



ECO-FRIENDLY PORTABLE CNG

Empowering Rural Areas with
Green Energy



Problem

- **Untapped Potential:** Tanzania has vast natural gas reserves, but CNG adoption, especially in rural areas, is extremely low.
- **Rural Reliance on Costly, Higher-Emission Fuels:** Farmers depend on petrol and diesel for critical agricultural machinery, leading to high costs and environmental damage.



Solution

**A small-scale CNG processing and filling system.
Compress and store natural gas in portable
cylinders for use in farm machinery.**

How it works

- **Single-Stage Compressor:** Efficiently compresses natural gas for storage, reducing costs.
- **Gas Drier & Purification:** Cleans the gas, removing moisture and impurities for optimal performance and safety.
- **Metering & Storage System:** Accurately measures and stores gas with built-in safety features (valves, sensors).
- **Portable CNG Cylinders:** Lightweight and durable cylinders for safe storage and easy transport to farms.



Business model

Revenue Streams:

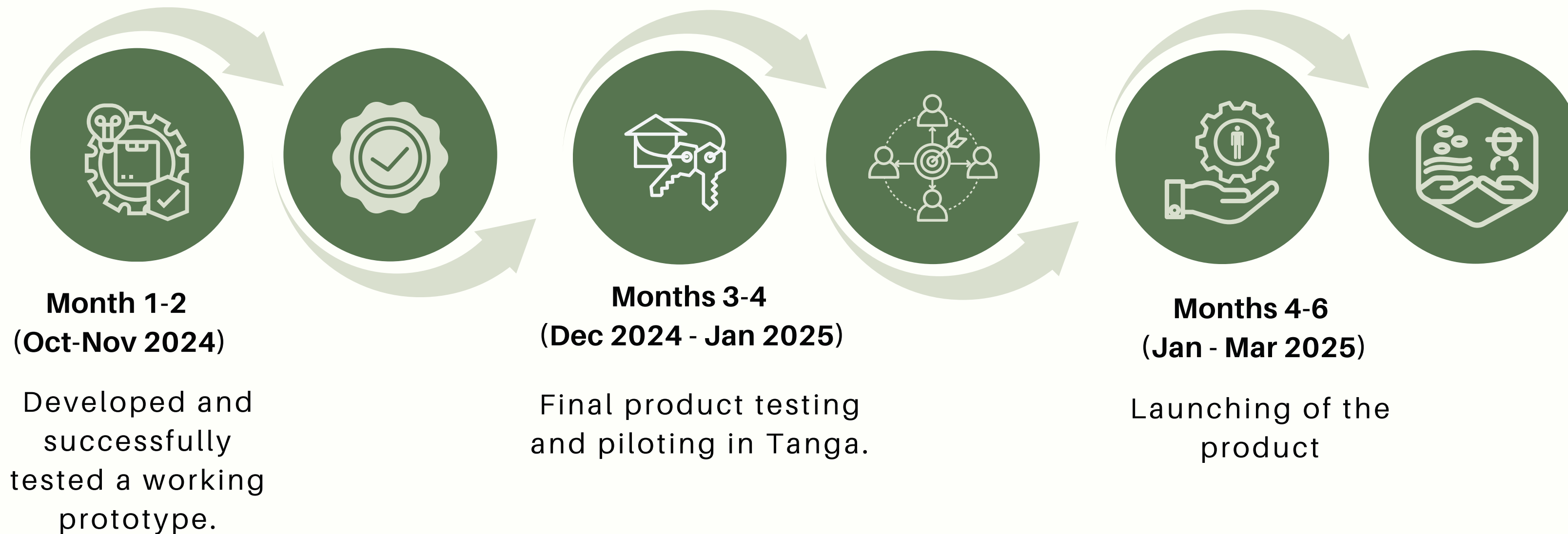
- Selling pre-filled portable CNG cylinders.
- Providing mobile and community-based refill services.
- Leasing CNG-compatible farm machinery.
- Offering training and maintenance services.

Distribution & Partnerships:

- Partnering with farmer groups & local agents for direct reach.
- Establishing strategic refill stations in agricultural hubs.
- Collaborating with government, manufacturers, and NGOs for support and growth.



Traction

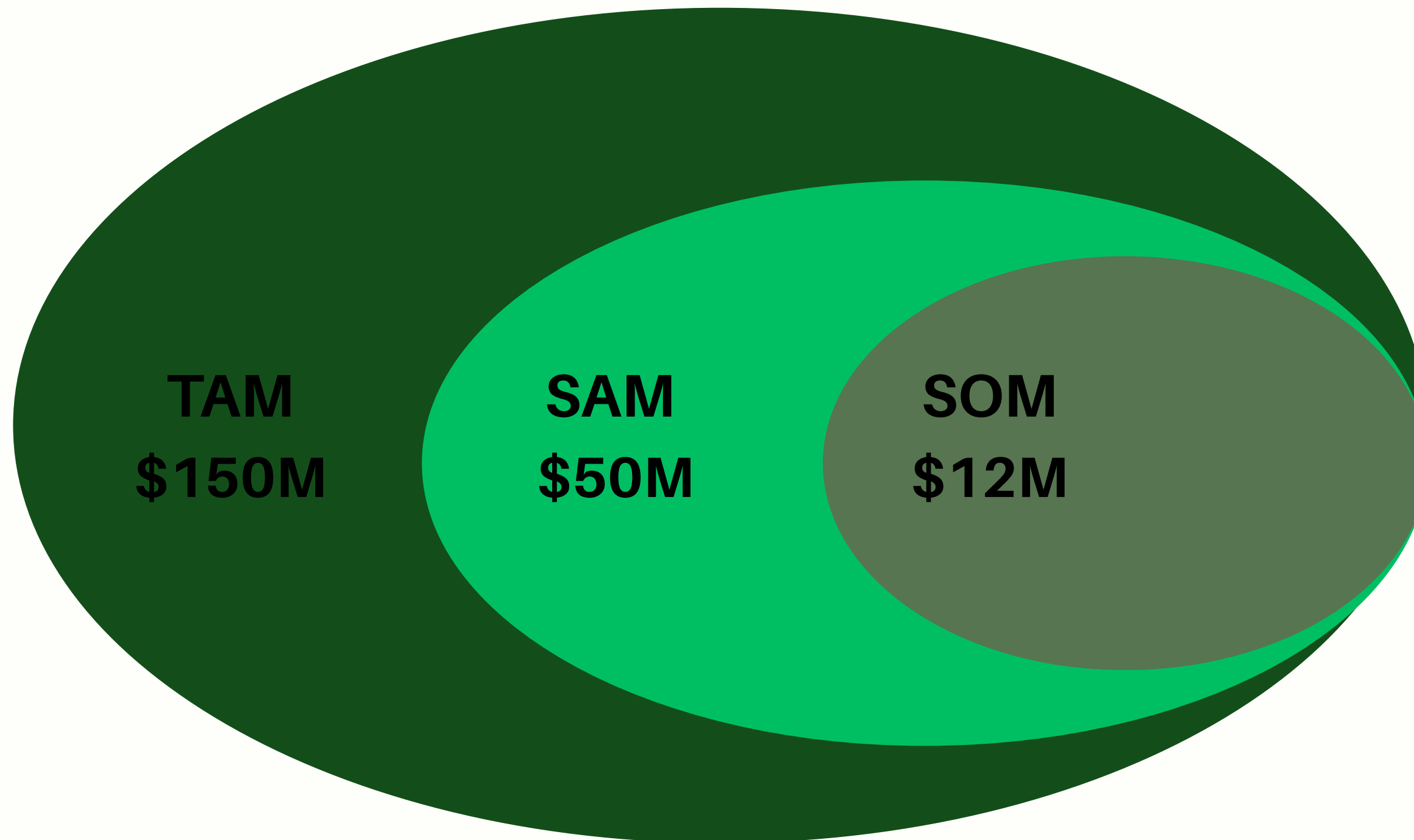


Targeted Customers

- **Rural Farmers:** Primarily those using petrol- or diesel-powered farm machinery like irrigation pumps, sprayers, planters, and harvesters to offer them a more affordable and accessible fuel alternative.
- **Rural Households:** Specifically those living off-grid who currently rely heavily on traditional fuels such as firewood and charcoal for cooking. CNG can be offered as a cleaner, modern cooking fuel.
- **Small-Scale Transporters:** This includes operators of vehicles like motorcycles (bodaboda) and three-wheeled vehicles (tuk-tuks/bajaji) in rural and semi-urban areas, who can convert to or use CNG to reduce fuel costs.
- **Agricultural Cooperatives and Farmers' Unions:** While also partners for distribution, the individual farmers within these groups are key end customers.

Market Size

4.5 million farmers in using fuel-powered machinery in Tanzania



Our Ask

TZS 170 Million

- **Gas Processing Sites: TZS 120 million**
- **Smelting Furnaces: TZS 40 million**
- **Technician Training: TZS 10 million**