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kpfdzqqjnr Carbon Footprint Dashboard

Comprehensive PCF Analysis for Product kpfdzqqjnr by carboncalcpcf.com

Total Product Carbon Footprint: 22.253 kg CO₂e

Total Footprint

GHG Protocol Standard

22.253 kg CO₂e

Carbon Intensity

Per Functional Unit (1.0 unit)

22.253 kg CO₂e/unit

Top Material Hotspot

Primary CO₂e Contributor

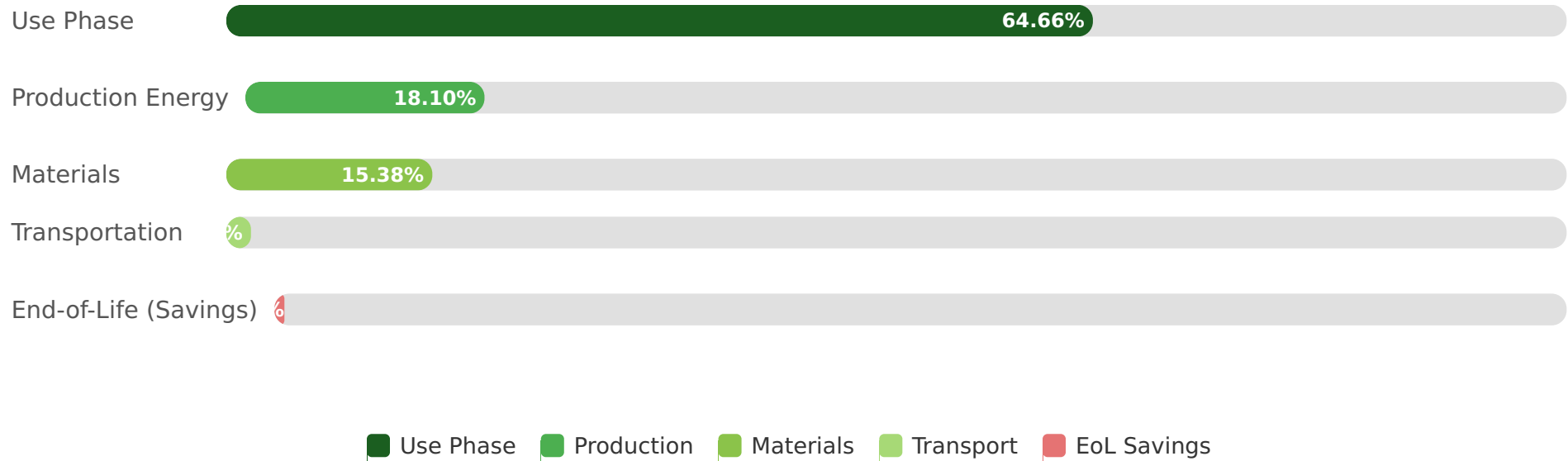
Circuit Board (43.48%)

Primary Emission Scope

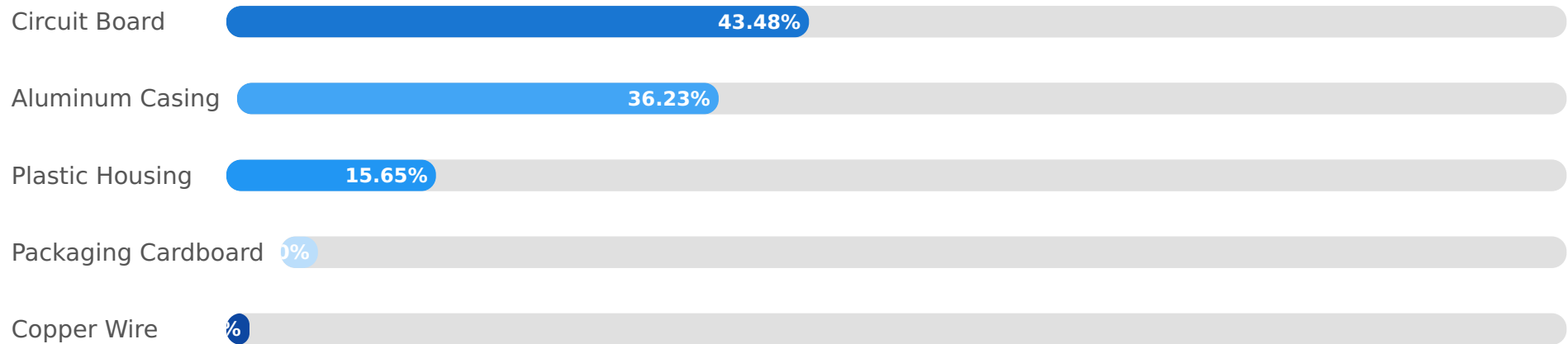
Largest Lifecycle Contributor

Use Phase (64.66%)

Lifecycle Stage Breakdown



Material Carbon Impact



Percentage of Total Material Carbon Footprint (3.45 kg CO2e)

Key Emission Highlights

- **Use Phase Dominance:** The product's operational lifespan contributes a substantial 14.50 kg CO₂e (64.66% of positive emissions), making it the primary hotspot.
- **Production Energy Impact:** Despite 30% renewable energy use, the remaining grid electricity in China accounts for a significant 4.06 kg CO₂e (18.10%).
- **Material Footprint:** Embedded carbon in materials, notably Circuit Boards and Aluminum Casing, represents 3.45 kg CO₂e (15.38% of positive emissions).

Decarbonization Action Plan

- **Optimize Use Phase Efficiency:** Implement design improvements and energy-efficient components to reduce energy consumption during product use.
- **Enhance Renewable Sourcing:** Increase the percentage of renewable energy used in production beyond 30% through direct procurement or on-site generation.
- **Material Innovation:** Explore lower-carbon alternatives, increase recycled content, and optimize material usage for high-impact components.
- **Circular Economy Programs:** Strengthen take-back and recycling initiatives to maximize material recovery and carbon savings at end-of-life.