

html

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# Product Carbon Footprint Dashboard

for dhssogogjd (Smart Home Sensor) by jkmmldopey

**9.925 kgCO<sub>2</sub>e** per unit

## Total Footprint

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

Total greenhouse gas emissions for 1.0 unit.

## Carbon Intensity

**49.63 kgCO<sub>2</sub>e/kg**

Emissions per kilogram of product (0.2 kg total weight).

## Top Material Hotspot

**Electronic Components**

Largest contributor within raw material acquisition (2.500 kgCO<sub>2</sub>e).

## Primary Emission Scope

**Scope 3 (Use Phase)**

Use of Sold Products is the most significant stage (8.750 kgCO<sub>2</sub>e).

# Emissions Breakdown

## Lifecycle Stage Carbon Impact

Materials & Pre-processing	3.165 kgCO <sub>2e</sub> (25.10%)
Manufacturing Energy (Scope 2)	0.140 kgCO <sub>2e</sub> (1.11%)
Logistics (Upstream & Downstream)	0.554 kgCO <sub>2e</sub> (4.39%)
Use of Sold Products	8.750 kgCO <sub>2e</sub> (69.40%)
End-of-Life Treatment (Net Credit)	-2.684 kgCO <sub>2e</sub>

Note: Percentages are calculated against the sum of positive emissions before End-of-Life credit (Total Positive: 12.609 kgCO<sub>2e</sub>). End-of-Life provides a net reduction due to recycling initiatives.

## Material Composition Carbon Impact

Electronic Components	2.500 kgCO <sub>2e</sub> (79.0%)
Printed Circuit Board (PCB)	0.400 kgCO <sub>2e</sub> (12.6%)
Plastic Casing	0.250 kgCO <sub>2e</sub> (7.9%)
Recycled Cardboard Packaging	0.015 kgCO <sub>2e</sub> (0.5%)

Total Material Emissions (Upstream, Scope 3): 3.165 kgCO<sub>2e</sub>. Percentages are calculated based on this total.

## Highlights: Emission Hotspots

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- **Use Phase Dominance:** The most significant contributor is the product's 7-year use phase, accounting for 8.750 kgCO<sub>2e</sub> due to electricity consumption.
- **Material Intensity:** Electronic components and PCBs are major upstream hotspots (total 3.165 kgCO<sub>2e</sub>), reflecting energy-intensive manufacturing processes.
- **Circular Economy Success:** A high recyclability of 85% and take-back programs yield a significant net credit of -2.684 kgCO<sub>2e</sub> at End-of-Life.

