

Product Carbon Footprint (PCF) Dashboard

for "tkxzlhjtje"

Total PCF: **101.84 kg CO2e** / unit

Total Product Footprint

101.84 kg CO2e

Per 1.0 unit of "tkxzlhtje"

Carbon Intensity

101.84 kg CO2e

Per functional unit (1.0 unit)

Top Material Hotspot

Aluminium Casing

3.50 kg CO2e from raw materials

Key Insights & Emission Hotspots

Use Phase Dominance: The product's energy consumption during its 7-year lifespan is the largest contributor, accounting for approximately 49.1% of the total PCF, highlighting energy efficiency as crucial.

Production Impact: Manufacturing emissions, primarily from purchased electricity in China (45.7% of PCF), represent the second significant hotspot, even with 50% assumed renewable energy use.

Scope 3 Significance: Value chain emissions (Scope 3) constitute the majority (54.3%) of the total PCF, driven by the use phase, materials, and transport, underscoring the importance of holistic supply chain engagement.

Recommended Action Plan

****Improve Use Phase Energy Efficiency:**** Focus on design improvements and consumer education to significantly reduce energy consumption during the product's operational lifespan.

****Decarbonize Production:**** Explore options for increasing renewable energy sourcing or investing in offsets for manufacturing operations in China to reduce Scope 2 emissions.

****Enhance Data Accuracy:**** Prioritize collecting comprehensive, primary Bill of Materials (BOM) data and specific energy consumption figures from suppliers for a more precise and actionable PCF.

****Material Optimization:**** Investigate and integrate lower-carbon alternative materials, particularly for high-impact components like Aluminium.