carboncalcpcf.com

Product Carbon Footprint for vutttuwvkx

Analysis for **fqiqwrikfj** by mjprdrunwh

Total PCF: 40.19 kg CO2e per unit

Total Footprint

40.19 kg CO2e

Carbon Intensity

40.19 kg CO2e/unit

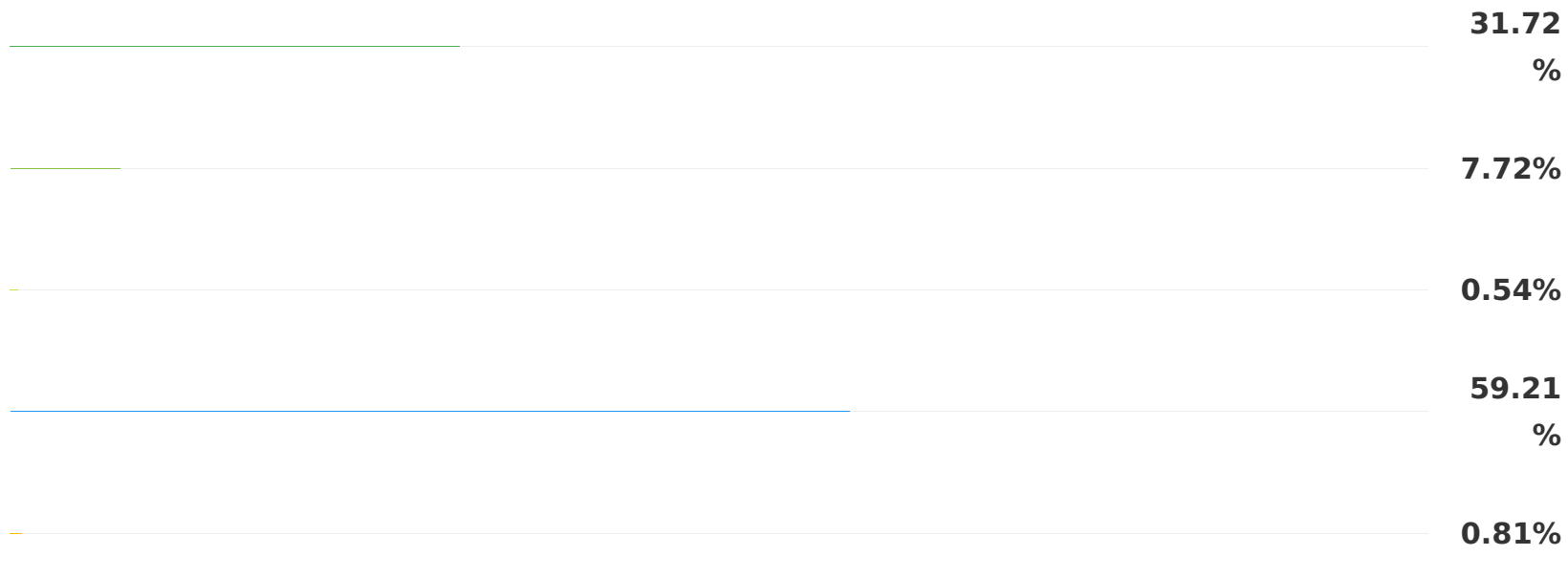
Top Material Hotspot

Aluminum Casing

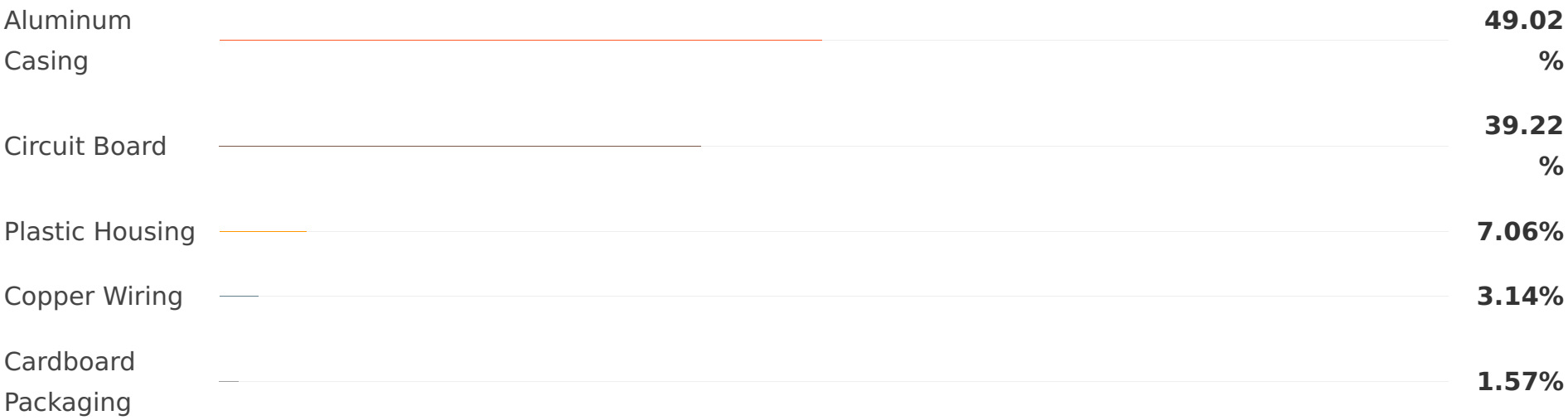
Primary Emission Scope

Scope 3 (Use Phase)

Lifecycle Emissions Breakdown



Material Carbon Impact (of Total Materials)



Highlights & Hotspots

The **Use Phase** is the most significant contributor, accounting for 59.2% of the total carbon footprint due to the product's 5-year energy consumption.

Materials Acquisition & Pre-processing is the second largest hotspot (31.7%), with aluminum casing and the circuit board being key drivers.

Production emissions (Scope 2) from purchased electricity contribute 7.7%, indicating room for further renewable energy integration.

Decarbonization Action Plan

Enhance Energy Efficiency: Focus on reducing energy consumption during the product's use phase through innovative design and user guidance.

Sustainable Material Sourcing: Explore lower-carbon materials for the aluminum casing and circuit board, and implement circular design principles.

Boost Renewable Energy: Increase the procurement or generation of renewable energy at production facilities beyond the current 50%.

Optimize Logistics: Evaluate and optimize transport routes and modes for upstream and downstream distribution to minimize emissions.