Product Carbon Footprint Dashboard

Total PCF

34.04 kgCO2e

Product: **phgyxuzuhx**

System Boundary: Cradle-to-Grave | Standard: GHG Protocol

Total Footprint

34.04

kgCO2e

for 1.0 unit

Carbon Intensity

34.04

kgCO2e/unit

Based on functional unit

Top Material Hotspot

Lithium Battery

8.00 kgCO2e contribution

Primary Emission Scope

Scope 3

Dominated by Use Phase & Materials

Key Insights & Hotspots

- Use Phase is the dominant emission hotspot, contributing 25.00 kgCO2e (approx. 73% of the total positive emissions) due to energy consumption over the product's lifespan.
- Raw Materials, especially the Lithium Battery (8.00 kgCO2e), account for a significant portion of upstream emissions (9.90 kgCO2e total for materials).
- End-of-Life activities result in a net carbon reduction of -4.17 kgCO2e, thanks to effective recyclability (85%) and circular economy programs.

Recommendations for Reduction

- ✓ Optimize Use Phase: Invest in R&D to significantly reduce the product's energy consumption during its lifespan; explore longer product durability.
- ✓ Supply Chain Engagement: Collaborate with raw material suppliers (especially for batteries and PCBs) to identify lower-carbon alternatives or production methods.
- ✓ Manufacturing Efficiency: Increase the percentage of renewable energy used in the Chinese manufacturing facility and implement energy efficiency measures.
- ✓ Circular Economy Initiatives: Expand and promote take-back and recycling programs to maximize material recovery and reduce reliance on virgin materials.