

Product Carbon Footprint Dashboard

Product: **gsvegtqidh**

Total PCF: **22.73 kg CO2e**

Total Footprint

22.73 kg CO2e

Per 1.0 unit (Cradle-to-Grave)

Carbon Intensity

25.26 kg CO2e/kg

Based on 0.9 kg product weight

Top Material Hotspot

Circuit board

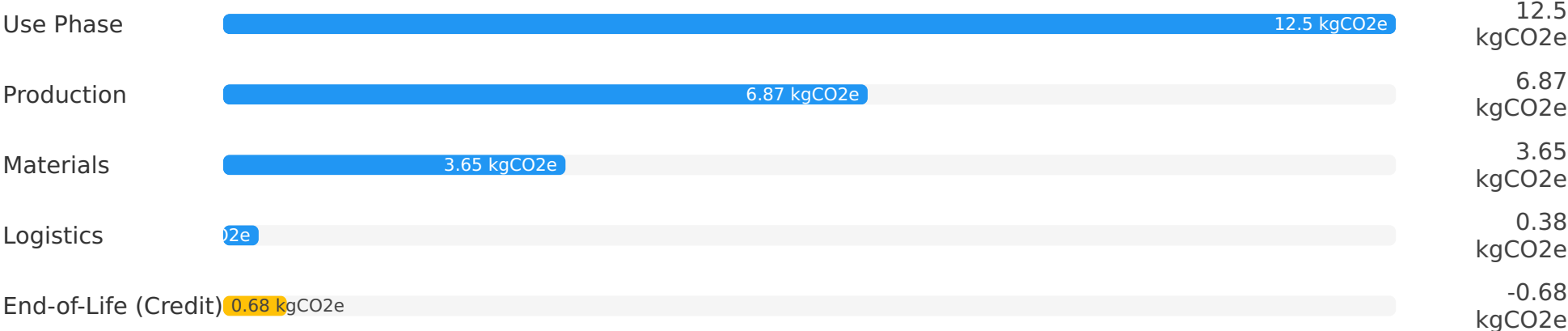
1.50 kg CO2e (41.1% of material impact)

Primary Emission Scope

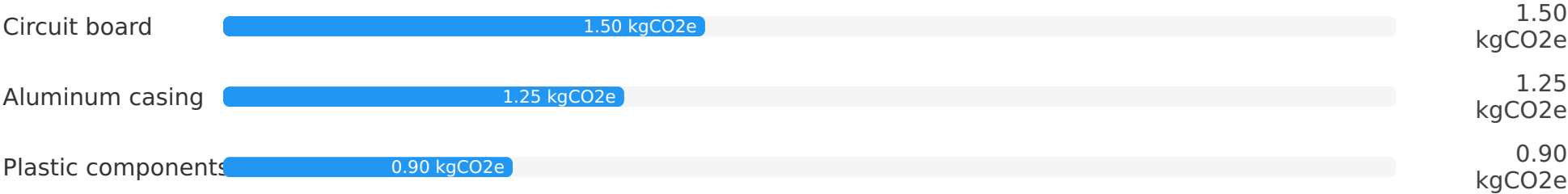
Scope 3 Downstream

12.01 kg CO2e (Use Phase main contributor)

Lifecycle Stage Breakdown



Material Carbon Impact



Highlights & Hotspots

- The **Use Phase** represents the largest contribution to the PCF (12.5 kg CO₂e), primarily due to energy consumption over the product's 5-year lifespan.
- **Manufacturing Energy** (6.87 kg CO₂e) is a significant hotspot, largely influenced by the reliance on grid electricity in China despite 30% renewable usage.
- Within the upstream phase, the **Circuit Board** component contributes most significantly to material-related emissions (1.50 kg CO₂e).

Action Plan for Reduction

- **Optimize Use Phase:** Invest in energy-efficient design, explore lower power consumption modes, and consider energy-saving features.
- **Enhance Manufacturing:** Increase renewable energy procurement beyond 30% in manufacturing operations and investigate process optimization.
- **Material Innovations:** Explore lower-carbon alternatives for key components, especially high-impact materials like circuit boards, and increase recycled content.