

html

Product Carbon Footprint Dashboard

For Product: tnsynylewv - by carboncalcpcf.com

30.39 kg CO₂e

Total Illustrative PCF

Total Carbon Footprint

30.39 kg CO₂e

Carbon Intensity

30.39 kg CO₂e / unit

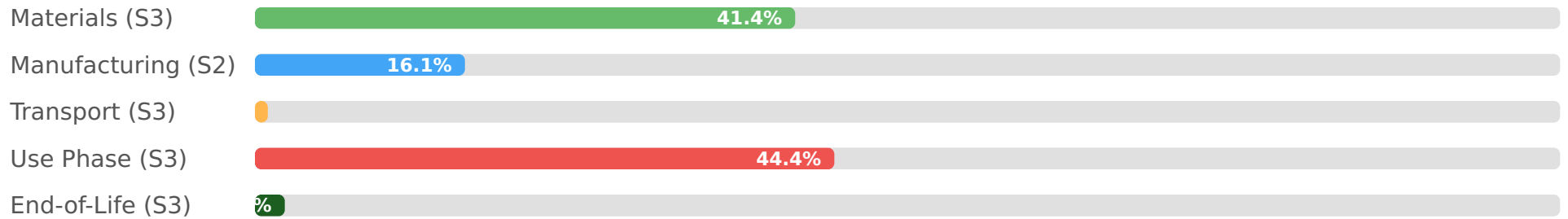
Top Material Hotspot

Aluminum Casing (5.0 kg CO₂e)

Primary Emission Scope

Scope 3 (Upstream & Downstream)

Emissions by Lifecycle Stage



Material Carbon Impact



Highlights & Hotspots

- Raw Material Extraction & Processing accounts for 41.4% of the total footprint, primarily from high-impact materials like Aluminum and the Battery Pack.
- The Use Phase is the single largest contributor at 44.4%, driven by the product's 5-year lifespan and annual energy consumption.
- Manufacturing contributes 16.1%, indicating opportunities for further decarbonization of energy sources and process optimization.

Recommendations for Reduction

- **Material Optimization:** Explore lighter-weight, recycled content, or lower embodied carbon materials (e.g., for aluminum casing, battery, circuit board).
- **Manufacturing Efficiency:** Increase renewable energy usage in production and optimize processes to reduce energy intensity.
- **Use Phase Efficiency:** Design for enhanced energy efficiency during operation and promote energy-saving modes for end-users.
- **Circular Economy:** Strengthen take-back programs and improve design for disassembly/repairability to boost recycling rates.