

carboncalcpcf.com

# Product Carbon Footprint for uotlyeyfy

Total PCF: **5.46 kgCO<sub>2</sub>e**

A detailed "cradle-to-grave" analysis for 1.0 unit, manufactured in China, adhering to GHG Protocol standards.

**5.46**

Total Footprint (kgCO2e/unit)

**21.01**

Footprint Intensity (kgCO2e/kg)

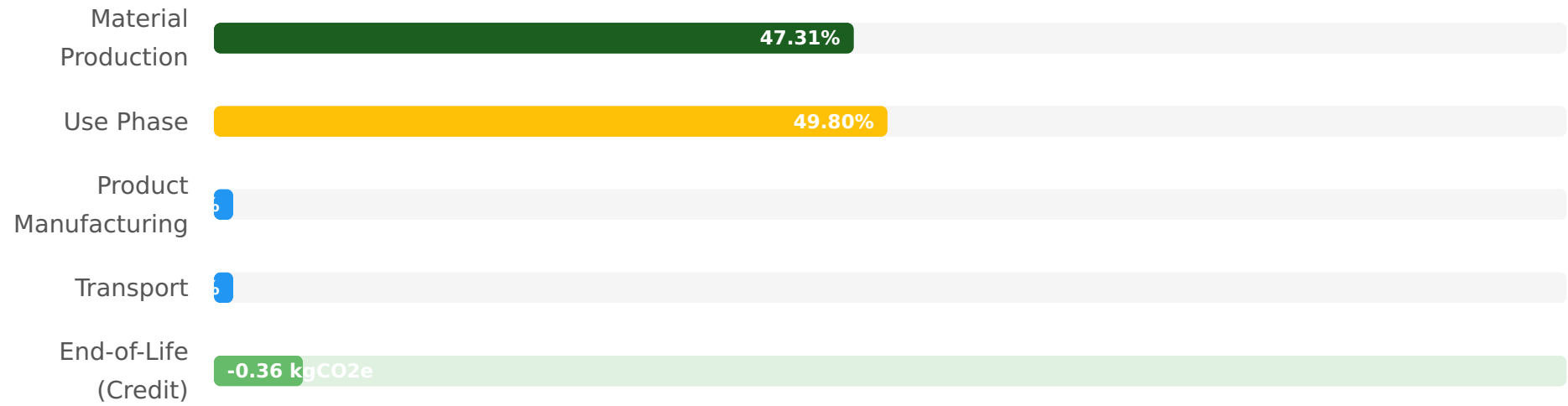
**Circuit Board**

Top Material Hotspot

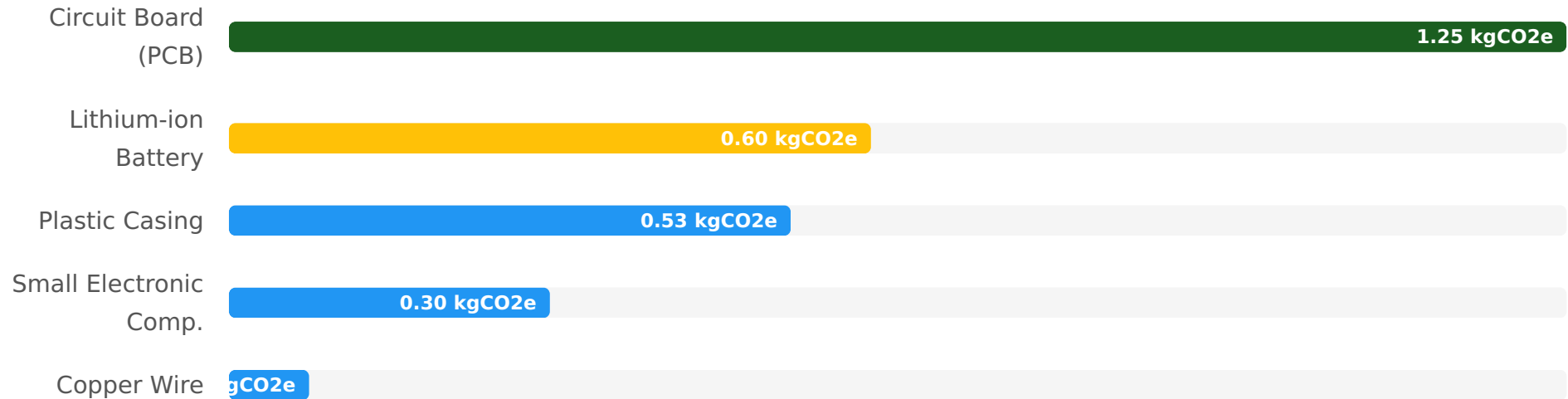
**Scope 3**

Primary Emission Scope (98.46%)

## Lifecycle Stage Breakdown



## Material Carbon Impact



## Highlights

- **Use Phase (53.1%)** and **Material Production (50.4%)** are the primary contributors to the product's carbon footprint.
- The **End-of-Life phase provides a significant credit** (-0.36 kgCO2e) due to a high recyclability percentage (70%), demonstrating effective circularity efforts.
- This analysis achieves high GHG Protocol Scope 3 coverage, with **98.46% of total emissions accounted for in the value chain.**

## How to Reduce the Footprint

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- **Enhance Use Phase Efficiency:** Invest in R&D to significantly reduce product energy consumption during its 5-year lifespan.
- **Sustainable Material Sourcing:** Explore and implement materials with lower embodied carbon and increase recycled content.
- **Optimize Logistics:** Further optimize transport modes, favoring rail or sea, and refine route planning where feasible.
- **Strengthen Circularity:** Leverage the "Active take-back program" to maximize actual recycling, reuse, or refurbishment rates.