National Biogas Conference 2015

Standards And Regulations
5 March 2015
Content

- Introducing to SABIA Mandate
- Biogas Standards and Regulation
- Sectors for Standards and Regulation
SABIA’s mandate includes:

- Active engagement at all levels of government for the origination and enforcement of appropriate standards and regulations;
- Advising decision-makers on the most adequate policies to develop a sustainable biogas market;
- Marketing of the multiple benefits of biogas as a renewable energy resource;
- Encouraging and supporting research into the field of anaerobic digestion;
- Representing the biogas industry sector as a single voice in all forums within South Africa and assisting in an advisory role;
- Promoting the biogas technology in the public and private sectors;
- Coordinating with other renewable energy industry groups on lobbying government stakeholders around common issues;
- Promote quality use of biogas and biogas equipment in interest of safety of users/consumers and public.
TOWARDS A SA BIOGAS STANDARD

Currently no effective standard for the installation of pipes and appliances for use with biogas in South Africa (“SA”).

WHY IS THIS IMPORTANT?

- SA biogas industry needs a standard that can demonstrate that biogas technologies are safe and secure.
- Standard required to train biogas practitioners towards building a qualified and trusted community of biogas professionals.
- Registered qualified biogas professionals are needed so that clients can be assured that they offer services and products of the highest quality.

All of these constitute critical steps for the biogas industry to actively participate in relevant policy and legislative fora that pertain to biogas and biogas-related issues.
BIOGAS STANDARD FOCUS:

To promote the safe and efficient use and supply of biogas based gas within the biogas Industry of Southern Africa

The following need to be considered:

- Safety Environment
- Industry Focus
- Win – Win Relationship
- Integrity
- Continuous Improvement
- Develop industry Standards
BIOGAS STANDARD FOCUS:
FUNCTIONAL INTERRELATIONSHIP:

Safety & Health  People  Statutory & Regulatory

Systems  Your Business  Processes

Quality & Environmental

Added value

For your business and the customers

Customer?
BIOGAS REGULATORY FRAMEWORK

- OHS Act
- PER Regulation R734
- PER Guidelines 27 February 2015
- Sectors Domestic (<0.5GJ/h)
- Commercial and Industrial (>0.5GJ/h)
- Operating Pressure of Systems < 50 kPa (PER)
- Gas Act: (NERSA) Biogas
  - Storage License
  - Construction Licence
  - Production Activity Registration
  - Trading License
- NEMA regulations:
  - Air Quality
  - Water Usage Licenses
  - Waste Management Act
  - Production Requirements and Thresholds
  - Reduce Time and process of approvals
SAFE GAS EQUIPMENT SCHEME

Mandate / Authority of the SGES

Dept of Labour

OHS ACT

PER

SANS1539

‘SANS 827’

SANS347

SANS329

SGES Committee
SAFE GAS EQUIPMENT SCHEME

• All Commercial & Industrial biogas equipment > 0.5 GJ/h
• Domestic and commercial equipment using methane gas < 0.5 GJ/h
• On Biogas/Natural gas will apply to:
  • Gas ovens
  • Burners / Furnace / Boilers
  • Bio-digesters
  • Hot water Geysers
  • Heaters
  • Gas Generators / Engines
EQUIPMENT INCLUDED IN SAFE GAS
EQUIPMENT SCHEME (SGES)
SECTORS WHERE STANDARDS IN BIOGAS SHOULD BE DEVELOPED OR INFLUENCE

- Equipment certification
- Installations Practice
- Sector classification
- Training and Education
- International Standards
- Government Policy
- Industry Strategy
- SABS and SANS Standards
- Started with Biogas standards
- Equipment standards outstanding
SECTORS WHERE STANDARDS IN BIOGAS SHOULD BE DEVELOPED OR INFLUENCE

– Domestic Regulation.
  • Basic requirements
  • Ensure safe use and operation
  • Keep cost low for market penetration
  • Equipment safety and quality control
  • Installers to be trained and certified to issue CoC`s

– Commercial and Industrial Regulation
  • Comply with industrial safe gas practice
  • CoC`s to be issued for all installations
  • Only approved equipment to be used
SECTORS FOR BIOGAS STANDARDS

Rural Biogas Projects

Agriculture:
- Dairies
- Fruit/Vegetable packaging plants

Food Processing:
- Meat/Cheese/Juice/Baking

Abattoirs

Waste Water Treatment

Landfill Biogas

Co–operative Plants
- Manufacturing of Biogas Equipment (Civil Engineering)
- Cleaning and Upgrading of Biogas (Chemical Engineering)
- Piping and Compression (Mechanical Engineering)
- Generate electricity (Electrical Engineering)
- Vehicle Application (Automotive and Road Traffic Act)
CURRENT BIOGAS POTENTIAL FOR VEHICLES

- Metrobus Dual Fuel Busses
- Tswane Metro 40 Gas Busses
- Harmony Biogas Project in Welkom
- Durban BRT Project
- Megabus Gas Bus Project
FUTURE OF BIOGAS

What are the challenges facing the biogas industry in South Africa?

- Lack of awareness and understanding of the energy, environmental and social benefits of biogas technologies by all stakeholders;
- Complex administrative processes for project development and authorisation, especially at the municipality level;
- No supportive legal framework and no specific policy support;
- Lack of dedicated financing mechanisms;
- No biogas standards for safe and quality use of biogas;
- Lack of skilled and registered labour force.
THANK YOU

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