

html

Product Carbon Footprint Dashboard: wiilfdygnm

 **Total PCF: 33.827 kgCO2e**

Total Product Footprint

33.827

kgCO₂e per unit

Carbon Intensity

33.827

kgCO₂e / unit

Top Material Hotspot

Lithium-ion Battery

65.13% of Material Impact

Primary Emission Scope

Scope 3

77.59% from Use Phase

Lifecycle Carbon Breakdown

Contribution by Lifecycle Stage (of Total PCF)



Materials (13.6%) Manufacturing (7.8%) Transportation (1.4%) Use Phase (77.6%) End-of-Life Credit (-0.4%)

Material Carbon Impact

Top Materials by Carbon Contribution (of Total Material Impact)

Lithium-ion Battery	65.13%
ABS Plastic Enclosure	16.28%
Printed Circuit Board (PCB)	10.85%
Copper Wire	4.34%
Packaging (Cardboard)	2.61%
Steel Screws	0.78%

Key Carbon Hotspots

- The **Use Phase** accounts for approximately 77.6% of the total product carbon footprint, primarily due to the European electricity grid mix.

Recommendations for Reduction

1. ****Use Phase Optimization:**** Investigate options for reducing energy consumption or promoting renewable energy usage during the product's lifespan.
2. ****Material Innovations:**** Explore lower-carbon or increased recycled content for high-impact components like Lithium-ion Batteries and PCBs.
3. ****Renewable Energy Procurement:**** Increase the percentage of renewable energy used in the Chinese manufacturing facility or collaborate with suppliers.
4. ****Logistics Efficiency:**** Optimize transport routes and modes, especially for last-mile delivery, to minimize associated emissions.
5. ****Circular Economy Enhancement:**** Expand circular economy programs to maximize product lifespan, repairability, and end-of-life material recovery.