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Product Carbon Footprint: kekqvdqynw

Company: xfiygyism | **Standard:** GHG Protocol | **Country:** China

Total PCF: 26.48 kgCO₂e/unit

carboncalcpcf.com

Total Footprint

26.48 kgCO₂e/unit

GHG Protocol Adherent

Carbon Intensity

26.48 kgCO₂e/unit

Per 1.0 Functional Unit

Top Hotspot

Use Phase

20.00 kgCO₂e/unit

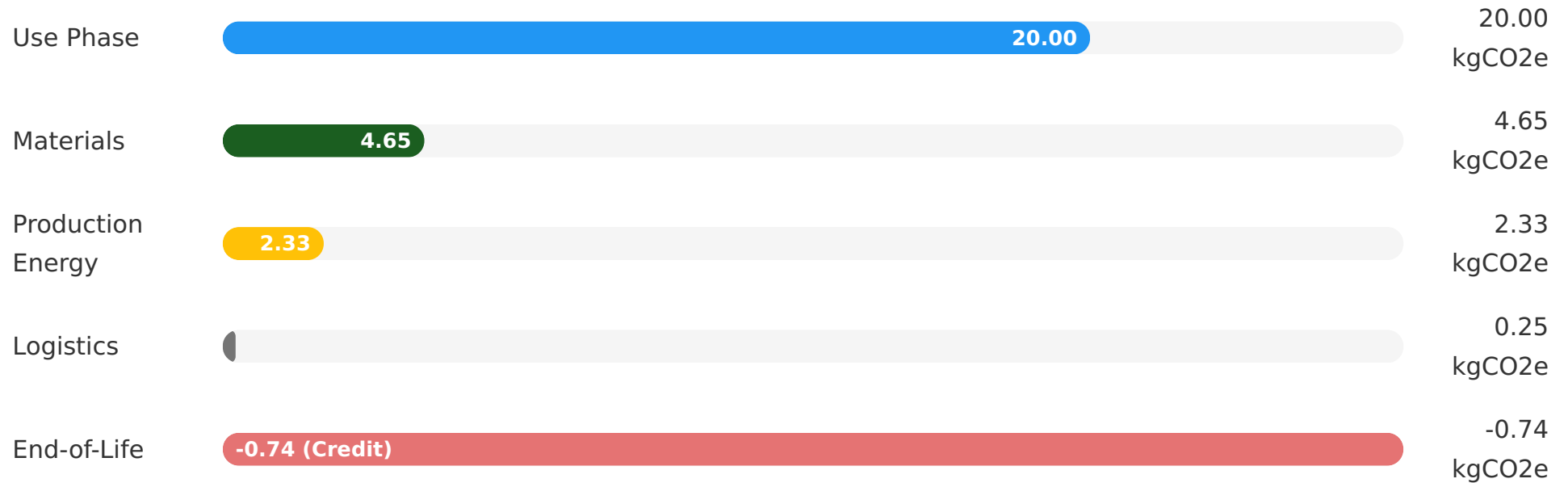
Material Hotspot

Aluminum Casing

2.50 kgCO₂e/unit

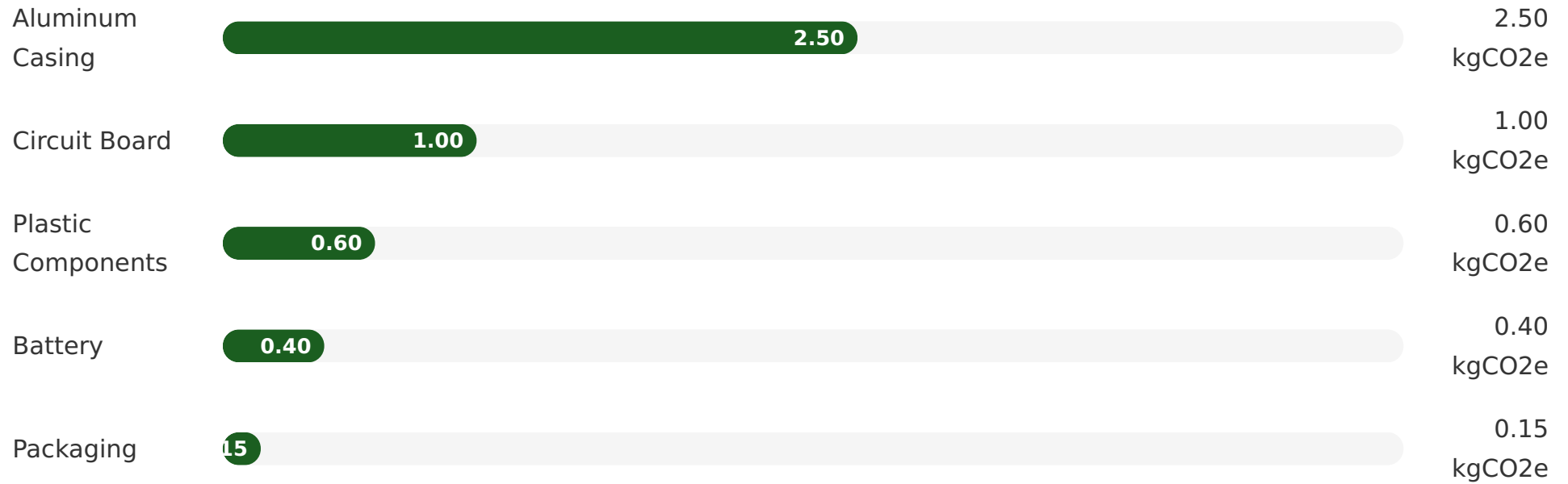
Emissions Breakdown & Hotspots

Lifecycle Stage Contributions



*Percentages based on positive contributions (27.225 kgCO2e) for visual clarity. End-of-Life provides a net credit.

Material Carbon Impact



*Total Material Carbon Footprint: 4.65 kgCO2e

Highlights & Key Insights

- The **Use Phase** dominates the product's carbon footprint, contributing 20.00 kgCO₂e/unit, emphasizing the need for energy-efficient design.
- **Material Acquisition & Production** is the second largest contributor (4.65 kgCO₂e/unit), with Aluminum Casing and Circuit Board being significant hotspots.
- A notable **net carbon credit of -0.74 kgCO₂e/unit** is achieved in the End-of-Life phase, driven by strong recyclability (80%) and material recovery efforts.

Action Plan: How to Reduce Carbon Footprint

- **Product Redesign for Energy Efficiency:** Prioritize engineering and design improvements to significantly reduce energy consumption during the product's use phase.
- **Sustainable Material Sourcing:** Actively seek and integrate lower embedded carbon materials, increasing recycled content and ensuring robust certifications for components like aluminum and plastics.
- **Increase Renewable Energy Procurement:** Target 100% renewable energy use for manufacturing operations in China to further minimize Scope 2 emissions.
- **Optimize Logistics:** Evaluate and implement more efficient and lower-emission transportation modes and routes for both inbound and outbound supply chains.
- **Enhance Circularity:** Strengthen take-back programs and explore innovative business models to maximize recyclability and reusability, boosting end-of-life benefits.