# Product Carbon Footprint Dashboard

Detailed analysis for **vzqoixjxxz** by qzdxxrxmki

Report Date: May 27, 2026

## 50.124 kg CO2e

Total Product Carbon Footprint

### Total Footprint

## 50.124 kg CO2e

Per Functional Unit (1.0 unit)

### Carbon Intensity

## 50.124 kg CO2e/unit

Based on 1.0 unit of vzqoixjxxz

### Top Material Hotspot

## Circuit Board

2.0 kg CO2e (47.6% of material impact)

### Primary Emission Scope

## Scope 3

Driven by Use Phase (89.8% of total)

## Lifecycle Stage Breakdown

| | |
|---|---|
| Raw Materials | 8.38% |
| Production Energy | 3.41% |
| Logistics | 0.11% |
| Use Phase | 89.78% |
| End-of-Life (Saving) | -1.68% |

## Material Carbon Impact

| | |
|---|---|
| Circuit Board | 47.62% |
| Aluminum Casing | 23.81% |
| Lithium-ion Battery | 17.86% |
| ABS Plastic Housing | 10.71% |

# Highlights & Key Insights

The **Use Phase accounts for nearly 90%** of the product's total carbon footprint, making it the primary hotspot for reduction efforts.

**Raw material acquisition** is the second largest contributor (8.4%), with the Circuit Board having the highest individual material impact (47.6% of material impact).

Strong **End-of-Life management**, including high recyclability (80%) and active circular programs, results in a net carbon saving of 0.84 kg CO2e.

## Action Plan: How to Reduce PCF

- **Energy Efficiency in Use Phase:** Invest in R&D to significantly reduce the product's energy consumption during its operational lifespan and educate users on renewable energy adoption.
- **Material Optimization:** Explore lower embodied carbon materials, increase recycled content, and optimize design for minimal material use, focusing on high-impact components like Circuit Boards and Lithium-ion batteries.
- **Supply Chain Engagement:** Collaborate with key suppliers to encourage their transition to renewable energy and implement cleaner, more efficient production processes.
- **Strengthen Circular Economy:** Expand and promote the company's product return and refurbishment program to maximize material recovery and product lifespan extension, further enhancing EoL benefits.