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Product Carbon Footprint Dashboard

Product: ttxylteyhn (1.0 unit) | **Company:** mtooorxyhd | **Standard:** GHG Protocol

40.76 kg CO2e
Total PCF

Total Footprint

40.76 kg CO2e

Per 1.0 unit of ttxylteyhn

Carbon Intensity

40.76 kg CO2e/unit

Functional Unit: 1.0 unit

Top Material Hotspot

Aluminum Casing

3.35 kg CO2e (58.16% of material impact)

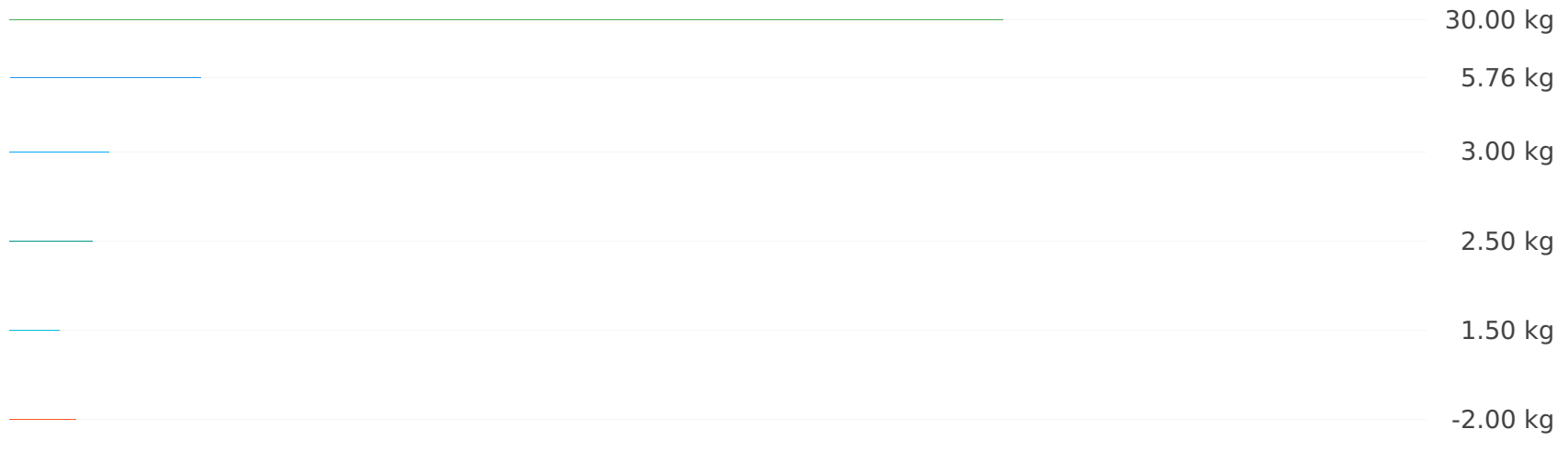
Primary Emission Scope

Scope 3

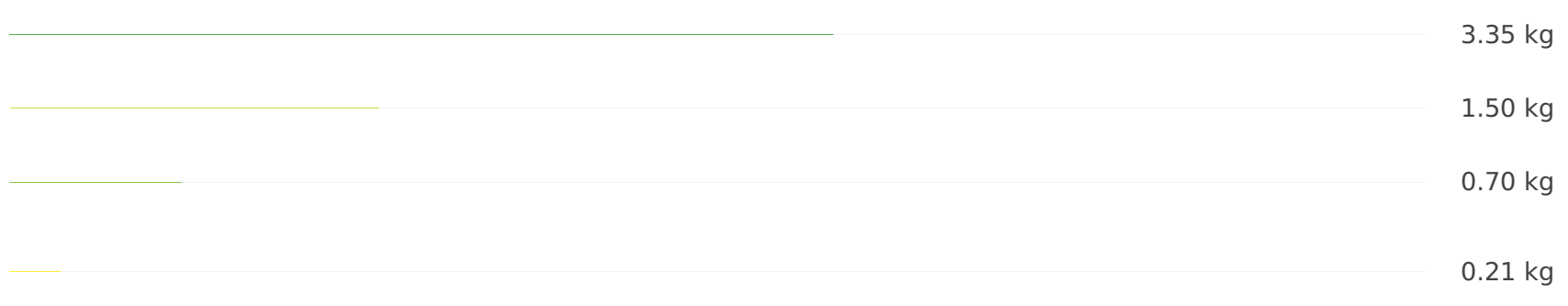
Dominated by Use Phase (30.00 kg CO2e)

Carbon Footprint Breakdown

Lifecycle Stage Contributions



Material Carbon Impact



Key Insights & Hotspots

- The **Use Phase** accounts for the largest portion of the product's carbon footprint (30.00 kg CO2e), emphasizing the need for energy-efficient design.
- **Raw Material Acquisition**, particularly the Aluminum Casing, is a significant upstream contributor, highlighting material choice and supplier processes as critical impact areas.
- The **End-of-Life** stage generates a credit (-2.00 kg CO2e) due to strong recyclability and circular programs, showcasing effective waste management strategies.

Recommendations for Emission Reduction

- **Enhance Product Energy Efficiency:** Focus R&D on reducing energy consumption during the product's operational lifespan.
- **Sustainable Sourcing:** Prioritize suppliers with lower carbon footprints for high-impact materials and gather primary data for precision.
- **Optimize Logistics:** Explore lower-emission transport modes (e.g., rail/sea over air) and localized sourcing to reduce distances.
- **Circular Economy Integration:** Strengthen take-back programs and design for increased recyclability to maximize material recovery and generate further credits.
- **Increase Renewable Energy Adoption:** Continue investing in renewable energy for manufacturing operations to decarbonize Scope 2 emissions.