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GHG Protocol Consultations Webinar

Scope 2 and Electricity Sector Consequential Accounting

October 27, 2025

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Record

This meeting is recorded.

The webinar recording and slides will be shared afterward and posted to the website.

Speakers

Alexander Bassen

Chair of Independent Standards Board

David Burns

Director of Governance

Michael Macrae

Director of Scope 2

Chelsea Gillis

Scope 2 Manager

Elliott Engelmann

Scope 2 Manager

Agenda

1. Introduction by Alexander Bassen, ISB Chair
2. Standard Development and Revision Process
3. Scope 2 Inventory Consultation
4. Consequential Accounting Consultation
5. Responding to Additional Common Questions

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Introduction by Alexander Bassen, ISB Chair

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Two Parallel Public Consultations

Scope 2 Inventory Accounting

Focus: Proposed updates to the Scope 2 Guidance (2015)

Goal: Keep scope 2 corporate inventory accounting fit for purpose, including updates to location- and market-based methods.

Electricity-Sector Consequential Methods

Focus: Estimating avoided emissions from electricity-sector actions.

Goal: Gather input on methodologies that assess the broader climate impact of procurement and investment decisions to inform the Actions and Market Instruments (AMI) Working Group in developing sector-agnostic impact metrics for future standards.

Please submit all feedback via the relevant online survey form accessible at https://ghgprotocol.org/ghg-protocol-public-consultations

Feedback shared with GHG Protocol via other channels will not be considered as part of the public consultation process.

Governance & Standard Development and Revision Process

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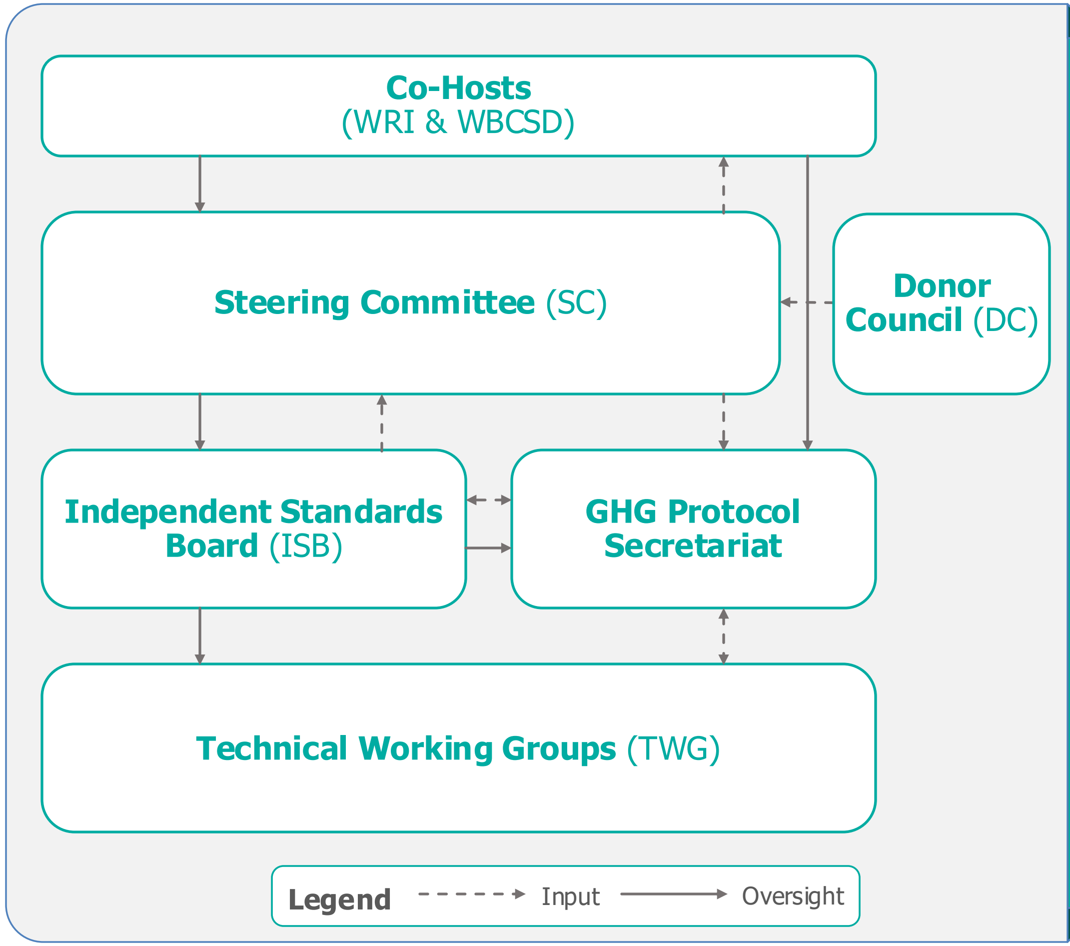
GHG Protocol Multi-Stakeholder Governance Structure



Co-Hosts
- Oversee GHG Protocol, hire and oversee Secretariat staff, approve annual budgets and progress reports, process grants and contracts
- Publish final standards

Steering Committee
- Provide strategic guidance on the goals and direction of the GHG Protocol
- Approves GHG Protocol's mission, vision, strategy, and rules of procedure

Independent Standards Board
- Oversee the standards development process and approve final standards and guidance

GHG Protocol Secretariat
- Execute daily management, support services, and standards development activities for GHG Protocol

Technical Working Groups
- Convene on specific topics or standards/guidance
- Provide expert input on the issues under consideration based on the GHG Protocol decision-making criteria

Donor Council *(actively recruiting)*
- Facilitate two-way communication between GHG Protocol and donors
- Provide input on long-term strategic priorities of GHG Protocol

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Standard Development and Revision Process

Preparation
- Definition of need, objective and scope
- Identification of steps and timeline

Development / Revision Process
- Working groups / consensus making and decision-making
- Consultation and alignment through ISB

Public Consultation
- Publication of proposal
- Public consultation, feedback analysis and summary
- If necessary: recalibration and draft reissued, with summary of changes

Approval
- Decision by ISB

Ratification
- Decision by SC

Publication
- On GHG Protocol website

Post-implementation review / piloting
- *Where applicable*

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Decision-Making Criteria

Purpose: Support the GHG Protocol Secretariat, Technical Working Groups, and Independent Standards Board in evaluating GHG Protocol accounting and reporting approaches to determine which option among a defined set of options best adheres to the criteria and should be pursued.

1A. Scientific integrity → 1B. GHG accounting and reporting principles → 2A. Support ambitious global climate action → 2B. Support programs based on GHG Protocol and uses of GHG data → 3. Feasibility to impliment

Note: This is a summary version. For further details, refer to the full decision-making criteria included in the annex to the Governance Overview, available at https://ghgprotocol.org/our-governance.

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Anonymity and Confidentiality

- All feedback submitted will be made publicly available.

- **Anonymity**
  - Through the survey form, you can indicate if you'd like your personal information redacted from your response.
  - If you request anonymity, your name, organizational affiliation and country will not be included in the public summary of feedback.

- **Confidentiality**
  - In exceptional circumstances where good cause exists, a respondent may request that highly sensitive or confidential information not be made publicly available.
    - This is a narrow exemption only for commercially sensitive data or pre-publication research findings that are submitted in support of or as a supplement to feedback otherwise subject to public disclosure.
    - Must submit request via the form in the consultation materials before submitting feedback through the consultation form by **December 1st** for request to be considered.

Scope 2 Inventory Consultation

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Why We're Updating the Scope 2 Standard

- The world has changed dramatically since the original 2015 Scope 2 Guidance. Electricity markets are now more dynamic, renewable technologies widespread, **and GHG Protocol standards are referenced in regulatory and investor disclosure programs**.

- Several key areas of concern raised by stakeholders about the Scope 2 Guidance (2015) include:
  - Lack of accuracy and comparability of scope 2 values
  - Double counting risks
  - Decision-usefulness of the market-based method

- The proposed updates aim to keep scope 2 inventories **decision-useful** and provide **comparable reporting data for use by target setting programs, regulatory and investor frameworks** while staying grounded in GHG Protocol accounting principles.

Scope 2 is an Inventory Accounting Approach

- Scope 2 addresses indirect emissions associated with purchased and consumed energy.
- Inventory accounting (scopes 1-3) uses an **attributional approach**: it allocates emissions within defined organizational and operational boundaries.
- In contrast, project accounting uses a **consequential approach**, which estimates system-wide impacts relative to a counterfactual baseline.
- While both approaches are informative, keeping them separate is important to maintain credibility, comparability, and alignment with external frameworks.
- Separate from scope 2, consequential impact accounting for the electricity sector is also being evaluated now in its own consultation.

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Structure of Scope 2 Public Consultation

All proposed revisions are open for feedback with each section reflecting a different stage of development:

Section 3 (definitions and purposes):

- **Proposed updates** are described for feedback

Section 4 & 5 (LBM and MBM revisions):

- **Proposed text** is drafted for feedback

Section 6 & 7 (Exemptions, Legacy Clause, and other transition tools):

- Includes **draft options** or framing questions for feedback

The public consultation gives all stakeholders a voice in shaping the next version of Scope 2.

It is not expected that you answer every question. Many questions are opportunities to provide further information on earlier questions if you choose.

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Scope 2 Guidance: Key revisions for public consultation

The structure of the updated scope 2 reporting framework will remain the same, including a continuation of the dual reporting requirement for both the location-based and market-based methods.

Location-based method

- Update to the location-based **emission factor hierarchy**
- Requirement to use the **most precise location-based emission factor** *accessible* for which activity data is also available.
- **Definition of accessible**: publicly available, free to use, from a credible source

Market-based method

- **Hourly matching**: require that all certificates be matched on an hourly basis
- **Deliverability**: require that all certificates are sourced from generation deemed deliverable
- **Standard Supply Service (SSS)**: New guidance and requirement that a reporting entity shall not claim more than its pro-rata share of SSS
- **Updated definition of residual mix** and where no residual mix is available, use of fossil only rates

Implementation measures for feasibility

- **Load profiles** to translate annual or monthly data into hourly data
- **Exemption thresholds** for organizations under a threshold
- **Legacy clause** and other transition tools are being considered for existing investments
- **Phased implementation** rules are being considered to facilitate a smooth transition to new requirements

Public consultation will include questions related to **estimating avoided emissions of electric sector actions using consequential methods** to support the Actions & Market Instruments TWG, which is advancing standardized, sector-agnostic requirements for quantifying and reporting impacts such as avoided emissions.

Proposed revisions to the location-based method for consultation

Update to the location-based emission factor hierarchy based on:

1. Spatial boundaries (local boundary, operational grid boundary, grid-wide or national boundary)
2. Temporal granularity (hourly, monthly, annual)
3. Emission factor type (consumption based, production based)

Definition of accessible: publicly available, free to use, from a credible source

Requirement to use the most precise location-based emission factor *accessible* for which activity data is also available.

Implementation measures for feasibility

Load profiles to translate annual or monthly data into hourly data

Phased implementation rules are being considered to facilitate a smooth transition to new requirements

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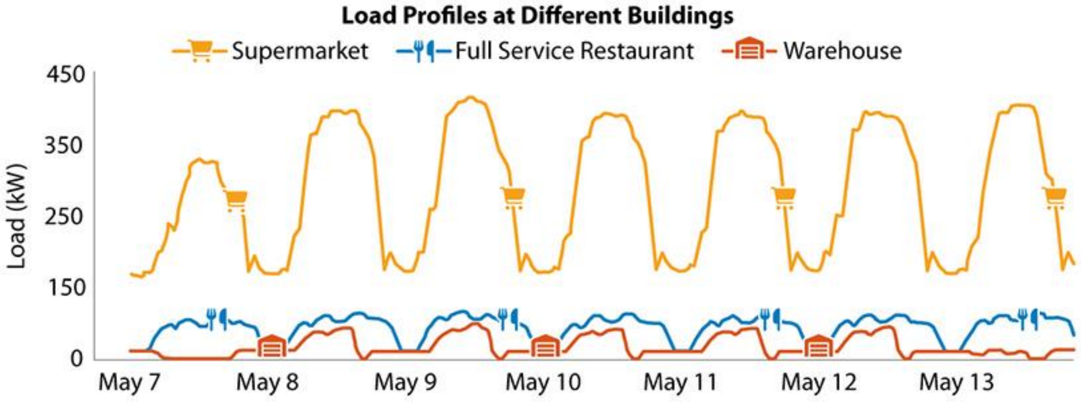
Using load profiles to approximate hourly activity data from annual data

- Load profiles can be used to translate annual, monthly, or daily electricity consumption data into hourly electricity consumption estimates.
- Profiles exist for a variety of applications and geographies, and are publicly available in many cases.
- Enables hourly reporting even if hourly activity data is not available.



Source: NREL

Common questions about location-based method revisions

Do the proposed revisions provide an option for LBM reporting for all organisations?

- Yes, the revised LBM emission factor hierarchy intends to provide an option for LBM reporting for all organisations.
- In your consultation feedback, provide comments on whether you can identify an accessible emission factor in the hierarchy that matches your available activity data and;
- Identify any regional challenges with applying the proposed hierarchy.

Do the proposed revisions mean I have to use more granular emission factors under the LBM?

- Only if they are accessible and you have matching activity data available
- In your consultation feedback, provide comments on any expected administrative and cost impacts of this change and how this change impacts the usefulness of the LBM for decision-making.

How do the proposed revisions describe 'accessible' emission factors in my region?

- Emission factors are considered 'accessible' if they're free, publicly available and from a credible source.
- In your consultation feedback, provide input on how the S2 Standard should define credible sources and examples of credible sources from your region.

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Proposed revisions to market-based method for consultation

- **Hourly matching**: require that all certificates be matched on an hourly basis, except in cases of exemption
- **Deliverability**: require that all certificates are sourced from generation deemed deliverable
- **Standard Supply Service (SSS)**: New guidance and requirement that a reporting entity shall not claim more than its pro-rata share of SSS
- **Updated definition of residual mix** and where no residual mix is available, use of fossil only rates

Implementation measures for feasibility

- **Load profiles** to translate annual or monthly data into hourly data
- **Exemption thresholds** to provide flexibility for for organizations under a threshold
- **Legacy clause** and other transition tools are being considered for existing investments
- **Phased implementation** rules are being considered to facilitate a smooth transition to new requirements

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What is Standard Supply Service?

- Standard Supply Service (SSS) builds on concepts introduced in the original Scope 2 Guidance, to provide global rules for how to account for electricity from **publicly funded, mandated, or shared resources** such as those delivered through default utility service or government clean energy programs.

- The proposed update clarifies that **each reporting entity may account for its fair, proportional share of electricity from Standard Supply Service resources** and that portion shall not be transferred or used to substantiate claims by another reporting entity.

- Example: If 20% of your deliverable power comes from clean energy resources included in SSS you could claim 20% of consumption as zero emissions electricity and would need to procure contractual instruments from clean energy resources for the remaining 80% to claim zero scope 2 emissions under the market-based method

Clean energy resources from **Standard Supply Service** (20% of load) + Clean energy resources from **voluntary procurement** (80% of load) = **Zero scope 2 emissions** (100% of load)

- All voluntary and SSS contractual instruments need to align with the updated scope 2 quality criteria.

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Common questions about market-based method revisions (1/2)

How do I know if I am able to use monthly or annual matching instead of hourly?

- The criteria for exemptions to hourly matching are being developed through consultation.
- In Question 69 & 70, we ask what your preferred **default exemption conditions** are. This default is then applied when you answer other questions related to hourly matching.
- In section 6, we ask for broader input on exemptions so you can provide additional feedback and suggestions.

How can I do hourly matching if the infrastructure isn't ready yet?

- A phased implementation period could allow multiple years between approval and required adoption of the updated GHG Protocol Standard allowing infrastructure to develop.
- Load profiles can be used to enable organizations without access to hourly activity data to approximate hourly data from monthly or annual data.
- In your consultation feedback, identify if the use of load profiles would affect the comparability, relevance, and usefulness of MBM inventories relative to your current practice.

Common questions about market-based method revisions (2/2)

What are the deliverable market boundaries being considered in the revisions?

- The table *proposed methodologies for demonstrating deliverability* outlines proposed deliverable market boundaries for different regions.
- For regions globally, please provide feedback on whether the proposed market boundaries outlined in the table are suitable, and if not suggest alternatives.
- For the US, three options were considered in the TWG, so feedback is also requested on your preferred option.

How are the revisions describing Standard Supply Service in my region?

- The list of region-specific examples of SSS is being developed through consultation
- In your consultation feedback, identify examples from your region that align with the concept of SSS: resources that are publicly funded, mandated by policy, or part of default utility service.

How are existing investments/long term contracts being considered in the revisions?

- The consultation paper outlines the spectrum of feedback received related to a legacy clause and other transition approaches.
- In your consultation feedback, please describe details of your preferred legacy clause design and provide feedback on the alternative approaches for transition.

Consequential Accounting Consultation

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Why we're doing consultation on consequential accounting topics

- Consequential accounting, while valuable, is underutilized in corporate reporting due to complexity, limited guidance, and disconnection from target-setting and disclosure frameworks.

- Stakeholder concern over proposed changes to MBM accounting underscores the need for additional metrics that:
    - Reflect electric-sector decarbonization impacts not captured within a value chain inventory.
    - Recognize contributions from procurement strategies such as non-deliverable PPAs that are currently countable under Scope 2 but may no longer qualify.

- ISB feedback reiterated the value in developing structure for consequential accounting, but raised key questions around additionality, the calculation approach, and the use of marginal emission rates.

What is included in public consultation

1. Background information on consequential/project accounting concepts, avoided emissions quantification, and GHG Protocol's approach to ongoing development of this accounting method through the Actions and Market Instruments working group.

2. Emissions impact formulas: MWhs procurement x MERs = emissions impacts in tonnes of CO2

3. Treatment of additionality

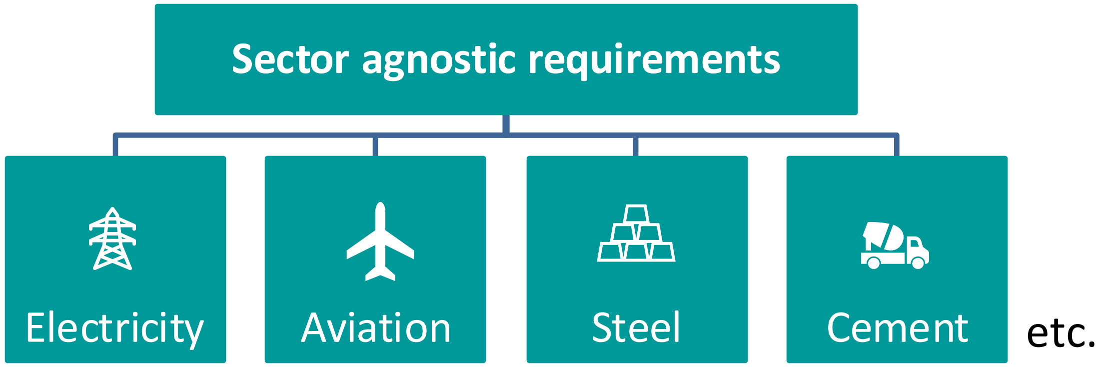
4. Marginal emission rate methodologies

5. Build and operating margin weighting approaches

Guidance for the Consequential Consultation

- This consultation is designed to collect information on electricity sector emissions impacts, which will be incorporated in AMI's ongoing process moving forward.

- Through this consultation the Secretariat is seeking both:
    - Specifics and details around quantifying emissions impacts of projects in the electricity sector.
    - General considerations and best practices for emissions impact quantification that can be applied to any sector or scope of emissions.



Questions about the Consequential Consultation

- **Why are you asking about additionality, doesn't that only apply to offsets?**
  - Additionality has historically been used primarily in carbon offset contexts, but has applications in electricity as well, and has been adopted under some approaches.
  - Quantification of avoided emissions requires demonstration of additionality.

- **How does the Scope 2 Subgroup formula for avoided emissions differ from the GHG Protocol approach in *Guidelines for Quantifying GHG Reductions from Grid-connected Electricity Projects***
  - Both approaches quantify impact using MWhs of generation and marginal emission rates.
  - The Subgroup approach excludes secondary effects, and suggests yearly reporting of impacts.

- **Would VPPAs count under this approach?**
  - Yes, if additionality requirements are met.

Responding to Additional Common Questions

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How were these proposed changes developed?

Does the proposal introduce a requirement to match a residual mix emission factor on an hourly basis?

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Would the proposal require matching Standard Supply Service on an hourly basis?

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Under the proposal, what is the definition of deliverability?

What if my organization does not have hourly meter data?

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Going forward will purchasing RECs count towards reducing my company's scope 2 emissions?

How will existing PPAs and renewable energy contracts be treated under the revised Scope 2 guidance, and how might companies safeguard prior investments?

How will companies procure clean energy if the Scope 2 revisions limit purchases from neighboring or interconnected markets that may offer cleaner or more cost-effective options?

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How will the proposed Scope 2 changes affect costs and administrative burden for companies engaged in voluntary clean-energy procurement?

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