

Product Carbon Footprint Dashboard

Total PCF: **22.89** kg CO2e

Total Footprint

Lifecycle Stage Breakdown

22.89 kg CO2e

Use Phase Cradle-to-Grave for 1.0 unit	64.80%
Material Acquisition	30.19%
Carbon Intensity	2.85%
End-of-Life	1.18%
Transport Per functional unit of hoegwgnlp	0.98%

Top Material Hotspot

2.95 kg CO2e

Aluminum Frame (42.26% of material emissions)

Primary Emission Scope

Key Insights & Highlights

- The Use Phase is the dominant emission hotspot, accounting for approximately 64.80% of the total PCF.
- Material Acquisition is the second most significant contributor, making up around 30.19% of the footprint, with Aluminum Frame being the largest material impactor.
- Manufacturing, Transport, and End-of-Life phases show comparatively lower contributions but still present areas for optimization.

Recommended Action Plan

- Optimize Product Energy Efficiency: Invest in R&D to drastically reduce the energy consumption of hoegwgnqlp during its use phase.
- Sustainable Material Sourcing: Collaborate with suppliers to identify and procure materials with lower embodied carbon, prioritizing components contributing most to the material footprint.
- Expand Renewable Energy Footprint: Explore options to achieve 100% renewable energy in manufacturing facilities through Power Purchase Agreements or on-site generation.
- Enhance Circular Economy Initiatives: Further develop and promote take-back programs to maximize recyclability and enable closed-loop material flows.
- Refine Data Collection: Implement robust systems for collecting primary data for all Bill of Materials items, precise transport routes, and actual use-phase energy consumption patterns.