

carboncalcpcf.com

Product Carbon Footprint Dashboard

Product: gpesipvwuo

Total PCF	Quantity	Boundary	Standard
25.3 kg CO2e	1.0 unit	Cradle-to-Grave	GHG Protocol

Total Carbon Footprint

25.3 kg CO₂e

Per 1.0 unit of gpesipvwuo

Carbon Intensity

50.6 kg CO₂e/kg

Based on 0.5 kg product weight

Top Material Hotspot

Aluminium Casing

3.00 kg CO₂e from materials

Key Insights & Hotspots

- **Use Phase Dominance:** The product's operational lifespan contributes the largest share (10.0 kg CO₂e), highlighting energy efficiency as a critical design factor.
- **Manufacturing Impact:** Despite 70% renewable energy use, manufacturing energy remains a significant hotspot (9.0 kg CO₂e) due to the electricity grid mix in China.
- **Material Choices Matter:** Raw material acquisition, especially for Aluminium and Lithium-ion Batteries, contributes substantially to upstream emissions (6.925 kg CO₂e).
- **Circular Economy Benefits:** Strong recyclability and take-back programs create a notable net benefit in the End-of-Life stage (-0.75 kg CO₂e), showcasing effective circularity.

Action Plan to Reduce Footprint

- **Boost Renewable Energy:** Further invest in or procure 100% renewable energy for manufacturing operations to drastically reduce Scope 2 emissions.
- **Enhance Product Energy Efficiency:** Optimize product design for lower energy consumption during the use phase through hardware improvements and smart features.
- **Source Sustainable Materials:** Explore alternative, lower-impact materials, increase recycled content, and demand primary emissions data from suppliers for all components.
- **Strengthen Circular Initiatives:** Continuously improve take-back and recycling infrastructure, aiming for even higher material recovery and extended product lifespans.