

html

Product Carbon Footprint Dashboard for rdntsfslu

Total CO2e:
17.54 kg

17.54 kg

TOTAL FOOTPRINT

17.54 kg/unit

CARBON INTENSITY

Use Phase

PRIMARY EMISSION HOTSPOT

Scope 3

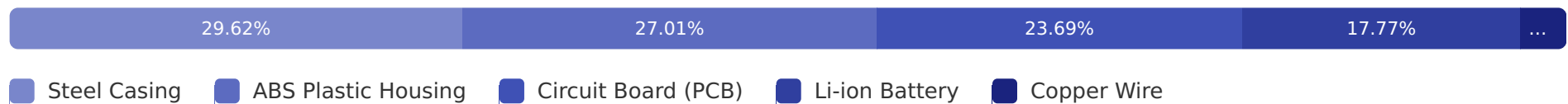
PRIMARY EMISSION SCOPE

Carbon Footprint by Lifecycle Stage



Note: End-of-Life treatment resulted in net carbon savings of -0.24 kg CO₂e, contributing to the overall reduction.

Material Contribution to Carbon Footprint



Key Emission Hotspots

- The **Use Phase** (Category 11), accounting for 12.50 kg CO₂e, is the most significant contributor to the overall footprint, largely due to energy consumption during the product's lifespan.
- **Purchased Goods and Services** (Category 1 - Materials), with 4.22 kg CO₂e, represent the second largest hotspot, driven by components like the PCB, Steel Casing, and ABS Plastic.
- **Downstream Transportation** (Category 9) contributes 0.115 kg CO₂e, primarily from intercontinental shipping for product distribution.

Recommendations for Carbon Reduction

- **Energy Efficiency in Use Phase:** Implement design improvements or more efficient components to significantly reduce energy consumption during the product's 5-year lifespan.
- **Sustainable Material Sourcing:** Investigate alternative materials with lower embodied carbon, increase recycled content, or partner with low-carbon suppliers for key components.
- **Optimized Logistics:** Review and refine supply chain logistics to identify and leverage more carbon-efficient transportation modes and consolidation strategies.
- **Circular Economy Integration:** Enhance the "Product Lifecycle Management Program" to maximize actual recycling rates and explore avenues for repairability, refurbishment, or remanufacturing.