

carboncalcpcf.com

# oqyoovxqsp Carbon Footprint Dashboard

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

Cradle-to-Grave Analysis (1.0 unit)

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

Total Footprint

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

Carbon Intensity

**Aluminum Frame**

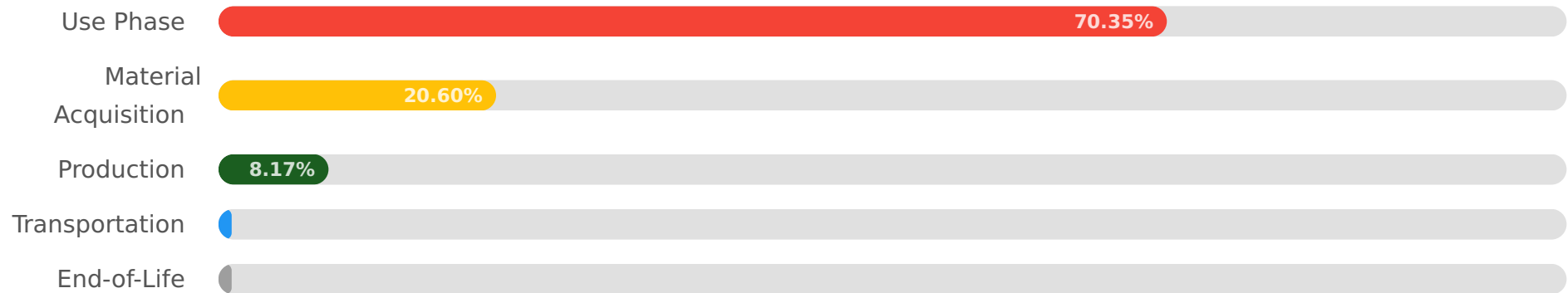
Top Material Hotspot

**Use Phase**

Primary Emission Source (70.35%)

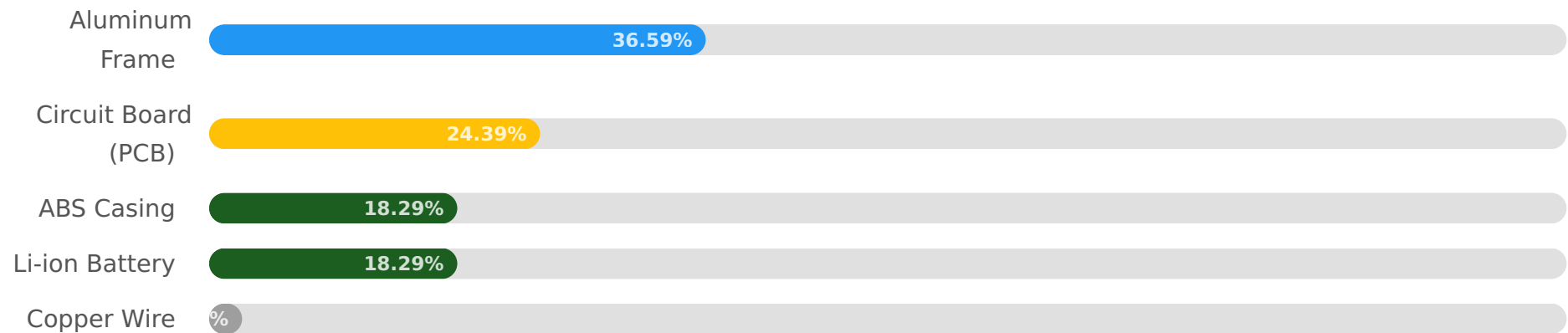
# Lifecycle Emission Breakdown

Understanding emissions across the product's entire journey.



# Material Carbon Impact

Top contributing materials to the product's embedded carbon.



## Key Insights

- The **Use Phase** dominates the product's footprint, accounting for over 70% of total emissions, primarily due to energy consumption.
- **Material Acquisition** is the second largest contributor (20.60%), with the Aluminum Frame and Circuit Board being significant hotspots.
- Despite 50% renewable energy use in production, the **Manufacturing Phase** still contributes over 8% to the total PCF, indicating room for further efficiency.

## Recommendations for Reduction

- **Enhance Product Energy Efficiency:** Prioritize R&D to significantly reduce energy consumption during the product's use phase.
- **Sustainable Material Sourcing:** Explore lower-carbon materials or increase recycled content, especially for high-impact components.
- **Increase Renewable Energy in Production:** Aim for 100% renewable electricity for manufacturing operations in China.
- **Strengthen Circular Economy:** Expand take-back and recycling programs to maximize material recovery and reduce virgin material demand.
- **Optimize Logistics:** Continuously evaluate and optimize transportation routes and modes for maximum carbon efficiency.