



Publication

Towards intermediate carbon footprint estimates

for the international aid and health sectors



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This position paper focuses exclusively on the international aid and health sectors and considers how the emission reporting burden of organisations can be reduced whilst keeping a robust framework.



Executive summary

Carbon footprint assessments are essential tools for organisations to understand their greenhouse gas emissions, identify major hotspots, and prioritise the most impactful reduction actions. However, producing comprehensive carbon footprints every year can require significant time, resources, and data collection efforts, particularly in decentralised and resource-constrained contexts such as the aid and global health sectors. The resources required to maintain this process can limit organisations' ability to focus on implementing concrete reduction actions. There is therefore a need for approaches that preserve sufficient visibility on emissions while reducing the operational burden associated with full carbon accounting.

This paper proposes an intermediate carbon footprint estimate approach where organisations calculate a full carbon footprint typically every three years and use simplified estimates of total emissions to bridge the years between complete recalculations. Intermediate estimates provide a lighter annual monitoring approach based on key physical data collected annually and approximation methods for less material emission sources. The process is closely linked to an organisation's monitoring framework ([Roadmap Monitoring Framework](#)), as both are developed and implemented in parallel. The goal is to support implementation of reduction actions and ensure robust monitoring over time.

Full carbon footprint assessments remain essential strategic exercises and the objective is not to replace full carbon footprint assessments. Rather, this tool should be understood as a monitoring approach designed to progressively rebalance efforts between measurement and action. By implementing this approach, organisations will maintain a reliable understanding of emissions trends over time while freeing up time and resources to implement reduction measures.

This paper outlines the rationale behind the approach, the conditions under which it can be used, and a practical step-by-step framework for implementing a robust and credible process. It also provides guidance on how to communicate the publication of an intermediate carbon footprint estimate.

Moving towards intermediate carbon footprint estimates

Introduction

Carbon Footprint assessments provide a comprehensive view of emissions and help organisations prioritise the most effective reduction actions. However, they are detailed and granular measurement tools and maintaining this process every year can become highly **resource-intensive**, particularly in decentralised and resource-constrained contexts.

In this context, once a robust baseline and a clear reduction roadmap are in place, the priority should progressively **shift from measurement to action**. Rather than systematically recalculating a full carbon footprint every year, organisations may benefit from a **simplified approach** that allows them to track emissions trends and assess the impact of key climate actions over time with less effort.

This paper describes **what an intermediate carbon footprint estimate is** and how it can **simplify** the monitoring of greenhouse gas emissions to maintain a reliable but pragmatic view of total emissions over time. It also outlines how this approach links with the **monitoring framework** and supports a credible monitoring process. The approach is indeed designed to work alongside the [Roadmap Monitoring Framework](#), with both processes reinforcing each other to improve tracking of reduction actions over time.

Core principle

Intermediate carbon footprint estimates provide a **lighter annual monitoring approach** between full carbon footprint assessments that should typically take place every three years. They are based on **key physical data collected annually**, combined with **approximation methods** for less material emission sources.

The role of Full Carbon Footprints

Full carbon footprints enable organisations to:

1. build a comprehensive understanding of their emissions, allowing them to identify major hotspots and prioritise the most impactful solutions.
2. determine how data should be collected every year, particularly for the most important emission sources and key reduction actions.
3. identify data gaps and methodological weaknesses and progressively improve data collection processes.



An intermediate carbon footprint estimate is not a shortcut; it is a deliberate and structured monitoring approach. However, it should not replace an initial full carbon footprint, nor periodical full recalculations every three years.

Application contexts

The approach is relevant for organisations operating in contexts where annual full carbon footprint recalculations are constrained by limited resources, decentralised operations, or low data availability. This is particularly true within the aid and global health sectors, where decentralisation and the location of operations often creates significant barriers to data access and resource allocation.

This landscape encompasses a vast array of operational realities; consequently, this paper does not seek to impose a universal simplification methodology. Rather, it proposes a targeted solution for organisations struggling to balance the dual demands of annual carbon accounting and the implementation of tangible reduction measures.

Once a robust baseline and a clear roadmap are established, priority should shift towards executing reduction actions and tracking their impact over time. The proposed approach offers a scientifically valid alternative that is **significantly less resource-intensive** than reproducing a full footprint annually—a process that risks discouraging teams when workloads are high and perceived value is limited.

It is imperative to emphasise that this framework must not be misinterpreted as a licence for organisations to abandon carbon accounting entirely. It is a strategic tool designed for **specific contexts, such as resource-constrained field operations, highly decentralised programmes, or emergency response phases where data granularity is unattainable**. It is not an excuse to cease calculation efforts.

Ways to simplify

Two complementary approaches may help organisations to simplify the carbon footprint process:

- 1) **Automate the footprint calculation as much as possible:**
 - a. **Centralise the data collection.** To save time and gain access to higher-quality data.
 - b. **Automate the footprint calculation:** Use this centralised data to automate the selection of emission factors as much as possible, and more broadly, the calculation of the carbon footprint.

This approach is in general better suited to larger organisations with more centralised data and requires setting up structured data extraction processes.



- 2) Implement **an intermediate carbon footprint estimate process**, which balances rigour with operational efficiency.

This document focuses on the second approach, which is particularly well suited to smaller organisations with more limited resources, whereas the first approach is typically more relevant for larger, more data-mature organisations.

Trade-offs

The main challenge lies in striking the right balance:

- A **full footprint** is essential for credibility and strategic planning—but its resource demands can be substantial.
- A **lightweight annual process** is more manageable—but may lack precision and could cause confusion if it is perceived as a “real” footprint.

There is also a risk that making carbon footprints more comprehensive and spread over time could render processes less familiar—and thus more time-consuming.

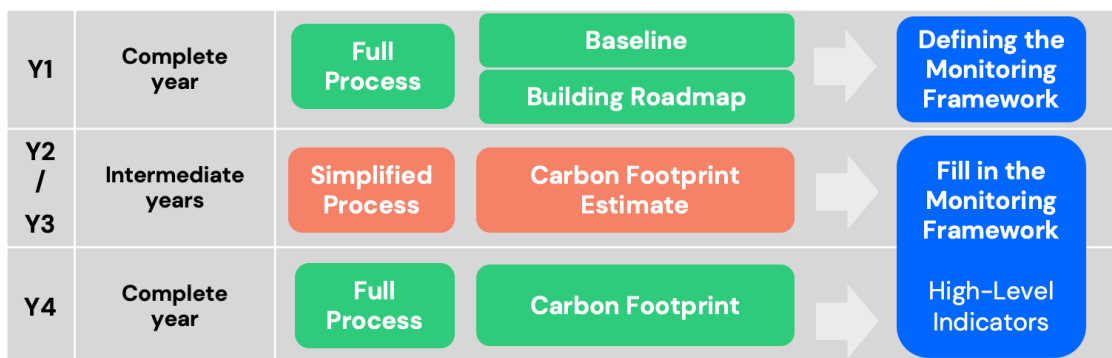
Moreover, organisations must ensure that even simplified approaches remain useful:

- For **monitoring key actions** (incl. through the monitoring framework);
- For **maintaining a rough estimate of total emissions**;
- And for **improving emissions data quality** over time.

If not properly designed and communicated, an intermediate carbon footprint estimate can **erode confidence** in the numbers or lead to **misinterpretation** of progress.

What does it mean in practice?

The proposed methodology is based on a key principle: full carbon footprint assessments conducted periodically with intermediate Carbon Footprint estimates between complete recalculation, feeding the monitoring framework:



The table below illustrates **the differences in granularity required across the three processes**, highlighting in green when data is required, and in grey when it is not (non-exhaustive list):

Category	Data	Carbon Footprint	Intermediate Carbon Footprint Estimate	Monitoring Framework
Travel	km.passenger by air	x	x	x
	short/long-haul detail	x		
Freight	t.km transported by air	x	x	x
	t.km transported by road and maritime	x	x	
Procurement	Spend for Purchased Goods and Services (details for top items only)	x	x	x
	Spend for Purchased Goods and Services (details for most items)	x		
Energy	L of fuel consumed (total)	x	x	x
	Electricity consumed in kWh total	x	x	x
	Electricity consumed in kWh by country	x	x	
	% of total energy consumption from low-carbon source	x	x	x
Waste	Renewable electricity installed	x		
	Estimated weight	x	x	x
Commuting	Number of FTE	x	x	
	Survey with detailed information	x		
Fugitive emissions	Number of buildings or FTE	x	x	
	Number of cooling items	x		
Events	Number of events (with average people attending)	x	x	
	List of events with the participants, data on travel and catering	x		
Capital goods	Total spend	x	x	
	List of vehicles and IT items	x		

Data shown in italics are macro indicators used to extrapolate emissions

Step-by-step approach

This section outlines a practical step-by-step approach to implement an intermediate carbon footprint estimate.

STEP 1. Define the frequency of full footprints

A full recalculation should be carried out at regular intervals—typically every **three years**, depending on:

- The stability of the organisation’s activities;
- The availability of reliable data;
- The time and efforts available.



This frequency should be agreed upon upfront to provide clarity and predictability.

STEP 2. Map data sources and complexity

The data collection plan is not standardised and needs to be adapted to each organisation's unique functional specificities and established data systems. It is based on a mapping matrix designed to tailor the approach for estimating intermediate carbon footprints.

The matrix links each emission category to three key parameters: scope 1 and 2, ease of data collection and strategic importance. Strategic importance is defined based on the contribution to the overall footprint, its link to key solutions, its relevance for operational teams, and its alignment with high-level KPIs.

The mapping criteria (for each subcategory of the carbon footprint) are the following:

- a. **Alignment with High-Level Indicators from the Monitoring Framework:** Indicate whether a performance indicator from the monitoring framework is already associated with this subcategory.
- b. **Scope 1 or 2 classification:** Indicate whether the subcategory falls under Scope 1 or 2 or not.
- c. **Data accessibility: Assess the ease of data retrieval** using three tiers:
 - High: Immediate and centralised data (e.g., utility bills, ERP systems).
 - Medium: Data available but requiring intermediate processing (e.g., consolidation from multiple sources).
 - Low: Decentralised data or requiring field surveys (e.g., manual logs, external suppliers).
- d. **Strategic relevance:**
 - **Baseline share:** The subcategory's contribution to the total carbon footprint.
 - **Link to key solutions:** Alignment with priority reduction measures (High/Medium/Low).
 - **Territorial/team relevance:** Degree of involvement by local teams or decentralised sites to:
 - Maintain operational ownership (avoid HQ-only processes).
 - Ensure shared accountability (e.g., "Regional sites manage their own consumption data").
- e. **Result of the mapping criteria:**

To select the subcategories for annual data collection, we use the mapping matrix defined above. The process prioritises **High-Level Indicators**, all **Scope 1 and 2**



emissions, subcategories rated "**High**" for **data accessibility** and **strategic relevance**.

Example of Categories Mapping Table:

Emission category	High-level Indicators Alignment	Scope 1 & 2	Collection ease	% Baseline	Solutions	Territorial/Team Relevance	Annual Data Selection
Air travel	●●● High	No	●●● High	15%	●●● High	●● Medium	Yes
Energy (generators)	● Low	Yes	●● Medium	10%	●● Medium	●●● High	Yes
Procurement	●●● High	No	●●● High	35%	●●● High	● Low	Yes
Fleet	●● Medium	Yes	● Low	15%	●● Medium	●● Medium	Yes
Freight	●● Medium	No	●● Medium	7%	● Low	● Low	No
Other	?	No	?	8%	● Low	?	No

STEP 3. Calculation

Once the categories for which data will or will not be collected for the intermediate carbon footprint estimate have been defined, the next phase involves calculation: data retrieval and computation in one case, and extrapolation in the other:

- **Data collection plan:**
 1. **Leverage existing data:** For each selected subcategory, start by identifying readily available data already used by the organisation (e.g., invoices, internal reports). Where data is harder to access, use low-effort methods (e.g., simplified data sources, sampling, or estimates).
 2. **Emission Factors:**
 - If the data matches the granularity of the previous complete footprint, reuse the **same emission factors (EFs)**.
 - If the data is less precise or aggregated, apply **simplified EFs** (e.g., composite EFs derived from the previous carbon footprint).
 - Typically for **top procurement items**: new specific emission factors might need to be identified based on **the implemented actions** to ensure they are accounted for and **reflected** in the calculations.
- **Coverage validation:** Calculate the total coverage percentage of this intermediate footprint. We recommend a minimum coverage threshold of **66%** to ensure the estimate remains robust and actionable.



- **Extrapolation of missing data:** For subcategories not included in annual data collection, a robust extrapolation method is still required to estimate their contribution to the total footprint. For each of these, a macro indicator correlated with the evolution of the subcategory is chosen. This allows the estimation of emission trends for the subcategory based on changes in the selected indicator.

STEP 4. Comparison and conclusion

Calculate the final estimated footprint and **document** all key assumptions, data sources, and methodological choices for extrapolation in a summary table.

Finally, **compare the results** with previous carbon footprints to assess consistency, identify key drivers of change, and validate the robustness of the estimate. This step ensures that the intermediate approach delivers credible and actionable insights, while also using this intermediate method to **monitor progress and confirm alignment with intended reduction targets**.

STEP 5. Prepare the next Complete Footprint

Identify existing gaps or inefficiencies within the current data collection systems. Develop a targeted improvement plan to address these structural weaknesses over time. (cf. Footprint renew document)

Results

The process delivers two key results to maintain visibility on emissions and drive climate action:

- A **global estimate of the organisation's emissions**, to maintain an overview of the overall emission trends.
- Comparative emissions data for key emissions categories, to enable improved monitoring of associated solutions and **serve as an input to the monitoring framework**.

Communication Guidelines

The following wording is proposed to support clear and transparent communication on intermediate carbon footprint estimates:

- It is essential to clarify that this is **not a full carbon footprint**, but an **estimation** based on **[year] data**, derived from a methodology refined following the **[year] complete footprint**.
- This estimation does **not** replace the next full assessment, scheduled for **[year]**.
- Its purpose is to **maintain close monitoring of key emission drivers and provide a global overview of our progress**.



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