

carboncalcpcf.com

Product Carbon Footprint Dashboard

Product: Smart Home Hub X-V (sllxmtxlvs) | **Company:** vvuwtpplwy

System Boundary: factory_gate (cradle-to-gate with full lifecycle analysis) | **Standard:** GHG Protocol

8.61 kg CO₂e

Total Footprint per unit

8.61

TOTAL PCF (KG CO₂E/UNIT)

1.0

FUNCTIONAL UNIT (UNITS)

6.25

PRIMARY HOTSPOT (USE PHASE KG CO2E)

Circuit Board

TOP MATERIAL IMPACT (BY CO2E)

Lifecycle Stage Breakdown



- 1 Optimize Use Phase Energy Efficiency:** Redesign the product for significantly lower energy consumption during its operational lifespan, exploring low-power modes and efficient components.
- 2 Enhance Circularity:** Increase recyclability beyond 60% through design for disassembly and explore options for component reuse.
- 3 Sustainable Material Sourcing:** Prioritize materials with lower embodied carbon footprints and work with suppliers for Environmental Product Declarations (EPDs).
- 4 Green Energy Procurement:** Aim for 100% renewable energy in manufacturing facilities to eliminate Scope 2 emissions entirely.
- 5 Logistics Optimization:** Continuously evaluate transportation routes and modes for efficiency, prioritizing lower-emission options where feasible.