Draft for TWG discussion

GREENHOUSE GAS PROTOCOL

Scope 2 Technical Working Group Meeting

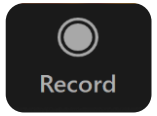
Meeting #12

April 16, 2025

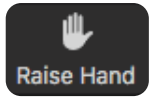
WORLD RESOURCES INSTITUTE

World Business Council for Sustainable Development

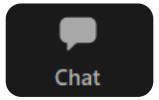
GREENHOUSE GAS PROTOCOL



This meeting is recorded.



Please use the Raise Hand function to speak during the call.



You can also use the chat function in the main control.

Recording, slides, and meeting minutes will be shared after the call.

Be mindful of sharing group discussion time; keep comments as succinct as possible.

Agenda

1. **Housekeeping, goals for meeting and timeline check-in**
2. **Consequential subgroup updates**
3. **Review process for consolidated proposal draft**
4. **Issue 6: Purposes/uses and claims (for LB and MB)**
5. **Next steps**

GREENHOUSE GAS PROTOCOL

Goals of today's meeting

GREENHOUSE GAS PROTOCOL

GREENHOUSE GAS PROTOCOL

Goals of today's meeting

1. Timeline check-in

2. Bring awareness on the Consequential Subgroup Part 1 Deliverable and ensure full TWG has an understanding of its elements

3. Ensure TWG knows how to provide feedback on location- and market-based method consolidated drafts

4. Purposes/Uses and Claims of location- and market-based methods:
   a. Clarify alignment between Decision Making Criteria and purposes/uses and claims
   b. Discuss if updated purposes/uses and claims accurately reflect the proposed updated location- and market-based methods

Timeline check-in: Plan for final Phase 1 meetings through June

	Apr 16	Apr 30	May 2	May 14	Jun 4	June 11	Jun 25
Meeting #	**12**	**13**		**14**	**15**		**16**
Topics planned	**Market-based method, Issue 6, consolidated proposal review process, and updates from consequential subgroup** •Issue 6: Purposes, Uses and Claims •Overview of consolidated draft review process •Consequential subgroup updates	**Market-based method consolidated draft discussion** •Deep dive on unresolved issues •Feasibility discussion	TWG submit comments on Secretariat – provided consolidated draft	**Location- and market-based method consolidated draft discussion** •Deep dive on unresolved issues across both methods •Polling on feedback to inform final edits	**Review of ISB feedback and finalization of location- and market-based recommendations** •Deep dive on unresolved issues across both methods	Secretariat share final version of consolidated draft including any amendments or options	**Voting on Phase 1 Final Recommendation for ISB**

Looking Ahead: Supporting Robust Accounting & Reporting that Enables Ambitious Climate Action

Inventory revisions consolidation

- Advancing updates to LBM and MBM through a consolidated reporting framework grounded in the Corporate Standard.
- April–May will focus on clarifying and refining the draft proposal. With alignment to the DMCH, TWG polling, and early ISB input, this is a critical window to shape a clear, implementable outcome.

Consequential metrics development

- Subgroup is developing a complementary framework to quantify electric sector emissions impacts using a consequential methodology.
- TWG and ISB feedback shows interest in this direction; continued engagement is building a credible path forward.

The Vision: A Coherent Reporting Framework That Reflects Diverse Needs

- Reporting Structure Option D (TWG meeting #2) enables well-defined roles for both inventory methods (LBM + MBM) and consequential approaches.
- We're committed to facilitating a model GHG reporting structure that:
  - Upholds inventory integrity and alignment with core GHG Protocol principles
  - Enables transparent reporting of consequential impacts where applicable
  - Supports actionable insights across diverse users and decisions

GREENHOUSE GAS PROTOCOL

Reporting Structure Option D Continues to Offer the Most Aligned Structure for a Coherent, Credible Reporting Framework

		Option A: Maintain dual reporting requirement w/ potential updates; Optional project accounting	Option B: Report only market-based w/ potential updates; Optional project accounting	Option C: Report only location-based w/ potential updates; Recommend or require project accounting	Option D: Maintain dual reporting requirement w/ potential updates; Recommended or require project accounting
Scientific integrity		NA	NA	NA	NA
GHG accounting and reporting principles *Corporate Standard* & *Project Accounting Protocol*	**Relevance**	Mixed / Yes	Mixed / No	Mixed / No	Yes
	Completeness	Mixed / Yes	Mixed / Yes	Yes	Yes
	Consistency	Mixed	Mixed	Mixed / Yes	Yes
	Transparency	Mixed / Yes	Mixed / Yes	Yes	Yes
	Accuracy	NA	NA	NA	NA
	Comparability	Mixed / Yes	Mixed	Mixed	Mixed / Yes
Supports decision making that drives ambitious global climate action		Mixed / Yes	Mixed	Mixed	Yes
Supports programs based on GHG Protocol and uses of GHG data		Mixed / Yes	No	No	Yes
Feasibility to implement		Yes	Yes	Mixed / Yes	Mixed / Yes

WORLD RESOURCES INSTITUTE

World Business Council for Sustainable Development

Update on consequential subgroup deliverable

GREENHOUSE GAS PROTOCOL

GREENHOUSE GAS PROTOCOL

Update on consequential subgroup deliverable

- Three proposals have been submitted for methods to quantify emissions impacts of electricity sector actions
- With the majority of support thus far, Proposals 1 and 2 will be the focus of the subgroup's part 2 work

Proposal 1: Marginal Emissions Impact	Proposal 2: Ad-hoc Consequential Guidance	Proposal 3: Routine Consequential Accounting
• Induced consumption from load, using MERs • Avoided emissions from generation projects (additionality required) using MERs • Net impact (induced – avoided)	• Applicable to all projects that have a high likelihood of producing negative secondary effects • Accounting framework closely resembles traditional project accounting	• Emissions induced or avoided from changes in electricity demand • Emissions induced or avoided from changes in electricity procurement • Impact score, relative to the highest possible global impact

GREENHOUSE GAS PROTOCOL

We are here

Subgroup meeting schedule

	Q1 2025			Q2 2025				
	Feb 6	**Mar 6**	**Mar 20**	**Apr 10**	**May 1**	**May 22**	**Jun 12**	**TBD**
Meeting #	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Topic	**Scope of work and purposes**	**First draft of Part 1 deliverable**	**Part 1 deliverable continued**	**Discuss Part 2 deliverable plan**	**Continued refinement of Part 2 deliverable**			**Final deliverables**
Meeting Content	- Address timeline and deliverables - Brainstorm purposes - Review next steps	- Review subgroup submissions on reporting structure - Discuss and prep revisions	- Review updated part 1 deliverables and discuss	- Final discussion on part 1 deliverable - Review plan for part 2 deliverable	- Calculation methods - Boundaries - Additionality - Purposes and uses of data	- Temporal and geographic granularity - Emission factors - Feasibility	- Examples and case studies - Cross-sector applicability	- If needed final discussion/approval of part 2 deliverable
TWG Tasks		Develop draft emissions impact reporting structure, to be discussed at meeting #2	Review updated proposals.	Review final proposal drafts.	Continued development of drafts of part 2 deliverable	Continued development of drafts of part 2 deliverable	Continued development of drafts of part 2 deliverable	Prepare final part 2 deliverable

GREENHOUSE GAS PROTOCOL

Key issues identified for subgroup part 2 deliverable

- **Issue 1:** Calculation method and approach
- **Issue 2:** Boundaries
- **Issue 3:** Treatment/definition of additionality
- **Issue 4:** Purposes and uses of data

→ **May 1st meeting**

- **Issue 5:** Temporal and geographic granularity
- **Issue 6:** Emission factors and data types
- **Issue 7:** Feasibility

→ **May 22nd meeting**

- **Issue 8:** Worked examples and case studies
- **Issue 9:** Cross-sector applicability

→ **June 12th meeting**

Review process for consolidated proposal drafts

GREENHOUSE GAS PROTOCOL

GREENHOUSE GAS PROTOCOL

Instructions for providing feedback to the consolidated drafts

<u>Step 1</u>: Review what is posted now for understanding

<u>Step 2</u>: Starting on Monday, April 21st, follow the below instructions to provide edits on the Secretariat-consolidated draft:

Add comments directly into the document using the 'New Comment' tool ( ) over the text in question.

1. Within each comment, **be sure to reference the line numbers** of the text in question for clarity. If it is a table, reference the table number.
2. Comments should be **concise and solution-oriented.**
   - If you identify a concern, **suggest alternative language** or a potential solution. The goal is to improve clarity or alignment—not to revisit settled foundational issues.
   - Solutions should **build on the directional polling results** from the TWG and ISB
   - Solutions should **align with the GHG Protocol Decision-Making Criteria and Hierarchy**
3. **For more detailed proposals:** If your alternative requires extended text, tables, or rationale, you may submit it separately in a Word or PowerPoint file—please include only the relevant excerpt(s) and a brief explanation of the intent or reasoning.

Comments on the forthcoming Secretariat-consolidated draft are due by May 2nd, 2025.

Issue 6: Purposes/Uses and Claims

GREENHOUSE GAS PROTOCOL

Alignment between DMC and Purposes/Uses

- GHGP decision-making criteria and hierarchy are written to deliver balanced outcomes across Integrity, Impact, and Feasibility of TWG proposed revisions.

- Individual recommendations and revisions made by the TWG may serve to support certain criteria more than others. For example:
  - Hourly matching requirements may be designed primarily to address science and principles **Integrity**.
  - Incorporating hierarchies rather than a single universal requirement can serve **Feasibility**.

- However, the location-based, market-based, and consequential reporting methods must maximize alignment with **all five criteria**. The criteria are ranked hierarchically to aid decision-making when options present trade-offs between criteria.

Alignment between DMC and Purposes/Uses

- Certain proposed edits to location- and market-based method purposes/uses may align more closely with a particular decision-making criteria.

- For example, the following proposed changes to the LBM purposes can reflect aspects of certain criteria more than others:
  - *Setting abatement targets and tracking progress over time* -> **Supports decision-making that drives ambitious global climate action**
  - *Providing a method of estimating emissions based on physically consumed grid electricity* -> **Accounting and reporting principles**
  - *Improving comparability across multiple grid regions over time* -> **Feasibility**

- Methods don't need to choose between accounting accuracy vs. ambitious action - alignment with both is required.

- Taken together, purposes/uses should support alignment with all three criteria.

GREENHOUSE GAS PROTOCOL

Summary of Revisions to the LBM Definition and Purpose/Use

1. Definition

- **Clarified and reinforced**: The LBM continues as a method to quantify scope 2 GHG emissions of electricity delivered in a specific place and time, independent of contractual arrangements.

2. Purpose and Use

- **Revised and clarified**:
  - Allocating emissions based on a reporter's **contribution to aggregate physical demand for grid electricity**.
  - Representing the **average GHG intensity of grid electricity consumed,** regardless of market or contracts.
  - Enabling risk and opportunity assessments related to **reliance on physical grid supply**, where such risks are conveyed through average grid emissions intensity.
  - Supports abatement planning, highlighting high-emissions locations and informing decisions where grid-average data is relevant
- **Reinforced**:
  - LBM is attributional and intended for use in corporate inventories.
  - LBM focuses on the emissions intensity of "consumed" electricity.
  - Supports target-setting based on grid emissions intensity trends (tonnes/MWh), promoting alignment with grid decarbonization.
  - Supports consistent comparability across sectors and grid regions over time, using average emissions as a benchmark.

For discussion: *Do these revised purpose and use statements align with what the updated LBM methodology actually delivers? Are additional edits or clarifications needed to prevent confusion or misapplication?*

Summary of Revisions to the MBM Definition and Purpose/Use

1. **Definition**
   - **Revised and clarified:**
   - The MBM quantifies scope 2 emissions based on specific generation sources contractually linked to the reporter, with time matching and deliverability within a defined market boundary.
   - Aligned with inventory principles: Reflects both physical and contractual relationships, allocating generator emissions to the end-user.

2. **Purpose and Use**
   - **Clarified and expanded:**
   - Enables companies to reflect electricity procured through specific contracts (e.g., PPAs) and certificates.
   - Supports risk and opportunity assessment related to contractual relationships.
   - Creates market signals to influence supply-side decarbonization.
   - Enables facility siting and procurement planning based on access to clean energy procurement.
   - Differentiated target-setting tied to electricity supply attributes.
   - Supports abatement planning based on energy use and supplier relationships.
   - Informs policy engagement by clarifying necessary market conditions for clean procurement.

For discussion: Do these revised definitions and purposes accurately describe what the MBM delivers in a value chain inventory context?

GREENHOUSE GAS PROTOCOL

Summary of revisions to the LBM claims

The specific claims associated with each method are reflected throughout the Scope 2 Guidance and the Revision Guidance Framework.

LBM Claims

- **Unchanged**:
  - LBM does not confer claims to specific generation sources or their attributes.
  - Reporters may state they are served by the regional mix, but not that they are procuring clean energy.

- **Clarified**:
  - LBM is not to be used for avoided emissions or demonstrating specific mitigation outcomes.
  - Emission factors used must reflect delivery through the same grid and matching accounting intervals (e.g., hourly when available).

For discussion: Do these clarified claims boundaries provide sufficient clarity and prevent misinterpretation of LBM outcomes?

GREENHOUSE GAS PROTOCOL

Summary of revisions to the MBM claims

The specific claims associated with each method are reflected throughout the Scope 2 Guidance and Revision Guidance Framework.

MBM Claims

– Clarified:

- MBM allows companies to claim the emissions attributes of electricity sourced from specific generators, provided criteria for time matching and deliverability are met.
- Claims must reflect use and rely on verified and exclusive allocation of energy attributes.

– Strengthened:

- Claims must be exclusive (i.e., no double counting).
- SSS allocations are claimable only up to a pro-rata share; voluntary claims must demonstrate exclusive financial and contractual ownership.
- Optional disclosures encouraged to explain policy context and procurement impact.

For discussion: Do these clarified claims boundaries provide sufficient clarity and prevent misinterpretation of MBM outcomes

GREENHOUSE GAS PROTOCOL

Claims Across Scope 2 Methods

For discussion:

- *What claims are appropriate when reported scope 2 inventory emissions go up or down?*
  - *Should reporters that meet the highest level of data precision in the hierarchy be able to make different claims than reporters that meet lower levels (e.g., hourly vs. annual matching)?*
- *Is additional guidance needed on how LBM or MBM results may or may not be used in public-facing communications or goal setting?*

LBM claims adapted from proposal draft	MBM claims adapted from proposal draft
Reporting entity's scope 2 emissions total change (Δ) due to…	
• Emission factor Δ: Emissions have increased/decreased based on the average GHG intensity of generation that can physically serve the reporter's load within connected grid regions. and/or • Activity data Δ: The reporter's contribution to aggregate physical demand of energy has decreased/increased.	• Emission factor Δ: Emissions have increased/decreased based on contractually purchased generation that can physically serve the reporter's load, or in the absence of purchases, the residual mix. and/or • Activity data Δ: The reporter's contribution to aggregate physical demand of energy has decreased/increased.

Next steps

GREENHOUSE GAS PROTOCOL

GREENHOUSE GAS PROTOCOL

Next steps

- **Next meeting: April 30th**, 09:00 EDT/15:00 CEST/ 23:00 CST

- **Location- & Marked-based revision proposals**:
  - Secretariat will further consolidate drafts and provide one package for feedback by Monday, April 21st.
  - Feedback on Secretariat-provided consolidated draft should be submitted via the shared document comment process through **May 2nd**. Proposals should:
    - Build on directional polling results from the TWG and ISB.
    - Align with the GHG Protocol Decision-Making Criteria and Hierarchy.
  - See slide 14 for instructions.

- **April–May will focus on clarifying and refining the draft proposal.** With alignment to the DMCH, TWG polling, and early ISB input, this is a critical window to shape a clear, implementable outcome.

- **A final recommendation will be prepared for a TWG vote on June 25th**

GREENHOUSE GAS PROTOCOL

Thank you!

If you'd like to stay updated on our work, please subscribe to GHG Protocol's email list to receive our monthly newsletter and other updates.

WORLD RESOURCES INSTITUTE

World Business Council for Sustainable Development

Supplementary slides

GREENHOUSE
GAS PROTOCOL

GREENHOUSE GAS PROTOCOL

Subgroup Proposal 1: Marginal Emissions Impact

Key elements

- **Induced Consumption**[1] Emissions (IC): emissions caused by a company's demand for electricity
  - total consumption * marginal emissions factors (MEF)
- **Avoided Emissions** (AE): an assessment of emissions avoided caused by procured renewable energy
  - total generation * marginal emissions factors (MEF)
- **Net Impact** (absolute and % basis): derivative metric from above
- Supporting Information: basis for additionality/causality claim for AE values; identification of emission rates used, qualitative impact assessment where applicable

Scope of assessment

- All electricity consumption occurring during reporting period
- Electricity generation during reporting period from all active generation and storage projects that meet (TBD) additionality criteria
- Geographic boundary of assessment – global (may do more local procurement)
- Limited to primary electric-sector impacts, including build and operating margin effects; separate calculation of upstream impacts (e.g., scope 3 category 3).

1. Stakeholders use different names for this calculation (e.g., carbon baseline, carbon footprint, or consumption benchmark).

GREENHOUSE GAS PROTOCOL

Subgroup Proposal 2: Ad-hoc Consequential Guidance

This proposal is complementary to the *Routine Marginal Impact* proposal and is NOT an alternative to that proposal.

Elements of the ad hoc consequential emissions statement

- Baseline scenario emissions/removals for Action A
- Intervention scenario emissions/removals for Action A
- System-wide change in emissions/removals caused by Action A
- Etc...

Scope of assessment

- **Recommended or required:** All actions that could have a potentially significant negative impacts (i.e., increase GHG emissions and/or decrease removals) outside the scope 1, 2 and 3 boundary
- **Recommended:** all actions that could have a potentially significant positive impacts on emissions/removals inside or outside the scope 1, 2 and 3 boundary
- **Geographic boundary of assessment:** all significant sources and sinks that change due to the action assessed

Subgroup Proposal 3: Routine Consequential Accounting

Elements of the consequential emissions statement

- Total emissions induced/avoided by changes in electricity demand
- Total emissions induced/avoided by changes in electricity procurement
- Impact Score (performance metric) Consequential emissions intensity (lb/MWh) of all changes, relative to highest possible global impact (displacing generation from dirtiest global generation)

Scope of assessment

- **Scope of projects/activities assessed in the emissions statement**: all changes in demand and procurement relative to some baseline, without identification of individual actions (e.g. difference between reporting year total demand and base year total demand on YoY, rolling average, or baseline year basis)
- **Temporal boundary of assessment**: previous year (retrospective)
- **Geographic boundary of assessment**: global

Addendum

GREENHOUSE GAS PROTOCOL

Phase 1 Scope of Work

1) Clarify objectives and consider any changes to the accounting and reporting requirements of the Scope 2 Standard

a) Clarify the objectives and purpose of the scope 2 location-based and market-based methods

b) Clarify the objectives and purpose of dual reporting of the location-based and market-based methods in scope 2

c) Clarify the relationship between scope 2 inventory accounting and electricity sector project accounting methodologies such as in the GHG Protocol Guidelines for Quantifying GHG Reductions from Grid-Connected Electricity Projects

d) Explore whether alternative or additional scope 2-related metrics should be included in a GHG emissions report

2) Location-based method technical improvements

a) Determine whether to require or recommend more accurate data than currently required, such as hourly data or consumption-based grid average emissions data

b) Clarify how to account for electricity generated and consumed from on-site projects within the reporting company's organizational boundary using the location-based method

c) As needed, evaluate technology-specific implications of location-based method technical improvements

3) Market-based method technical improvements

a) Review the Scope 2 Quality Criteria to consider revisions to the market boundary and vintage criteria requirements

b) Review the Scope 2 Quality Criteria to consider new requirements related to impact, additionality, or resource newness

c) Clarify how to account for carbon-free electricity and renewable power supplied under utility programs or regulatory compliance schemes in the market-based method and what information must be included in a supplier- or utility-specific emission factor

d) Evaluate if updates to the emission factor data hierarchy and order of operations in applying emission factors, energy attribute certificates, etc. are appropriate

e) As needed, evaluate technology-specific implications related to market-based method technical improvements

4) Role of project-based accounting methodology relative to scope 2 accounting

a) Clarify the relationship between scope 2 inventory accounting and electricity sector project accounting methodologies such as the GHG Protocol Guidelines for Quantifying GHG Reductions from Grid-Connected Electricity Projects

b) Determine how and to what extent the quantification and reporting of GHG emission impacts of grid-connected electricity projects using the project method is required by the standard

c) Clarify potential interactions between carbon credits sourced from carbon-free generation facilities and EACs from the same resource

5) Guidance for regional variation in energy markets

a) Consider the development of guidance and additional examples of scope 2 calculations for the location-based and market-based methods for various energy markets globally

b) Create additional guidance for accounting for the purchase and sale of energy associated with "off-grid" energy generating installations, including microgrids

6) Interaction with policies and programs

a) Clarify what each scope 2 accounting method/metric represents and provide directions and recommendations for their use by mandatory disclosure rules, target-setting programs, and for individual reporters