

html

Product Carbon Footprint Dashboard for "Ikrzfxufvj"

Total PCF: 33.07 kg CO2e / unit

Total Footprint

33.07 kg CO2e

Functional Unit

1.0 unit

Top Hotspot (Lifecycle)

Use Phase

Primary Emission Scope

Scope 3

Lifecycle Stage Breakdown

Materials & Pre-processing	6.49 kg CO2e (19.6%)
Manufacturing (Scopes 1 & 2)	2.70 kg CO2e (8.2%)
Logistics (Upstream & Downstream)	0.66 kg CO2e (2.0%)
Use Phase	25.00 kg CO2e (75.6%)
End-of-Life (Net)	-1.78 kg CO2e (-5.4%)

Highlights & Hotspots

The **Use Phase** dominates the carbon footprint, contributing over **75%** of the total emissions.

Material Acquisition is the second largest contributor, especially the **Aluminium Casing**.

Scope 3 emissions account for the vast majority (30.29 kg CO2e) of the product's environmental impact.

Material Carbon Impact

Aluminium Casing	4.00 kg CO2e (61.6%)
Plastic Housing (ABS)	1.05 kg CO2e (16.4%)
Printed Circuit Board	1.05 kg CO2e (16.4%)

Recommendations for Emission Reduction

- 1 Optimize Use Phase Energy Efficiency:** Implement design changes for lower power draw, integrate smart energy-saving features, and educate consumers on efficient usage.
- 2 Material Innovation:** Explore and integrate lower-carbon alternatives for high-impact materials such as aluminium and PCBs, prioritizing recycled content.
- 3 Enhance Renewable Energy Sourcing:** Increase the percentage of renewable energy used in manufacturing beyond the current 70% or invest in high-quality Renewable Energy Certificates.
- 4 Strengthen Circularity Programs:** Further develop and promote the internal take-back program to maximize material recovery and re-integration, reducing reliance on virgin materials.