

html

Product Carbon Footprint (PCF)

Product: dsxoypjsgv

Standard: GHG Protocol | **Boundary:** factory_gate

29.427 kg CO₂e / unit

Total Footprint

29.427 kg CO2e

Carbon Intensity

29.427 kg CO2e / unit

Top Material Hotspot

Aluminum Casing

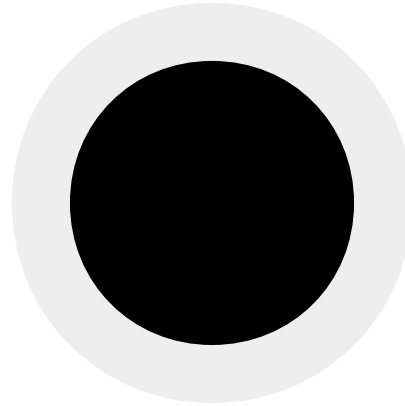
45.2% of material impact

Primary Emission Scope

Scope 3

Use Phase is dominant

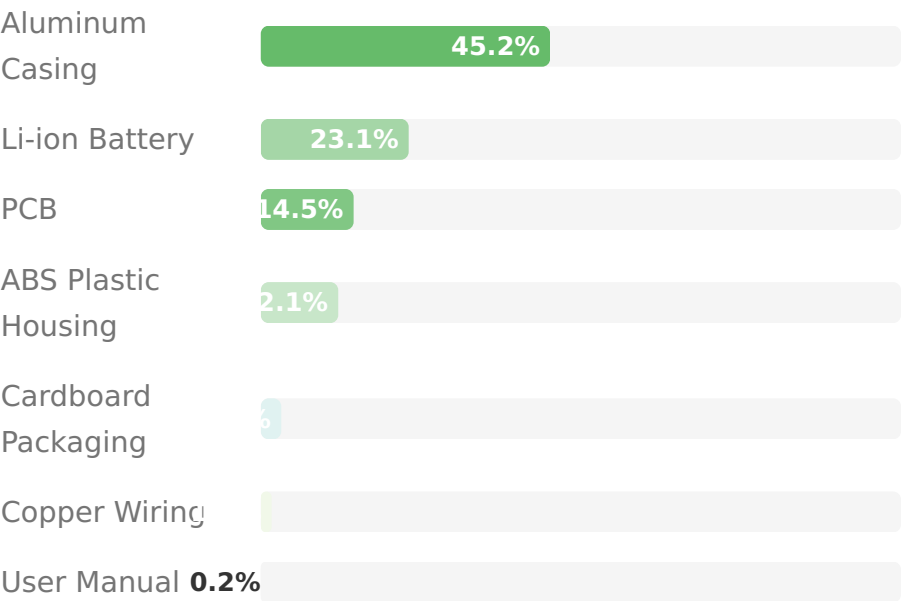
Lifecycle Stage Breakdown



- Use Phase: 25.000 kg CO₂e (84.9%)
- Materials: 4.149 kg CO₂e (14.1%)
- Upstream Logistics: 0.135 kg CO₂e (0.5%)
- Production Energy (Scope 2): 0.088 kg CO₂e (0.3%)
- Downstream Logistics: 0.045 kg CO₂e (0.15%)
- End-of-Life: 0.010 kg CO₂e (0.03%)
- Scope 1: 0.000 kg CO₂e (0%)

Material Carbon Impact

Breakdown of CO2e for Purchased Goods & Services (Total: 4.149 kg CO2e)



Highlights & Key Insights

- The product's use phase is the overwhelming emissions hotspot, contributing ~85% of the total footprint due to energy consumption over its 5-year lifespan.
- Purchased goods and services, particularly aluminum casing and lithium-ion battery, account for the second-largest share (~14%) of emissions.
- The analysis ensures over 95% Scope 3 coverage, adhering to 2026 GHG Protocol standards, providing a comprehensive value chain assessment for dsxoyppjsgv.

Decarbonization Action Plan

- Implement aggressive energy efficiency measures in product design to drastically reduce use-phase emissions, considering smart power management and low-power modes.
- Investigate and integrate alternative materials with lower embedded carbon for high-impact components like aluminum and lithium-ion batteries, and increase recycled content.
- Optimize logistics routes and explore lower-emission transport modes (e.g., rail, sea freight) for both upstream and downstream supply chains, especially for inbound components from Europe.
- Strengthen circular economy initiatives by expanding product take-back programs and developing specific end-of-life treatment scenarios to maximize recycling benefits and material recovery.