

html

# Product Carbon Footprint Dashboard

for  
lsxffnxnhq

**60.76 kgCO<sub>2</sub>e**  
Total Product Footprint

Product Name

**Advanced Smart Sensor**

Functional Unit

**1.0 unit**

System Boundary

**Factory Gate (+ Use & EoL)**

Production Country

**China**

**Emission Breakdown**

## Key Insights & Highlights

- Material Acquisition & Processing is the dominant emission hotspot, largely driven by complex electronic components like PCB assemblies, sensors, and lithium-ion batteries.
- The Use Phase represents a significant portion of the total footprint, indicating that product energy efficiency during operation is crucial for reducing overall impact.
- An 85% recyclability rate, coupled with an established product take-back program, provides a considerable carbon credit at the End-of-Life stage, contributing positively to the overall PCF.

## Action Plan for Decarbonization

- 1 Focus on Material Decarbonization:** Engage with suppliers of high-impact components to explore lower-carbon alternatives, design for material efficiency, and increase recycled content.
- 2 Enhance Product Energy Efficiency:** Further optimize the design of the Advanced Smart Sensor (lsxffnxnhq) to reduce energy consumption during its use phase.
- 3 Strengthen Circular Economy Initiatives:** Expand the existing Product Take-back Program and invest in advanced recycling technologies to maximize material recovery and reuse.
- 4 Improve Data Granularity:** Prioritize collecting primary data from key suppliers for more accurate, product-specific emission factors across the supply chain.
- 5 Monitor LSR Standard Guidance:** Actively track the GHG Protocol Land Sector and Removals Standard updates for full implementation by January 2027, especially for bio-based materials.