Product Carbon Footprint Dashboard

Real-time insights for **rtosvjjjqg**

Powered by carboncalcpcf.com

Key Metrics

21.474 kg CO2e

Total Footprint

21.474 kg CO2e/unit

Carbon Intensity

Lithium-ion Battery

Top Material Hotspot

Scope 3 (Use Phase)

Primary Emission Scope

Lifecycle Emissions Breakdown

- **Use Phase Dominance:** The product's operational lifetime accounts for approximately 70% of its total carbon footprint, making it the most critical hotspot.
- **Material Embodied Emissions:** Materials acquisition, especially for electronics (PCB, Li-ion Battery), contributes significantly (around 26%) to the overall PCF.
- **Circular Economy Benefits:** Robust end-of-life recycling programs result in a net negative emission for this stage, effectively providing a carbon credit of -1.609 kg CO2e.

Decarbonization Action Plan

1. **Optimize Use Phase Efficiency:** Engineer the product for even lower energy consumption during active use and standby; educate consumers on energy-saving modes.
2. **Material Decarbonization:** Engage with suppliers to procure lower-carbon materials, especially for PCBs, batteries, and structural components; investigate recycled content.
3. **Increase Renewable Energy:** Substantially increase the share of renewable energy in manufacturing operations (beyond the current 30%) and influence supply chain partners.
4. **Enhance Circularity:** Strengthen existing take-back programs to maximize collection rates and improve design for disassembly and repairability.