

html

# Product Carbon Footprint Dashboard

**Product:** epyoooklht | **Company:** pdrlywymlq

Generated Date:

**68.72 kg CO<sub>2</sub>e**

Total Product Footprint

Total Footprint

**68.72 kg CO<sub>2</sub>e**

Carbon Intensity

**68.72 kg CO<sub>2</sub>e/unit**

Top Material Hotspot

**Aluminum Casing**

2.40 kg CO<sub>2</sub>e

Primary Emission Scope

## Scope 3

97.8% coverage

## Emissions by Lifecycle Stage

Use Phase	60.00 kg CO2e (87.3%)
Materials Acquisition & Processing	5.95 kg CO2e (8.7%)
Manufacturing / Production	1.50 kg CO2e (2.2%)
Transport	1.07 kg CO2e (1.6%)
End-of-Life	0.20 kg CO2e (0.3%)

## Material Carbon Impact

Aluminum Casing	2.40 kg CO2e
Lithium-ion Battery	2.00 kg CO2e
Circuit Board (PCB)	0.75 kg CO2e
ABS Plastic Enclosure	0.70 kg CO2e
Copper Wire	0.10 kg CO2e

\*Based on Sub-Total Material Carbon Footprint: 5.95 kg CO2e

## Key Insights: Emission Hotspots

- Use Phase Dominance:** The product's operational lifespan accounts for a staggering 87.3% of its total carbon footprint (60.00 kg CO<sub>2</sub>e), primarily due to electricity consumption.
- Material Footprint:** Raw material acquisition and processing contribute 8.7% (5.95 kg CO<sub>2</sub>e), with Aluminum Casing identified as the single largest material hotspot.
- High Scope 3 Coverage:** Scope 3 emissions represent 97.8% of the total PCF, significantly exceeding the 95% coverage requirement for 2026, indicating a comprehensive value chain analysis.

## Action Plan: Strategies for Reduction

- Reduce** **Enhance Use Phase Efficiency:** Focus on innovating for ultra-low power consumption in future designs and educating customers on energy-efficient usage and renewable energy adoption.
- Reduce** **Optimize Material Sourcing:** Investigate and integrate lower-carbon alternatives for high-impact materials like aluminum, batteries, and PCBs, and increase the use of recycled content.
- Reduce** **Decarbonize Production:** Strive for 100% renewable energy procurement for manufacturing operations in China and implement further energy efficiency measures at the production facility.
- Reduce** **Strengthen Circular Economy:** Expand the "Product Refurbishment and Component Reuse Program" to maximize material recovery and design products for easier disassembly and repair.
- Reduce** **Refine Logistics:** Optimize transport routes and modes (e.g., shifting to rail or sea where feasible for long hauls) and explore localized sourcing to reduce transport distances.