

carboncalcpcf.com

# Product Carbon Footprint for nyfxyzzdzu

A detailed analysis by zrxemned, following GHG Protocol standards.

**7.44** kg CO<sub>2</sub>e / unit

## Total Product Footprint

**7.44**

kg CO2e / unit

## Carbon Intensity

**7.44**

kg CO2e / kg product\*

\*Based on assumed 1.0 kg product weight.

## Top Material Hotspot

**Plastic Casing**

1.25 kg CO2e

## Primary Emission Scope

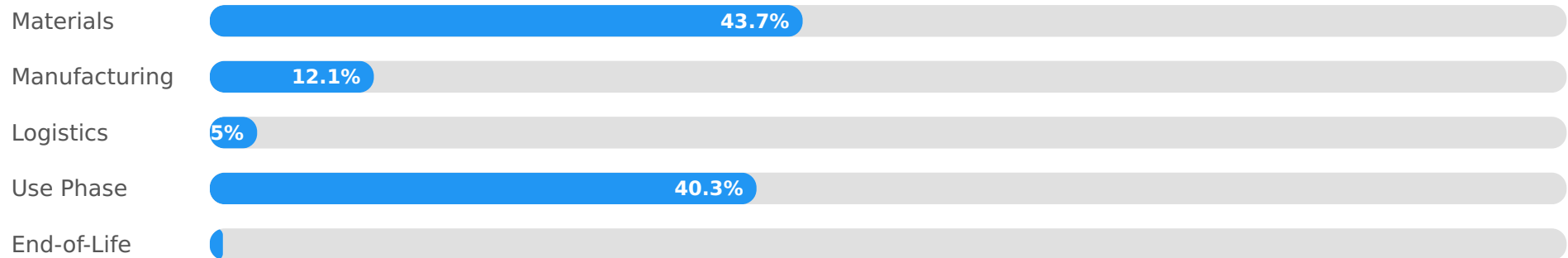
**Scope 3**

Value Chain Emissions

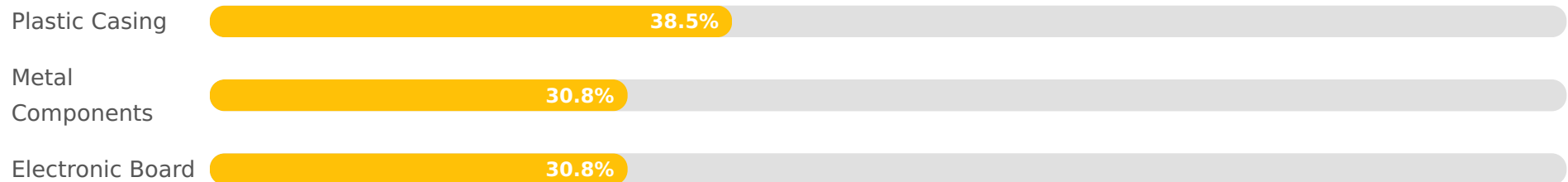
## Key Highlights

- ✓ Material Acquisition (43.7%) and Use Phase (40.3%) are the dominant emission sources for nyfxyzzdzu.
- ✓ The total product carbon footprint is 7.44 kg CO2e per unit, adhering to the GHG Protocol.
- ✓ Manufacturing in China significantly contributes to emissions, despite 40% renewable energy use, due to grid intensity.

## Lifecycle Stage Breakdown



## Material Carbon Impact



\*Percentages reflect carbon impact relative to total material acquisition emissions.

## Recommendations for Reduction

- 1 Material Optimization:** Explore lower-carbon alternatives for plastic, metal, and electronic components, and engage suppliers for primary data.
- 2 Enhance Manufacturing Efficiency:** Increase renewable energy procurement beyond 40% in China and implement energy-efficient processes.
- 3 Improve Product Energy Efficiency:** Focus R&D on significantly reducing the product's energy consumption during its use phase.
- 4 Strengthen Circularity Initiatives:** Further develop and promote take-back programs to maximize material recovery and recycling rates.