

OPTIONS FOR ACCOUNTING OF INTERVENTION EMISSIONS FACTORS

Scope & Applicability

In 2018 Gold Standard published the '[Value Chain Intervention Guidance](#)' (henceforth 'The Guidance')– a new Guidance for quantifying, reporting and accounting for interventions (projects and programmes of mitigation action) in company supply chains. The Guidance builds on the Greenhouse Gas Protocol Scope 3 Standard and Technical Guidance.

Through further stakeholder consultation and first pilot verification of interventions, this additional guidance addendum has been created. It focusses on the options for accounting of emissions, as introduced by the Guidance. It is expected to be applicable immediately for use by companies applying the Guidance and will later be incorporated into an updated version, likely in the first quarter of 2020.

This addendum focuses on emissions reporting. Removals will require a further update pending the Greenhouse Gas Protocol's forthcoming updates on removals. This is because the way removals are reported is likely to involve different approaches to emissions.

Context

The Guidance currently describes how companies should take the quantified results of their interventions and include them in their inventory reporting. While the approach is designed to be flexible, experience gained from piloting and from further consultation has pointed to the need for greater clarity to be included.

The following new text is therefore put forward for discussion and ultimately inclusion within the Guidance.

New Text – Accounting Options

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

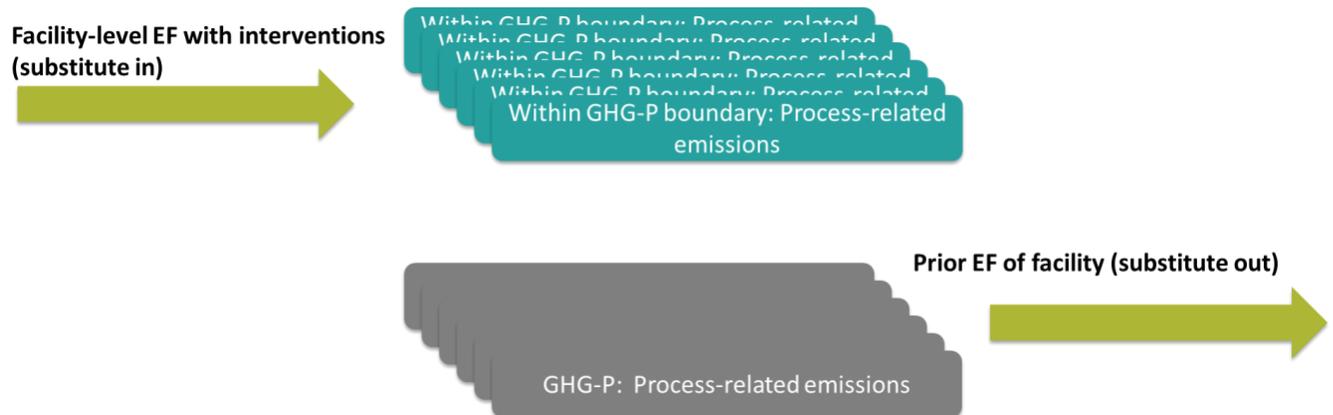
1. Supplier specific - all data used to calculate emission factor is specific to the supplier from whom goods and services are purchased
2. Average Data - all data is based on secondary process data e.g. default factors
3. Hybrid - a mix of supplier-specific and average data. This is the accounting approach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

The Guidance acknowledges that in many cases the reporting company will be applying an activity that impacts on a limited number of processes that contribute to the overall Emissions Factor of a given purchased goods or service. For example, Company A may seek to reduce the overall emissions intensity of wheat production and target activities such as tillage but not other factors such as fertilizer. It may not therefore make sense to take detailed on site measurements for those processes that are not targeted by an intervention and 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 emission factor 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 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 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

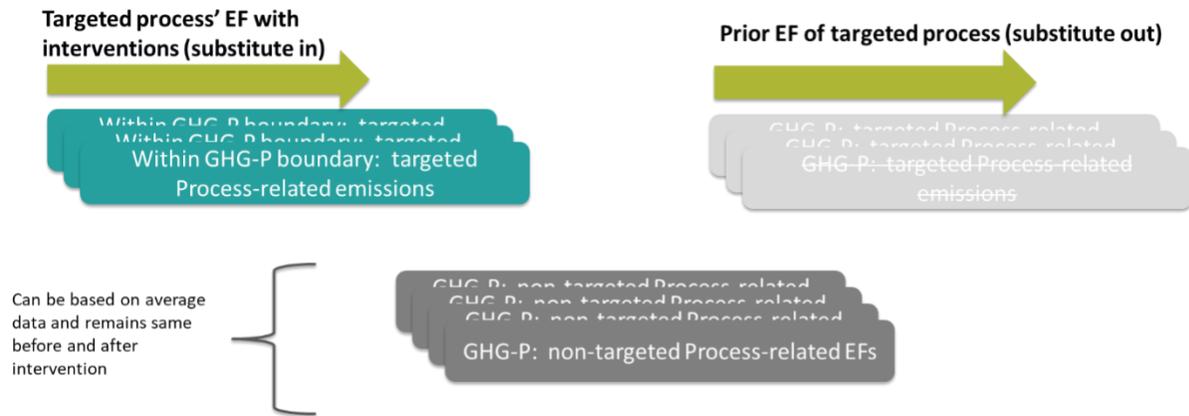
- Company A's Emissions Factor prior to interventions = 1.0 for Coffee, which includes for all the five processes. This can be supplier specific or based on average data
- Sum of Emissions of targeted and non-targeted processes after intervention = 2,000,000+1,000,000+3,000,000+500,000+2,500,000 tco2e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

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. Further two scenarios could be applicable here:

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

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Scenario 2 - Where emissions factor 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 emission factor for targeted process(es). In this case the intervention baseline emission factor for targeted process (supplier specific only) can be substituted with post-intervention emission factor for targeted process.



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)
<ul style="list-style-type: none"> • Company A's original Emissions Factor = 1.0 for Coffee, which includes for targeted process • Emissions Factor of targeted process = 0.1 • Company A substitutes out the 0.1 (leaving 0.9) and adds back in the Intervention process factor of 0.05 • New Emissions Factor of 0.95 	<ul style="list-style-type: none"> • Company A's original Emissions Factor = 1.0 is not broken down into process • Net Emissions Factor calculated by deducting intervention targeted process minus baseline targeted process (=0.05-0.1 = -0.05) • Original Emissions Factor 1.0-0.05 = New Emissions Factor 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' = $2,000,000 \text{ tco2e per annum} / 10,000,000 \text{ tonnes coffee yield per annum} = \text{EF of } 0.2$
- Intervention Emissions Intensity for targeted process 'Y' = $1,000,000 \text{ tco2e per annum} / 10,000,000 \text{ tonnes coffee yield per annum} = \text{EF of } 0.1$
- Intervention Emissions Intensity for targeted process 'Z' = $3,000,000 \text{ tco2e per annum} / 10,000,000 \text{ tonnes coffee yield per annum} = \text{EF of } 0.3$
- Emissions Intensity for non-targeted processes 'A' and 'B' is 0.05 and 0.25 respectively

Substitution Method (scenario 1)

- Company A's Emissions Factor 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 Emissions Factor of 0.9**
- Company A substitutes the facility's original emission factor of 1.0 with 0.9