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Product Carbon Footprint Dashboard

Product: wevvewljzl

Boundary: Cradle-to-Grave

Standard: GHG Protocol

12.92 kg CO2e

Total PCF (Cradle-to-Grave)

Total Footprint (Cradle-to-Grave)

12.92 kg CO2e

Carbon Intensity

12.92 kg CO2e/unit

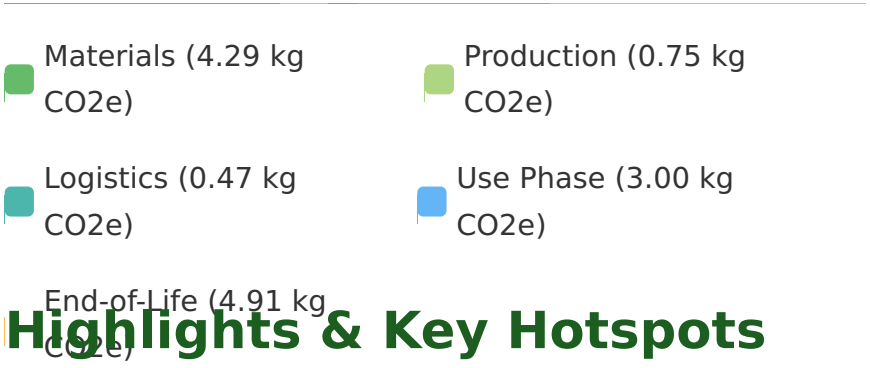
Top Material Hotspot

Li-ion Battery Pack

Dominant Emission Phase

Lifecycle Emission Breakdown

Contribution of each stage to the total cradle-to-grave footprint (approx. 13.42 kg CO2e based on sum of detailed components).



Material Carbon Impact

Breakdown of carbon footprint by key materials (Total Material Footprint: 4.29 kg CO2e).

Recycled Aluminum Alloy	**1.25 kg**
ABS Plastic (Virgin)	**1.14 kg**
Lithium-ion Battery Pack	**1.50 kg**
Copper Wiring	**0.20 kg**
Printed Circuit Board (PCB)	**0.20 kg**

Highlights & Key Hotspots

- **End-of-Life emissions** represent the largest single hotspot at 4.91 kg CO2e, emphasizing the need for improved circularity and waste management.
- **Material Acquisition and Pre-processing** accounts for a significant 4.29 kg CO2e, driven by components like the Lithium-ion Battery Pack.
- The **Use Phase** contributes 3.00 kg CO2e over the product's lifespan, highlighting the importance of energy efficiency for electronic products.

Action Plan: How to Reduce Carbon Footprint

- **Material Optimization:** Explore lower-carbon alternatives or increase recycled content for high-impact components, particularly the Lithium-ion Battery Pack.
- **Energy Efficiency:** Focus on design improvements and technologies to reduce product energy consumption during its 5-year use phase.
- **Circular Economy:** Enhance the existing take-back program and implement design-for-disassembly to improve recyclability beyond 70% and reduce End-of-Life emissions.
- **Renewable Energy:** Increase the percentage of renewable energy used in manufacturing beyond the current 50% to further reduce Scope 2 emissions.