html

carboncalcpcf.com

Product Carbon Footprint Dashboard

Product: **eiugutntol** | Total Carbon Footprint: **40.76 kgCO2e**

System Boundary: Cradle-to-grave (expanded from factory_gate) | Standard: GHG Protocol

TOTAL FOOTPRINT

40.76

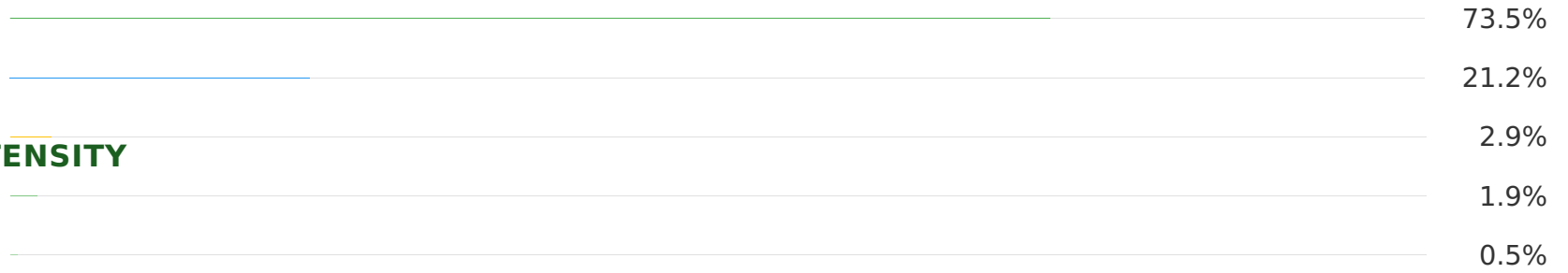
kgCO2e / unit

PER UNIT INTENSITY

40.76

kgCO2e / unit

Carbon Footprint by Lifecycle Stage

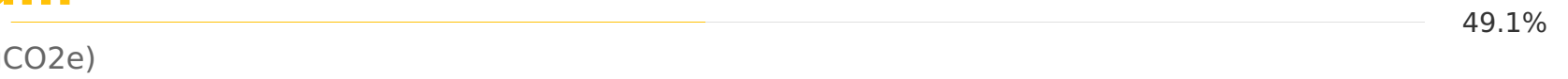


TOP MATERIAL HOTSPOT

Aluminum

Casing (4.25 kgCO2e)

Material Carbon Impact Breakdown



Key Emission Hotspots & Highlights

Dominant Use Phase Impact: The product's use phase accounts for a significant 73.5% of total emissions, primarily due to energy consumption over its 5-year lifespan.

Material Acquisition Contribution: Material acquisition and pre-processing are responsible for 21.2% of emissions, with Aluminum Casing being the largest contributor within this stage.

Scope 3 as Primary Driver: Indirect emissions (Scope 3) represent the vast majority of the footprint (97.12%), highlighting the importance of supply chain and customer-use considerations.

Recommendations for Carbon Reduction

Optimize Use Phase Efficiency: Focus on significantly reducing energy consumption during the product's lifespan through design improvements and promoting energy-efficient usage.

Sustainable Material Sourcing: Investigate and implement lower-carbon alternatives or higher recycled content for key materials, particularly for aluminum and other high-impact components.

Strengthen Circular Economy Initiatives: Leverage the established take-back program to maximize recycling rates, explore refurbishment, and extend product lifespan to minimize end-of-life impacts.

Enhance Data Granularity: Seek primary data from suppliers for material production and transport to refine emission calculations and identify more precise reduction opportunities.