carboncalcpcf.com

Product Carbon Footprint for qewhfyyete

Report Generated: May 16, 2026

51.38 kg CO_2e

Total PCF per 1.0 unit

Total Footprint

51.38 kg CO_2e

per 1.0 unit

Carbon Intensity

51.38 kg CO_2e/unit

Product: qewhfyyete

Top Material Hotspot

Aluminum Alloy

4.25 kg CO_2e (47.2% of materials)

Primary Emission Scope

Scope 3

Use Phase (61.7%)

Lifecycle Emissions Breakdown

Use Phase	31.68 kg
Materials	9.01 kg
Logistics	7.71 kg
Manufacturing	2.88 kg
End-of-Life	0.10 kg

Material Carbon Impact

Aluminum Alloy	4.25 kg
PCB	2.25 kg
Li-ion Battery	1.25 kg
ABS Plastic	0.64 kg
Copper Wire	0.41 kg
Cardboard	0.21 kg

Key Insights

- ✓ The **Use Phase** is the largest contributor, accounting for approximately 61.7% (31.68 kg CO_2e) of the total PCF, emphasizing the need for energy-efficient product design.
- ✓ **Material Production** (Purchased Goods and Services) represents the second significant hotspot at 17.5% (9.01 kg CO_2e), with Aluminum Alloy and Lithium-ion Batteries being key impact drivers.
- ✓ **Downstream Transportation** (Last-Mile Delivery) contributes 14.6% (7.50 kg CO_2e), highlighting optimization opportunities in product distribution logistics.

Recommendations for Decarbonization

1. **Enhance Use Phase Efficiency:** Focus on designing qewhfyyete for maximum energy efficiency, exploring low-power modes, and integrating smart energy management features.
2. **Sustainable Material Sourcing:** Investigate lower-carbon alternatives for high-impact materials (e.g., recycled aluminum, bio-based plastics) and engage suppliers to reduce upstream emissions.
3. **Optimize Logistics:** Explore more efficient downstream transport options, such as consolidating shipments, optimizing routes, or transitioning to electric last-mile delivery vehicles.
4. **Increase Renewable Energy in Production:** Continuously increase the percentage of renewable energy used in the manufacturing facility in China beyond the current 60% to further reduce Scope 2 emissions.
5. **Strengthen Circularity:** Leverage and expand the comprehensive regional take-back and refurbishment program to maximize material recovery and reuse, reducing reliance on virgin materials.

Report by mklphwqthh | Consultant: jtiiopgeru | Standard: GHG Protocol | System Boundary: Cradle-to-Grave