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Product Carbon Footprint for hteopskths

Standard: GHG Protocol | **Boundary:** factory_gate | **Country:** China

Total PCF

45.40

kg CO₂e

Total Footprint

45.40

kg CO2e per unit

Carbon Intensity

45.40

kg CO2e / unit
(Based on 1.0 unit)

Top Material Hotspot

Steel Frame

11.0 kg CO2e
(41.9% of material emissions)

Primary Emission Scope

Scope 3

Upstream Materials
(57.8% of total PCF)

Key Emission Hotspots

- **Materials Acquisition & Pre-processing** represents the largest contributor, accounting for approximately 57.8% of the total PCF. Electronic Board and Steel Frame are significant.
- **Product Use Phase** contributes about 29.7% of the total PCF, highlighting the importance of energy-efficient design.
- **Manufacturing (Scope 2)** contributes roughly 17.6% of the total, indicating opportunities for increased renewable energy adoption.

Recommendations for Reduction

1. **Enhance Primary Data Collection:** Prioritize collecting actual data from suppliers for manufacturing, materials, and transport to improve accuracy.
2. **Focus on Material Decarbonization:** Source lower-carbon alternatives for Steel Frames and Electronic Boards, and explore recycled content.
3. **Increase Renewable Energy in Production:** Aim to increase renewable energy usage at manufacturing facilities in China beyond the current 30%.
4. **Optimize Product Design for Use Phase:** Innovate for even greater energy efficiency during the product's lifespan.
5. **Strengthen Circularity:** Further develop and promote the Material Recovery Program to maximize recycling and explore repair/reuse models.