Product Carbon Footprint for myisdpnzwt

Company: ogiquzupez | **Functional Unit:** 1.0 unit

Production Country: China | **Standard:** GHG Protocol

30.82 kgCO2e/unit

carboncalcpcf.com

Total Carbon Footprint

30.82 kgCO2e

Primary Emission Hotspot

Use Phase

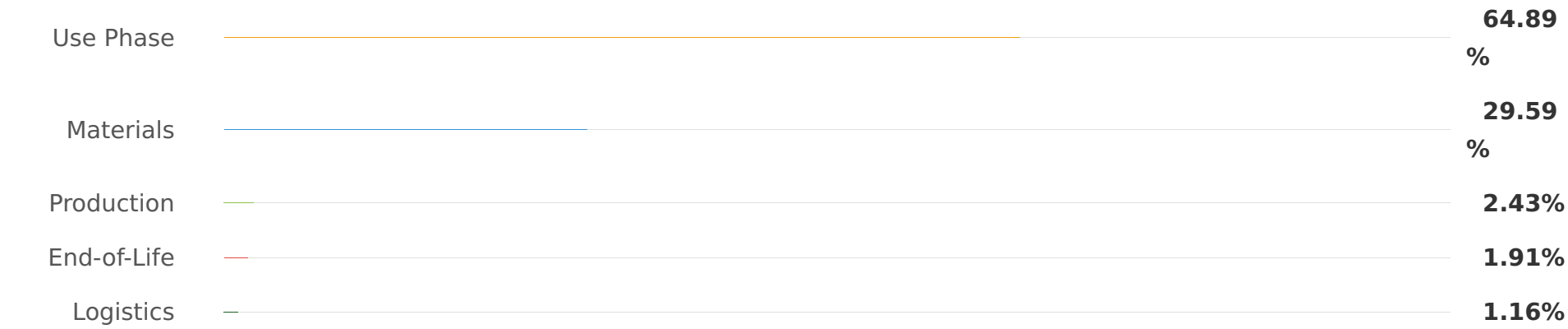
(64.89% of total)

Top Material Impact

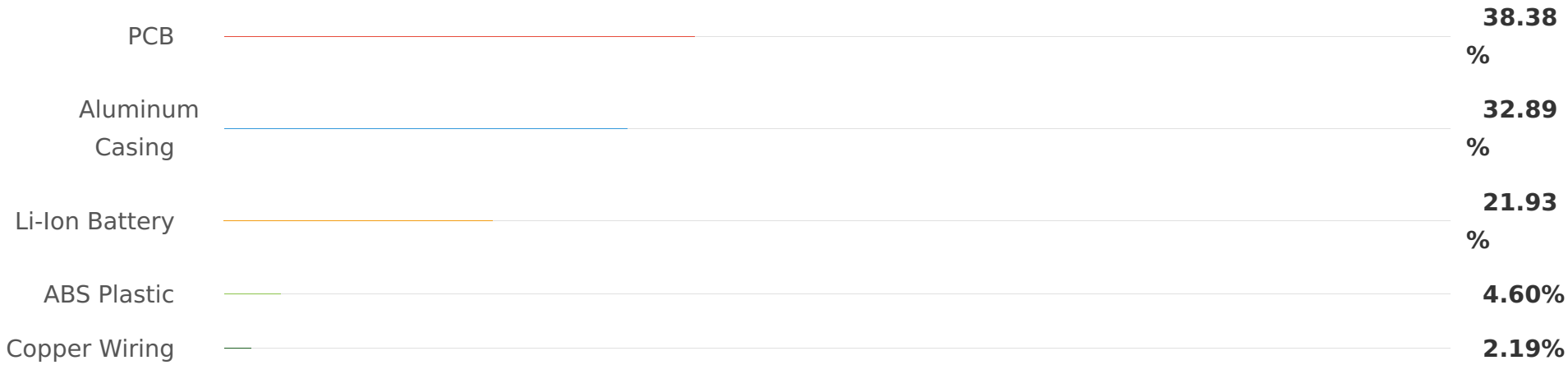
PCB

(3.50 kgCO2e of materials)

Lifecycle Stage Breakdown



Material Carbon Impact



Key Insights & Hotspots

- **Use Phase Dominance:** The product's energy consumption during its 5-year lifespan contributes the most significant portion of the footprint (approx. 64.89%).
- **Material Impact:** Raw materials, particularly the Printed Circuit Board (PCB) and Aluminum Casing, are major contributors, accounting for almost 30% of the total PCF.
- **Manufacturing Efficiency:** Despite 75% renewable energy use, the remaining 25% from the Chinese grid in the manufacturing phase still presents an area for emission reduction.

Recommendations for Reduction

1. **Energy Efficiency in Use:** Prioritize product design for maximal energy efficiency during the use phase to significantly reduce the largest emission hotspot.
2. **Sustainable Materials Sourcing:** Investigate and specify lower-carbon alternatives for PCBs, aluminum, and other high-impact materials. Increase recycled content where feasible.
3. **Renewable Energy Expansion:** Continue efforts to increase renewable energy penetration in manufacturing operations, aiming for 100% renewable electricity.
4. **Supply Chain Engagement:** Work with upstream suppliers to collect primary emission data for purchased goods and services and transportation, improving the accuracy of Scope 3 reporting.
5. **End-of-Life Optimization:** Explore enhanced circularity programs and design for easier disassembly and higher-value recycling to minimize waste and maximize material recovery.
6. **Data Refinement:** Conduct further data collection to obtain more specific, primary data for all relevant Scope 3 categories and regions, particularly as GHG Protocol guidance on the LSR Standard evolves.