html

xwxpoliqow Carbon Footprint Dashboard

34.31 kg CO2e / unit

carboncalcpcf.com

TOTAL FOOTPRINT (CRADLE-TO-GRAVE)

34.31 kg CO2e

Full lifecycle emissions from raw materials to end-of-life.

FACTORY-GATE FOOTPRINT

8.81 kg CO2e

Emissions up to product leaving the manufacturing facility.

TOP MATERIAL HOTSPOT

Circuit Board (1.50 kg CO2e)

Single largest material contributor within raw material acquisition.

PRIMARY EMISSION SCOPE

Use Phase (Scope 3)

The largest contributor to the overall product carbon footprint.

Lifecycle Stage Breakdown (Cradle-to-Grave)

- The Use Phase is the dominant contributor, accounting for approximately 73% (25.0 kg CO2e) of the total cradle-to-grave PCF.
- Raw Material Acquisition and Production is the second most significant hotspot, contributing about 12% (4.11 kg CO2e) to the total footprint.
- Purchased Electricity for Manufacturing (Scope 2) contributes approximately 13% (4.50 kg CO2e), highlighting the impact of the energy mix.
- End-of-Life demonstrates a net avoided emission of -0.55 kg CO2e/unit due to high recyclability and effective take-back programs.

Recommendations for Reduction

- **Optimize Use Phase Efficiency:** Redesign xwxpoliqow for lower energy consumption during its operational lifespan and encourage renewable energy at the user end.
- **Enhance Manufacturing Renewable Energy:** Increase the current 50% renewable energy usage in China's production facilities to reduce Scope 2 emissions.
- **Sustainable Material Sourcing:** Explore lower-carbon materials, increase recycled content, and source materials locally to cut upstream transport.
- **Strengthen Circularity:** Expand existing take-back programs and explore refurbishment/remanufacturing to maximize avoided emissions.
- **Supply Chain Engagement:** Collaborate with suppliers to reduce their carbon footprints, especially for high-impact materials and processes, improving data accuracy.