

html

Product Carbon Footprint Dashboard

evtqulrein by carboncalcpcf.com

Total PCF: **53.9 kg CO2e** per unit

Key Metrics

Total Footprint

53.9 kg CO₂e

Carbon Intensity

53.9 kg CO₂e/unit

Top Material Hotspot

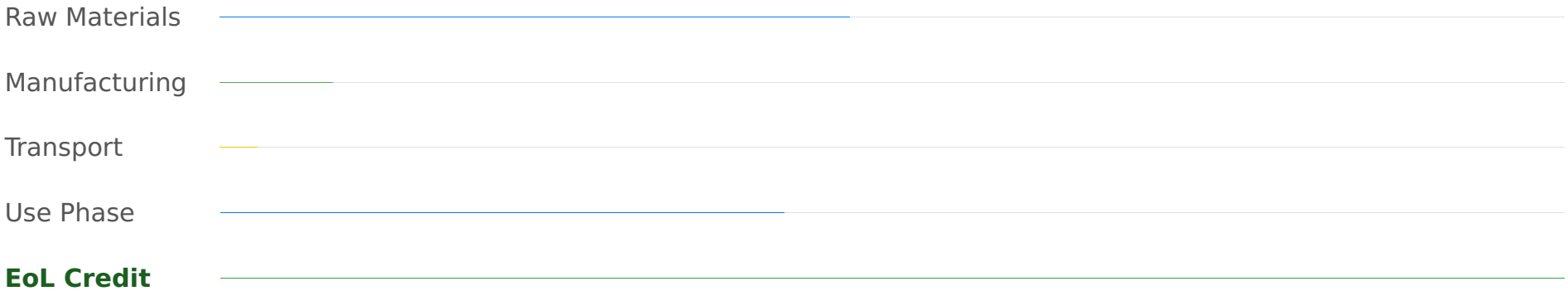
Steel (20.0 kg CO₂e)

Primary Emission Scope

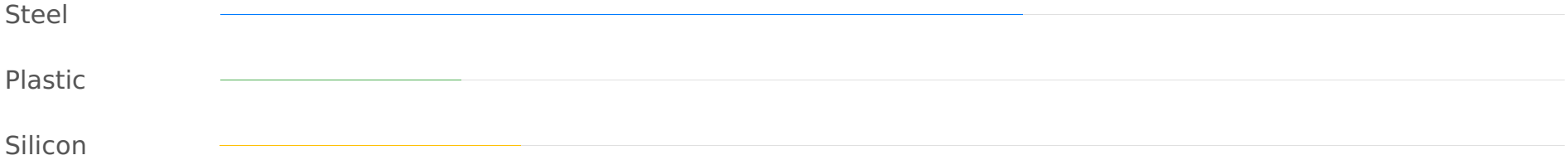
Scope 3 (48.0 kg CO₂e)

Emission Breakdown

Lifecycle Stage Contribution (Positive Emissions)



Material Carbon Impact (Raw Materials)



Highlights & Emission Hotspots

Raw Material Acquisition & Processing is the largest single contributor, accounting for 33.5 kg CO2e, highlighting the critical need for sustainable material sourcing and design.

The **Use Phase** contributes a significant 30.0 kg CO2e over the product's 5-year lifespan, indicating major opportunities for improving energy efficiency during product operation.

While a 60% renewable energy usage is present, **Manufacturing/Production** still adds 6.0 kg CO2e, suggesting further potential for decarbonization through process optimization and increased renewable energy adoption.

Recommended Action Plan

Material Optimization: Explore alternative materials with inherently lower carbon footprints or engage with suppliers committed to highly decarbonized production processes for key components like steel, plastic, and silicon.

Energy Efficiency in Use: Implement design improvements focused on reducing the product's energy consumption throughout its operational lifespan and develop user awareness campaigns to promote sustainable product use.

Manufacturing Decarbonization: Actively work towards increasing the percentage of renewable energy utilized in the production facility beyond the current 60% and continuously optimize manufacturing processes to reduce overall energy intensity.

Logistics Optimization: Strategically optimize transport routes, evaluate and integrate lower-emission transport modes where feasible (e.g., rail for longer distances), and explore opportunities for consolidating shipments to minimize transport-related emissions.

Strengthen Circularity: Fully leverage existing circular/take-back programs to further increase actual recycling rates and investigate additional opportunities for product repair, refurbishment, or remanufacturing to extend product lifespans and significantly minimize waste.

