Template for submitting proposals related to GHG Protocol's *Corporate Standard, Scope 2 Guidance, Scope 3 Standard, Scope 3 Calculation Guidance* and market-based accounting approaches

(Optional)

Proposal instructions

GHG Protocol is conducting four related surveys in reference to the following GHG Protocol standards, guidance and topics:

1. Corporate Accounting and Reporting Standard (Revised Edition, 2004) ("Corporate Standard")
2. Scope 2 Guidance (2015)
3. Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2011) ("Scope 3 Standard"), and Technical Guidance for Calculating Scope 3 Emissions, version 1.0, 2013 ("Scope 3 Calculation Guidance")
4. Market-based accounting approaches

The survey is open until March 14, 2023. To fill out the survey, click here.

As part of the survey process, respondents may provide proposals for potential updates, amendments, or additional guidance to the *Corporate Standard, Scope 2 Guidance, Scope 3 Standard, or Scope 3 Calculation Guidance*, by providing the information requested in this template. You may also use this template to provide justification for maintaining a current approach on a given topic.

Submitting proposals is optional. Respondents may submit multiple proposals related to different topics.

Proposals should be as concise as possible while providing the requested information. Submissions that are outside of the template may not be considered. Proposals may be made publicly available.

To submit the proposal, please save this file and fill out the fields below. When you've completed your proposal, please upload the file via this online folder. Please name your file STANDARD_Proposal_AFFILIATION, e.g., *Scope 2_Proposal_WRI*.

Proposal and supporting information

1. **Which standard or guidance does the proposal relate to (Corporate Standard, Scope 2 Guidance, Scope 3 Standard, Scope 3 Calculation Guidance, general/cross-cutting, market-based accounting approaches, or other)? If other, please specify.**

Market-based accounting approaches

2. **What is the GHG accounting and reporting topic the proposal seeks to address?**

Simplifying the typology of 'market-instruments' used in market-based GHG accounting

3. **What is the potential problem(s) or limitation(s) of the current standard or guidance which necessitates this proposal?**

The proposed list of market instruments provided in the Market-based Accounting Approaches Survey Memo create potential confusion around the concepts of project-based crediting, interventions, offsets, and insets. A typology of numerous and nuanced market-based instruments will make comparison of GHG metrics across companies more difficult and less meaningful. The definition of 'market-based' should be revisited and simplified. In essence, when a reporting company 'goes to the market' for GHG mitigation, then a market-based accounting approach can be used to measure and report the GHG mitigation. This is particularly relevant for electricity, where in-depth guidance will continue to be required to accommodate the complexity of electricity markets. However, reporting companies can 'go to market' for GHG mitigation across their entire value chain and outside their value chain. Currently, GHG protocol's definition of market-based accounting is too narrow. Attempting to define specific market instruments and guidance around how to measure and report them creates unnecessary complexity. We propose to expand and simplify the definition of market-based GHG accounting in order to better facilitate reporting on GHG mitigation interventions.

4. **Describe the proposed change(s) or additional guidance.**

A 'market-based' accounting approach should be used to represent GHG mitigation impacts when a reporting company 'goes to market' for lower-carbon products, services, operations, policies, actions, etc. (referred to collectively as 'interventions'). A reporting company can engage in GHG mitigation interventions within their own operations and across the entire value chain. A reporting company can also support GHG mitigation outside their value chain by providing finance to other companies or entities who actively mitigate GHG emissions. Within this framework, a 'GHG mitigation intervention' is any action that reduces current and/or future GHG emissions from a counterfactual baseline. GHG emissions can either be mitigated within a reporting company's value chain or outside it. This leads to a simplified typology for market-based accounting: ***inset interventions*** and ***offset interventions***. More details are provided below.

GHG mitigation Interventions: These encompass any kind of project, action, or decision that can be shown to increase GHG removals or reduce GHG emissions using project-based accounting methods quantified relative to counterfactual baseline scenarios. Project-based accounting standards should include strict quality criteria including additionality, permanence, avoiding leakage, unique issuance and claims, independent verification, and project governance. Interventions can either be within a company's value chain (referred to as insetting) or outside the value chain (offsetting).

Inset Interventions: Inset interventions encompass any project, action, or decision that have quantifiable GHG mitigation impacts within a company's value chain. These interventions will yield GHG reductions against a counterfactual baseline (similar to business-as-usual forecast) for the lifetime of the intervention. Each project should undergo project-based GHG accounting where the annual mitigation impacts are estimated over the lifetime of the intervention. Then during the company's annual GHG inventory effort, the measurable impacts from each intervention should be quantified. These can be represented in the annual inventory as mitigation wedges, reducing emissions from the business-as-usual baseline. Inset interventions require no credits because the company gets to account for the GHG mitigation impacts each year during their annual inventory. Creating certificates or credits for insetting should be prohibited, because the reporting company will inherently take account for the GHG mitigation in their annual inventory. Examples of inset interventions include (but are not limited to)

- Energy efficiency measures, such as improved insulation or appliance upgrades. (scope 1 and/or 2 intervention)
- Expansion of on-site renewable energy generation. (scope 1 and/or 2 intervention)
- A policy decision to reduce business travel and transition towards more virtual meetings (scope 3 intervention - reduction of business travel emissions)
- A procurement decision to purchase supplies/materials/services from a supplier that uses the Product Standard to calculate embodied carbon metrics. When the embodied carbon of the product from the new supplier can be proven to be less than the baseline supplier (which will require robust governance and quality criteria), this represents a scope 3 GHG intervention (category 1, purchased goods & services)
- The transition away from single-use plastics in the supply chain (scope 3 intervention - waste generated)

Offset Interventions: Offset interventions encompass any kind of project, action, or decision that results in GHG mitigation outside the company's value chain. Similar to inset interventions, offset interventions will yield GHG reductions against a counterfactual baseline (similar to business-as-usual forecast) for the lifetime of the intervention. Each project should undergo project-based GHG accounting where the annual mitigation impacts are estimated over the lifetime of the intervention.

At the end of a reporting year, the offset intervention project will report on realized annual GHG mitigation impacts for the previous reporting year. The financier (buyer) of the offset intervention will get a certificate of realized GHG mitigation from the intervention project and report these separately from scope 1, 2, and 3 emissions. The reporting company can use GHG mitigation figures from certificated offset interventions to report on 'net GHG emissions' for the reporting year. Examples of offset interventions include

- High-quality carbon offsets. The quantification and certification of GHG removals or GHG reductions must follow strict quality criteria
- Green bonds or sustainability bonds which report on annual GHG mitigation impacts
- Other kinds of climate finance that report on annual GHG mitigation impacts

Offset interventions must be held to strict quality criteria. Ideally, a regulatory body would enforce quality criteria on any company who is in the business of GHG mitigation and generating offset credits for the market. USDA organic certification is a good analog for the kind of regulatory structure needed in the carbon crediting space. Until legislation is passed to establish regulatory quality standards for carbon crediting, standards like those being developed by The Integrity Council must be adhered to.

Below are examples of how this simplified typology of market-based accounting would respond to the proposed market instruments in the GHG protocol survey.

Project-based crediting

- Crediting is not applicable for inset interventions. Any GHG mitigation impacts from inset interventions will be realized by the reporting company in their annual GHG inventory. These are reportable GHG reductions within the value chain. The impact of inset interventions should be reported as mitigation wedges from a counterfactual business-as-usual baseline.
- Offset intervention credits should represent realized GHG mitigation impacts from a project on an annual basis. These should be calculated as part of the project-based inventory every year. The example below illustrates how offset intervention credits should be structured.
    - Company A is interested in purchasing offset intervention credits. They decide to buy a 'use of proceeds' green bond which is earmarked for energy efficiency projects. The issuer of the bond provides details on the project and the estimated annual GHG mitigation impact. At the end of the fiscal year, the issuer of the bond provides an annual report to the holder of the bond (in this case Company A) which provides the realized annual GHG mitigation impacts of the bond. The annual report serves as the certificate of offset intervention GHG mitigation. The offset intervention can then be reported as an GHG mitigation alongside, but separate to, Company A's standard scope 1, 2, & 3 GHG inventory.

Supply shed/value chain interventions

- These are simply inset interventions specifically related to scope 3 purchased goods & services.

Certification/chain-of-custody models: Mass-balance certification

- This should be avoided. Instead companies should engage with suppliers who report high-

quality and transparent product-specific GHG accounting on the embodied GHG emissions for their products. In order for there to be a market for GHG mitigation, procurement decision makers must be able to confidently compare the embodied GHG emissions of substitute products.

Certification/chain-of-custody models: Book-and-claim certificates

- This should be avoided. Separation of environmental attributes from the products themselves (i.e. RECs) introduces risk of non-additionality. Each GHG mitigation intervention must lead to additional removals or reductions. Maintaining the environmental attributes with the underlying interventions (keeping them bundled) will help ensure additionality and prevent complex market conditions.

Summary

Market-based accounting is an opportunity for companies to report more accurately on any GHG mitigation interventions they undertake in a reporting year. Instead of creating a typology of numerous market instruments that could be leveraged for nuanced market-based accounting approaches, we propose a simplified typology of market-based accounting. This involves just two kinds of interventions: ***Inset Interventions*** and ***Offset Interventions***. The project-based GHG accounting is exactly the same for both, but they differ in how the reporting company accounts for reductions and/or removals in their annual inventory.

Another way of looking at market-based interventions for GHG mitigation is through the lens of climate finance. Any kind of climate finance mechanism is a form of market-based GHG mitigation. Anyone, including companies, can purchase climate finance mechanisms which will yield GHG mitigation impacts. These GHG mitigation impacts can either be within the company's value chain (inset) or outside the value chain (offset). The market-based typology proposed above aligns well with the market for climate finance and can hopefully support the much needed harmonization of standards and reporting on GHG mitigation projects.

5. Please explain how the proposal aligns with the GHG Protocol decision-making criteria and hierarchy (A, B, C, D below), while providing justification/evidence where possible.

A. GHG Protocol accounting and reporting approaches shall meet the GHG Protocol accounting and reporting principles (see Annex for definitions):

- Accuracy, Completeness, Consistency, Relevance, Transparency
- Additional principles for land sector activities and CO_2 removals: Conservativeness, Permanence, and Comparability if relevant

The proposal above does not deviate from the core principles of GHG accounting. The simplified typology of market-based accounting remains aligned with best practices outlined in the Corporate Standard, the Product Standard, and the Policy and Action Standard. In fact, implementation of this proposal, alongside strict quality criteria for supplier-specific and product-specific emission factors, would enhance both principles of accuracy and transparency. If a reporting company 'goes to market'

for lower-carbon goods and services, they must be able to access high-quality and interoperable GHG data as it relates to products, services, and interventions. Only when decision makers trust the data will any GHG metric become 'decision-worthy'. A simplified typology of 'market-based instruments' coupled with strict quality criteria for supplier-specific and product-specific GHG metrics will only enhance the core principles of GHG accounting.

B. GHG Protocol accounting and reporting approaches shall align with the latest climate science and global climate goals (i.e., keeping global warming below 1.5°C). To support this objective (non-exhaustive list):

- Direct emissions reported in a company's inventory should correspond to emissions to the atmosphere. Reductions in direct emissions reported in a company's inventory should correspond to reductions in emissions to the atmosphere.
- Indirect emissions reported in a company's inventory should in the aggregate correspond to emissions to the atmosphere. Reductions in indirect emissions reported in a company's inventory should in the aggregate correspond to reductions in emissions to the atmosphere.

Reporting GHG mitigation interventions within the value chain as 'mitigation wedges' against a counterfactual baseline supports the objective described above. Companies should use consequential accounting approaches to estimate the future GHG impacts of any intervention, but then quantify the actualized GHG reductions in their annual inventory. This marriage of consequential accounting and attributional accounting provides a framework to plan GHG mitigation efforts effectively and report actualized reductions annually.

C. GHG Protocol accounting frameworks should support ambitious climate goals and actions in the private and public sector.

- Would this proposal enable organizations to pursue more effective GHG mitigation/decarbonization efforts as compared to the existing standards and guidance? If so, how?
- Would this proposal better inform decision making by reporting organizations and their stakeholders (e.g. related to climate-related financial risks and other relevant information associated with GHG emissions reporting)?

Yes, this proposal will both enable reporting companies to pursue more effective GHG mitigation and inform better decision making and reporting. By simplifying the typology of market-based instruments, the process of reporting annual GHG mitigation will become much more accessible to reporting companies. Less resources will be required to perform the annual 'market-based' inventory. It will be easier to report the GHG mitigation impacts of interventions because each intervention (across scope 1, 2, and 3) will follow the same framework. This will support better decision making because stakeholders will have access to more metrics in any annual inventory. First, the total GHG

emissions would be reported just like they are in GHG inventories today. And in addition, each company will report what interventions they undertook in the previous year and how those reduced emissions from the counterfactual baseline. This framework provides a structured and consistent approach for companies to report annual GHG mitigation integrated in their annual GHG inventory.

D. GHG Protocol accounting frameworks which meet the above criteria should be feasible. (For aspects of accounting frameworks that meet the above criteria but are difficult to implement, GHG Protocol should provide additional guidance and tools to support implementation.)

- What specific information, data or calculation methods are required to implement this proposal (e.g., in the case of scope 2, data granularity, grid data, consumption data, emission information, etc.)? Would new data/methods be needed? Are current data/methods available? How would this be implemented in practice?
- Would this proposal accommodate and be accessible to all organizations globally who seek to account for and report their GHG emissions? Are there potential challenges which would need to be further addressed to implement this proposal globally? What would be the potential solutions?

This proposal relies on existing standards and guidance published by WRI/WBCSD. Both the Product Standard and the Policy and Action Standard provide all the GHG calculation guidance required to implement this proposal. In short, this proposal puts forward that any 'market-based instrument' is essentially a lower-carbon alternative to a baseline. This applies to any activity within the value chain (scope 1, 2, and/or 3) and outside the value chain. For any market-based instrument to communicate the associated GHG mitigation impacts, they must leverage the Product Standard or the Policy and Action Standard to calculate and report these metrics. Any reported metrics must meet strict quality criteria to ensure reliability and interoperability. This will equip decision makers with decision-worthy metrics. This proposal does not require development of any new standards or sources of data, it simply calls for a more streamlined typology of 'market-based instruments' so that reporting on annual GHG mitigation can be made more useful, consistent, and aligned with actualized GHG reductions.

6. Consistent with the hierarchy provided above, are there potential drawbacks or challenges to adopting this proposal? If so, what are they?

The main drawback and challenge will be relearning what a 'market-based' inventory is supposed to mean and what levers can be used across scope 1, 2, and 3 to influence market-based emissions.

Expanding the definition of 'market-instruments' to include any GHG mitigation intervention both inside and outside the value chain will be disruptive to the current reporting landscape. However, this disruption will be healthy for the GHG accounting and reporting community in the long run. If this proposal is adopted, a robust stakeholder engagement process and transparent communication will help define the path forward and ease the period of disruption.

7. Would the proposal improve alignment with other climate disclosure rules, programs and initiatives or lead to lack of alignment? Please describe.

We believe this proposal will have a positive impact on harmonization of GHG data and metrics. There is no data to support specific impacts on alignment between standards, however simplifying the market-based typology is expected to make it easier to compare annual GHG reports from different companies.

8. Please attach or reference supporting evidence, research, analysis, or other information to support the proposal, including any active research or ongoing evaluations. If relevant, please also explain how the effectiveness of the proposal can be evaluated and tracked over time.

9. If applicable, describe the process or stakeholders/groups consulted as part of developing this proposal.

This proposal was part of a collaboration with a new research lab at Northern Arizona University called the Carbon Accounting, Reporting, and Management Lab (CARML). No other groups were involved in the writing of this proposal.

10. If applicable, provide any additional information not covered in the questions above.

Proposal Annex

GHG Protocol Decision-Making Criteria and Hierarchy

A. First, GHG Protocol accounting and reporting approaches shall meet the GHG Protocol accounting and reporting principles:
- Accuracy, Completeness, Consistency, Relevance, Transparency
- Additional principles for land sector activities and CO_2 removals: Conservativeness, Permanence, and Comparability if relevant
- (See table below for definitions)

B. Second, GHG Protocol accounting and reporting approaches shall align with the latest climate science and global climate goals (i.e., keeping global warming below 1.5°C). To support this objective (non-exhaustive list):
- Direct emissions reported in a company's inventory should correspond to emissions to the atmosphere. Reductions in direct emissions reported in a company's inventory should correspond to reductions in emissions to the atmosphere.
- Indirect emissions reported in a company's inventory should in the aggregate correspond to emissions to the atmosphere. Reductions in indirect emissions reported in a company's inventory should in the aggregate correspond to reductions in emissions to the atmosphere.

C. Third, GHG Protocol accounting frameworks should support ambitious climate goals and actions in the private and public sector:
- Accounting framework/s would enable organizations to pursue more effective GHG mitigation/decarbonization efforts as compared to the existing standards and guidance
- Accounting framework/s would better inform decision making by reporting organizations and their stakeholders (e.g. related to climate-related financial risks and other relevant information associated with GHG emissions reporting)

D. Fourth, GHG Protocol accounting frameworks which meet the above criteria should be feasible to implement for the users of the frameworks.
- For aspects of accounting frameworks that meet the above criteria but are difficult to implement, GHG Protocol should provide additional guidance and tools to support implementation.

GHG Protocol Accounting and Reporting Principles

Principle	Definition
Accuracy	Ensure that the quantification of GHG emissions (and removals, if applicable) is systematically neither over nor under actual emissions (and removals, if applicable), and that uncertainties are reduced as far as practicable. Achieve sufficient accuracy to enable users to make decisions with reasonable assurance as to the integrity of the reported information.
Completeness	Account for and report on all GHG emissions (and removals, if applicable) from sources, sinks, and activities within the inventory boundary. Disclose and justify any specific exclusions.

Consistency	Use consistent methodologies to allow for meaningful performance tracking of emissions (and removals, if applicable) over time and between companies. Transparently document any changes to the data, inventory boundary, methods, or any other relevant factors in the time series.
Relevance	Ensure the GHG inventory appropriately reflects the GHG emissions (and removals, if applicable) of the company and serves the decision-making needs of users – both internal and external to the company.
Transparency	Address all relevant issues in a factual and coherent manner, based on a clear audit trail. Disclose any relevant assumptions and make appropriate references to the accounting and calculation methodologies and data sources used.
Conservativeness (Land Sector and Removals Guidance)	Use conservative assumptions, values, and procedures when uncertainty is high. Conservative values and assumptions are those that are more likely to overestimate GHG emissions and underestimate removals, rather than underestimate emissions and overestimate removals.
Permanence (Land Sector and Removals Guidance)	Ensure mechanisms are in place to monitor the continued storage of reported removals, account for reversals, and report emissions from associated carbon pools.
Comparability (optional) (Land Sector and Removals Guidance)	Apply common methodologies, data sources, assumptions, and reporting formats such that the reported GHG inventories from multiple companies can be compared.