

html

Product Carbon Footprint Dashboard

Product: ynxmiksgtj

52.369 kgCO₂e

Total Footprint

52.369 kgCO₂e

Carbon Intensity

52.369 kgCO₂e/unit

Top Material Hotspot

Aluminum Alloy Frame

2.70 kgCO₂e

Primary Emission Hotspot

Last-Mile Delivery

25.00 kgCO₂e

Lifecycle Stage Breakdown

- Materials (Scope 3, Cat 1): 11.58%
- Production (Scope 2): 11.46%
- Logistics (Scope 3, Cat 4): 47.96%
- Use (Scope 3, Cat 11): 28.64%
- End-of-Life (Scope 3, Cat 12): 0.35%

Material Carbon Impact

Aluminum Frame	2.70 kgCO ₂ e
Li-ion Battery	1.50 kgCO ₂ e
ABS Plastic	1.00 kgCO ₂ e
PCB	0.75 kgCO ₂ e
Copper Wiring	0.09 kgCO ₂ e
Cardboard Pkg	0.024 kgCO ₂ e

Key Emission Highlights

- **Logistics Dominance:** Last-mile delivery (25.00 kgCO₂e) is the single largest contributor to the product's carbon footprint.
- **Upstream Material Impact:** Manufacturing of core components, especially the Aluminum Alloy Frame and Lithium-ion Battery, represents a significant portion of upstream emissions.
- **Use Phase Energy:** Energy consumption during the product's 5-year lifespan contributes substantially, totaling 15.00 kgCO₂e.

Strategies for Reduction

- **Optimize Logistics:** Implement efficient routing, consolidate deliveries, and transition to electric vehicles for last-mile delivery to reduce transport emissions.
- **Sustainable Sourcing:** Prioritize materials with lower embodied carbon, increase recycled content, and engage suppliers on decarbonization initiatives for materials like aluminum and lithium.
- **Enhance Energy Efficiency:** Improve the product's energy efficiency during its use phase and encourage end-users to power devices with renewable energy sources.