

CARBONCALCPCF.COM

# Product Carbon Footprint Dashboard for xjsixktsox

Company: qlvmdffuse | Standard: GHG Protocol | Boundary: factory\_gate

Overall Product Footprint

**38.485 kg CO<sub>2</sub>e/unit**

TOTAL FOOTPRINT

**38.485**

kg CO2e / unit

PER UNIT IMPACT

**38.485**

kg CO2e / functional unit

TOP MATERIAL HOTSPOT

**Aluminum Casing**

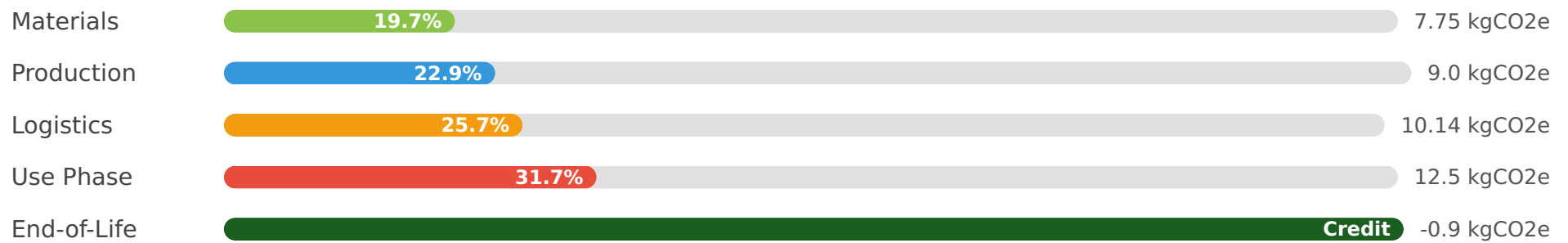
5.0 kg CO2e

PRIMARY EMISSION SCOPE

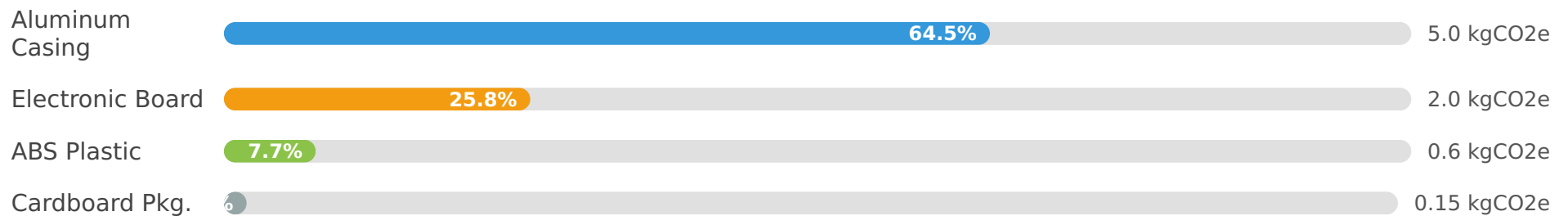
**Use Phase**

12.5 kg CO2e

## Lifecycle Stage Breakdown



## Material Carbon Impact



## Key Insights & Hotspots

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- **Use Phase Dominance:** The product's operational life accounts for **12.5 kg CO2e/unit**, making it the largest emission source and a critical area for improvement.
- **Last-Mile Logistics Impact:** Downstream transportation to the customer contributes significantly with **10.0 kg CO2e/unit**.
- **Material Footprint:** **Aluminum casing (5.0 kg CO2e)** is the primary material hotspot, highlighting the importance of sustainable raw material choices.

## Strategic Reduction Actions

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- **Enhance Product Energy Efficiency:** Focus engineering efforts on reducing energy consumption during the product's use phase.
- **Optimize Last-Mile Logistics:** Investigate and implement cleaner delivery options, optimize routing, and explore local distribution.
- **Sustainable Material Sourcing:** Prioritize recycled content, explore lower-carbon material alternatives, and work with suppliers for greener production.
- **Increase Renewable Energy Sourcing:** Further increase the share of renewable energy in manufacturing operations, leveraging PPAs or on-site generation.
- **Strengthen Circular Economy:** Maximize recycling and reuse through existing and expanded take-back programs to minimize end-of-life impacts.