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# Product Carbon Footprint for omeqtvkfqh

Report by zejeopthlu | Standard: GHG Protocol | Production Country: China

**10.945**

kgCO<sub>2</sub>e / unit

**10.945 kgCO<sub>2</sub>e**

TOTAL FOOTPRINT

**10.945 kgCO<sub>2</sub>e/unit**

CARBON INTENSITY

**Aluminum Casing**

TOP MATERIAL HOTSPOT

**Scope 3**

PRIMARY EMISSION SCOPE

## Highlights & Insights

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- **Material Acquisition Dominates:** The production of raw materials, especially aluminum and electronics, accounts for over 60% of the total product footprint, making it the largest hotspot.
- **Significant Use Phase Impact:** Energy consumption during the product's operational life contributes nearly 35% of emissions, influenced by user electricity sources and product efficiency.
- **Effective End-of-Life Strategy:** Robust recycling and take-back programs result in a net carbon credit (-0.805 kgCO<sub>2</sub>e), showcasing the positive impact of circular economy initiatives.

## Recommendations for Reduction

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- **Material Optimization:** Prioritize sourcing lower-carbon materials, increasing recycled content, and exploring bio-based alternatives for components.
- **Design for Durability & Efficiency:** Enhance product lifespan and energy efficiency to reduce both replacement frequency and operational emissions during the use phase.
- **Supply Chain Engagement:** Collaborate closely with key suppliers to understand and actively reduce their upstream emissions, particularly for high-impact components.
- **Renewable Energy Adoption:** Increase renewable energy usage in manufacturing operations and incentivize suppliers to adopt similar practices.
- **Strengthen Circular Economy:** Continue to invest in and expand take-back and recycling programs, aiming for higher material recovery rates and exploring remanufacturing options.