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xygjuryeld Carbon Footprint Dashboard

carboncalcpcf.com - Product Sustainability Report

35.294 kg CO₂e

Total Product Carbon Footprint (PCF) per unit

Product

xyggjuryeld

Product Name

Carbon Intensity

35.294 kg CO2e/unit

Total footprint per functional unit

Top Material Hotspot

Aluminum Casing

Contributes 3.5 kg CO2e in materials

Primary Emission Scope

Scope 3

Value Chain Emissions (95% coverage)

Key Highlights & Insights

- The **Use Phase** (Scope 3, Category 11) is the dominant emission hotspot, contributing 29.0 kg CO₂e (approx. 82% of total PCF), emphasizing the need for energy efficiency during product usage.
- **Material Acquisition** (Scope 3, Category 1) is the second-largest contributor at 6.55 kg CO₂e, with Aluminum Casing being the primary material hotspot.
- The **End-of-Life treatment** results in net avoided emissions (-1.54 kg CO₂e) due to a strong recyclability rate (80%) and active take-back programs, demonstrating positive circular economy impacts.

Action Plan: How to Reduce Impact

1. **Enhance Use Phase Efficiency:** Prioritize design for energy efficiency, explore lower power components, and implement smart energy-saving features for "xygjryeld".
2. **Optimize Material Sourcing:** Investigate lower-carbon alternative materials and increase recycled content, especially for aluminum and plastics.
3. **Increase Renewable Energy:** Strive for 100% renewable energy in production facilities to eliminate remaining Scope 2 emissions (currently 70% renewable).
4. **Refine Transport Logistics:** Explore more efficient transport modes (e.g., rail/sea) and investigate electrified vehicles for last-mile delivery.
5. **Promote Circularity:** Strengthen existing consumer take-back programs and explore innovative circular business models to maximize material recovery and reuse.