Product Carbon Footprint Dashboard for zjrlmhldmv

A comprehensive overview of your product's environmental impact.

Total Product Footprint

73.63

kg CO2e / unit

Functional Unit

1.0

unit of zjrlmhldmv

Top Material Hotspot

Aluminum Frame

~36% of material emissions

Primary Emission Scope

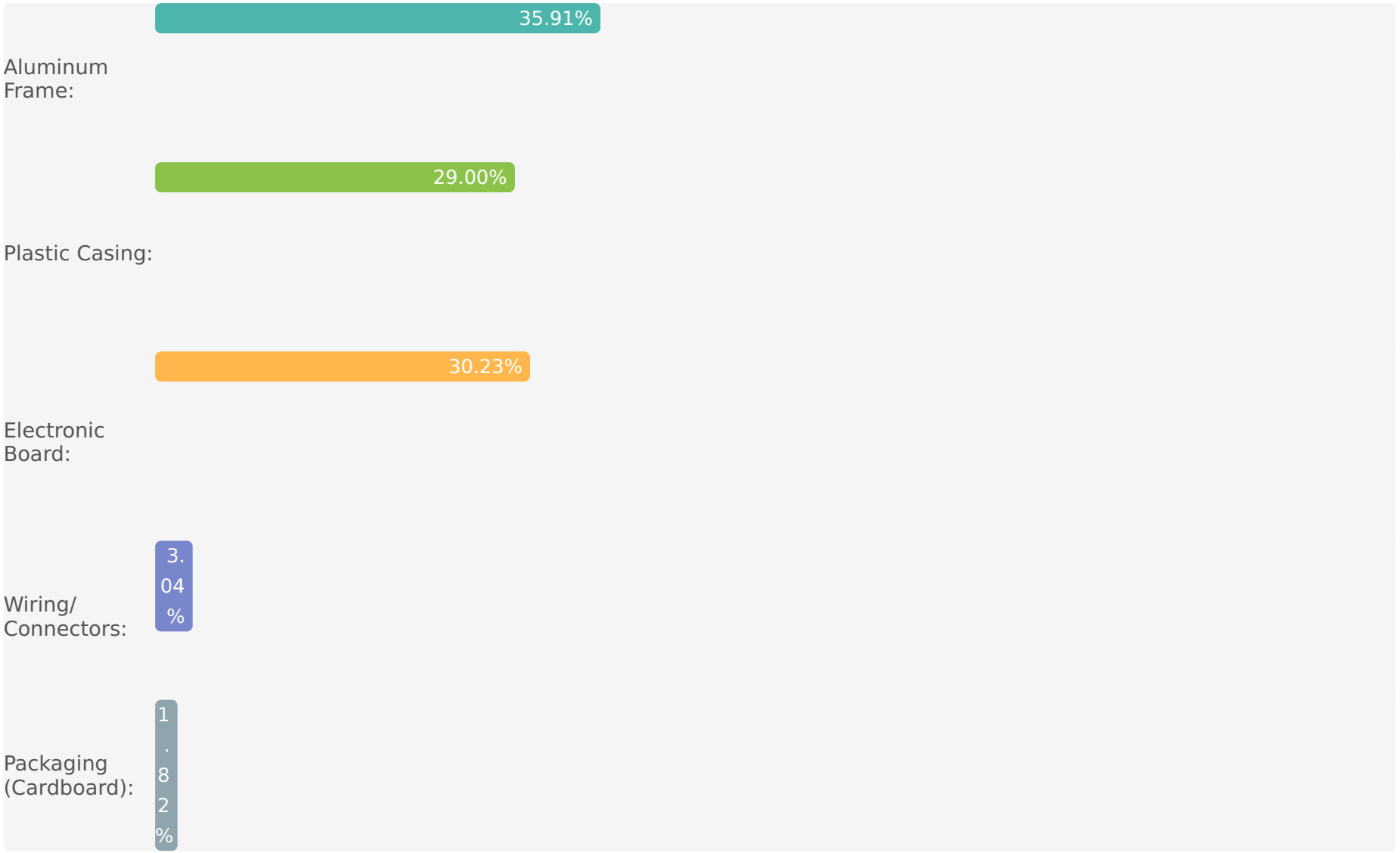
Scope 3

(Value Chain Emissions)

Carbon Footprint Breakdown

Lifecycle Stage Breakdown (Total: 73.63 kg CO2e)

Material Carbon Impact (Total Upstream Materials: 8.23 kg CO2e)



Key Highlights

- The Use Phase contributes the most significant portion (84.27%) to the product's total carbon footprint, primarily due to energy consumption over its 5-year lifespan.
- Upstream materials, particularly the Aluminum Frame (35.91% of material emissions) and Electronic Board (30.23%), are substantial contributors within Scope 3.
- Purchased electricity for production (Scope 2) accounts for 4.21% of the total, indicating opportunities for increased renewable energy adoption.

Recommendations for Emission Reduction

- **Optimize Use Phase Energy Efficiency:** Implement design changes to significantly reduce the product's energy consumption during its lifespan.
- **Decarbonize Electricity:** Actively pursue 100% renewable energy procurement for manufacturing operations and advocate for grid decarbonization in China.
- **Sustainable Material Sourcing:** Explore alternative materials with lower embodied carbon, increase recycled content, and engage suppliers for greener processes.
- **Enhance Circularity:** Develop and promote take-back programs to improve collection and recycling rates, investing in efficient recycling technologies.
- **Supply Chain Optimization:** Investigate opportunities to optimize transport modes and distances, prioritizing lower-emission options like rail or sea freight.