Carbon Footprint for "sxijqlldsg"

Product Analysis by hqkxtedylm, Report Date: May 19, 2026

51.91 kg CO2e

Total Product Carbon Footprint

carboncalcpcf.com

Total Footprint

51.91 kg CO2e

Carbon Intensity

51.91 kg CO2e/unit

Top Material Hotspot

Aluminum Housing (5.0 kg CO2e)

Primary Emission Scope

Use Phase (Scope 3 Downstream)

Lifecycle Stage Breakdown

Note: The End-of-Life phase results in a net removal of -0.90 kg CO2e, contributing to the overall lower net PCF of 51.91 kg CO2e.

Raw Material Acquisition
Upstream Transport
Manufacturing Energy
Direct Manufacturing
Downstream Transport
Use Phase
End-of-Life (Net Removal)

Top Material Carbon Impact

5.0 kgCO2e	2.0 kgCO2e	1.5 kgCO2e	1.05 kgCO2e
Aluminum Housing	Lithium-ion Battery	Circuit Board (PCB)	ABS Plastic Casing

Key Insights & Hotspots

The **Use Phase** is the dominant contributor, accounting for a significant portion of the total product carbon footprint, driven by energy consumption during the product's lifespan.

Raw Material Acquisition is a major hotspot, with aluminum and battery components being significant contributors to upstream emissions.

Manufacturing energy represents a notable impact, indicating room for further decarbonization despite existing renewable energy usage.

Recommended Action Plan

Enhance Use-Phase Efficiency: Invest in R&D for lower energy consumption, longer product lifespans, and user guidance for efficient use.

Sustainable Material Sourcing: Explore low-carbon alternatives, increase recycled content, and seek primary emission data from suppliers.

Decarbonize Manufacturing: Aim for 100% renewable energy for all manufacturing operations and explore on-site generation.

Strengthen Circularity: Leverage existing take-back schemes to maximize material recovery and explore product-as-a-service models.