Building language to build a market:

A glossary of definitions related to market-based mechanisms for corporate greenhouse gas emissions reporting and mitigation strategies

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INTRODUCTION

Market-based approaches to addressing climate mitigation have been operating since the late 1980s. However, perspectives on how and when to use market-based instruments continue to evolve. This is especially true within the context of how companies might use value-chain associated market-based instruments to mitigate value chain emissions in their GHG inventories. As the context has evolved, existing terminology has become outdated or lacks the nuance needed to support a shared understanding of this highly technical topic. Without a common language, miscommunication among technical experts and standards developers can slow progress and hinder the clarity that regulated entities need to comply with these standards. **This document aims to provide consistent terminology related to market-based instruments and their applications in quantifying and addressing Scope 1, 2, and 3 emissions.**

The need currently is greater than it has been in the past given that the major standards setters like the Science-Based Targets initiative (SBTi), the International Organization for Standardization (ISO), and the GHG Protocol (GHG P) are creating or updating their climate and sustainability standards and guidance. At the same time other supporting standards and guidance setters have a need to speak the same language–e.g., the AIM Platform, the Value Chain Initiative, Verra's Scope 3 Program, etc. The authors of this glossary hope these terms are useful for all related standards and initiatives.

More specifically this document aims to solve the following challenges:

- The lack of specificity of commonly used terms (e.g., "value chain", which is defined in different ways across major climate standards);
- The need to introduce new terminology to support discussions around new concepts (e.g., "activity-linked instrument");
- The need to replace terminology that is not intuitive or accurate enough (e.g., "commodity certificate") or that has created significant communication barriers (e.g., this glossary proposes replacing "environmental attribute certificate" with "attribute claim instrument" to avoid confusion with the long-used term "energy attribute certificate").

Readers of this glossary should note that these definitions were developed under a consensus-driven approach with main contributors coming from the Center for Resource Solutions, (Peggy Kellen and Devon Johnson), Netflix, Inc. (Stefan Gerlicz, Caitie Reck, and Cindy Chiang), Verra (Candace Vinke and Jon Alcock), and Winrock International (Brad Schallert and Tiffany Wu).

The definitions in this document represent the views of the individual contributors but not necessarily those of the organizations.

DEFINITIONS

Activity-linked Instrument

ACIs that are issued to represent either emissions from the production of products or interventions to lower the emissions of an underlying activity that is logically relevant to an emissions source that contributes to a company's GHG inventory. Depending on the requirements of a standard or regulation, activity-linked instruments may not have to be sourced from only within the boundaries of a company's value chain, so long as the activity-linked instruments address a type of emissions source within a company's GHG inventory

Allocation

The process of assigning GHG emissions data to parent and child products as products advance through a value chain or to organizational entities within the same value chain.

or:

Method of allocating emissions information upstream and downstream through a value chain, via parent-child relationships.

Attribute Claim Instrument (ACI)

(formerly "Environmental Attribute Certificate")
Record which conveys to its owner the unique right to claim consumption or use of the attributes (e.g., direct, indirect, avoided, reduced, or removed and sequestered emissions) of the product or project for which it was issued. Some ACIs may be transferred or transacted separately or unbundled from the product or project they represent. ACIs can represent emissions using inventory accounting or emissions reductions and removals calculated using either inventory or project-based accounting.

Attribution

The process of assigning GHG emissions data to amounts of impacted product(s).

Commodity Certificates

see definition of Product Certificates.

**It is recommended that this term be retired from the SBTi's lexicon and others who have adopted it, because certificates can themselves be commodities.*

Consequential Accounting

see definitions for Project-based Accounting.

Energy Attribute Certificate (EAC)

Attribute Claim Instruments (ACIs) that convey to the owner the unique right to claim consumption or use of the attributes of a unit of produced energy, including details like the generation resource type and age, emissions associated with production and use, and the location and time of generation. EACs are an established tool in energy sector transactions for a range of energy sources, including renewable energy certificates (RECs), to promote transparency and support clean energy growth. EACs may be unbundled and transferred or transacted separately from the energy generation they represent.

Environmental Attribute Certificate

see definition for "Attribute Claim Instrument".

**It is recommended that this term be retired from the lexicon of SBTi and others who have adopted it, since it has led to confusion with the term energy attribute certificate (EAC), which has been used by climate and energy professionals for more than a decade*

Environmental Product Declarations(EPD)

An EPD measures the environmental impact of a product. It is generated based on data obtained through life cycle assessment (LCA). An LCA is performed using a peer-reviewed Product Category Rules document (PCR) in line with the European standard EN 15804, ISO 14025, and other related international standards.

GHG Inventory and Interventions Report

(formerly "Inventory Report")

A report that displays the values associated with a company's GHG inventory which uses inventory accounting and other interventions which could be accounted for using project-based accounting.

In-value Chain Intervention

A traceable intervention activity which results in GHG emission reductions or carbon dioxide removals attributable to an impacted product within a value chain. The emission reductions or removals resulting from an intervention that is within or associated with a value chain could be calculated using consequential/project-based or attributional accounting methods.

Intervention

Activity(s) in a product's life cycle that reduces or removes emissions in a specified value chain.

Inventory Accounting

A GHG accounting method that provides a complete assessment of the emissions from sources within the reporting entity's inventory boundary. This includes direct and indirect activities, where progress is tracked relative to a historic base year or period. Inventory accounting quantifies the direct emissions of emitting activities and is reported based on the emitting activity's relationship to the reporting company's organizational boundary.

"Inventory accounting" is also known as "attributional accounting" or "allocational accounting."

Mitigation Outcome

Avoided, reduced, or removed and sequestered emissions that result from a mitigation activity. It implies a sense of surety/certainty of impact. Only for ex-post mitigation. Ex-ante investments or credit are not mitigation outcomes unless the term mitigation outcome is modified by another adjective (e.g., "estimated mitigation outcome" or "ex-ante mitigation outcome").

Physical Value Chain

The portion of a value chain for which the company can establish physical traceability through adherence to an identity preservation or segregation chain of custody model.

Product Certificate

(formerly Commodity Certificate)
Attribute Claim Instruments (ACIs) that convey verified data about the attributes of a product's production process. These instruments are transacted either bundled with a product or unbundled from the product from which it was issued.

"Product certificates" are also known as "commodity certificates, but the authors recommend that "commodity certificate" not be used any longer."

Project-based Accounting

Project-based accounting estimates the impacts or changes in GHG emissions resulting from specific projects, actions, or interventions relative to a baseline scenario. It is the primary method used to evaluate the emission effects of projects by comparing emissions and removals that happen in the project scenario with an estimate of what would have happened without the intervention. The project-based accounting approach evaluates system-wide emissions impacts of the specific project or intervention in question.

"Project-based accounting" is also known as "consequential accounting" or "impact accounting"

Proxy-derived Value Chain Emissions

Emissions representing the portion of the value chain for which the company may not have primary emissions source data , but instead are estimated using proxy data from secondary or hybrid primary-secondary sources.

Renewable Energy Certificate (REC)

A tradable, contractual instrument that represents the full suite of non-power attributes of a set number of watt-hours of grid-connected or stand-alone renewable energy generation. Renewable electricity generation and use are tracked through RECs, and so by matching RECs with your electricity service you are using renewable electricity. REC transactions can either be bundled with proportional amounts of procured physical electricity (such as under direct PPAs) or unbundled from physical electricity and traded separately. In both cases, they demonstrate that a given amount of electricity has been produced by a specified entity, and consumed by a specified entity, ensuring unique generation and consumption claims of associated non-power attributes.

Renewable Energy Certificates are an example of Energy Attribute Certificates (EACs).

Value Chain

For a finished product, a *(product) value chain* is a series of consecutive steps that go into the creation of a finished product(s) from its initial design to its arrival at the customer, use phase and end of life. For an organization, a *(organizational) value chain* is a series of consecutive steps that go into the creation of all the organization's finished products. A value chain includes each step in the production process at which value is added to the product (or aggregated products), including the sourcing, manufacturing, and marketing stages.

This definition applies to both product carbon footprints and organizational product footprints.

Relationship of Key Terms in the Market-Based Measure Glossary

The authors recommend phasing out of two SBTi terms and one team used in ISO.