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Product Carbon Footprint Dashboard

Product: jfuxoiivgl

Report Date: June 3, 2026

37.27 kg CO₂e

Total Cradle-to-Grave Carbon Footprint

Total Footprint

37.27

kg CO2e

Carbon Intensity

37.27

kg CO2e / unit

Top Material Hotspot

Aluminum

3.00 kg CO2e

Primary Emission Scope

Scope 3

90.3% of total

Lifecycle Stage Breakdown

Use Phase	25.00 kg CO2e (67.1%)
Material Acquisition	9.05 kg CO2e (24.3%)
Manufacturing (Scope 2)	3.60 kg CO2e (9.7%)
Transport	1.07 kg CO2e (2.9%)
End-of-Life (Net Credit)	-1.45 kg CO2e (-3.9%)

Top Material Carbon Impact

Aluminum Casing	3.00 kg CO2e (33.1%)
Circuit Board (PCB)	2.00 kg CO2e (22.1%)
Lithium-ion Battery	1.80 kg CO2e (19.9%)
Plastic Housing	1.75 kg CO2e (19.3%)

Based on a total material carbon impact of 9.05 kg CO2e.

Highlights & Key Insights

- **Use Phase Dominance:** The product's energy consumption over its 5-year lifespan contributes a significant **67.1%** of the total carbon footprint, making it the primary hotspot.
- **Material Impact:** Upstream material acquisition, especially for **Aluminum Casing** and **Lithium-ion Battery**, accounts for **24.3%** of emissions.
- **Circular Economy Benefits:** Robust recycling and take-back programs result in a **net carbon credit of -1.45 kg CO2e** at the End-of-Life stage, demonstrating successful circularity.

Recommendations for Footprint Reduction

- **Optimize Use Phase:** Invest in R&D for more energy-efficient designs and explore alternative, lower-carbon power sources for product usage.
- **Innovate Materials:** Research and implement lower-carbon alternatives for high-impact components like aluminum and lithium-ion batteries, and increase recycled content.
- **Boost Renewable Energy:** Increase the percentage of renewable energy procured for manufacturing operations to further reduce Scope 2 emissions.