

carboncalcpcf.com

# Product Carbon Footprint Dashboard

Product: pkowyowozt | System Boundary: factory\_gate | Standard: GHG Protocol

**26.28 kgCO<sub>2</sub>e/unit**

TOTAL FOOTPRINT

**26.28 kgCO2e/unit**

Net emissions across full lifecycle

CARBON INTENSITY

**26.28 kgCO2e**

Per 1.0 unit of pkowyowozt

TOP MATERIAL HOTSPOT

**Aluminum Casing**

~53.8% of Material Emissions (4.0 kgCO2e)

PRIMARY EMISSION SCOPE

**Scope 3 (76%)**

Indirect value chain emissions

# Emission Highlights

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The **Use Phase** is the most significant contributor, accounting for approximately 47.6% of the total PCF, primarily due to energy consumption during the product's lifespan.

**Material Acquisition & Pre-processing** is the second largest hotspot at around 27.6%, driven by the production of raw materials like primary metals and electronics.

**Manufacturing operations** contribute approximately 24.4%, mainly from purchased electricity for the production facility in China.

## Recommended Action Plan

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- Optimize Use Phase:** Invest in R&D to enhance the energy efficiency of pkowyowozt during its operational life and encourage renewable energy use by consumers.
- Sustainable Material Sourcing:** Prioritize materials with lower carbon footprints, increase recycled content, and engage suppliers for product-specific EPDs and decarbonization.
- Renewable Energy in Manufacturing:** Accelerate the transition to 100% renewable energy for manufacturing operations in China, through direct procurement or on-site generation.
- Enhance Circularity:** Further develop and promote circular/take-back programs for pkowyowozt to extend product life and maximize material recovery at End-of-Life.