Greenhouse Gas Protocol

Actions and Market Instruments

Phase 1 Progress Update
White Paper

Purpose, principles, key concepts and options for multi-statement reporting of impacts of actions and market instruments in GHG reports

WORKING DRAFT VERSION 2.1 FOR INDEPENDENT STANDARDS BOARD REVIEW

19 December 2025

About this document

This document summarizes phase 1 progress of the Actions and Market Instruments (AMI) standard development process. As defined in the Standard Development Plan,[1] phase 1 includes:

- Terms and definitions;
- Accounting and reporting objectives and principles;
- Determining additional reporting elements and associated quantification method(s) needed to address the impacts of actions and market instruments; and
- Defining the purpose, structure, and limitations of individual elements within the corporate GHG emissions report.

This summary documents the current status of Technical Working Group (TWG) discussions. It is provided to give stakeholders information on key topics and options under development and will form the basis for public consultation on selected questions.

GHG Protocol will hold a phase 1 public consultation period beginning in Q1 2026 to solicit targeted inputs including on the contents of this White Paper. In line with the GHG Protocol Standard Development and Revision Procedure,[2] the Secretariat kindly requests that interested stakeholders hold comments related to this document until the phase 1 targeted public consultation period begins which provides an opportunity for feedback.

The contents of this paper and the results of the public consultation will inform the further process to develop the complete draft GHG Protocol Actions and Market Instruments Standard/Guidance.

All phase 1 outcomes presented here, including proposed draft text, are subject to change, including based on the stakeholder feedback received during the public consultation period. The release of the complete draft Actions and Market Instruments Standard/Guidance for public consultation is planned for 2027.

Disclaimer

All outcomes and draft text herein are works in progress, subject to change and should not be construed as final standard text nor relied upon as advice. GHG Protocol is not responsible for reliance on or actions taken based on the contents of this document.

[1] Available at: https://ghgprotocol.org/ghg-protocol-corporate-suite-standards-and-guidance-update-process.
[2] Available at: https://ghgprotocol.org/our-governance

Executive Summary

Need for a Standard on Actions and Market Instruments (AMI)

Many companies influence emissions within and beyond their value chain in ways that are not reflected in the corporate physical GHG inventory due to the inventory boundaries and accounting requirements. For example, companies may invest in emission reduction or removal projects within their value chain, but the specific project impacts may not be directly traced or allocated to the company's own inventory data. Actions may also include use of market instruments such as commodity certificates or carbon credits, investments beyond the company's value chain, efforts to avoid emissions, among others.

To provide an accounting and reporting framework beyond the physical GHG inventory, the GHG Protocol is developing an Actions and Market Instruments (AMI) standard/guidance.

By standardizing how companies account for and report on mitigation activities, the AMI Standard/Guidance will empower companies and investors to report the impact of these efforts with greater clarity and credibility. Clear guidance for how to account for actions and market instruments across sectors in GHG reports will help unlock the investments required for decarbonization while strengthening the integrity of GHG accounting and reporting as well as providing meaningful information to various stakeholders. The AMI Standard/Guidance intends to address the reporting of low-carbon contractual investments, such as in the electricity sector (e.g., virtual power purchase agreements), industry (e.g. green steel, chemicals, cement certificates), transport (e.g. biomethane certificates, sustainable aviation fuel) and agriculture, among others.

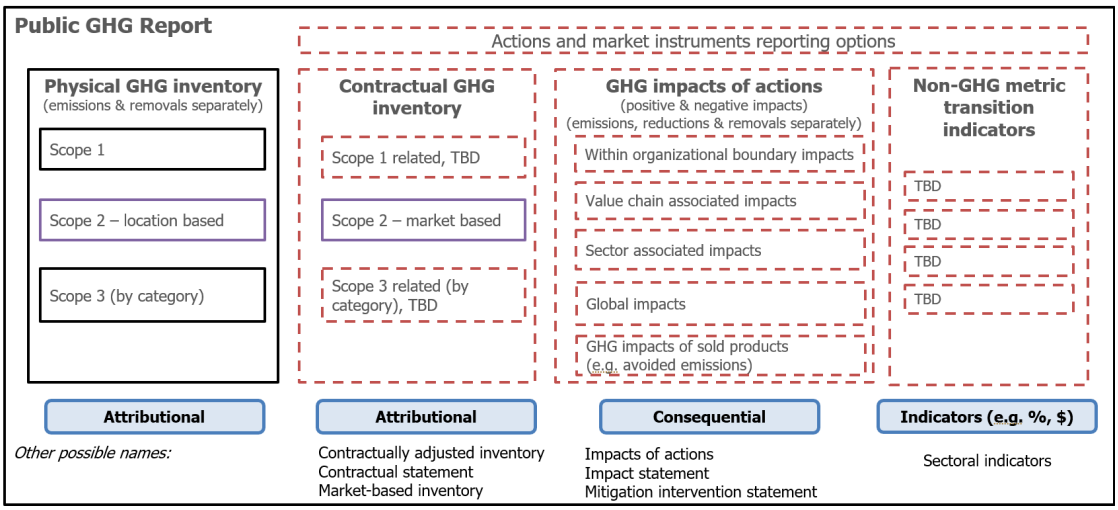
A Multi-Statement GHG Reporting Structure

A core proposal is the introduction of a multi-statement GHG reporting structure. It ensures that physical GHG inventory emissions remain visible while providing transparency on mitigation actions not reflected in the physical inventory and their underlying assumptions. A comprehensive multi-statement GHG report can provide complete information by transparently disclosing the results from different methods, acknowledging that different GHG accounting methods provide different information and serve different purposes.

Including the physical GHG inventory, four statements are under consideration (figure ES.1):

1. Physical GHG inventory
2. Contractual GHG inventory
3. GHG impacts of actions
4. Non-GHG metric transition indicators

Figure ES.1. Reporting statements under consideration



Notes:

1. The above are options for additional statements to account for and report on the impacts of actions and market instruments complementary to the physical GHG inventory.
2. Solid lines are current elements in published final or draft standards. All elements in red dotted lines are possible future elements, to be determined and subject to change. Purple elements are addressed by the Scope 2 Standard/Guidance.
3. Names of statements are draft and subject to change. Alternative names are listed below the statements.
4. Each statement would include disaggregated reporting into multiple individual reporting elements or accounting categories. The figure illustrates possible disaggregation categories, but the specific disaggregation categories as well as overall statement structure is subject to change and further development.
5. Additional accounting categories or reporting elements may be defined by additional sector-specific requirements and guidance (e.g. Land Sector and Removals Standard).

The proposed multi-statement reporting structure seeks to provide clarity on the appropriate accounting and reporting methods for each statement, with Statement 1 and Statement 2 based on attributional accounting, Statement 3 based on consequential accounting, and Statement 4 based on key performance indicators.

Decisions have not yet been taken on whether newly proposed statements should be required or optional as well as on whether statements are mutually exclusive. These and other outstanding questions outlined in Annex A, as well as technical specifications outlined in Annex F, will be subject to further TWG development in 2026 with review and approval by the ISB. As these topics are further explored, changes to the statement structure, naming, accounting and reporting specifications, and other aspects of the proposed multi-statement reporting structure may occur.

1. Physical GHG Inventory – The Foundation

The physical GHG inventory as first established in the GHG Protocol Corporate Standard continues to serve as the foundation of corporate GHG accounting and reporting. It provides comprehensive

accounting and disclosure of an organization's annual GHG emissions (and removals, if applicable) resulting from the company's activities in its operations and value chain across scope 1, scope 2 and scope 3, based on attributional accounting approaches.

2. Contractual GHG Inventory – Making Procurement and Market Choices Visible

The contractual GHG inventory presents a complementary inventory in which the emissions associated with the activities in the physical inventory are adjusted based on the purchase of qualified contractual arrangements and market instruments.

Examples of market instruments may include mitigation-related contractual agreements or commodity certificates for the purchase of low-carbon fuels/commodities, subject to eligibility criteria, safeguards and quality criteria to be defined in phase 2.

The contractual GHG inventory may incorporate the existing scope 2 market-based method and is expected to introduce new approaches for scope 1 and scope 3.

By maintaining a clear separation from the physical GHG inventory, this statement ensures that claims about procurement and market choices are transparent and maintains the integrity of the company's physical GHG inventory.

3. GHG Impacts of Actions – Transparent and Consistent Reporting of Intervention Impacts and Contributions

The GHG impacts of actions statement provides a dedicated, structured statement for reporting on impacts (e.g. emissions avoided, reduced or removed) of actions taken by the reporting company inside and outside the company's value chain using consequential accounting methods.

The statement is expected to include separate reporting of GHG impacts into multiple categories. The TWG is exploring the following categories:

- Within organizational boundary impacts
- Value chain associated impacts
- Sector associated impacts
- Global impacts (beyond value chain and sector)
- GHG impacts of sold products (e.g. avoided emissions)

By maintaining a clear separation from statement 1 and statement 2, this statement would ensure that claims about mitigation impacts, avoided emissions, credits and other impacts based on consequential accounting are transparent and separately reported from statements using attributional accounting methods.

4. Non GHG Metric Transition Indicators – KPIs not expressed in CO_2e

This statement provides a standardized reporting structure for various decision-relevant and decarbonization-relevant metrics and indicators. Examples may include financing contributions to mitigation projects, percentage of procurement or products sold that meet defined criteria, intensity metrics, or other key performance indicators. This statement would allow for additional means of

reporting on climate mitigation progress through indicators, separately from attributional and consequential GHG accounting.

Inclusive Multi-Stakeholder Process

The AMI Technical Working Group operates through an inclusive, multi-stakeholder process under the governance of the GHG Protocol. The TWG consists of representatives from businesses across sectors, associations, NGOs, academia, government and GHG programs. To promote alignment across the GHG accounting, reporting and target setting ecosystem, GHG Protocol has convened related initiatives within the TWG, such as Science Based Targets initiative (SBTi), CDP, ISEAL, the AIM Platform, Value Change Initiative (VCI), the Voluntary Carbon Markets Integrity Initiative (VCMI), the Task Force for Corporate Action Transparency (TCAT), WBCSD, among others.

All outputs from the AMI TWG are reviewed by the GHG Protocol Independent Standards Board for decision-making and approval.

Outlook

The White Paper will be subject to a public consultation scheduled for Q1 2026, which will inform further development of the AMI Standard/Guidance. Phase 2 of the TWG work will begin in 2026 and focus on further developing the multi-statement reporting structure. This is expected to include developing eligibility criteria, quality criteria and safeguards for each statement, testing practicality of the statements, considering the use of residual emission factors in Statement 2, setting boundaries between sub-categories in Statement 3, determining whether each statement should be required or optional, further developing definitions and calculation methods, determining the level of physical connectivity/traceability for eligibility of instruments in Statements 1 and 2,[3] and coordinating with the Scope 2 TWG how to further develop recently proposed consequential accounting methodologies for the electricity sector within Statement 3, among other phase 2 topics outlined in Annex F.

The topics considered in phase 2 may necessitate revisiting topics considered in phase 1. The content of this white paper is therefore subject to change and should not be construed as final standard text nor relied upon as advice.

[3] Scope 2 related requirements remain the remit of the Scope 2 TWG.

Contents

1. Introduction

Survey feedback prior to beginning the Actions and Market Instruments (AMI) standard development process in Q4 2024 indicated a clear need for additional clarity on how companies quantify and report on the impact of actions (e.g. interventions) and market instruments in corporate GHG reporting.

While different accounting and reporting approaches were suggested across respondents, there was a common request for additional clarity on the accounting objectives, reporting structure, and potential for inclusion of various types of instruments within GHG Protocol's accounting and reporting standards. Additionally, respondents suggested conditions, criteria, and safeguards for the reporting of instruments, including but not limited to those in use by other regulatory or voluntary reporting programs. Survey feedback also highlighted a need for clearer roles among actors in the GHG accounting ecosystem, including GHG Protocol, target setting programs and regulators.

In response to this feedback and market demands, the GHG Protocol has begun developing the Actions and Market Instruments Standard. This standard will provide requirements and guidance for GHG accounting and reporting on the impacts of actions and market instruments in corporate GHG reports. As a forthcoming addition to the Greenhouse Gas Protocol's suite of corporate standards, it is a cross-sector standard intended to be applicable to all organizations, sectors and regions.

The AMI Standard/Guidance will offer a rigorous framework for accounting and reporting on corporate actions and market-based instruments such as carbon credits, value chain interventions, and chain-of-custody models, beyond-value-chain mitigation actions, avoided emissions and related topics. The AMI Standard/Guidance is designed for companies, governments, NGOs, and other stakeholders seeking credible, harmonized, and transparent approaches to quantify the climate impact of these instruments and actions. Its development responds to the growing need for clarity and consistency in how such interventions are applied and disclosed, especially as climate finance and mitigation strategies become increasingly complex and subject to scrutiny. The standard enables use alongside other frameworks, such as SBTi's target setting standards.

For further information, refer to the Actions and Market Instruments Standard Development Plan.

Ultimately, by setting up the respective accounting and reporting requirements, the AMI Standard/Guidance is intended to accelerate impactful GHG mitigation activities in line with the GHG Protocol's mission and vision:

- GHG Protocol's **vision** is that all private and public entities account for their GHG emissions, enabling an acceleration in reductions in line with the global warming limits required by climate science.
- GHG Protocol's **mission** is to develop the most credible, accessible, and widely used greenhouse gas accounting and reporting standards and to proactively facilitate their global adoption and implementation.

2. Precedent in GHG Protocol standards

The AMI Standard will build on existing GHG Protocol standards and guidance as relevant. Examples of existing provisions are included in Table 1. Refer to Annex C for further text from the GHG Protocol Corporate Standard chapter on accounting for GHG reductions.

While existing standards provide requirements and guidance that can be leveraged for the AMI Standard, key elements will be revisited and updated in the AMI TWG for the AMI Standard to reflect progress since the publication of the other standards.

Table 1. Overview of GHG Protocol standards and relevance for AMI Standard/Guidance

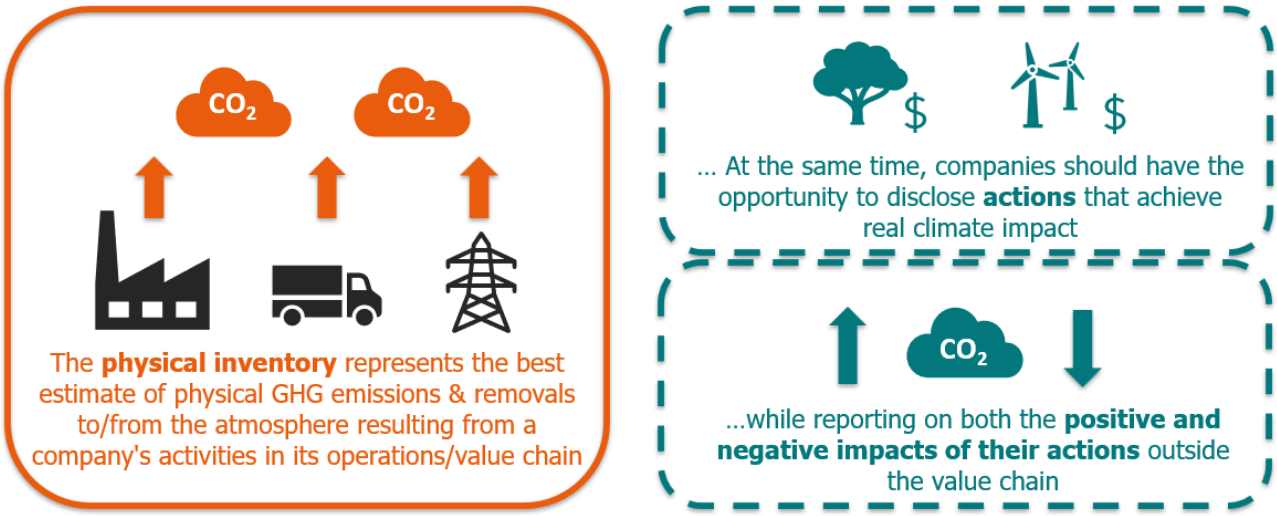
Standard	Summary of relevant provisions
Corporate Standard	• Explains the value of accounting for GHG reductions from projects using project accounting methods, in addition to accounting for GHG emissions using inventory methods (Chapter 8: Accounting for GHG Reductions, p.59) • Explains key criteria needed to quantify and report GHG reductions, including additionality, selection of baseline scenario, quantification of relevant primary and secondary effects of projects, and avoidance of double counting (p.60) • Reporting project-based GHG reductions and trades of market instruments separately from the physical GHG inventory in the GHG inventory report (p.60)
Scope 3 Standard	• Accounting for reductions from actions using inventory and project accounting methods (Chapter 9: 9.4 Accounting for scope 3 emissions and reductions over time, p.106-107) • Accounting for avoided emissions using project accounting methods (Chapter 9: 9.5 Accounting for avoided emissions, p.107 and p.109) • Reporting project-based GHG reductions, avoided emissions, and trades of market instruments separately from the inventory in the GHG inventory report (Chapter 11: 11.2 Optional information, p.120)
Scope 2 Guidance	• Accounting for indirect scope 2 emissions from purchased and consumed energy using both a location-based method and a market-based method (Chapter 4: 4.1 Approaches to accounting scope 2, p.25-27) • Companies with any operations in electricity markets providing product or supplier-specific data in the form of contractual instruments are required to report scope 2 emissions according to both the location-based method and the market-based method (i.e., "dual reporting") (Chapter 1: 1.5.1 New reporting requirements, p.8)

	• Additional requirements related to quality criteria for contractual instruments and the use of residual emission factors (Chapter 7: 7.1 Required information for scope 2, p.60)
Project Protocol	• Requirements and guidance for quantifying and reporting GHG impacts of projects
Guidelines for Quantifying GHG Reductions from Grid-Connected Electricity Projects	• Sector-specific requirements and guidance for project accounting for the electricity sector
Land Use, Land Use Change and Forestry Guidance for GHG Project Accounting	• Sector-specific requirements and guidance for project accounting for the LULUCF sector
Policy and Action Standard	• Requirements and guidance for quantifying and reporting GHG impacts of actions larger than projects

3. Need for multi-statement GHG reporting structure

Feedback from stakeholders has highlighted the need and value of reporting GHG impacts of actions taken by the reporting company that are not reflected in a physical GHG inventory (figure 1). The AMI Standard/Guidance intends to fundamentally improve and expand on the categories that are so far to be '*reported separately*' according to the Corporate Standard. Through the AMI Standard/Guidance, GHG Protocol will develop a more comprehensive and transparent corporate GHG accounting and reporting structure, with disaggregated reporting of physical GHG inventory emissions and standardized new reporting element(s) for the impacts of actions and market instruments. Clear guidance for how to account for actions and market instruments across sectors in GHG reports will help unlock the required investments while strengthening the integrity of GHG accounting and reporting as well as providing meaningful information to various stakeholders. This will also allow for integration with other voluntary and regulatory GHG reporting and target-setting programs.

Figure 1. Reasons for disaggregated reporting



The AMI Standard/Guidance is addressing these issues with a cross-sector approach including:

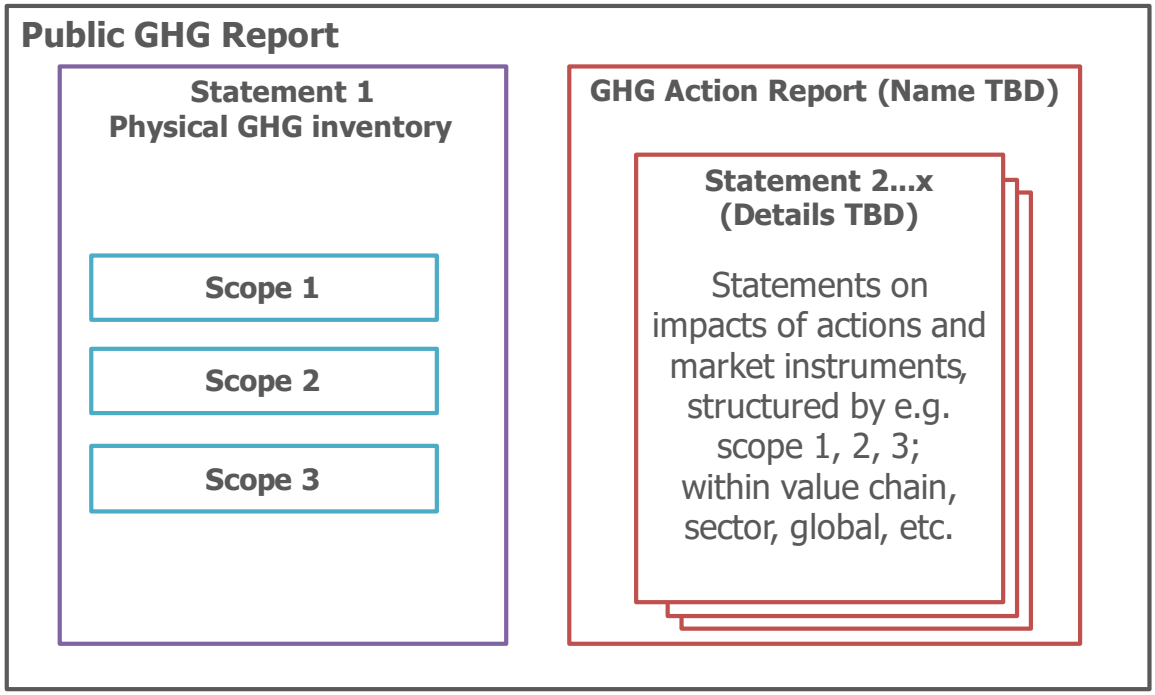
- Quantifying and reporting GHG impacts of actions within and outside of the reporting company's value chain, not otherwise reflected in the physical inventory
    - Positive (Avoided emissions)
    - Negative (Leakage), if significant
- Quantifying and reporting transactions of market instruments

The approach will make use of a disaggregated, transparent reporting structure. A public GHG report is expected to contain (figure 2):

- A physical GHG inventory, organized by scope.
- Further statements for impacts of actions and market instruments to separately report elements with unique attributes (e.g. attributional vs. consequential approaches, in value chain vs. outside value chain, transition indicators not expressed in t CO_2e etc.). Further detail on statements is provided in section 8.

Different GHG accounting methods provide different information and serve different purposes. A comprehensive GHG report can provide complete information by transparently disclosing the results from different methods. The structure will address the different needs and use cases behind the statements, e.g. that project/intervention methods are best suitable for decision-making.

Figure 2. Basic concept for a multi-statement model



This structure would allow corporate reporters to transparently communicate the effects of impactful interventions while the physical inventory remains the foundational estimate of physical GHG emissions (and removals, if applicable) resulting from a company's activities. This approach will maintain the integrity of the physical GHG inventory, disclosing a scope 1, scope 2, and scope 3 GHG inventory based on physical GHG accounting principles. The physical inventory is the statement on which much of the voluntary and regulatory corporate accounting and reporting ecosystem is built. While the physical inventory is established in existing guidance, there is a role to clarify the boundaries of the physical inventory, and this work is continuing through both AMI and the Corporate Standard update processes.

The AMI Standard/Guidance will furthermore provide guidance and recommendations on how to use the most appropriate data and information for different purposes. This will include:

- Recommendations on how reporting companies can use various reporting elements for decision-making
- Recommendations on how stakeholders can interpret reported data
- Recommendations on how voluntary and regulatory programs can use new reporting elements for applications like target-setting

While the AMI Standard/Guidance is intended to be primarily sector-agnostic, there is a role for sector-specific approaches to quantify and report GHG impacts for individual sectors that may not be applicable or relevant for other sectors.

4. Purpose, goals, and objectives of the AMI Standard/Guidance

The GHG Protocol Actions and Market Instruments (AMI) Standard/Guidance will provide requirements and guidance for companies and other organizations to account for and report on the impacts of actions and market instruments in GHG reports.

The **purpose** is to:

- Enable companies to account for and report on impactful decarbonization actions that are currently not reflected in the physical inventory by establishing a credible, transparent multi-statement accounting and reporting framework
- Provide transparency in distinguishing between actions and market instruments accounted for under different statements in a GHG report, including those accounted for in the physical GHG inventory and those accounted for in other statements beyond the physical GHG inventory
- Strengthen the integrity and credibility of corporate climate action through rigorous, accurate, credible, and transparent GHG accounting and reporting approaches
- Incentivize companies and financiers to make impactful investments in lower carbon products, projects and actions
- Enable stakeholders (investors, NGOs, and others) to better evaluate the impacts and effectiveness of a company's decarbonization efforts
- Empower customers (B2B and B2C) to make informed procurement choices that support their own climate objectives
- Provide a cross-sector standard that can be used as a foundation for sector-specific requirements and guidance, ensuring consistent approaches and a common language across sectors

The **goals and objectives** are to:

- Support GHG programs and companies by providing GHG accounting and reporting elements as inputs to setting and tracking progress toward decarbonization targets
- Enable target setting programs to make policy decisions on how various types of actions and market instruments could be recognized under corporate mitigation targets
- Provide commonly accepted terms and definitions of actions, instruments, impacts and related concepts to create clarity and consistency
- Address the appropriate role of actions and market instruments within corporate GHG accounting and reporting
- Provide a comprehensive and transparent multi-statement corporate GHG accounting and reporting structure beyond the physical inventory, with disaggregated reporting between statements as well as within statements for the impacts of actions and market instruments
- Improve comparability and consistency of reported information across organizations and over time
- Set safeguards and quality criteria to ensure credibility of reported impacts, while referring to programs to define further details within their programs

5. Key concepts, terms and definitions

This section provides working drafts of terms and definitions. Where possible, existing definitions from existing GHG Protocol standards and external initiatives are incorporated.[4] The goal is to provide in the final standard an unambiguous glossary of terms and definitions by GHG Protocol, facilitating a common language for actions, market instruments and related concepts. Where possible, terms and definitions are narrowed down to a single definition in the sections below, while in some cases, multiple options are provided for further TWG development and consolidation or alignment with other terms in the GHG accounting, reporting and target setting ecosystem.

The terms and definitions are grouped into the following sections: Actions and market instruments (5.1), Attributional and consequential accounting (5.2), GHG report, statement and inventory (5.3), GHG impact related terms (5.4), GHG credit and certificate related terms (5.5), and traceability related terms (5.6).

Additional terms and definitions (GHG inventory terms and target related terms) are provided in the glossary.

5.1 Actions and market instruments

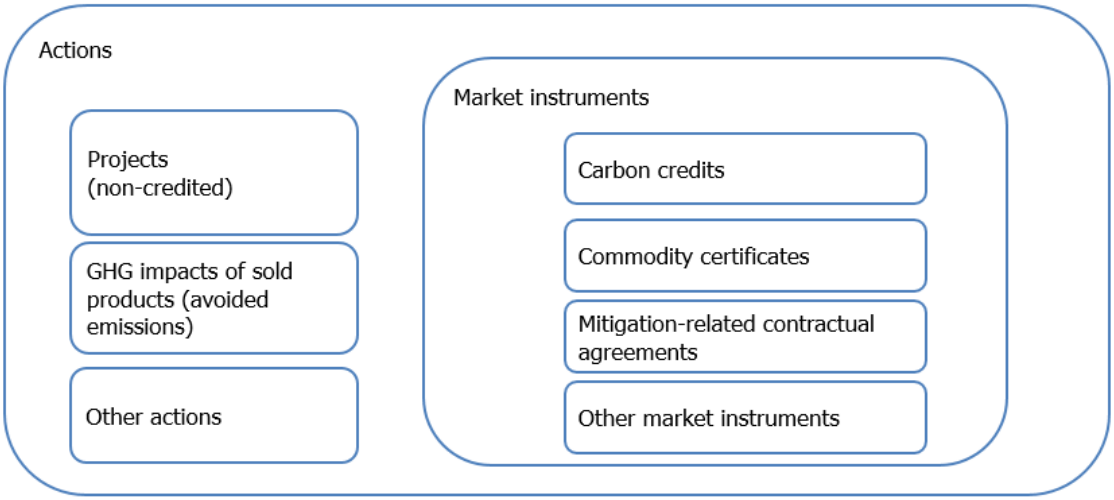
Actions and market instruments are two broad categories that are intended to encompass the various areas of interest to the AMI Standard/Guidance. As shown in figure 3, the terms are not mutually exclusive but instead market instruments are a subset of actions, and both terms can be further differentiated.

- **Action:** Project, investment/financing, production/sale of products, purchase/consumption of products, or other intervention or activity that leads to changes in GHG emissions and removals (without regard to inventory boundary).
    - Also called 'intervention'.
    - The term 'action' includes market instruments but is not limited to market instruments.
- **Mitigation action: "**A GHG-related activity that results in a measurable, verifiable, additional, and attributable reduction or removal of greenhouse gases from the atmosphere, relative to what would have occurred in the absence of the mitigation action". (TCAT, p. 40)
    - Mitigation actions are not limited to market instruments.
- **Project:** "A specific project or activity designed to achieve GHG emission reductions, storage of carbon, or enhancement of GHG removals from the atmosphere. GHG projects may be stand-alone projects, or specific activities or elements within a larger non-GHG related project." ('GHG Project' from Corporate Standard, p. 98)
    - GHG emission reductions/removals from projects can be credited or non-credited.
- **Market instruments**: A contractual arrangement between two or more parties that enables the creation, transfer, or claiming of greenhouse gas (GHG) related environmental attributes.

[4] Definitions from external sources are quoted in quotation marks; working definitions and definitions by other existing GHG Protocol standards are not in quotation marks.

- Market instruments include:
  a) carbon credits (see section 5.5 for additional terms and definitions),
  b) commodity certificates[5] (traded through a chain of custody),
  c) mitigation-related contractual agreements, and
  d) other market instruments
- Market instruments have been developed for compliance/regulatory markets and voluntary markets.
- Other terms for market instruments include market-based instruments, environmental attribute certificates (EACs), etc.
- Market instruments function to incentivize climate-positive practices and address environmental externalities through market mechanisms.
- Market instruments are determined by the contractual relationship itself; instruments such as certificates or registry-issued documents serve only as designators or evidence of contractual rights to particular environmental claims.
- The credibility of a market instrument depends on the robustness and transparency of the underlying data, governance, and assurance systems.
- Market instruments may be tradeable and can vary in their instrument type, the specified characteristics, degree of connectivity to the reporting company, units and types of mitigation outcomes represented.

Figure 3. Relationship between actions, projects and market instruments



[5] The term 'commodity' is used here to refer to any type of product, not only commodities, and includes fuel, energy, and other types of products.

5.2 Attributional and consequential accounting

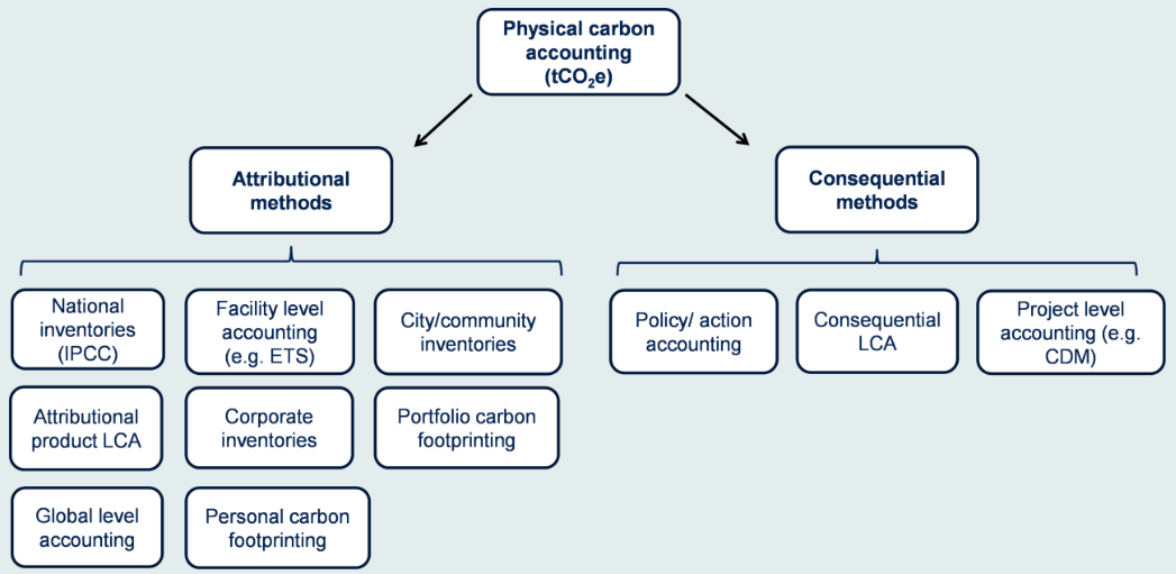
Differentiating and contextualizing actions and market instruments within corporate GHG accounting requires understanding different types of accounting:

- **Attributional accounting** (also known as **inventory accounting**): A type of GHG accounting that quantifies and tracks GHG emissions, removals and other accounting categories within a defined inventory boundary over time relative to a historical base year.
    - Corporate inventory accounting is a type of attributional accounting that is the primary method used by corporations and other organizations to report emissions from their operations and value chains. The attributional accounting approach requires reporting organizations to define clear organizational and operational boundaries, within which emissions are quantified and organized across scopes 1, 2, and 3.
        - Its rules and procedures are detailed within several GHG Protocol standards and guidance including the GHG Protocol Corporate Standard, the Scope 2 Guidance, the Corporate Value Chain (Scope 3) Standard, and the upcoming Land Sector and Removals Standard and Guidance.
    - Alternative definitions
        - Attributional accounting: "Also sometimes known as allocational accounting. The assignment (attribution) of GHG emissions to the activities and processes a company uses to produce products and services." (TCAT, p.39)
        - Allocational GHG accounting: "Regularly estimating and/or measuring physical quantities (mass) of atmospheric GHG emissions and removals allocated to subjects (e.g., facilities, organizations, jurisdictions, countries) over time with comparability between subjects' estimates, time series consistency, completeness, and additivity to system-wide total emissions from the defined population of subjects. Allocation must entail physical (i.e., matter or energy) connection to the subject. The quantification of GHG emissions for each time period in the time series is a GHG inventory. (Colloquially, the term "GHG inventory" or more properly "GHG inventory of emissions from sources and removals from sinks" is also used to refer to a quantified time series of repeated single time period inventories.)" (GHGMI)
- **Consequential accounting**: A type of GHG accounting that estimates the impacts or changes in GHG emissions (and removals, if applicable) resulting from specific projects, actions, or interventions relative to a baseline scenario.
    - Consequential accounting includes multiple subcategories of methods, such as project accounting, policy/action accounting, consequential LCA, etc. (figure 4).
    - Alternative terms for consequential accounting include project accounting, intervention accounting, and impact accounting.
    - Project accounting is a type of consequential accounting that estimates the effects of specific projects or actions on GHG emissions and removals relative to a counterfactual baseline scenario. A baseline scenario is a reference case for the project activity describing what would have most likely occurred without the intervention, often referred to as a counterfactual baseline.

- Rules and procedures for project-level accounting have been detailed in the GHG Protocol for Project Accounting and its sector-specific supplements, the Guidelines for Quantifying GHG Reductions from Grid-Connected Electricity Projects and the Land Use, Land-Use Change, and Forestry (LULUCF) Guidance for GHG Project Accounting.

- Policy/action accounting is a type of consequential accounting that quantifies the total changes in emissions and removals caused by policies and actions larger than projects, such as programs, strategies, portfolio changes, technological innovations, incentive schemes, investment programs, regulations, etc.
  - Rules and procedures for quantifying GHG impacts of actions larger than individual projects have been detailed in the Policy and Action Standard.
- Intervention accounting is used as a broader term to refer to consequential accounting at any scale including projects and actions larger than projects (inclusive of both project accounting and policy/action accounting).
- Consequential LCA is a type of consequential accounting that estimates the total, system-wide change in emissions and removals that occurs as the result of a change in output of the functional unit, in response to, for example, changes in production technology, public policy, or consumer behavior.

Figure 4. Categorization of physical carbon accounting as attributional and consequential



Source: GHG Management Institute

An attributional GHG inventory may be thought of as defining responsibility for emissions and removals occurring from sources and sinks. While this provides important information and insights for many aspects of climate action and planning, changes in inventory totals cannot always provide signals or incentives that align corporate actions with impacts to atmospheric emissions. For example:

- Changes in in the electric grid mix from regulatory action may lead to a decrease in scope 2 emissions for corporate reporters without any direct action from those reporters.

- An increase in the use of biogenic products may decrease fossil emissions within the inventory boundary of a reporting company, however secondary effects such as an increase in demand for biogenic products could lead to deforestation.

An action could be quantified using attributional or consequential accounting, i.e. with inventory accounting if it leads to a change in activity data within the inventory boundary or quantified with project-based accounting if the outcomes are compared to a counterfactual baseline scenario.

5.3 GHG report, statement, inventory

- **GHG report:** A document disclosing a company's GHG inventory results, GHG impacts of actions taken by the company, methods and data used, and other relevant reporting elements to internal and external stakeholders. A GHG report can include multiple GHG statements.[6]
- **GHG statement:** A collection of reporting elements within a GHG report that are aligned via specific criteria (e.g. boundaries, accounting approach, and/or other criteria).[7]
- **Reporting element:** A component of a GHG statement that provides unique information.
- **Accounting category**: A reporting element that represents a unique impact to the climate resulting from an entity's activities (e.g., emissions, removals, land use, land carbon leakage, gross CO_2 fluxes, product carbon storage, and reversals). An accounting category may be further disaggregated into accounting subcategories. (Land Sector and Removals Standard)
- **GHG inventory:** A central element in a GHG report that provides a quantified list of an organization's GHG emissions (and removals, if applicable).[8]
- **GHG Action (or Mitigation / Impact / Intervention) Report** *(title TBD):* The part of the GHG report that consists of one or more statements (see section 8) beyond the physical GHG inventory, reporting on actions/interventions taken by the reporting entity.
- **Physical GHG inventory:** An inventory of GHG emissions (and removals, if applicable) occurring within the reporting company's operations and value chain using inventory accounting methods, without double counting by the same entity, and independent of any GHG trades such as purchases or sales of allowances, offsets, and credits. (Land Sector and Removals Standard)

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[6] Terms and definitions from other sources: GHG Protocol Corporate Standard: "**GHG public report**: Provides, among other details, the reporting company's physical emissions for its chosen inventory boundary. (refer to Chapter 9)." ISO 14064-1:2018: "**Greenhouse gas report (GHG report)**: standalone document intended to communicate an *organization's* or *GHG project's* GHG-related information to its *intended users*. A GHG report can include a *GHG statement*."

[7] Terms and definitions from other sources: ISO 14064-1:2018: **greenhouse gas statement (GHG statement):** factual and objective declaration that provides the subject matter for the *verification* or *validation*. Note 1 to entry: The GHG statement could be presented at a point in time or could cover a period of time. Note 2 to entry: The GHG statement provided by the *responsible party* (3.4.3) should be clearly identifiable, capable of consistent evaluation or measurement against suitable criteria by a *verifier* (3.4.11) or *validator* (3.4.12). Note 3 to entry: The GHG statement could be provided in a *GHG report* (3.2.9) or *GHG project* (3.2.7) plan.

[8] Terms and definitions from other sources: GHG Protocol Corporate Standard and Scope 3 Standard: "**Greenhouse gas (GHG) inventory**: A quantified list of an organization's GHG emissions and sources." ISO 14064-1:2018: **"Greenhouse gas inventory (GHG inventory):** list of *GHG sources* (3.1.2) and *GHG sinks* (3.1.3), and their quantified *GHG emissions* (3.1.5) and *GHG removals* (3.1.6)"

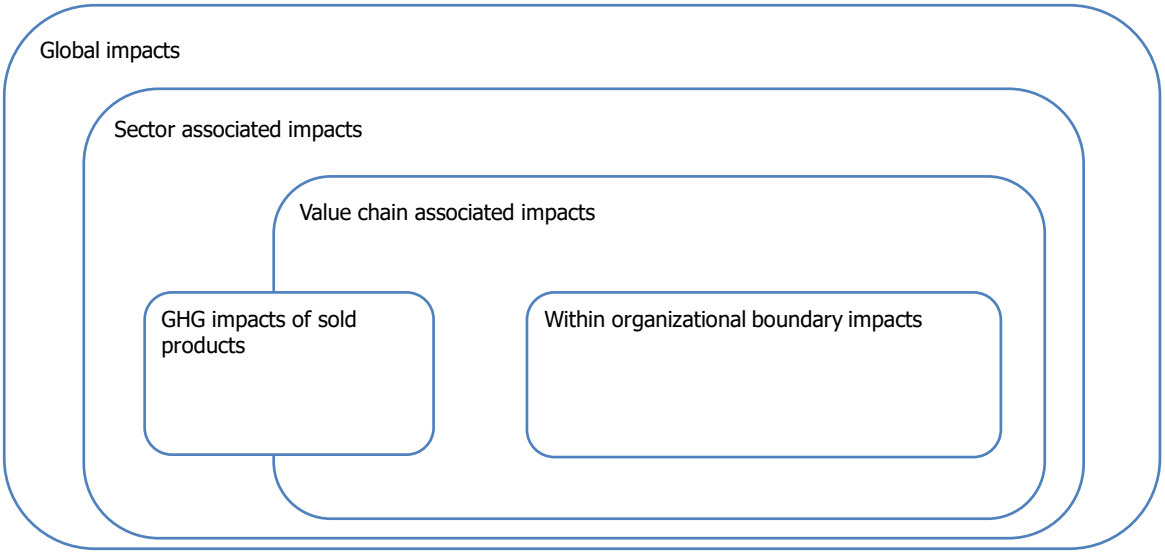
- **Indicator**: A measurable variable used to track progress or assess conditions in a specific area, often to evaluate changes over time or performance against a set goal. (SBTi draft Corporate Net-Zero Standard version 2.0)

5.4 GHG impact related terms

- **GHG impacts of actions**
  - **Within organizational boundary impacts:** Quantified GHG impacts of actions implemented by the reporting company within the reporting company's organizational boundary [which are not reported in other statements].
  - **Value chain associated impacts:** Quantified GHG impacts of actions implemented by the reporting company within the reporting company's value chain, outside of its organizational boundary [which are not reported in other statements].
  - **Sector associated impacts:** Quantified GHG impacts of actions implemented by the reporting company within the reporting company's sector, outside of its value chain [which are not reported in other statements].
  - **Global impacts** (beyond value chain and sector): Quantified GHG impacts of actions implemented by the reporting company outside of the reporting company's sector [which are not reported in other statements].
  - **GHG impacts of sold products:** Quantified change in systemwide GHG emissions resulting from the use of products sold by the reporting company relative to emissions in a counterfactual baseline scenario, typically quantified over the life cycle of the solution (product/good or service).

Note: Some categories (e.g. value chain associated impacts and sector associated impacts) may be merged throughout the further work in phase 2. If they remain distinct, specific definitions, criteria or tests to differentiate 'value chain' and 'sector' will be developed in phase 2 (including building on or referring to external initiatives).

Figure 5. Relationship of GHG impact categories from reporting company to global



Note: Categories are from the perspective of the reporting company.

- **Avoided emissions:** GHG emissions that are prevented as a result of a company's action(s), compared to a baseline scenario without the action(s). (Land Sector and Removals Standard).
- **Avoided emissions from the use of sold products:**
    - Avoided emissions in society that result from the use of a company's products and solutions compared to alternative products and solutions. (Scope 3 Standard)
    - Avoided emissions focus on the GHG benefits generated by solutions offered (e.g. goods, services, policy, etc.) by the reporting organisation to its customers. They compare the emissions of a solution (such as an initiative or a product) with the emissions induced by a counterfactual/baseline scenario. Normally, avoided emissions are quantified over the life cycle of the solution, but they may sometimes be quantified over a fixed period of time (ISO 14064-1 draft "Definition of avoided emissions".)
    - "The estimated difference in full life cycle GHG emissions that result from a scenario with a solution in place, compared to a reference scenario without the solution when reference scenario emissions are higher (ISO 14064-1). This reduction occurs in other actors' direct emissions." (WBCSD Avoided Emissions Guidance, p. 74).
- **Avoided removals:** Removals that would have otherwise happened, but that, as a result of a company's activities, did not happen (Land Sector and Removals Standard).
- **Emission reduction:** A decrease in GHG emissions or an increase in removal or storage of GHGs from the atmosphere, relative to baseline emissions (adapted from Project Protocol).
- **Enhanced removals:** An increase in removal or storage of GHGs from the atmosphere, relative to baseline removals (adapted from Project Protocol).
- **Leakage:** A phenomenon that occurs when corporate actions lead to increased emissions and/or decreased removals outside of a company's traditional inventory boundary.

  - **Leakage effects:** Negative impacts on emissions and removals outside the company's inventory boundary caused by a company's activities to reduce emissions or increase removals within the inventory boundary.
  - **Land carbon leakage (accounting category):** A specific type of leakage, driven by increased demand for agricultural products and a fixed amount of global land, that occurs when corporate actions displace food or feed production to locations beyond the lands in their operations or value chain, leading to agricultural expansion and land use change (Land Sector and Removals Standard).

- **Market-mediated effects**: Effects of an action, such as substitution or displacement effects, resulting from supply and demand dynamics (adapted from Policy and Action Standard).
- **Additionality (options):**
  1. A criterion often applied to GHG projects stipulating that project-based GHG reductions should only be quantified if the project activity "would not have happened anyway"—i.e., that the project activity (or the same technologies or practices it employs) would not have been implemented in its baseline scenario and/or that project activity emissions are lower than baseline emissions. (Project Protocol)
  2. The intervention (e.g., project or activity) reduces emissions or increases removals relative to the amount of emissions or removals that would have occurred without the financial incentives provided by the credit. (Land Sector and Removals Standard; in the context of quality criteria for GHG credits)
  3. "Additionality is the extent to which something happens as a result of an intervention that would not have occurred in the absence of that intervention." (SBTi Glossary)
  4. "The outcome would not have occurred without the intervention. This generally means showing that activities are not already financially viable, legally mandated, or fully financed under existing policies." (SBTI NZ 2.0 draft, p. 91)
  5. "At the time of the decision to implement a mitigation activity, the outcomes of such an activity would not have occurred due to the absence of the incentives created by the carbon related revenues." (VCI)
  6. "The greenhouse gas (GHG) emission reductions or removals from the mitigation activity shall be additional, i.e., they would not have occurred in the absence of the incentive created by carbon-credit revenues." (ICVCM)
  7. "A proposed activity is additional if the recognized policy interventions are deemed to be causing the activity to take place. The occurrence of additionality is determined by assessing whether a proposed activity is distinct from its baseline. A baseline is a prediction of the quantified amount of an input to or output from an activity resulting from the expected future behavior of the actors proposing, and affected by, the proposed activity in the absence of one or more policy interventions, holding all other factors constant (ceteris paribus). The conditions of a baseline are described in a baseline scenario." (GHGMI)
- **GHG assessment boundary:** The scope of a GHG impact quantification in terms of the range of GHG impacts, sources and sinks, and greenhouse gases that are included in the assessment (adapted from Policy and Action Standard).

- **Ex-ante assessment:** quantifying expected future (forward-looking) GHG impacts of an action (adapted from Policy and Action Standard).
- **Ex-post assessment:** quantifying historical (backward-looking) GHG impacts of an action (adapted from Policy and Action Standard).

5.5 GHG credit and certificate related terms

- **Carbon credit** (also called **GHG credit**): A convertible and transferable instrument usually bestowed by a GHG program which represents the reduction, avoidance or enhanced CO_2 removals of a specified amount (typically equivalent to one metric tonne of carbon dioxide equivalent) of greenhouse gas emissions, not necessarily used as an offset.
    - Carbon credit: "A tradeable intangible instrument that is issued by a carbon-crediting program, representing a GHG emission reduction to, or removal from, the atmosphere equivalent to one metric tonne of carbon dioxide equivalent. This is calculated as the difference in GHG emissions or removals from a baseline scenario to the emissions or removals occurring under the mitigation activity, and any adjustments for leakage. The carbon credit is uniquely serialised, issued, tracked and retired or administratively cancelled by means of an electronic registry operated by an administrative body, such as a carbon-crediting program. (ICVCM)
    - Credited GHG reductions or removal enhancements are quantified using project or intervention accounting methods.
    - In certain applications, carbon credits are sometimes referred to as 'offsets' or 'insets' depending on how the carbon credit is used and based on whether the credit is generated from projects or interventions occurring inside or outside of the reporting company's value chain. In other applications, carbon credits are not used to making offsetting or insetting claims.
- **Emissions reduction credits** represent a reduction or avoidance of GHG emissions relative to baseline emissions associated with an intervention (Land Sector and Removals Standard).
- **Removal enhancement credits** represent an increase in removals relative to baseline removals associated with an intervention (e.g., soil carbon sequestration, direct air capture with geologic storage). (In some cases, emission reductions and removal enhancements from a project may be accounted for together against a common baseline. In such cases, separate reporting may not be possible.) (Land Sector and Removals Standard)
- **GHG program:** A generic term used to refer to any voluntary or mandatory international, national, sub-national, government or nongovernmental authority that registers, certifies, and/or regulates GHG emissions or removals (Land Sector and Removals Standard).
- **Environmental attribute certificates (EAC):** A term sometimes used to refer to both carbon credits and commodity certificates.
    - Note: As EACs summarize two different types of market instruments, this paper does not use the aggregate term EAC but refers instead to the specific instruments (e.g. carbon credits or commodity certificates).

  - SBTi definition: "EACs are instruments that are used to convey environmental- or sustainability-related characteristics of a given activity or commodity" (SBTi). SBTi includes both a) carbon credits and b) energy and commodity certificates in the definition of EAC. (SBTi Draft Corporate Net-Zero Standard V2 Explained: Environmental Attribute Certificates)
  - TCAT definition: "Certificates that are issued by registries and "book and claim" systems that represent : (1) the environmental "attributes" or characteristics of an underlying good, product or activity (e.g. 1MWh of renewable energy produced), and/or (2) an amount (e.g., one tonne of CO_2e) of emission reduction, storage, or removal of greenhouse gases resulting from a mitigation action expressed in metric tons of CO2e reduced or removed (i.e., carbon credits) or (3) an emissions intensity factor per unit of an underlying good, product or service" (TCAT, p. 40).

- **Energy Attribute Certificates (EAC)**: "A category of contractual instruments used in the energy sector to convey information about energy generation to other entities involved in the sale, distribution, consumption, or regulation of electricity. This category includes instruments that may go by several different names, including certificates, tags, credits, etc." (Scope 2 Guidance)
- **Commodity Certificates**:
  - Commodity certificates are instruments that represent the environmental attributes of an underlying good, product or service. Attributes can be binary (i.e. renewable energy v non-renewable) or metric-based (e.g. low-carbon coffee, with an emission factor of X)"
  - Commodity certificates convey "the environmental or sustainability performance (e.g. GHG emissions intensity) of a commodity or material like timber, agricultural products, and metals" (SBTi Draft Corporate Net-Zero Standard V2 Explained: Environmental Attribute Certificates)).

5.6 Traceability related terms[9]

- **Traceability:** The ability of a company to identify, track and collect information in the value chain of goods and services purchased or sold by the company, including upstream and downstream processes and products.
- **Traceability system:** A set of procedures that allow an entity to track and record how specific materials or products move across entities and are transformed throughout their value chain, from production to processing to end use.
- **Physical traceability:** The ability of a company to identify, track, and collect information on activities (e.g. activity data or GHG emission or removals factors) related to material flows of goods and services in its value chain, across its upstream and downstream processes and products.
- **Impact traceability:** The ability of a company to identify, track, and collect information on the GHG emission or removal impacts of projects or interventions in the value chain of goods and

[9] Terms and definitions are taken from the Land Sector and Removals Standard except where noted.

services purchased or sold by the company, including upstream and downstream processes and products.

- **Activity pool:** The set of emissions sources that may physically serve the reporting entity, but within which further traceability to the specific physical sources used by the reporting entity is not possible (Brander & Bjørn, 2023). Examples include an upstream supply pool, such as a supply shed from which companies source a specific commodity, or a downstream activity pool, such as the electricity grid that powers the products the company brings to market. (SBTi Corporate Net-Zero Standard Version 2.0, second consultation draft)
- **Sourcing region**: A predefined, spatially explicit land area that supplies a given raw material to the first point of aggregation or first processing facility in the value chain. Sourcing region boundaries may be defined relative to the tier of the value chain that is inclusive of multiple first points of aggregation or first processing facilities with overlapping areas that supply harvested raw materials.
- **Supply shed:** A group of suppliers providing functionally equivalent goods or services within a fixed and spatially defined area that is demonstrably part of a company's supply chain (VCI Food and Agriculture Sector Guidance).
- **Chain of custody model:** The approach taken to transfer the information associated with a material or product as ownership of the material or product transfers from one entity to another in a value chain
- **Chain of custody models** (adapted from: ISO 22095:2020; ISEAL, 2025)[10], ranked from strong physical relationship to no physical relationship:
    - **Identity preserved:** Chain of custody model in which materials or products with specified characteristics originating from a single source or origin are kept physically separate from materials or products originating from other sources throughout the value chain.
    - **Segregation**: Chain of custody model in which materials or products with a set of specified characteristics are kept physically separate from materials or products without that set of characteristics. This model allows for mixing of materials with the same set of characteristics from multiple sources but not mixing with materials or products without that set of characteristics.
    - **Controlled blending:** Chain of custody model in which materials or products with a set of specified characteristics are mixed according to certain criteria with materials or products without that set of characteristics, resulting in a proportional attribution of the specified characteristics within all parts of the final output(s) or product group(s). System boundaries: At a given stage in the value chain for a batch of products.
    - **Mass balance (options):**
        - **"**Chain of custody model in which materials or products with a set of specified characteristics are mixed according to defined criteria with materials or products without that set of characteristics" (ISO 22095:2020)

[10] For definitions and additional guidance refer to ISEAL Alliance, "Chain of Custody Models and Definitions." *A reference document for sustainability system stakeholders. Version* 2 (2025).

  - "A chain of custody model in which certified input materials are mixed according to defined criteria with non-certified materials, and where there is no guarantee of physical presence of specified characteristics in a material" (ISEAL, 2025)
  - "Chain of custody model in which materials or products with a set of specified characteristics are mixed according to defined criteria with materials without that set of characteristics, and where the volume of content with the specified characteristics can be attributed to any of the parts of the final output(s) or product group(s), at the transfer boundary. If the transfer boundary is producing various outputs or product groups, allocation has to be performed first. Transfer boundary can be at a given stage in the value chain, where the volume of content with specified characteristics is reconciled at a:
    - Batch-level – for the final outputs from the batch at the point of blending.
    - Site-level (facility) – for the final outputs at the site over a defined reconciliation period, recommended to not exceed 12 months.
    - Multi-site / group-level – for the final outputs from the multiple sites over a defined reconciliation period, recommended to not exceed 12 months." (Land Sector and Removals Standard)

- **Controlled Mass Balance:** A variation of mass balance, where all input material entering the system boundary has specific attributes – most commonly that all the material, whether certified or not, is compliant with a set of minimum specified legal or sustainability requirements (ISEAL, 2025)
- **Book and Claim (options)**:
  - "A model in which the transfer of certified volumes are decoupled from the physical flow of material or product through the supply chain" (ISEAL, 2025)
  - "Chain of custody model in which the administrative record flow is not necessarily connected to the physical flow of material or product throughout the supply chain." (ISO 22095:2020)
  - **"**Chain of custody model in which the transfer of specified characteristics are not connected to the physical flow of material or products through the supply chain." (Land Sector and Removals Standard)

6. Principles for GHG accounting and reporting

The GHG accounting and reporting of GHG impacts of actions and market instruments should be accurate, consistent, complete, relevant, transparent and conservative, removals should meet the principle of permanence, and additional quality criteria apply to credited GHG reductions and removals.

The sections below present general definitions of each principle from multiple standards (including draft updates being considered in the Corporate Standard TWG) and apply or extend the general concepts as a basis for designing a new multi-statement GHG reporting structure for impacts of actions and market instruments.

6.1 Transparency

- **General definition (draft, subject to revision and consolidation)**
  - Corporate Standard: Ensure that GHG reporting contains all information relevant to users including but not limited to assumptions, limitations, exclusions, and references to accounting and calculation methodologies and data sources used. Present all information in a clear, factual, neutral, and understandable manner. Maintain clear documentation (i.e., an audit trail) to enable internal reviewers and external verifiers to attest to the credibility of reported GHG information.
  - Project Protocol: Provide clear and sufficient information for reviewers to assess the credibility and reliability of GHG reduction claims.
  - Policy and Action Standard: Provide clear and complete information for internal and external reviewers to assess the credibility and reliability of the results. Disclose all relevant methods, data sources, calculations, assumptions, and uncertainties. Disclose the processes, procedures, and limitations of the GHG assessment in a clear, factual, neutral, and understandable manner through an audit trail with clear documentation. The information should be sufficient to enable a party external to the GHG assessment process to derive the same results if provided with the same source data.
- **Application to actions and market instruments**
  - A foundational concept for multi-statement GHG reporting design is transparent and disaggregated reporting of unique reporting statements and elements without netting.
  - Ensure separate reporting of attributional (e.g. physical inventory emissions) and consequential elements (e.g. GHG impacts of actions).
    - Separate reporting of physical inventory emissions from project-based GHG reductions and trades of market instruments is established in the Corporate Standard (Chapter 8, Accounting for GHG Reductions, page 60-61 – see Annex C).
  - As a policy neutral standard,[11] the role of GHG Protocol is to ensure accurate, complete, transparent information. Disaggregation of GHG elements ensures separate reporting of "apples and oranges" to ensure full transparency and enable other actors and

[11] GHG Protocol standards should be scientifically sound and policy neutral, such that they support multiple policy mechanisms and programs that build on the GHG Protocol foundation. GHG Protocol standards focus primarily on GHG accounting and reporting issues while identifying relevant policy issues and target setting issues to be addressed by programs, regulators, and policymakers. GHG Protocol standards are policy relevant and intended to support the larger objective of reducing GHG emissions in line with global climate goals, but the standard is not designed to favor one policy mechanism over another. GHG Protocol standards provide guidance on target setting and limited requirements where needed to support the accounting and reporting approaches.

policymakers to make decisions about whether and how to add or net diverse categories.

- Whether to include one or more accounting categories within a target boundary and whether to net one category against another (i.e. treat one as fungible with another) is a policy decision. Target setting programs and policymakers can make policy decisions about whether to aggregate or net across categories when defining target setting rules in the context of specific policy/program objectives.
- Disaggregated, transparent reporting without netting under the GHG Protocol ensures transparency and allows for better integration with multiple programs (including target setting programs such as SBTi), which may seek to include different reporting elements based on their policy objectives. If GHG Protocol were to merge or net elements in the GHG reporting, GHG Protocol would be taking away the ability of programs and policymakers to make policy decisions.
- For more information on target setting and the role of GHG programs, see section 7.

- Ensure transparency by reporting methodologies, baselines, assumptions, and data sources to quantify GHG impacts and outcomes of actions and market instruments.

6.2 Completeness

- **General definitions**
  - Corporate Standard: Account for and report on all GHG emissions, removals (if applicable) and other metrics from sources, sinks and activities within the inventory boundary. Disclose and justify any exclusions. A complete inventory should appropriately reflect the GHG emissions, removals, and other metrics of the company. Companies should not exclude any activities that would compromise the relevance of the reported inventory.
  - Project Protocol: Consider all relevant information that may affect the accounting and quantification of GHG reductions and complete all requirements.
  - Policy and Action Standard: Include all significant GHG effects, sources, and sinks in the GHG assessment boundary. Disclose and justify any specific exclusions.
- **Application to actions and market instruments**
  - Include all relevant impacts and actions in the GHG report. Do not have biased (systematically incomplete) reporting based on inclusion or exclusion of information.
  - The GHG accounting and reporting system should account for and report both positive and negative elements (i.e. increases and decreases in emissions and removals) occurring within and outside the inventory boundary.
  - Avoid cherry picking by selectively reporting on positive impacts or actions without reporting on both positive and negative impacts or actions
    - Avoid cherry picking of which actions to report on. If companies report GHG impacts of actions, companies should report impacts from all significant actions, not only selectively reporting impacts from only positive actions.

- Avoid cherry picking of which impacts of those actions to quantify and report. If GHG impacts of actions are reported, companies should report all significant GHG impacts (positive and negative), including both increases and decreases in emissions/removals.

6.3 Accuracy

- **General definition**
  - Corporate Standard: Ensure that the quantification of GHG emissions, removals (if applicable) and other metrics is systematically neither over nor under the actual value, as far as can be judged, and that uncertainties are reduced as far as practicable. Achieve sufficient accuracy to enable users to make decisions with reasonable confidence as to the integrity of the reported information.
  - Project Protocol: Reduce uncertainties as much as is practical.
  - Policy and Action Standard: Ensure that the estimated change in GHG emissions and removals is systematically neither over nor under actual values, as far as can be judged, and that uncertainties are reduced as far as practicable. Achieve sufficient accuracy to enable users and stakeholders to make appropriate and informed decisions with reasonable confidence as to the integrity of the reported information. Accuracy should be pursued as far as possible, but once uncertainty can no longer be practically reduced, conservative estimates should be used.
- **Application to actions and market instruments**
  - Reported GHG emissions, removals, or emission reductions should be scientifically accurate as far as reasonably feasible and correspond to real emissions, removals or reductions in greenhouse gases to/from the atmosphere.
  - Quantification methods and data should be appropriate to support intended claims. Ensure that any claims based on the reported data are accurate and not misrepresentative. For example, emission reduction claims should be based on methods designed to quantify emission reductions.
  - Ensure that the estimated change in GHG emissions and removals is systematically neither over nor under actual values, as far as can be judged, and that uncertainties are reduced as far as practicable. Accuracy should be pursued as far as possible, but once uncertainty can no longer be practically reduced, conservative estimates should be used.

6.4 Conservativeness

- **General definition**
  - Corporate Standard (as part of accuracy principle)[12]:

[12] Adapted from conservativeness text in the GHG Protocol Policy and Action Standard.

- Accuracy should be pursued as far as possible, but once uncertainty can no longer be practically reduced, conservative estimates should be used.
- Conservative values and assumptions are those more likely to overestimate GHG emissions (except in the base year), underestimate removals, and underestimate GHG reductions from a base year or GHG reductions over time.
    - For base year emissions, conservativeness means pursuing accuracy as far as possible, then under-estimating base year emissions if there is uncertainty, so as not to overestimate reported GHG reductions relative to base year. Overestimating base year emissions would be non-conservative, since it would have the effect of overestimating reported GHG reductions relative to base year emissions.
- Users should consider conservativeness in addition to accuracy when uncertainty can no longer be practicably reduced, when a range of possible values exist, or when uncertainty is high. Whether to use conservative estimates and how conservative to be depends on the objectives of the GHG inventory. The principle of relevance can help guide what approach to use and how conservative to be. For some objectives, accuracy should be prioritized over conservativeness in order to obtain unbiased results.
- Conservativeness should not be used as a substitute for collecting accurate data where data exist and can be collected, or as a justification for not improving data collection systems to collect more accurate data. Users should apply sensitivity analysis when uncertainty is high to understand the range of possible outcomes using both more conservative and less conservative assumptions. Chapter 7 *[Managing Inventory Quality]* provides guidance on uncertainty.
- The GHG Protocol Land Sector and Removals Standard includes a conservativeness principle that companies accounting and reporting on CO_2 removals are required to follow.

- Project Protocol: Use conservative assumptions, values, and procedures when uncertainty is high. GHG reductions should not be overestimated. Where data and assumptions are uncertain and where the cost of measures to reduce uncertainty is not worth the increase in accuracy, conservative values and assumptions should be used. Conservative values and assumptions are those that are more likely to underestimate than overestimate GHG reductions.

- **Application to actions and market instruments**
    - Accuracy should be pursued as far as possible, but once uncertainty can no longer be practically reduced, conservative estimates should be used. Users should consider conservativeness when a range of possible values or probabilities exists (for example, when developing baseline scenarios).
    - Conservative values and assumptions are those more likely to underestimate GHG reductions and removals (or overestimate GHG emissions) resulting from an action.
    - For base year emissions or baseline scenario emissions, conservativeness means pursuing accuracy as far as possible, then under-estimating base year emissions or baseline scenario emissions if there is uncertainty, so as not to overestimate reported GHG reductions relative to base year or baseline scenario emissions. Overestimating

base year or baseline scenario emissions would be non-conservative, since it would have the effect of overestimating reported GHG reductions relative to base year or baseline scenario emissions.

6.5 Consistency

- **General definitions**
  - Corporate Standard: Use consistent methodologies to allow for meaningful comparisons of GHG emissions, removals (if applicable) and other metrics for the company over time, between divisions within the company, and between companies where relevant. The consistent application of accounting approaches, inventory boundaries, data sources, calculation methodologies, assumptions, and reporting formats is essential to producing comparable GHG emissions data. Transparently document any changes to the data, inventory boundary, methods, or any other relevant factors in the time series.
  - Project Protocol: Use data, methods, criteria, and assumptions that allow meaningful and valid comparisons.
  - Policy and Action Standard: Use consistent accounting approaches, data collection methods, and calculation methods to allow for meaningful performance tracking over time. Transparently document any changes to the data, GHG assessment boundary, methods, or any other relevant factors in the time series.
    - **Comparability:** Ensure common methodologies, data sources, assumptions, and reporting formats such that the estimated change in GHG emissions and removals resulting from multiple policies or actions can be compared. If the objective is to compare the results of independent assessments of policies carried out by different entities, users should exercise caution in comparing the results of policy assessments based on this standard. Differences in reported emissions impacts may be a result of differences in methodology rather than real- world differences. Additional measures are necessary to enable valid comparisons, such as consistency in the timeframe of the assessments, the types of effects included in the GHG assessment boundary, baseline assumptions, calculation methodologies, methods for assessing policy interactions, and data sources. Additional consistency can be provided through GHG reporting programs or more detailed sector- specific guidance. To understand whether comparisons are valid, all methodologies, assumptions, and data sources used must be transparently reported.
- **Application to actions and market instruments**
  - Use methods, approaches and data that are consistent (over time) and comparable (across companies) to the extent possible.
  - Use methods, approaches and data that are consistent and comparable between project (with-action) and baseline (without-action) scenarios when estimating GHG impacts of actions.

6.6 Relevance

- **General definitions**
  - Corporate Standard: Ensure the GHG inventory report appropriately reflects the GHG emissions, removals (if applicable) and other metrics of the company and serves the decision-making needs of users – both internal and external to the company.
  - Project Protocol: Use data, methods, criteria, and assumptions that are appropriate for the intended use of reported information.
  - Policy and Action Standard: Ensure the GHG assessment appropriately reflects the GHG effects of the policy or action and serves the decision- making needs of users and stakeholders— both internal and external to the reporting entity.
- **Application to actions and market instruments**
  - Include all relevant statements and reporting elements in the GHG report.

6.7 Permanence

- **General definitions**
  - Land Sector and Removal Standard (for inventory removals): Ensure mechanisms are in place to monitor the continued storage of reported removals and captured GHGs, account for reversals, and report emissions from associated carbon pools.
  - Land Sector and Removal Standard (for credited removals): GHG reduction or removal credits ensure the longevity of a carbon pool and the stability of its stocks over time (such as 100 years or other time period defined by the program) and have mechanisms in place to monitor and compensate for any reversals or emissions from the stored carbon.
- **Application to actions and market instruments**
  - This principle applies to removals only.
  - Any reported removals should ensure permanence. (Specific definition of permanence and approach to operationalizing permanence to be determined in phase 2).

6.8 Principles or quality criteria for (credited) emission reductions and enhanced removals

Additional principles or quality criteria beyond the principles above (sections 6.1 to 6.7) apply when accounting for and reporting credited GHG emission reductions or removals. Various external initiatives have developed quality criteria which are also relevant and will be considered (e.g. UNFCCC Article 6, AIM, TCAT, ICVCM, VCMI, SBTi, ISO 14068, etc.). Their application to eligibility requirements for reporting on actions and market instruments will be further considered. Further details and options on quality criteria are presented in section 9.

- **General definitions**
  - Land Sector and Removals Standard: Companies shall ensure that any credited GHG reductions or removals adhere to the following quality criteria:
    - Additionality, credible baselines, permanence (for removals), mitigate leakage, unique issuance and claiming, regular monitoring, independent validation and verification, GHG program governance, and no net harm.
- **Application to actions and market instruments**
  - Actions and market instruments reported in a corporate GHG report should be impactful in reducing GHG emissions or increasing GHG removals.
  - GHG reductions reported in a corporate GHG report should correspond to reductions in atmospheric GHG emissions.
  - GHG removals reported in a corporate GHG report should correspond to permanent removals of GHG emissions from the atmosphere.
  - GHG reductions or removals reported in a corporate GHG report should reflect additional emissions reduction, avoidance, or removal that would not have occurred absent the reporting company's intervention (specific methods for operationalizing additionality are to be determined).
  - Additional quality criteria are presented in section 9.

7. Target setting and role of programs

GHG Protocol provides standards and guidance on GHG quantification/accounting and reporting. GHG Protocol's role is not to decide whether or under what conditions market instruments or actions are eligible to count toward meeting company targets. Deciding on the use of instruments is a policy decision about target setting rules to be made by programs and policymakers.

Target setting programs historically focus on the physical inventory plus the scope 2 market-based inventory as these are the currently existing statements. With the AMI Standard/Guidance developing additional statements for a GHG report, new statements will likely become part of reporting in accordance with GHG Protocol Standards. These new statements present options for target setting programs to consider as they set target setting rules.

GHG Protocol supports target setting programs such as SBTi by providing common measurement and reporting data upon which programs can make policy decisions on which elements to include in target boundaries. It is up to programs to decide which elements of a comprehensive multi-statement GHG report to use to meet GHG targets.

GHG Protocol plans to provide limited guidance to target setting programs and policymakers on options or recommendations for target setting and target accounting, but decisions should be made by programs, regulators, and policymakers. Actions and market instruments could be part of overall target accounting or performance accounting, subject to policy and programmatic rules.

Setting net targets – role of policymakers and GHG programs

- Setting rules for net targets is a GHG program or regulatory decision. The GHG Protocol accounting and reporting standard is not by itself sufficient for this purpose.
- If more than one accounting category is included in a net target boundary, it allows progress in one category to count against progress in another category when determining whether the net target has been achieved. GHG Protocol requires disaggregation of reporting elements in GHG reports, which enables policymakers, regulators and GHG programs to make policy decisions on fungibility between reporting elements in the context of specific program objectives.
- Target setting programs may choose to allow reporting elements to be added or netted within a target boundary to meet specific program objectives.

Target setting rules to be defined by policymakers and GHG programs

- Target boundary (i.e. which GHG statements and elements to include)
- Target level (i.e. level of ambition of the target)
- Target base year and target year
- Reference point for GHG impacts of actions and market instruments such as avoided emissions (e.g. physical inventory emissions, other reference points)
- Whether specific types of actions and market instruments are eligible or ineligible to count toward corporate GHG targets, and if so for which sectors, for which types of instruments / programs, up to what limit, in what geographies, for what period of time, etc.

As many companies rely on both SBTi and GHG Protocol, both organizations are undergoing active processes to align where possible and define GHG accounting and reporting approaches (GHG Protocol) and target setting rules (SBTi) for how GHG impacts beyond the physical GHG inventory can be incorporated into a broader understanding of corporate climate action. As these processes continue, additional communications will specify how GHG accounting and reporting statements developed by GHG Protocol map to target setting categories developed by SBTi.

8. Structure of a GHG Report

A GHG report should contain information on unique elements in separate statements. While the Physical GHG Inventory is and will remain the primary component of corporate reporting outlined within the Corporate Standard, additional statements listed below are being considered within the Actions and Market Instruments Technical Working Group.

8.1 Overview of statements

Options for statements to be included in a GHG report are as follows:

1. Physical GHG inventory
2. Contractual GHG inventory
3. GHG impacts of actions
    A. Within organizational boundary
    B. Within value chain (outside organizational boundary)

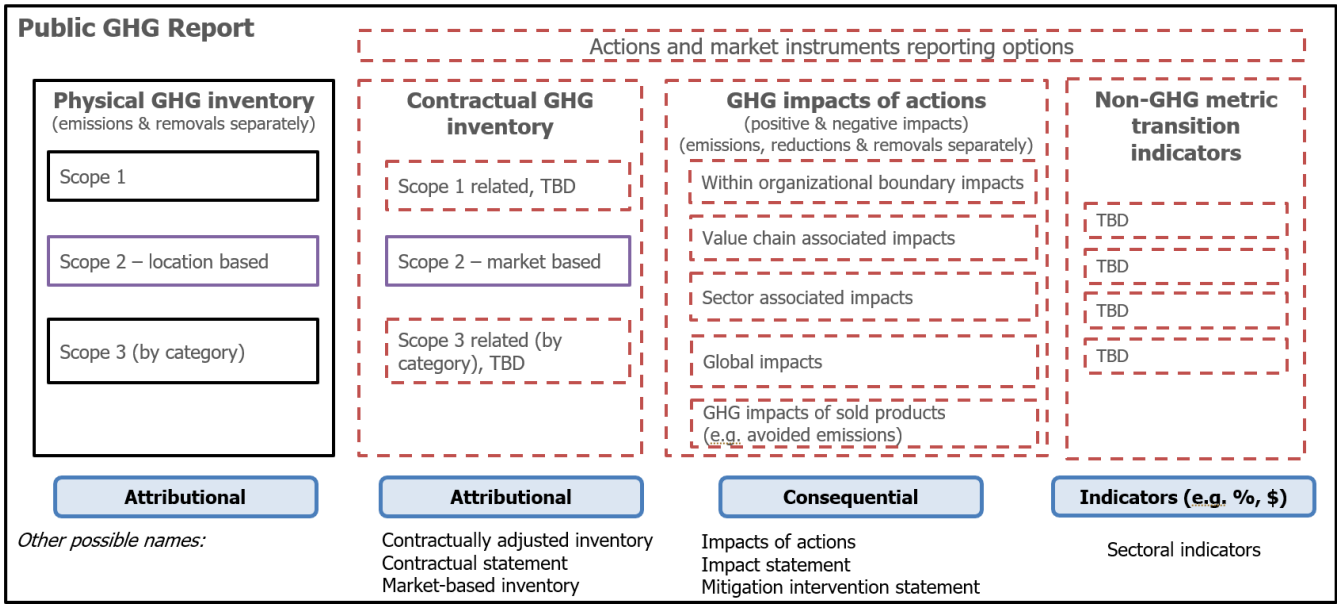
C. Within sector (outside of value chain)
D. GHG impacts of sold products (e.g. avoided emissions)
E. Global (outside sector)

4. Non-GHG metric transition indicators

These statements are outlined in figure 6 and represent the various options under consideration. Elaboration on the details of each statement is provided below and in Annex F. The statement options in figure 6 and elements in Annex F are draft and will be further developed and finalized in phase 2 of the standard development process.

No decisions have been made on which statements should be required or optional, other than the physical GHG inventory which is required. Decisions have not been made on whether statements are mutually exclusive or not. As the TWG develops these topics further, changes to the statement structure, naming, accounting and reporting specifications, and other aspects of the proposed multi-statement reporting structure may occur.

Figure 6. Reporting statements under consideration



Notes:

1. The above are options for additional statements to account for and report on the impacts of actions and market instruments outside of the physical GHG inventory.
2. Solid lines are current elements in published final or draft standards. All elements in red dotted lines are possible future elements, to be determined and subject to change. Purple elements are addressed by the Scope 2 Standard/Guidance.
3. Names of statements are draft and subject to change. Alternative names are listed below the statements.
4. Each statement would include disaggregated reporting into multiple individual reporting elements or accounting categories. The figure illustrates possible disaggregation categories, but the specific disaggregation categories as well as overall statement structure is subject to change and further development.
5. Additional accounting categories or reporting elements may be defined by additional sector-specific requirements and guidance (e.g. Land Sector and Removals Standard).

8.2 Physical GHG Inventory

The physical GHG inventory as first established in the GHG Protocol Corporate Standard continues to serve as the foundation of corporate GHG accounting and reporting. It provides comprehensive accounting and disclosure of an organization's annual GHG emissions (and removals, if applicable) resulting from the company's activities in its operations and value chain across scope 1, scope 2 and scope 3, using attributional accounting approaches and independent of any GHG trades such as purchases or sales of allowances, offsets, and credits.

Purpose

The purpose of the physical GHG inventory is to:

- Provide a comprehensive accounting and disclosure of an organization's annual GHG emissions resulting from the company's activities in its operations and value chain.
- Serve as the foundation for the ecosystem of corporate GHG accounting and reporting.
- Provide information on the sources of emissions and trends over time.
- Serve as primary basis for setting GHG emissions reduction targets and tracking progress over time.
- Inform mitigation actions by identifying emission reduction opportunities (that reduce activity data or emission factors) in reporting company operations or value chain.
- Inform investors and other stakeholders about climate-related risks and opportunities of the reporting entity.

Statement characteristics

The physical GHG inventory is defined by organizational boundaries, operational boundaries, and scope 3 category definitions in accordance with the *GHG Protocol Corporate Accounting and Reporting Standard* and the *Corporate Value Chain (Scope 3) Accounting and Reporting Standard*. There is no double counting of emissions and removals within a single GHG inventory, such that scope 1, scope 2, and scope 3 (and scope 3 categories) are mutually exclusive for the reporting organization.

Accounting method

The physical GHG inventory uses attributional (or inventory) accounting methods to quantify GHG emissions (and removals, if applicable) within a defined inventory boundary, tracked over time relative to a historical base year. This approach accounts for average emissions from a shared pool if a company's level of physical traceability does not exceed that shared pool.

Key topics to address in phase 2

Phase 2 will define boundaries between market instruments that enable physical traceability/connectivity and therefore can be accounted for in the physical GHG inventory and instruments that do not fulfill this requirement and can instead be eligible for statement 2, providing that eligibility criteria, quality criteria and safeguards are met.

8.3 Contractual GHG Inventory

The contractual GHG inventory presents a complementary inventory in which the emissions associated with the activities in the physical inventory are adjusted based on the purchase of qualified contractual arrangements and market instruments.

The contractual GHG inventory may incorporate the existing scope 2 market-based method and is expected to introduce new approaches for scope 1 and scope 3.

Purpose

The purpose of the contractual GHG inventory is to:

- Create opportunities for organizations to account for and report on actions/investments that are not eligible for reporting within the physical GHG inventory if they enable value chain decarbonization (in sectors such as chemicals, transport, steel and cement but also in agriculture).
- Standardize accounting and reporting approaches and integrate eligibility criteria, safeguards, and quality criteria for the procurement and reporting of market instruments so that reporting organizations and stakeholders can have confidence in markets for contractual instruments and contractually adjusted GHG emissions reporting.
- Allow for setting targets and tracking progress against targets (if instruments are eligible under target setting program rules)

Statement characteristics

The contractual GHG inventory includes annual reporting of emissions resulting from activities that occurred in the reporting year.

Examples of market instruments may include mitigation-related contractual agreements or commodity certificates for the purchase of low-carbon fuels (such as biomethane, waste-derived liquid fuels, green hydrogen) and commodities (such as metals, chemicals, cement, agricultural products), subject to eligibility criteria, safeguards and quality criteria to be defined in phase 2.

Accounting method

The contractual GHG inventory uses attributional (or inventory) accounting methods to quantify GHG emissions (and removals, if applicable) within a defined inventory boundary, tracked over time relative to a historical base year.

There are multiple proposed methods for quantifying the impacts of interventions on emissions factors. The AMI TWG so far has collected existing approaches from VCI, AIM and TCAT. See Table F.2 for calculation method options such as substitution, enhanced substitution, and activity estimation methods.

Key topics to address in phase 2

Phase 2 will include evaluating proposed accounting methods and developing requirements/guidance for their use, as well as developing quality requirements and safeguards for eligible market instruments. It will also consider the feasibility of developing a complete contractual inventory across all scopes, including considering the application of residual emission factors and appropriate allocation approaches, as well as additional topics outlined in Annex F.

8.4 GHG Impacts of Actions

The GHG impacts of actions statement provides a dedicated, structured statement for reporting on impacts (e.g. emissions avoided, reduced or removed) of actions taken by the reporting company inside and outside the company's value chain using consequential accounting methods.

The GHG impacts of actions statement does not provide a comprehensive assessment of a corporate footprint, but instead allows reporters to quantify and report the impact of activities that are quantified using consequential methods and therefore not reflected in the physical GHG inventory.

Purpose

The purpose of the GHG impacts of actions statement is to:

- Provide quantification and reporting of the outcomes of corporate actions on climate change mitigation within or beyond an organization's value chain
- Incentivize investment, financing and mitigation through solutions where a reporting organization cannot reduce emissions in the physical GHG inventory
- Recognize corporate contributions to GHG mitigation within value chains, sectors, and globally
- Inform mitigation actions by identifying emission reduction opportunities based on quantified GHG impact
- Allow for setting targets and tracking against consequential or impact-based targets (if instruments are eligible under target setting program rules)

Statement characteristics

The statement is expected to include separate reporting of GHG impacts into multiple categories. The TWG is exploring the following categories:

- Within organizational boundary impacts
    - Quantified GHG impacts of actions implemented by the reporting company within the reporting company's organizational boundary [which are not reported in other statements].
    - For examples of such actions, refer to Annex C which copies text from the GHG Protocol Corporate Standard (chapter 8) on situations where companies can take actions within their organizational boundary which result in GHG impacts that do not show up in their GHG inventory.
- Value chain associated impacts
    - Quantified GHG impacts of actions implemented by the reporting company within the reporting company's value chain, outside of its organizational boundary [which are not reported in other statements].
- Sector associated impacts
    - Quantified GHG impacts of actions implemented by the reporting company within the reporting company's sector, outside of its value chain [which are not reported in other statements].
- Global impacts (beyond value chain and sector)
    - Quantified GHG impacts of actions implemented by the reporting company outside of the reporting company's sector [which are not reported in other statements].
- GHG impacts of sold products (e.g. avoided emissions)

- Quantified change in systemwide GHG emissions resulting from the use of products sold by the reporting company relative to emissions in a counterfactual baseline scenario.

Note: Some categories (e.g. value chain associated impacts and sector associated impacts) may be merged throughout the further work in phase 2. If they remain distinct, specific definitions, criteria or tests to differentiate 'value chain' and 'sector' will be developed in phase 2 (including building on or referring to external initiatives).

This statement is expected to include quality criteria such as additionality, credible baselines, permanence, mitigate leakage, unique issuance and claiming, regular monitoring, independent validation and verification, GHG program governance, and sustainable development benefits and safeguards. These will be further developed in phase 2.

Accounting method

The GHG impacts of actions statement uses consequential accounting methods to quantify impacts on GHG emissions or removals of specific projects, actions, or interventions by estimating the GHG impacts of an action relative to a baseline scenario in which the action did not occur. Specific methods based on the type of action or intervention may vary and are to be further discussed in phase 2. For a more detailed description of possible quantification methods, refer to Table F.2.

Key topics to address in phase 2

Phase 2 topics include further refining the proposed reporting substructure, exploring the use of existing sector and association tests (e.g. AIM, TCAT), developing additionality criteria, quality criteria and safeguards for eligible interventions, addressing the issue of double claiming, selection of appropriate baselines, discuss the concept of induced emissions as well as additional topics outlined in Annex F. Phase 2 will also be informed by the outcomes of the scope 2 public consultation results on consequential accounting methods (see box 1).

Box 1. Consequential electricity-sector emissions impacts

In February 2025 the Scope 2 Technical Working Group (TWG) formed a subgroup of electricity sector experts to develop methodologies for quantifying consequential emissions impacts for electricity projects. Its remit was to produce sector-specific recommendations and proposals for the Actions and Market Instruments (AMI) TWG. The subgroup's purpose was to recommend how organizations quantify and report consequential GHG impacts from their electricity actions. Its objectives were to: (1) provide focused, actionable recommendations to advance consequential accounting measures, (2) outline any additional disclosure elements needed to report consequential impacts, and (3) deliver a detailed proposal to the AMI TWG with calculation methodologies and reporting guidance. The subgroup produced a draft proposal. Following this work, the ISB directed further development of cross-sector avoided emissions/consequential methods to continue under the AMI TWG, building on the subgroup's groundwork, before resuming sector-specific methodological development.

A public consultation on consequential electricity-sector emissions impacts began on October 20, 2025 through January 31, 2026. The outputs from this consultation will be considered by the AMI TWG in phase 2 in developing the requirements, quality criteria, reporting structure and other elements of the GHG impacts of actions statement.

8.5 Non-GHG Metric Transition Indicators

This statement provides a reporting structure for various decision-relevant and decarbonization-relevant metrics and indicators. Examples may include financing contributions to mitigation projects, percentage of procurement or products sold that meet defined criteria, intensity metrics, or other key performance indicators that are not measured in GHG metrics.

Purpose

The purpose of the non-GHG metric transition indicators statement is to:

- Provide additional means of reporting on climate mitigation progress through indicators, separately from attributional and consequential GHG accounting.
- Provide robust and clear, ideally simple, easy to measure, and easy to communicate key performance indicators that are decision-relevant, decarbonization-relevant, and can be used to track performance without GHG quantification.
- Allow for setting targets and tracking progress against non-GHG indicator targets (if eligible under target setting program rules).

Statement characteristics

Examples of indicators that may be reported may include but are not limited to:

- Percentage of materials procured or products sold that are zero/low carbon or meet defined criteria
- Revenue from products sold that are zero/low carbon; procurement spend for zero/low carbon materials ($, €, etc.)
- Renewable energy purchases (%, GWh, $, €, etc.)
- Land occupation
- Financial contribution ($, €, etc.) to actions beyond the company's value chain with an expected climate mitigation outcome

Accounting method

Accounting methods may vary based on selected indicators. However, base year value and/or reference level should be provided for each indicator.

Key topics to address in phase 2

Phase 2 will include exploring to what extent non-GHG indicators can be standardized, given the need for sector-specific metrics, exploring whether reporting on progress of Transition Plans can be supported given that they are required in some jurisdictions, as well as additional topics outlined in Annex F.

Annex A. Questions to address in phase 2 (non-exhaustive) to inform GHG reporting structure and accounting and reporting requirements

The questions below are a non-exhaustive list of topics to be addressed and resolved in phase 2 of the AMI Standard/Guidance development process. Some of these topics have been discussed by the TWG in phase 1, but will be fully resolved in phase 2. A selection of questions will also inform the Q1 2026 public consultation. The GHG Protocol Secretariat and the AMI TWG will prepare consultation questions in January 2026 for review and approval by the ISB prior to the consultation in Q1 2026.

General

1. Should statements be mutually exclusive, such that no reported emission or impact appears in more than one statement?
2. For market instruments that could be theoretically reported in more than one statement (e.g. book and claim certificates), should there only be one available statement to report a given type of market instrument? If more than one statement is developed to report on a single type of market instrument, how could confusion be avoided and how could companies be guided to report a given action/instrument in the most suitable statement?
3. How can eligibility criteria, quality criteria and safeguards be defined such that actions, market instruments and claims are only reported if they have sufficient credibility/integrity?
4. Should each statement be optional or required?
5. How should the statements be named?
6. How can the need for differentiated, disaggregated reporting and requirements to ensure the credibility of instruments be balanced with practical feasibility in terms of accounting and reporting effort for users?

Physical GHG inventory

7. Which chain of custody models establish physical traceability?
8. Which alternative models beyond chain of custody models can demonstrate physical traceability?

Contractual GHG inventory

9. Is the purpose of a contractual inventory distinct and complementary relative to a physical inventory and impact statements?
10. What type of instruments are eligible to be reported in this statement and which quality criteria and safeguards need to apply?
11. How would a contractual inventory look like in practice across scope 1, scope 2, and scope 3?
12. Should emissions be used from the physical GHG inventory in cases where no market instruments are available to ensure completeness of this statement (e.g. for scope 3 category 1where only limited market instruments exist)?

13. Can residual emission factors be developed and mandatorily used by all actors to avoid double counting?
14. Is it appropriate to have a scope 1 category in a contractual GHG statement given that scope 1 emissions are direct emissions?
15. How should market instruments for renewable fuels be accounted for?
16. What chain of custody models do not establish physical traceability?
17. How can this method include the lessons learned and avoid the challenges and critiques of the original scope 2 market-based method?
18. Can the latest updates to the scope 2 market-based method (e.g. hourly matching, deliverability) be applied to other sectors?
19. What quantity of contractual instruments are eligible to be reported? (e.g. no more than the unit of activity reflected in physical inventory)
20. Should double claiming be avoided between a company purchasing a physical product and a company purchasing a commodity certificate from the same product if they are unbundled? Should there be co-claiming and if so how should co-claiming be reported?

GHG impacts of actions

21. How should 'value chain' be defined? Should 'value chain' be defined such that the physical GHG inventory boundary corresponds to 'value chain' or defined in a broader manner?
22. What reporting structure should be used?
23. Can existing sector and association tests (e.g. AIM, TCAT) be used?
24. Which chain of custody models should be reflected in this statement?
25. Should the reporting categories (e.g. within the organizational boundary, within the value chain) be defined based on where the action occurs or where the impact of that action on GHG sources/sinks occurs?
26. How should additionality be operationalized?
27. What baseline(s) should be used?
28. How should quantified GHG impacts of multiple actions be aggregated and/or disaggregated?
29. What safeguards are needed to define and standardize baseline selection?
30. What calculation method(s) should be used?
31. What type of instruments are eligible to be reported in this statement?
32. Should double claiming be avoided between a company purchasing a physical product and a company purchasing a commodity certificate from the same product if they are unbundled? Should there be co-claiming and if so how should co-claiming be reported?

Non-GHG metric transition indicators

33. To what extent can non-GHG metric transition indicators be standardized, assuming a large role for sector-specific indicators?
34. Can the indicators be linked to transition plans?
35. How should eligibility criteria for investment KPIs be defined?

Annex B: AMI Scope of Work from Standard Development Plan

A. Standardizing relevant terms, concepts, and definitions
B. Accounting and reporting objectives and principles
C. The relationship between inventory (attributional) and project/intervention (consequential) accounting and their use in the corporate suite of standards
D. The relevance and appropriate role of quantified impacts of corporate actions and market instruments in relation to the reporting company's organizational boundary and value chain. Including but not limited to:
    i. Emission reduction projects
    ii. Removal enhancement projects
    iii. Value chain interventions
    iv. Systemwide positive and negative impacts of actions, including avoided emissions (e.g. from the use of sold products), leakage, and other types of impacts
    v. Chain-of-custody certification models
    vi. Project-based credits
E. Structure of a corporate GHG emissions report
    i. Disaggregated, transparent reporting
        - Which may include multiple reporting elements such as categories, tables, or statements related to physical inventory emissions, impact reporting, and/or others to be defined
    ii. Definitions, purpose, and limitations of each reporting element
    iii. Appropriate quantification methods
F. Accounting requirements and guidance
    i. Boundaries, criteria, safeguards, etc.
    ii. Traceability requirements and guidance
    iii. Role of programs in defining programmatic rules
G. Reporting requirements and guidance
    i. The relationship between reporting elements and how to interpret a comprehensive GHG emissions report
H. Verification/assurance of emissions reports
I. Guidance to programs and policymakers
    i. Options and guidance for setting target setting rules based on program/policy objectives
        - Such as related to target boundaries, level of ambition, and eligibility of actions or market instruments
    ii. Options and guidance for setting target accounting (or performance accounting) rules for quantifying target progress and achievement, based on program/policy objectives
    iii. Role of programs in making policy decisions on whether and which instruments and actions count toward GHG targets and whether to aggregate or net across reporting categories to determine target progress
        - Including under what conditions, for which sectors, over what time period, etc.
    iv. Role of programs in verification, oversight, and enforcement

Annex C: Precedent in the GHG Protocol Corporate Standard

The following text is from the GHG Protocol Corporate Standard, Chapter 8 (Accounting for GHG reductions):

> "The *GHG Protocol Corporate Standard* focuses on accounting and reporting for GHG emissions at the company or organizational level. Reductions in corporate emissions are calculated by comparing changes in the company's actual emissions inventory over time relative to a base year. Focusing on overall corporate or organizational level emissions has the advantage of helping companies manage their aggregate GHG risks and opportunities more effectively. It also helps focus resources on activities that result in the most cost-effective GHG reductions.
>
> In contrast to corporate accounting, the [*GHG Protocol for Project Accounting]* focuses on the quantification of GHG reductions from GHG mitigation projects that will be used as offsets. Offsets are discrete GHG reductions used to compensate for (i.e., offset) GHG emissions elsewhere, for example to meet a voluntary or mandatory GHG target or cap. Offsets are calculated relative to a baseline that represents a hypothetical scenario for what emissions would have been in the absence of the project.
>
> …
>
> **Project based reductions and offsets/credits**
>
> Project reductions that are to be used as offsets should be quantified using a project quantification method, such as the [*GHG Protocol for Project Accounting],* that addresses the following accounting issues:
>
> - **SELECTION OF A BASELINE SCENARIO AND EMISSION.** The baseline scenario represents what would have happened in the absence of the project. Baseline emissions are the hypothetical emissions associated with this scenario. The selection of a baseline scenario always involves uncertainty because it represents a hypothetical scenario for what would have happened without the project. The project reduction is calculated as the difference between the baseline and project emissions. This differs from the way corporate or organizational reductions are measured in this document, i.e., in relation to an actual historical base year.
> - **DEMONSTRATION OF ADDITIONALITY.** This relates to whether the project has resulted in emission reductions or removals in addition to what would have happened in the absence of the project. If the project reduction is used as an offset, the quantification procedure should address additionality and demonstrate that the project itself is not the baseline and that project emissions are less than baseline emissions. Additionality ensures the integrity of the fixed cap or target for which the offset is used. Each reduction unit from a project used as an offset allows the organization or facility with a cap or target one additional unit of emissions. If the project were going to happen anyway (i.e., is non-additional), global emissions will be higher by the number of reduction units issued to the project.

- **IDENTIFICATION AND QUANTIFICATION OF RELEVANT SECONDARY EFFECTS.** These are GHG emissions changes resulting from the project not captured by the primary effect(s). Primary effects are the specific GHG reducing elements or activities (reducing GHG emissions, carbon storage, or enhancing GHG removals) that the project is intended to achieve. Secondary effects are typically the small, unintended GHG consequences of a project and include leakage (changes in the availability or quantity of a product or service that results in changes in GHG emissions elsewhere) as well as changes in GHG emissions up- and downstream of the project. If relevant, secondary effects should be incorporated into the calculation of the project reduction.
- **CONSIDERATION OF REVERSIBILITY.** Some projects achieve reductions in atmospheric carbon dioxide levels by capturing, removing and/or storing carbon or GHGs in biological or non-biological sinks (e.g., forestry, land use management, underground reservoirs). These reductions may be temporary in that the removed carbon dioxide may be returned to the atmosphere at some point in the future through intentional activities or accidental occurrences—such as harvesting of forestland or forest fires, etc. This problem with the temporary nature of GHG reductions is sometimes referred to as the "permanence" issue. The risk of reversibility should be assessed, together with any mitigation or compensation measures included in the project design.
- **AVOIDANCE OF DOUBLE COUNTING.** To avoid double counting, the reductions giving rise to the offset must occur at sources or sinks not included in the target or cap for which the offset is used. Also, if the reductions occur at sources or sinks owned or controlled by someone other than the parties to the project (i.e., they are indirect), the ownership of the reduction should be clarified to avoid double counting.

…

Reporting project based reductions

It is important for companies to report their physical inventory emissions for their chosen inventory boundaries separately and independently of any GHG trades they undertake. GHG trades should be reported in its public GHG report under optional information—either in relation to a target (Corporate Standard, chapter 11) or corporate inventory (see chapter 9). Appropriate information addressing the credibility of purchased or sold offsets or credits should be included. The term "GHG trades" refers to all purchases or sales of allowances, offsets, and credits.

When companies implement internal projects that reduce GHGs from their operations, the resulting reductions are usually captured in their inventory's boundaries. These reductions need not be reported separately unless they are sold, traded externally, or otherwise used as an offset or credit. However, some companies may be able to make changes to their own operations that result in GHG emissions changes at sources not included in their own inventory boundary, or not captured by comparing emissions changes over time. For example:

- Substituting fossil fuel with waste-derived fuel that might otherwise be used as landfill or incinerated without energy recovery. Such substitution may have no

direct effect on (or may even increase) a company's own GHG emissions. However, it could result in emissions reductions elsewhere by another organization, e.g., through avoiding landfill gas and fossil fuel use.

- Installing an on-site power generation plant (e.g., a combined heat and power, or CHP, plant) that provides surplus electricity to other companies may increase a company's direct emissions, while displacing the consumption of grid electricity by the companies supplied. Any resulting emissions reductions at the plants where this electricity would have otherwise been produced will not be captured in the inventory of the company installing the on-site plant.
- Substituting purchased grid electricity with an on-site power generation plant (e.g., CHP) may increase a company's direct GHG emissions, while reducing the GHG emissions associated with the generation of grid electricity. Depending on the GHG intensity and the supply structure of the electricity grid, this reduction may be over- or underestimated when merely comparing scope 2 emissions over time, if the latter are quantified using an average grid emission factor.

These reductions may be separately quantified, for example using the [*GHG Protocol for Project Accounting],* and reported in a company's public GHG report under optional information in the same way as GHG trades described above."

The Corporate Standard, Chapter 9 (Reporting GHG Emissions) provides requirements and guidance on the elements of a public GHG emissions report. The emissions report includes scope 1, scope 2, and scope 3 emissions, commonly referred to as the GHG inventory, as well as various additional required and optional information to be reported separately, such as project-based GHG reductions and trades of market instruments.

Annex D: Glossary of additional terms not included in section 5

Terms and definitions are taken from the Land Sector and Removals Standard, which builds on previous GHG Protocol standards, except where noted.

GHG inventory terms

- **Accounting:** Measuring, quantifying and monitoring GHG emissions, removals and other related metrics using standardized methods per agreed-upon protocols.
- **Activity data:** A quantitative measure of a level of activity related to a source or sink that results in GHG emissions, removals, and/or other impacts covered by other accounting categories.
- **Allocation:** The process of partitioning GHG emissions from a single facility or other system (e.g., vehicle, business unit, corporation) among its various outputs. (Scope 3 Standard)
- **Cradle-to-gate:** All emissions that occur in the life cycle of purchased products, up to the point of receipt by the reporting company (excluding emissions from sources that are owned or controlled by the reporting company). (Scope 3 Standard)
- **Direct emissions:** Emissions from sources that are owned or controlled by the reporting company. (Scope 3 Standard)
- **Emission:** The release of a greenhouse gas into the atmosphere.
- **Emission factor:** A value that estimates the quantity of emissions per unit of activity (e.g. per tonne of fuel consumed, per tonne of product produced), allowing absolute GHG emissions to be estimated from activity data.
- **GHG accounting:** Measuring, quantifying and monitoring GHG emissions, removals and other related metrics using standardized methods per agreed-upon protocols.
- **Indirect emissions**: Emissions that are a consequence of the activities of the reporting company, but occur at sources owned or controlled by another company. (Scope 3 Standard)
- **Inventory boundary**: A conceptual boundary that encompasses the direct and indirect emissions, removals and other relevant metrics that are included in the inventory. It results from the chosen organizational and operational boundaries, and relevant accounting categories.
- **Life cycle:** Consecutive and interlinked stages of a product system, from raw material acquisition or generation of natural resources to end of life. (Scope 3 Standard)
- **Product:** Any good or service. (Scope 3 Standard)
- **Removals (inventory accounting category):** The net transfer of a greenhouse gas from the atmosphere to storage within a non-atmospheric pool.
- **Reporting:** Presenting data to internal management and external users such as regulators, shareholders, the general public or specific stakeholder groups.
- **Reporting year:** The year for which emissions are reported. (Scope 3 Standard)
- **Residual mix:** The mix of energy generation resources and associated attributes such as GHG emissions in a defined geographic boundary left after contractual instruments have been

claimed/ retired/canceled. The residual mix can provide an emission factor for companies without contractual instruments to use in a market-based method calculation (Scope 2 Guidance).

- **Scope 1 emissions:** Emissions from operations that are owned or controlled by the reporting company. (Scope 3 Standard)
- **Scope 2 emissions:** Emissions from the generation of purchased or acquired electricity, steam, heating or cooling consumed by the reporting company. (Scope 3 Standard)
- **Scope 3 activity:** An individual source of emissions included in a scope 3 category. (Scope 3 Standard)
- **Scope 3 category:** One of the 15 types of scope 3 emissions. (Scope 3 Standard)
- **Scope 3 emissions:** All indirect emissions (not included in scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions. (Scope 3 Standard)
- **Sink:** A biogenic or technological process, activity or mechanism that removes greenhouse gases from the atmosphere
- **Source:** A process, activity or mechanism that releases greenhouse gases into the atmosphere.
- **Temporal boundary**: Determines the relevant time period for quantifying emissions, removals, or other accounting categories.
- **Value chain (Scope 3 Standard):** In the Scope 3 Standard, "value chain" refers to all of the upstream and downstream activities associated with the operations of the reporting company, including the use of sold products by consumers and the end-of-life treatment of sold products after consumer use.

Target related terms

- **External compensation target:** Target for achieving mitigation external to the target boundary through purchasing and retiring GHG credits (also called offsets or carbon credits) to compensate for annual or cumulative unabated emissions in the target boundary, if allowed under the relevant target setting program or target setting policy.
- **Contribution or financing target:** Target for contributing to financing GHG mitigation outside the company's target boundary, through financing or purchasing and retiring GHG credits applied against contribution targets (i.e., without using GHG credits as offsets or compensation).
- **Target boundary:** The boundary that defines which GHGs, scopes, sectors, lands, operations or other assets, accounting categories, and activities are covered by the target.
- **Target level:** The numerical value of the target, expressed as an absolute value or a percent reduction relative to a value in the target base year or period.
- **Target base year or period:** The base year or period used for defining a GHG target.
- **Target year or period:** The year or period of time during which emissions, removals or other metric performance is actually measured against the target level.

Annex E: References

- GHG Protocol Corporate Standard, Chapter 8 (Accounting for GHG Reductions)
- GHG Protocol for Project Accounting (quantifying GHG impacts of mitigation projects)
    - GHG Protocol Guidelines for Quantifying GHG Reductions from Grid-Connected Electricity Projects (sector-specific guidance)
    - The Land Use, Land-Use Change, and Forestry (LULUCF) Guidance for GHG Project Accounting (sector-specific guidance)
- GHG Protocol Policy and Action Standard (quantifying GHG impacts of actions larger than projects)
- GHG Protocol Scope 2 Guidance. 2015. Available at: https://ghgprotocol.org/scope-2-guidance.
- GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard. 2011. Available at: https://ghgprotocol.org/corporate-value-chain-scope-3-standard.
- GHG Protocol Land Sector and Removals Standard and Guidance (forthcoming)
    - Draft: GHG Protocol Land Sector and Removals Guidance

External initiatives and resources (not exhaustive):

- AIM Platform. Intervention Quality, Accounting, and Reporting Standard and Guidance, Association Test, and other standards and guidance. 2025. Available at: https://aimplatform.org/wp-content/uploads/2025/09/Intervention-Quality-Accounting-and-Reporting-Standard-and-Guidance_Stakeholder-Comment.pdf.
- AIM Platform. Advanced and Indirect Mitigation Platform Association Test. 2024. Available at: https://aimplatform.org/wp-content/uploads/2025/03/AIM-Platform-Association-Test-Stakeholder-Comment-Draft-03.11.2025.pdf.
- GHG Management Institute (GHGMI). Gillenwater, M., (2025). What is Greenhouse Gas Accounting? Market-based approaches in multi-statement GHG reporting. Seattle, WA. Greenhouse Gas Management Institute, August 2025. Available at: https://ghginstitute.org/2025/09/03/market-based-ghg-accounting-multi-statement-reporting/.
- ICVCM. Core Carbon Principles. Available at: https://icvcm.org/core-carbon-principles/.
- ISEAL Alliance. "Chain of Custody Models and Definitions." A reference document for sustainability system stakeholders. Version 2 (2025). Available at: https://isealalliance.org/sites/default/files/resource/2025-07/ISEAL_Chain%20of%20custody%20models%20and%20definitions%202025_V7_1.pdf.
- ISO 14064-1:2018 Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals.
- ISO 14064-2:2019. Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements.
- SBTi Glossary V1.2. 2024. Available at: https://files.sciencebasedtargets.org/production/files/SBTi-Glossary.pdf
- SBTi Corporate Net-Zero Standard Version 2.0 Draft for second public consultation. 2025. Available at: https://sciencebasedtargets.org/developing-the-net-zero-standard.

- SBTi. Draft Corporate Net-Zero Standard V2 Explained: Environmental Attribute Certificates - Science Based Targets Initiative. 2025. Available at: https://sciencebasedtargets.org/blog/draft-corporate-net-zero-standard-v2-explained-environmental-attribute-certificates
- Smart Freight Centre. Voluntary Market Based Measures Framework for Logistics Emissions Accounting and Reporting. 2023. Available at: https://smart-freight-centre-media.s3.amazonaws.com/documents/SFC_MBM_FRAMEWORK_2023_Oct.pdf.
- Task Force for Corporate Action Transparency (TCAT). Mitigation Action Accounting and Reporting Guidance. 2025. Available at: https://www.tcataction.org/guidance-documents.
- UNFCCC. Article 6.4 Draft Standard: Demonstration of Additionality in Mechanism Methodologies. Available at: https://unfccc.int/sites/default/files/resource/In-meeting_SBM015_A6.4%20Draft%20additionality%20standard.pdf.
- Value Change Initiative. Accounting and reporting Scope 3 Interventions in the Food and Agriculture sector. 2025. Available at: http://valuechangeinitiative.com/https://valuechangeinitiative.com/resource/accounting-and-reporting-scope-3-interventions-in-the-food-and-agriculture-sector/.
- Value Change Initiative. Advancing Scope 3 accounting in the Apparel and Footwear sector. 2025. Available at: https://valuechangeinitiative.com/resource/advancing-scope-3-accounting-in-the-apparel-and-footwear-sector/.
- Value Change Initiative. Value Chain Interventions – Greenhouse Gas Accounting & Reporting Guidance. 2021. Available at: https://valuechangeinitiative.com/wp-content/uploads/sites/2/2021/10/11.Value-Change-Interventions-Guidance.pdf.
- VCMI. Available at: https://vcmintegrity.org/.
- WBCSD. Guidance on Avoided Emissions v2.0. 2025. Available at: https://www.wbcsd.org/resources/guidance-on-avoided-emissions-helping-business-drive-innovations-and-scale-solutions-toward-net-zero/.