

Product Carbon Footprint for ydvuwqxndf

Company: iupmovgjho | Standard: GHG Protocol

31.604

kg CO₂e / unit

Total Footprint

31.604 kgCO2e

Per 1.0 unit of ydvuwqxndf

Production Country

China

Final assembly location

Top Emission Hotspot

Materials

53.4% of total footprint

Primary Emission Scope

Scope 3

Upstream & Downstream Activities

Lifecycle Stage Breakdown

Emissions by Stage (kgCO2e)

Materials (Cat 1)	16.880 kgCO2e
Production (Scope 2)	1.004 kgCO2e
Transport (Cat 4)	0.535 kgCO2e
Use Phase (Cat 11)	15.000 kgCO2e
End-of-Life (Credit)	-1.815 kgCO2e

Note: End-of-Life provides a significant carbon credit through recycling.

Top Material Carbon Impact (kgCO2e)

Aluminum Alloy Casing	6.00 kgCO2e
Lithium-ion Battery Pack	5.00 kgCO2e

These four materials constitute ~95% of total material emissions.

Highlights & Key Insights

- **Material Acquisition (53.4% of PCF)** is the largest emission contributor, primarily from Aluminum Alloy Casing and Lithium-ion Battery Pack.
- **Use Phase Emissions (47.5% of PCF)** are also highly significant over the product's 5-year lifespan, even with a relatively greener European grid mix.
- A **strong End-of-Life credit (-1.815 kgCO₂e)** is achieved due to high recyclability (80%) and existing take-back programs, demonstrating effective circularity.

Action Plan: Pathways to Reduction

1. **Material Optimization:** Investigate lower embodied carbon alternatives for Aluminum Alloy, Li-ion batteries, and Silicon Chipsets. Increase recycled content.

