Process, Energy and Environmental Technology Station

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

Kgaugelo Modise
Stakeholders
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

<table>
<thead>
<tr>
<th>Key Performance Indicators</th>
<th>Number of SMEs Projects implemented in collaboration with at least one stakeholder and/or agency in the National System of Innovation (NSI)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Number of SME’s projects supported whose activities relate to the Green Economy</td>
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<td>Number of Youth projects supported by PEETS.</td>
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<td>Number of Enterprises Incubated (Long Term Goal)</td>
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</table>
Strategic Objective 2: To develop, Improve and Transfer Innovative technologies for the enhancement of the Green Economy.

<table>
<thead>
<tr>
<th>Key Performance Indicators</th>
<th>Number of Small and Medium Size Enterprises (SMEs) receiving technological support from TS.</th>
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<td>Number of PDI owned enterprise as a percentage of total enterprise Supported</td>
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<tr>
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<td>Number of Female owned enterprises as percentage of total enterprise supported</td>
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**PEETS FOCUS AREAS**

- **Energy**
  - Renewable Energy
    - Solar Energy
    - Bio-energy
  - Energy Efficiency
- **Environment**
  - Water
    - Waste Water
    - Clean Water
  - Pollution
    - 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
SME’s, Cooperatives, Individuals

- **INNOVATION**
  - ENERGY
  - ENVIRONMENT
  - WATER

- **PRODUCT AND SERVICE**
  - Testing / Analysis
  - Energy Auditing
  - Product and Process Development / Improvement
  - Engineering Consultation
  - Technology Research and Development
  - Environmental Impact Assessment
  - Prototype Assembling
  - Training and Demonstration

**DELIVERABLE**
Implement projects
BUSINESS OPPORTUNITIES
ENERGY EFFICIENCY

Opportunities

• Energy training and awareness
• Energy auditing
• Energy measurement and verification
Renewable energy

- Solar energy

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

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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 dug 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: www.robinsharma.com
THANK YOU

<table>
<thead>
<tr>
<th>CONTACT DETAILS</th>
<th>PHYSICAL ADDRESS</th>
<th>POSTAL ADDRESS</th>
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<td></td>
<td>Johannesburg 2028</td>
<td>South Africa</td>
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