

carboncalcpcf.com

Product Carbon Footprint Dashboard

Product: njqygioqlh

Total PCF: 55.69 kg CO2e

Total Footprint

55.69 kg CO2e

Carbon Intensity

55.69 kg CO2e / unit

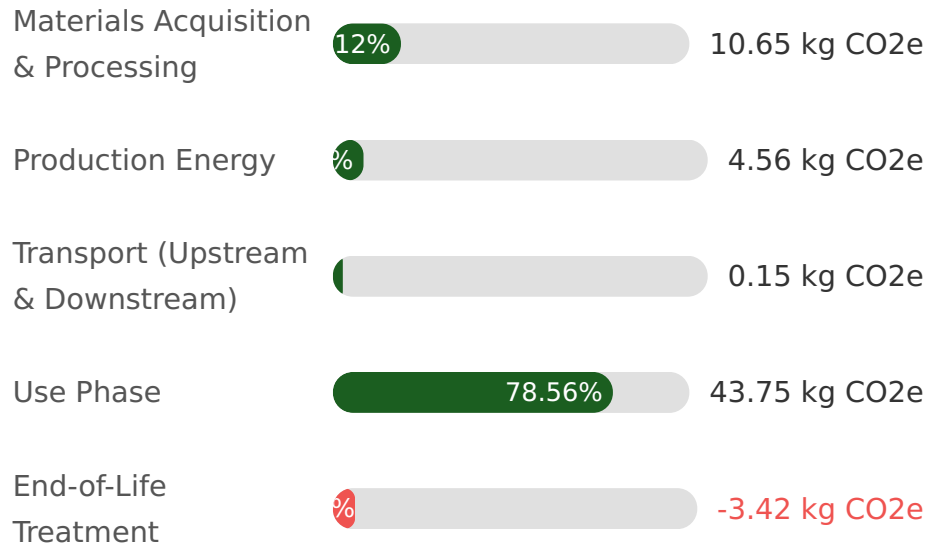
Top Lifecycle Hotspot

Use Phase

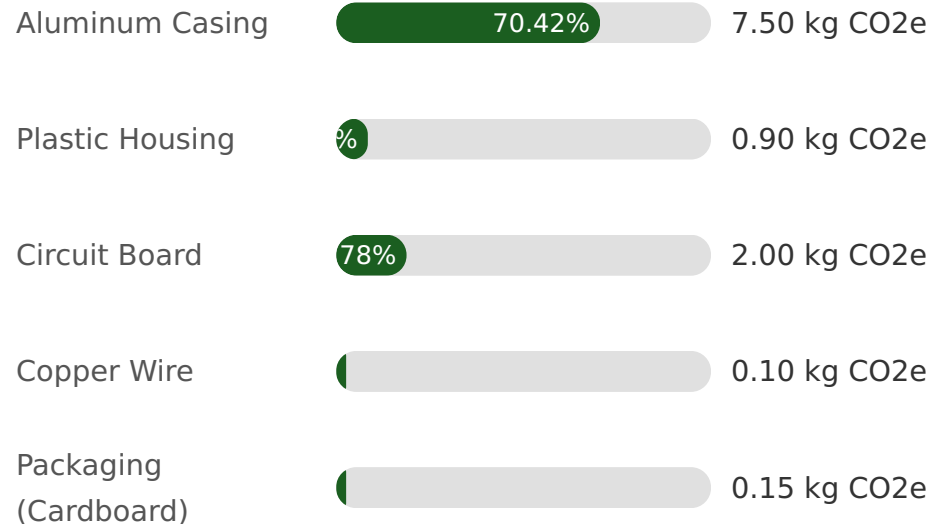
Primary GHG Scope

Scope 3 (Downstream)

Lifecycle Stage Breakdown



Material Carbon Impact



Key Insights & Hotspots

- **Use Phase Dominance:** The product's energy consumption during its 7-year lifespan accounts for 78.56% of its total carbon footprint, making it the primary hotspot.
- **Material Impact:** Materials acquisition, particularly the aluminum casing and circuit board, contributes 19.12% to the total PCF, indicating significant upstream emissions.
- **Circular Economy Benefits:** High recyclability (70%) and implemented circular programs result in a net negative End-of-Life impact (-6.14%), effectively avoiding significant virgin material production emissions.

Recommendations for Reduction

- **Optimize Use Phase:** Invest in R&D for more energy-efficient product designs and consider offering green energy solutions or advice to end-users.
- **Material Innovations:** Explore alternative, lower-carbon materials or increase the use of recycled content in high-impact components like aluminum and plastics.
- **Renewable Energy Expansion:** Increase the percentage of renewable energy used in manufacturing operations in China, potentially through on-site generation or certified renewable energy purchases (PPAs).
- **Supply Chain Engagement:** Collaborate with suppliers to reduce the footprint of purchased goods and services, especially for high-impact components.

