our responses to questions 75 and 87). To the extent that market participation, procurement decisions, and investment signals are driven by scope 2 reporting rather than by separate impact metrics, the proposed changes would still undermine the effectiveness and usability of the market-based method. For this reason, introducing a parallel metric does not address the core issues we have identified with the proposed scope 2 revisions.

150. If you answered “I do not support the development of impact metrics outside the scope 2 inventory” to question 146, which of the following rationale captures your views (select all that apply).

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

No answer.

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

No answer.

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

The following two revisions would preserve scientific and accounting integrity, support real climate impact, and remain feasible to implement at scale: (1) defining market boundaries based on electricity sectors rather than grid interconnections, and (2) recommending—but not requiring—hourly matching, supported by a temporal data hierarchy.

1. Sectoral Market Boundaries

Integrity: Electricity on a shared grid cannot be physically directed or tracked to specific users, and electricity does not carry the emissions attributes of its generation. In markets such as the U.S., specified electricity transactions and the conveyance of attributes are determined contractually, not physically. Instruments such as RECs exist precisely because physical delivery of specified electricity is impossible. Aligning boundaries with electricity sectors (e.g., national markets or multinational regions with active trade and shared governance) reflects the reality of attribute markets and avoids conflating the logic of the location-based and market-based methods.

Impact: Restricting procurement to physically “deliverable” subregions would shrink markets, limit access to cost-effective clean energy, and slow renewable deployment. It would also undermine procurement models—such as VPPAs—that have driven large-scale clean energy growth. Sectoral boundaries maintain broader markets, enabling buyers to support development where it is most efficient and impactful.

Feasibility: There is no consensus definition of “physical deliverability,” and attempts to localize procurement face regulatory, geographic, and operational barriers, especially in vertically integrated regions. Sectoral boundaries avoid these challenges and provide a scalable, clear, and implementable structure.

2. Hourly Matching as an Option, Not a Requirement

Integrity: Hourly matching increases temporal precision but does not make market-based scope 2 accounting more “accurate,” because neither hourly nor annual matching reflects physical power delivery. Specified use is contractual. Hourly matching is therefore a refinement within the same attributional system. Making hourly matching mandatory before data systems are ready would undermine integrity by forcing reporters to rely on estimated or incomplete data and by excluding legitimate monthly and annual clean energy purchases.

Impact: Hourly matching can sharpen demand signals in hours of scarcity and help identify needs for new clean generation or storage. However, the system-wide benefits are highly context-dependent and vary by region, assumptions, and modeling choices. Annual matching has already demonstrated substantial climate impact and contributed meaningfully to renewable deployment. Requirements that increase cost and reduce procurement flexibility may reduce participation in clean energy markets.

Feasibility: Most EAC registries and tracking systems are not yet capable of hourly tracking. Implementing an hourly requirement would force reporters to depend on estimation techniques,

inhibiting accuracy and comparability. A temporal data hierarchy—parallel to the LBM—can accommodate hourly, monthly, or annual matching as available.

In summary, defining sectoral market boundaries and establishing a temporal data hierarchy for the MBM provide the most appropriate balance of integrity, impact, and feasibility. This approach preserves the integrity of the attributional scope 2 inventory, maintains the effectiveness and cost-efficiency of clean energy markets, and enables multiple matching frameworks to coexist as consumer options. It avoids the risks associated with mandating localized or hourly matching while supporting continued progress toward grid decarbonization.

Section 6. Exemptions – hourly matching exemption threshold

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

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

5

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

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

b, c, and d

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

CRS emphasizes that hourly matching should be recommended, not required. Any increase in temporal precision beyond the current vintage-related quality criterion should be addressed through the data hierarchy—as is done in the location-based method—rather than by creating a new or revised quality criterion that would exclude otherwise legitimate monthly or annual purchases. See our response to question 75. If hourly matching is recommended rather than mandated, exemptions will be unnecessary.

However, if the hourly matching proposal is adopted, CRS strongly supports exemptions (hence, our responses to questions 153 and 154). In this case, exemptions must be sufficiently robust to ensure that reporters who continue to align with the GHG Protocol are not compelled to rely on estimated or incomplete data, or to default to residual-mix or fossil-only emission factors due to gaps in data availability or market infrastructure.

We also strongly oppose adoption of “physical deliverability” requirements. Such requirements do not improve the integrity of market-based accounting, yet they would significantly contract REC markets and undermine voluntary clean energy procurement. If physical deliverability is also retained, the standard should allow broad exemptions where EACs are sourced from generators within the same electricity sector, which typically correspond to national boundaries or multinational regions with active electricity trade and shared governance. This approach preserves accounting integrity, consistency, and scalability while avoiding arbitrary geographic constraints. See our responses to questions 87 and 152.

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

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

No answer.

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

No answer.

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

In most cases, an hourly matching requirement cannot yet be implemented with reliable primary data. Forcing universal compliance today risks disincentivizing valid climate action, ultimately trading accuracy and impact only to gain reporting precision.

Market and data systems are not universally ready for hourly matching. Requiring hourly matching before robust hourly data, tracking, and REC/EAC systems are widely available would force many reporters to use estimated or incomplete information, or to default to residual-mix or fossil-only emission factors. That outcome would exclude valid monthly or annual renewable purchases from being recognized solely because the infrastructure to verify them hourly is lacking.

A requirement for hourly matching risks prioritizing secondary over primary data. The proposal would push reporters toward heavy reliance on load profiles and other secondary data to approximate hourly consumption, even when high-quality primary procurement data exists for annual or monthly instruments. This inversion of the data hierarchy is a significant departure from established GHG accounting norms and best practice, and it warrants explicit exemptions to prevent methodological backsliding.

Accounting changes do not change physical electricity use. Whether matching is done hourly or annually, customers physically consume the local grid mix in every hour. Renewable or other specified purchases are contractual claims, not a physical routing of electrons. Hourly matching therefore tightens the temporal alignment of claims and consumption (providing greater precision), but it does not make market-based results “more accurate.” Differences between hourly and annual outcomes reflect different accounting timeframes, not errors that must be corrected through mandatory hourly compliance.

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

- a. Threshold [enter number] GWh per [deliverable market boundary/site/other]
- b. Preferred option selected in section 5.3.1, question 70

a. 400 GWh per site

Explanation:

If hourly matching is required, CRS recommends that exemptions be based on site-level annual electricity consumption, not company-wide load. The appropriate threshold should approximate the scale at which an individual facility's consumption becomes large enough to trigger system-level planning or interconnection considerations.

For this reason, CRS recommends a site-level hourly matching threshold equivalent to approximately 50 MW of peak demand, which corresponds to roughly 350–450 GWh per year depending on load factor. Facilities below this size generally do not require detailed system impact studies, dedicated infrastructure, or transmission-level service, neither are they generally likely have access to the data systems needed to comply.

Using a site-level threshold ensures that only the very largest facilities—those whose operations are comparable in scale to generators and whose consumption is material to grid dynamics—would be required to implement hourly matching. Other facilities can elect hourly matching on an optional basis. This approach avoids penalizing small sites and better aligns with the scale at which hourly matching could meaningfully influence system behavior. It also maintains feasibility: the vast majority of facilities do not have access to hourly metering, data systems, or contract structures necessary for hourly matching, and requiring it would impose disproportionate burden with limited benefit.

In summary, a site-level exemption threshold of ~400 GWh/year (~50 MW peak load) appropriately targets only those facilities whose consumption is of sufficient magnitude to justify mandatory hourly matching, while preserving feasibility and avoiding unnecessary cost and complexity for the majority of electricity customers.

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

a. Rationale (<300 words)

Our proposed threshold—400 GWh per year at the site level (equivalent to roughly 50 MW of peak demand)—better fits the intent of the exemption because it targets only the very largest electricity-consuming facilities. Individual loads of this magnitude may trigger transmission-level interconnection studies, system impact analyses, or dedicated network service, reflecting that they are significant actors in grid operations. A threshold grounded in established system-planning practice therefore preserves the integrity and intended impact of the MBM by requiring hourly matching only where consumption is sufficiently large and where data systems are more likely to exist.

In contrast, exemption thresholds of 5, 10, or even 50 GWh per year are far below the scale at which a facility's consumption materially affects grid dispatch, and would require hourly matching for thousands of small and medium sites that do not have access to hourly load data or the contractual and metering infrastructure needed to comply. Applying hourly requirements at these lower levels

would significantly increase administrative and cost burdens while offering little improvement in environmental integrity, and may result in negative impacts to demand for carbon-free energy.

A site-level threshold of ~400 GWh/year also reduces burden for companies with many small facilities, which would otherwise face higher cumulative reporting complexity than a company with a single large facility with equivalent total load. This threshold therefore more effectively balances feasibility, burden reduction, and MBM integrity, ensuring that hourly matching is required only for facilities where it is most relevant and practical.

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

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

No answer.

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

No answer.

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

- a. Option 1
- b. Option 2
- c. Option 3
- d. Option 4
- e. None of the above (please explain)

e

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

CRS selected “None of the Above” and instead proposes that any site with less than 400 GWh of electricity consumption per year may use a monthly or annual accounting interval for Criteria 4 for those sites, in accordance with the contractual instruments temporal data hierarchy. This proposal balances integrity, impact and feasibility by focusing hourly matching requirements on the largest facilities that may reasonably be expected to impact grid reliability based on the scale of their electricity demand. Owners of these facilities have the greatest opportunity to access credible hourly data and invest in on-site, or grid connected voluntary renewable energy projects. This proposal also provides a pathway for smaller facilities to voluntarily hourly match to demonstrate leadership while reported data prioritizes accuracy and integrity over precision supported by secondary information like estimated load profiles.

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

No answer.

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

- a. Time-limited (i.e. phased out over time)
- b. Ongoing
- c. Unsure
- d. Do not support exemptions

b

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

No answer.

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

No answer.

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

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

a

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

Any exemption included in the final guidance must permit full conformance with the standard. If using an authorized exemption renders a company nonconformant or only “partially conformant,” the exemption becomes effectively punitive and self-defeating. Such an approach would discourage participation in market-based accounting and clean energy procurement, undermining the market’s growth and environmental goals. It would also create an unnecessary barrier—especially for smaller or newer procurers—by reducing incentives to engage at all. Exemptions should function as legitimate pathways within the standard, not as carve-outs that strip companies of conformance.

Section 7. Legacy clause considerations

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

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

5

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

- a. Reflects a reasonable balance of integrity, impact and feasibility as existing long-term contracts reflect significant financial and operational commitments to energy resources
- b. Encourages organizations with legacy contracts to continue to engage in voluntary procurement using an annual procurement approach

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

b, c, d, and e

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

CRS emphasizes that requiring hourly matching and physical deliverability under the market-based method could materially reduce the volume and impact of corporate procurement. If hourly matching is recommended rather than mandated, and if our recommendation for sectoral market boundaries is accepted, then a legacy clause will be unnecessary. However, if proposed updates to Quality Criteria 4 and 5 are adopted, a well-designed legacy clause will be critical to maintaining fairness, market stability, and reporting integrity while avoiding unintended consequences that could shrink REC markets and slow clean energy development (hence our responses to questions 171 and 172).

Annual matching continues to support valid market-based claims. Companies acting in good faith to mitigate their market-based scope 2 should not be left with credible stranded assets solely to facilitate a change to accounting practices. The introduction of this new objective without a reasonable transition opportunity will dissuade companies from voluntary clean energy procurement altogether. Reduced market demand makes procurement more difficult and further reduced the capacity for the market infrastructure investments necessary for hourly transactions. If the GHG Protocol does not protect the investments it has motivated, companies will be less likely to participate in the future.

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

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

No answer.

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

No answer.

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

- a. Contract signed prior to implementation date of the Scope 2 Standard (post phase-in period)
- b. Contract signed prior to publication date of the Scope 2 Standard
- c. Other (please explain)
- d. Do not support Legacy Clause

a

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

No answer.

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

- a. Eligibility by instrument type and term: Define which instruments qualify (e.g., PPAs, utility green tariffs, supplier-specific contracts, unbundled certificates) and any minimum original term, including treatment or eligibility of perpetual or undefined-term contracts.
- b. Duration of legacy treatment: Specify the time limit or maximum remaining term after which updated Scope 2 Quality Criteria apply to all contracts.
- c. Allocation rules to prevent legacy contractual instruments being used to target the most challenging hours or locations.
- d. Transfers and resale requirements when legacy instruments are sold or transferred to third parties.
- e. Extensions and amendments: Define how contract extensions or material amendments after the cutoff affect eligibility (e.g., whether the extended or modified portion is treated as a new contract subject to updated Scope 2 Quality Criteria).
- f. Disclosures: Scope and granularity of disclosures for any use of a Legacy Clause (for example separate presentation of MBM results with and without legacy-treated instruments, percentage of contracts covered, share of load covered, expected end date of legacy status)

- g. Pre-effective-date guardrails: Approaches to discourage contracting intended solely to expand legacy eligibility before the cutoff (for example, disclosure of execution date and negotiation timeline).
- h. Global equity: Approaches to address regional concentration of eligible contracts and related equity considerations.

(a, b) All contracts for any instrument type or term length should be eligible for the legacy clause for the full duration of the contract's term to support integrity of these transactions, the impact on new clean generation that such contracts can facilitate and avoid additional implementation challenges associated with robust review of private contracts. A failure to recognize full contract terms under the GHG Protocol would risk significantly reducing financing opportunities for new clean generation that are often necessary for project completion or to maintain existing clean generation.

(c) Allocation of legacy contractual instruments should not be limited to any hours or locations, beyond what is currently eligible under to 2015 Scope 2 Guidance to maintain feasibility and the integrity of the legacy clause itself.

(d) No transaction requirements should be set for legacy contracts. Resale is a common practice today both by marketers and where EAC arbitrage is used to enable new renewable energy project investments.

(e) Extensions, amendments, or other modifications to a legacy instrument contract should not affect that contract's eligibility for legacy status. The continued or modified portion of such a contract should not be treated as a new contract subject to updated Scope 2 Quality Criteria, provided the underlying contractual relationship remains in effect. Determinations of whether a contract is the same or new should be governed by applicable commercial, regulatory, or legal standards, not redefined by the GHG Protocol.

(f) Transparency should be provided regarding the portion of the market-based scope 2 total that is matched on either an annual, quarterly, monthly, or hourly basis. Additional disclosure regarding the use of a legacy instrument contract is not necessary.

(g) No pre-effective-date guardrails should be set.

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

Scale of 1 (No material implications) – 5 (Significant implications)

No answer.

180. Please briefly explain your rating: identify what the potential impacts could be and the main factors driving the impact (for example, comparability, transparency etc). Some stakeholders have outlined a preference for transition tools other than a legacy clause as a way to balance continuity and comparability for the scope 2 MBM.

No answer.

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

- a. Legacy clause: allow existing contracts that meet the current Scope 2 Quality Criteria to continue to be reported under the MBM as described in your response to Question 178.
- b. Uniform effective date: rather than using a legacy clause, instead apply the updated quality criteria to all contractual instruments from a specific date following a defined lead time. The lead time would seek to facilitate companies having time to consider changes to existing contracts. Contracts executed before the effective date could continue to be used during the lead time, with separate, clearly labelled disclosure identifying results affected by those contracts.
- c. Other (please specify)

a

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

No answer.

183. If a uniform effective date was applied rather than a legacy clause, what would be an appropriate date for organizations to be required to apply the updated quality criteria to all contractual instruments? (enter in 20XX).

2035