

html

Product Carbon Footprint Dashboard

Product: qlkexopvpg
carboncalcpcf.com

172.97 kgCO₂e

Total Product Carbon Footprint

Total Footprint

172.97 kgCO₂e

Overall impact per 1.0 unit.

Carbon Intensity

172.97 kgCO₂e/unit

Emissions per functional unit.

Top Material Hotspot

Aluminum Alloy Sheet

Contributes 12.0 kgCO₂e (60.2% of material impact).

Primary Emission Scope

Use Phase (Scope 3)

86.7% of total emissions (150.00 kgCO₂e).

Key Insights

- The **Use Phase** is the dominant emission hotspot, accounting for ~86.7% of the total Product Carbon Footprint due to significant energy consumption over its 5-year lifespan.
- **Material Acquisition** is the second largest contributor (~11.5%), with Aluminum Alloy Sheet and Lithium-ion Battery Pack being the most impactful materials.
- The **End-of-Life** phase currently provides a net carbon credit (-3.15 kgCO₂e) thanks to high recyclability (85%) and a product take-back program.

Recommendations for Reduction

1. **Optimize Use Phase:** Focus on improving energy efficiency of `qlkexopvpg` and explore renewable energy options for users.
2. **Material Decarbonization:** Prioritize sourcing lower-carbon alternatives for aluminum and batteries, and increase recycled content.
3. **Logistics Optimization:** Improve efficiency in both upstream and downstream transport, specifically targeting last-mile delivery.
4. **Enhance Circularity:** Strengthen take-back and refurbishment programs to maximize product lifespan and recycling rates.