html

carboncalcpcf.com

Product Carbon Footprint Dashboard

for **yrdqyvonrl** by gkdqorzzuk

Total PCF: **52.38 kgCO2e** per unit

52.38 kgCO2e

TOTAL PRODUCT FOOTPRINT

52.38 kgCO2e/unit

CARBON INTENSITY

Aluminum Casing

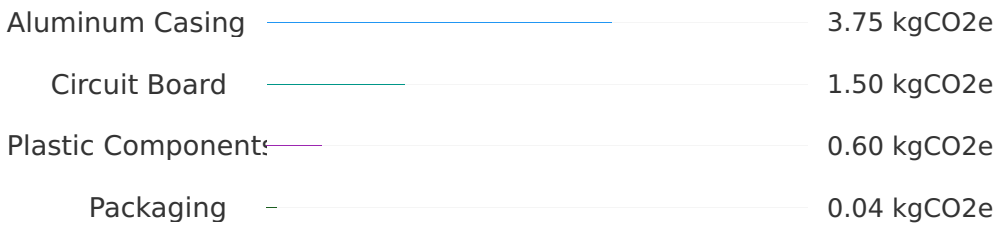
TOP MATERIAL HOTSPOT

Use Phase

PRIMARY EMISSION SCOPE

Lifecycle Stage Breakdown

Top Material Carbon Impact



Total material carbon from BOM: 5.89 kgCO2e

Highlights & Key Hotspots

- The **Use Phase is the dominant emissions hotspot**, accounting for **74.72%** (39.20 kgCO2e) of the total Product Carbon Footprint.
- **Purchased Goods and Services (Materials)** represents the second largest contributor at **11.23%** (5.89 kgCO2e), with Aluminum Casing being the primary material hotspot.
- Manufacturing (Scope 2) emissions contribute **6.41%** (3.36 kgCO2e), noting that 60% renewable energy is already utilized in this phase.

Recommendations for Emission Reduction

- **Optimize Use Phase Efficiency:** Redesign yrdqyvonrl for lower energy consumption during its 7-year lifespan, explore more energy-efficient components, or provide user guidance on energy-saving practices.
- **Sustainable Material Sourcing:** Investigate suppliers for aluminum, plastics, and electronics with lower embedded carbon, increasing the use of recycled content, or exploring innovative, low-impact materials.
- **Enhance Renewable Energy:** Further increase the percentage of renewable energy used in manufacturing beyond the current 60% through direct sourcing, on-site generation, or purchasing high-quality renewable energy certificates.
- **Strengthen Circularity:** Expand the existing take-back programs to maximize material recovery and explore refurbishment or remanufacturing opportunities to extend product lifespans.