

# Product Carbon Footprint Dashboard

## vqngysnhkx

Total Footprint: **46.29 kgCO<sub>2</sub>e**  
(per 1.0 unit)

**46.29**

Total kgCO<sub>2</sub>e

**4.27**

Carbon Intensity (kgCO<sub>2</sub>e/kg)

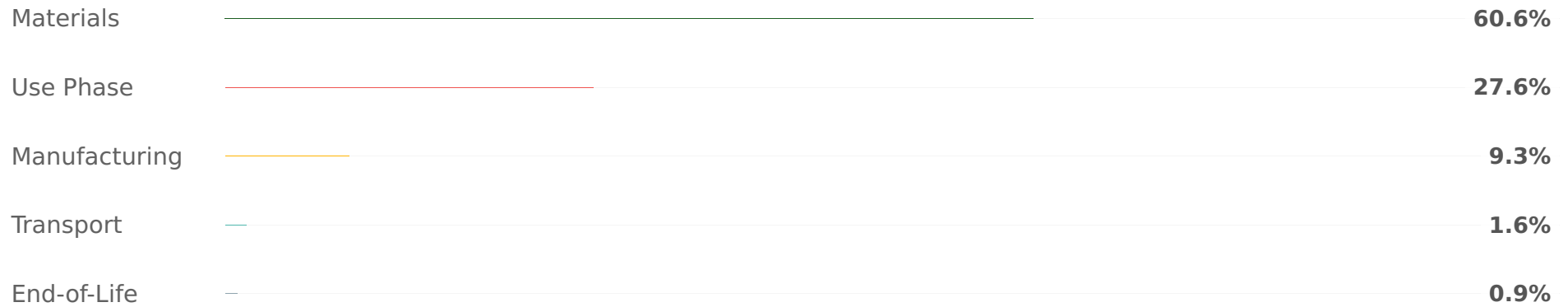
**Steel Plate**

Top Material Hotspot

**Scope 3 Upstream**

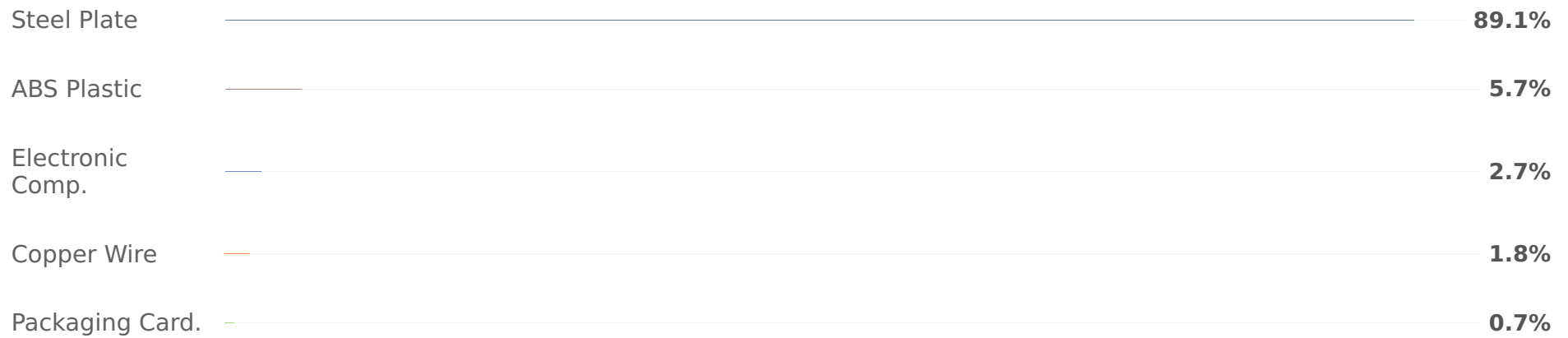
Primary Emission Scope

## Lifecycle Stage Breakdown



## Material Carbon Impact

Breakdown of emissions from material acquisition & pre-processing.



## Highlights & Emission Hotspots

- • **Material Acquisition Dominates:** The production of raw materials, especially steel, contributes the largest portion (60.6%) of the product's carbon footprint.
- • **Significant Use Phase Impact:** Energy consumption during the 7-year product lifespan accounts for a substantial 27.6% of total emissions, primarily due to the assumed European grid mix.
- • **Strong Scope 3 Coverage:** Scope 3 emissions (upstream & downstream) represent 90.7% of the total footprint, reflecting robust value chain analysis and compliance with 2026 GHG Protocol targets.

# Recommendations for Emission Reduction

- • **Material Optimization:** Explore lighter materials, those with lower embedded carbon (e.g., recycled content steel, bio-based plastics), or extending product durability. Engage with suppliers to improve their material production processes.
- • **Renewable Energy Sourcing:** Increase renewable energy usage in manufacturing beyond the current 60% and investigate investment in renewable energy projects for the Chinese grid.
- • **Energy Efficiency in Use:** Invest in R&D to significantly reduce the product's energy consumption during its use phase and educate consumers on energy-efficient usage patterns.
- • **Enhance Circularity:** Strengthen existing take-back programs and investigate opportunities for product refurbishment, repair, or component reuse to maximize the lifespan of materials and products, leveraging the 75% recyclability.