Product Carbon Footprint Estimation Tool



What is Product Carbon Footprint (PCF)?

A PCF is the measure of the total greenhouse gas emissions of a product throughout its lifecycle, typically expressed in carbon dioxide equivalents (CO₂e).

Our Commitment to Sustainability

We are committed to reducing Scope 3 emissions by 30% by 2032 as part of our science-based targets. To reach our target, supplier collaboration is key.

Why Supplier Engagement Matters

Reliable PCF data is essential for tracking and reducing emissions. Transparency and sustainable design practices are key to achieving our shared sustainability goals.

Please consider





WE ARE COMMITTED TO PURSUING OUR KEY TARGETS THROUGHOUT ALL LIFECYCLE STAGES, WITH A CLEAR FOCUS ON SUPPLIER ENGAGEMENT AND DESIGN FOR SUSTINABILITY



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Here's why this approach is important



Using averages over time helps account for variations in production and provides a more representative view of the process.

It allows for a better understanding of how regrind materials impact overall material consumption and carbon footprint.

By considering multiple production cycles, you can capture the full impact of using regrind material on both input and output.

This method provides a more comprehensive assessment of the carbon footprint by accounting for the reduced use of virgin materials over time.



When implementing this approach, consider the following steps

Define an appropriate time frame for analysis (e.g., monthly, quarterly, or annually).

Record total input materials, including both virgin and regrind.

Measure total output over the same period.

Calculate average consumption and production rates.

Compare these figures to baseline data using only virgin materials.





Build your own emission database

	Emission source	Activity data	Unit of measure (UoM)	Data sources	Emission factors sources
Scope 1	Stationary: Boilers, process heaters, furnaces, incinerators, combustion turbines, etc.	 Quantity of fuel consumed (for example: natural gas, kerosene, butane, etc.) 	 <u>Volumetric</u>: m³, gallons, L, scf <u>Mass</u>: short ton, kilogram <u>Energy</u>: btu, joules <i>Etc</i> 	 Purchase records Metered fuel doc Utility bills 	 Fossil fuel suppliers Public databases
Scope 2	Purchased electricity, purchased heat, steam and cooling	 Electricity consumed Heat, steam 	 kWh btu, joules 	 Purchase records Utility bills ERP Data Meters at production machines 	 Energy provider Public databases
Scope 3	Purchased goods and services, packaging, transportation of goods	 Raw material consumption Components per product 	 Mass or weight: Kilograms Pieces Meters <i>Etc</i> 	 Purchase records Production orders Bill of materials ERP Data 	 Raw material or component suppliers Public Databases

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PCF Estimation Tool

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