

html

carboncalcpf.com

Product Carbon Footprint Dashboard

Product: hvqqpwtowz

Analysis Standard: GHG Protocol

18.27 kg
CO2e per
unit

Total Footprint

18.27 kg CO₂e

Carbon Intensity

18.27 kg CO₂e/unit

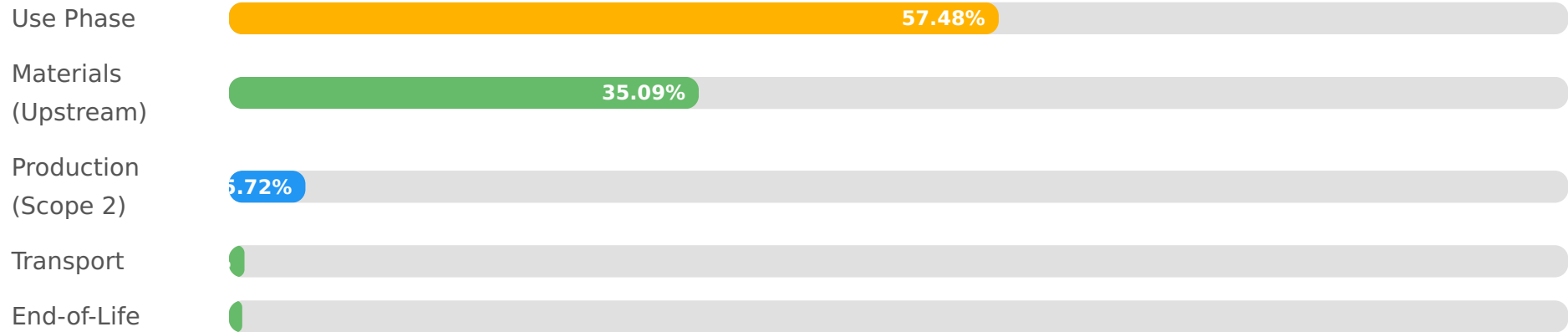
Top Material Hotspot

Aluminum Casing (3.75 kg CO₂e)

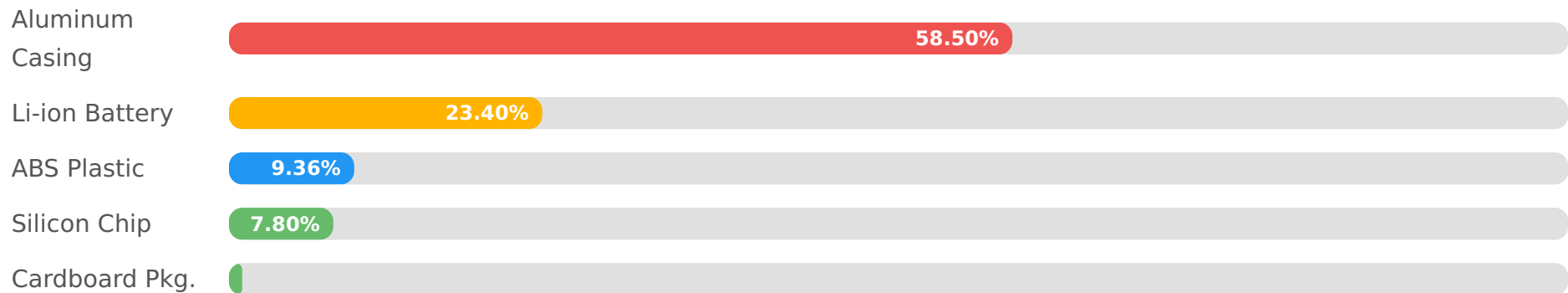
Primary Emission Scope

Scope 3 (17.22 kg CO₂e)

Lifecycle Stage Breakdown



Material Carbon Impact



Key Highlights

- The **Use Phase** is the most significant contributor, accounting for 57.48% (10.5 kg CO₂e) of the total footprint, primarily due to product energy consumption over its 3-year lifespan.
- **Material Acquisition** contributes 35.09% (6.41 kg CO₂e), with Aluminum Casing and Lithium-ion Battery identified as major material hotspots.
- The **Production Phase** impact (5.72% or 1.045 kg CO₂e) is notably mitigated by 70% renewable energy usage at the manufacturing facility.

Action Plan for Reduction

- ✓ **Optimize Product Energy Efficiency:** Focus on reducing energy consumption during the 3-year use phase to significantly lower the dominant hotspot.
- ✓ **Source Sustainable Materials:** Explore options for lower-carbon alternatives or higher recycled content, especially for Aluminum components and Lithium-ion batteries.
- ✓ **Enhance Circularity & Take-back:** Leverage the 80% recyclability and existing take-back programs to minimize end-of-life impacts and resource depletion.
- ✓ **Increase Renewable Energy in Production:** Further increase the already strong 70% renewable energy usage in the China production facility to drive down Scope 2 emissions.

