

html

carboncalcpcf.com

Product Carbon Footprint Dashboard

"jimvtprnld"

Total PCF: 34.19 kgCO₂e

34.19 kgCO₂e

Total Footprint

34.19 kgCO₂e/unit

Carbon Intensity

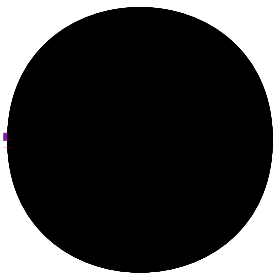
Use Phase

Primary Emission Hotspot

Scope 3

Primary Emission Scope

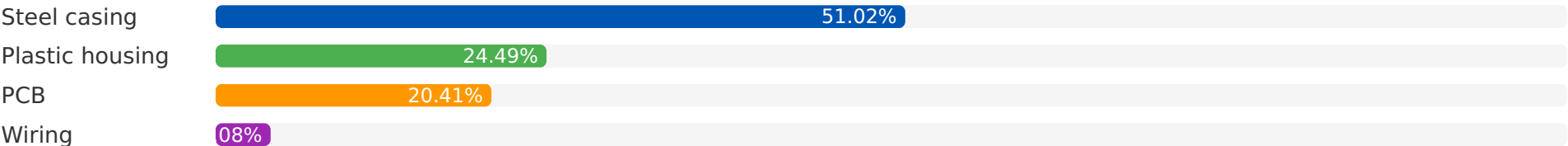
Lifecycle Stage Breakdown



87.75%

- Use Phase: 30.0 kgCO2e (87.75%)
- Materials Acquisition: 2.45 kgCO2e (7.17%)
- Production: 1.44 kgCO2e (4.22%)
- Transportation: 0.29 kgCO2e (0.83%)
- End-of-Life: 0.01 kgCO2e (0.03%)

Material Carbon Impact



Based on a subtotal of 2.45 kgCO2e for materials.

Key Emission Hotspots

- ✓ **Use Phase Dominance:** The product's energy consumption during its 5-year lifespan accounts for ~87.7% of the total PCF, making it the most significant contributor.
- ✓ **Material Impact:** Raw materials, particularly steel casing and plastic housing, contribute ~7.2% of the total carbon footprint.
- ✓ **Production Emissions:** Non-renewable electricity usage during manufacturing contributes ~4.2% to the overall PCF.

Recommended Actions for Reduction

- ✓ **Enhance Use Phase Efficiency:** Focus on product design innovations to drastically reduce energy consumption and promote renewable energy use by end-users.
- ✓ **Decarbonize Production:** Increase the share of renewable energy at manufacturing facilities beyond 75% to further reduce Scope 2 emissions.
- ✓ **Optimize Material Sourcing:** Explore and integrate lower-carbon materials or those with higher recycled content in the Bill of Materials.
- ✓ **Strengthen Circular Economy:** Expand take-back programs to maximize material recovery and minimize waste.