html

carboncalcpcf.com

Product Carbon Footprint Dashboard

for **zopeyprlus**

14.206 kgCO2e

Summary based on GHG Protocol (2026 LSR & Scope 3 Compliant)

Total PCF per Unit

14.206 kgCO2e

Carbon Intensity

14.206 kgCO2e/unit

Top Emission Hotspot

Materials (10.998 kgCO2e)

Net Offset from Circularity

-6.713 kgCO2e

Lifecycle Stage Breakdown

Materials (Scope 3, Cat 1)	**10.998 kgCO2e**
Production (Scope 2)	**3.723 kgCO2e**
Logistics (Scope 3, Cat 4 & 9)	**0.248 kgCO2e**
Use Phase (Scope 3, Cat 11)	**5.950 kgCO2e**
End-of-Life (Scope 3, Cat 12) - Offset	**-6.713 kgCO2e**

Material Composition Carbon Impact

Aluminum Casing	**7.385 kgCO2e**
ABS Plastic Housing	**0.938 kgCO2e**
Electronic Circuit Board	**2.487 kgCO2e**
Packaging (Cardboard)	**0.188 kgCO2e**

Key Insights & Highlights

- **Material Acquisition Dominates:** Purchased goods and services (materials), particularly aluminum and electronics, represent the largest portion of the product's carbon footprint (10.998 kgCO2e).
- **Significant Use Phase Impact:** The energy consumed during the product's 5-year lifespan contributes substantially to emissions (5.950 kgCO2e), highlighting the need for energy-efficient design.
- **Circular Economy Reduces Footprint:** Robust end-of-life strategies, including refurbishment and recycling programs, provide a significant net avoided emission of -6.713 kgCO2e, effectively reducing the overall PCF.

Recommended Actions for Reduction

- **Engage Suppliers for Primary Data:** Collaborate to obtain specific emission factors for high-impact materials and explore lower-carbon or recycled content alternatives.
- **Enhance Production & Use Phase Efficiency:** Increase renewable energy usage at the China manufacturing facility and design products for greater energy efficiency during use and extended lifespan.
- **Optimize Logistics & Data Collection:** Refine transport routes and modes, and collect more granular data across all lifecycle stages for improved accuracy in future analyses.