carboncalcpcf.com

Product Carbon Footprint Dashboard for lxhnxtzveo

Detailed analysis of 1.0 unit, from factory gate to end-of-life (Cradle-to-Grave)

Total Carbon Footprint: 31.07 kgCO2e

Key Metrics Overview

Total Footprint

31.07 kgCO2e

Per 1.0 unit of lxhnxtzveo

Carbon Intensity

31.07 kgCO2e/unit

Based on 1.0 unit produced

Top Material Hotspot

Lithium-Ion Batt.

Largest contributor in materials

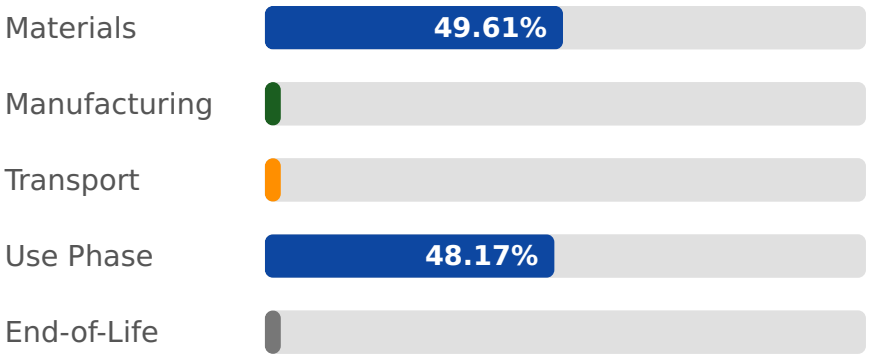
Primary Emission Scope

Scope 3

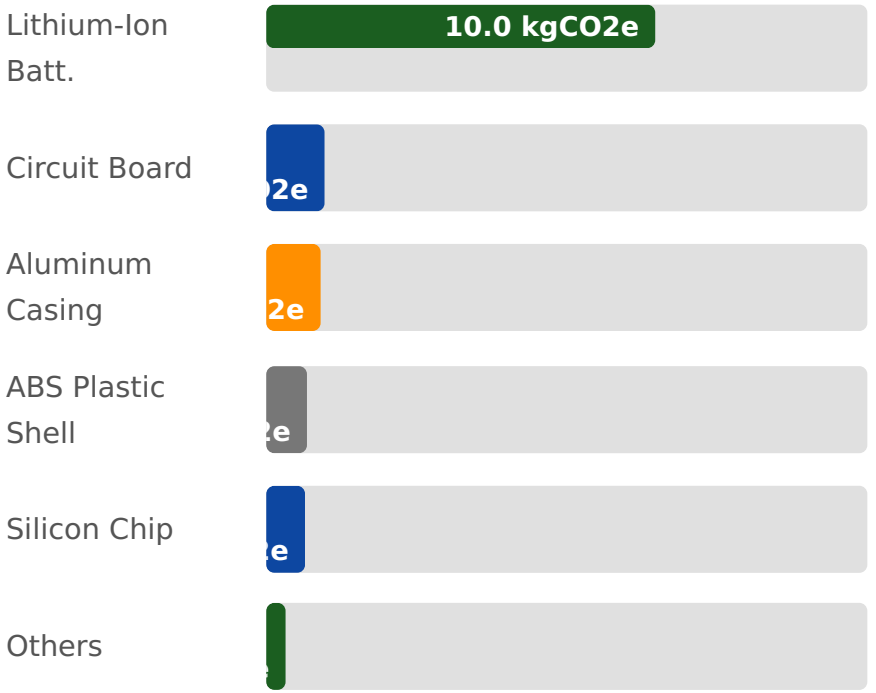
Dominates overall footprint

Emission Breakdown

Lifecycle Stage Breakdown (kgCO2e)



Material Carbon Impact (kgCO2e)



Highlights & Key Hotspots

- **Materials Acquisition & Pre-processing (49.61%):** The sourcing and processing of raw materials, particularly the Lithium-Ion Battery, Aluminum Casing, and Silicon Chip, contribute significantly to the overall footprint.
- **Use Phase (48.17%):** Energy consumption during the product's 5-year lifespan is a major hotspot, largely dependent on the electricity grid mix where the product is used.
- **Scope 3 Dominance:** With materials and use phase combined, Scope 3 emissions account for the vast majority of the product's carbon footprint.

Recommendations for Decarbonization

- **Material Decarbonization:** Engage with suppliers of high-impact materials to explore lower-carbon alternatives, increase recycled content, or optimize material efficiency.
- **Energy Efficiency in Use Phase:** Investigate opportunities to reduce the product's energy consumption during its use and promote renewable energy sourcing for consumers.
- **Circular Economy Initiatives:** Further develop and promote take-back and recycling programs to maximize material recovery and minimize end-of-life impacts.