

carboncalcpcf.com

Product Carbon Footprint Dashboard

for Product: **sszgvokdij** by hslynqyids

Total PCF: 54.59 kgCO₂e

Total Carbon Footprint

54.59 kgCO₂e

per 1.0 unit of sszgvokdij

Carbon Intensity

51.02 kgCO₂e/kg

Product Weight: 1.07 kg

Primary Emission Scope

Scope 3

Driven by Use Phase (83.58%)

Top Material Hotspot

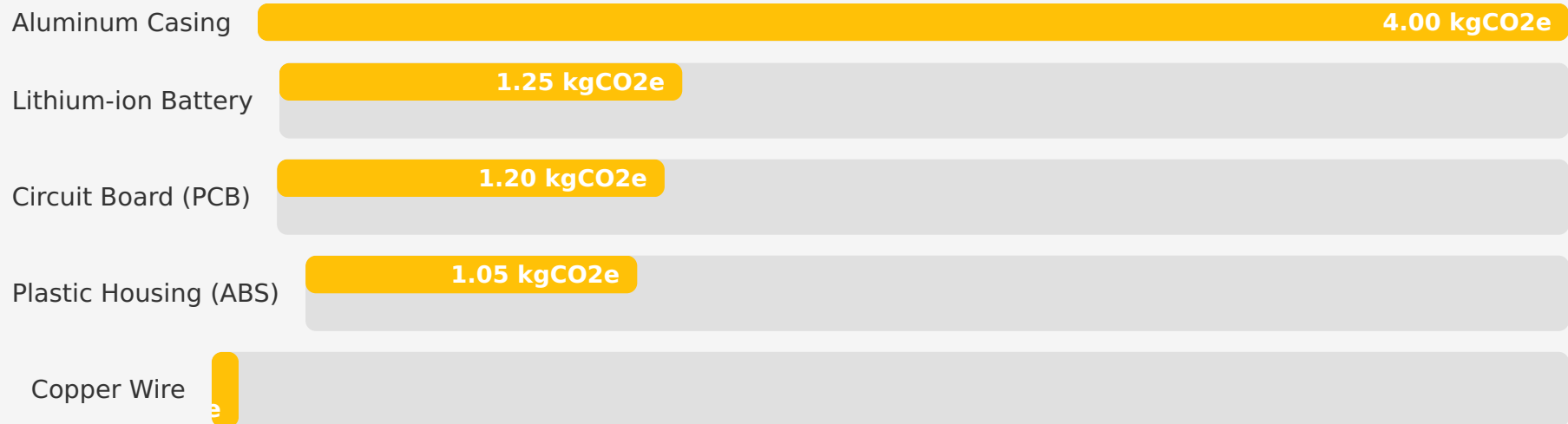
Aluminum Casing

4.00 kgCO₂e of materials

Carbon Footprint by Lifecycle Stage



Top Material Carbon Impact



Key Insights & Hotspots

- ✓ **Use Phase Dominance:** The product's operational energy consumption over its 5-year lifespan accounts for a staggering 83.58% of the total carbon footprint.
- ✓ **Material Intensity:** Material acquisition, particularly for components like Aluminum Casing, Lithium-ion Batteries, and Circuit Boards, contributes 13.97% of emissions.
- ✓ **Low Production & Logistics Impact:** Direct manufacturing emissions (Scope 1 & 2) and transportation represent a minor portion, indicating efficient factory operations and logistics.

Recommendations for Carbon Reduction

- ✓ **Optimize Use Phase Energy:** Prioritize R&D for significant reductions in product energy consumption during operation.
- ✓ **Source Sustainable Materials:** Explore lower-carbon alternatives for high-impact materials and engage with suppliers for their emission reductions.



Enhance Circular Economy:

Strengthen take-back and recycling programs, considering closed-loop recycling and product longevity.



Increase Renewable Energy:

Further increase renewable energy usage at the China manufacturing facility beyond 50% to reduce Scope 2 emissions.