

PepsiCo Product Carbon Footprint Interim Requirement

Latest Update: January 30, 2025

Objective: This document describes the interim requirements for suppliers when providing supplier-specific Product Carbon Footprint to PepsiCo to replace industry average emission factors from secondary databases. It is not intended to assess the Product Carbon Footprint of new or emerging productions or solutions. This document will be updated as industry standards and frameworks such as WBCSD Pathfinder, GHG Protocol, and Life Cycle Assessment (LCA) standards evolve.

Timing:

- Suppliers must submit their final PCF data to PepsiCo by February 28th of each year (with draft data provided earlier for PepsiCo to review and validate methodology), for the data to be incorporated into PepsiCo's annual GHG inventory.
- Suppliers must use verified data from the most recent year for the PCF.
- Updated PCFs must be refreshed on an annual basis. If no progress has been made or no changes have taken place during the reporting year, this must be communicated.

Note: Data that reflect a year lag are acceptable. E.g., data need to be submitted to PepsiCo by Feb 28th, 2025 to be incorporated into PepsiCo's 2024 GHG inventory. If suppliers do not have verified 2024 PCF by this date, PepsiCo will accept 2023 PCF data.

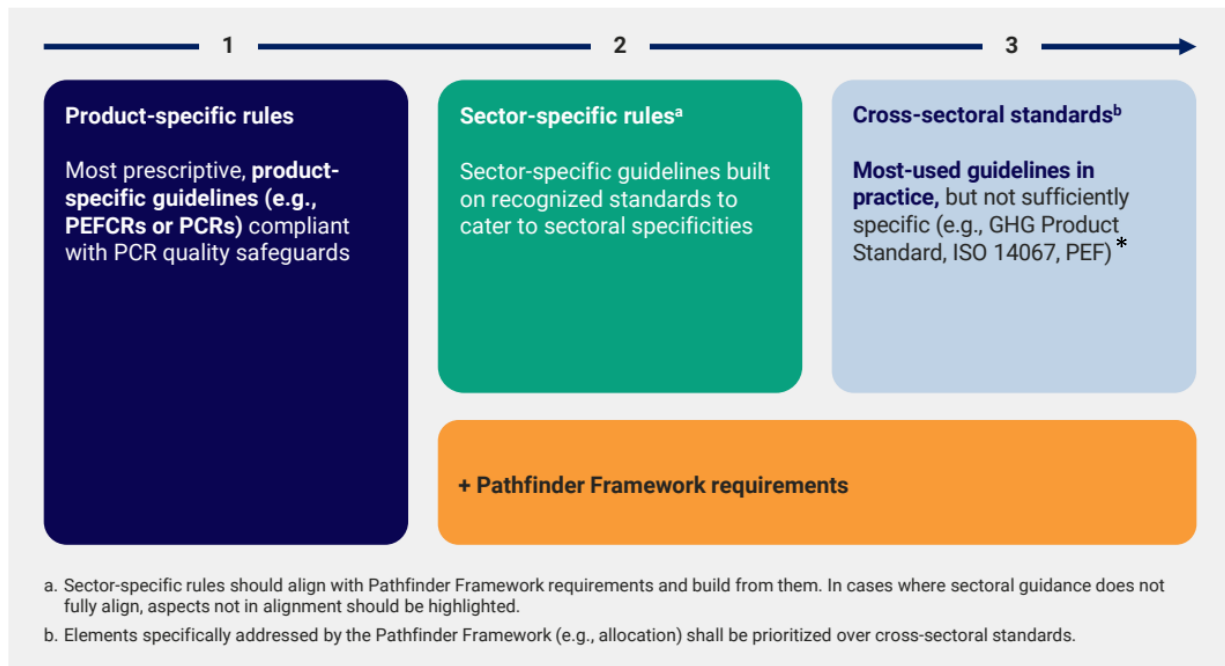
Methodology Requirements:

PCF Approach

- The PCF methodology will be clearly documented and available for review
- The PCF methodology must align with [WBCSD Pathfinder for Carbon Transparency \(PACT\): Guidance for the Accounting and Exchange of Product Life Cycle Emissions](#) and any other product- or sector-specific rules that are compliant with the GHG Protocol rules
- In accordance with PACT guidance, suppliers should follow one or more of the following standards where relevant. Suppliers must follow WBCSD PACT hierarchy of standard application to decide which standard(s) to use.
 - Cross-sectoral standards
 - ISO 14040 & 14044 Life Cycle Assessment
 - ISO 14067 Carbon footprint of products
 - ISO 14025 Environmental labels and declarations
 - GHG Protocol Product Life Cycle Accounting & Reporting Standard
 - PAS 2050 Specification for the assessment of the life cycle greenhouse gas emissions of goods and services
 - Sector-specific rules
 - E.g., Together for Sustainability for the Chemical sector
 - Product-specific rules
 - EU Product Environmental Footprint (EU PEF)*
 - EU Product Environmental Footprint Category Rules (EU PEFCRs)
 - Product Category Rules (PCRs) by Environmental Product Declaration (the International EPD System) and other program operators

- If other, please specify and explain why the standard was chosen

Figure 1. WBCSD PACT Prioritization of methods and standards.¹



- Must provide documentation of consistent methodology for the PCFs to be comparable year over year (e.g., consistent underlying LCI dataset version, consistent geographic boundary). If there is a major change in methodology, suppliers must provide re-stated historical PCFs
- PCF must not include any avoided emissions credits and must separate carbon removal
- PCF for agricultural products and bio-based packaging products must include a FLAG/non-FLAG split. Supplier must consult with PepsiCo on the definition of FLAG and non-FLAG emissions. Note that for agricultural products, all processing is non-FLAG.

*For PCFs created using PEF methodology, the cut-off method must be used for end-of-life allocation.

Third-Party Verification:

Option 1 (Most Preferred):

- The PCF needs to be third party verified, in accordance with the PCF/LCA standard utilized from the above list. It must be either:
 - Individual PCF/LCA for each product is third party verified; or
 - Internal PCF/LCA tool is third party verified

Option 2 (Next Preferred):

- Corporate scope 1, 2, 3 are third party verified; limited assurance is accepted; scope 3 verification must cover material scope 3 categories

¹ Available from "PACT Methodology: Guidance for the Accounting and Exchange of Product Life Cycle Emissions version 2.0". <https://wbcsd.github.io/tr/2023/framework-20232601/framework.pdf>

- If product carbon footprint is calculated by allocating corporate emissions to products (and not by using a LCA tool or methodology), the allocation methodology must also be third party verified

Option 3 (Least Preferred):

- Corporate scope 1 and 2 emissions are third party verified; limited assurance is accepted. If product carbon footprint is calculated by allocating corporate emissions to products (and not by using a LCA tool or methodology), the allocation methodology must also be third party verified

Functional Unit:

- The functional unit will be the unit mass of product or material

System Boundary:

For Agricultural Products:

- Gate-to-Gate (Manufacturing stage under the supplier's direct control only)
- *Optional: Transportation between supplier and PepsiCo, Secondary Packaging*

For Packaging Products:

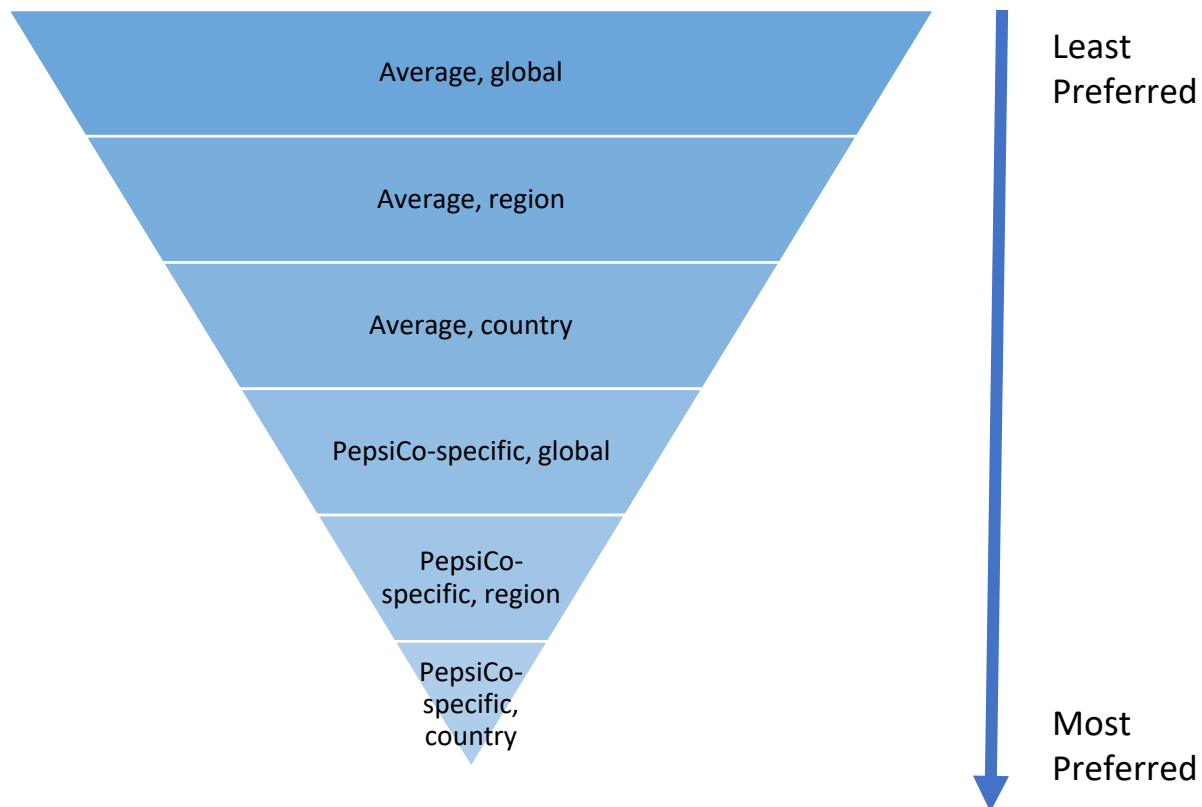
- Cradle-to-supplier manufacturing gate, break into stages:
 - Material Acquisition & Pre-processing
 - Manufacturing
- *Optional: Transportation between supplier and PepsiCo, Secondary Packaging*

Suppliers must provide the PCF breakdown per stage and category indicated above.

Geography Boundary:

- Suppliers shall use best efforts to provide PepsiCo with the most granular data possible. PepsiCo-specific, country PCF is most preferred (reflecting the sites supplying to PepsiCo within a given country).

Figure 2. Hierarchy of PCF geography



Environmental Impacts Measured:

- Climate change impacts must be reported as a standardized CO₂e, using the most recent IPCC 100 GWP values (at time of requirements written, this is AR6 2021)

Data Sources Used:

Minimum requirements:

- Primary data, from the supplier's own value chain, should be used, wherever possible.
- All sources of background data used in the study must be fully referenced and from acceptable and widely available LCI data sources.
- All data sources must include origin data year.
- Primary data must be from the current year or previous year, in the case of a 1 year lag.

Optimum requirements:

- Background data should come from the latest versions of WFLDB and Ecoinvent.

Allocation:

Minimum requirements:

- Allocation methodology, when applied, must be clearly stated and justified (e.g., economic vs. physical vs. energy allocation)
- For end-of-life allocation, the cut-off method must be used

Optimum requirements:

- For agricultural commodity co-products, economic allocation is preferred

Incorporation of Decarbonization Levers in PCF:

- The PCF must incorporate and reflect progress from decarbonization activities taken by suppliers (e.g., renewable electricity, renewable thermal, recycled content, etc.) based on agreed upon allocation methodology with PepsiCo (i.e., allocation of the emission reductions between PepsiCo and other customers of the supplier)