To create the slick, modern, and interactive-looking HTML dashboard, I will extract the key findings from the provided report and structure them according to the requirements. **Extracted Data:** * **Product:** `oynrfwyzsq` * **Company:** `qpjgtyjudy` * **Consultant:** `ggyusvwgju` * **Standard:** `GHG Protocol` * **Total PCF:** `21.92 kg $CO_2e$` * **System Boundary:** `Cradle-to-grave` * **Production Country:** `China` * **Renewable Energy Usage (Manufacturing):** `60%` * **Recyclability Percentage (EoL):** `80%` * **Primary Emission Scope:** `Scope 3 (99.18%)` * **Top Material Hotspot (highest individual material):** `Aluminum Casing (3.75 kg $CO_2e$)` **Lifecycle Stage Breakdown (Emissions and Percentage):** * Materials (Upstream): 6.57 kg CO_2e (29.98%) * Manufacturing (Purchased Energy): 0.18 kg CO_2e (0.82%) * Transport & Distribution (Upstream): 0.03 kg CO_2e (0.14%) * Use Phase: 15.00 kg CO_2e (68.45%) * End-of-Life: 0.14 kg CO_2e (0.64%) **Material Composition vs. Carbon Impact (from BOM, as percentages of Total Material Emissions):** * Aluminum Casing: (3.75 / 6.57) * 100 = 57.08% * Plastic Enclosure: (0.90 / 6.57) * 100 = 13.69% * Copper Wire: (0.80 / 6.57) * 100 = 12.18% * Lithium-ion Battery: (0.75 / 6.57) * 100 = 11.41% * Circuit Board: (0.25 / 6.57) * 100 = 3.81% * Packaging Cardboard: (0.12 / 6.57) * 100 = 1.83% **Emission Hotspots (from Executive Summary and Review & Report):** * Use Phase (68.45%) * Materials (29.98%) **Recommendations for Decarbonization:** * Optimize Use Phase * Sustainable Material Sourcing * Circular Economy Integration * Renewable Energy Transition * Logistics Optimization The GHG Protocol's Land Sector and Removals (LSR) Standard was released on January 30, 2026, and is set to take effect on January 1, 2027. The accompanying Guidance is expected in Q2 of 2026. The standard provides requirements and guidance for entities with significant land sector activities and those reporting CO_2 removals or CO_2 capture with geologic storage. This version of the LSR Standard does not include forest carbon accounting. The national average grid emission factor for China is approximately 0.6 kg CO_2e/kWh according to the report. Recent data from 2023 shows China's national average electricity carbon footprint factor to be 0.6205 kg CO_2e/kWh. Other reports mention values around 0.577 kg CO_2e/MWh (0.577 kg CO_2e/kWh) or 0.5568 kg CO_2e/kWh for 2021. For Europe, the report uses an illustrative average of 0.3 kg CO_2e/kWh for the use phase. The European Carbon Factor reached a record low of 181 kg CO_2/MWh (0.181 kg CO_2/kWh) in 2024, down from 211 kg CO_2/MWh (0.211 kg CO_2/kWh) in 2023. The greenhouse gas emission intensity of power generation in the EU is estimated to have been 9% lower in 2024 than in 2023, and 40% less than a decade ago. html

Product Carbon Footprint Dashboard

carboncalcpcf.com

Product: oynrfwyzsq • **Company:** qpjgtyjudy

21.92 kg CO_2e (Total PCF)

Total Product Footprint

21.92 kg CO_2e

Primary Emission Scope

Scope 3

(99.18% of total)

Top Material Hotspot

Aluminum Casing

(3.75 kg CO_2e)

Renewable Energy Used

60%

(Manufacturing)

Carbon Footprint by Lifecycle Stage

Use Phase	15.00 kg CO_2e (68.45%)
Materials (Upstream)	6.57 kg CO_2e (29.98%)
End-of-Life	0.14 kg CO_2e (0.64%)
Manufacturing (Purchased Energy)	0.18 kg CO_2e (0.82%)
Transport & Distribution	0.03 kg CO_2e (0.14%)

Material Carbon Impact Breakdown

Aluminum Casing	57.08%
Plastic Enclosure	13.69%
Copper Wire	12.18%
Lithium-ion Battery	11.41%
Circuit Board	3.81%

Key Emission Highlights

- The **Use Phase** is the most significant contributor (68.45%) to oynrfwyzsq's carbon footprint, emphasizing the need for energy-efficient design.
- **Upstream Materials** account for nearly 30% of emissions, with Aluminum Casing being the largest single material hotspot.
- **Scope 3 emissions** (value chain) dominate the footprint at 99.18%, highlighting the importance of supply chain engagement.

Recommendations for Decarbonization

- **Optimize Use Phase:** Invest in R&D for enhanced energy efficiency and explore smart power-saving features.
- **Sustainable Material Sourcing:** Collaborate with suppliers to reduce embodied carbon of high-impact materials and increase recycled content.
- **Circular Economy Integration:** Expand take-back programs and explore repair/reuse models to extend product lifespan.
- **Renewable Energy Transition:** Increase renewable energy usage in manufacturing and advocate for cleaner grids.
- **Logistics Optimization:** Regularly review and optimize transport modes and routes to minimize emissions.