

Product Carbon Footprint Dashboard

carboncalcpcf.com

Detailed PCF Analysis for **dohgswekuk** by kindinfhmik

Total Carbon Footprint:

88.00 kg CO₂e

Functional Unit:

1.0 unit

System Boundary:

Cradle-to-Grave

Total Footprint

88.00 kg CO₂e

Net emissions across full lifecycle

Carbon Intensity

88.00 kg CO₂e/unit

Emissions per functional unit

Top Material Hotspot

Aluminum Alloy

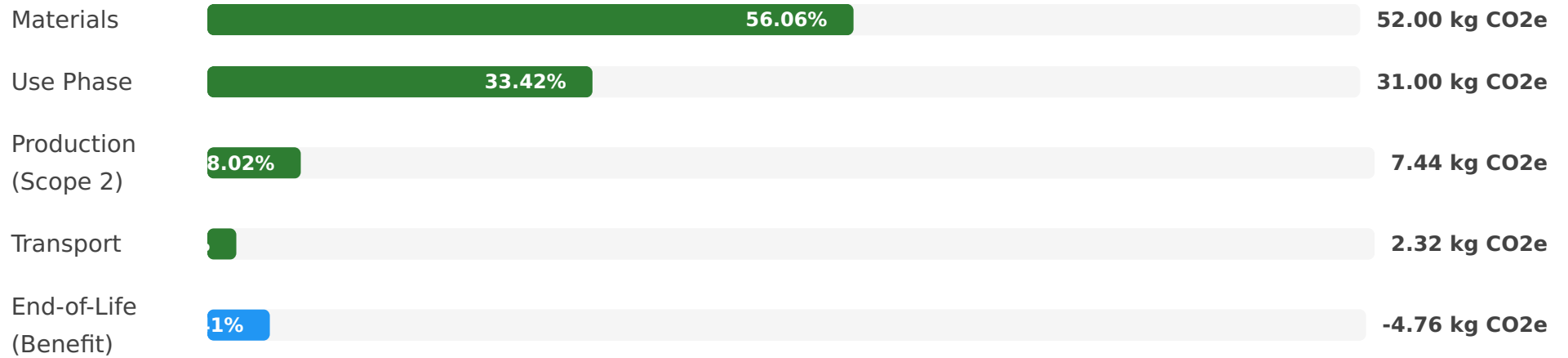
35.0 kg CO₂e contribution

Primary Emission Scope

Scope 3

Value Chain emissions dominate

Lifecycle Stage Breakdown



Material Carbon Impact



Based on total material emissions of 52.0 kg CO2e.

Key Emission Hotspots

- Materials Acquisition & Pre-processing (52.00 kg CO₂e) is the largest contributor, primarily due to aluminum alloy.
- The Use Phase (31.00 kg CO₂e) represents a significant portion of the total footprint due to product energy consumption over its lifespan.
- The End-of-Life stage provides a net carbon benefit (-4.76 kg CO₂e) due to high recyclability and the company's take-back program.

Recommendations for Reduction

- **Material Optimization:** Explore lighter-weight alternatives, increase recycled content, or design for reduced material usage, especially for aluminum.
- **Energy Efficiency in Use:** Investigate design improvements or smart energy management features to lower the product's energy consumption during its lifespan.
- **Renewable Energy Expansion:** Further increase the percentage of renewable energy sources utilized in the production facility to minimize Scope 2 emissions.
- **Supply Chain Engagement:** Collaborate with upstream suppliers to identify and implement strategies for reducing their emissions related to components and raw materials.