VALUE CHAIN (SCOPE 3) INTERVENTIONS –

GREENHOUSE GAS ACCOUNTING & REPORTING GUIDANCE

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Value Change

> *Supporting ambitious corporate scope 3 climate commitments with technical guidance on credible greenhouse gas (GHG) accounting for value chain interventions*

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KEY TERMS AND DEFINITIONS

The terms and definitions applied in this Guidance generally refer to and align with the Greenhouse Gas Protocol 'Corporate Value Chain (Scope 3) Accounting & Reporting Standard'[1] (henceforth 'Scope 3 Standard'). In addition, reference is made to the Greenhouse Gas Protocol 'Technical Guidance for Calculating Scope 3 Emissions'[2] (henceforth 'Scope 3 Technical Guidance') and the Greenhouse Gas Protocol Project Protocol (henceforth 'Project Protocol').

The following key terms are highlighted as adjusted and/or additional terms applied within this Guidance. Some are also provided for ease of reference (marked as 'from (for e.g.) Scope 3 Standard).

Companies should be aware that the Greenhouse Gas Protocol is, at the time of writing, developing standards and guidance for accounting for land-based emissions and removals. These new approaches are likely to include further requirements and clarification concerning several key aspects, including the terms and definitions of this guidance.

Causality: Demonstration that an investment (or other equivalent action) of a company or group of companies acting collectively to take advantage of supply shed (see below) is what caused the Intervention to happen. Causality does not guarantee rights to be able to issue or retire carbon credits for other purposes from an intervention. This depends on the requirements of the issuing body, which may not necessarily align directly with this definition.

Emissions Factor (from Scope 3 Standard): A factor that converts activity data into GHG emissions data (e.g., kg CO2e emitted per litre of fuel consumed, kg CO2e emitted per kilometer traveled, etc.).

Impact Factor: The relative improvement in emissions caused by an Intervention's impact on a targeted Scope 3 Activity, based on the assessment of ex-ante and ex-

[1] https://ghgprotocol.org/sites/default/files/standards/Corporate-Value-Chain-Accounting-Reporing-Standard_041613_2.pdf

[2] https://ghgprotocol.org/scope-3-technical-calculation-guidance

post emissions. Depending on the nature of the activities in the Intervention it may be possible to use the Impact Factor to more efficiently assess the benefits of a larger scale intervention without repeating the quantification exercise each time. The credibility of this approach may depend on the homogeneity of activity and its expected results and is likely to require further safeguarding where Interventions and results are influenced by physical and spatial inputs, such as climate and water.

Intervention: An umbrella term for any action that introduces a change to a Scope 3 Activity (see below). This could include a new technology, practice or supply change (for example, to a different product input or sourcing location) to reduce or remove emissions. An Intervention may include changes to several Activities that reduce or sequester emissions in different ways and that may or may not be included within the Scope 3 Inventory.

Market: The pool of potential suppliers for equivalent purchased goods targeted by an intervention. A geographical definition is typically applied, for example the pool of potential suppliers in a given 'sourcing area' such as a catchment, landscape, country or area for like goods and services. In some cases a market may be further defined by specific market rules, such as those used by cooperatives.

Purchased Goods & Services (from Scope 3 Standard): Extraction, production, and transportation of goods and services purchased or acquired by the reporting company in the reporting. This Guidance primarily focuses on Interventions associated with the activities involved in the Purchased Goods & Services category. Some of the concepts may be applicable to other Scope 3 categories as defined by the 'Scope 3 Technical Guidance'.

Removals: Carbon removals may be biogenic or engineered. This guidance focuses on biogenic removals, noting that further guidance on the role of engineered solutions is pending. [Excerpt from Scope 3 Standard[3]]: :"Scope 1, scope 2, and scope 3 inventories include only emissions, not removals. Any removals (e.g., biological GHG sequestration) may be reported separately from the scopes." This position is being

[3] It is noted that the Greenhouse Gas Protocol is in the process of developing standards for the accounting of removals. Hence this Guidance is primarily focused on interventions that target emissions reduction, though some of the concepts may apply also to removals. This Guidance is intended for further update to include removals upon completion of the Greenhouse Gas Protocol development.
https://ghgprotocol.org/blog/new-greenhouse-gas-protocol-standardsguidance-carbon-removals-and-land-use

updated at the time of writing and it is expected that removals will form a more direct input to company accounting and reporting (See footnote 3, below.)"

Scope 3 Activity (from Scope 3 Standard): An individual source of emissions included in a scope 3 category. [Added for the purposes of this Guidance]: An individual activity, representing a source of emissions that, when summed with other sources of emissions define the overall Emissions Factor.

Scope 3 Inventory (from Scope 3 Standard): A quantified list of an organisation's GHG emissions and sources [outside of scope 1 and scope 2 emissions].

Supply Shed: A group of suppliers in a specifically defined geography and/or market (e.g., at a national or sub-national level) providing similar goods and services that can be demonstrated to be associated with the company's value chain. It may not be feasible to demonstrate which specific suppliers provide the goods and services, but it should be demonstrable that they are in the group that do, for example by demonstrating that these suppliers provide material to the company's direct suppliers. The concept of Supply Shed is introduced to cater for situations where a reporting company may not be able to directly trace sourcing to a specific supplier in the upstream supply chain, but it is known that sourcing comes from that group of suppliers.

Value Chain (from Scope 3 Standard): All 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.

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INTRODUCTION

This Guidance aims to enable and incentivise value chain Interventions by providing an approach to recognise and include their impact in reporting towards quantitative GHG reduction performance targets, even in cases where direct knowledge and measurement of specific value chain participants is challenging.

Applying this guidance a will help companies to:

1. Identify characteristics of value chain Interventions that are subject to this Guidance and design and select appropriate measurement and monitoring, reporting and verification (MRV) approaches
2. Account for the net emissions changes associated with a given Intervention
3. Credibly include that accounting in the company's Scope 3 Inventory and reporting, where appropriate
4. Make narrative claims that describe and tell the story of the company's role in the Intervention and the impacts arising from it

Many companies are motivated to set value chain GHG emissions targets and report on their progress, using protocols and standards such as the Greenhouse Gas Protocol (henceforth GHGP) 'Scope 3 Standard' and the Science Based Targets Initiative (henceforth SBTi). The setting and reporting of performance targets is typically based on an emissions inventory approach.

Value chains are often deep and complex. With variable data quality, and traceability, it may be impractical to investigate in detail and/or to act on directly with suppliers. However, there is a growing recognition of the potential for value chain emissions to contribute to averting the climate emergency and an expectation that companies should be managing emissions in their value chain through setting ambitious targets and engaging with suppliers and customers to achieve them.

As part of their reduction strategies, companies may employ ''Interventions': projects, programmes and business decisions that drive sustainability and reduce emissions in key areas of their value chain.

For many companies, large emissions sources may be far upstream in the supply chain where influence and information availability is limited and supply is highly dynamic. Therefore, implementing sustainability projects and programmes is not yet practical. While in some cases the effects of supply chain Interventions are directly

measurable, the structure of value chains can make it challenging to directly measure these effects, for example, because specific supplier locations, identities, and/or activities—especially those at the grower or producer level—may be unknown or difficult to access.

Nevertheless, companies are well-advised to focus their reduction efforts on their largest emissions sources and there is therefore a desire to find approaches to investing in reduction efforts regardless of these access barriers. Where value chain Interventions do not have such data and access barriers, application of the Scope 3 Standard may already be sufficient to demonstrate the reductions achieved.

This Guidance is intended to offer supplementary recommendations and advice in cases where knowledge about an Intervention is available but there is a gap to be resolved to link this intervention to a company's specific supply. It is also intended to address cases where the supply affected by an Intervention is unlikely to be exactly that received by an intervening company, but is from the same production market or sourcing area as where that company sources (referred to here as a "Supply Shed"), for example, where upstream suppliers may be difficult to trace.

The guiding principles, approach and set of recommended practices are therefore provided to enable the accounting of Interventions, include them in emissions reporting to a credible amount, and account for and communicate about them appropriately.

This approach is supplementary to and to be used in conjunction with the accounting approaches provided in the GHGP Scope 3 Calculation Guidance. This Guidance may also be applied in other reporting protocols and programs, where approved.

OVERVIEW OF GUIDANCE

The Guidance is set out in 3 parts:

- **Part 1 – How to quantify and account for an Intervention:** This section provides a recommended approach for how to design, quantify and account for the net emissions changes before and after an Intervention.
- **Part 2 – How to report an Intervention within a company's Scope 3 Inventory:** This section provides a recommended approach for taking the information developed under Part 1 and incorporating it into a Scope 3 inventory.
- **Part 3 – How to communicate about Interventions:** This section provides recommendations for how to make narrative claims associated with the Intervention, for example, in communications, marketing and social responsibility materials. It also covers the relationship between Scope 3 Interventions and carbon markets.

Accounting and reporting of emissions that are 'in scope' in accordance with the Scope 3 Standard should follow both the Accounting Principles set out in that Standard and in this document (where inconsistencies exist the Scope 3 should be assumed to take priority). Impact claims about the overall Intervention are for narrative purposes and may not strictly align with the Scope 3 Standard, which does not necessarily cover all aspects that an intervention may Include (for example narrative claims concerning co-benefits such as water or livelihoods).

WHO SHOULD USE THIS GUIDANCE

There are many stakeholders involved in realising an intervention, ranging from producers and suppliers to the companies reporting the results. Other actors include practitioners and proponents who are expert in the design and implementation of Interventions, such as project developers and NGOs, or auditors that verify impacts for reporting. The role of independent protocols that are designed to quantify impact, such as tools and methodologies is also acknowledged. This guidance is not written with a specific group in mind but rather should be used to inform the actions of each, relevant to their roles.

This Guidance is therefore primarily written through the lens of companies with Scope 3 GHG targets that seek to account for targeted Interventions in their value chain that may impact the associated net emissions.

The Guidance is primarily aimed at Interventions that affect purchased goods and services[4] but some aspects of the approach could be extrapolated to other categories of Scope 3 emissions, as detailed in the Scope 3 Standard. The Guidance henceforth refers to supply chain for this reason. The Guidance is intended to be applied on a voluntary basis by companies. Where an Intervention is mandated or imposed upon a company, for example through regional or national policy, then the Guidance may still be applied but the company should make this transparent in any communications described under Part 3 of this Guidance.

Companies might use this approach to address 'hot spots' in their supply chain, to target strategic improvements in key areas that can deliver rapid change, as an element of their overall Scope 3 strategy. Figure 1 provides further direction on when this could be applied:

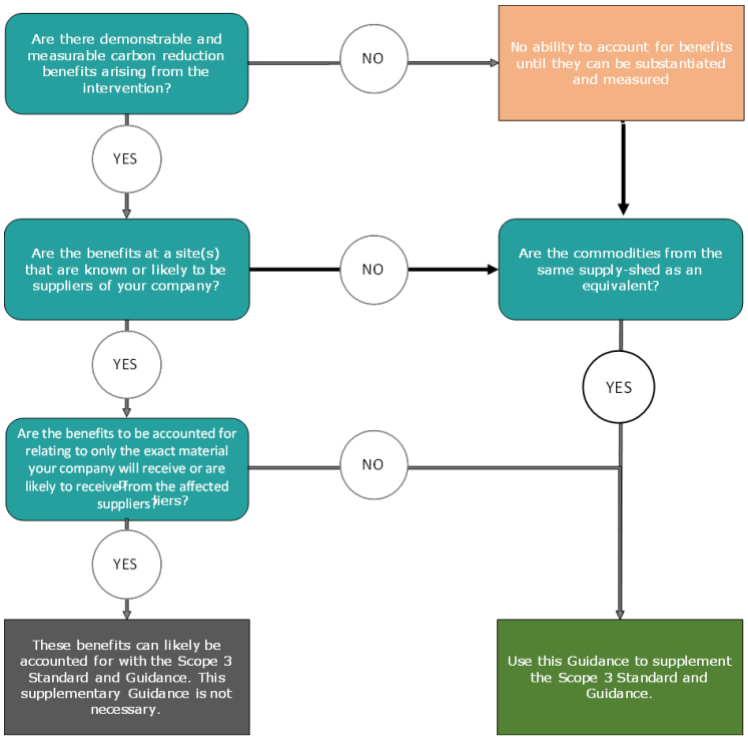


Figure 1 – Decision making flow chart

[4] Extracted from Scope 3Calculation Guidance (p7): 'Extraction, production, and transportation of goods and services purchased or acquired by the reporting company in the reporting year'

HOW IT WORKS

This Guidance assumes that the company already reports emissions inventory reporting, for example through CDP and SBTi. Figure 2 sets out the steps towards quantifying and accounting for the Intervention (Part 1 of this document) then incorporating that data into the overall inventory reporting (Part 2) and finally making credible narrative claims (Part 3) to promote it.

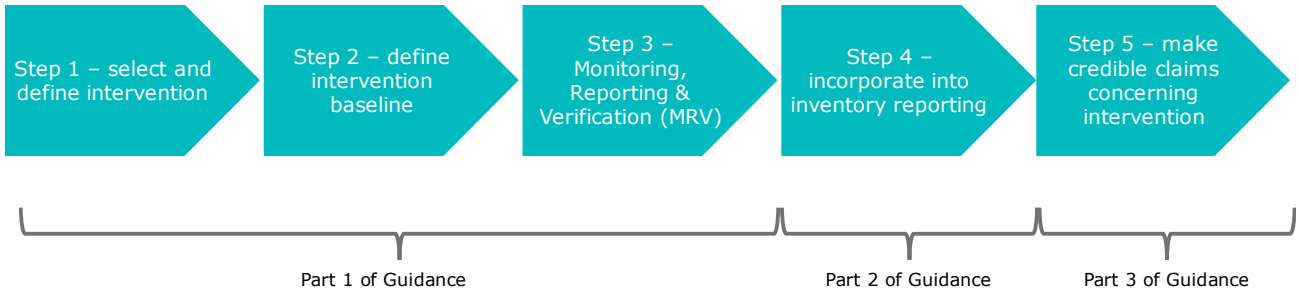


Figure 2 - Overview of process to apply this Guidance

The exact timing of the implementation of the Intervention is not strictly defined. This Guidance could be applied to an intended Intervention (hence the Intervention may commence after Step 2 above) or one that is already underway, in which case the steps are applied retrospectively. Where applying retrospectively, users should take steps to ensure an equivalent level of rigour is applied, for example, where it is not possible to go back to collect data where conditions have changed.

The accounting approach for purchased goods and services in the Scope 3 Guidance takes a life-cycle approach in that all direct and relevant upstream emissions associated with producing a purchased good or service should be accounted for. The Intervention-based accounting suggested here is complementary but allows for adjusting accounting only for the changes caused by the Intervention, provided that there is no reason to presume these changes affect emissions happening elsewhere in that supply chain. This Guidance may also be applicable to indirect emissions where relevant, material and accounted for.

The Scope 3 Calculation Guidance defines several approaches for accounting for supply chain emissions, as outlined in Figure 3.

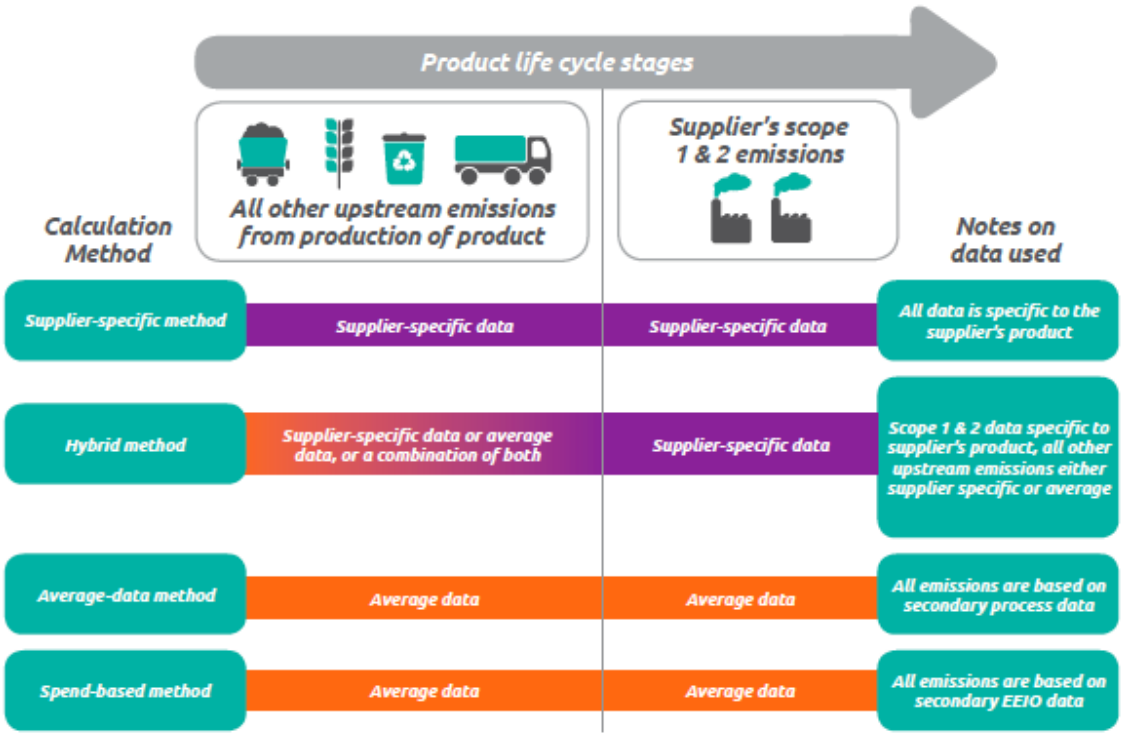


Figure 3 (excerpt from p21 Scope 3 Standard) - different data types used for different calculation methods

The Interventions most appropriate for this Guidance will generally fall between the 'Hybrid' method and 'Average-data' method, with a combination of supplier-specific data and average data, for example, based on generalised assessments of commodities at country- or global-levels. For companies far down the value chain (i.e. closer to the end consumer), the life cycle often also includes several tiers of suppliers. The life cycle stage closest to the "farm" or production level offering the opportunity for field-specific data and unique data challenges.

Example: Company purchases milk products, wheat and cacao. The company's Inventory for the three products is the sum of the total emissions for each. This, in line with the Scope 3 Guidance is calculated using the product Emissions Factor (the emissions intensity per unit of goods produced) multiplied by the quantity or volume of each good purchased in a given year. This is illustrated in Figure 4.

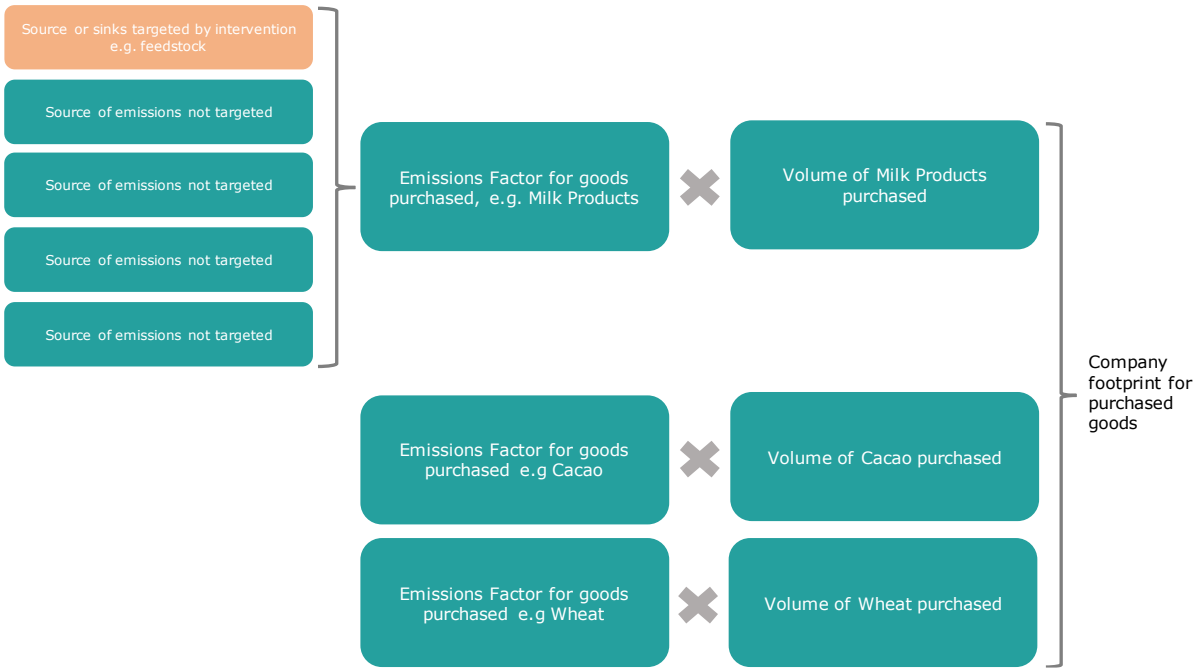


Figure 4: Illustrative company inventory model for purchases of milk products, wheat and cacao

In this example the Emissions Factor for Milk Products could be set using average data sets available (for example, a default factor, such as those published by IPCC). The company then carries out an Intervention that reduces emissions related to feedstock (highlighted in orange, above) and captures this impact using supplier specific data, in line with this Guidance to demonstrate the improvement. The remainder of the Emissions Factor may be completed using supplier-specific information or still be built using average data or supplier specific data, as best fits the needs of the reporting company.

Users of this Guidance should keep in mind that the purpose is to account for changes in emissions caused by the Intervention. It is therefore important to actively ensure that there are real improvements in emissions with Causality (i.e. the result of an Intervention), as opposed to a perceived improvement that is based only on improving the accuracy of the calculation method.

Further Guidance is provided in Part Two of this document.

ACCOUNTING PRINCIPLES

Users of this Guidance should adhere to the Accounting & Reporting Principles of the Scope 3 Standard and other relevant GHGP documentation when making decisions concerning their Intervention reporting. The principles are repeated as follows for ease of reference, along with specific interpretation for Interventions:

Accounting Principle (excerpt from Scope 3 Standard)	Applicability for Interventions
Relevance: Ensure the GHG inventory appropriately reflects the GHG emissions of the company and serves the decision-making needs of users – both internal and external to the company.	The Intervention should be relevant to the purchased goods and services included within the Scope 3 inventory of the reporting company. A company may include the results of an Intervention in their accounting as appropriate and as they arise. Activities that are in the Intervention boundary but outside the inventory boundary should be reported separately.
Completeness: Account for and report on all GHG emission sources and activities within the inventory boundary. Disclose and justify any specific exclusions.	The reporting company should include all emissions related to the purchased goods and services targeted in their inventory, not only the sources that are targeted for improvement. Sources of emissions that fall outside the impact of the Intervention may be estimated using other methods, such as the average data and supplier-specific methods.
Consistency: Use consistent methodologies to allow for meaningful performance tracking of emissions over time. Transparently document any changes to the data, inventory boundary, methods, or any other relevant factors in the time series.	The approach used should be consistently applied to the Intervention over time. Approaches should be as consistent as possible across multiple Interventions within the same supply chain or scope. Where a baseline Intervention scenario is applied, the same quantification method and assumptions should be used for both. This is covered in Part 2 of this document.

Transparency: Address all relevant issues in a factual and coherent manner, based on a clear audit trail. Disclose any relevant assumptions and make appropriate references to the accounting and calculation methodologies and data sources used.	Companies should disclose uncertainty and any relevant assumptions and limitations and make appropriate references to the accounting and calculation methodologies and data sources used to measure the net GHG emissions change from a supply chain Intervention.
Accuracy: Ensure that the quantification of GHG emissions is systematically neither over nor under actual emissions, 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.	To continuously improve Intervention-level accuracy, baseline measurements should be updated when: 1) incorrect assumptions or inaccuracies in existing baseline measurements are discovered; and 2) new or better data or methodologies become available. Uncertainty of Intervention results should be disclosed and ideally reduced over time. It is especially important to calculate uncertainty for Interventions that include a high degree of variability or are impacted by physical factors such as rainfall. For other Interventions this may be less relevant and can be dealt with at the overall accounting level. The scale at which to calculate uncertainty, for example if averaging over a larger area should also be disclosed.

Table 1 - Applicability of Scope 3 Standard Accounting & Reporting Principles

DATA QUALITY

Companies should refer to the Scope 3 Standard and Scope 3 Calculation Guidance for requirements and recommendations on data quality to be used in the approach set out in this Guidance.

This Guidance provides the general approaches for accounting and reporting but cannot assess and recommend specific quantification and MRV approaches for every combination of goods and Interventions. There are many sources of methodologies and quantification approaches, tools and models. It is generally recommended that

credible, third party quantification approaches are employed and that uncertainty, limitations and assumptions are transparently disclosed.

Quantification methods should be appropriate to the Intervention context and activities and should be peer reviewed and/or approved under recognised standards, such as those found in carbon markets (which may require some conversion for this purpose) or third party proprietary tools for specific sectors or producers.

Where model-based approaches are applied these should be checked against 'ground-truth' on site as required and informed by the potential variability caused by, for example, climate, water and other physical inputs. Model-based results should be directionally true (i.e. if a positive improvement is reported there should be no possibility of there being a negative result on site) and accurate/precise.

Companies should assess approaches against the above principles and their own tolerance for risk, while further good practice guidance including recommended levels of precision are under development at the time of writing.

PART 1 – HOW TO ACCOUNT FOR AN INTERVENTION

This section recommends an approach for quantifying and accounting emissions before and after an Intervention takes place. It covers topics associated with recommended Intervention types, scope and boundary, baseline, accounting methodologies, leakage, monitoring, reporting, and verification (MRV) and sustainable development.

Emissions associated with purchased goods and services are calculated in the Scope 3 Standard by multiplying the volume of purchased goods by an emissions factor (EF). As per the Scope 3 Guidance, the EF boundary should include all upstream (cradle-to-gate) emissions of purchased goods and services, as in *Equation 1:*

$$\mathbf{E_y = Volume\ of\ Goods\ or\ Services\ Purchased * EF}$$

Where:

E_y = Emissions in a given year associated with the purchase of goods and services

EF = Emissions Factor (an emissions intensity per unit of goods produced, tCO_2e / volume of product / year)

This Guidance seeks to enable the accounting and reporting of an improvement caused by an Intervention without presuming the need for a full supplier-specific approach to be developed for activities not targeted.

Depending on the level of granularity in the reported EF, it may be possible to substitute new emissions results for a specific source of emissions in the EF at the facility level, post-intervention in the reporting year and account for the reduction in Scope 3 inventory. Alternatively, for example, where the EF is not broken down into sufficient detail, the relative changes to specific sources of emissions and activities caused by an Intervention can be reported using a substitution method, described in Part 2 of this Guidance.

Note that the change in the post-Intervention EF can be determined by evaluating only the portion of the supply chain acted on, provided the intervention cannot reasonably be expected to cause changes elsewhere in the supply chain, in which case

those changes should also be accounted for. This is also described further in Part 2, under 'substitution accounting'.

STEP 1 – SELECT AND DEFINE AN INTERVENTION AND SUPPLY SHED

1.1 This Guidance is applicable to any Intervention that reduces (or potentially removes[5]) emissions that will lead to a lower EF for the targeted goods and services. Relevant Interventions may include new equipment and technology or changes in behaviour or practice. Note that although changes within only a portion of the supply chain might be evaluated in determining the new EF, all expected changes in the supply chain emissions caused by the intervention should be accounted for.

This section does not presume the specific roles taken by companies, suppliers and Intervention developers. This arrangement will be dependent on context and preference of those involved. Where references to companies are made, users should keep in mind to extrapolate and adjust for the roles and responsibilities they hold in the intervention (in other words, the use of the word 'company' is intended to be a catch all term in this Guidance).

1.2 The company should identify the purchased goods or services that are to be targeted, the geographic and economic market area covered and the suppliers to be included in the Intervention, insofar as feasible. Only Interventions that affect (i.e. are in the value chain of) goods and services that are included within the inventory under the Scope 3 Standard should apply this approach, though Interventions may include aspects that are not part of the Scope 3 inventory (and accordingly should be reported separately and do not count towards, for example, SBTi reporting).

Companies may define the scale of their Intervention a number of ways. For example, an Intervention may help a number of producers improve yields with the same emissions, which could be reported as a lower EF (with any excess being outside the company's Scope 3 boundary). Conversely, companies may also establish the yield needed specifically and only for their inventory volumes and enroll producers or areas to match. This can help to make the Intervention more targeted/accurate for a

[5] The guideline is for interventions that impact biological sequestration only, for example soil organic carbon or in woody biomass and not for activities involving Carbon Capture & Storage. Attention is drawn to the Greenhouse Gas Protocol development of standards for accounting of removals that may result in significant updates to accounting guidance and requirements in future.

specific company's needs but it should be noted that where yield is variable, for example due to weather and natural variations, then company's may wish to take care to include provisions for production shortfalls.

If the actual goods and services purchased are not fully traceable, the same approach may be applied to 'like' goods and services in what is called a 'Supply Shed'. A Supply Shed is a group of suppliers in a specifically defined geography and/or market (e.g., at a national or sub-national level) providing similar goods and services that can be demonstrated to be associated with the company's supply chain.

The boundaries of a Supply Shed may be defined economically, for example a group of suppliers providing equivalent goods and services that can be demonstrated to be within the company's supply chain and physically, for example a group of suppliers/interventions in a specific catchment area. The appropriateness of each may depend on the nature of the intervention.

It may not be feasible to demonstrate which specific suppliers provide the goods and services but it should be demonstrable that they are in the group that do, for example, by demonstrating that these suppliers provide material to the company's direct suppliers. The concept of Supply Shed is intended primarily to cater to situations where a reporting company may not be able to directly trace sourcing to a specific supplier in the upstream supply chain, but it is known that sourcing comes from that group of suppliers.

Companies should consider the following two questions:

1. Is it demonstrably possible that the tier two or above supplier (for example, farm) provides products to the tier one supplier (for example, mill)? If the answer is No, the farm is not in the Supply Shed.
2. Does the Intervention impact, at least in part, the emissions and/or removals processes of the tier two or above supplier? If No, the Intervention outcomes cannot be included in Scope 3 reporting.

Furthermore, corporates should consider spatial effects where appropriate. Interventions may result in physically and spatially dependent benefits, for example, those influenced by localised conditions such as climate, soil type, or water as opposed to those whose results are more comparable wherever they are applied, such as switch to renewable energy. In such cases, the company should consider restricting the definition of Supply Shed or to explore the possibility of larger scale averaging of

results, if possible. This may be highly dependent on the nature of the purchased goods and on local conditions, with sector or crop specific tools and guidance likely to emerge.

The Supply Shed concept recognises that it may not always be feasible to demonstrate which specific upstream suppliers or producers (e.g., farmers) provide the goods and services, but it should be demonstrable that they are in the group that do. This approach caters to situations where a Company may not be able to directly trace sourcing to a specific upstream supplier but it is known (i.e. can be demonstrated) that sourcing comes from a group of suppliers within a geographical area (the "market") from which Company sources. It also allows some flexibility for the coming and going of individual suppliers within that market, while maintaining overall integrity of accounting.

Example 1: A company produces apparel for sale in the US and Europe. It uses natural materials from various sources, but the company can trace to regions of smallholder farmers without being able to specify further. The company works with smallholders to improve processes that sequester carbon in the soil and reduce energy process emissions. It reports these benefits in accordance with the VCI Guidance, applying a Supply Shed model to overcome the inherent traceability issues.

Company A purchases wool and textiles for sportswear from a group of facilities, group '1', but is not able to trace the wool, cotton and other inputs back to specific ranches that supply group 1 because the products are consolidated at the facility level before being distributed further down the supply chain. It is also a highly dynamic product, changing seasonally the mix of textiles involved.

If it is possible to demonstrate that the ranches where Company A introduces Interventions provide products to, a direct supplier of the Company, i.e. group 1 facilities from which Company A sources, these ranches can be included in Company's Supply Shed. Company A should take care to review the equivalence of goods reported, for example by tracking specifically year on year on and applying a factor to ensure accuracy of annual results, or reporting averages over a longer period if this can be achieved transparently and credibly.

Example 2: Company B purchases dairy products from farms participating in a cooperative. The participating farms sell through an aggregator or wholesaler and have agreed that prices and supply that consolidates that supply. It is neither physically possible (due to mixing) nor socially possible (due to cooperative agreement) for Company B to trace supply to specific farms in the region. If it is possible to demonstrate that the farms included in the intervention participate in the co-operative, Supply Shed can apply.

The Supply Shed concept potentially introduces a risk of double counting, involving the scenario where:

— Company A, the proponent (investor) of an Intervention with a group of upstream suppliers in their Supply Shed, reports the beneficial greenhouse gas (GHG) result of the intervention but do not know which supplier(s) in the group produce the exact goods they purchase.

— Company B, who are not involved in the causality of the Intervention, are physically purchasing some or all of the goods targeted by the Intervention. If they become aware of and report the beneficial impacts of the Intervention on GHG emissions and/or removals, both Company A and Company B might report the same improvement.

In this example, Company B should not report the Intervention benefits in the above example as this may result in double counting and cannot demonstrate Causality. In practice, this is challenging to prevent due to the lack of transparent tracking and allocation of benefits to date. Solutions to protect against double counting may vary from case to case, but may include transparent declaration of use and usage restrictions, agreement with producers/suppliers on allocation or the creation of tracking systems in future. This Guidance is not prescriptive due to the varying nature of supply chains. Rather, companies should adhere to the letter and spirit of GHGP and avoid harmful double counting and minimise the risk of others double counting.

It is noted that this form of double counting between two company inventories is a different issue to double claiming between one company's inventory and carbon credits used for offsetting. This issue is further explored in Part 3 of this Guidance.

While the Supply Shed concept is primarily intended to overcome genuine traceability issues, rather than to maximise reporting benefit by aggregating an intervention on a

specific or group of specific suppliers, there may be cases where its application may overcome other barriers to investment. For example, investment or support to suppliers that provide small volumes of specialist goods to a wide range of customers may be limited due to there being no single or groups of customers large enough to have the incentive to act. Application of the Supply Shed concept to such examples may be reasonable and credible but users should take care to consider whether other forms of support or cooperative action are feasible as well as whether an aggregation approach may negatively impact incentives for others to take action in the same supply chain.

The supplier market approach to defining Supply Sheds could also be used in broader sense to include those upstream suppliers within Supply Shed that supply to direct suppliers of Company. This allows suppliers, where an Intervention takes place and are not supplying goods to actual tier 1 supplier of the Company but to 'potential' suppliers (i.e. those that are in the same Supply Shed that potentially can supply the same goods to the purchaser), to be included in Supply Shed.

Options are provided below in decreasing order of preference to justify upstream suppliers as part of Supply Shed. Please note that first preference in any case is the scenario where upstream suppliers providing similar goods and services can be demonstrated as supplying goods and services to actual direct suppliers of the Company. Generally speaking, companies should keep equivalency in mind when defining their Supply Sheds and markets, including both economically and physically where appropriate.

1. Option 1 - It should be demonstrated that there is a **pre-defined market for the type and quality of specific good, and the Company purchases that specific good from that market**. Examples could include regulated areas or areas covered by industry associations.

2. Option 2 - the same type of specific good purchased by a company are **physically transported in the market (for example, cooperatives) where a Company buys from**.

In some circumstances, where it is impossible to both link the goods a company buys to a specific market and link the goods brought to that market to specific producers and suppliers, the following option could be considered as interim accounting options until better data is available. Note that at the country level or other similarly larger

scale definitions, it may be challenging to demonstrate equivalence, particularly where Interventions are more spatially/physically influenced. See also 1.7, below, for commentary regarding market-based approaches at larger scales.

3. Option 3 - the same type of specific good purchased by a company are **produced in same Country** (or potentially larger region, noting that physical/financial connectedness may become less and less straightforward to demonstrate credibly) where the company buys from.

Example

In row-crop agriculture, a specific field can grow a rotating selection of crops in different growing seasons or years. If a company causes an Intervention on a specific field that grows a commodity purchased by the Company in year 1, a different crop that the Company does not purchase may be grown on the field in year 2. As outlined in the Value Chain Interventions Guidance, that field has the 'potential' to supply the original crop to the Company in the future and hence can be considered within the company's Supply Shed.

Oat Intervention Example

If only oats are grown commercially on the Intervention farms, all of the resulting emission reductions can be attributed to the volume of oats grown. If more than oats are grown commercially on the farms, the company should apply an allocation adjustment – either mass or economic – to the reduced emissions attributed to the oats. This example assumes only oats are grown.

- 5,000,000 kg of oats are sourced from a predetermined Supply Shed (e.g., USDA Land Resource Region – Northern Great Plains Spring Wheat Region, Saskatchewan and Manitoba)
- Standard oat emissions factor is 0.357 kgCO2e/kg oats for the Supply Shed
- Average farm emissions within the Supply Shed are 500 kgCO2e/farm acre
- An Intervention is made within the Supply Shed on 1,000 acres, reducing the average farm emissions to 375 kgCO2e/farm acre
- The average oat yield for the Supply Shed is 1400 kg/acre

- Company is able to demonstrate that the Intervention farms in the Supply Shed grow or have grown oats

Pre-Intervention emissions

Emissions from oats prior to Intervention = 5,000,000 kg x 0.357 kgCO2e/kg oats = 1,785,000 kgCO2e

Impact Factor

375 kgCO2e/farm acre after Intervention / 500 kgCO2e/farm acre before Intervention = 0.75

Mass of oats from 'potential' oat growing farm land in the Supply Shed improved:

1000 acres x 1400 kg/acre = 1,400,000 kg oats linked to intervention acres

Emissions from oats:

{(5,000,000 kg – 1,400,000 kg) x 0.357 kgCO2e/kg oats} + {1,400,000kg x 0.357 kgCO2e/kg oats x .75}

=1,285,200 kgCO2e + 374,800 kgCO2e = 1,660,000 kgCO2e

The company's Supply Shed intervention resulted in a 1,785,000 – 1,660,000 = 125,000 kgCO2e improvement in emissions.

1.3 Interventions that target a change in technology or practice should be within the Supply Shed of the company (see above). Interventions covering multiple Supply Sheds should report each separately. It is recommended that categorisation mirrors the company's overall inventory.

1.4 The Intervention boundary should be defined. It is recommended that this is done using the definitions and guidance in the GHGP Scope 3 Standard and Guidance. It may also be helpful to consider the GHGP Project Protocol, though care should be taken over including aspects that are not within the Scope 3 boundary but may be within a project boundary. An Intervention may target the improvement of one or more activities within a value chain and one or more specific processes within that.

The EF boundary should include all of the emissions associated with production, even though the calculation of results and, if desirable, creation of an Impact Factor may focus on only those activities and processes affected by the Intervention. For practicality purposes, a company may be able to review the underlying average EF assumptions already used and determine if they are reflective of the conditions in the Intervention. This can be further supplemented with Intervention-specific data should these assumptions require further substantiation.

1.5 One Intervention may include several changes to activities and processes, for example introducing new technologies and changing several practices under one Intervention programme. Some of these activities may fall partly or entirely outside the boundary of the Scope 3 inventory, either because the results are surplus to the volume of goods purchased by the company or because the activities are not part of the Scope 3 boundary, per GHGP definitions, and reporting should reflect this accordingly. Part three of this document explores options for these elements in further detail.

For example, a company that procures nut products for use in cosmetics may introduce a range of activities under one Intervention that could include:

- Improvements to farming practices to reduce emissions and to sequester soil carbon
- Introduction of efficient technologies for smallholders to improve the processing of nut products, for example improved cookstoves that are also used domestically

In the latter activity, the emissions may be partly covered within the Scope 3 boundary and partly outside. For example, if the users of the stoves process the nuts using the stoves then this would be within the Scope 3 boundary, while if the stoves are also used for domestic purposes then, while still very valuable, these emission reductions would fall outside the Scope 3 boundary. Therefore, they should not be included within the inventory accounting, but may be calculated for another purpose, such as communicating about the broader Intervention benefits, see Part 3 of this document).

Companies should therefore separately report on what is included within the Scope 3 boundary from what is considered outside. There are several resources that provide guidance on this topic, for example:

- The Scope 3 Standard and Scope 3 Guidance provides requirements and recommendations for what can and cannot be included within the Scope 3 boundary and should be the first point of reference. Other guidance may include:
  - ISO 14040 and14044 are used extensively in establishing Life Cycle Assessment (LCA) boundaries for products whilst ISO 14064 for projects may also provide useful definitions and requirements. The definitions of what is and is not included within a system boundary can act as a guide to establish what should be included in a Scope 3 boundary.
  - Quantis World Food LCA Database includes useful illustrations of system boundaries for agricultural products.

For the purposes of overall claims concerning an Intervention (see Part 3 of this document) the sum total of all activities may be included. For the purposes of GHG inventory accounting, only those that are within the Scope 3 boundary should be included. By separating these out in table form the user can make informed decisions based on their accounting for what to include and what to say about it.

1.6 An assessment of the volume of goods impacted by the Intervention should be made, such that a robust estimate of the amount of goods and services produced per year by suppliers within the boundary of the Intervention can be presented. Likewise, companies should ensure that the activities resulting improved EFs are continued after the Intervention is implemented. This may involve ongoing MRV to ascertain that the beneficial activities have not reverted to pre-implementation practices.

1.7 It is recommended that companies incorporate sustainable development approaches within the Intervention, particularly for those Interventions that impact social or environmental issues. These should include:

- Stakeholder inclusivity – Identifying interested and affected stakeholders and ensuring their views are incorporated into the design and that there is an ongoing feedback and grievance mechanism in place. Engagement should ideally take place prior to the Intervention to gather feedback from stakeholders that can shape the Intervention and deliver greater benefits and buy-in overall.
- Mitigating risks and safeguards – Identifying and addressing potential negative impacts and providing mitigation for them, including for any stakeholder rights that may be affected.

— Contributions to sustainable development – Identifying opportunities to contribute wider positive impacts to sustainable development relevant to the targeted goods and services.

It is beyond the scope of this Guidance to provide specific information on these points. Instead it is recommended to follow guidance such as UNDP Social and Environmental Standards or best practice approaches such as Gold Standard for the Global Goals. This is particularly important for Interventions in value chains in developing countries or in vulnerable communities.

1.8 The Supply Shed concept implies the potential to create market-led or market-based approaches to scaling Scope 3 action. As noted earlier in this section, as the definition of Supply Shed is widened, for example to country scale, it may also become challenging to credibly report benefits that are physically and spatially defined, for example by input such as climate, soil type, water etc.

The GHGP accounting approach is generally based on 'physical' accounting and reporting, meaning that the processes reported are those physically associated with the reporting company.

It is often not possible to report on the exact goods purchased by a company to maintain this physical connection. In doing so it may become impractical to carry out an Intervention, due to the dynamics of procurement and supply chains over time. To provide a solution to these issues, market-based approaches or mechanisms have been proposed by some proponents. Markets have the potential to scale action by allowing transactional, simplified access to benefits through collective action. It may be possible to overcome the issues posed by scale and spatial effect, whilst maintaining a credible level of physical connectivity to the goods purchased. This requires further consideration and careful development in future.

It is therefore concluded that this Guidance neither promotes nor precludes the use of market-based approaches or mechanisms towards Scope 3. It is expected that further development in this area will progress in the coming years.

STEP 1 OUTPUTS

At the end of Step 1 a company should be able to report:

- The Supply Shed of goods and services targeted for improvement by the Intervention, as related to their overall company inventory
- The nature of the Intervention proposed, how it relates to the EF of the targeted goods and services and how it will reduce or remove emissions inside and outside the Scope 3 boundary
- Where appropriate, a design and implementation plan for the Intervention that addresses issues of sustainable development
- For each Supply Shed:
    - The total volume of commodity affected by the Intervention
    - An assessment of the number and tier of suppliers included

It is recommended that these outputs are independently verified (as recommended in the Scope 3 Standard) and ideally certified under a quality standard such as Gold Standard.

STEP 2 – DEFINE INTERVENTION BASELINE

1.9 Establishing a baseline scenario for the Intervention allows for greater flexibility in accounting (see Part 2) and helps to demonstrate that the Intervention has genuinely improved emissions. To demonstrate the improvements caused by the Intervention, it is important to clearly define and measure the emissions of the impacted goods and services prior to the Intervention. The baseline EF (or factor for the specific processes targeted) should represent the relevant goods or services supply chain immediately prior, or within a reasonable timeframe (i.e., where data is available and where the situation can be accurately verified) to the implementation of the Intervention.

The baseline should account for the condition as close to reality and as consistent with the accounting for the post-Intervention state as is feasible. Collection of baseline data may be undertaken from a period of time prior to Implementation as long as any changes during that period are incorporated, to the extent feasible. Many project accounting methodologies provide detailed guidance for how this can be achieved and may provide useful guidance.

Companies reporting against performance targets should assess and record baselines within 2 to 3 years before the Intervention. This ensures that benefits for Interventions already in place and claimed by others are not double counted.

It is noted that this is a recommended maximum period and not a target – many companies establish baseline at the inception of an Intervention and hence may capture data at year 0 of the Intervention. It may also be possible that a general baseline could be developed that accounts for variation in specific baselines at production unit level, across a larger region. The aim of this recommendation is to ensure accurate data and hence this approach would be acceptable. Companies should consider the optimal and most efficient baseline data collection. For example, it may be feasible to collect at the same time as implementing the Intervention or to use nearby control/comparison sites with similar conditions.

If it is not feasible nor cost-effective to assess the baseline 2 to 3 years prior, a longer time frame is possible but the company should take care to ensure data used is credible. It is possible to apply pre-existing data for those baseline EFs that are not targeted by the Intervention, see 1.7. If no baseline data is available or is only partially available then the company may apply other sources of data, such as default factors, though as noted above many project accounting methodologies provide alternatives to assist with developing baseline scenarios. In these cases, care should be taken to ensure that these include sufficient granularity as compared to the data proposed to be included in the Intervention and that the scopes (i.e. sources of emissions) are comparable.

Overall, care should be taken to avoid inconsistency of accounting between baseline and Intervention scenarios as doing so may result in over-estimation of benefits.

1.10 The Intervention baseline emissions are defined as:

- The annual emissions associated with the baseline status of the EF (or targeted processes) prior to the Intervention, in line with 1.9, above
- For sequestration – the storage and rate of sequestration in relevant sinks prior to the Intervention, in line with 1.9, above. Note that this definition may further evolve subject to the GHGP pending development on land-use emissions and removals.

1.11 The baseline EF is defined as:

Equation 2:

$$\mathbf{EF_{by} = EAP_{by} / P_{by}}$$

Where:

— EF_{by} = the Emissions Factor for the targeted process in the baseline year

— EAP_{by} = the total net emissions or sequestration associated with the targeted supply chain Intervention in the baseline year

— P_{by} = the total production of the good or service associated with the Intervention (and in Supply Shed) in the base year

1.12 Companies should assess the different characteristics of the areas and practices targeted by the Intervention and stratify accordingly. Examples might include suppliers in different climatic areas or with specific environmental characteristics that are different from other areas the Intervention is applied. A baseline should be created for the targeted commodity supply chain in each case where the resultant improvement may differ due to context specific conditions.

1.13 For collecting and calculating baseline emissions, it is recommended to focus on primary data for the emissions affected by the Intervention and to be transparent about any assumptions and uncertainty in the data collected.

Specific guidance for different EF may exist that could also be applied. In addition, project-level methodologies, such as those used by the Clean Development Mechanism and Gold Standard, could be adapted for this purpose (see also Part 3 for guidance on relationship to carbon credit issuance). For the latter, the baseline and boundary definitions would need to be adjusted in accordance with Step 1 of this Guidance. The GHGP Project Protocol may also provide useful guidance and approaches.

For consistency, it is important that the same approach or an approach to ensure consistency and equivalence is applied to both the baseline and post-Intervention calculations.

1.14 It is recommended that the baseline is independently verified by a competent third party. As it is ultimately the change or improvement that is of interest, the same verifier should also in the Scope 3 Standard (Chapter 10, Assurance).

STEP 2 OUTPUTS

At the end of Step 2, a company should be able to clearly define the baseline status of the proposed Intervention, the total volume of goods and services affected, and report total baseline disaggregated sinks and sources of emissions and EF for the targeted goods or services. This should be done for each Supply Shed identified in Step 1.

The company should also be able to justify the approach to quantifying the Intervention baseline and identify any assumptions. For verifiable assertions, the company should also document the justification, along with any other pertinent assumptions and calculations.

STEP 3 – POST-INTERVENTION QUANTIFICATION, MONITORING, REPORTING & VERIFICATION (MRV)

1.15 The approach to quantify emissions and EF post-Intervention is defined as follows:

Equation 3:

$$\mathbf{EF_{yn} = EAP_{yn} / P_{yn}}$$

Where:

- EF_{yn} = the Emissions Factor for the targeted process in year n (i.e. any given year post Intervention)
- EAP_{yn} = the total net emissions associated with the targeted process in year n
- P_{iyn} = the total Volume of production associated with the Intervention in year n

1.16 For carbon removals, the change between the cumulative rate of removal compared to the baseline should be used to calculate for reporting separately to emissions, noting that accounting for land-based emissions and removals is currently under development by GHGP and these definitions may further evolve.

1.16 Similarly to baseline definition, it is recommended to focus on primary data for the emissions affected by the Intervention and to be transparent about any assumptions and uncertainty in the data collected.

Specific guidance for different EF may exist that could also be applied. In addition, project-level methodologies, such as those used by the Clean Development Mechanism and Gold Standard, could be adapted for this purpose (see also Part 3 for guidance on relationship to carbon credit issuance). For the latter, the baseline and boundary definitions would need to be adjusted in accordance with Step 1 of this Guidance. The GHGP Project Protocol may also provide useful guidance and approaches.

For consistency, it is important that the same approach or an approach to ensure consistency and equivalence is applied to both the baseline and post-Intervention calculations.

1.17 Monitoring should be conducted at a frequency commensurate with data accuracy needs, practicality and risk unless otherwise specified in the chosen quantification methodology. Typically, a company implementing an Intervention would conduct ongoing monitoring at a frequency of between 1 and 5 years. Reporting is recommended at an annual frequency in line with corporate accounting.

1.18 Monitoring of intervention results should be continued until the results can be considered to be a permanent change of practice and/or equilibrium is reached (in the case of sequestration) unless otherwise specified in the chosen quantification methodology. A period between 5-20 years would be a typical range of post-Intervention monitoring, though the exact duration should be determined based on the needs and relevance to the reporting company.

The reporting company should then maintain a monitoring regime if it is to continue to report on the net emissions improvements for credible claims. For practicality, this could focus on whether the practices or technologies are still employed or, in the case of sequestration, that no major loss or reversal has taken place. GHGP are currently developing land-based emissions and removals accounting approaches, of which

permanence is likely to be a key feature. Further development is expected in this area.

1.19 Monitoring and reporting should be independently verified by a competent third party, see 1.14.

1.20 Company should be transparent in all cases concerning any assumptions and the level of uncertainty involved in their MRV calculations and reporting. Uncertainty can be assessed using the GHGP tools and guidance.

STEP 3 OUTPUTS

Step 3 is effectively repeated for a number of years post-Intervention. For each given year, a company should be able to report on total volume of goods and services impacted and purchased, as well as total emissions or emissions sequestered, associated with the targeted production activities.

PART 2 – HOW TO INCLUDE AN INTERVENTION IN THE SCOPE 3 INVENTORY

This section provides a recommended approach to taking the outputs generated in Part 1 and incorporating them into a company's scope 3 inventory.

STEP 4 – INCORPORATE INTO THE COMPANY'S SCOPE 3 INVENTORY

2.1 Emissions Factor

The emissions associated with an Intervention should be used to either create or update an Emissions Factor, as described in Part 1, above. Companies should clearly state the rationale for the option selected and be able to demonstrate that emissions have been reduced (and not only been reported more accurately) by comparison with baseline.

There are 3 main accounting approaches defined in the GHG-P Scope 3 Technical Guidance:

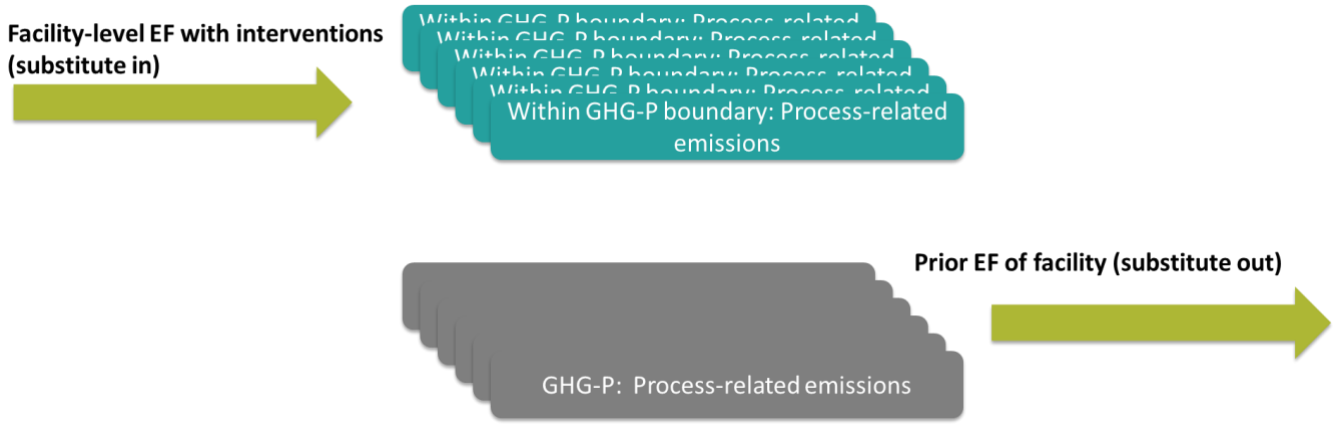
1. Supplier specific - All data used to calculate emission factor is specific to the supplier from whom goods and services are purchased.
2. Average Data - All data is based on secondary process data, for example, default factors.
3. Hybrid - A mix of supplier-specific and average data. This is the accounting approach proposed in the Value Chain Interventions Guidance and further options for accounting using this approach are defined below.

In many cases the reporting company will apply an activity that impacts a limited number of processes that contribute to the overall Emissions Factor of a given purchased good or service. For example, Company A may seek to reduce the overall emissions intensity of cotton production and target activities such as tillage but not other factors such as fertiliser. Therefore, it may not make sense to take detailed on site measurements for those processes that are not targeted by an Intervention. Hence, an accounting method that allows only certain processes to be targeted and updated is required.

To allow for this the following options are provided.

Option 1 – Facility Substitution Method

This method could be used where multiple Intervention activities (i.e., affecting multiple processes) are applied at a supplier's facility. New emissions factor (EF) from supplier-specific data is created for the entire facility. This new EF can substitute the prior EF. The prior EF should be based on facility specific data, or in absence of facility data, average data could be used.



Example

Company A purchases cotton from a group of farmers. It implements three Interventions targeting processes 'X' (tillage), 'Y' (fertilisers) and 'Z' (burning residues) that are sources and sinks of emissions by implementing new technology and practice types. Two other processes ('A' and 'B', irrigation and transport) are left untouched by the Interventions. The Interventions impact an annual production of 10,000,000 tonnes of coffee per annum.

- Intervention Emissions for targeted process 'X' = 2,000,000 tco2e per annum
- Intervention Emissions for targeted process 'Y' = 1,000,000 tco2e per annum
- Intervention Emissions for targeted process 'Z' = 3,000,000 tco2e per annum

Emissions for non-targeted processes 'A' and 'B' are 500,000 and 2,500,000 tco2e per annum respectively.

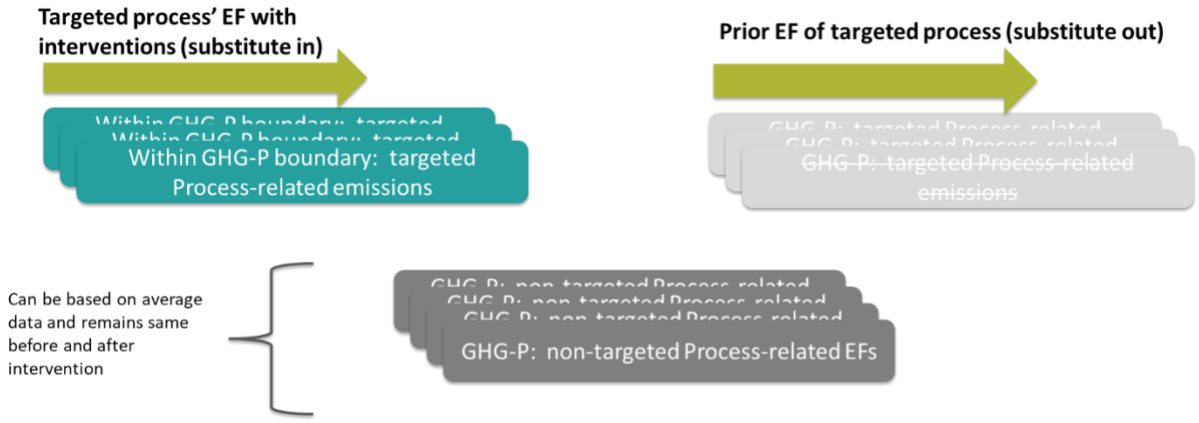
Facility Substitution Method

- Company A's Emissions Factor prior to interventions = 1.0 for cotton, which includes all the five processes. This can be supplier specific or based on average data
- Sum of Emissions of targeted and non-targeted processes after intervention = 2,000,000+1,000,000+3,000,000+500,000+2,500,000 tco2e per annum
- **New Emissions Factor =** (2,000,000+1,000,000+3,000,000+500,000+2,500,000)/10,000,000 = **0.9 tCO2e /Tonne of cotton / year**
- Company A substitutes the facility's original emission factor of 1.0 with 0.9 tCO2e /Tonne of cotton / year

Option 2 – Process Substitution Method

This method could be used where there are multiple processes that affect the emission factor of the facility but only one or two processes are targeted with value chain Interventions. Two other scenarios could be applicable here:

Scenario 1 - Where the EF for the facility prior to Intervention is broken down into granular detail on specific processes within the facility and supplier is measuring post-Intervention EF for targeted process(es) and relying on other sources/average data for the rest. In this case the Intervention baseline EF for targeted process (supplier specific or average data) can be substituted with post-intervention EF for targeted process.



Scenario 2 – Where the EF for the facility prior to Intervention is not broken down into granular detail on specific processes within the facility but supplier is measuring post-Intervention EF for targeted process(es). In this case the Intervention baseline EF for

targeted process (supplier specific only) can be substituted with post-intervention EF for targeted process.

Companies should work with suppliers to build capacity and agree approaches to minimise double claiming with other reporting companies in this scenario.

Example

Company A purchases coffee from a group of farmers. It implements an Intervention targeting Process 'X', that reduces emissions by implementing a new technology type. All other processes are left untouched by the Intervention. The Intervention impacts an annual production of 10,000,000 tonnes of coffee per year.

- Intervention Baseline Emissions Intensity for targeted process = 1,000,000 tco2e per annum / 10,000,000 tonnes coffee yield per annum = EF of 0.1
- Intervention Emissions Intensity for targeted process = 500,000 tco2e per annum / 10,000,000 tonnes coffee yield per annum = EF of 0.05

Comparison

Substitution Method (scenario 1)	Substitution Method (scenario 2)
• Company A's original EF = 1.0 for Coffee, which includes for targeted process • EF of targeted process = 0.1	• Company A's original EF = 1.0 is not broken down into process • Net EF calculated by deducting intervention targeted process minus baseline targeted process (=0.05-0.1 = -0.05)

• Company A substitutes out the 0.1 (leaving 0.9) and adds back in the Intervention process factor of 0.05 • **New EF of 0.95**	• Original EF 1.0+(-0.05) = **New EF of 0.95**

Example

Company A purchases coffee from a group of farmers. It implements three Interventions targeting processes 'X', 'Y' and 'Z' that reduce emissions by implementing new technology types. Two other processes ('A' and 'B') are left untouched by the Interventions. The Interventions impacts an annual production of 10,000,000 tonnes of coffee per year

- Intervention Emissions Intensity for targeted process 'X' = 2,000,000 tco2e per annum / 10,000,000 tonnes coffee yield per annum = EF of 0.2
- Intervention Emissions Intensity for targeted process 'Y' = 1,000,000 tco2e per annum / 10,000,000 tonnes coffee yield per annum = EF of 0.1
- Intervention Emissions Intensity for targeted process 'Z' = 3,000,000 tco2e per annum / 10,000,000 tonnes coffee yield per annum = EF of 0.3

Emissions Intensity for non-targeted processes 'A' and 'B' is 0.05 and 0.25 respectively

Substitution Method (scenario 1)

- Company A's EF prior to interventions = 1.0 for Coffee, which includes for all the five processes. This can be supplier specific or based on average data
- Sum Emissions Factor of targeted and non-targeted processes after intervention = 0.2+0.1+0.3+0.05+0.25
- **New EF of 0.9 tCO2e /Tonne of coffee / year**

Company A substitutes the facility's original emission factor of 1.0 with 0.9

2.2 Assessing amount of goods and services to report

Companies should report in their Scope 3 inventory footprint only the portion of the affected good or service that is purchased (noting that the concept of Supply Shed

may be taken into account). Two broad approaches are possible, depending on whether the company is directly intervening/supporting change or indirectly influencing the Intervention outcome, for example through a contractual relationship with a supplier.

Method 1 - Direct Intervention: Where a company is the direct proponent of an Intervention (i.e. can demonstrate causality, per Part 3 of this Guidance), all production impacted by the Intervention can potentially be reported, up to the total amount of goods and services actually purchased from the group of suppliers, so long as they are within the Supply Shed. This allows companies that directly support change to report the benefit of their Intervention regardless of whether they take physical receipt of the affected goods.

Only one company or consortium of companies working together (and clearly allocating amongst themselves) should apply the Direct Intervention Method in order to minimise risk of double counting.

Method 2 - Indirect influence: In cases where a company is not intervening directly, but are either working broadly across the supply base (for example, through industry-wide efforts), indirectly influencing an initiative or conducting a supply switch approach then physical tracing should be applied. In this case the company should demonstrate that the goods and services accounted for were those actually purchased.

Section 4.2 describes how more extensive 'narrative' claims could be made for goods and services impacted by the Intervention, beyond the scope of what is being purchased.

Companies should present an assessment of the amount of goods and services purchased, including both traceable and untraceable elements, and any assumptions made to reach a total. Particular attention should be given to ensuring that the total amount of improved goods reported as purchased does not exceed the total production capacity impacted by the Intervention (as these would represent false emissions claims).

A company should include in their report the volume of goods purchased (as estimated in above), multiplied by the post-Intervention EF. For all other purchased goods and services of the same type not covered by the intervention, these should not be reported using the post-Intervention EF.

PART 3 – HOW TO COMMUNICATE ABOUT INTERVENTIONS

This section provides guidance as to the claims that can be made associated with the interventions created. Generally, the claims outlined in this Section are for voluntary purposes rather than legal, regulatory or compliance claims, though companies should be aware that many such mechanisms may overlap with inventory accounting at the activity level.

Companies should ensure that where they are required to report for such purposes, for example, for national policy reasons (carbon taxation, corporate social responsibility requirements) that their accounting, reporting and narrative are in line with any such legal requirement. Applying this guidance does not guarantee this due to the variety of regulated approaches where an Intervention may occur or overlap.

This Guidance is launched at a time of change within carbon markets, especially voluntary applications of carbon markets, such as offsetting. Generally, the Guidance adheres to the principle that use of markets to facilitate change beyond the company boundary should not disrupt or detract from inventory-focused efforts. The Guidance also recognises that carbon markets have a range of applications, including those that require a unique claim to a benefit (for example, offsetting) and those that do not (for example, results-based financial contributions).

This section therefore considers two broad applications of mitigation that is not captured within the company inventory and that may be used in the context of voluntary carbon markets or financial contributions:

1. For offsetting claims – wherein a company claims that their emissions have been compensated such that the atmosphere is 'no worse off' overall than it would have been if the company had not emitted. This claim requires the credit used for offsetting to be uniquely owned and not captured either in national or other company inventories.

2. For finance claims – wherein a company claims to have financed an Intervention through the purchase of credits or other results-based finance mechanism. In this instance the claim is not compensatory and hence is not reliant on unique ownership, particularly if the claim concerns supporting a host country or area of supply chain. It is always good practice to disclose the nature of double claiming for transparency.

While the first claim, offsetting, is well established it is expected that the second claim will increase in popularity over time as an appropriate mechanism to support action in the era of the Paris Agreement whilst not precluding others from benefitting in their inventory or national reporting (as would be the case for offsetting, see below).

In general, the above is included because offsetting, wherein an entity compensates for an emission by purchasing and retiring a carbon credit (and to make claims such as carbon neutrality) requires a uniquely claimed carbon credit.

Without this provision it cannot be said with certainty that other claimants have not inadvertently negated the compensation by their behaviours caused by the benefit. For example, a company may adjust progress elsewhere in their inventory due to the signal from interventions financed by carbon offset markets, in a similar way to leakage. Not all carbon credits are used for offsetting, with other finance claims emerging that are not undermined in the same way by double claiming. Further development is expected in the coming years on this point. In general however, companies should take responsibility for the integrity of mechanisms they participate in or effect and not assume that double claiming is acceptable when interacting with carbon markets.

3.1 The amount of goods and services that can be included in company inventory reporting is defined in Part 2. Companies should include as appropriate and allowed within their given reporting protocol and within the scope of these sections. In general, companies should transparently disclose all the benefits of interventions and their status as either inside or outside a company inventory boundary and why.

3.2 As well as reporting the goods and services purchased or estimated to have been purchased from the suppliers, this section explains how the company may also:

- Issue carbon credits[6] for surplus emission reductions or removals (either for impact on goods beyond the purchase volume of the company or for activities that do not fall within the Scope 3 boundary) under a reputable scheme, such as Gold Standard. To avoid integrity issues associated with double claiming (see above), the issuance of carbon credits for use in offsetting or other uniquely claimed benefits should be limited to the emissions reductions and removals related to the balance of goods and services not reported in the Scope 3 Inventory unless an inventory adjustment is made (i.e. the Scope 3 inventory is revised to exclude the benefits of sold credits). **In other words, it is not possible to issue carbon credits from emissions reductions that are also reported in the corporate inventory.** Purchasing or making claims concerning carbon credits that have been reported in another company's inventory is not recommended. Note that the rules of the relevant carbon credit issuer may not fully align with and/or include elements not covered in this Guidance.
    - It is noted that the above alone cannot remove the possibility of inadvertent double claiming between inventories and carbon markets, for example, where inclusion in reporting is not transparent. Schemes that issue carbon credits and companies that purchase them should avoid creating the possibility of double claiming so far as possible, pending further integration between markets and reporting. Alternatively, claims associated with the use of carbon credits should shift to the 'financial contribution' model outlined in the introduction to this section.
- Report the emissions benefits of the Intervention alongside their company report, for example, for marketing and communications. If the claims to the emissions reductions are sold to third parties as carbon credits for use in offsetting or other uniquely claimed benefits, the company should no longer make these claims (as the right to do so is transferred with the carbon credit).

To take advantage of such claims, the company should be able to demonstrate that

[6] It is noted that the rights to ownership of carbon attributes are a fundamental principle of carbon crediting. Hence carbon credits should only be pursued by the owner of the credit, typically the supplier involved, or to have transparently transferred that ownership to the reporting company. This is a requirement of any credible carbon standard.

their actions substantively contributed to or enabled the Intervention and resulting emissions benefit. Demonstrating their contribution allows the organisation to:

- Apply the changed EF generated by the Intervention more broadly (see Parts 1 and 2 for further detail)–
- Make communication claims concerning the Intervention and its benefits (covered in this section)
- Access market mechanisms such as carbon credit issuance in the voluntary carbon markets (where specific third party issuance requirements are met).

As previously noted, this contribution can be demonstrated in a number of ways:

- Direct financial investment: For example, the company directly purchases or finances the procurement of new equipment for the supplier. While circumstances will greatly differ from Intervention to Intervention, the financial investment should be such that, individually or collectively, it allows the Intervention to proceed and is commensurate to the benefit to the reporting companies. Concerns could include 'tokenistic' investment that takes advantage of the efforts of other companies or taking 100% of the benefits reached without a commensurate contribution to enable this. If working collectively, the joint contributions of the different corporates should be acknowledged.
- Incentives: For example, a company offers improved contractual terms or preferential sourcing in return for changes in production practices.
- Procurement requirements: For example, an organisation introduces a new supplier requirement for specific actions, such as no-till agriculture, or emission reduction results, such as a 10% improvement from a baseline. Or an organisation procures certified goods or goods that comply with a specific standard that equates to reduced emissions.

The company may also wish to demonstrate their contribution in other ways but, if they are going to attribute an emissions reduction to an Intervention, they should be able to demonstrate overall that the activities associated with and the improvements being generated by the Intervention were not occurring prior to the causal action and that the changes would not have occurred without the Intervention.

It is possible for companies to work together to deliver an Intervention. Accordingly, joint attribution is also possible and should be transparently stated in reporting. Where appropriate, net emissions changes should be adjusted for proportional attribution of different causes and actions from different companies.

Carbon market evolution in relation to Scope 3

Many companies employ offsetting as a way to take urgent action towards compensating residual emissions while in-boundary reductions are implemented or while on the journey towards science-based target achievements.

Value chain engagement and Scope 3 reporting deepens, the overlap between the activities that are employed to reduce indirect company emissions will increasingly overlap with carbon market activities. This enhances the potential for double claiming of one emission reduction benefit, towards a science-based target and towards a compensatory claim, such as carbon neutrality.

Double claiming risks undermining the environmental integrity and credibility of both the Scope 3 inventory and the offsetting claim and results in less overall climate mitigation potential. As voluntary mitigation rises in both demand and scrutiny, the efficacy of reporting and claims becomes especially important to avoid accusations of greenwashing.

This Guidance therefore recommends that companies avoid seeking issuance of carbon credits where the same reduction is also being reported as part of their Scope 3 inventory. Likewise, it recommends that carbon credit issuers avoid issuing both for the same reduction. Finally, this Guidance recommends that companies do not make offsetting claims from credits issued for activities known to be part of a Scope 3 Intervention and where the specific reduction is being reported by another company.

It is acknowledged that these recommendations do not fully resolve this complex issue. It remains possible, due to the overlapping claims in Scope 3, that a downstream user reports the benefit in their Scope 3 inventory. In time, more sophisticated registry and tracking mechanisms are expected to emerge to formally remove the possibility of double claiming.

Finally, new uses of carbon markets that do not relate to offsetting/compensation claims may arise. Examples may include corporate contributions to country targets via domestic mechanisms. Under such schemes, double claiming may become less of a concern. Companies should adhere to the requirements of any scheme in which they participate and avoid double claiming between inventory and offset accounting.

3.3 Narrative claims

Beyond the scope of what can be included within reporting protocols, a company that implements a successful initiative is encouraged to promote it in other ways, for example through promotional material or press releases. The following types claims could be used:

Type of Claim	Description	Example
Story-based narratives, descriptions and claims	Descriptive claims about the Intervention and its impact, including the role of the company in making it happen.	By providing financial support and training, we implemented a programme of farming best practice in Togo, working with 250 smallholder farmers to improve the sustainability of cocoa production and deliver emissions benefits by storing carbon in the soil.
Emissions reduction or removal claims	Quantified claims about the impact of the Intervention in reducing or removing emissions or lowering emissions intensity	Our programme of incentives led to the installation of onsite renewables at 25 factories in Georgia, reducing emissions by 500,000tCO_2e between 2015 and 2017.
Contribution to Paris Agreement or other policy approach	Claims that the intervention (and hence the company) has supported the Paris Agreement by reducing or removing emissions	Our best practice supplier procurement protocol in Peru reduced emissions by 1Million tCO2e between 2020 and 2025, supporting the goals of Peru's Nationally Determined Contribution and the ambition of the Paris Agreement

Table 2 - Narrative Claims

3.4 Double Counting: So far the issue of double claiming between offsetting, finance and Scope 3 has been considered. There are various other forms of double counting that affect emissions reporting. Not all instances of what may be considered double counting are prohibited in corporate inventory accounting. The response to double counting differs depending on the nature of reporting or claims being made – Table 2, provides an overview of the forms of double counting relevant to supply chain interventions and how they are treated.

Double Counting Type	Example	Response
Between a Company's Scope 3 inventory and supplier Scope 1, 2 or 3 inventory	A company purchases products from a supplier. The company invests in or influences energy efficiency improvements that reduce emissions in the operations of the supplier. The company includes the benefits of that Intervention in their Scope 3 inventory, and the supplier incorporates the Intervention into their Scope 1 inventory.	This is an acceptable form of double-counting, since it is logical that all or a portion of a company's Scope 1, 2 and 3 emissions will be within the Scope 3 emissions of all other companies in their value chain. It also encourages joint responsibility for the same emissions, which may lead to an increased shared focus on resolving them.
Two companies account for the same improved goods and services	One company invests in improvements to a given supplier and accounts for the improvement associated with the amount of goods and services purchased from them (i.e. a lower emissions factor). A second company also buys from that same supplier and also accounts for the lower impact or "cleaner" goods and services purchased.	This risk is mitigated by implementing a robust mass-based accounting system so that each company only counts the improvement tied to the goods they source, and the supplier does not "sell" the already-claimed improvement to additional customers. Other companies purchasing from targeted suppliers should consider this Guidance when assessing their reporting, should they wish to include the improved emissions status.

Emission reductions counted for both reported reductions from supply chain interventions and issued as carbon credits from the Intervention	A company includes reductions from an Intervention into their scope 3 emissions inventory improvements and also issues carbon credits arising from the reduced emissions from that same Intervention.	Projects and companies should safeguard against the same emissions reductions being both sold as credits that require a unique claim and counted in inventories. See earlier in Part 3 of this document for further guidance.
Company and national inventories count the same emissions reductions in their inventories.	A company creates an intervention resulting in lower emissions and reports this in its inventory. At the same time the host country captures the benefit in its national inventory.	This is an acceptable form of double-counting, since all emissions can simultaneously be part of national emission inventories and corporate inventories. There is no intention that corporate accounting be exclusive of national accounting and in fact may lead to shared responsibility.

Table 3 – Managing Double Counting