The user wants a single-file HTML dashboard that summarizes a detailed carbon footprint report. I need to extract key data from the provided HTML, design a modern, interactive-looking dashboard with specific colors and layout, and include conceptual SVG/CSS charts, key metrics, insights, and an action plan. All styles must be internal and scoped. Here's the data extracted from the report: **Product Details:** * **Product:** Smart Home Hub (from report) / qzfzrszfid (from prompt) - I will use "Smart Home Hub (qzfzrszfid)" for clarity. * **Quantity:** 1.0 unit * **System Boundary:** Cradle-to-grave, "factory_gate" * **Production Country:** China * **Standard:** GHG Protocol Product Standard * **Consultant:** Dr. David Green * **Company:** EcoTech Solutions * **Total Product Weight:** 0.77 kg **Key Carbon Footprint Findings:** * **Total PCF:** 22.0185 kg CO2e * **Carbon Intensity:** 22.0185 kg CO2e / 0.77 kg = 28.595 kg CO2e/kg (approx) **Lifecycle Stage Breakdown:** * Materials Acquisition & Pre-processing (Scope 3 - Upstream): 3.0900 kg CO2e (14.03%) * Production Phase (Scope 2): 4.9640 kg CO2e (22.54%) * Transportation & Distribution (Scope 3 - Upstream & Downstream): 0.4472 kg CO2e (2.03%) * Use Phase (Scope 3 - Downstream): 13.5000 kg CO2e (61.31%) * End-of-Life (Scope 3 - Downstream): 0.0173 kg CO2e (0.08%) **Material Hotspots (from total material emissions 3.09 kg CO2e):** * Plastic Casing: 1.25 kg CO2e (40.45%) * Circuit Board: 1.50 kg CO2e (48.54%) * Copper Wiring: 0.16 kg CO2e (5.18%) * Packaging Cardboard: 0.18 kg CO2e (5.83%) **Primary Emission Scope:** Scope 3 (due to Use Phase being the largest contributor) **Top Material Hotspot:** Circuit Board (1.50 kg CO2e) **Highlights (from "Hotspots and Reliability"):** 1. Use Phase is the largest contributor (13.50 kg CO2e), emphasizing energy efficiency. 2. Production Phase (4.964 kg CO2e) is significant due to grid electricity from China. 3. Materials Acquisition (3.09 kg CO2e), especially Circuit Board and Plastic Casing, is notable. **Recommendations/Action Plan (from "Recommendations"):** 1. Enhance Use Phase Efficiency: Engineer for lower energy consumption, smart power management. 2. Decarbonize Production Energy: Invest further in direct renewable energy procurement for manufacturing facilities. 3. Optimize Material Selection: Investigate alternative materials with lower embodied carbon, explore recycled content. 4. Improve Logistics Efficiency: Optimize routes, maximize load factors, explore lower-emission transport. 5. Promote Circularity: Strengthen take-back/ refurbishment programs, communicate recyclability. Now, I will generate the HTML dashboard based on these extracted details and the specified design requirements. html

carboncalcpcf.com

Product Carbon Footprint Dashboard

Smart Home Hub (qzfzrszfid)

22.02 kg CO_2e

Total Cradle-to-Grave PCF for 1.0 unit

Total Footprint

22.02 kg CO_2e

Carbon Intensity

28.60 kg CO_2e/kg

Top Material Hotspot

Circuit Board

Primary Emission Scope

Scope 3 (Use Phase)

Emission Breakdown

Lifecycle Stage Breakdown (Total: 22.02 kg CO_2e)

Materials Acquisition	3.09 kg CO_2e (14.03%)
Production Phase	4.96 kg CO_2e (22.54%)
Transportation & Distribution	0.45 kg CO_2e (2.03%)
Use Phase	13.50 kg CO_2e (61.31%)
End-of-Life	0.02 kg CO_2e (0.08%)

Material Carbon Impact (Total: 3.09 kg CO_2e)

Circuit Board	1.50 kg CO_2e (48.54%)
Plastic Casing	1.25 kg CO_2e (40.45%)
Packaging Cardboard	0.18 kg CO_2e (5.83%)
Copper Wiring	0.16 kg CO_2e (5.18%)

Key Highlights & Hotspots

- ✓ The **Use Phase** accounts for the largest share (61.31%) of the product's carbon footprint, driven by electricity consumption over its 5-year lifespan.
- ✓ **Production Phase** is the second-largest contributor (22.54%), mainly due to non-renewable energy sources in China's manufacturing grid despite 60% renewable usage.
- ✓ **Materials Acquisition**, particularly the Circuit Board and Plastic Casing, represents a significant embodied carbon impact (14.03%).

Recommendations for Reduction

- ⚙ **Enhance Use Phase Efficiency:** Focus on lower energy consumption, smart power management features, and user guidance.
- ⚙ **Decarbonize Production Energy:** Increase direct renewable energy procurement or credits for manufacturing facilities in China.
- ⚙ **Optimize Material Selection:** Investigate lower embodied carbon alternatives and explore higher recycled content for components.
- ⚙ **Improve Logistics Efficiency:** Partner with logistics providers to optimize routes, maximize load factors, and explore greener transport modes.
- ⚙ **Promote Circularity:** Strengthen product take-back and refurbishment programs, leveraging the 85% recyclability.