Product Carbon Footprint Dashboard: nuoosvufdy

carboncalcpcf.com

Total PCF: 29.49 kg CO2e (per 1.0 unit)

Functional Unit: 1.0 unit | System Boundary: factory_gate | Production Country: China | Standard: GHG Protocol

Total Footprint

29.49 kg CO2e

Cradle-to-grave lifecycle

Carbon Intensity

29.49 kg CO2e/unit

Per 1.0 functional unit

Top Material Hotspot

Printed Circuit Board

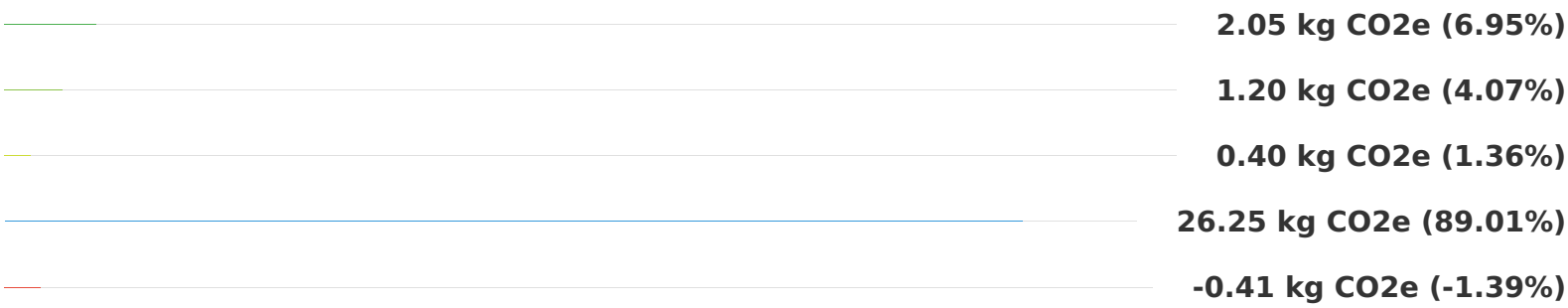
0.75 kg CO2e (from 2.05 kg CO2e total materials)

Primary Emission Scope

Use Phase

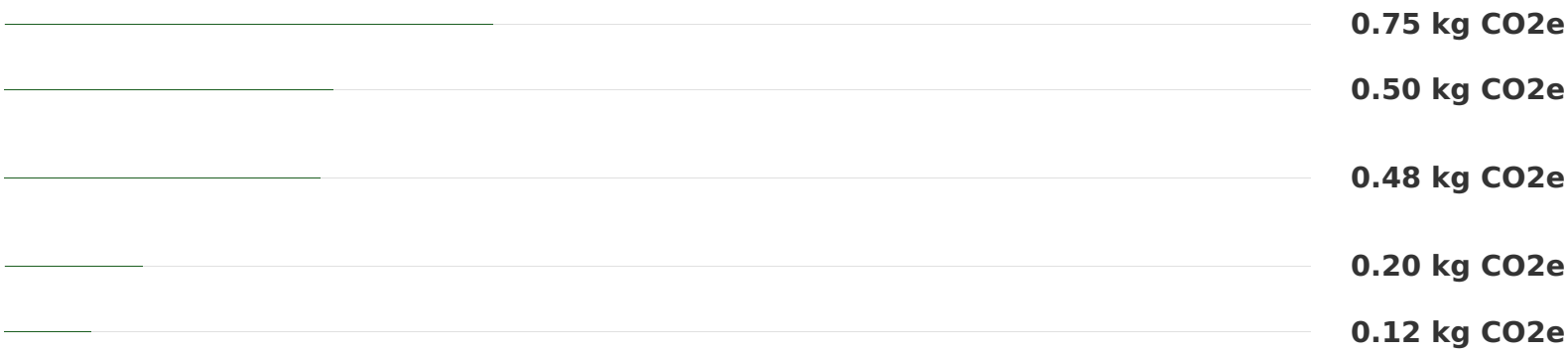
89.01% of total footprint (Scope 3)

Lifecycle Stage Breakdown



Materials	**2.05 kg CO2e (6.95%)**
Production	**1.20 kg CO2e (4.07%)**
Transport	**0.40 kg CO2e (1.36%)**
Use Phase	**26.25 kg CO2e (89.01%)**
End-of-Life	**-0.41 kg CO2e (-1.39%)**

Material Carbon Impact



PCB	**0.75 kg CO2e**
Sensor Chipset	**0.50 kg CO2e**
ABS Plastic Casing	**0.48 kg CO2e**
Li-ion Battery	**0.20 kg CO2e**
Packaging	**0.12 kg CO2e**

Key Findings & Hotspots

- The **Use Phase** is the dominant contributor, accounting for approximately 89.01% of the total carbon footprint, primarily driven by the product's energy consumption over its 7-year lifespan.
- **Materials acquisition and processing** contribute 6.95% of emissions, with the Printed Circuit Board (PCB) identified as the highest individual material impact (0.75 kg CO2e).
- **End-of-Life activities** result in a net carbon saving of -1.39% due to the high recyclability (80%) and liqsdrrpjh's operational take-back program.

Recommendations for Carbon Reduction

- **Optimize Use Phase Energy Efficiency:** Prioritize research and development to significantly reduce nuoosvufdy's energy consumption during its operational lifespan.
- **Promote Renewable Energy Adoption:** Encourage end-users to power the product with renewable energy sources or explore integrating small-scale renewable energy solutions (e.g., solar charging).
- **Supply Chain Engagement:** Strengthen collaboration with material suppliers to source lower-carbon intensity materials and verify emission factors with primary data for greater accuracy.
- **Enhance Circularity:** Innovate further in material selection for easier dismantling and recycling, and expand existing take-back initiatives to maximize avoided emissions benefits.