

carboncalcpcf.com

# Product Carbon Footprint for rjqppjzrnjd

A detailed Cradle-to-Grave analysis, compliant with GHG Protocol standards.

**Total Carbon Footprint: 34.89 kg CO<sub>2</sub>e**

**Total PCF (Net)**

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

Cradle-to-Grave (per 1.0 unit)

**Top Emission Hotspot**

**Use Phase**

71.5% of positive emissions

**Top Material Impact**

**Aluminum Casing**

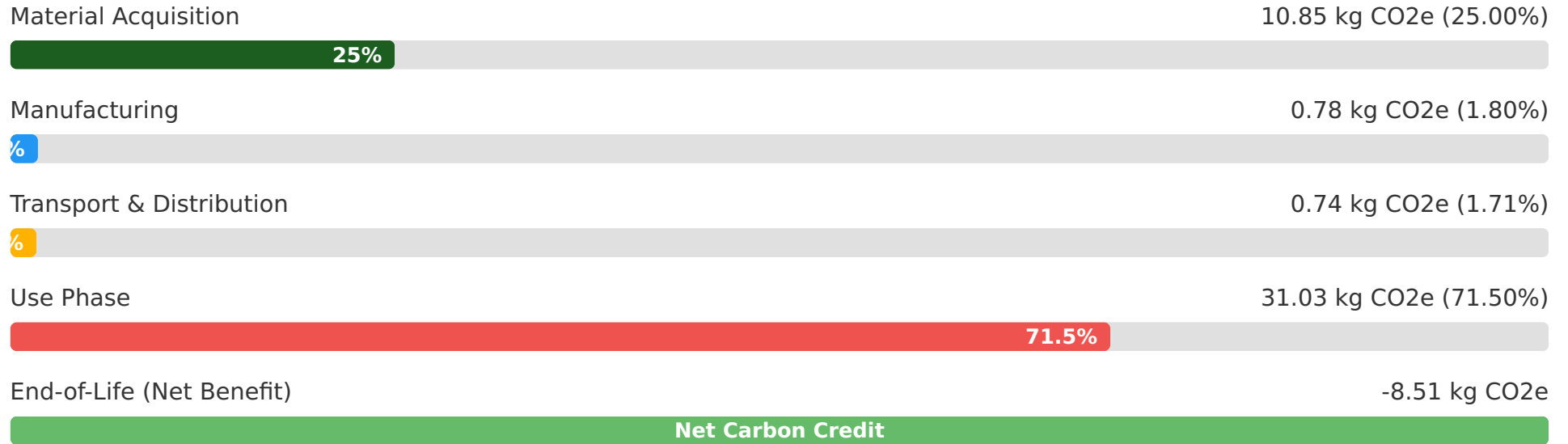
7.50 kg CO<sub>2</sub>e (69.12% of material impact)

**End-of-Life Benefit**

**-8.51 kg CO<sub>2</sub>e**

Due to 80% recyclability & take-back

## Lifecycle Stage Breakdown (Positive Emissions)



## Material Carbon Impact Breakdown



## Key Emission Hotspots

- **Use Phase (31.03 kg CO<sub>2</sub>e):** The dominant contributor, accounting for approx. 71.5% of total positive emissions.
- **Material Acquisition (10.85 kg CO<sub>2</sub>e):** The second-largest hotspot, driven by high-impact materials like Aluminum and Printed Circuit Boards.
- **End-of-Life (-8.51 kg CO<sub>2</sub>e):** Generates a significant net carbon benefit due to 80% recyclability and circular programs.

## Recommendations for Reduction

- **Reduce Use Phase Energy:** Implement energy-efficient designs and explore solutions to encourage user-side renewable energy adoption.
- **Source Low-Carbon Materials:** Prioritize suppliers offering materials with lower embodied carbon, focusing efforts on Aluminum and Printed Circuit Boards, and increasing recycled content.
- **Enhance Circularity:** Continue investing in and expanding take-back and refurbishment programs to maximize material lifecycles and associated carbon benefits.