GreenCape Overview

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Green Economy Investment and Finance Liaison

Outward Mission
October 2017
Context

Genesis

Overview of activities

Results

Learnings and going forward

1. Renewable Energy
   Utility-scale projects, small-scale embedded generation, and localisation of component manufacture.

2. Energy Efficiency
   Energy efficient buildings and equipment, demand side management and financing contracting models.

3. Alternative Waste Treatment
   Municipal decision-making and policy and legislative tools on alternative waste treatment options; small-scale biogas, recycling and reuse (dry recyclables, construction and demolition waste).

4. Western Cape Industrial Symbiosis Programme (WISP)
   Free facilitation service that networks companies to exchange under-utilised resources (materials, energy, assets, logistics and expertise).

5. Water
   Water provision and economic development; greentech opportunities for water use efficiency, treatment and reuse.

6. Agriculture and Bio-Based Value Chains
   Sustainable agriculture, valorisation of wastes to high value bio-products, including bio-energy.
A focus on manufacturing allows the green economy needs to become a permanent fixture in the national economy

**Mandate**
“To support the accelerated development of the Western Cape green economy”

- Lower carbon
- More resource efficient
- Increase local production

- Economic growth
  - Increased investment
  - Job creation

**Vision**
“The Western Cape is the green economy hub for Sub-Saharan Africa – the regional headquarters and manufacturing centre for leading companies in this space”
Even when considering environmental issues, emerging markets maintain a distinct socio-economic focus.
Clusters address the limitations of, and tensions between, the public and private sectors

Environmental focus

Clusters address structural limitations and tensions

Public sector
Struggles with adapting technology policy and regulation

Private sector
Needs to be more proactive in creating jobs
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GreenCape was the result of three macro-trends dovetailing:

- Energy Crisis
- Development of the Green Economy
- Political Will
Development of the Green Economy

- Global movement reaches SA
- Lower tech prices
- Increase in green legislation
- Imminent IPP programme
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How are we set up?

**OVERVIEW OF ACTIVITIES**

- **Energy**
  - Renewable Energy (Utility)
  - Energy Efficiency
  - Smart Electricity

- **Resources**
  - Agriculture
  - Water
  - Smart Water Allocation
  - Bioenergy and resource productivity

- **Waste**
  - Waste
  - Waste economy

- **WISP** (Western Cape Industrial Symbiosis Programme)

- **Atlantis SEZ office**

- **Green Finance**
  - Skills
  - Technical and knowledge support
  - Business matchmaking

**Programmes**
- Ring-fenced project
- Project
The range of work crosses a wide variety of outputs

PASSIVE / INTERNAL

Research:
- Field data through key relationships, site visits and networking
- Market Intelligence Reports
- Knowledge pieces
- Industry updates

Tools:
- Green-Agri Portal
- Decision-making tools e.g. waste, non-revenue water
- Regulatory and legislative advice e.g. tariff work
- Green Finance Database

Stakeholder engagement:
- Networking events
- Thought leadership presentations
- Setting up cross-sectoral and triple helix meetings
- Support for industry gatherings

ACTIVE / CLIENT-FACING

Front-line activity:
- Proposed Special Economic Zone for Greentech manufacturing
- Western Cape Industrial Symbiosis Programme (WISP)
- Market Connect and Finance Lab
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Headline results indicate that GreenCape has made significant socio-economic strides in setting up a cleantech foundation

- **ZAR17 bn investment** in the Western Cape since 2011
- **>10,000 local jobs** created

- **60% of successful REIPPPP projects** developed in the Western Cape
- **70% of successful renewable energy manufacturing** in the Western Cape

- **1st African Cleantech** cluster invited to join the world leading regions – International Cleantech Network (ICN)
- **>1000 Member** companies of the GreenCape cluster

- **Atlantis greentech hub** established – incentives for local manufacturing and services
- **SARETEC** providing local skills for the industry
Example: Western Cape Industrial Symbiosis Programme (WISP)

Overview

The Western Cape Industrial Symbiosis Programme (WISP) is a free service which connects companies so that they can identify and realise the business opportunities enabled by using unused or residual resources (materials, energy, water, assets, logistics, expertise).
## Results

### Example: Western Cape Industrial Symbiosis Programme (WISP)

#### Key Performance Indicator

<table>
<thead>
<tr>
<th>Key Performance Indicator</th>
<th>To Date (July 2017)</th>
<th>7 Year Projection (Assuming No More Synergies Completed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste Diversion</td>
<td>6,500 tonnes</td>
<td>14,300 tonnes</td>
</tr>
<tr>
<td>Additional Revenue</td>
<td>R 15.0 million</td>
<td>R 33.5 million</td>
</tr>
<tr>
<td>Cost Savings</td>
<td>R 13.10 million</td>
<td>R 24.4 million</td>
</tr>
<tr>
<td>Private Investment</td>
<td>R640 000</td>
<td>R5 million</td>
</tr>
<tr>
<td>Fossil GHG Savings</td>
<td>48,000 tonnes CO₂e</td>
<td>209,300 tonnes CO₂e</td>
</tr>
<tr>
<td></td>
<td>(~ 6 2.2MW wind turbines)</td>
<td>(~ 27 2.2 MW wind turbines)</td>
</tr>
<tr>
<td>Job Creation</td>
<td>25 temporary</td>
<td>25 temporary</td>
</tr>
<tr>
<td></td>
<td>20 permanent</td>
<td>20 permanent</td>
</tr>
<tr>
<td></td>
<td>73 economy-wide jobs</td>
<td>140 economy-wide jobs</td>
</tr>
</tbody>
</table>
Example: Renewable Energy Independent Power Producers Purchasing Programme (REIPPPP)

- Overview of arguable SA’s most successful PPP since achieving democracy
- GreenCape’s role was to act as a free and effective turnkey solution
  - Worked with Industry Associations
  - Attracted developers
  - Pushed through necessary troubleshooting
Leading achievements at a national and international level
Leading achievements at a national and international level

**ICN - C40 Cities Challenge: Agriprotein**

Rio de Janeiro and Agriprotein – Organic Waste Solution

**WISP – GreenCape housed project**

Western Cape Industrial Symbiosis Programme – promoting resource efficiency and circular economy activities, first in CoCT and now RSA
Leading achievements at a national and international level

GIZ - GreenCape

Support for study tour to Germany – Instrumental in development of SARETEC Co-financed Wind Turbine Training and Skills development programme at GC
Provided skills for Green Jobs programme

World Bank Group Market Connect Project

Cross Border B2B Matchmaking facility run by GC
As of the end of August 2017:
• 11 months of formal matchmaking
• 130 formal expressions of interest
• Originating from companies and aggregators from more than 20 countries in Africa, North America, Asia and Europe
• Directly supporting 94 companies
• Impacting 7 different sectors in the South African Green Economy
Leading achievements at a national and international level

GreenCape – WESGRO – InvestSA OSS

Myself as a manifestation of the partnership between the City of Cape Town, Regional and National government (One stop shop and Atlantis SEZ)
The Cape Investor Centre launched in 2017
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Positioning, people and prioritization drives performance

- **Strong links to the triple helix**, across all green subsectors, including continued financial and nonfinancial support from all tiers of government. Credible position in the ecosystem, driven by:
  - Alignment with national / provincial / local policies and strategies
  - Political neutrality
  - Legal independence
  - Technical competence

- **Diverse, high quality team**

- **Smart growth**
  - Initial focus and success on RE, enabled expansion
  - Robust problem-solving approach
  - Impact orientation (ruthless prioritisation)
Positioning, people and prioritization drives performance

Going Forward

- Building on a **South African equivalent to a 'feed-in tariff'** which is now being used by 20 municipalities in the Western Cape and has become the national standard - SSEG

- Looking **to leverage clustering best practice** from Europe to help expand GreenCape's activities and footprint through a Switch Africa Green Application to the EU.

- Working on several **financial models to increase the roll over of RE** in the City of Cape town, and to use this to investigate the viability of a Green Investment Bank in the South African context.
Thank You

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Q&A

"We'd now like to open the floor to shorter speeches disguised as questions."
GreenCape funding is driven by all tiers of government, while reporting on traditional metrics for economic development.

Status quo

- Western Cape Government Department of Economic Development and Tourism provides a core base of funding
- Funding planned over 3 year periods, but allocated annually
- Key metrics for funders are impact in terms of investment and job creation

Going forward

- Large multi-year funded projects such as World Bank Market Connect and Finance Lab form part of a movement towards sustainable funding
Sustainable finance depends on continually providing value

- Benefit from government funding and grants early on
  - Initially housed in a Provincial Department
  - Spun out an independent entity (Special Purpose Vehicle)
  - Establishing a strong value proposition to help justify expansion
- Diversify funding through different governmental departments and grant funding (sector or geographical) usually through ring-fenced projects
- Naturally, over time, we can expect government funding to decrease
- Continually mapping of services that our stakeholders would be willing to pay for
  - Testing this by taking on more commercial projects
  - Tracking a potentially portfolio of services we could provide
- Ultimately, decrease dependence on government or grant-based funding into commercial, sustainably driven sources.
GreenCape aims for a ruthless prioritization approach which is firmly adhered to

Illustration: Water Programme, 2017 - 2019

Size of the opportunity
(market size and job potential)

Ease or ability to influence

High

Try increase influence

Municipal treatment, reuse and reclamation

Smart allocation

Primary

Private sector water treatment, reuse and reclamation

Quick wins

NRW reduction programme

Sanitation technology and business models

Private sector smart metering and auditing

Utility-scale energy technology

No go zone