Carbon Footprint Dashboard: yezezthndg

Detailed PCF Analysis by kuhjghrkuo, adhering to GHG Protocol

Total Product Carbon Footprint:	**22.68 kgCO2e**
System Boundary:	**factory_gate (extended)**
Production Country:	**China**

Total Product Footprint

22.68 kgCO2e

Per 1.0 unit of yezezthndg

Carbon Intensity

22.68 kgCO2e/unit

Equivalent to the total PCF for the functional unit.

Primary Emission Scope

Scope 3 (96.69%)

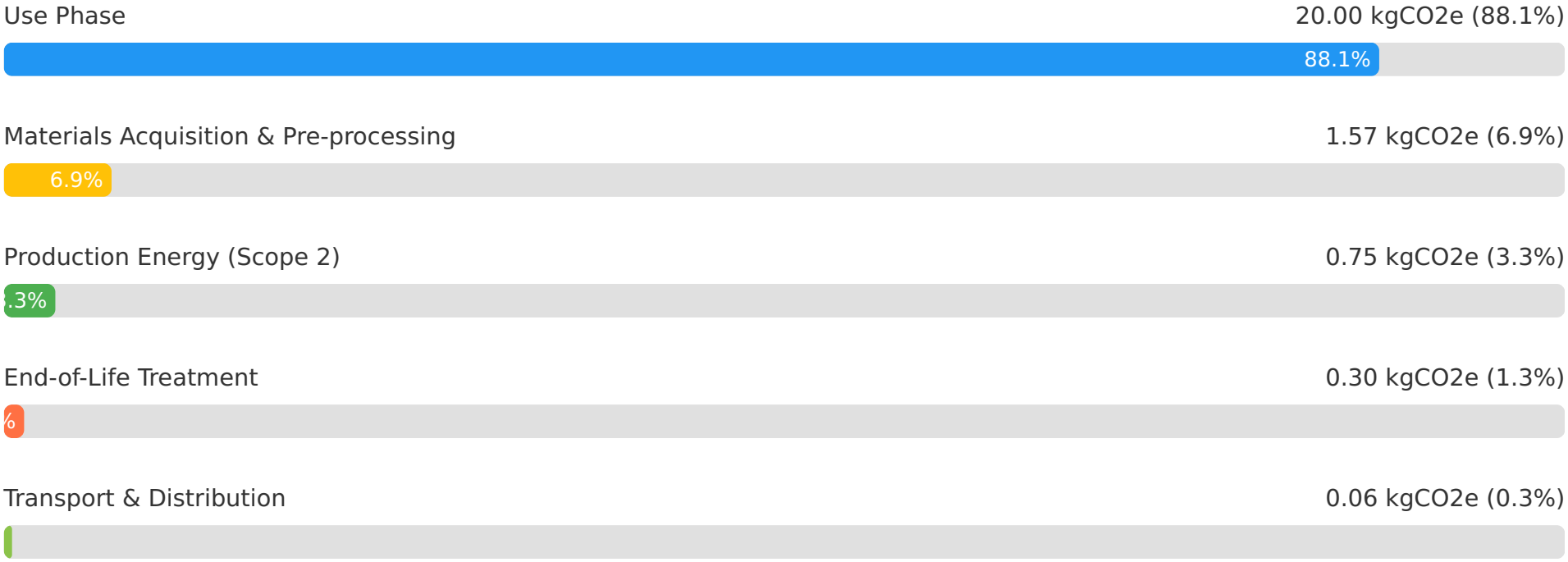
Emissions from the value chain, dominated by Use Phase.

Top Material Hotspot

Internal Circuitry (0.50 kgCO2e)

Along with Body Casing, these are key material impacts.

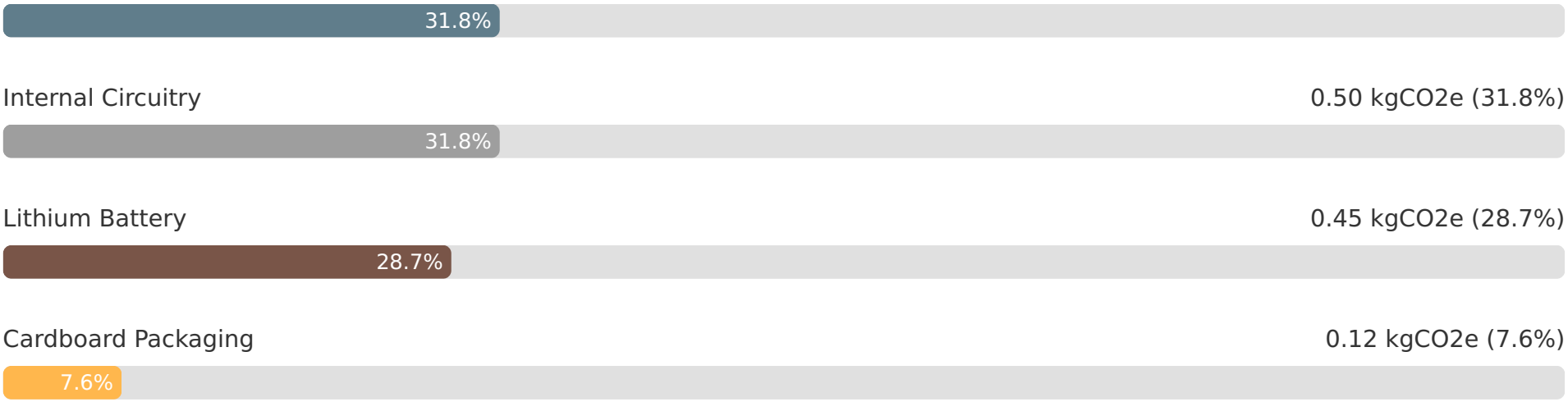
Emissions Breakdown by Lifecycle Stage



Material Carbon Impact Breakdown

Relative impact within the Materials Acquisition & Pre-processing stage (Total: 1.57 kgCO2e).

Body Casing 0.50 kgCO2e (31.8%)



Key Highlights

- The **Use Phase** accounts for a staggering 88.1% of the total product carbon footprint, making it the primary hotspot for reduction efforts.
- **Scope 3 emissions** dominate, representing 96.69% of the total PCF, underscoring the importance of value chain engagement and supplier collaboration.
- **Materials Acquisition**, particularly for Internal Circuitry and Body Casing, is the second largest contributor (6.9% of total PCF).

Recommendations for Carbon Reduction

1. **Optimize Use Phase Efficiency:** Focus on designing yezezthndg for ultra-low energy consumption during its lifespan. Explore low-power modes, extend battery life, and provide clear user guidance on energy-efficient operation.
2. **Sustainable Material Sourcing:** Investigate opportunities to source lower-carbon alternatives for components identified as hotspots, such as internal circuitry and batteries. Engage with suppliers to improve their own emission profiles and explore recycled content for plastic casings.
3. **Enhance Renewable Energy Adoption:** Continue efforts to increase renewable energy usage in manufacturing beyond 75%. Explore Power Purchase Agreements (PPAs) for 100% renewable electricity or invest in on-site renewable energy generation.
4. **Improve Logistics Efficiency:** Optimize transport routes, explore more efficient transport modes (e.g., rail or sea for bulk shipments where feasible, given the "Europe Focused" supply chain), and collaborate with logistics providers to reduce their emissions intensity.
5. **Strengthen Circular Economy Initiatives:** Expand and promote the company-led take-back program to maximize product collection and ensure high-quality recycling or refurbishment. Explore design-for-disassembly to facilitate material recovery.
6. **Implement LSR Data Collection:** For future PCF analyses, especially with the 2027 effective date for the LSR Standard, initiate data collection on land-use impacts within the supply chain for relevant materials.