carboncalcpcf.com

Product Carbon Footprint Dashboard

Product: **lwlosdxvth**

Company: ijgjkhlepn

Total PCF for 1.0 unit

36.01 kgCO2e

Key Metrics

Total Footprint

36.01 kgCO2e

per 1.0 unit

Carbon Intensity

36.01 kgCO2e/unit

System Boundary: factory_gate

Primary Emission Hotspot

Use Phase

69.42% of total PCF

Top Material Hotspot

Aluminum Alloy

46.12% of material footprint

Lifecycle Stage Breakdown

Material Impact Hotspots

Aluminum Alloy	**3.75 kgCO2e (46.12%)**
Lithium-Ion Cell	**2.00 kgCO2e (24.60%)**
Printed Circuit Board (PCB)	**1.50 kgCO2e (18.45%)**
ABS Plastic	**0.63 kgCO2e (7.75%)**

Highlights

> Use Phase Dominates PCF: The product's operational lifespan accounts for **69.42%** of its total carbon footprint, making it the primary area for reduction.

> Materials Significant: Raw material acquisition contributes **22.58%** of the total footprint, with Aluminum Alloy being the largest material hotspot.

> Comprehensive Scope 3 Coverage: The analysis includes all significant Scope 3 categories, ensuring a holistic view of the product's value chain emissions, aligning with GHG Protocol 2026 requirements.

Action Plan: How to Reduce Impact

Optimize Use Phase: Invest in R&D for more energy-efficient designs and educate consumers on energy-saving usage patterns.

Sustainable Material Sourcing: Explore suppliers for materials with lower embedded carbon (e.g., recycled aluminum, bio-based plastics).

Boost Renewable Energy: Increase renewable energy procurement at manufacturing facilities beyond the current 70% to further reduce Scope 2 emissions.

Enhance Circularity: Strengthen take-back programs and explore advanced recycling for materials to maximize recovery and minimize landfilling.