

Project Phoenix: Community Plastic-to-Building Initiative

A 12-Month Action Plan for Pilot Deployment

Vision

To create a scalable, community-led circular economy that converts plastic waste into affordable building materials, tackling pollution and housing insecurity simultaneously.

Core Objective for Year 1

Deploy and validate three fully operational, community-owned pilot systems in Lagos, Kano, and Port Harcourt, proving the technical, economic, and social model.

Phase 1: Foundation & Refinement (Months 1-3)

- Technical Finalization: Complete prototype optimization for durability and ease of use. Finalize brick design and solar-thermal press specifications.
- Community Partner Identification: Secure formal partnerships with 3 local NGOs/CBOs in target cities. Jointly select pilot communities.
- Team Assembly: Hire a core project coordinator and a technical field officer.

Phase 2: Pilot Launch & Capacity Building (Months 4-6)

- Local Fabrication & Deployment: Manufacture and install three complete "Phoenix Kits" (solar converter + press) in partnership with local workshops.
- Train-the-Trainer Program: Conduct intensive hands-on training for 3 local teams (5-7 people each) on machine operation, safety, brick production, basic masonry, and cooperative management.
- Waste Stream Logistics: Establish a reliable, hyper-local collection system for mixed plastic waste within each community.

Phase 3: Production & Construction (Months 7-9)

- Brick Production Commences: Teams begin full-scale operation, meeting weekly production targets.
- First Community Structure: Each community democratically selects and co-designs its first build (e.g., a market stall, a classroom block, a community hall).
- Data Collection Begins: Systematic monitoring of key metrics: plastic diverted, bricks produced, labor hours, construction progress, and local economic impact.

Phase 4: Validation & Scaling Blueprint (Months 10-12)

- Construction Completion & Inauguration: Formal handover of completed structures to the community.
- Impact Assessment & Viability Report: Analyze all collected data to prove the model's technical, social, and financial viability. Document costs, savings, and social return on investment.
- Open-Source Toolkit v1.0: Create and publicly release a comprehensive digital toolkit containing technical specs, training modules, community governance guides, and a financial model calculator.
- Roadmap for Scale: Develop a clear plan for Year 2, identifying potential partners, funders, and 10 new communities for expansion.