



sanedi

South African National Energy
Development Institute.



Micro-Digester Working Group

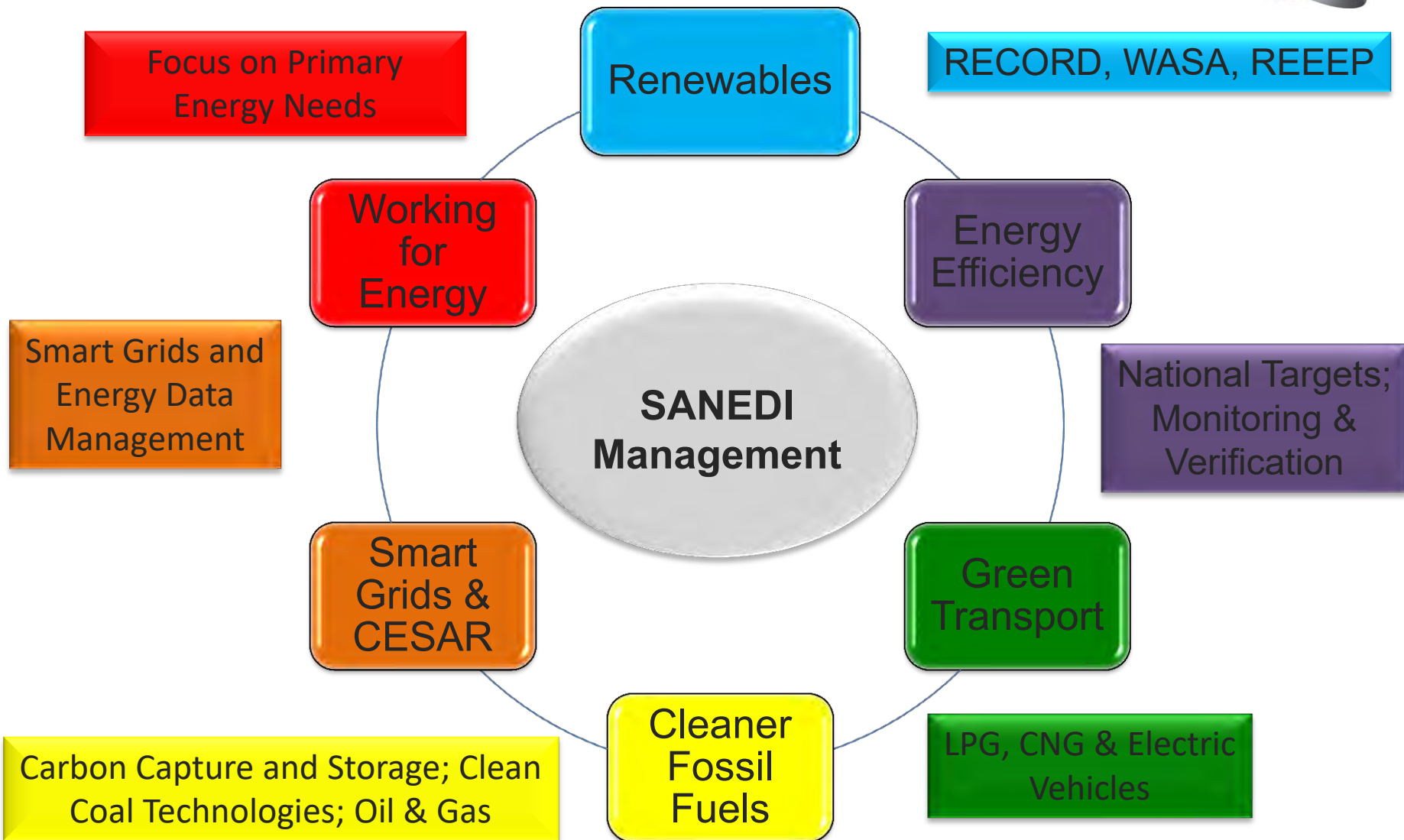
Presented by SANEDI:
WORKING FOR ENERGY PROGRAMME

**3rd National Biogas Conference:
Moving Biogas Forward**

**DBSA
Lever Road, Headway Hill, Midrand
1 November 2017**

ENERGY INNOVATION FOR LIFE

SANEDI structure





WORKING FOR ENERGY PROGRAMME

ENERGY INNOVATION FOR LIFE

WfE MANDATE



Part of the Expanded Public Works Programme (SA's PEP)

- Employment creation
- Skills development
- Focusing on Women, Youth and people with Disabilities

The Programme has two broad focus areas:

1. Renewable Energy

- I. Energy research
 - i. E.g: Studies on energy poverty eradication
- II. Demonstration of Renewable Energy technology applications
 - i. E.g: Biomass to energy (biogas and syngas) initiatives derived from waste and invasive alien plants

2. Energy Saving Initiatives

- I. Demonstration of Energy Saving options for low income rural and urban communities
 - i. E.g: Cool Surfaces / Cool Roofs
- II. Community Outreach
 - i. Community Awareness; Skills development; Enterprise Development

Beneficiary focus areas



- 🌍 Low income households;
- 🌍 Educational facilities (ECDC's; Schools; Agricultural Colleges)
- 🌍 Places of care/ frail
- 🌍 Income Saving & Generating community projects
 - Energy Services Provision
 - Food production
 - Food processing
 - Waste Management



SOME OF THE WORKING FOR ENERGY PROJECTS

ECDC greening initiatives in Kwa Maphumulo - KZN



Solar water heating, rain water harvesting, bioenergy, food gardens and efficient lighting

Bladder / Balloon designs Anaerobic digesters



ENERGY INNOVATION FOR LIFE

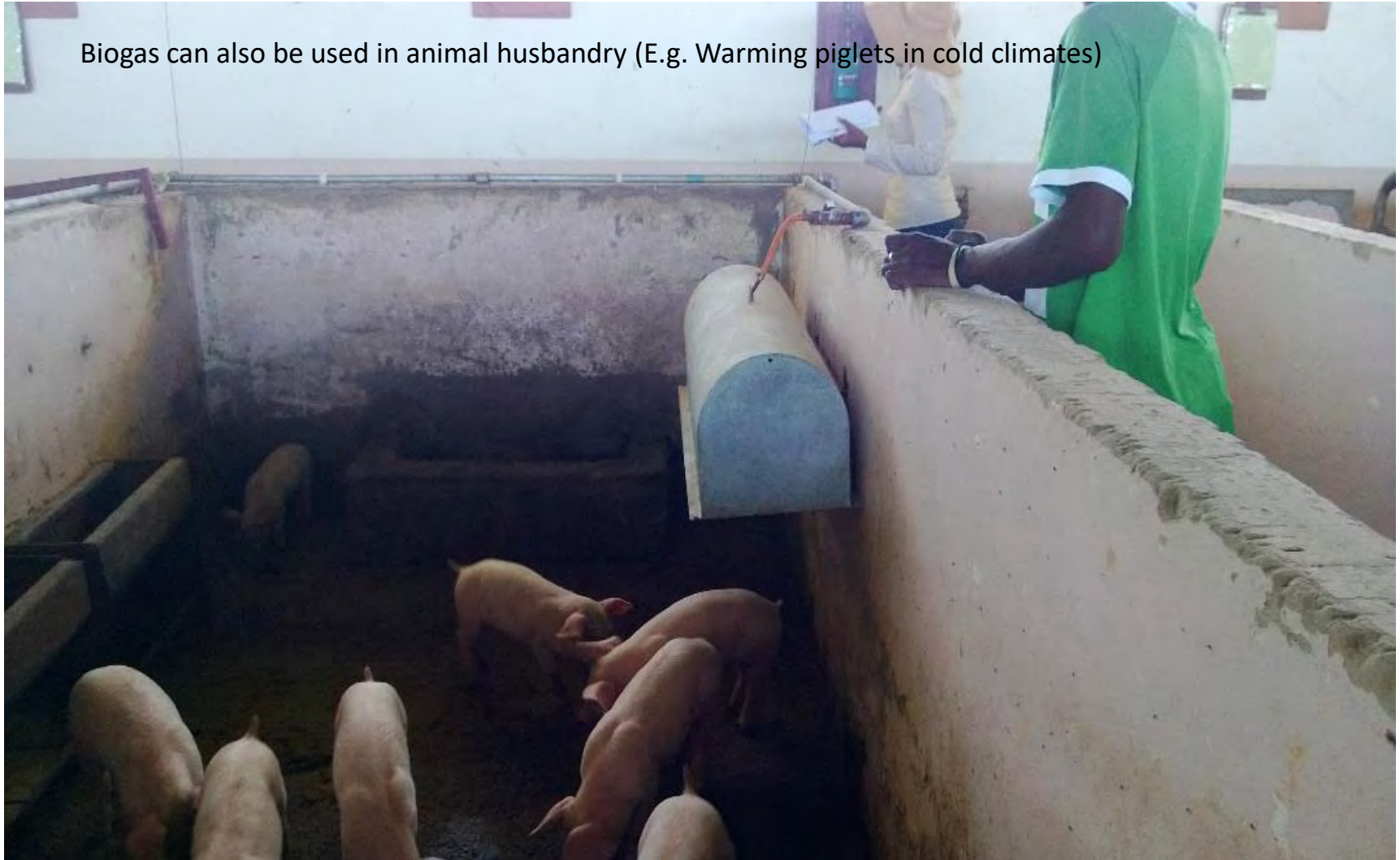
Domestic Anaerobic digester design construction



Biogas Usage: Animal Husbandry



Biogas can also be used in animal husbandry (E.g. Warming piglets in cold climates)



Biogas usage: ECDC's



ENERGY INNOVATION FOR LIFE



Six working groups

1. Licencing
2. Financial / Commercial viability
- 3. Micro Digesters**
4. Information Gathering
5. Vehicular biogas
6. Research (RECORD)

Micro Digester Working Group



History

- Formed by combining the “Small Scale” and “Rural digesters” working group

Terms of Reference

- Defined as digesters that fall below the minimum licencing and permit requirements from various government departments
- Advancement of the micro digester industry in South Africa
- Reduce recipients / beneficiaries / customers exposures / risks to cow boy contractors

Current work area / focus of the working group

- **Production of Biogas Guidelines Manual and Decision Making Tool**
 - Development of the Terms of Reference
 - Funded by USAID: SA LED
- **Intended users of such a document would include:**
 - National, Provincial and Municipal Government Departments
 - Donor Agencies
 - Research institutions
 - Commercial institutions
 - Private households



Voluntary participation (THANK YOU!)

- Department of Energy
- GIZ
- USAID: SA-LED
- University of Fort Hare
- SABIA
- Department of Environmental Affairs
- UNIDO
- Water Research Commission
- CSIR
- Solutions without borders
- Motomaluti
- UNISA
- SANEDI: Working for Energy (Chair)



sanedi

South African National Energy
Development Institute.



**THANK
YOU**

ENERGY INNOVATION FOR LIFE