html

carboncalcpcf.com

Carbon Footprint Dashboard for finznydjof

Total PCF: 44.28 kg CO2e

(for 1.0 unit, Cradle-to-Grave)

Total Footprint

44.28 kg CO2e

Carbon Intensity

44.28 kg CO2e/unit

Top Material Hotspot

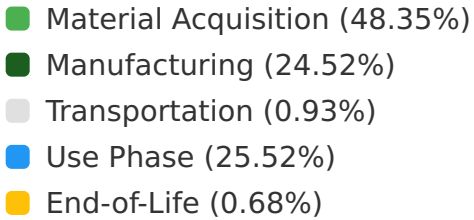
Aluminum Casing

Primary Emission Scope

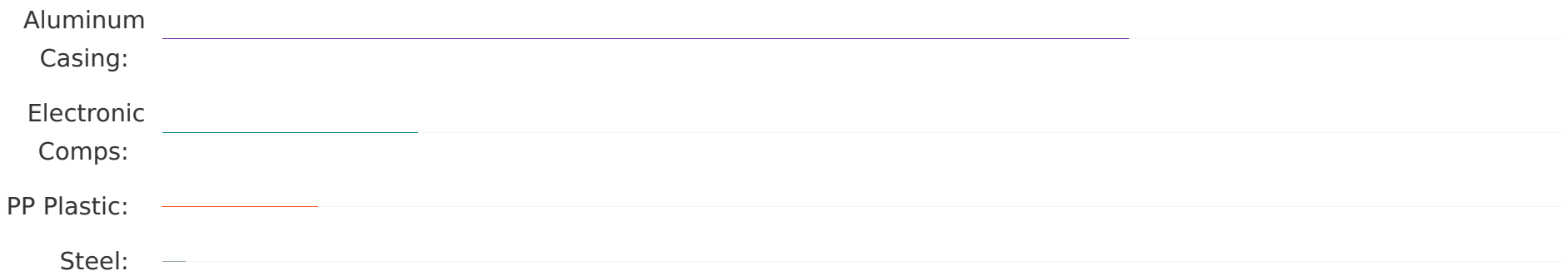
Scope 3

Detailed Impact Analysis

Lifecycle Emissions Breakdown



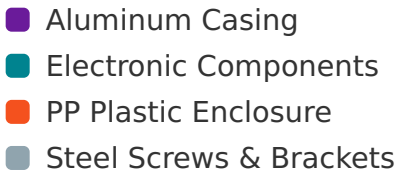
Material Carbon Impact



Key Insights & Recommendations

Highlights of Carbon Impact

- **Material Acquisition Dominates:** Nearly half of the product's carbon footprint (48.35%) stems from raw material extraction and processing, with aluminum casing being the largest single contributor.
- **Significant Use Phase Emissions:** The energy consumed during the product's 5-year lifespan accounts for a substantial 25.52% of the total footprint.
- **Manufacturing Energy Footprint:** Production energy in China contributes 24.52%, indicating a clear opportunity for decarbonization at the factory level.



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Recommendations for Reduction

- **Material Optimization:** Explore alternatives with lower embedded carbon or higher recycled content for aluminum and plastics. Engage with suppliers to reduce upstream emissions.
- **Energy Efficiency in Manufacturing:** Increase renewable energy sourcing beyond 30% for the China facility and implement further energy-saving measures.
- **Use Phase Decarbonization:** Design for greater energy efficiency and educate users on low-carbon usage, promoting renewable energy sources for product operation.
- **Circular Economy Integration:** Enhance take-back programs and design for disassembly to improve recyclability and material recovery beyond the current 70%.