

- Linked to this is the prospect of creating a new multi-billion rand industry in the renewable energy sector, including the possibility of establishing a dedicated biogas related manufacturing sector.

Challenges and barriers

This topic deserves robust conversation. This sustainable energy source is one worthy of being championed among both industry and government. Here are some of the key barriers and support mechanisms:

- As a key driver, the ability to affect meaningful partnerships, promote healthy regulation and consider industry incentives, the public sector's role as a champion is not to be under-estimated.
- The current lack of information inhibits the ability to share the story within influential interest groups.
- Appropriately funded research is required to build a knowledge base which drives the industry forward.
- The regulatory environment runs the risk of acting as a barrier as opposed to promoting the growth of this exciting renewable energy technology.
- The length, complexity and high cost associated with the application and licensing process for large scale IPP projects served as a major deterrent for biogas projects to apply for IPP licenses. Unfortunately these issues have not been meaningfully addressed when the new 1-5MW Small Scale IPP process was launched two months ago.
- A general feed-in tariff could make a meaningful contribution to initiate the roll-out of large numbers of small scale renewable energy projects that could evolve into a real driver for our economy.

- Biogas generators produce clean electricity and can provide free thermal energy (CHP) that would otherwise have been wasted (i.e. not utilised for energy output) in the conventional energy space.
- The benefit of carbon mitigation is measurable. For every tonne of methane burnt and reverted to CO₂ equates to the removal of over 22 tonnes of harmful greenhouse gases.
- Biogas can also be utilised as vehicular fuel.
- Most organic waste types are suitable as feedstock: manure, sewerage, food waste, fruit & vegetable waste, fats & oils, etc. and the anaerobic digestion process converts these potentially environmentally hazardous wastes into organic compost.

The benefits of biogas for local government and communities

- Industry sectors such as agriculture, food manufacture/ processing, abattoirs, dairies, feedlots and local government will benefit from effective waste management.
- Biogas can be used as an effective way to provide energy to outlying rural communities that currently have no hope of receiving Eskom electricity, with the added benefit of producing compost to promote local growing of vegetables, contributing to creating rural food security.
- Biogas has the potential to be a viable, competitive and sustainable South African industry.
- Biogas as a renewable energy sector has the potential to create meaningful jobs, while simultaneously creating a newly skilled group around the technology.

Biogas

National Conference

2013

Conversations around challenges and opportunities

DBSA-Vulindlela Academy
30th and 31st October 2013



- The primary benefit is energy production. Biogas can be used as fuel for basic utilities such as stoves, lights and hot water geysers.
- Biogas is used to generate electricity by running biogas generators.

The benefits of biogas, focusing on energy production and sustainability

- Biogas is produced when organic waste decomposes in the absence of oxygen.
- This process results in biogas which contains methane (CH₄) which is a combustible gas.
- It is a renewable energy source that has multiple benefits and the potential to grow into a multi-billion rand industry for our country.

What is biogas and why does it matter?

Biogas has the potential to become one of South Africa's most important renewable energy sources. At this conference various speakers will highlight the numerous benefits, industry-specific opportunities and challenges within biogas as a new industry. As key stakeholders, we encourage you to take time to understand what biogas is and the vast opportunities that biogas presents in energy, service delivery, sustainability and skills development.

Welcome to the National Biogas Conference

Time	Topic	Speakers
08:00	Registration	Aphane (DoE)
09:00	Welcoming address	Cyprian Marowa (DBSA)
09:30	Conference aim and outline	Noma Qase (DoE)
10:00	Biogas basics	David Cilliers (SABIA)
10:30	Historical overview of biogas in SA	Gracia Munganga (SABIA)
11:00	Coffee	
11:30	Biogas potential in SA	Prof Harro von Blotnitz (UCT)
12:00	Direct benefits for SA to develop a biogas industry	Raoul Goosen - Economic growth potential/vehicular biogas (IDC)
	Moderator: Mark Trepelt	Jan du Preez - Waste to compost, thermal energy (BiogasSA)
	Biogas is produced when organic waste decomposes in the absence of oxygen.	TBC - Electricity production/carbon mitigation (Eskom)
	This process results in biogas which contains methane (CH ₄) which is a combustible gas.	Lovell Emslie - Job creation/manufacturing (CAE)
	It is a renewable energy source that has multiple benefits and the potential to grow into a multi-billion rand industry for our country.	Wolsey Barnard - Rural energisation (DoE)
13:15	Lunch	
14:15	SA case studies: Rural biogas	Jotte von Ierland
14:45	3MW biogas plant in Bronkhorstspuit	Sean Thomas (Biozatt)
15:15	Abattoir biogas plant in Jan Kemp Dorp	Otto Haeger (Ibert)
15:45	Tea	
16:15	Landfill biogas	David Cornish (Ener-G Systems)
16:45	Biogas at municipalities	Jason Gifford (WEC - Northern WWP)
17:30	Networking Cocktail	

Wednesday 30th Oct 2013

Time	Topic	Speakers
08:30	Welcome	Mertlyn Adams (DBSA)
08:45	Regulatory requirements	Eddie Cooke (SAPGA, SABIA)
09:15	Financing biogas projects	Renta van Tonder (IDC)
	Moderator: Joel Houdet	TBC (DBSA)
	TBC (Commercial banking sector)	Andrew Etzinger (Eskom)
	Sithembile Tantsi (DTI Incentives)	
10:30	Tea	
11:00	Development and challenges of rural biogas in India	Dr Karve (Rural digester experience in India)
12:00	Development of commercial digesters in Thailand	Joost Seteur
13:15	Lunch	
14:15	Biogas and Small Scale Renewables	Andrew Etzinger - 1-5MW Small Scale IPP, wheeling, PPA (Eskom)
	Moderator: TBC	TBC (NERSA)
	Ompi Aphane (DoE)	
	David Cornish (Ener-G Systems)	
15:30	Looking at the viability of creating a national platform for the promotion of biogas projects in SA	Soeren David (GIZ)

Thursday 31st Oct 2013

