

# nqhf gflpmn Product Carbon Footprint

Total PCF

**21.49**  
**kgCO2e**

Company

**givestwlzx**

### **Total Footprint**

**21.49 kgCO<sub>2</sub>e**

per 1.0 unit

### **Carbon Intensity**

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

Based on 1.0 unit quantity

### **Top Material Hotspot**

**Internal Electronics**

4.50 kgCO<sub>2</sub>e (53.3% of material impact)

### **Primary Emission Scope**

**Scope 3 (Use Phase)**

12.50 kgCO<sub>2</sub>e (~58% of total)

## Key Highlights

- The **Use Phase** dominates emissions, accounting for approximately 58% of the total PCF due to prolonged energy consumption.
- **Materials Acquisition & Pre-processing** is the second largest hotspot, contributing around 39% of emissions, highlighting embodied carbon in components.
- The **End-of-Life** stage demonstrates a net carbon benefit (-0.30 kgCO<sub>2</sub>e) due to high recyclability (80%) and robust circular economy programs.

## Recommendations for Reduction

- **Enhance Use Phase Efficiency:** Focus on designing for greater energy efficiency and educating users on sustainable energy sourcing.
- **Sustainable Material Sourcing:** Prioritize materials with lower embodied carbon, increase recycled content, and engage suppliers for specific emission data.
- **Renewable Energy Procurement:** Strive to achieve 100% renewable energy usage in manufacturing beyond the current 75%.
- **Logistics Optimization:** Continuously optimize transport routes and consider lower-emission modes for both upstream and downstream logistics.
- **Strengthen Circular Economy:** Expand and promote the advanced take-back program to maximize collection and quality recycling.