Product Carbon Footprint Dashboard

Product: qgngunglvi

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18.03 kgCO2e

Total Carbon Footprint (per unit)

Total Footprint

18.03 kgCO2e

Per 1.0 unit of qgngunglvi

Carbon Intensity

18.03 kgCO2e/unit

Efficiency per functional unit

Top Emission Hotspot

Use Phase

69.33% of total footprint

Lifecycle Stage Breakdown

Raw Material Acquisition & Pre-processing	3.89 kgCO2e (21.57%)
Manufacturing (Production)	1.11 kgCO2e (6.13%)
Transport (Upstream & Downstream)	0.39 kgCO2e (2.17%)
Use Phase	12.50 kgCO2e (69.33%)
End-of-Life Treatment	0.14 kgCO2e (0.78%)

Top Material Carbon Impact

Electronic Components	2.00 kgCO2e (51.44%)
Printed Circuit Board (PCB)	0.80 kgCO2e (20.58%)
Plastic Casing (ABS)	0.78 kgCO2e (20.09%)
Packaging (Corrugated Cardboard)	0.17 kgCO2e (4.40%)
Copper Wiring	0.07 kgCO2e (1.80%)

Key Highlights

- The **Use Phase** is the dominant emission hotspot, accounting for 69.33% of the total Product Carbon Footprint, primarily driven by the product's energy consumption over its lifespan.
- **Raw Material Acquisition & Pre-processing** represents the second largest impact at 21.57%, with Electronic Components being the largest contributor within this stage.
- **Scope 3 emissions** constitute a significant 93.87% of the total footprint, highlighting the critical importance of value chain decarbonization, though it's just below the 2026 GHG Protocol's 95% coverage target.

Recommendations for Emission Reduction

- **Prioritize Use Phase Decarbonization:** Focus on designing for ultra-low power consumption and exploring renewable energy charging solutions to significantly cut the largest emission hotspot.
- **Optimize Material Sourcing:** Increase recycled content in plastics and metals, and engage suppliers for primary, low-carbon material data, especially for high-impact electronic components.
- **Enhance Manufacturing Efficiency & Circularity:** Increase renewable energy adoption in production, implement energy-efficient processes, and expand take-back programs for easier disassembly and recycling.
- **Improve Data Quality for 2026 Compliance:** Implement robust systems for collecting primary data across all Scope 3 categories to meet and exceed the 95% coverage requirement and ensure greater accuracy.