

Product Carbon Footprint for jiiwsgiji

carboncalcpcf.com

Total
PCF:

21.13 kg CO₂e

Key Carbon Metrics

Total Product Footprint

21.13

kg CO₂e / unit

Functional Unit

1.0

unit of jiiinwsgiji

Top Material Hotspot

Aluminum Casing

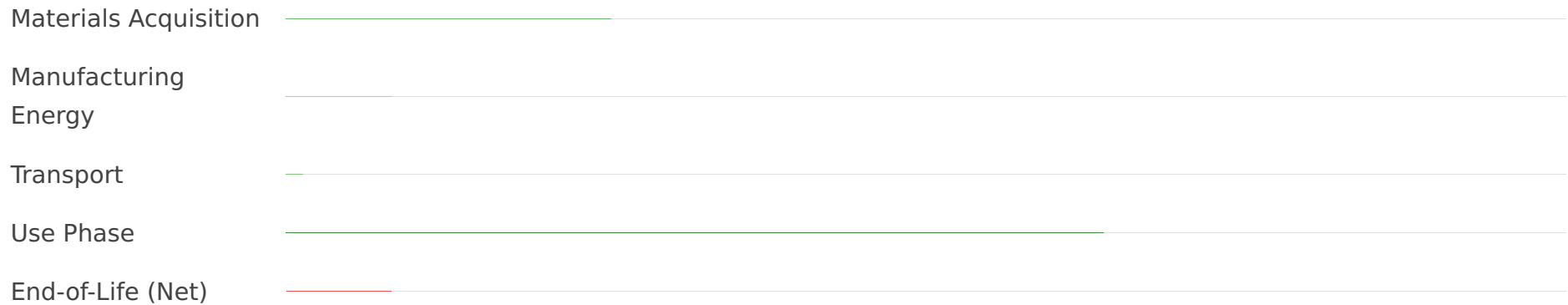
4.00 kg CO₂e

Primary Emission Scope

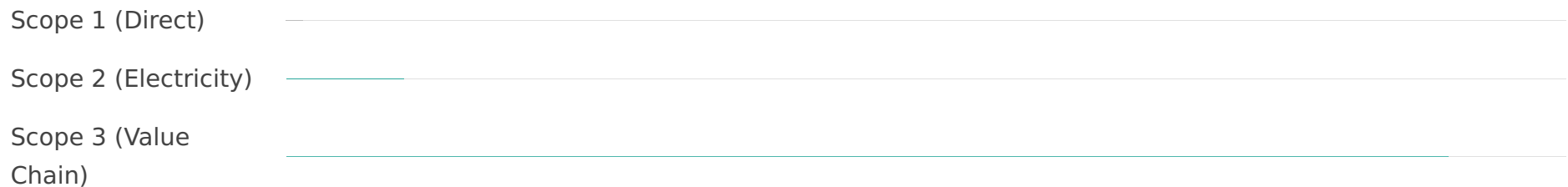
Scope 3

90.8% of Total

Lifecycle Stage Breakdown (Total PCF: 21.13 kg CO₂e)

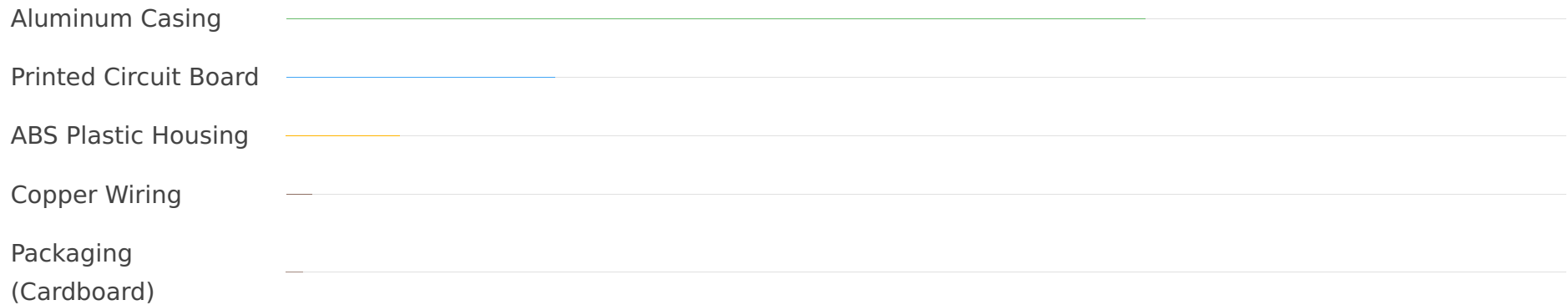


GHG Protocol Scope Breakdown



Note: Scope 1 emissions are considered negligible for this product. Scope 3 covers 90.8%, highlighting value chain impact.

Key Material Carbon Impact (kg CO₂e)



Total Material Emissions: 5.96 kg CO₂e

Key Emission Hotspots

- **Use Phase (63.9%):** The product's energy consumption over its 5-year lifespan is the most significant contributor.
- **Materials Acquisition & Pre-processing (25.4%):** Upstream impacts from raw materials, especially Aluminum, are substantial.
- **Manufacturing Energy (8.3%):** Purchased electricity for production remains a notable emission source.

Recommendations for Emission Reduction

- **Enhance Use Phase Efficiency:** Invest in R&D for lower energy consumption, explore smart features, and educate users on energy-saving practices.
- **Sustainable Material Sourcing:** Prioritize low-carbon materials, increase recycled content, and engage suppliers for primary emission data.
- **Increase Renewable Energy in Manufacturing:** Target 100% renewable energy procurement for production facilities in China.
- **Optimize Logistics:** Explore multimodal transport, optimize routes, consolidate shipments, and partner with low-carbon logistics providers.
- **Strengthen Circular Economy Initiatives:** Expand take-back programs, design for disassembly/repairability, and invest in innovative recycling technologies.