

PCF_InputFile_Master_Unit_conversion

File link:

1. Purpose of the file:

This file provides the unit conversion factors used to convert quantities from various units found across data sources and regions into the standardised units used in Product Carbon Footprint (PCF) calculations: KG (kilograms), TO (metric tons), and MWH (megawatt-hours).

Each row defines a conversion rule from a source unit (from_unit) to a target unit (to_unit) via a multiplication factor (conversion_rule). An optional adjustment coefficient (adj_coeff) and a free-text comment field are also provided.

This master reference table is used by the PCF tool to normalise all incoming quantity data before emission factor calculations are applied.

2. File Structure

2.1. List of tabs

Sheet Name	Description	Mandatory	Comment
Sheet1	Main data sheet. Contains the full list of unit conversion rules used by the PCF tool.	YES	Don't delete this sheet

2.2. Main columns description

SHEET: Sheet1

FIELD	from_unit	to_unit	conversion_rule	adj_coeff	comment
DESCRIPTION	The source unit of measure as found across the various data sources and regions feeding into the PCF tool.	The standardised target unit used in PCF calculations. Only three target units are supported.	The multiplication factor applied to a quantity in from_unit to convert it to to_unit. For example, a value of 0.45359237 converts LB to KG.	An optional additional adjustment coefficient applied on top of the conversion_rule, for cases requiring a secondary correction factor.	Free-text notes added by the data owner to explain the conversion rule or flag special cases (e.g. material-specific conversions, regional notes).
DATA TYPE	String	String	Float	Float	String
MANDATORY	YES	YES	YES	NO	NO
VALIDATION / ALLOWED VALUES	e.g. KG, LB, TO, TON, MWH, NM3, G, OZ, BTU	KG TO MWH DA3	Positive float; e.g. 1000.0, 0.45359237, 0.001	Positive float, if provided	Free text; e.g. "metric ton", "Active ingredient in LB"
TYPE	System	System	System	System	System

3. Filling instructions

Sheet Name	Instructions
Sheet1	<ul style="list-style-type: none"> Complete all mandatory fields for every row. Rows with missing mandatory values will be rejected during upload. from_unit and to_unit must be string values matching the unit codes used across Syensqo data sources. Do not use free-form descriptions – use the standardised unit codes. to_unit must be one of the three supported target units: KG, TO, MWH (or DA3 for special cases). conversion_rule must be a positive float representing the multiplication factor to convert one unit of from_unit into to_unit. Use sufficient decimal precision (e.g. 0.45359237000000). The combination of from_unit and to_unit must be unique. Duplicate conversion pairs will be rejected during data upload. If a unit conversion requires a material-specific or context-specific note, document it clearly in the comment field. Do not modify, add, or remove columns. Do not leave mandatory fields blank.

4. Maintenance best practices

Please comply with the following instructions to maintain the file:

- Always keep the original structure (do not add/remove columns without approval).
- Update only the necessary fields.
- Save a backup copy before any major changes.
- Respect data confidentiality.

5. Contact Points

File owner	Hubert Sizaret
Technical Support	Camille Faure Laëtitia Arantes

The data owner will receive the error file by email and will be responsible for making any necessary manual corrections. For any questions or issues, please contact the responsible person listed above. Please strictly follow these guidelines to ensure data quality and reliability.