



Methodological guide for emissions measurement in the humanitarian sector

Draft for sector-wide consultation

June 2026





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Acknowledgements

This guide was written by Hichem Demortier (Analytics Team Lead) and Damien Friot (Environmental expert) under the direction of Bruno Jochum (Executive Director), with the support of Paolo Sévègnes (Carbon Metrics Officer), Blerim Arslani (Carbon Metrics Engineer), Jean Colrat (Environment Engineer, Carbon Accounting) and Pauline Dupuy (Junior Climate Analytics Officer).

The Climate Action Accelerator would like to thank the members of the Review Group for their ongoing support, the quality of their contributions and the breadth of perspectives they brought. The Accelerator would especially like to acknowledge Nora Steurer, Environment Specialist, Greenhouse Gas Emissions, Logistics Cluster Environment Team (WREC Coalition), for her thorough reviews and relevant contributions to every iteration of this guide.



Introduction

Definition of the humanitarian sector

The humanitarian sector is here understood as the humanitarian organisations as well as the institutional donors funding their work. Humanitarian organisations can be national or international. They deliver assistance and protection to save lives and alleviate suffering during and after crises.

Rationale, objectives and structure

The humanitarian sector has a set of specificities impacting the measurement and reporting of greenhouse gas (GHG) emissions. They include for example the use of cash transfers in operations, the widespread use of donations, the multiplicity of types of partnerships occurring when delivering aid, the challenges in the quality of data, or the large variability of organisational perimeters over time. The challenges met by the sector because of these specificities lead to the addition of this guide to complement existing GHG Protocol guidelines.

Like other official sectoral guides, this sector-driven document interprets the existing GHG Protocol Corporate Accounting and Reporting Standard (Corporate Standard, 2004) and, when necessary, complements them with sector-specific guidance. By doing so, the guide will allow humanitarian actors:

- To prepare a true and fair GHG inventory of their emissions, using a standardised approach and making the process more relevant to the specific characteristics of the humanitarian aid sector
- To provide humanitarian organisations with the appropriate information to define and monitor their decarbonisation strategies

This guide follows the structure of the GHG Protocol. It identifies for each section whether the humanitarian sector has specificities warranting a differentiated or clarified approach when accounting for and reporting on emissions.

Target users

This document outlines sectoral recommendations and the rationale for these recommendations, using a combination of existing GHG Protocol principles and sector-specific principles. It is therefore more conceptual by nature, and directed at experts in emissions measurement from the following organisations:



- United Nations agencies
- Red Cross and Red Crescent movement
- Government agencies and authorities
- Institutional donors
- Operational organisations, whether they are national or international non-governmental organisations (NGOs) or civil society organisations (CSOs)
- Networks of organisations
- Consultants supporting these sectoral actors
- Any other organisation facing similar challenges

Guide development process

The development of version 1.0 of this guide followed this process:

- Preparation of a gap analysis to understand the specificities of the sector and best way to manage them, and identify the GHG Protocol principles requiring some sector-specific guidance (CAA: 2024)
- Review and validation of the additional principles required by the humanitarian sector by a core review group of experts (April to June 2025)
- Review and validation of the detailed structure of the guide by a core review group of experts (April to June 2025)
- Drafting of the guide (June 2025)
- Broader consultation of the sector (ongoing, from September 2025)
- Finalisation of version 1.0 of the guide (mid-2026)
- Release of version 1.0 of the guide (late 2026)

Limitations and objectives of the first version

Firstly, this version should be considered as a first step based on existing experience at the time of the writing, subject to ongoing improvements.

Some actors have started their decarbonisation journey several years ago. The Accelerator's partners themselves already represent 10% of the sector. While there are enough available knowledge and expertise in the sector to produce a first version of this guide, many actors are at the beginning of their journey. The sector's expertise will therefore grow exponentially over the coming years, paving the way for more and better insights into how to best manage the sector's specificities and challenges.



Secondly, the sector is extremely diverse (variety of types of actors, of sizes, of operations or geographies). This sectoral guideline is therefore not written to cover every specificity, but rather to give broad guidance.

Related documents

- Global technical reference documents:
 - The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (revised edition)¹
 - Technical Guidance for Calculating Scope 3 Emissions (version 1.0)²
 - The ISO 14064 standard³
- Humanitarian specific reference documents and agreements:
 - Climate and Environmental Charter for Humanitarian Organisations
 - Humanitarian Aid Donor Declaration on Climate and Environment
 - Guidance document on Environmental Responsibility in Humanitarian Operations by the Inter-Agency Standing Committee (IASC)

¹ [The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard \(revised edition\)](#)

² [Technical Guidance for Calculating Scope 3 Emissions](#)

³ [ISO 14064 Standard](#)



Foreword from the Review Group

This guideline provides guidance adapted to the humanitarian sector to measure GHG emissions. This document therefore focuses on technical and practical considerations. While these dimensions are essential the Review Group also wishes to remind the sector of two important considerations.

The importance of the journey at organisational and sectoral levels

Humanitarian organisations and the sector are embarking on a long, complex but essential journey. It is therefore critical:

- To keep in mind that measurement is here to guide and enable emission reduction strategies and actions, and to demonstrate the impact of these strategies and actions, rather than focusing only on reporting (for compliance reasons for example).
- To get started and improve rather than wait, and to start by putting a greater focus on emissions with a larger reduction potential, while remembering that emissions with limited emission potential should always be measured.

The importance of thinking beyond organisational emissions

This guide is designed to allow humanitarian organisations to embark on their decarbonisation journey. As they start this journey, this guide encourages them to integrate a global and science-based perspective on GHG emissions and on their overall impact beyond emissions, without waiting for the signature of international agreements and their operationalisation. To do so, it recommends:

- To remember that a focus on the reduction of the yearly GHG emissions of an organisation could be counter-productive to reduce global GHG emissions⁴.
- To consider their impact beyond GHG emissions, keeping in mind that eight other global Planetary Boundaries are at stake to ensure the survival of humanity⁵.

⁴ This is, for example, the case when selecting products with a low carbon intensity and a short life resulting in higher emissions per year of use than products with a higher carbon intensity but proportionally a much longer life. It is better to provide a blanket lasting three years and emitting twice as much than a blanket lasting one year, even if it doubles the footprint of the organisation distributing the blanket.

⁵ [Stockholm Resilience Centre](#): the nine planetary boundaries are climate change, novel entities, stratospheric ozone depletion, atmospheric aerosol loading, ocean acidification, modification of biogeochemical flows, freshwater change, land system change, and biosphere integrity.



The Review Group

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Chapter 1: GHG accounting and reporting principles

The GHG protocol contains five original principles as guidance for quantifying and reporting GHG emissions. The here proposed additions are designed to complement these original principles, integrate some recent evolutions implemented by several sectors, and add some sector-specific nuances when relevant.

These principles should be considered as mutually complementary. As an example, “Completeness” suggests all emissions should be measured. “Good enough approach” allows organisations to start with a simple approach if necessary.

Follow the aid

The main guidance is to apply a “follow the aid” approach and therefore consider the flows from the donor or group of donors to the implementing organisation or group of organisations, and down to the beneficiary’s activities (See chapter 3 on organisational boundaries for more details).

Proposed additions

GHG protocol principles ⁶	Proposed additions
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.	
Consistency Use consistent methodologies to allow for meaningful comparisons of emissions over time. Transparently document any changes to the data, inventory boundary, methods, or any other relevant factors in the time series.	

⁶ The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (revised edition)



Completeness Account for and report on all GHG emission sources and activities within the chosen inventory boundary. Disclose and justify any specific exclusions.	Materiality Ensure sources generating material emissions are included in the reporting. Information is considered to be material if, by its inclusion or exclusion, it can be seen to influence any decisions or actions taken by users of it (GHG Protocol pg 69). Good enough approach Adapt measurement to the quality of information and available data. The absence of quality information or a lack of knowledge are not sufficient reasons for not reporting: a simplified approach should be used in the case of missing knowledge.
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 assurance as to the integrity of the reported information.	Simplicity Align the measurement approach with organisational capability and resources. The humanitarian sector is characterised by the diversity of its actors, from large international to small grass-roots organisations. It is accepted to use basic estimates and aiming for improvement when relevant and possible.
Relevance Ensure the GHG inventory appropriately reflects the GHG emissions of the organisation and serves the decision-making needs of users—both internal and external to the organization.	

Materiality (complements “Completeness”)

Measurement of emissions should be done with the materiality of emissions in mind. The GHG Protocol’s definition (Chapter 10) provide sufficient guidance: *“Information is considered to be material if, by its inclusion or exclusion, it can be seen to influence any decisions or actions taken by users of it. A material discrepancy is an error (for example, from an oversight, omission or miscalculation) that results in a reported quantity or statement being significantly different to the true value or meaning. (...) While the concept of materiality involves a value judgment, the point at which a discrepancy becomes material (materiality threshold) is usually pre-defined. As a rule of thumb, an error is considered to be materially misleading if its value exceeds 5% of the total inventory for the part of the organization being verified)”*.



Good enough approach (complements “Completeness”)

A characteristic of the humanitarian sector is the difficulty to sometimes access reliable information for all aspects of the reporting. This can for example be due to specific contexts (high-intensity conflicts) or specific aid modalities (cash distribution). In such contexts, the potential improvements may not be worth the risks or the costs associated or may be very limited.

The principle of good enough approach aims at justifying a differentiated approach. Given the importance of the completeness and accuracy principles, this principle does not imply measurement should be omitted, but it rather suggests the use of simplified approaches, such as proxies or generic emission factors for example. If emissions are material, organisations should aim, when possible, for an improvement in data collection.

Simplicity (complements “Accuracy”)

The humanitarian sector is made of multiple actors, from large international organisations and agencies to small local organisations. These different actors have a very broad range of resources and capabilities. The sector therefore recommends adapting measurement sophistication in line with organisational resources and capabilities. Organisations can consequently use simplified approaches to estimate emissions, particularly when emissions are not material, or when knowledge or resources are lacking.

The principle of accuracy remains essential, and organisations should aim to increase knowledge and data accuracy regarding their emissions over time.



Chapter 2: Organisational goals and inventory design

What the GHG Protocol stipulates

Improving your understanding of your company's GHG emissions by compiling a GHG inventory makes good business sense. Companies frequently cite the following five business goals as reasons for compiling a GHG inventory:

- Managing GHG risks and identifying reduction opportunities
- Public reporting and participation in voluntary GHG programs
- Participating in mandatory reporting programs
- Participating in GHG markets
- Recognition for early voluntary action

Specificities of the humanitarian sector and recommended approach

The humanitarian sector is not primarily driven by business objectives. While the five business goals can be applied to the humanitarian sector, the generic GHG organisational goals are only a first step.

The humanitarian sector is also committed to the “do no harm” principle, and to the prevention and alleviation of adverse consequences of its action. As stipulated in the Climate and Environment Charter for humanitarian organisations, the sector acknowledges the importance to “avoid, minimise and manage the damage we cause to the environment and the climate⁷”, in line with the nine Planetary Boundaries.

⁷ Commitment 2, Climate and Environment Charter for humanitarian organisations



Chapter 3: Setting organisational boundaries

What the GHG Procol stipulates

Business operations vary in their legal and organisational structures; they include wholly owned operations, incorporated and non-incorporated joint ventures, subsidiaries, and others. For the purposes of financial accounting, they are treated according to established rules that depend on the structure of the organisation and the relationships among the parties involved. In setting organisational boundaries, a company selects an approach for consolidating GHG emissions and then consistently applies the selected approach to define those businesses and operations that constitute the company for the purpose of accounting and reporting GHG emissions. The GHG Protocol's definition of the organisational perimeter considers three options: financial control, operational control or equity share.

Specificities of the humanitarian sector and recommended approach

The financial or operational control approaches do not completely represent the non-control, non-equity and non-commercial based relationships between humanitarian actors like in-kind donations, funding of operations or cash transfers. The most appropriate way to consider downstream emissions when multiple partners deliver funding or services should also be clarified because of the lack of information in the GHG protocol.

A general representation of the actors and activities of the humanitarian sector is presented in Figure 1. The related measurement concept of “Follow the aid from the donor to the beneficiaries’ activities” implies that measurement should include all flows going from the funder or group of funders to the implementing organisation or group of organisations, and down to the beneficiaries’ activities.

This diagram also underpins the attribution of emissions to the different actors involved.

Follow the aid from the donor to the beneficiaries’ activities

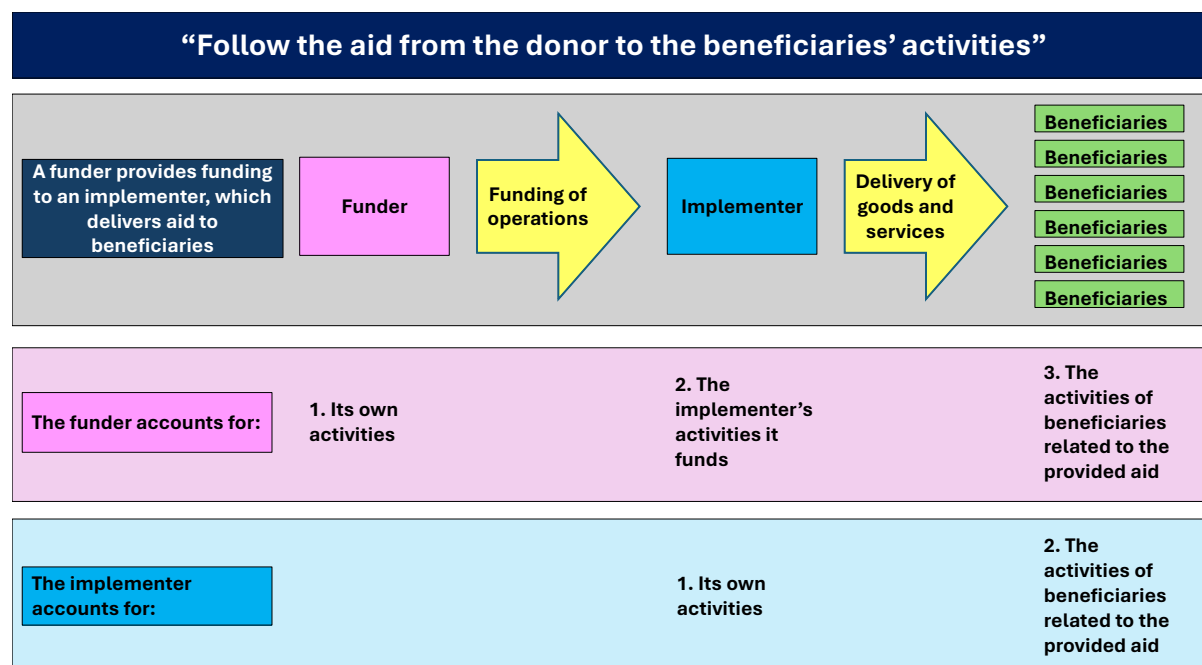
Three main types of actors are considered:

- Funders (providing funding to organisations)



- Implementers (delivering goods and services to beneficiaries)
- Beneficiaries (using the delivered goods and services)

Figure 1: "Follow the aid" for the definition of the organisational perimeter



Reporting recommendations per type of actor

Funders would usually consider in their organisational perimeter:

- a) Their own activities
- b) The activities of the funded organisations (implementers)
- c) The activities of the beneficiaries related to the goods and services delivered by the implementers.

Implementers would usually consider in their organisational perimeter:

- A) Their own activities
- d) The activities of the beneficiaries related to the goods and services delivered



Consideration of non-control, non-equity and non-commercial relationships

Providing grants to an organisation or sharing assets (e.g. transportation means) are some examples of the relationships between organisations which are not unambiguously captured within the GHG way of setting boundaries between entities. Several basic rules can be proposed:

Parent organisation having shares in a subsidiary organisation (as per the GHG protocol current practice)

Assuming we are in financial or organisational control rather than equity share, as per GHG protocol:

- If the parent organisation has more than 50% of the shares or a significant minority of shares and one or several seats on the board of the subsidiary organisation, the subsidiary organisation is part of the parent organisation entities. It therefore should account for 100% of emissions of the subsidiary organisation, with scope 1 emissions accounted for in scope 1, scope 2 emissions in scope 2 and scope 3 emissions in scope 3.
- If the parent organisation has a minority of shares and no seat on the board of the subsidiary organisation, it is considered as not having control, and therefore outside of the organisational entities. All emissions are recorded in 3.15 “investments” according to the percentage of shares detained.

Funding of an organisation or project by a funder

It is here considered that the funding does not translate into operational or financial control (in which case it should be considered as part of the parent organisation entities and reported in scope 1, 2 and 3):

- The funded implementers are considered outside of the organisation entities. Emissions related to the funding should thus be accounted for in 3.15 “funding” by the funder. This is thus a suggested new sub-category of the 3.15 “investments” category.



Multiple partners delivering funding or goods and services: attribution

Two main questions occur:

- The attribution of emissions between donors of a funded organisation or project
- The attribution of emissions between implementers co-delivering humanitarian aid

In situations where several organisations, whether at donor or implementer level, contribute to the funding or delivery of aid, the total emissions should be split between these organisations. Determining how to split emissions raises several questions:

How should the share of emissions be calculated?

- If the funding is a general contribution within a pooled funding, the share of emissions should be calculated as a percentage of total emissions of the funded project or activity.
- If the funding is allocated to specific sub-activities or specific purchases, a specific GHG inventory of funded activities is preferable.

How to determine the share of an organisation's emissions when there is no information about the total funding and / or emissions?

- If the total emissions are unknown: organisations can use sector-specific financial-based emission factors to estimate emissions. They can then apply these emission factors to the funded amount.
- If the share of the organisation in the total funding is unknown:
 - If the total emissions are known, organisations can try to estimate their share of the funding and therefore of emissions.
 - If the total emissions are unknown, they can revert to financial emission factors and apply them to the amount funded.

Should emissions from indirect activities such as overheads be considered, as they are not directly related to the funded activities?

- The current recommendation is to include emissions from overheads if they are included in the funding.



Overall, the “do your best” approach is recommended. It is essential to always clearly communicate about the assumptions, simplifications and limitations of the calculations.

Example	What's tricky?	Proposed approach
Delivery of aid in partnership with local Ministry of Health: An organisation works in partnership with the national Ministry of Health (MoH) to deliver vaccinations. It manages all the logistics, while the MoH provides the staffing and vaccines.	What should the organisation report as its emissions?	The organisation should report on what it pays for, using the financial control approach.
Delivery of aid in a refugee camp: An organisation has built and has supervision of a refugee camp, while providing energy. Another organisation manages the water and food supply. A third organisation runs the health centres.	What should the organisation supervising the camp report as its emissions? And what about the other organisations?	The organisation supervising the camp will account for the emissions related to its activities, i.e. the construction of the camp and the delivery of energy. It will not include the emissions related to food, water and health activities. Each organisation report on the emissions related to its funding and part of the overheads if included in the funding.



Chapter 4: Setting operational boundaries

What the GHG Procol stipulates

After a company has determined its organisational boundaries in terms of the operations that it owns or controls, it then sets its operational boundaries. This involves identifying emissions associated with its operations, categorizing them as direct and indirect emissions, and choosing the scope of accounting and reporting for indirect emissions.

Specificities of the humanitarian sector and recommended approach

Operations in the humanitarian sector can differ from a commercial model to a) get resources, and b) to deliver products and services to beneficiaries. This influences several aspects of the reporting:

- Category 1 “purchased goods and services”: in-kind donations can be an important part of the goods and services provided to beneficiaries while they are not purchased.
- Category 11 and 12 “use and end of life of sold products”: products are mainly donated, and this category is therefore as such not well named for the humanitarian sector.
- Category 15 “investments”: funders provide funding to implementers without expected financial returns. Cash and vouchers are provided to beneficiaries. These activities, while financial activities, are thus not investments.

The main proposal in this document to deal with this issue until better solutions are found is renaming and sub-division of categories 1, 11, 12 and 15.

In addition, guidance on specific situations is needed to harmonise reporting and/or the low availability of data for:

- Volunteers, external consultants and incentives
- Use of cash and vouchers assistance

Renaming and sub-division of exiting categories

Renaming some existing categories with generic terms and creating sub-categories will enable the required distinctions:



- Category 1: rename to “Goods and services” and differentiate two sub-categories a) purchased and b) in-kind donations
- Category 11: rename to “use of products” and differentiate two sub-categories a) donated, b) sold
- Category 12: rename to “end-of-life of products” and differentiate two sub-categories a) donated, b) sold
- Category 15: rename to “investment and transfer of funds” and differentiate three sub-categories a) investment through shares, b) funding of humanitarian activities, and c) direct transfer of funds to beneficiaries.

Examples: donations received and given

Example	What's tricky?	Proposed approach
Donations to humanitarian organisations An implementer humanitarian organisation receives some food donations for distribution to beneficiaries.	How should this donation be accounted for?	Received goods and services are considered as if they were purchased but in subcategory “in-kind donation”.
Donations to beneficiaries Implementers provide goods and services for free to beneficiaries, rather than selling them.	How should these goods and services be accounted for by the implementer?	Given goods and services are considered in category 1 Goods and services, sub-category « purchased » or « in-kind donation » as well as in categories 11 (« Use of products » and 12 « End-of-life of products » if relevant.



Case study: duration of emissions to include

Example	What's tricky?	Proposed approach
Duration of emissions to include A donor funds a humanitarian organisation to distribute cooking stoves in a refugee camp.	What are the scopes and emissions for the donor and for the implementers? It is assumed that the donor funds 100% of the program, and that information is available.	• Implementer: emissions from the purchase of stoves are accounted in purchases of goods and services (category 1). If material, emissions from the use of stoves by beneficiaries are accounted in category 11, and emissions from end-of-life of stoves in category 12. • Donor: all emissions mentioned above (i.e. emissions from category 1 and if material emissions from categories 11 and 12) are accounted in “3.15 funding”.

Guidance on specific situations

Volunteers and external consultants can be a significant part of humanitarian organisations’ workforce. Similarly, humanitarian organisations can use incentives as salary supplements for employees under contract with another organisation and temporarily supporting their activities.

All these collaborators can be classified as internal or external employees, depending on several factors, which can impact the measurement of several categories, e.g. commuting. It is therefore important to provide guidance of how to consider them.



Case studies: Volunteers, external consultants and incentives

Example	What's tricky?	Proposed approach
Reporting on volunteers An organisation gets help from a team of volunteers, which comes every Monday afternoon to assist with food distribution in schools. The volunteers report to the head of school-based programs.	Should these volunteers be considered as employees of the organisation? If so, are they internal or external?	Volunteers working regularly for an organisation with or without being under its direct control or contract may be classified as internal employees. Volunteers working very irregularly may be classified as external employees.
Inclusion of consultants in employee count A humanitarian organisation has contracted three consultants during the last reporting period: • The first one has been helping the logistic department four days per month for several years to prepare the monthly orders. • The second one has joined the logistic for the first time this year for 3 weeks, helping with orders during an emergency. • The third one has been employed to support the creation of a new strategic plan, which is due every fourth year.	Should these consultants be considered as internal employees or external employees? Can they be considered as purchased services?	It is recommended to classify as internal employees, the people contributing to core activities or support activities on a long-term or ongoing basis, irrespective of the type of contractual relationship between them and the organisation. People on short term contracts or working on one-off activities can be recorded as external employees if directly contributing to core activities, and purchased services if contributing to non-core activities. In this example, the first consultant is therefore an internal employee (ongoing contribution to core activity). The second one is an external employee (one-off contribution to core activity). The third one should be considered as purchased services (non-core or ongoing activity). When considered as internal employees, their emissions should be considered similarly to other employees (e.g. commuting, etc.). When considered as external employees, their emissions should be considered in scope 3 (goods and services, upstream transport, etc.).



Example	What's tricky?	Proposed approach
Reporting on incentives A humanitarian organisation requires the support from employees of the local government for a health promotion campaign. The organisation has decided to pay financial incentives to the local government employees, in addition to the existing salaries.	Should the employees to whom incentives are paid be included in the organisation's employees? Should the commuting of these employees be accounted for?	Financial incentives are supplements of existing salaries and do therefore not require to be accounted for. The commuting of employees receiving incentives does not need to be accounted for: they are already contracted by other organisations and would be commuting even if not paid any incentive.

Use of cash and voucher assistance

According to the above proposal, cash and vouchers should be considered in category 15 “investment and transfer of funds”, sub-category c) direct transfers of funds to beneficiaries.

Reporting of cash when quality of information is low

In many cases however, there is very limited information on the use of cash. In this case, the proposed approach is to report it in a new category (see below “Use of cash and voucher assistance”), out of the usual reporting and similarly to the reporting of biogenic carbon emissions. It is thus taken out of the total reported GHG emissions and reported on the side.



Case studies: cash and voucher assistance

Example	What's tricky?	Proposed approach
Use of cash assistance An organisation distributes €500,000 in cash to 10,000 families during a conflict.	How to account for cash assistance-related emissions when there is limited knowledge about the way the cash will be used?	Using the principle of “Completeness”, the organisation should include the emissions in its reporting. The principle of “Simplicity” suggests the organisation should use a simplified and cash-specific emission factor to estimate these emissions. Given the low reduction potential and inaccuracy of emissions measurement, they should be reported separately from the baseline, using category 15, c) “direct transfers of funds to beneficiaries”.
Use of voucher assistance An organisation distributes 1,000 vouchers each valued €100 for beneficiaries to buy rice from a local supplier.	How to account for voucher assistance-related emissions, considering the difficulty to ensure vouchers are used for the intended purpose?	The organisation should record the related emissions into category 15, c) “direct transfers of funds to beneficiaries”, using an adapted emission factor (in this case an emission factor for rice). These emissions will be reported separately, i.e. outside of the baseline, for the same reasons as for cash.



Chapter 5: Tracking emissions over time

Tracking emission over time is key to ensure that implemented reduction actions are effectively enabling a reduction of the emissions. Ensuring meaningful comparability over time requires dealing adequately with a) structural changes in the organisation over time, b) changes in the applied methodology, and c) updates of emission factors. A clear policy for the publication of past results which have been recalculated is also needed. Data quality (Chapter 6) is also essential since not all types of data enable building reduction scenarios.

What the GHG Procol stipulates

Companies often undergo significant structural changes such as acquisitions, divestments, and mergers. These changes will alter a company's historical emission profile, making meaningful comparisons over time difficult. To maintain consistency over time, or in other words, to keep comparing “like with like”, historic emission data will have to be recalculated.

Structural changes in the organisation: specificities of the humanitarian sector

Due to the nature of the activities in the humanitarian sector, the perimeter of reporting can vary widely from year to year. Challenges can come from the variability in the volume of activities, their location and their typology. These possibly extreme variations impact emissions, whether by affecting the activity data or the emissivity of activities, making difficult any comparison over time.

Organisations should make decisions to allow tracking of emissions and reductions. It is therefore essential to identify a base year which is as close as possible to the normative activities of an organisation.

- From a volume of activity perspective, this means identifying the most “normative” year.
- From a type of activity perspective, this may not be possible, and large variation of activities from health to nutrition or shelter should be explained.



- From a location of activity perspective, this may vary depending on the nature of operations. An emergency organisation may consider there is no “normative location” given emergencies may vary from one year to another.

Examples

Example	What's tricky?	Proposed approach
Impact of COVID-19 An organisation usually uses 600 plane tickets per year. During the COVID-19 pandemic, these numbers decreased to less than 100.	How to choose the appropriate baseline year to ensure future comparisons will be meaningful?	The base year used should either be a pre-pandemic year, with a “normative” level of activity, or post-pandemic year, when activities have restarted.
Impact of extraordinary events on activities An organisation has an average budget of 20 million EUR per year. In 2022, the war in Ukraine triggered very large donations, doubling the budget of the organisation. Its budget has gone back to 25 million euros in 2023.	What is the best baseline year for this organisation, given the high variability of its revenues and activities?	This organisation could use as reference year 2021 or 2023, which are closer to its average yearly budget.

Other changes in the applied methodology

The computation of organisation carbon footprints requires regularly dealing with the changes in the available data. This implies an update of the methodology and the recalculation of present and past years back to the baseline.

These changes can be external to measurement effort (e.g. changes in IT systems, managerial restructuring, or new suppliers) or internal (e.g. improvements until the methodology is mature or integration of new – more detailed – data to enable the modelling of reduction scenarios). Emission factors also evolve due to error correction in databases, to new estimates or new technologies. This situation frequently leads to two issues:

- The activity data from former years is not available in the format required for the updated methodology. Results can therefore not be recomputed for former years.



- It is difficult to analyse a change in results when modifying both activity data and emission factors.

There is thus a clear trade-off between (a) the adaptation to new data and improvement of the quality of the reported footprint and (b) enabling tracking performance over time in a consistent way.

The recommended strategy is to establish and document the thresholds used for the recalculation and the republication of past results:

- Changes in the methodology resulting in changes in results below a specific threshold do not require a republication of past years. They can be integrated on a yearly basis.
- Above this threshold, changes in the methodology require a republication of the past years. It is recommended to group these large changes to avoid yearly republications which can be difficult to understand to readers.
- Changes in emission factors should also be done scarcely and updates to past years be applied only for error corrections but not for evolving technologies.

This approach privileges the stability of the methodology and emission factors over time (to increase comparability and reader understanding) at the cost of lower accuracy.

Thresholds can be defined in several ways: with respect to the organisation footprint, to the scopes or to a category.



Chapter 6: Identifying and calculating GHG emissions

What the GHG Procol stipulates

Once the inventory boundary has been established, companies generally calculate GHG emissions using the following steps:

1. Identify GHG emissions sources
2. Select a GHG emissions calculation approach
3. Collect activity data and choose emission factors
4. Apply calculation tools
5. Roll-up GHG emissions data to corporate level.

Specificities of the humanitarian sector and recommended approach

The GHG protocol provides sufficient guidance, as the broad process to follow remains similar for any sector. The present methodological guideline completes the broad guidance of the GHG Protocol.

In addition, several tools and documents exist to support the decarbonisation efforts of the humanitarian sector. A short list of the main resources is included below, with a focus on humanitarian-specific resources:

- The [Humanitarian Carbon Calculator](#) (HCC), a freely accessible online tool for humanitarian organisations, which enables the measurement and tracking of GHG emissions.
- Resources of the Climate Action Accelerator:
 - [Sectoral roadmap and playbook: a sectoral analysis and set of recommendations for sectoral decarbonisation](#)
 - [Measurement toolkit: a practical tool to assist with the data collection and measurement of emissions](#)
 - [Repository of Life Cycle Assessments](#) (LCAs) Guide: a resource compiling simplified and standardized sector-specific EFs from LCAs
- Sectoral resources:
 - [WREC Supply Chain Decarbonization Quick Guide](#)
 - [Greenhouse Gas Emissions Cheat Sheet](#)



Chapter 7: Managing inventory quality

What the GHG Procol stipulates

Companies have different reasons for managing the quality of their GHG emissions inventory, ranging from identifying opportunities for improvement to stakeholder demand to preparation for regulation. The GHG Protocol Corporate Standard recognizes that these reasons are a function of a company's goals and its expectations for the future. A company's goals for and vision of the evolution of the GHG emissions issue should guide the design of its corporate inventory, the implementation of a quality management system, and the treatment of uncertainty within its inventory.

Specificities of the humanitarian sector and recommended approach

Two types of data are used for computing GHG emissions: activity data and emission factors.

Activity data

Data quality is an identified challenge in the humanitarian sector, whether it is due to the lack of data or to its variable quality. The HCC guideline rates the quality of data from 1 to 4 using a data quality index. Data should ideally be activity data, such as kWh usage over a period, and would then be rated as 1 or "good quality". Reliable extrapolations using data or averages from the organisation translate into a rating of 2 or "average data". Extrapolations using third party data from a comparable organisation rate as 3 or "low quality". Data estimated from public data or national studies or using rough proxies will translate into a rating of 4 or "very low quality".

Emission factors

The quality of the emission factors is also essential to improve the accuracy of GHG emissions estimates. Emission factors should ideally be recent, product specific and country specific. The loss of quality when one or several of these criteria are not met leads to a decrease in the accuracy of emissions measurement.

Data quality table

Table 1 below summarises the combined impact of activity data quality and emission factors quality on the overall accuracy of emissions measurement.



Table 1: Impact of activity data quality and emission factors quality on measurement accuracy

			Emission factor		
			All criteria below are met	One of the following criteria is met:	One of the following criteria is met:
			- Product specific EF - Country specific EF - 3-year-old or less	- Product generic EF - Continental EF - 3 to 10-year-old	- Sectoral EF - World EF UNKNOWN - 10-year-old or more
			Good	Average	Very low
Activity data	Measured, collected or verified estimate	Good			
	Estimated using organisation's data)	Average			
	Estimated / modelled using 3rd party data	Low			
	Rough proxy or unknown	Very low			

This table follows a simple rule: the worst quality (either of data or emission factor) determines the overall accuracy of the measurement. Any activity data or emission factor rated as “very low” will significantly compromise the quality of measurement and lead to a “very low” rating of the overall accuracy.

The second important rule relates to the consequence of the above rating: organisations should consider actions which take them out of the “red zone” or “very low” overall accuracy (principle of accuracy). These actions will enable proper reporting and guide decarbonisation. These actions should therefore be prioritised using the most important emissions sources (materiality principle) with significant decarbonisation potential.

Table 2 below summarises the usual state of measurement quality across scopes 1, 2 and 3, while showing how this quality impacts decarbonisation.



Table 2: Impact of measurement quality on decarbonisation

Measurement quality	Usual situation	Decarbonisation scenario building	Visibility of decarbonisation efforts
Good	Scope 1, 2 with extended data collection	Easy	High
Average quality	Scope 1, 2 with rough data collection	Possible through modelling	Medium
Low quality but needed	Scope 3 with activity-based models	Possible through modelling	Medium
Low quality, to be replaced	Scope 3 using financial data (purchased goods & services) and rough estimates	Very difficult	Nil



Chapter 8: Accounting for GHG reductions

External reporting is important for accountability. It should however be clearly understood that the format of reporting in the GHG protocol is not adequate for decision making from a topical perspective. (transport is for example accounted in Scope 1 for owned vehicles and in Scope 3 in the case of a rented fleet): several representations of results are therefore required. This topical perspective is not dealt with here further.

What the GHG Procol stipulates

As voluntary reporting, external GHG programs, and emission trading systems evolve, it is becoming increasingly essential for companies to understand the implications of accounting for GHG emissions changes over time on the one hand, and, on the other hand, accounting for offsets or credits that result from GHG reduction projects. This chapter elaborates on the different issues associated with the term “GHG reductions.”

Recommended approach

Reporting must allow the development and monitoring of a decarbonisation roadmap, identifying priority areas, levers and actions. If done for the first time, external support or collaboration can be instrumental.

While the GHG Protocol covers emissions, other dimensions of planetary limits are important, as described in the global perspective principle.

Existing tools and examples

The [roadmap monitoring framework](#) developed by the Climate Action Accelerator helps organisations track their progress in implementing the climate and environmental roadmap.



Chapter 9: Reporting GHG emissions

What the GHG Procol stipulates

A credible GHG emissions report presents relevant information that is complete, consistent, accurate and transparent. While it takes time to develop a rigorous and complete corporate inventory of GHG emissions, knowledge will improve with experience in calculating and reporting data. It is therefore recommended that a public GHG report:

- Be based on the best data available at the time of publication, while being transparent about its limitations
- Communicate any material discrepancies identified in previous years
- Include the company's gross emissions for its chosen inventory boundary separate from and independent of any GHG trades it might engage in.

Recommended approach

There can be a balance to find between the need to foster capability building and cultural change of organisations, and the reality of their existing capabilities in the early years. This is especially relevant for small organisations with limited capacity and capability to measure and report annually on their emissions.

The recommendation remains to measure emissions every year, using a differentiated approach depending on the capability of organisations. While doing this, organisations must also be mindful of their operation environment and stakeholders, including donors.

- Yearly footprint: yearly data collection is recommended. Measurement can be simplified for small organisations.
- Targeted approach: there can be a specific analytical focus every year to improve data collection and measurement on key emissions.
- Publication: publishing is recommended every year as it fosters transparency. It can be a simplified version for small organisations with less capabilities and resources. This includes the publication of the baseline results, which determines the emissions reduction plans. The publication of the inventory quality will enable readers to understand clearly the limitations of published results.
- Operating environment: each organisation can assess its obligations based on its operating environment and stakeholders.



Some examples below illustrate the sectoral recommendations.

Example	What's tricky?	Proposed approach
Targeted approach An organisation is starting its emission reduction journey and is only tracking financial data for its base year footprint. This footprint indicates that a large part of its emissions comes from freight activities.	It can be overwhelming to have multiple aspects of the first footprint requiring improvement and organisational changes.	These activities should be its priority focus, taking as a potential first step the tracking of air, sea and road freight, and organising its systems to track activity data. This will then enable the analysis of unjustified air freight for example, paving the way for its reduction strategy. Once done, the organisation can focus on its next large category of emissions. Larger organisations with more capacity and capabilities can choose to manage several improvements in parallel.
Operating environment An organisation grows from 95 to 110 employees. It has its headquarters in a country requiring the yearly publication of scope 1 and scope 2 emissions for all organisations with more than 100 employees.	It can be tricky to adapt to a change in the regulatory environment.	It needs to comply with the relevant regulations and put the adequate system in place to gather the required information. It may start with financial data and decide how it progresses towards an improved data collection system.
Operating environment An organisation receives a funding from a new donor. This donor requires the tracking of all emissions in its funding agreement.	The organisation may not have the systems to track the emissions from this new funding.	An emissions tracking system must be put in place for this specific project, even if it doesn't apply to the whole organisation.



Chapter 10: Verification of GHG emissions

What the GHG Procol stipulates

Verification is an objective assessment of the accuracy and completeness of reported GHG information and the conformity of this information to pre-established GHG accounting and reporting principles. Although the practice of verifying corporate GHG inventories is still evolving the emergence of widely accepted standards, such as the GHG Protocol Corporate Standard and the forthcoming GHG Protocol Project Quantification Standard, should help GHG verification become more uniform, credible, and widely accepted.

Recommended approach

The GHG Protocol provides sufficient guidance for the sector. External verification will not be a priority for most organisations. It is nevertheless important for any organisation to document its approach, including:

- A clear definition of its organisational boundaries
- A clear definition of its operational boundaries
- Documented internal processes



Chapter 11: Setting GHG targets

What the GHG Procol stipulates

Setting targets is a business practice that helps ensure that an issue is kept on senior management's "radar screen" and factored into relevant decisions about what products and services to provide and what materials and technologies to use. Often, a corporate GHG emission reduction target is the logical follow-up to developing a GHG inventory.

Recommended approach

The humanitarian sector is committed to ambitious yet realistic emissions reduction targets. These targets might vary over time as science and climate change modelling progress, international frameworks evolve, and the Science-Based Targets initiative (SBTi) updates its recommendations. Organisational targets can therefore be updated as required to integrate the above-mentioned changes.