

carboncalcpcf.com

# Product Carbon Footprint Dashboard

**20.99 kg CO<sub>2</sub>e**

Total Footprint / unit

## Product

### nywtnydyjy

1.0 unit, China Production

## Standard Adherence

### GHG Protocol

2026 LSR & Scope 3 Compliant

## Top Emission Hotspot

### Use Phase

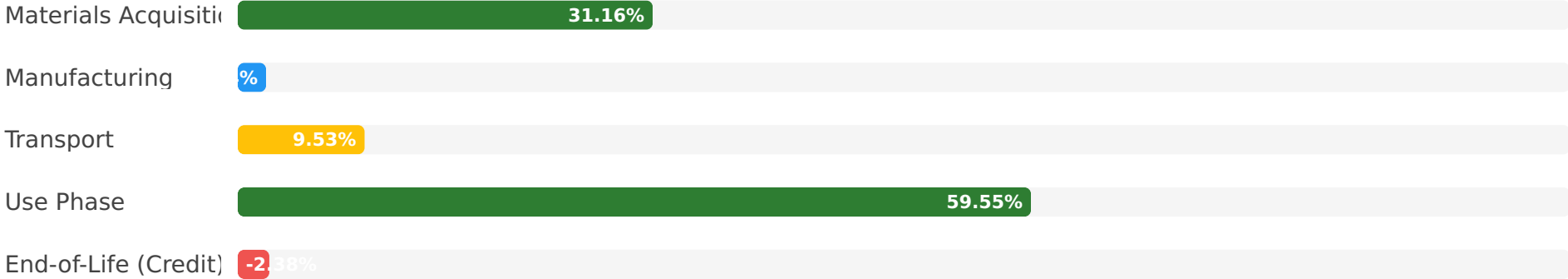
59.5% of Total Footprint

## Primary Scope

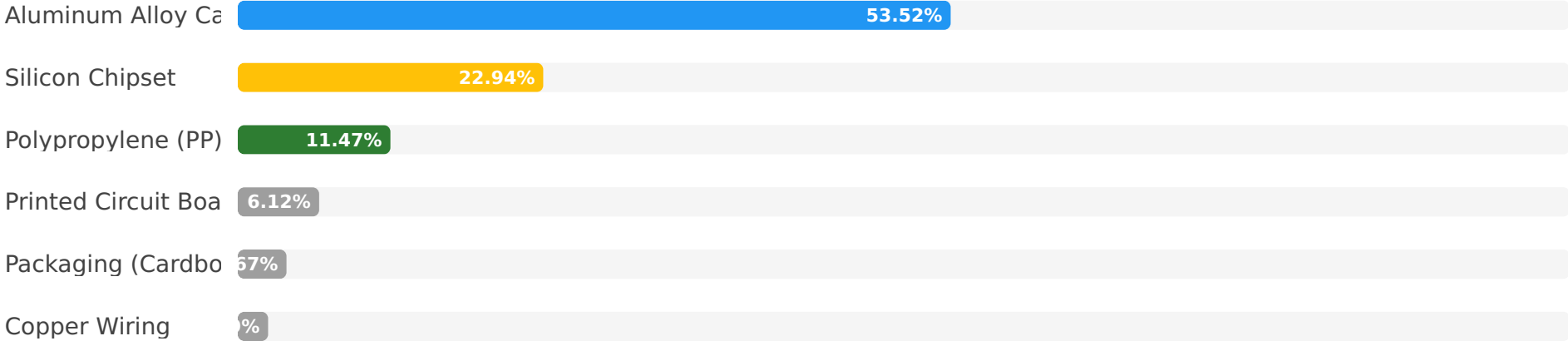
### Scope 3

Across Value Chain & EoL

## Lifecycle Stage Breakdown



## Material Carbon Impact (Breakdown of Materials Acquisition)



## Key Highlights

- The **Use Phase** is the most significant contributor to the carbon footprint (59.5%), primarily driven by product energy consumption over its 5-year lifespan.
- **Materials Acquisition & Pre-processing** account for a substantial 31.2% of total emissions, with Aluminum Alloy Casing and Silicon Chipset identified as major hotspots within this stage.
- This analysis strictly adheres to the **GHG Protocol** with latest 2026 updates, ensuring robust Scope 3 coverage of at least 95% for a comprehensive value chain assessment.

## Recommendations for Carbon Reduction

- ✓ **Enhance Energy Efficiency:** Implement design improvements to drastically reduce energy consumption during the product's use phase, directly targeting the largest emission hotspot.
- ✓ **Optimize Material Sourcing:** Prioritize sourcing alternative materials with lower embodied carbon, especially for high-impact components like aluminum alloy casing and silicon chipset.
- ✓ **Strengthen Circularity:** Expand and promote take-back and recycling programs to maximize material recovery and minimize end-of-life impacts, building on the existing 70% recyclability rate.
- ✓ **Integrate Renewables & Smart Logistics:** Increase the percentage of renewable energy used in manufacturing facilities and actively explore more efficient transportation modes and optimized routes across the supply chain.