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carboncalpcf.com

oofgudovrm Carbon Footprint Dashboard

Comprehensive Product Carbon Footprint (PCF) Analysis

195.27 kg CO₂e

For 1.0 unit, Cradle-to-Grave, GHG Protocol

Total Footprint

195.27 kg CO₂e

Per functional unit

Carbon Intensity

195.27 kg CO₂e

Per 1.0 unit of oofgudovrm

Top Material Hotspot

Steel Sheet

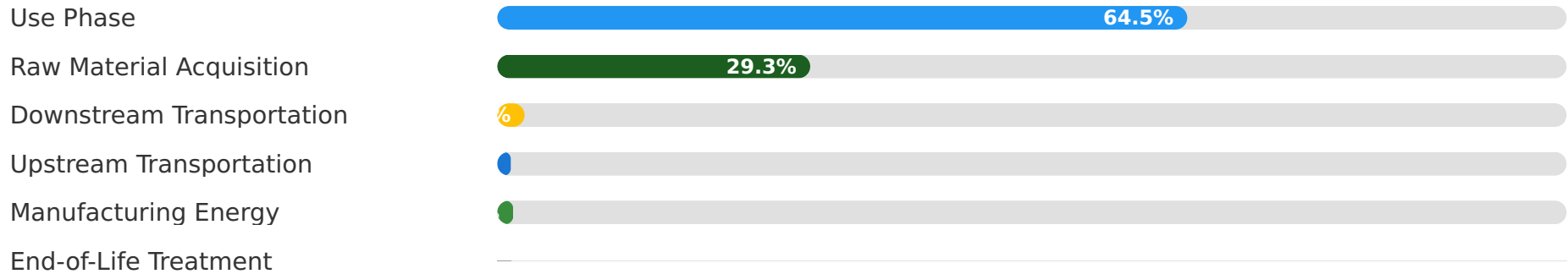
(33.0 kg CO₂e)

Primary Emission Source

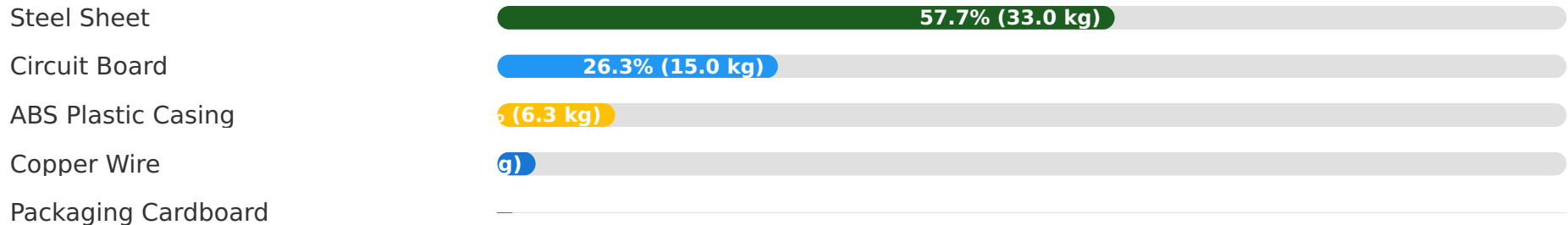
Use Phase

(64.5% of total)

Lifecycle Stage Breakdown



Material Carbon Impact



Based on 57.15 kg CO₂e for material production.

Key Insights & Hotspots

- Use Phase Dominance:** The product's operational use accounts for 64.5% (126.0 kg CO₂e) of the total carbon footprint, making it the primary hotspot.

- **Material Acquisition Impact:** Raw material acquisition and pre-processing contribute significantly (29.3% or 57.15 kg CO_{2e}), with Steel Sheet being the highest individual material contributor.
- **Full Lifecycle Coverage:** Analysis was expanded to a 'cradle-to-grave' boundary, providing a comprehensive view, aligned with GHG Protocol 2026 updates for Scope 3 coverage.

How to Reduce Footprint: Action Plan

- **Product Redesign for Energy Efficiency:** Prioritize innovations to lower energy consumption during the 7-year use phase.
- **Sustainable Material Sourcing:** Seek lower-carbon materials and increase recycled content, especially for steel and ABS plastic components.
- **Logistics Optimization:** Implement strategies to optimize transport routes, consolidate shipments, and consider low-emission transport for inbound and outbound logistics.
- **Enhanced Data Collection:** Establish robust systems for primary activity data collection across the value chain to improve future PCF accuracy.
- **Circular Economy Initiatives:** Strengthen and promote take-back programs to boost recyclability and facilitate material circularity.