

Product Carbon Footprint Summary

Product: **pmdgkxlozk** | Company: **ixqnfryukm**

235.616 kgCO₂e

carboncalcpf.com

Total Footprint

235.616 kgCO₂e

Carbon Intensity

235.616 kgCO₂e/unit

Top Material Hotspot

Aluminum Casing

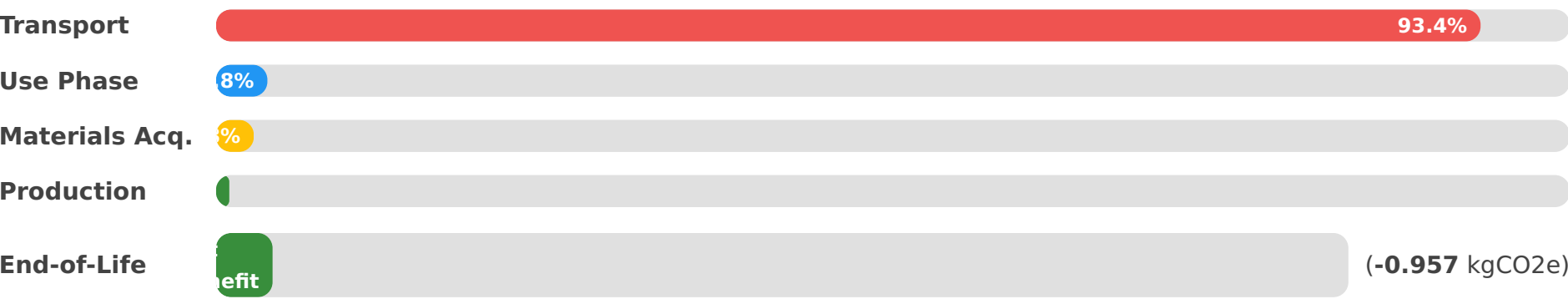
4.00 kgCO₂e of 6.55 kgCO₂e material carbon

Primary Emission Scope

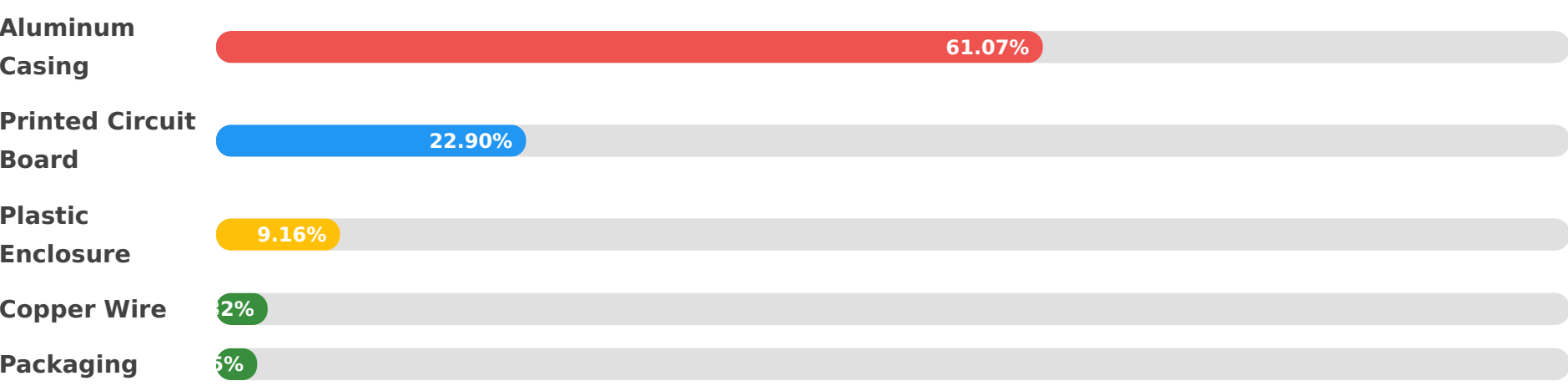
Scope 3 (Value Chain)

Detailed Emissions Breakdown

Lifecycle Stage Contribution



Material Carbon Impact



Key Findings & Highlights

- **Downstream Transport Dominance:** The downstream transport phase accounts for a staggering 93.4% of the total product carbon footprint, identifying it as the critical emission hotspot.
- **Materials & Use Phase:** Material acquisition (2.8%) and the product's use phase (3.8%) are the next significant contributors, warranting attention for reduction strategies.
- **Circular Economy Benefits:** End-of-Life processes, particularly due to robust recycling and take-back programs, show a net negative emission (-0.957 kgCO₂e), indicating a positive environmental benefit from circularity efforts.

Recommendations for Emissions Reduction

- **Optimize Logistics:**

- Explore lower-emission transport modes (e.g., rail, sea freight) for long-haul distances.
- Optimize load factors and routing for both main and last-mile delivery.
- Investigate localizing aspects of the supply chain to reduce overall transport distances.

- **Sustainable Material Sourcing:**

- Prioritize materials with lower embodied carbon (e.g., recycled aluminum or plastics).
- Engage with suppliers to encourage renewable energy in their manufacturing processes.
- Explore innovative, bio-based, or less carbon-intensive materials.

- **Enhance Energy Efficiency in Use:**

- Develop more energy-efficient product designs.
- Educate consumers on efficient product usage.

- **Strengthen Circularity:**

- Expand and promote existing take-back and recycling programs.
- Design products for easier disassembly, repairability, and higher recyclability.