



Lukhanyiso Food & Energy Centre

Lukhanyiso Farmers, IFS Farming and RDLR Department
Welkom, Free State



Overall Objectives

The Lukhanyiso Food & Energy centre is developed to demonstrate:

- Sustainable Integrated Food & Energy production
- The BEE agro-village concept
- Linkages between agri-development and renewable energy production

Sustainability of small-scale BEE farmers going large-scale:

- 90 small-scale BEE farmers
- A central farm
- Joint buying, selling and quality control

Farming is large-scale and standardized !

Developed by Lukhanyiso Farmers PO, IFS Farming and RDLR Department

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The Project Innovations

Innovative construction of small-scale BEE farms

- Livable courtyard farms
- Energy efficient insulated farms

Innovative small-scale BEE farm operation

- Similar market conditions (competing with the big players)
- A sustainable head start
- Innovate organisation and structuring

Innovative linkages to renewable energy production and sales

High beneficiary job creation and skills development impacts

The 90 farms



The Central Farm



The Farming

- 125,000 chickens
- 11,000 pigs
- 1000 ha maize
- 90 ha vegetables



The Infrastructure



Head start = Cost reduction

- **Feed**
- **Electricity**
- **Water**
- **Transport**
- **Biosecurity**



The Development



- **Construction undertaken by 90 beneficiary families creating more than 165 jobs**
- **95% of construction employees are beneficiaries**



The Manufacturing



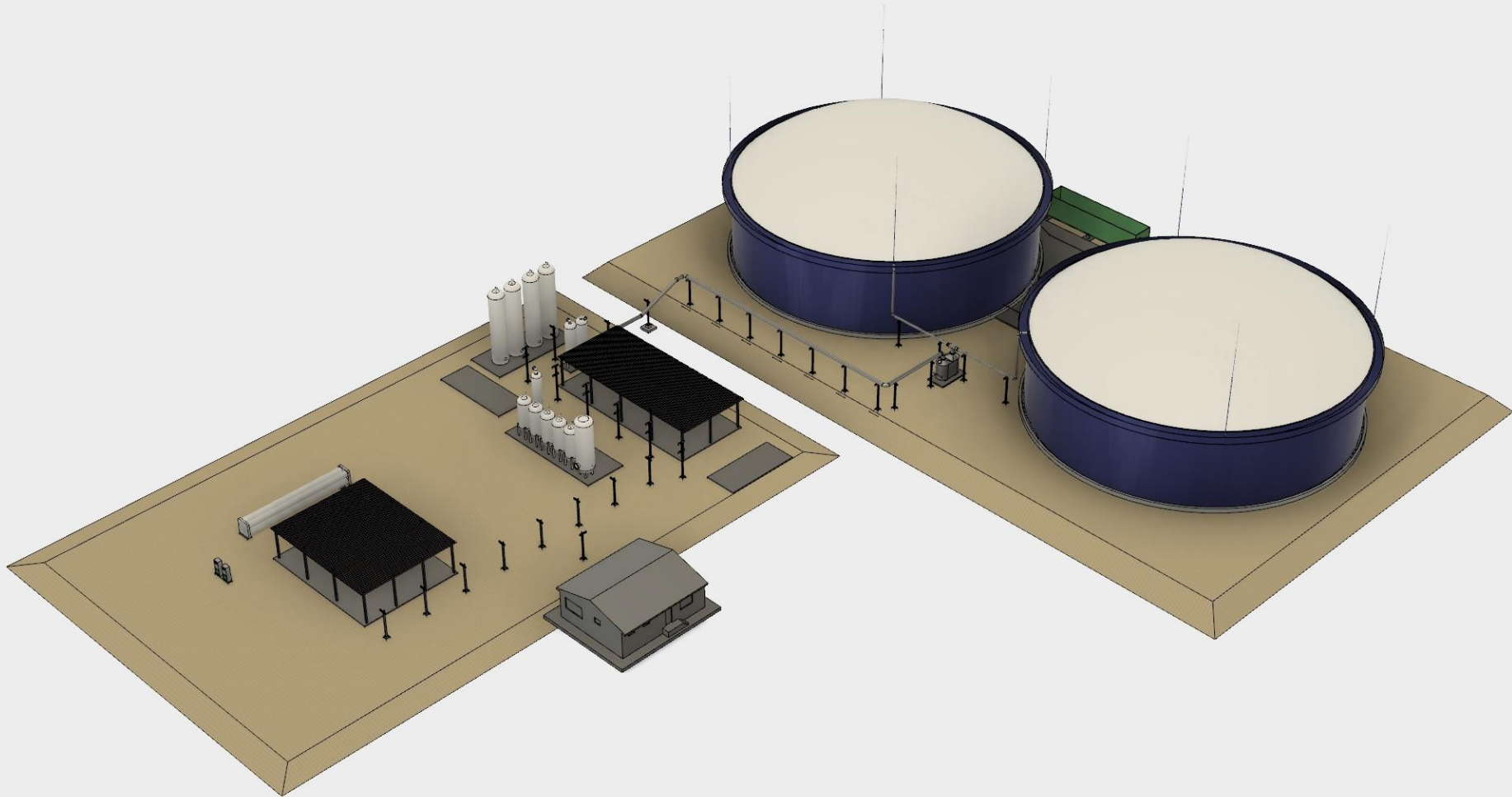
- Manufacturing facility established and staffed locally for production of High Performance Concrete fully insulated panels for house construction



The Energy Component



ENERGY: Lukhanyiso Bio-CNG



172,000 GJ/Annum CNG Production Capacity

Construction of 2 X 7500m³ Digesters & 1500m³/h Gas Treatment System



Project Stats:

Total Investment Cost: R73m

Annual Revenue: R23m

Feedstock Consumption: 64,000 ton/annum



