



Process, Energy and Environmental Technology Station

Business Opportunities in Energy Sector for
Women
16 & 17 September 2015
Mahikeng.



Kgaugelo Modise



Stakeholders



science
& technology

Department:
Science and Technology
REPUBLIC OF SOUTH AFRICA



sanedi
South African National Energy
Development Institute



solargis[®]



PRESENTATION CONTENT

- **Women role in energy sector**
- **Background of PEETS**
- **Mandate**
- **Vision and Mission**
- **Strategic Objectives**
- **Focus Area**
- **Products and Services**
- **Business opportunities**

Women role in energy sector

- Research has shown that only 15 CEO's
 - out of Fortune 500 companies in 2011 were women or 3% worldwide.
- Furthermore, the percentage of women directors on the Boards of Directors of those Fortune 500 companies is only 16%.
- With oil and gas sectors having the lowest percentage of women directors, at 9%.



BACKGROUND

Established 2010 Funded by

Technology Innovation Agency (TIA),

Stationed at

University of Johannesburg,

DOORNFONTEIN CAMPUS

Johannesburg

2028



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PEETS MANDATE

- The primary mandate for the PEETS is to contribute towards improving the competitiveness of industry through the application of specialised knowledge, technology and facilitating the interaction between industry (especially SMEs) and the academia in order to enable innovation.

PEETS VISION AND MISSION

- Vision : To establish a vibrant green economy that continually drives South Africa`s equitable socio-economic success.
- Mission : Providing technical oriented Enterprise development support in the Energy and Environment sector through appropriate technological innovations in order to grow South Africa`s socio-economy in a sustainable manner.

PEETS OBJECTIVES

Strategic Objective 1 : To initiate, Develop and sustain partnerships to grow green economy through various technology Intervention

Key Performance Indicators

- Number of SMEs Projects implemented in collaboration with at least one stakeholder and/or agency in the National System of Innovation(NSI)
- Number of SME's projects supported whose activities relate to the Green Economy
- Number of Youth projects supported by PEETS.
- Number of Enterprises Incubated (Long Term Goal)



PEETS OBJECTIVES

Strategic Objective 2: To develop, Improve and Transfer Innovative technologies for the enhancement of the Green Economy.

Key Performance Indicators

- Number of Small and Medium Size Enterprises (SMEs) receiving technological support from TS.
- Number of PDI owned enterprise as a percentage of total enterprise Supported
- Number of Female owned enterprises as percentage of total enterprise supported

PEETS FOCUS AREAS

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Energy

Renewable Energy

Solar Energy

Bio-energy

Solar

Photovoltaic
Cell

Bio-Diesel

Bio-gas

Energy
Efficiency

Environment

Water

Pollution

Waste Water

Clean Water

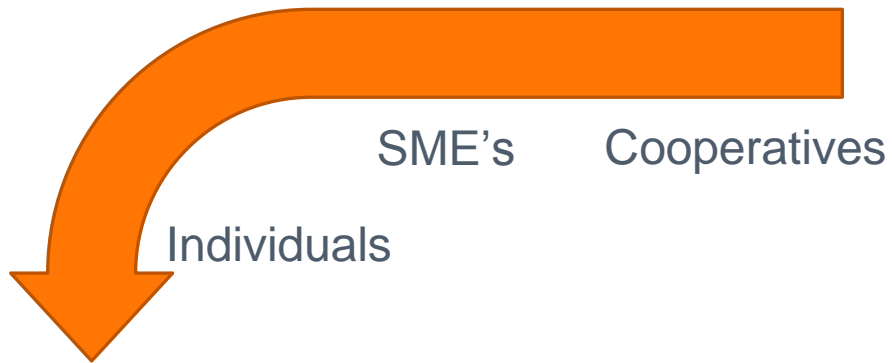
Air

Solid Waste
Management

Training and Development

PRODUCT AND SERVICES

- Air Quality Auditing
- Energy Auditing
- Process Optimization
- Testing /Analysis
- Product and Process Development / Improvement
- Waste Characterization
- Engineering Consultation
- Technology Research and Development
- Environmental Impact Assessment
- Prototype Assembling
- Training and Demonstration



- INNOVATION
 - » ENERGY
 - » ENVIRONMENT
 - » WATER

» PRODUCT AND SERVICE

- » Testing /Analysis
- » Energy Auditing
- » Product and Process Development / Improvement
- » Engineering Consultation
- » Technology Research and Development
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DELIVERABLE

Implement projects

BUSINESS OPPORTUNITIES



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ENERGY EFFICIENCY

Opportunities

- Energy training and awareness
- Energy auditing
- Energy measurement and verification



Renewable energy

- Solar energy



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Opportunities

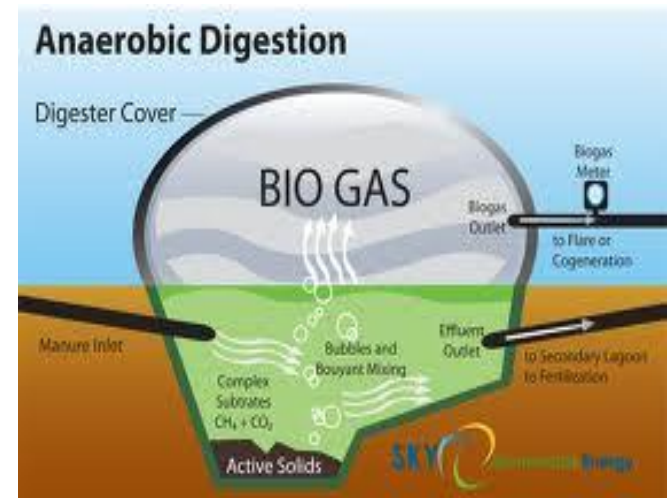
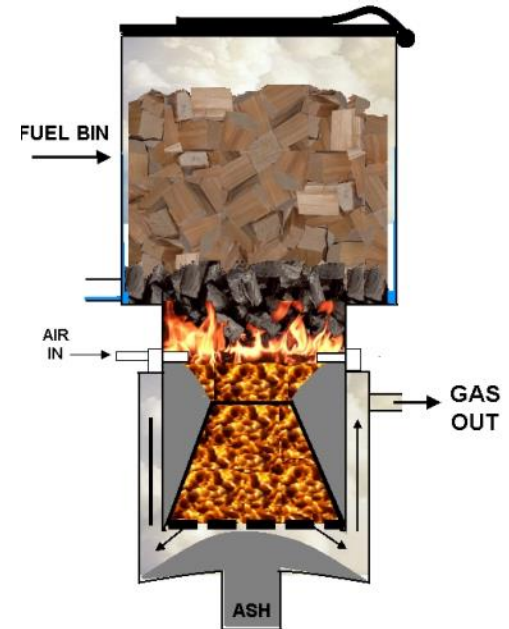
- Solar training and awareness
- Installation

ENERGY FROM WASTE

- Thermal conversion - conventional (combustion), and advanced (pyrolysis, gasification) technologies
- Biochemical conversion - anaerobic digestion to produce biogas
- Biodiesel production from waste

Opportunities

- The first blending of fossil fuel diesel with biodiesel in South Africa is expected to commence in October 2015.
- Testing and implementation of the optimum blending processes



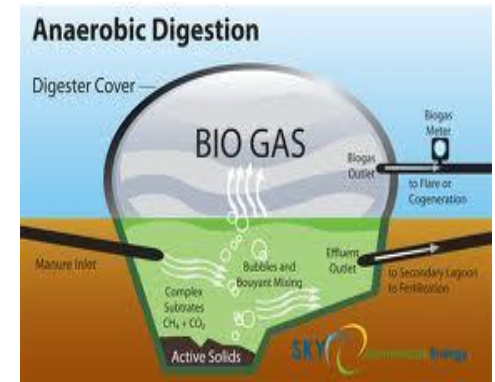
DIGESTERS

- Digesters - relatively cheap (compared to thermal conversion equipment)
- Can be part of existing composting facilities
- Significantly improves air quality and odour problems
- Biogas has many applications (heat, power and even transport fuel)
- Best suited for soft/wet biomass
 - Eg food waste, animal waste, abattoir waste, garden waste, sewage, etc

Opportunities:

- Collect animal waste (cow dung and chicken waste) and sell to bio digesters
- Bio gas production
- Convert Pit Toilet to digesters.

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**NO ENERGY = NO MASTERY.
PROTECT YOURS TODAY.**



Robin Sharma



**“YOU CAN GET
TO WORLD-CLASS,
YOU CAN MAKE EXCUSES,
YOU CAN'T DO BOTH.”**

Robin Sharma

For more inspiration visit:
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THANK YOU

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