

html

Product Carbon Footprint for fnkidqfmzf

1.0 unit · Factory Gate · China

Powered by carboncalcpf.com

15.60
kgCO₂e / unit

15.60

Total PCF (kgCO₂e)

15.60

Carbon Intensity (kgCO₂e/unit)

Use Phase

Top Emission Hotspot

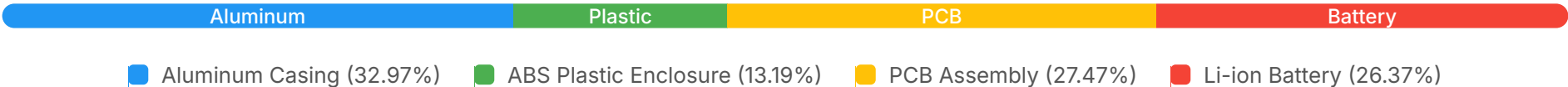
Scope 3

Primary Emission Scope

Lifecycle Stage Breakdown



Material Carbon Impact (Scope 3, Cat 1)



Highlights & Hotspots

- **Use Phase Dominance:** The product's energy consumption during its 5-year lifespan is the largest contributor, accounting for 57.69% (9.00 kgCO₂e) of the total PCF.
- **Material Impact:** Raw material acquisition and production represent a significant 29.17% (4.55 kgCO₂e) of emissions, with Aluminum and Battery manufacturing being key contributors.
- **Production Electricity:** Purchased electricity for manufacturing in China contributes 13.01% (2.03 kgCO₂e), highlighting the impact of regional grid carbon intensity.

Strategic Decarbonization Roadmap

1. **Enhance Product Energy Efficiency:** Focus on design improvements to drastically reduce energy consumption during the product's use phase.
2. **Decarbonize Manufacturing Operations:** Increase renewable energy usage at the China facility beyond 30% through PPAs or on-site generation.
3. **Optimize Material Selection:** Investigate lower-carbon alternatives for high-impact materials like aluminum and battery components, prioritizing suppliers with sustainable practices.
4. **Improve Circularity:** Leverage take-back programs and design for disassembly to maximize material recovery and recycling, reducing end-of-life impacts.