

carboncalpcf.com

Carbon Footprint Dashboard: xzpnjvfdgg

370.75

kg CO2e (Full Lifecycle)

227.99 kg CO2e

Cradle-to-Factory-Gate PCF

49.6%

Top Emission Hotspot: Materials

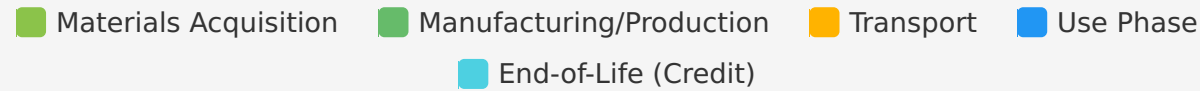
Scope 3

Primary Emission Scope

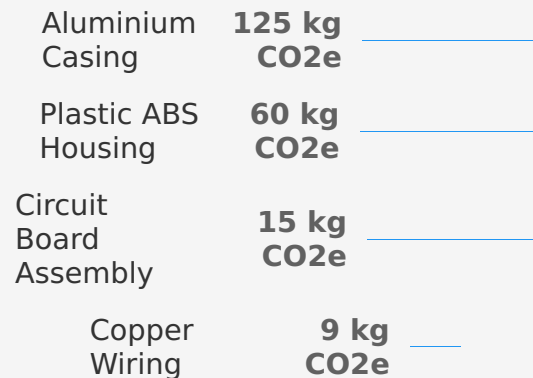
China

Production Country

Lifecycle Emission Breakdown



Top Material Carbon Impact (BOM)



Key Insights & Hotspots

- Materials Acquisition (49.6%):** The procurement of raw materials, particularly aluminium and plastic, represents the largest single source of emissions.
- Use Phase (34.9%):** Significant emissions arise from the product's energy consumption over its 5-year operational lifespan, emphasizing the need for energy-efficient design.
- End-of-Life (-6.7%):** A net avoided emission due to an assumed 75% recyclability and active circular programs, showcasing the positive impact of robust End-of-Life strategies.

Recommendations for Impact Reduction

1. **Material Optimization:** Investigate opportunities for using lower-carbon materials, recycled content (e.g., recycled aluminium, post-consumer recycled plastics), or alternative material designs.
2. **Energy Efficiency in Use:** Focus on designing xzpnjvfdgg for enhanced energy efficiency during its operational life, exploring smart energy management or more efficient components.
3. **Supply Chain Decarbonization:** Collaborate with suppliers to understand and reduce their emissions, and optimize logistics by considering multimodal transport and local sourcing.
4. **Circular Economy Strategies:** Strengthen existing circular/take-back programs and explore innovative business models to maximize recyclability and material recovery.