

carboncalcpcf.com

BYD Atto 3 Essential 2025 Carbon Footprint

Product Carbon Footprint Analysis (Factory-Gate)

Total PCF: 12,470.85 kg CO₂e

Total Footprint

12,470.85

kg CO₂e

Carbon Intensity

7.13

kg CO₂e / kg vehicle

Top Material Hotspot

LFP Battery

~43.7% of total

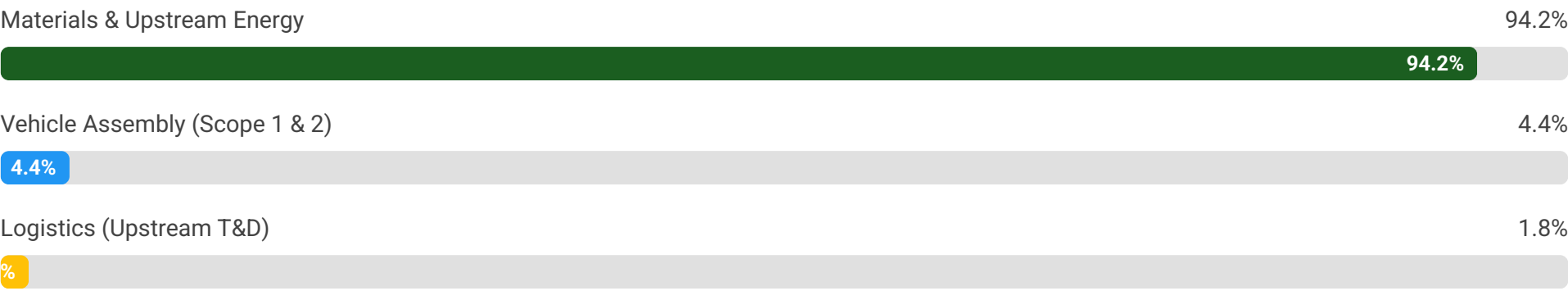
Primary Emission Scope

Scope 3

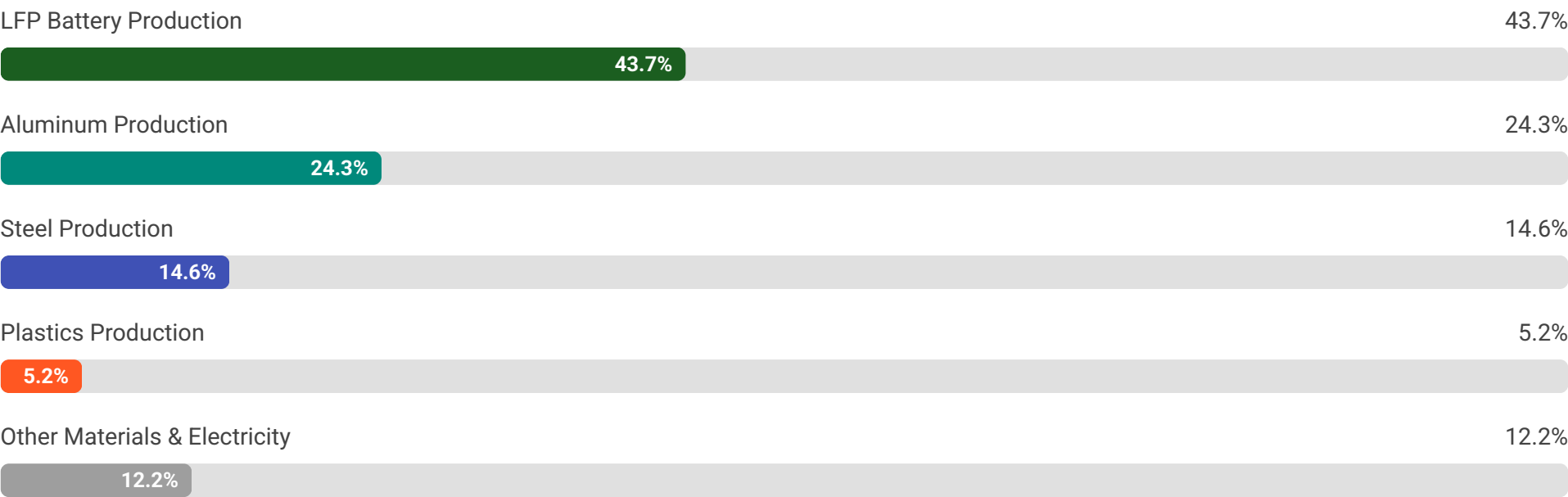
Upstream Value Chain

Emission Breakdown

Lifecycle Stage Contribution (Factory-Gate)



Key Material Carbon Impact



Key Insights

- LFP Battery production is the dominant emission hotspot, contributing ~43.7% of the total factory-gate PCF.
- Primary Aluminum and Steel production together account for a significant ~38.9% of emissions due to their energy-intensive manufacturing processes.
- The vast majority of emissions (Scope 3) arise from upstream material manufacturing, highlighting supply chain decarbonization as a critical focus area.

Recommendations for Reduction

- ✓ Prioritize sourcing from suppliers committed to using renewable energy in battery cell and material production.
- ✓ Seek out "green" aluminum and steel producers utilizing clean energy sources (e.g., hydropower, electric arc furnaces with renewables) or carbon capture technologies.
- ✓ Transition the final vehicle assembly plant in China to 100% renewable electricity to reduce Scope 2 emissions.
- ✓ Enhance supply chain transparency through direct collaboration with Tier 1 and Tier 2 suppliers for primary data collection.