

Product Carbon Footprint Dashboard for **hmxvdmouni**

Total PCF (1.0 unit)

159.18 kg CO₂e

Total Footprint

159.18

kg CO2e per unit

Carbon Intensity

159.18

kg CO2e / functional unit

Top Material Hotspot

Aluminum Casing

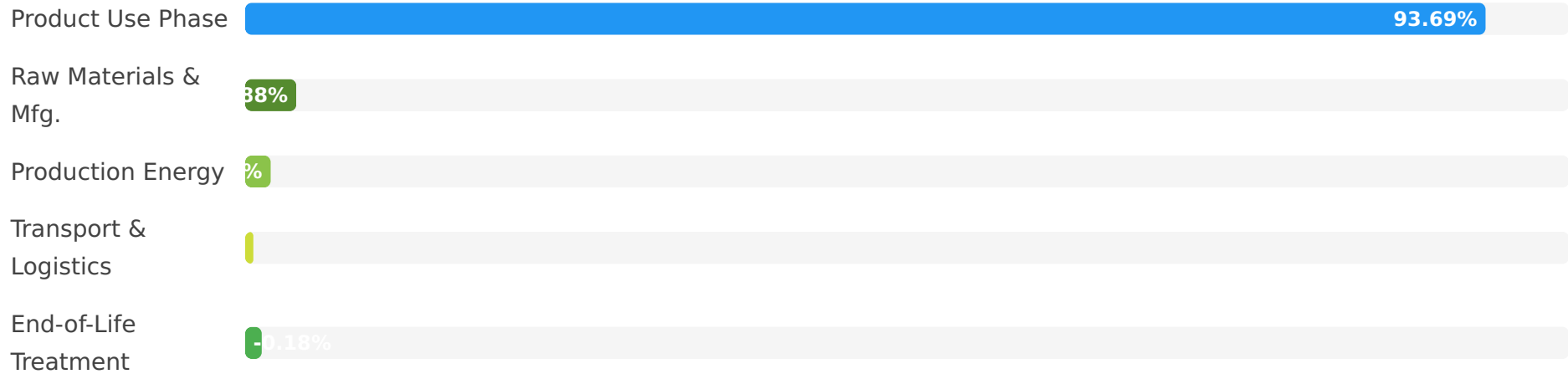
4.00 kg CO2e

Primary Emission Scope

Scope 3

Use Phase (93.69%)

Lifecycle Emission Breakdown



Top Material Carbon Impact



*Bar widths represent impact relative to the total material carbon footprint of 6.21 kg CO2e.

Key Emission Highlights

- The **Use Phase** is the dominant emission hotspot, accounting for an overwhelming 93.69% of the total product carbon footprint, primarily due to energy consumption over the product's lifespan.
- **Raw Materials & Manufacturing** (3.88%) is the second most significant contributor, with Aluminum Casing being the largest single material impact (4.00 kg CO₂e) within this category.
- The **End-of-Life Treatment** stage provides a net carbon credit (-0.18%) due to the high recyclability (70%) of the product and associated recycling benefits.

Strategic Recommendations to Reduce Footprint

- **Optimize Use Phase Energy Efficiency:** Focus on redesigning for lower energy consumption during product use and educate end-users on efficient operating practices.
- **Enhance Sustainable Sourcing:** Engage actively with material suppliers to source lower-carbon alternatives and gather primary data for a more accurate assessment of upstream impacts.
- **Expand Renewable Energy in Production:** Increase the proportion of renewable energy utilized in manufacturing facilities to further reduce Scope 2 emissions.
- **Strengthen Circular Economy Initiatives:** Explore opportunities to increase recyclability beyond 70% or implement robust repair/refurbishment programs to maximize End-of-Life benefits.

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