

# Product Carbon Footprint for ksjyhwwmpu

Generated Date: May 22, 2026 | carboncalcpcf.com

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

# Key Metrics

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Total Footprint

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

Carbon Intensity

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

Top Material Hotspot

**PCB** (1.25 kg CO<sub>2</sub>e)

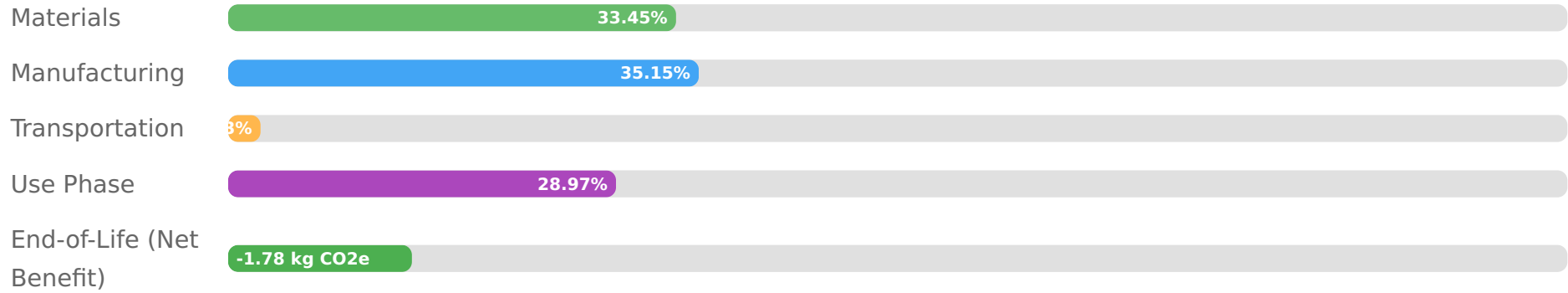
Primary Emission Scope

**Scope 3** (8.40 kg CO<sub>2</sub>e)

# Emissions Breakdown

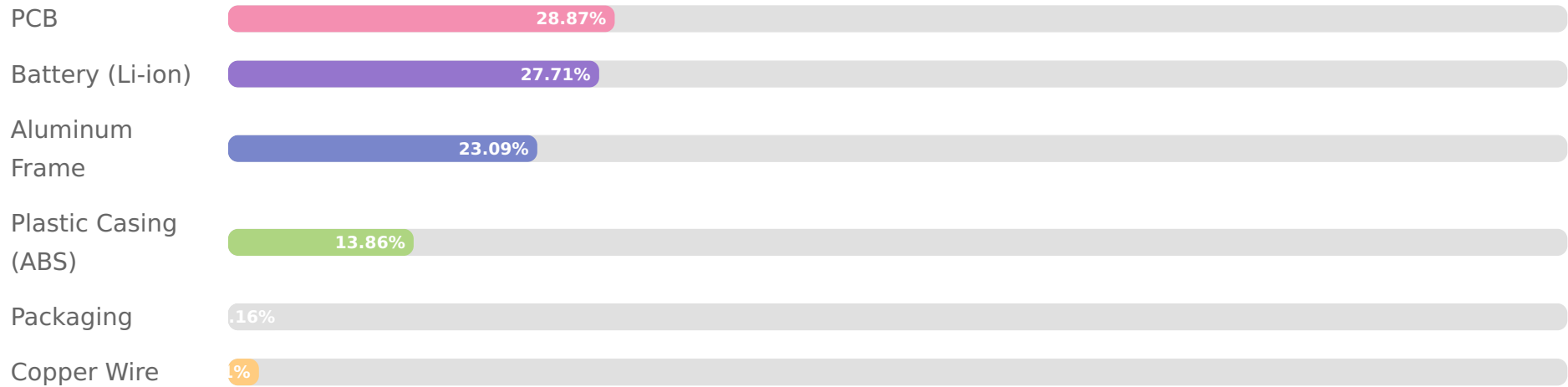
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## Lifecycle Stage Contributions



Note: End-of-Life shows a net benefit due to recycling, offsetting initial material production emissions.

## Material Carbon Impact



Based on total material emissions (4.33 kg CO2e).

## Highlights & Hotspots

- Manufacturing energy (Scope 2 electricity) contributes significantly, representing 35.15% of positive emissions.
- Materials acquisition (Scope 3) is a major factor, with PCB, Aluminum, and Li-ion battery being high-impact components.
- The product's energy consumption during the use phase (Scope 3) accounts for nearly 29% of positive emissions.

## How to Reduce Footprint

- 1 **Decarbonize Manufacturing:** Accelerate transition to 100% renewable energy for production facilities.
- 2 **Sustainable Sourcing:** Prioritize lower-carbon materials and increase recycled content for high-impact components.
- 3 **Enhance Energy Efficiency:** Redesign the product to minimize energy consumption during its operational life.
- 4 **Circular Economy:** Expand take-back and recycling programs to maximize material recovery and extend product lifespan.