Product Carbon Footprint Dashboard

For Product: **pevwzhfyui**

10.132 kg CO2e

Total PCF per unit

10.132

Total Footprint (kg CO2e)

per 1.0 unit of pevwzhfyui

10.132

Carbon Intensity (kg CO2e/unit)

based on 1.0 functional unit

PCB

Top Material Hotspot

3.0 kg CO2e from Printed Circuit Board

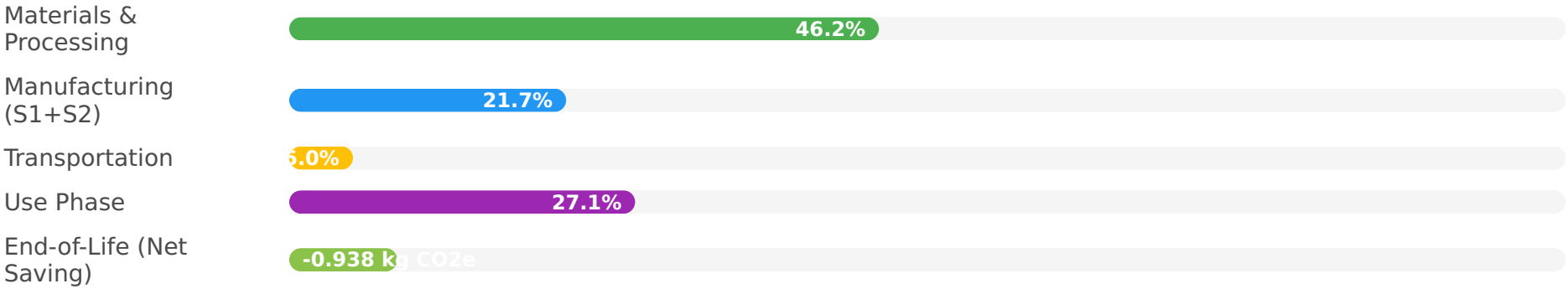
Scope 3

Primary Emission Scope

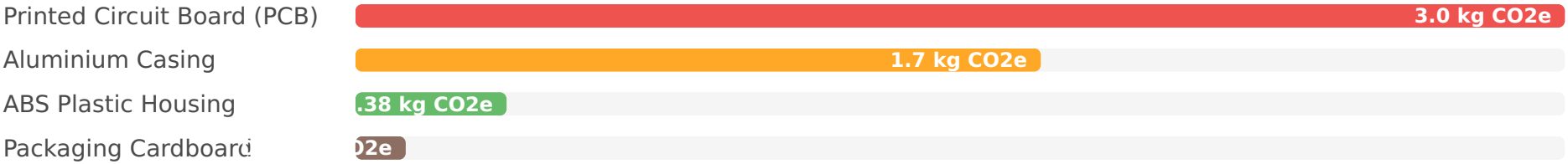
Accounts for over 70% of total PCF

Emission Breakdown

Lifecycle Stage Contributions



Material Impact (kg CO2e)



Key Highlights & Hotspots

- **Material Acquisition & Processing** is the largest hotspot (46.2%), driven by high-impact components like PCBs and Aluminium.
- **Manufacturing (Scope 2)** contributes 21.7% of emissions, mainly due to the grid carbon intensity in China, despite 60% renewable energy use.
- The **Use Phase** accounts for a substantial 27.1% of the total footprint over the product's 5-year lifespan, emphasizing energy efficiency needs.

Action Plan for Reduction

- **Material Optimization:** Investigate and implement lower embedded carbon alternatives or reduce the quantity of high-impact materials.
- **Enhanced Renewable Energy Sourcing:** Increase the proportion of renewable energy beyond 60% at manufacturing sites, e.g., via Power Purchase Agreements.
- **Product Energy Efficiency:** Innovate to significantly reduce energy consumption during the product's active use phase.
- **Circular Economy Programs:** Strengthen existing take-back programs and explore wider material reuse and refurbishment initiatives.
- **Deep Supplier Engagement:** Collaborate closely with upstream suppliers to track, report, and reduce their emissions within Scope 3.