Product Carbon Footprint for Imnohovgpi

Report by carboncalcpcf.com

17.52 kgCO2e

Total Product Footprint

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17.52

kgCO2e per unit

Carbon Intensity

17.52

kgCO2e / unit

Top Material Hotspot

Aluminium Casing

3.50 kgCO2e

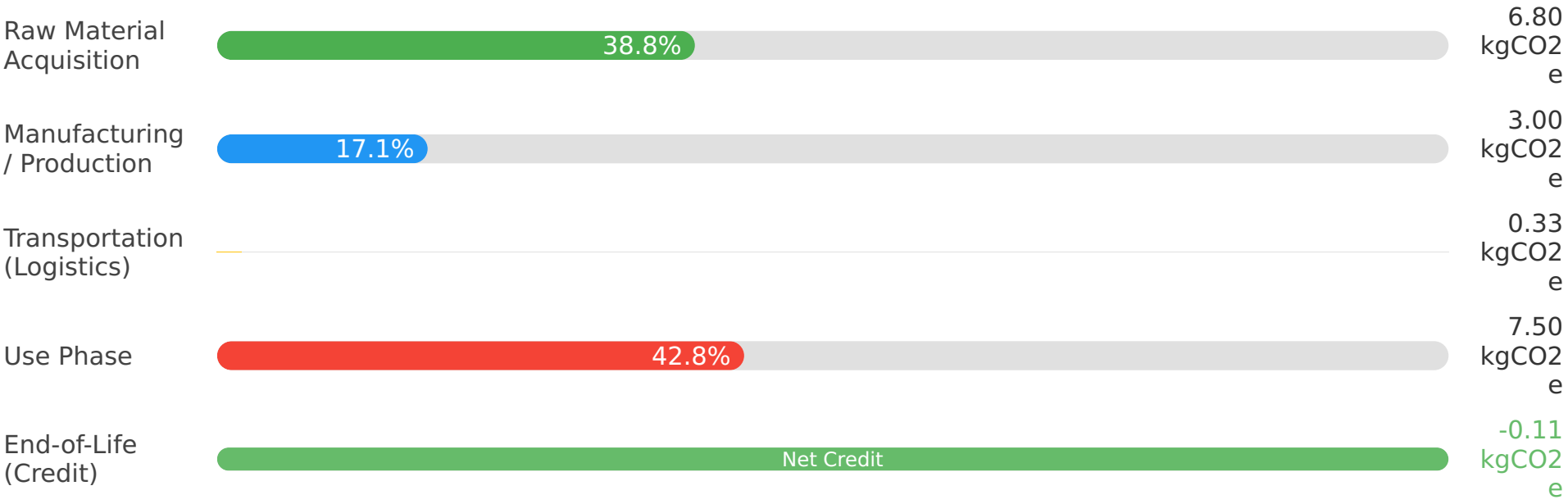
Primary Emission Scope

Scope 3

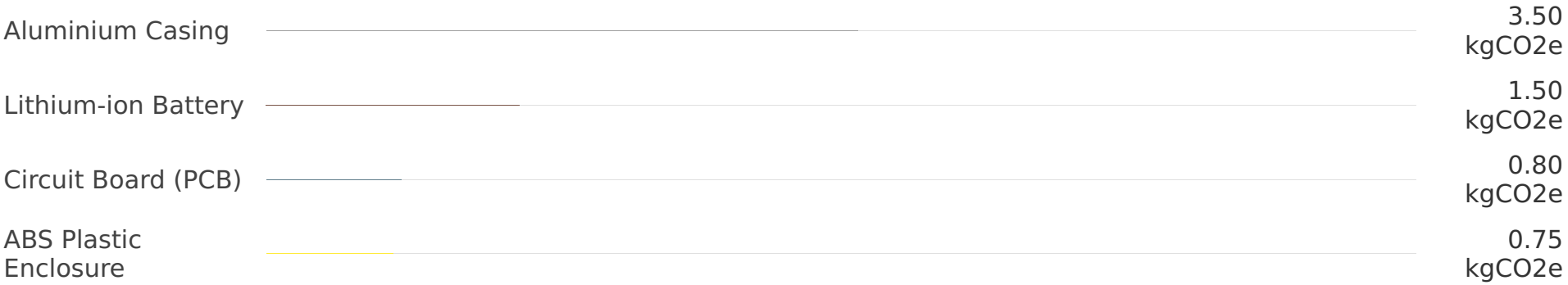
14.52 kgCO2e (82.9%)

Detailed Footprint Analysis

Lifecycle Stage Breakdown



Top Material Carbon Impact



Key Insights & Hotspots

- **Use Phase Dominance:** The product's energy consumption during its 5-year illustrative lifespan accounts for 42.8% of the total footprint, highlighting the need for energy-efficient design.
- **Material Embodied Carbon:** Raw material acquisition, especially Aluminium and Lithium-ion batteries, contributes 38.8%, emphasizing sustainable sourcing and material optimization.
- **Manufacturing Emissions:** Despite assumed renewable energy, the Chinese production facility's energy consumption remains a significant hotspot (17.1%), requiring increased green energy adoption.

Recommendations for Reduction

- **Optimize Product Design:** Focus on reducing use phase energy and integrating higher percentages of recycled or lower-impact materials.
- **Engage Supply Chain:** Collaborate with suppliers for primary data and encourage their transition to renewable energy sources.
- **Enhance Operational Efficiency:** Invest in energy efficiency measures and increase renewable energy procurement at the manufacturing facility.
- **Strengthen Circular Economy:** Continue expanding circular/take-back programs and design for disassembly/repair to extend product lifespan.