

Product Carbon Footprint Dashboard:

A detailed sustainability analysis by **kwtspsywww** for xyzmywjl
powered by carboncalcpcf.com

Total Product Footprint

810.46 kg CO₂e

for 1.0 unit

Carbon Intensity

810.46 kg CO₂e/unit

Functional Unit: 1.0 unit

Top Emission Hotspot

Transportation & Distribution

795.00 kg CO₂e (98.1%)

Highlights & Key Insights

- **Transportation Dominance:** The most significant portion (98.1%) of the product's carbon footprint stems from transportation and distribution, primarily due to long-distance logistics.
- **Net Positive End-of-Life:** High recyclability (70%) combined with established circular/take-back programs results in a net carbon credit for the End-of-Life phase, effectively reducing the overall footprint.
- **Limited Scope 1 Impact:** Direct emissions (Scope 1) are minimal, indicating that the majority of emissions originate from upstream (materials, transport) and downstream (use, EoL) value chain activities.

Action Plan: How to Reduce Carbon Footprint

- **Optimize Logistics:** Prioritize efficient transport modes (e.g., rail, sea) and explore route optimization and local sourcing of materials to significantly cut down transportation emissions.
- **Supplier Engagement:** Collaborate with suppliers to collect primary data on their emissions, fostering transparency and driving reductions across the upstream supply chain.
- **Circular Economy Expansion:** Enhance and promote take-back and refurbishment programs to extend product lifespan, minimizing material loss and maximizing material recovery beyond current recycling efforts.
- **Product Redesign for Materials:** Investigate alternative, lower-carbon materials for significant components, particularly for the aluminum frame which has the highest material impact.
- **Operational Energy Efficiency:** Continuously improve energy efficiency at manufacturing sites and increase renewable energy procurement to further reduce Scope 2 emissions, even if currently a minor hotspot.