

CHAPTER 18.

Accounting for credited emission reductions and removals

This chapter provides requirements on accounting for GHG emission reductions or CO₂ removals that have been credited for the purpose of transferring GHG reduction or removal claims between parties (i.e., companies or other entities). This chapter is applicable if a company is tracking progress toward targets and a GHG credit has been issued within its operations or value chain.

18.1 Overview

This chapter applies to GHG credits in the context of voluntary GHG reporting according to the GHG Protocol, to avoid double counting of progress toward targets. Companies must follow national, international, and/or programmatic accounting rules for credits as part of compliance markets, regulations, GHG programs, and the United Nations Framework Convention on Climate Change (UNFCCC), where they apply.

Credits are quantified and reported differently from emissions and removals included in the GHG inventory. Credits are quantified using project or intervention accounting methods, which measure systemwide GHG impacts relative to counterfactual baseline scenarios or performance benchmarks that represent the conditions most likely to occur in the absence of the activity (see Chapter 16 for details). This is in contrast to inventory accounting, which quantifies GHG emissions and removals relative to those in a base year.

Inventory accounting relative to a base year can be used to demonstrate progress towards targets, within a company's operations or value chain. GHG credits can be used to meet compensation or contribution targets outside of the company's operations or value chain, and as a supplement to meeting scope 1, scope 2, and scope 3 GHG targets. To avoid double counting of progress toward two targets, through both inventory accounting by one company and as a GHG credit toward compensation targets by another company, the company where credits have been issued within their operations or value chain must adjust GHG emissions and removals (separately from the GHG inventory) when tracking progress. At the same time, GHG credits cannot be subtracted from the GHG inventory by the company retiring GHG credits.

Companies must meet the following requirements:

- GHG credits disclosed in the GHG report must follow the quality criteria described below, ideally through a GHG crediting program (Requirement 29).
- Companies for which GHG credits were issued within their operations or value chains must adjust their emissions and/or removals (separately from the GHG inventory) when tracking progress towards targets, to avoid double counting with companies retiring such credits (Requirement 30).
- All companies must disclose how double counting was avoided and report additional information (see "Reporting GHG credits").

18.2 Requirements

18.2.1 Accounting requirements

REQUIREMENT 29:

GHG crediting principles

Companies **shall** ensure that any GHG credits (emission reductions or removals) adhere to the following quality criteria: additionality, credible baseline, monitoring, permanence, leakage mitigation, unique issuance and claiming, independent validation and verification, GHG program governance, and sustainable development benefits and safeguards.

Refer to Chapter 18 in the Guidance for more information on the quality criteria.

REQUIREMENT 30:

Avoid double counting with GHG credits¹

If companies use their GHG inventory to track progress towards a GHG target, they **shall** meet the following requirements:

- **Avoid double counting:** Companies **shall** not double count a tonne of GHG emission reduction or removal that has been generated in their organizational boundary or value chain with a tonne of GHG emission reduction or removal that has been issued, if the credit is retired and used (or could potentially be used) as an offset or for compensation targets.
 - This requirement applies to scope 1 and scope 3 accounting when using the spatial boundaries of sourcing region, land management unit, or harvested area and data that reflects the emission reduction or removal associated with the GHG credit.
 - Programs and regulations **may** set rules that take precedence over this requirement. Companies **should** follow applicable program rules and regulations.
- **Adjustments for targets for issued GHG credits:** If GHG credits issued within their organizational boundary or value chain have been used as offsets or external compensation, they **shall** adjust emissions and/or removals to factor out such emission reductions or removal enhancements. To do so, companies **shall** separately calculate:
 - **Physical GHG inventory emissions and removals:** Companies **shall** calculate scope 1, 2, and 3 emissions and scope 1 and 3 removals, independent of any issued or retired GHG credits within the company's operations or value chain.
 - **Emissions and removals adjusted for issued GHG credits:** Companies **shall** separately calculate scope 1, 2, and 3 emission values (and scope 1 and 3 removals values, if applicable) that are adjusted for GHG credits issued within the company's operations or value chain, by adding credited emissions reductions to emissions and subtracting credited removals from removals.
 - **Tracking progress toward targets:** Companies **shall** use the emissions and removals values adjusted for issued GHG credits when accounting for progress toward a target following Requirement 27.

Specific cases

REQUIREMENT 30.1:

Inset credits

If applicable, companies **shall** avoid double counting between inset credits used for compensation and the scope 3 inventory.

Refer to Chapter 18 in the Guidance for additional guidance on avoiding double counting between GHG credits and the GHG inventory when the inventory is used for target setting.

18.2.2 Reporting requirements

Reporting GHG credits

Companies **shall** disclose the following information related to GHG credits:

- GHG emission reduction or removal generated from sources or sinks within the company's organizational boundary or value chain that have been issued as a GHG credit
- GHG credits or other instruments retired by the reporting company, if applicable, reported separately from emissions and removals reported in the inventory
- GHG credits used against the reporting company's compensation targets, if applicable, separately from GHG credits used against the reporting company's contribution/financing targets
- Offset/credit quality criteria followed, GHG crediting program used, protocols and quantification methodologies used, scale (jurisdictional or project), country of origin, and other information as relevant to GHG credits reported above
- Whether the credits are emission reduction credits, removal credits, or a combination, with each type reported separately
- Types of credited emission reduction or removal activities/projects
- Non-permanence risks associated with removal credits and mechanisms followed to address permanence
- Vintages and serial numbers of credits issued/retired
- Social and environmental co-benefits of credits, if relevant

Companies that use their GHG inventory to track progress toward targets **shall** report:

- **Physical GHG inventory emissions and removals:** Physical GHG inventory values for scope 1, 2, and 3 emissions, and scope 1 and 3 removals (if applicable), independent of any transactions.
- **Emissions and removals adjusted for issued GHG credits:** Values adjusted for GHG credits issued within the company's operations and value chain, for scope 1, 2, and 3 emissions, and scope 1 and 3 removals (if applicable).

Additionally, such companies **shall** disclose in their GHG report a description of how they avoided double counting with GHG credits.

18.3 Recommendations

GHG crediting principles

Companies **should** refer to GHG programs for additional guidance on quality criteria, such as the Integrity Council for the Voluntary Carbon Market (ICVCM), the Tropical Forest Credit Integrity (TFCI), the Voluntary Carbon Markets Integrity Initiative (VCMI), and SBTi.

Box 18.1 Recommendations for GHG programs and regulators

Programs and regulators **should** set rules and requirements to ensure avoidance of double counting between buyers and sellers, covering both issuance and retirement of credits, if GHG credits are allowed to be used as offsets or compensation for target-setting purposes.



18.4 Guidance on the requirements and recommendations

18.4.1 Overview of GHG credits

The guidance in this section provides a general overview of different types of GHG credits and how accounting for emissions and removals in the GHG inventory differs from accounting for GHG credits. Companies should refer to project accounting standards for detailed methodologies for quantifying GHG impacts from mitigation projects if used for crediting.²

Table 18.1 describes how emissions and removals included in a GHG inventory are quantified and reported differently from GHG credits. When tracking progress towards targets, companies cannot double count emissions and removals included in the GHG inventory and GHG credits.

Table 18.1 Accounting for emissions and removals in the GHG inventory versus accounting for credits

	Description	Accounting method	Quality criteria	Reporting
Accounting for emissions and removals in the GHG inventory (scope 1, 2, and 3)	GHG emissions and removals that occur in a company’s operations and value chain	Inventory accounting	For emissions: n/a For removals: traceability, data specific to sinks and pools, uncertainty, scope 3 allocation, ongoing storage monitoring, reversals accounting. <i>See Chapters 12–14 for more information</i>	Reported in the physical GHG inventory (if requirements for reporting removals in Chapters 12–14 are met)
Accounting for GHG credits (e.g., offsets)	Quantified GHG reduction or removal impacts of projects or interventions, which are credited for GHG claims to be transferred between entities	Project or intervention accounting (relative to counterfactual baseline scenario)	Additionality, credible baseline, monitoring, permanence, leakage mitigation, unique issuance and claiming, independent validation and verification, GHG program governance, sustainable development benefits and safeguards. <i>See Section 18.4.2 for more information</i>	Reported separately from the physical GHG inventory

This section provides information on different types of GHG credits. GHG credits can be distinguished in the following ways:

- Emission reduction credits versus removal enhancement credits
- Credits used against compensation targets versus credits used against contribution or financing targets
- Credits from projects occurring *outside* the value chain versus credits occurring *inside* the value chain
- Actions reflected in credits (project accounting) versus actions reflected in the scope 3 inventory (inventory accounting)

Emission reduction credits versus removal enhancement credits

Emission reduction and removal enhancement credits differ as follows:

- **Emission reduction credits** represent a reduction or avoidance of GHG emissions relative to baseline emissions associated with an intervention (e.g., avoided deforestation or reduced emissions from livestock systems).

- **Removal enhancement credits** represent an increase in removals relative to baseline removals associated with an intervention (e.g., soil carbon sequestration on croplands or 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. If relevant, companies need to separately report GHG credits based on whether they are emission reduction credits, removal credits, or a combination.

Credits used against compensation targets versus credits used against contribution or financing targets

As discussed in Chapter 17, to achieve additional mitigation outside the target boundary as a supplement to meeting the company's GHG targets, companies can invest in GHG credits and apply them toward external compensation or contribution targets:

- **Compensation target:** A target for achieving mitigation external to the target boundary through purchasing and retiring GHG credits³ (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 policy.
- **Contribution or financing target:** A 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 (without using GHG credits as offsets or against compensation targets) or some other financial support for climate action.

The distinction depends on how GHG credits are used in relation to the company's targets and whether they can be claimed by any other party (e.g., the supplying party or other company or entity). Credits used against compensation targets require quality criteria to be met (see Section 18.4.2) and avoidance of double counting between entities (see Section 18.4.3). GHG credits used against contribution or financing targets require the same quality criteria to be met (see Section 18.4.2), with the exception that they do not require avoidance of double counting, since the credits are not counted toward more than one entity's GHG emission reduction or compensation target. Under this approach, GHG credits may be referred to as "financed reductions or removals," "financed GHG mitigation," or other claims not related to the achievement of the company's GHG emission reduction or compensation target.

Companies need to separately report GHG credits based on whether they are used against compensation targets or contribution and financing targets.



Credits from projects occurring outside the value chain versus credits occurring inside the value chain

If GHG credits are retired and applied against compensation targets, they are sometimes referred to as “offsets” or “insets,” based on whether the credit is generated from projects or interventions occurring outside or inside of the reporting company’s value chain:

- **Offset credits:** Quantified mitigation outcomes (e.g., emission reductions or removals) of projects or broader interventions that are credited for GHG claims to be transferred between entities, and that are generated from projects or interventions occurring *outside* the reporting company’s value chain.
- **Inset credits:** Quantified mitigation outcomes (e.g., emission reductions or removals) of projects or broader interventions that are credited for GHG claims to be transferred between entities, and that are generated from projects or interventions occurring *inside* the reporting company’s value chain (i.e., scope 3).



Credited GHG emission reductions or removal enhancements, whether occurring inside or outside the reporting company’s value chain, are quantified using project or intervention accounting methods. The requirements and guidance in this chapter for credits used for offsetting or compensation targets apply to both inset and offset credits, including quality criteria (see Section 18.4.2) and avoidance of double counting (see Section 18.4.3).

Emission reductions or removals reflected in GHG credits (project accounting) versus the scope 3 inventory (inventory accounting)

Using inventory accounting methods, a mitigation action occurring in a company’s value chain is reflected in its scope 3 inventory, assuming scope 3 data and methods are sensitive to the impacts of the mitigation action. In such a case, the impacts from the action are reflected as a reduction in scope 3 emissions or an increase in scope 3 removals relative to the base year or period.

If a company reports a scope 1, 2, and 3 inventory and a GHG credit is also purchased or retired from within its value chain, there would be an inherent overlap and double counting between an activity accounted for as an improvement in the scope 3 inventory and the same activity counted as a GHG credit, if the activity is reflected in its scope 3 inventory.⁴

Any purchases of GHG credits must be reported separately from the scope 1, 2, and 3 inventory. Any GHG credits generated from within the reporting company’s operations and value chain or retired by the reporting company are required to be separately reported and cannot be directly deducted from the GHG inventory (i.e., companies must report emission reduction credits separately; they cannot be applied to adjust a company’s reported scope 1, 2, or 3 emissions). In such cases, GHG credits must avoid double counting with the reporting company’s GHG inventory following Requirement 30 and the guidance in Section 18.4.3.

18.4.2 GHG crediting principles

This section provides a list of quality criteria that any credited GHG emission reductions or removals must meet. Table 18.2 provides definitions for the quality criteria.⁵

Credited GHG emission reductions and removals should align, via the quality criteria, with the goals of the Paris Agreement. Specifically, this entails robust accounting and reporting practices consistent with the Paris Rulebook agreed at COP26⁶ and the “Guidance on Cooperative Approaches” agreed at COP29 (Articles 6.2 and 6.4 of the Paris Agreement).⁷

Table 18.2 Quality criteria for credited GHG emission reductions or removals

Term	Definition
Additionality	The intervention (e.g., project or activity) results in emission reductions or removals increases that would not have occurred in the absence of the incentives provided by the credit. In the context of the Paris Agreement, this means that the intervention is in regulatory surplus (i.e., not required by existing law, regulation, or legally binding mandate) and would not have occurred under a business-as-usual scenario due to demonstrable financial, technological, or institutional barriers.
Credible baseline	GHG emission reductions or removals are quantified relative to a realistic, defensible, and conservative estimate of GHG emissions or removals occurring in the baseline scenario or performance standard. In the context of the Paris Agreement, baselines are set conservatively below business-as-usual, taking into account national circumstances and policies (including Nationally Determined Contributions [NDCs]), and are periodically reassessed and updated (i.e., dynamic baselining) to reflect changing national, regional, or sectoral conditions. With respect to removals, a credible baseline may be zero if no removals were likely to occur in the absence of the intervention.
Monitoring	GHG emission reduction or removal credits are monitored and quantified ex post, based on accurate and precise measurement, sampling, and quantification protocols where data are monitored throughout the crediting period.
Permanence	GHG emission reduction or removal credits ensure the longevity of a carbon pool and the stability of its stocks over time (e.g., 100 years or some 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.
Leakage mitigation	GHG emission reduction or removal credits mitigate the risk of displacing impacts elsewhere and account for any increase in GHG emissions or decrease in GHG removals outside of the project boundary that result from the intervention. ⁸
Unique issuance and claiming	Processes are in place to ensure that there is an exclusive right to each unit of GHG emission reduction or removal, where only one emission reduction or removal unit is issued for each tonne of carbon dioxide equivalent (tCO ₂ e) reduced or removed. All units are transparently tracked from issuance to retirement or cancellation. Independent carbon registries linked to voluntary carbon standards can be used to ensure GHG emission reduction or removal units are issued, reported (including authorization status, if applicable), and retired accordingly. GHG emission reduction or removal credits from such registries and standards must prevent the following types of double counting : <ul style="list-style-type: none"> • Double use: occurs where multiple parties use a single GHG emission reduction or removal unit (e.g., use of a single unit toward more than one entity’s mitigation target) • Double issuance: occurs where multiple GHG emission reductions or removal units are issued for the same GHG emission reductions or removal • Double claiming: occurs where multiple parties claim the right to a single emission reduction, removal, or mitigation outcome towards their respective targets, compensatory claims, or neutralization claims
Independent validation and verification	The validation and verification of GHG emission reduction or removal credits is conducted in accordance with international best practices, either according to nationally accepted third-party validation and verification procedures or to a reasonable level of assurance by an independent third-party validator and verifier through the GHG program/standard.

Table 18.2 Quality criteria for credited GHG emission reductions or removals (cont.)

Term	Definition
GHG program governance	The issuance of GHG emission reduction or removal credits are by GHG programs with a clearly defined and transparent governance structure. This includes published rules and procedures, accreditation procedures for third-party auditors, and stakeholder consultation procedures for the development or refinement of program requirements, and as part of the project approval process, with established grievance and input mechanisms to address complaints about projects after implementation.
Sustainable development benefits and safeguards	<p>Interventions reflected within the GHG emission reduction or removal credits conform with or go beyond established industry best practices on social, economic, ecological, and environmental safeguards while delivering positive sustainable development impacts. Projects should comply with applicable legal requirements, be free of human rights violations, respect the rights of indigenous peoples and local communities, and be gender sensitive. Some programs require that projects proactively advance social and environmental co-benefits, as well as monitor and report on these benefits.</p> <p>Companies should strive to maximize co-benefits associated with GHG projects to meet a variety of social, economic, and environmental objectives (such as health, climate resilience, biodiversity, etc.) and contribute to the United Nations Sustainable Development Goals, and to monitor, report, and verify these impacts to the extent possible.</p>

18.4.3 Avoiding double counting for companies with issued GHG credits

The need to avoid the double counting of GHG credits differs from how emissions and removals are inherently accounted for by multiple companies across a value chain using the scopes framework. In the scope 3 inventory, companies account for emissions and removals across their full value chain, such that scope 3 emissions and removals from common activities may be counted by multiple companies that are at different stages of the same value chain. For example, removals generated by increased carbon stocks within a shade-grown coffee plantation (without being issued as GHG credits) could be accounted for within the scope 3 inventories of the coffee manufacturers, distributors, retailers, and consumers in the value chain of that coffee plantation. If the removals are instead issued as GHG credits and sold for use as an offset or toward a compensation target, the removal cannot be counted by more than one entity.

The guidance in this section applies to companies that have GHG credits issued within their operations or value chains and are tracking progress toward targets. Double counting progress toward targets is a risk when such credits are retired by other companies to be applied toward compensation targets or used to make offsetting claims. This risk does not apply when such credits are applied towards contribution or financing targets.

Double counting is a concern and must be avoided by companies that set a sourcing region, land management unit, or harvested area scope 3 spatial boundary and thereby use supplier-specific data to complete their scope 3 accounting (see Requirement 30). Since such data will be from specific activities within the reporting company’s value chain, this data may reflect emission reductions or removals enhancements associated with GHG credits that are issued within the sourcing region, land management unit, or harvested area scope 3 spatial boundary.

Avoiding double counting is not necessary for companies that do not use supplier-specific data to complete their scope 3 accounting and therefore do not reflect emission reductions or removals enhancements associated with GHG credits. This would be the case for companies that set a jurisdictional or global scope 3 spatial boundary and thereby use secondary data to complete the scope 3 accounting. Such secondary data (e.g., national or global average data) will not be from specific activities within a company’s operations or value chain and therefore will not reflect GHG emission reductions or removals associated with GHG credits that may be issued within these broader scope 3 spatial boundaries.



GHG credits used as offsets or applied towards compensation targets require an exclusive claim for one party (company or other entity) to claim a tonne of GHG emission reduction or removal enhancement (tCO₂e) from an intervention. Double counting must be avoided, such that no other entity may claim the same tonne of emission reduction or removal enhancement. Double counting includes double use, double issuance, and double claiming. A GHG credit must only be claimed by the party that retires the credit. This requirement applies to the avoidance of double counting between multiple private entities or in multiple GHG targets, for example, through contracts between buyers and sellers that transfer ownership of credits.

Double counting must be avoided if GHG emission reductions or removals receive credit in a GHG emission reduction program and the company is also using its GHG inventory to track progress towards a target. Double counting must be avoided for offset credits or other market instruments that convey unique claims to GHG emission reductions or removals if they are used for offsetting or compensation. To avoid double crediting, companies should specify the exclusive ownership of emission reductions or removals through contractual agreements.

Double counting of credits can occur when a GHG credit is counted towards the target by both the selling and purchasing organizations. For example, Company A undertakes an internal emission reduction project that reduces GHG emissions at sources included in its own target. Company A then sells this project's emission reduction to Company B to use towards its target, while still counting it toward its own target.

In this case, a single GHG emission reduction is counted by two different organizations against targets that cover different emission sources. Trading programs address this issue by using registries that allocate a serial number to all traded credits and ensuring the serial numbers are retired once they are used. In the absence of registries, the risk of double counting could be addressed by a contract between seller and buyer, coupled with transparent reporting (for more information, see "Right to report" guidance in Chapter 13).

Avoiding double counting through adjustments for issued GHG credits

As set forth in Requirement 30, if companies choose to set targets and there are GHG credits used as offsets or external compensation in their organizational boundary or value chain, they must adjust emissions and/or removals reported in the inventory to factor out emission reductions or removal enhancements associated with the issuance of GHG credits used as offsets or compensation, and report the adjusted figures separately from the inventory.

Separately calculating and reporting adjusted scope 1, scope 2, and scope 3 emissions by scope 3 category (and scope 1 and scope 3 removals by scope 3 category, if applicable) enables other companies in the value chain to report their scope 3 emissions and removals while avoiding the double counting of unique claims. Adjusted values avoid the double counting of emission reductions and removals between buyers and sellers of credits.

Equation 18.1 shows how to calculate emissions and removals adjusted for issued GHG credits to avoid double counting.

Equation 18.1 Calculating emissions and removals adjusted for issued GHG credits

Adjusted emissions (Scope 1, 2, or 3):

Adjusted removals (Scope 1 or 3):

$$AE_{sc} = E_{sc} + ER_{CR_{sc}}$$

$$AR_{sc} = R_{sc} - R_{CR_{sc}}$$

Description		Unit	Source
AE_{sc}	Adjusted emissions, by scope 1, 2, or 3	tonnes CO ₂	Calculated
E_{sc}	Emissions, by scope 1, 2, or 3	tonnes CO ₂	Calculated
$ER_{CR_{sc}}$	Emission reduction credits issued or generated from activities within the scope boundary	tonnes CO ₂	User input
AR_{sc}	Adjusted removals, by scope 1, 2, or 3	tonnes CO ₂	Calculated
R_{sc}	Removals, by scope 1, 2, or 3	tonnes CO ₂	Calculated
$R_{CR_{sc}}$	Removals credits issued or generated from activities within the scope boundary	tonnes CO ₂	User input
sc	Scope 1, scope 2 or scope 3 for each scope 3 category		User input

Avoiding the double counting of an emission reduction or removal in a company’s scope 3 inventory requires that either:

- A supplier provides both inventory emissions and removals and adjusted emissions and removals data to the customer, and the customer uses the inventory data to determine its scope 3 inventory emissions and removals and the adjusted values to determine its scope 3 emissions and removals adjusted for issued GHG credits; or
- The reporting company determines the quantity of emission reductions and removals issued as GHG credits in its value chain and develops its own calculations of scope 3 inventory emissions and removals and scope 3 emissions and removals adjusted for issued GHG credits.

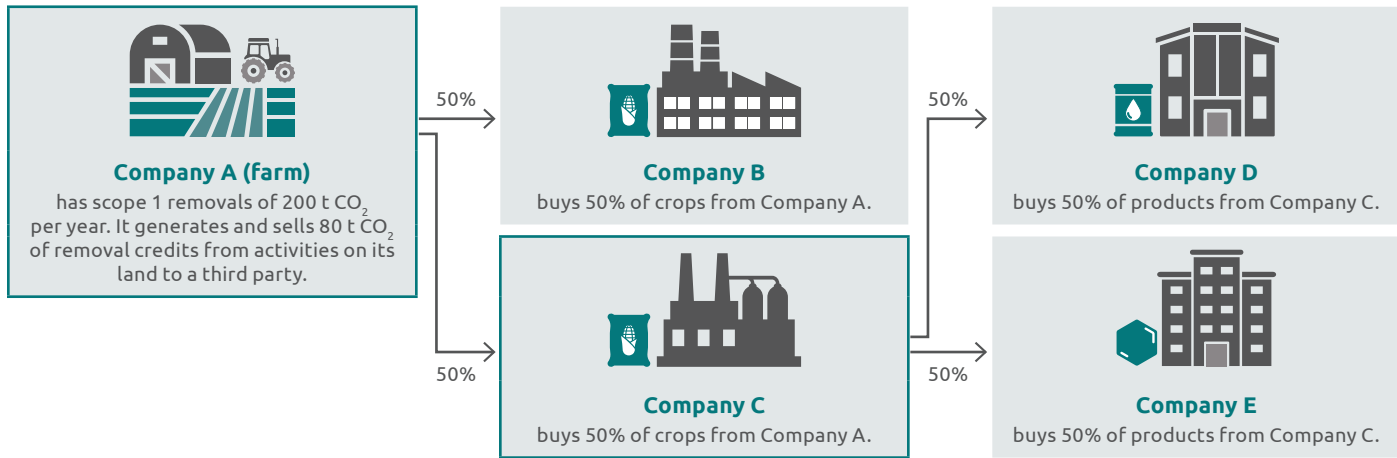
Table 18.3 provides additional guidance for various scenarios.

Table 18.3 Accounting guidance for various scenarios that involve GHG credits

Scenario	Accounting approach
<p>The reporting company issues a GHG credit from an activity within its organizational boundary</p>	<p>If a company issues a GHG credit from an intervention occurring within its organizational (scope 1) boundary and transfers the GHG credit to another company for use as an offset or compensation claim, the company must separately report that issued GHG credit.</p> <p>When accounting for any climate targets, the reporting company must separately report emissions and removals adjusted for issued GHG credits. The adjusted value adds any emission reductions or deducts any removals that are issued as GHG credits and used for compensation claims from its scope 1 emissions and removals. This adjusted value is then used for scope 1 target accounting to avoid double counting.</p> <p>If the company provides its GHG data to another company (a customer) for the purposes of calculating the customer’s scope 3 inventory, the company provides two figures to the customer: scope 1 emissions and removals and scope 1 emissions and removals adjusted for issued GHG credits, such that the customer can calculate both their scope 3 emissions and removals and their scope 3 emissions and removals adjusted for issued GHG credits. If the customer is using the inventory to track progress toward targets, they should use scope 3 emissions and removals adjusted for issued GHG credits to track their progress over time.</p>
<p>A company in the reporting company’s supply chain issues a GHG credit and sells or transfers the credits to a third party</p>	<p>The reporting company determines the quantity of GHG credits that have been issued from lands or operations in its supply chain, for example, by asking suppliers to provide information on issued GHG credits or gathering data from registries or other data sources on credits issued within a sourcing region.</p> <p>If the supplier can provide the necessary data: The supplier provides two figures to the customer (i.e., the reporting company): the supplier’s scope 1 emissions and removals and scope 1 emissions and removals adjusted for issued GHG credits (that are within the customer’s scope 3 spatial boundary), such that the customer can calculate both scope 3 emissions and removals and scope 3 emissions and removals adjusted for issued GHG credits. The supplier also provides any additional data required for the customer to calculate its scope 3 emissions, such as the production or sales data needed for allocating emissions and removals.</p> <p>If the supplier cannot provide the necessary data: The reporting company determines the quantity of emission reductions and removals issued as GHG credits in the supply chain from available registries or databases and develops its own calculations of scope 3 emissions and removals and scope 3 emissions and removals adjusted for issued GHG credits.</p>
<p>The reporting company purchases and retires an emission reduction or removal credit from outside its value chain</p>	<p>The reporting company reports the purchase and retirement of GHG credits separately from the physical GHG inventory.</p>
<p>The reporting company purchases and retires an emission reduction or removal credit from within its value chain</p>	<p>The reporting company reports the purchase and retirement of GHG credits separately from the physical GHG inventory.</p>
<p>The reporting company works with a supplier to reduce emissions or increase removals in the value chain (without credits being generated)</p>	<p>The reporting company accounts for the improvement as reduced scope 3 emissions or increased scope 3 removals, for example, through reduced emission factors used to calculate the scope 3 inventory (if traceability requirements are met).</p>

Figures 18.1 and 18.2 provide illustrative examples of avoiding double counting in a value chain. In both examples, GHG credits are issued and sold to a third party rather than to other companies in the value chain. Figure 18.1 provides an example of how to avoid the double counting of removal credits in a supply chain through calculating removals adjusted for issued GHG credits. Figure 18.2 provides an example of how to avoid the double counting of emission reduction credits in a supply chain by calculating emissions adjusted for issued GHG credits.

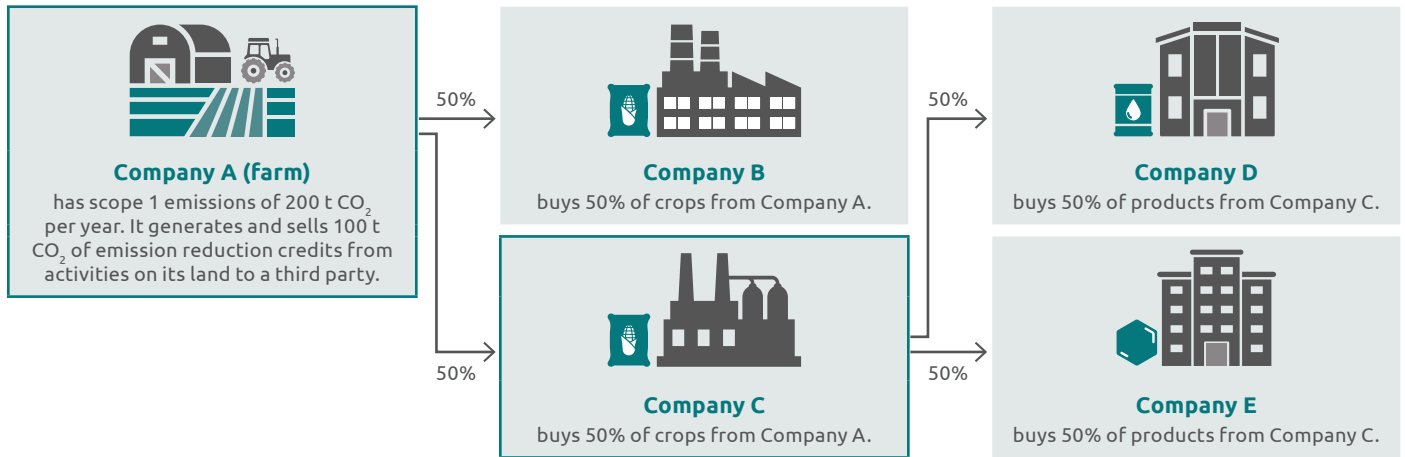
Figure 18.1 Example of how to avoid the double counting of removal credits in the supply chain



Accounting for removals sold as credits in the supply chain

Company	Scope 1 land removals (inventory)	Scope 1 land removals (adjusted for sold credits)	Scope 3 land removals (inventory)	Scope 3 land removals (adjusted for sold credits)
A	200	120 (200 – 80 = 120)	0	0
B	0	0	100 (200 x 50% = 100)	60 ((200 – 80) x 50% = 60)
C	0	0	100 (200 x 50% = 100)	60 ((200 – 80) x 50% = 60)
D	0	0	50 (200 x 50% x 50% = 50)	30 ((200 – 80) x 50% x 50% = 30)
E	0	0	50 (200 x 50% x 50% = 100)	30 ((200 – 80) x 50% x 50% = 30)

Figure 18.2 Example of how to avoid the double counting of emission reduction credits in the supply chain



Accounting for removals sold as credits in the supply chain

Company	Scope 1 land emissions (inventory)	Scope 1 land emissions (adjusted for sold credits)	Scope 3 land emissions (inventory)	Scope 3 land emissions (adjusted for sold credits)
A	200	300 (200 + 100 = 300)	0	0
B	0	0	100 (200 x 50% = 100)	150 ((200 + 100) x 50% = 150)
C	0	0	100 (200 x 50% = 100)	150 ((200 + 100) x 50% = 150)
D	0	0	50 (200 x 50% x 50% = 50)	75 ((200 + 100) x 50% x 50% = 75)
E	0	0	50 (200 x 50% x 50% = 100)	75 ((200 + 100) x 50% x 50% = 75)



Case study: Acorn—Avoiding double counting

The coffee traders Caravela, Cooperative Coffees, Falcon Coffees, Sucafina, and an agroforestry carbon program called Acorn, founded by Rabobank, have spearheaded a solution to tackle the challenges of scope 3 decarbonization by adopting the quantification, validation, and payment systems of the voluntary carbon market to support accounting within value chain interventions. The intervention supports the transition of smallholder coffee farmers to agroforestry and monetizes their sequestered carbon as carbon removal units (CRUs) that can be accounted for in a reporting company's GHG inventory using scope 3 inventory accounting methods, without double counting or double claiming.

Acorn benchmarks the CRU value to market prices on the voluntary carbon market (VCM). Farmers decide whether they want to monetize their removals with Acorn via CRUs. CRU payments to farmers finance efforts to maintain the on-farm carbon removals that would not have otherwise occurred. The smallholder coffee farmers receive 70 percent of the CRU value.

Once CRUs are issued, reporting companies can decide each year if they want to:

1. **Account for the CRUs in their physical GHG inventory by following inventory accounting methods** to account for scope 3 land management removals and also report their full supply chain (scopes 1–3) emissions transparently, according to the GHG Protocol standards. Only if companies can meet the removals requirements, can they purchase the CRUs to include the removals in their scope 3 inventory reporting;
2. **Purchase the CRUs as a GHG credit, report separately**, and use them to meet any compensation or contribution/financing targets. This is an alternative if companies cannot meet the relevant removals requirements to include removals in their inventory; or
3. **Refer to Acorn to identify any CRUs with potential for double counting.** If the reporting company uses its inventory to track progress toward targets, it needs to adjust its removals for issued GHG credits or CRUs that were sold to third parties on the VCM to factor out removal enhancements.

The approach ensures there is no double use, double issuance, or double claiming of a CRU, and it safeguards a fair price for farmers for their additional work of nurturing and growing the (shade) trees that sequester additional carbon on their land. There are two risks of double counting carbon removals:

- Two companies sourcing from the same farmers and claiming CRUs for the same volume in their respective scope 3 inventories.
- A VCM carbon project (or jurisdictional program) and a company both accounting for the same carbon removals.

Acorn takes the following actions to prevent double counting:

- LMU-level traceability is required for reporting companies to account for the CRUs in their physical GHG inventory (scenario "1" above). Companies using sourcing region-level accounting can purchase the CRU and report it separately (scenario "2"), or refer to Acorn to prevent double counting (scenario "3").
- CRUs are recorded by Acorn, providing full transparency by allowing each CRU to be traced back to its origin and the plot where carbon remains sequestered.
- Farmer contracts do not allow for other GHG programs to make a claim to the farmer's carbon removals. Following the VCM's additionality principle, farmers need to be aware of, in agreement with, and compensated for any project making a claim to their land.
- If applicable: Acorn contacts other traders sourcing from the same farmers in the same year, to ensure proper allocation and prevent double counting.

To date, multiple coffee and cocoa traders and roasters are working with Acorn, including Lavazza, Pelican Rouge, and Falcon Coffees. Acorn is active in over 15 countries with more than 500,000 farmers.

Endnotes

- 1 The GHG Protocol’s workstream on actions and market instruments will define where to report credits in a company’s GHG report and specify if additional information needs to be disclosed. The current requirement does not set a precedent for that process.
- 2 For example, the *GHG Protocol for Project Accounting* (for project-scale actions) and supplementary *Land Use, Land-Use Change, and Forestry Guidance for GHG Project Accounting* (available at <https://ghgprotocol.org/standards/project-protocol>) in combination with program-specific standards or methodologies.
- 3 In this section, the term “GHG credits” refers to any type of compensation credit, including “offset credits” and “inset credits,” since both follow a project-based crediting approach and are used as compensation.
- 4 Depending on the data and methods used, the activity may not be reflected in calculated scope 3 values (e.g., if using secondary data), but the inset activity occurs within the scope 3 inventory boundary. In such cases where scope 3 inventory methods cannot distinguish the mitigation activity, there is no risk of double counting.
- 5 Quality criteria were developed drawing from international best practices, from the following GHG programs: Article 6 of the Paris Agreement, CORSIA, the Integrity Council for the Voluntary Carbon Market (ICVCM), the Tropical Forest Credit Integrity (TFCI) Guide, the Voluntary Carbon Markets Integrity Initiative (VCMi), and SBTi.
- 6 United Nations Framework Convention on Climate Change. *Decision 1/CP.26: Glasgow Climate Pact*. Glasgow, Scotland. Approved November 13, 2021. United Nations Framework Convention on Climate Change (UNFCCC)
- 7 United Nations Framework Convention on Climate Change. *Decision 4/CMA.6: Matters Relating to Cooperative Approaches Referred to in Article 6, Paragraph 2, of the Paris Agreement*. Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA 6), Baku, Azerbaijan, November 11–22, 2024. United Nations Framework Convention on Climate Change (UNFCCC).
- 8 See Chapter 16 for general guidance on mitigating leakage and other impacts of actions.

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