

html

# Product Carbon Footprint Dashboard

for kslguiwzfd

**27.53 kgCO<sub>2</sub>e**

Total PCF per Unit

PRODUCT NAME

**kslguiwzfd**

ACCOUNTING STANDARD

**GHG Protocol**

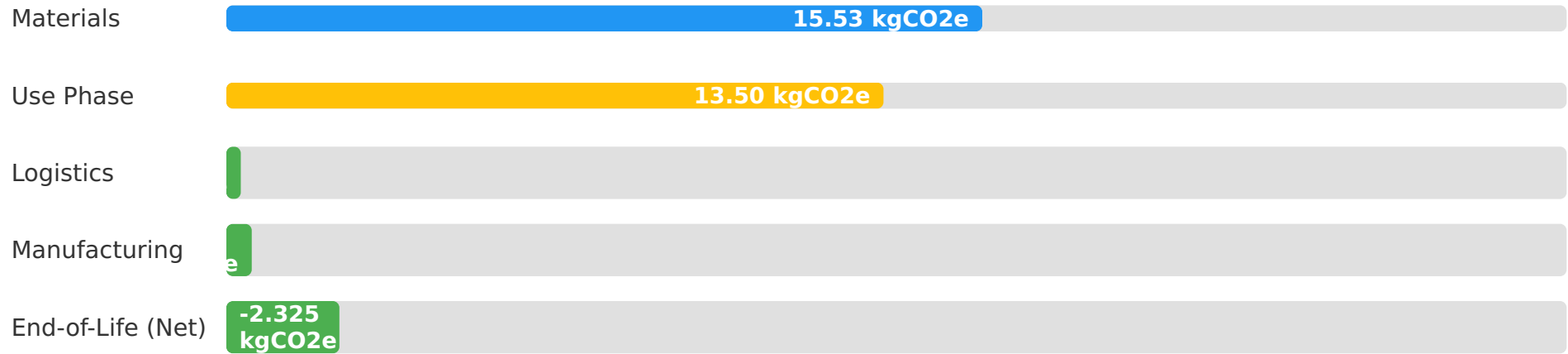
TOP MATERIAL HOTSPOT

**Aluminium Casing**

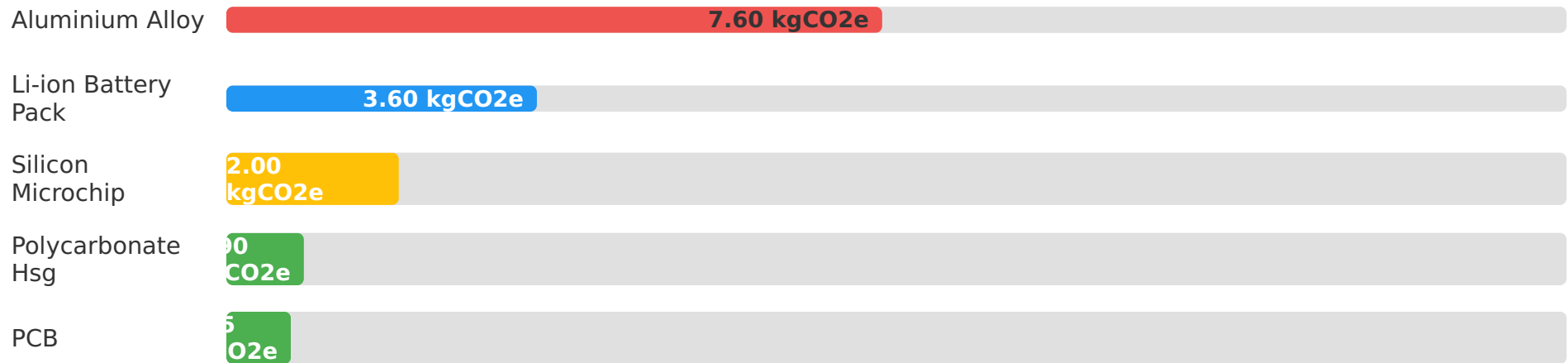
PRIMARY EMISSION SCOPE

**Scope 3**

## Lifecycle Stage Breakdown



## Top Material Carbon Impact



## Key Insights & Highlights

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- **Material and Use Phase Dominance:** Embodied emissions in raw materials (15.53 kgCO<sub>2</sub>e) and energy consumption during the 5-year use phase (13.50 kgCO<sub>2</sub>e) are the primary emission hotspots.
- **Circular Economy Benefits:** A high recyclability rate (85%) and an established take-back program result in net negative End-of-Life emissions (-2.325 kgCO<sub>2</sub>e), showcasing significant environmental benefits.
- **Mitigated Manufacturing Impact:** Despite production in China, 70% renewable energy usage at the manufacturing facility helps to substantially reduce direct production energy (Scope 2) emissions.

## Recommendations for Emission Reduction

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1. **Material Optimization:** Investigate and implement alternative, lower-carbon materials for high-impact components, particularly Aluminium Alloy and Silicon. Prioritize increased recycled content in all material inputs.
2. **Energy Efficiency in Use:** Innovate product design to further minimize energy consumption during the use phase. Provide users with clear guidance on energy-efficient operation and promote the use of renewable energy sources.
3. **Enhanced Supply Chain Engagement:** Collaborate closely with key suppliers to improve their environmental performance, incentivize low-carbon production, and gather more granular, primary emission data for purchased goods and services.
4. **Circular Economy Advancement:** Continuously strengthen the existing product take-back programs. Explore opportunities for product refurbishment, remanufacturing, and component reuse to extend product lifespans and maximize material recovery.