

carboncalcpcf.com

Product Carbon Footprint Dashboard

Product: ylqultpqgy Total PCF: 18.835 kgCO₂e

Total Product Carbon Footprint

18.835 kgCO₂e

Carbon Intensity (per kg of product)

45.94 kgCO₂e/kg

Top Lifecycle Hotspot

Use Phase

(87.27% of total)

Top Material Hotspot

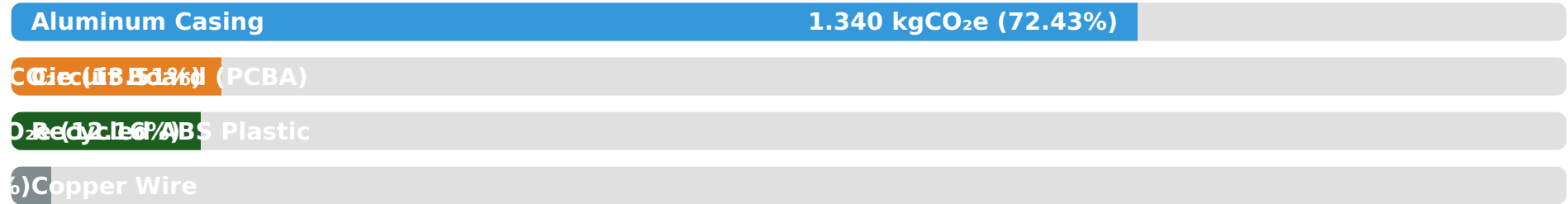
Aluminum Casing

(1.34 kgCO₂e)

Lifecycle Stage Breakdown



Material Carbon Impact (of 1.850 kgCO₂e total)



Highlights

- The **Use Phase** is the overwhelmingly dominant emission hotspot, accounting for 87.27% of the total product carbon footprint. This is primarily due to energy consumption over its 5-year lifespan.
- **Material Acquisition** is the second most significant contributor at 10.15%, with Aluminum Casing being the largest single material impact (1.340 kgCO₂e).
- Strong **circular economy initiatives** (80% recyclability, 70% take-back rate) significantly mitigate End-of-Life impacts, although precise avoided emissions are not quantified.

How to Reduce Your Footprint

- **Optimize Use Phase Energy:** Prioritize redesigns for lower energy consumption during the product's lifespan, and encourage user energy-saving habits.
- **Engage Supply Chain for Materials:** Work with suppliers to source lower-carbon aluminum and other materials, or explore alternative, less energy-intensive materials.
- **Increase Renewable Energy in Production:** Expand the adoption of renewable energy sources beyond the current 50% in manufacturing operations.
- **Enhance Circularity:** Strengthen take-back programs and invest in advanced recycling technologies to maximize material recovery and minimize waste.