

Product Carbon Footprint Dashboard

Analysis for: **kkipyexuud**

37.525 kg CO₂e
Total PCF (Cradle-to-Grave)

carboncalcpcf.com

Product

kkipyexuud

Carbon Intensity

37.525 kg CO2e/unit

Top Material Hotspot

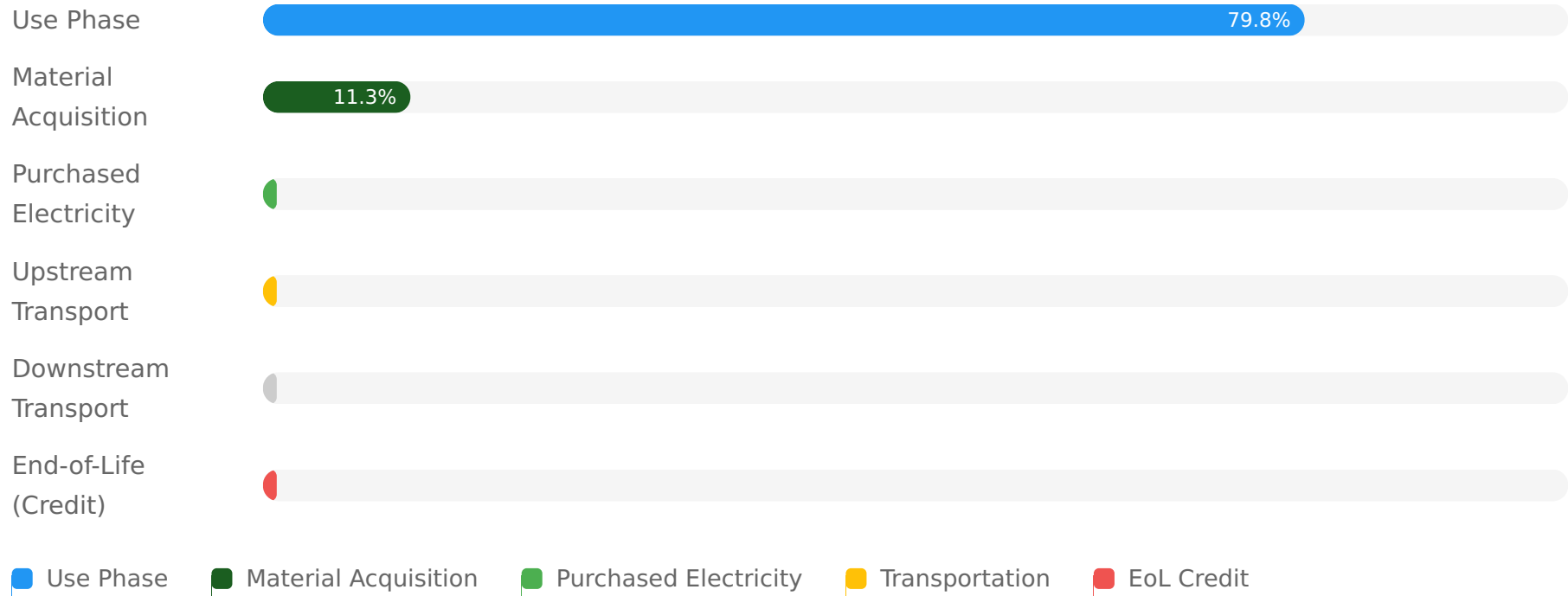
Circuit Board (PCB)

Primary Emission Scope

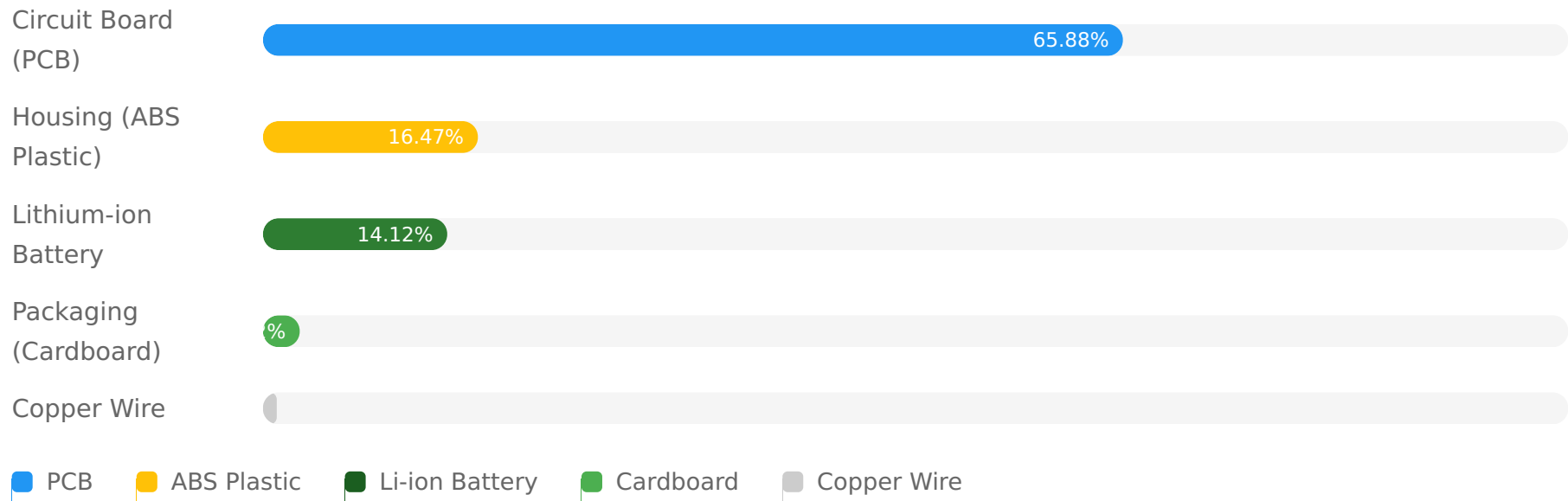
Scope 3 (Use Phase)

Emissions Breakdown

Lifecycle Stage Contribution



Material Carbon Impact (Subtotal: 4.25 kg CO2e)



Key Insights

- The **Use Phase** accounts for the largest portion (79.8%) of the product's carbon footprint, driven by its 5-year operational lifespan and energy consumption.
- **Material Acquisition** is the second most significant hotspot (11.3%), with the Circuit Board (PCB) being the primary contributor within materials.
- Purchased electricity for manufacturing contributes 1.0% to the total PCF, despite 75% renewable energy usage.

Recommendations for Reduction

1. Invest in R&D to significantly reduce the operational energy consumption of kklpyexuud through more efficient components or intelligent power management.
2. Explore alternative materials with lower embodied carbon and increase the use of recycled content beyond current levels for components like the Circuit Board and ABS plastic.
3. Further develop and promote the existing take-back programs to maximize material recovery and explore opportunities for product refurbishment or remanufacturing.
4. Continue to increase the reliance on renewable energy sources in manufacturing operations and throughout the supply chain.
5. Investigate opportunities to optimize logistics, potentially consolidating shipments or exploring lower-emission transport modes where feasible.