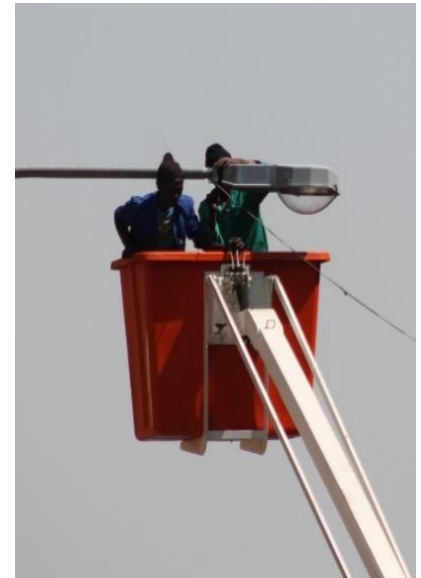




# South African - German Energy Programme (SAGEN)

## Overview of SAGEN support for biogas: milestones and way forward





## South African – German Energy Programme (SAGEN) – Phase 2

### Component 1: Renewable Energy

#### Sub-Component 1.1: Support to REIPPPP

(IPP Office support on SED and monitoring;  
grid integration support; SARETEC; Eastern Cape)

#### Sub-Component 1.2: Market development for PV rooftop systems

(national framework; support to AMEU and municipalities;  
implementation at municipal level; quality infrastructure)

#### Sub-Component 1.3: Market development for biogas projects

(awareness creation; national framework; project  
development; training and research support)

### Component 2: Energy Efficiency

#### Sub-Component 2.1: Support to the municipal Energy Efficiency Demand Side Management Programme (MEEDSM)

#### Sub-Component 2.2: LED street lighting in municipalities based on of SECO co-financing

#### Sub-Component 2.3: Support to the National Solar Water Heating Programme (NSWHP)



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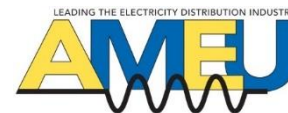
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## Partners in the implementation of SAGEN



# Main lines of activities 2016 - 2017

1

## Biogas information gathering and awareness creation

- Updating of SABIA hosted biogas information hub
- **Resource assessments** (WWTW, agro waste)
- Biogas **technology matrix report** for AD & upgrading
- Facilitation of the **national biogas platform** and **working groups**

2

## National framework conditions

- Support to the **National Bioenergy Strategy** development
- Discussion and finalization of the **bonus scheme** and **benefits of biogas** paper
- Streamlining of **licensing** procedures + digestate for composting/fertiliser **guidelines**
- Support to establishment of **technical biogas standards** for equipment

4

## Training and research activities

- Implementation of the biogas from agro-waste **study tour** in Germany
- Implementation of the biogas from agro-waste **training** in South Africa
- Ad-hoc support to provision of **training** for **WWTW operators**
- Support to development of **SARETEC curricula**
- Support to **university labs**

3

## Biogas project development

- Clarification of **financing options** for biogas
- Development of biogas **feasibility studies** (WWTW)
- Analysis of rural digester projects in the Eastern Cape under EP
- Organic waste stream **pilot testing project** (Karan Beef): biogas yields and business

## **Top 10 Highlights thus far**

1. Coordination of to the National Biogas Platform & support to Conference
2. Development of the Capable WWTW Concept
3. Support to selected South African universities with lab equipment for biogas testing
4. Standardised lab protocol for biogas testing
5. Feasibility studies for 2 municipal WWTW

## **Top 10 Highlights thus far**

6. Development of norms & standards for organic waste for the exclusion of a waste management license
7. Online biogas project map for the country hosted on the SABIA information hub
8. Biogas from agro-waste study tour to Germany for farmers, government officials and financiers
9. Biogas from waste waste study tour to Germany for municipalities and national government officials
10. Resource assessment for wastewater done for South African municipal water works in terms of biogas potential



## Structure of SAGEN-3

Objective:

**National and local stakeholders use improved framework conditions for RE and EE**

### Renewable Energy (RE)

Output A:  
Large-scale grid-connected RE

Output B:  
Small-scale embedded generation  
(SSEG)

### Energy Efficiency (EE)

Output C:  
Energy management systems in  
municipalities

Output D:  
Implementation of energy efficiency  
measures

Thank you!