Product Carbon Footprint Dashboard

For product: nxegwtulkl

Company: upqufrqsfx | Generated: May 18, 2026

Total Carbon Footprint

67.30 kgCO2e

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67.30 kgCO2e

Carbon Intensity

67.30 kgCO2e/unit

Top Material Hotspot

Aluminum Alloy

Primary Emission Scope

Scope 3

Carbon Footprint Breakdown by Lifecycle Stage

*Note: End-of-Life activities result in an avoided emission of 5.74 kgCO2e, reducing the overall footprint.

Key Emissions Hotspots

- **Use Phase Dominance:** The product's energy consumption over its 5-year lifespan accounts for the largest share of emissions (62.05 kgCO2e).
- **Material Impact:** Embodied emissions in raw materials, particularly Aluminum Alloy and Lithium-ion Battery, are the second most significant contributor (7.65 kgCO2e).
- **Manufacturing Footprint:** Despite 50% renewable energy use, purchased grid electricity during production still adds 3.10 kgCO2e to the footprint.

Material Composition vs. Carbon Impact

Recommendations for Decarbonization

- **Energy-Efficient Design:** Prioritize reducing product energy consumption during the use phase through innovative design and alternative power sources.
- **Sustainable Materials:** Explore lower-carbon materials, increase recycled content, and investigate bio-based alternatives for key components.
- **Green Manufacturing:** Continuously increase renewable energy adoption in production and optimize processes to reduce overall energy intensity.
- **Circular Economy:** Further develop and quantify the impact of take-back programs to maximize material recovery and minimize virgin material demand.