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Product Carbon Footprint Analysis: pglyivrfjt

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Total PCF: 36.02 kg CO₂e

Total Footprint

36.02 kg CO2e

for 1.0 unit of pglyivrfjt

Carbon Intensity

36.02 kg CO2e/unit

Adheres to GHG Protocol Standard

Top Material Hotspot

Aluminum Casing

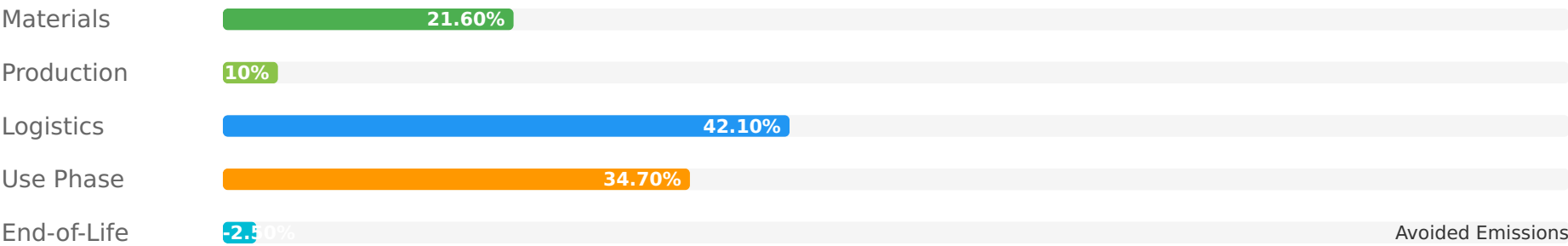
3.50 kg CO2e (21.60% of materials)

Primary Emission Source

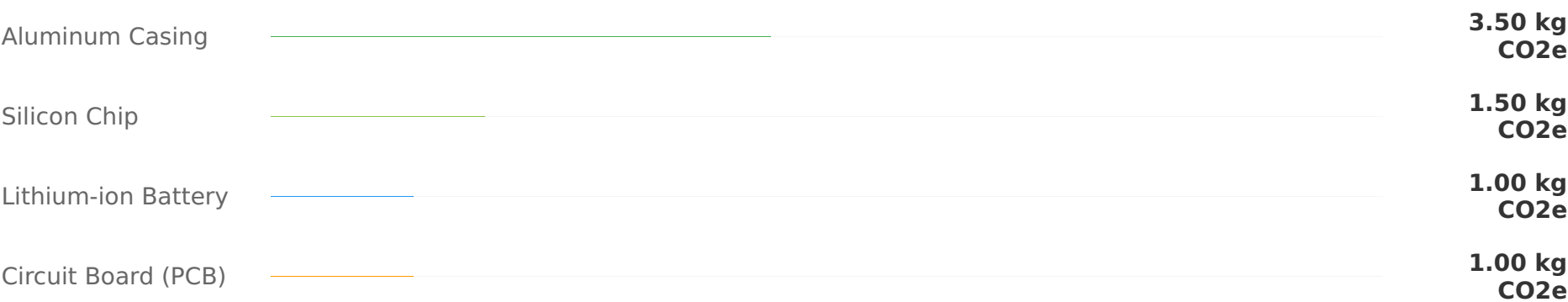
Last-Mile Delivery

15.00 kg CO2e (41.64% of total PCF)

Lifecycle Stage Breakdown



Top Material Carbon Impact



Highlights & Key Insights

- **Last-Mile Delivery is the dominant hotspot (41.64%)**, largely due to dedicated product delivery over the last mile, warranting significant investigation into optimization strategies.
- **Use Phase Energy Consumption (34.70%)** is the second largest contributor, emphasizing the importance of improving product energy efficiency and promoting renewable energy use by end-users.
- **Raw Materials (21.60%)**, particularly high-impact items like Aluminum Casing (3.50 kg CO₂e), Semiconductor Fabrication, and Battery Production, represent a substantial upstream impact.
- The report confirms **net avoided emissions at the End-of-Life stage (-2.50%)**, reflecting positive impacts from implemented recyclability and circular/take-back programs.

Action Plan: How to Reduce Carbon Footprint

- 1. Optimize Last-Mile Logistics:** Focus on fleet electrification, route optimization, and exploring alternative delivery methods to drastically cut emissions from this primary source.
- 1. Enhance Product Energy Efficiency:** Design future iterations of pglyivrfjt for lower power consumption throughout its lifespan and educate users on responsible energy use.
- 1. Decarbonize Material Sourcing:** Prioritize the procurement of lower-carbon materials, increase recycled content, and actively engage with suppliers to support their decarbonization efforts.
- 1. Strengthen Circular Economy Initiatives:** Expand existing take-back schemes, aim for higher recyclability percentages, and consider product-as-a-service models to maximize material recovery and reuse.