

Carbon Footprint Dashboard

Product: kthkpfufyh | Company: ivyulpxewz
Standard: GHG Protocol | Boundary: factory_gate

9.452
kg CO₂e / unit

Total Footprint

9.452 kg CO₂e

Functional Unit

1.0 unit

Top Material Hotspot

Li-ion Battery (4.000 kg CO₂e)

Primary Emission Scope

Scope 3 Upstream

Lifecycle Stage Breakdown

Materials Acquisition & Pre-processing	63.75% (6.279 kg CO2e)
Manufacturing (Energy)	18.28% (1.800 kg CO2e)
Use Phase	15.23% (1.500 kg CO2e)
Downstream Transportation	2.03% (0.200 kg CO2e)
Upstream Transportation	0.71% (0.070 kg CO2e)
End-of-Life Treatment (Net Offset)	-0.397 kg CO2e

Material Carbon Impact

Lithium-ion Battery	63.70% (4.000 kg CO2e)
Circuit Board	27.87% (1.750 kg CO2e)
Plastic Casing (ABS)	7.47% (0.469 kg CO2e)
Packaging (Cardboard)	0.80% (0.050 kg CO2e)
Packaging (LDPE Film)	0.16% (0.010 kg CO2e)

Key Insights & Hotspots

- Lithium-ion Battery production is the single largest hotspot, contributing 4.000 kg CO₂e, representing 63.70% of material-related emissions.
- Manufacturing energy consumption (Scope 2) in China is a significant contributor (1.800 kg CO₂e), highlighting the impact of the regional grid intensity.
- The use phase and circuit board manufacturing are also substantial contributors, each accounting for over 1.5 kg CO₂e.

Recommendations for Reduction

- ****Material Optimization:**** Explore lower-impact alternatives for batteries and PCBs, or increase recycled content in plastic casing.
- ****Supply Chain Decarbonization:**** Engage suppliers (especially battery/electronics) to promote renewable energy use in their production.
- ****Manufacturing Efficiency:**** Increase renewable energy adoption beyond 40% and implement energy-saving measures in the factory.
- ****Circular Economy:**** Enhance the company's recycling program and explore design for disassembly to maximize material recovery.