## **DETAILED BUDGET WITH PHASED APPROACH**

# Phase 1 – Biogas Cylinder Plant (₦100,000,000)

S/N	Item	Estimated Cost (N)	Description
1	Infrastructure & Equipment	65,000,000	Fabrication and installation of large-capacity biodigester; compressor and cylinder filling system; initial refillable cylinders.
2	Operations & Logistics	15,000,000	Cylinder transport and distribution setup; safety certification; regulatory permits; storage racks and accessories.
3	Human Capital & Training	10,000,000	Training of plant operators, welders, and cylinder handlers; community training for safe cylinder use and maintenance.
4	Market Development & Monitoring	10,000,000	Branding, awareness campaigns, cooperative engagement, distributor agreements; monitoring and evaluation of adoption.
5	Subtotal Phase 1:	₩100,000,000	

## Phase 2 – Briquette & Stove Commercialization

Rationale: For areas with limited feedstock and/or high logistics costs, where biogas cylinders may be expensive to distribute, briquette production and stove assembly provide a localized, low-cost clean energy option.

S/N	Item	Estimated Cost (₦)	Description
1	Briquette Production Unit	18,000,000	Carbonizer, briquette press, dryers, and packaging line to convert digestate and agro-residues into smokeless briquettes.
2	Stove Assembly Unit	12,000,000	Fabrication tools, raw materials, and assembly of efficient briquette-compatible stoves.
3	Operations & Training	8,000,000	Training of local artisans in stove parts fabrication; assembling training of women's cooperatives in briquette packaging and distribution.
4	Market Pilot & Expansion	7,000,000	Sales and Distribution of briquettes and stoves in select communities; off-take agreements with cooperatives and distributors.
5	Subtotal	<del>N</del> 45,000,000	

### **Grand Total (Phase 1 + Phase 2)**

## ₩145,000,000

#### **Phased Approach:**

- **Phase 1** establishes a commercially viable biogas cylinder plant and generates sustained revenue.
- **Phase 2** expands into briquette and stove commercialization where logistics and/or feedstock availability make gas distribution costly.
- Earnings from Phase 1 will partially finance Phase 2, ensuring scalability and sustainability.