Product Carbon Footprint for wpzwzjiudo

carboncalcpcf.com

Total PCF: 82.25 kg CO2e

Total Footprint

82.25 kg CO2e

Carbon Intensity

82.25 kg CO2e/unit

Top Material Hotspot

Aluminum Alloy

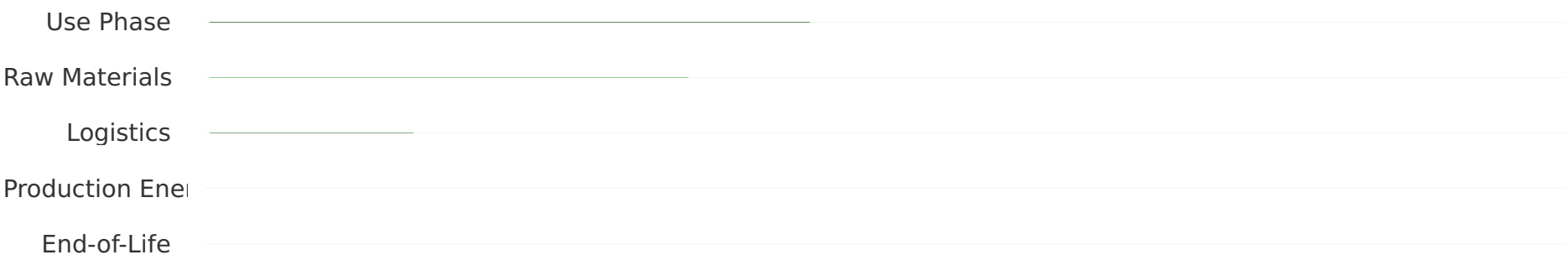
15.0 kg CO2e

Primary Emission Scope

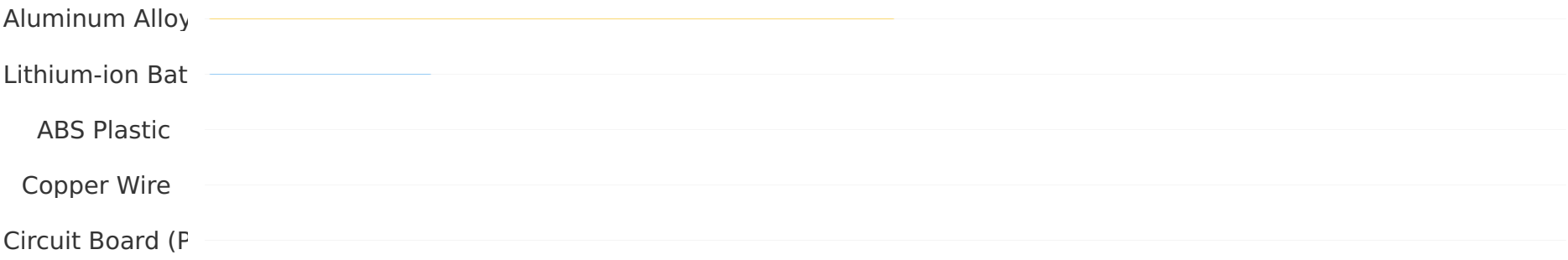
Scope 3 (Use Phase)

44.83% of Total

Lifecycle Stage Breakdown



Material Carbon Impact



Key Emission Hotspots

- **Use Phase:** The most significant contributor (44.83%) due to energy consumption over the product's 5-year lifespan.
- **Raw Materials:** Acquisition and manufacturing of components, notably Aluminum Alloy and Lithium-ion Battery, account for 35.92% of upstream emissions.
- **Last-Mile Delivery:** The final leg of transportation to the customer contributes 15.23%, highlighting logistics optimization opportunities.

Recommendations for Emission Reduction

- **Enhance Use Phase Efficiency:** Design wpzwzjiudo for greater energy efficiency, exploring lower-power components or smart energy management.
- **Sustainable Material Sourcing:** Invest in R&D for lower-carbon materials or source from suppliers using renewable energy.
- **Optimize Logistics:** Investigate opportunities to optimize transportation routes and modes, particularly for last-mile delivery, e.g., using electric vehicles.
- **Strengthen Circularity:** Leverage the "Advanced take-back and refurbishment program" to maximize product lifespan through repair and remanufacturing.
- **Increase Renewable Energy in Production: While 70% renewable energy is commendable, aiming for 100% renewable energy in manufacturing facilities would further reduce Scope 2 emissions.**