

html

Product Carbon Footprint Dashboard

31.24
kgCO₂e

Total PCF per Unit

Product: xntyflnwfs | **Standard:** GHG Protocol | **Boundary:** Cradle-to-Grave

Total Footprint

31.24 kgCO₂e

Carbon Intensity

31.24 kgCO₂e/unit

Top Material Hotspot

Aluminum Casing

(3.75 kgCO₂e)

Primary Emission Scope

Use Phase

(58% of Total)

Lifecycle Stage Breakdown

Use Phase	18.10 kgCO2e
Materials	10.20 kgCO2e
Production	2.79 kgCO2e
Logistics	0.44 kgCO2e
End-of-Life	-0.29 kgCO2e

Material Carbon Impact

Aluminum Casing	3.75 kgCO2e
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Key Highlights & Insights

The **Use Phase** accounts for the majority (58%) of the product's carbon footprint, making energy efficiency a critical area for reduction.

Material Acquisition is the second largest contributor (33%), with aluminum casing and lithium-ion batteries identified as primary hotspots.

Circular economy principles are positively impacting End-of-Life, resulting in a net carbon credit (-0.29 kgCO₂e) due to recycling.

Recommended Action Plan

Enhance Use Phase Decarbonization: Focus R&D on improving product energy efficiency and guide users on sustainable energy sourcing.

Optimize Material Sourcing: Explore low-carbon alternatives, increase recycled content, and collaborate with high-impact material suppliers.

Boost Manufacturing Efficiency: Increase renewable energy procurement and implement further energy efficiency measures at the factory.

****Strengthen Circularity:**** Expand take-back programs and design for disassembly to maximize recycling and material recovery rates.