June 2016



Using a sector development agency to mobilize a local green economy

The case of GreenCape in the Western Cape, South Africa

Lauren Basson, Manager: Technical and Knowledge; Mike Mulcahy, Chief Executive Officer; Aman Baboolal, Analyst; Salomé Bronkhorst, Communications Manager The GreenCape Sector Developing Agency, 18 Roeland Street, Cape Town, 8001, South Africa

Appendix

This appendix presents brief examples of some of the work in which GreenCape has been involved, the stakeholders, and the nature of involvement. This is not an exhaustive list, but is an attempt to illustrate the crosscutting and varied nature of GreenCape's work since its inception and how the approach has contributed towards low emission development.

Market intelligence reports, networking, membership, and sector desks

GreenCape's sector desk leads produce an annual flagship market intelligence report¹ as part of the goal to make South Africa and Cape Town the African investment destination of choice for companies in green economy sectors. The reports are designed to assist investors and businesses who are currently active or interested in entering green economy sectors in South Africa, and specifically the Western Cape. These reports are produced internally and typically contain primary data gathered over the year as well as aggregated trend data.

The sectors covered are: agriculture, water, waste, energy services, and utility-scale renewable energy². Each report provides an overview of the market within a sector, including the key players, legislation and



regulation, opportunities and challenges, key developments, and achievements. The intention of these reports is to provide accurate, concise information about trends and opportunities in order to increase



the amount of information that is available to the private sector. The underlying hypothesis is that this will accelerated decision making and position the region as having a competitive advantage in the green economy.

The sector desks host networking functions as well as workshops and conferences. These are platforms to facilitate information exchange. Much of the primary data gathered for the market intelligence reports comes from these industry engagements. Contacts are encouraged to sign up as members to receive market intelligence, relevant industry updates, and sector related news, as well as invitations to further networking opportunities and conferences. The 2016 market intelligence reports were published in March and within 2 months had over 22,000 downloads.

Green Finance Desk

Overview

The Green Finance Desk (GFD) was established during Q4 of 2014, largely as a result of recommendations of the Green Finance Investment Case report³ commissioned by the Western Cape Government in 2013. The focus of the report was on the Western Cape's financial ecosystem, which is the combination of fiscal resources, private investments, savings, loans, risk reduction facilities, and regulations that collectively constitute the broad financial sector. In keeping with the Western Cape Green Economy Strategy Framework's intention of being private sector driven but public sector enabled, the study paid particular attention to complementarity between fiscal resources, regulation, and the mobilization of private sector finance.

The GFD serves a facilitation role that cuts across all the sectors within GreenCape, and uses a GFD tool to assist businesses in finding the right people to contact. Regular meetings are held with investors/financiers where they are provided an overview of GreenCape and are invited to become members. Businesses that seek funding often make requests via the sector desks or programs that then send leads to the GFD. Businesses are provided details of potential investors either directly or through using the online tool.⁴

Green finance database tool

GreenCape recognized that a significant information gap existed between financiers and businesses seeking capital in the green economy. In conjunction with the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), the development of a green finance database was initiated during Q1 of 2015. This database is being hosted on the South African National Energy Development Institute (SANEDI) website.⁵ The GFD took the lead in developing the database, and worked to identify financiers active in the green economy and better understand their service offering. The database lists potential funders by type of funding, amount available, who it is available to, and details on the process established to access it. The list is continuously being updated and currently holds at least 80 financiers spread across the private and public sectors and development finance Institutions.



Green Finance Desk involvement in World Bank Market Connect project

infoDev, a Global Partnership Program of The World Bank, with support from the United Kingdom's Department for International Development (DFID), launched the Market Connect program,⁶ a project being overseen by the World Bank. Market Connect is a global, centrally managed pilot program which creates bridges between revenue generating green ventures in developing countries and the global assets they require to succeed. South Africa has been selected as the first country in this pilot to serve as an example of how this project will be run in emerging markets.

After an initial research phase of 3 months, seven initiatives were proposed and GreenCape, considered to be a thought leader in green business in South Africa, was appointed as project manager. The GFD is responsible for setting the overall strategic direction, as well as day to day management of the program. This involves delivering a number of proposed initiatives; monitoring progress of initiatives being run by partners, including private sector company Impact Amplifier and the Bertha Centre for Social Innovation and Entrepreneurship (at the University of Cape Town Graduate School of Business); and consolidating regular reports to the World Bank. The initiatives address market failures by focusing on linking international business models, innovative financing, and international capital to local small and growing businesses. The current phase will refine the initiatives to three options in July 2016 and these will be rolled out in a pilot phase over the following 12 months.

Proposed Atlantis Special Economic Zone

A pivotal step in the drive towards green industrialization was the collaboration between the City of Cape Town, Western Cape Government, and GreenCape in 2011 to set up a green technology industrial park in Atlantis in response to national policies and strategies to support the development and growth of the green economy.. GreenCape provided subject matter experts in green industries and helped to identify appropriate work packages and activities to enable green, technology focused industrial development.

GreenCape worked with the City of Cape Town to develop an accelerated land disposal process. Such a process was a clear requirement to establish industrial activity. This led to GreenCape reconfiguring the application form, distributing it, assisting with its completion, and sitting on the technical evaluation committee that determines the qualifying technologies. The City of Cape Town has approved the use of 68 ha of greenfield sites in 2012 to be part of the green tech concept for the revitalization of Atlantis.

Further collaboration between GreenCape and the national Department of Trade and Industry (DTI) in 2014 led to the proposal to convert Atlantis into a green technology special economic zone (SEZ). GreenCape agreed to be the project office and work with the DTI through the application process. In practice, this includes preparing an application, project management, international investment promotion, skills development, small business support, youth development, and company aftercare.

The successful negotiation with Spanish wind tower manufacturer Gestamp Renewables (GRI) in 2014 led to ZAR 300 million (US\$20.3 million) worth of investment in a 12,000 m² factory capable of manufacturing 150 wind towers per annum. This investment created a total 220 green jobs between 2014 and 2015. GRI's expansion in 2015 added a further ZAR 175 million (US\$11.8 million) and an



extra 500 m² factory space, making it the biggest green tech investor in the proposed SEZ. The first set of completed wind towers were delivered to the market in October 2015 and have already been installed in a wind farm in the Northern Cape Province. GreenCape provided on-the-ground support including, but not limited to, navigating the skills ecosystem and helping the City of Cape Town to progress the application through the required processes.

This investor confidence in the Atlantis investment landscape received a further boost when Resolux Africa, a Danish tower internals manufacturer, concluded a supplier agreement with GRI in 2015 for the supply of wind tower components. This led to the formal launch of Resolux Africa in March 2016, cementing the first step towards the development of a wind technology value chain in the proposed Atlantis SEZ. The investment of ZAR 25 million (US\$1.7 million) by Resolux has the potential to create 80 direct and indirect jobs in the wind value chain. Resolux is currently the only supplier of tower internals in South Africa and its long term focus is to use locally sourced materials to promote local content manufacturing.

Since its establishment, GreenCape has successfully assisted Wesgro (the regional trade promotion agency) in attracting other investors into the renewable energy space and these companies have established footprint outside the Atlantis area, but in Cape Town. These companies include Jinko (Solar PV); SunPower (Solar PV); SMA (Solar Inverters); and AEG (Solar Inverters).

The proposed Atlantis SEZ is an early national success story for local content manufacturing in the renewable energy space to support green industrial development.

Investment Promotion Agency partnership

The partnership between the South African National Investment Promotion Agency, InvestSA; the Western Cape Government's Investment Promotion Agency;, Wesgro; and GreenCape represents key stakeholder engagement since GreenCape's inception.

On a national to provincial level, engagement between InvestSA, Wesgro, and GreenCape initially took place on an ad hoc basis. On the provincial level, the Department of Economic Development and Tourism (DEDAT), Wesgro, and GreenCape had biweekly engagements to set priorities. In 2012, InvestSA and GreenCape began more frequent engagements to collaborate on presenting a case for establishing South Africa as a hub for the manufacturing of components and equipment for the renewable energy industry. In 2013, GreenCape served on the steering committee for a national DTI localization roadmap for the solar industry in South Africa, and in 2014 on the steering committee for a localization roadmap for the wind industry in South Africa.

In 2014, InvestSA and GreenCape signed a memorandum of understanding to formalize the relationship between the national government and a provincial agency and to demonstrate the success of collaboration between national, provincial, and local government in attracting sustainable foreign direct investment (FDI). Formal engagements between InvestSA and GreenCape still continue on a monthly basis. In December 2015, Wesgro and GreenCape conceptualized a joint resource (split 50–50 financially between the two entities) to ensure even better collaboration in attracting green FDI into the Western Cape Government.



As a result of the partnership between the provincial entities and coordination on a provincial level, the Western Cape has positioned itself as the definitive green economy hub in South Africa. Over 60% of all renewable energy project developers are based in the Western Cape. Of the manufacturing capacity that has been set up to service those projects, close to 70% is based in the Western Cape. In addition, GreenCape is the first African member of the international Cleantech Network.⁷ This is a network of world leading green regions and the cluster development agencies that support those regions.

To demonstrate the collaborative effort undertaken, each entity's role in securing this investment is outlined briefly below:

- InvestSA ensured effective coordination between relevant national entities (including the DTI's industrial development and localization teams, the Department of Energy and the Independent Power Producer's office; the South African Revenue Services (SARS), the International Trade Administration Commission, the Department of Home Affairs and the Department of Economic Development). Also, the DTI awarded GRI with a multi-million USD tax incentive and training allowance for the establishment of the manufacturing facility.
- Wesgro ensured coordination with the provincial Red Tape Reduction Unit, negotiations with the City of Cape Town on land availability, and promoting the province as a green economy hub.
- GreenCape provided essential knowledge of the renewable energy sector and was present in negotiations with GRI from as early as 2012. GreenCape further provided motivations to the City of Cape Town to offer attractive tariffs and land disposal incentives.

Developing the Waste Programme in GreenCape

The original waste sector desk was created to address concerns in the waste-to-energy sphere, specifically regarding organic waste treatment and its potential for energy (biogas). The program was then further developed to address specific, recurring challenges in the waste sector identified through the sector desk engagements.

April 2011: In a joint initiative between GreenCape and the provincial DEDAT, a waste sector desk was initiated. The aim was to understand the waste economy in South Africa through meetings with academia and both private and public sectors, and to identify barriers to the growth of the waste economy as well as points of intervention to support growth.

Currently the diverse membership stands at over 200 and consists of professionals including:

- Experts in waste management
- · local, provincial, and national spheres of government
- SANEDI
- GIZ.



January 2012: The outcome of the prioritization and screening was that municipalities needed support in decision making for waste management (infrastructure), both technical and legal. Three focus areas were selected:

- policy and legislation
- · assisting municipalities to select appropriate alternative waste management technologies
- developing the waste economy to consider full value chains.

Policy and legislation tool

The range of policies and regulations associated with (changes to) waste management and the setting up of alternative waste management infrastructure were identified as key barriers to the waste economy. A set of tools was developed to provide clarification and support in navigating these policies and regulations and, in the case of municipalities, to assist in achieving sustainable integrated waste management while addressing needs of different municipal role players—including the solid waste manager, municipal manager, finance manager, and economic development department.

2013–14: GreenCape developed a policy and regulation tool in the form of a spreadsheet that was aimed at assisting both private and public sectors to identify the policy and legislative requirements for implementation of the different types of alternative waste management technologies.

June–July 2014: GreenCape and GIZ, as part of the Climate Change Programme with the National Government Department of Environmental Affairs (DEA), the South African Local Government Association (SALGA), and SANEDI agreed to synergize efforts as GreenCape had made significant progress on developing content, and GIZ could leverage more resources to develop the tool into an online platform available nationally. GreenCape was responsible for the technical content of the tool. The project partners were responsible for web development, hosting, and legal vetting of the tool.

October 2015: Launch of a web based tool⁸ hosted by the national DEA.

The development of the waste tool is an example of GreenCape working vertically across all three tiers of government to enable new, green, low carbon technology options to be legally, responsibly, and diligently understood and procured in South Africa.

Integrated waste management decision support tool

2013–14: In parallel with the policy and legislation tool described above, GreenCape developed an Integrated Waste Management Decision Support Tool (IWM-DST) to assist the municipalities in determining the full life cycle impact of different waste management technologies. Combined, the goal of the two tools is to help municipalities procure waste management technology that is technically appropriate for their context, and that the process by which this is done is legally compliant.

August–December 2014: The draft IWM-DST was developed and tested using Stellenbosch Municipality as a case study. A full systems approach of costing different scenarios for municipal solid waste management was taken, using the financial model developed. In addition, the environmental impact of the different scenarios, including carbon emissions, was modeled on a life cycle basis using



environmental modeling software that had been adapted to the South African content. The results from the Stellenbosch case study highlight the environmental impact of the different scenarios, allowing the municipality to identify suitable interventions while taking the costs and benefits into account. The process demonstrated the importance of the engagement of different stakeholders, such as the solid waste management department, the director of technical services, and the portfolio committee in charge of engineering services.

February 2015: A full report was submitted to the project funder the provincial DEDAT detailing the tailoring of the IWM-DST to the South African context, and demonstrating its value in outlining the financial implications and environmental impact of different waste management systems on a life cycle basis.

July 2015: The results of the case study were integrated into the draft Integrated Waste Management Plan for Stellenbosch Municipality

August 2015: Work commenced on developing a simpler heuristic tool to assist municipalities to select appropriate waste management systems for their context, considering, among others, municipal goals and (recycling) targets, amount of waste available, and attendant financial viability of different alternative waste management technologies (e.g. composting, anaerobic digestion, thermal treatment).

May 2016: The heuristic tool is handed over to the provincial Department of Environmental Affairs and Development Planning, and specifically to those responsible for training municipal waste management officers across Western Cape Province, to be integrated into the training of those officers for the development of the next generation of municipal integrated waste management plans.

Smart Electricity: Municipal tariff modeling

Over the past 3 years the Smart Electricity team has worked with the majority of municipalities in the Western Cape to explore the future of the electricity business in this new and evolving landscape.

In the context of global climate change and a shifting energy supply landscape, developing nations, including South Africa, face unique challenges. Rising electricity prices, decreasing renewable energy prices, and the economic impact of an electricity supply crisis in South Africa have created a large demand for viable, small scale renewable energy sources. This shift in the energy landscape has necessitated a change in how local municipalities, and provincial and national governments, price and provide electricity.

In 2014, Stellenbosch Municipality approached GreenCape for support in understanding its role in this changing electricity landscape, as selling bulk electricity to residents is a significant revenue stream for municipalities to enable them to provide other services especially to poorer communities. The municipality was unsure as to how its revenue structure would respond to an uptake of small scale embedded renewable generation and energy efficiency, and what mechanisms exist for the municipality, as the electricity business is potentially reinvented. The municipality understood that it needed to change its electricity business, its tariff models, and its basic structures in order to remain a



valuable player in the electricity services value chain. However, the options available to the municipality and the effects of specific changes were not sufficiently understood by all the relevant stakeholders.

Based on an assessment of the current situation in Stellenbosch, the known problems, municipal requirements, and resources available to GreenCape, the Smart Electricity team undertook a study to explore tariff model options, analyzing and comparing them to highlight the effect that each option has on operating revenue and customer savings, given the uptake of embedded generation and energy efficiency. The study helped the municipality to understand the following.

- The uptake of small scale embedded generation has high potential and can add value to the local economy.
- Policies, regulations, bylaws and tariffs are required to manage the uptake of small scale embedded generation effectively.
- A well designed tariff will allow the municipality to manage the uptake to benefit both customers and the municipality.

The results of the study, and the continued work with the Municipality over the past year, have resulted in GreenCape supporting Stellenbosch in drafting small scale embedded generation policies, regulations, bylaws, and tariffs. Stellenbosch Municipality has advertised its policy and guidelines on small scale embedded generation for public comment, after which it will be tabled for council approval. With support from GreenCape, the Municipality has also drafted a tariff that has been submitted to the National Energy Regulator of South Africa (NERSA) for approval. All of the work has been designed to ensure that the municipality remains a valuable cog in the electricity services value chain.

The Smart Electricity team is continuing this work by providing information, documentation, and related support to other local municipalities in the province to enable them to draft small scale embedded generation policies, regulations, bylaws and tariffs, and for them to obtain the necessary approvals from NERSA.

South African Renewable Energy Technology Centre

The South African Renewable Energy Technology Centre (SARETEC) is the first national renewable energy technology centre in South Africa. SARETEC offers specialized industry related and accredited training for the entire renewable energy industry along with tailored short courses and workshops. As a National Centre, SARETEC endeavors to make locally developed technologies more accessible to the renewable energy industry in partnership with education and research institutions in all provinces.

The Centre has received funding from the Department of Higher Education and Training (DHET) through the National Skills Fund (NSF) and support from the German Ministry for Economic Cooperation and Development through the South African–German energy programme (SAGEN), implemented by GIZ, SANEDI, and GreenCape.

SARETEC has established strong partnerships with government, academia, industry, associations, and private sector companies within the renewable energy sector. The facility is an ecofriendly building and is designed to showcase the use of renewable energy and energy efficient technology.



Focus and prioritization

Having a dedicated resource, fully focused on delivering training infrastructure, GreenCape was able to swiftly explore a number of possibilities, finding several dead ends and frustrating nonstarter approaches, but ultimately a path to success.

A German skills development expert was seconded to GreenCape in 2011, under the Western Cape Bavaria Partnership Agreement. The expert continues to serve as a skills development consultant and is the GreenCape contact point for the activities undertaken over the past 5 years

In 2013, National Skills Fund granted ZAR 105 million (US\$7.1 million) to establish SARETEC. GreenCape was primarily involved in the development of the business plan, training schemes, equipment lists, and the advisory board.

Targeted and appropriate problem definition and solving

Dozens of workstreams had to converge to establish a training centre. This included curriculum development, physical infrastructure, industry support, and support from a large and confusing set of education stakeholders in the South African higher education system. Of note are the following milestones.

- Developed the Wind Turbine Service Technician (WTST) curriculum.
- · Negotiated scope of work and commissioned draft curriculum for South Africa.
- Worked closely with Centre for Renewable and Sustainable Energy Studies at Stellenbosch University on WTST training schemes.
- Initiated, organized, and managed review of National Diploma Qualifications in Engineering and attempted development of a WTST curriculum with GIZ and Quality Council for Trades and Occupations.
- Monitored and advised during construction of SARETEC.
- Cofacilitated training of two groups of South African candidates for Wind Turbine Service and four trainers in Germany.
- Facilitated the Manufacturing, Engineering and Related Sector Education and Training Authority (merSETA) pilot project WTST training
- Advised on candidate selection process and execution for merSETA pilot project WTST training

Credibility

The work that GreenCape was doing in other areas created considerable credibility for this project to be able to succeed', through the following activities, among others.

Drafted business plan and had discussions with DTI, Department of Science and Technology, Centre for Scientific and Industrial Research, SANEDI, and various other national institutions.

Met with Director General of DHET, presented a revised plan for a Wind Centre, including training, at



Technical Vocational Education Training colleges in the Western, Northern, and Eastern Cape.

Established weekly teleconference with DHET, GreenCape, and Stellenbosch University on organizational matters and funding.

An expert from the GIZ Centre for International Migration and Development (CIM) and GreenCape organized a study tour to wind industry facilities in northern Germany including delegates from various South African Universities, CIM, SANEDI, provincial governments, ESKOM (state utility), DHET, and the National Skills Fund.

Worked with the South African Wind Energy Association skills group on socioeconomic obligations of renewable energy utilities, including lobbying for SARETEC to be the preferred training provider in the renewables industry in Southern Africa.

GreenAgri portal

GreenAgri is an initiative that supports the Western Cape's provincial strategic goals and its Green Economy Strategic Framework, including smart agri-production plans on sustainable farming practices, balancing farming and conservation needs, resource efficiency, and waste minimization. The portal was developed by the Western Cape Department of Agriculture (DoA) in collaboration with GreenCape.

The DoA had received an increasing number of enquiries surrounding sustainable production in agriculture. Farmers complained that they did not always know what was relevant and reliable in this rapidly changing environment. The DoA approached GreenCape to provide credible, relevant, independent information for the farming community in the Western Cape.

In order to understand what would be relevant and to gather information for the GreenAgri website⁹, a number of role players in the agriculture sector were approached for their input. These included commodity associations, research institutions, government departments, farmers, organizations involved in sustainable initiatives, and consultants.

Stakeholder workshops with a variety of role players were also held to obtain input on how the website should be structured, and whether it was user friendly and the information was useful and relevant. This led to repackaging the information, as the sector is very broad and farmers do not necessarily want the same content. An ability to understand a merit order of relevance to the targeted farming community was developed over time.

The portal now acts as a one-stop portal for all farmers, agricultural researchers, and private and nongovernmental agencies interested in green, smart agricultural practices, initiatives, and research and in getting involved in the green economy space.

Services provided include:

- A trusted information platform
- · Allows users the opportunity to network with green industry participants
- provides a platform for industry participants to actively discuss smart agricultural matters



- data collection for proposed policy changes
- assists industry participants to keep up to date with ever changing green policies, practices, and inventions and to help them assess their own level of green activities (e.g. the business cases for green technologies developed by the bio-economy program, such as solar photovoltaics for fruit packhouses and insect protein for animal feed)
- acts as a publicly accessible repository of policies and action plans at provincial, national, and international levels.

Western Cape Industrial Symbiosis Programme

Background

The mitigation of climate change will require the industrial sector to be more resource efficient and reduce the carbon intensity of production processes. The Western Cape Industrial Symbiosis Programme (WISP), which is funded through the Green Economy initiative of the Western Cape Government, aims to address these challenges by improving resource efficiency through industrial symbiosis, that is, synergistic and typically mutually beneficial relationships between companies.

Program overview

WISP is a free facilitation service that connects companies so that they can identify and realize the business opportunities enabled by using unused or residual resources (materials, energy, water, assets, logistics, expertise). WISP uses various engagement tools including business opportunity workshops, individual company meetings, and site visits, as well as awareness raising at industry events. These methods allow WISP to build a network of companies and identify underutilized resources that could lead to business opportunities for member companies. An important role of the WISP team is managing the progression of the synergies identified, including building and maintaining relationships, developing business cases for member companies, assisting companies with other requirements for the implementation of synergies, creating synergy case studies, and reporting on the effectiveness of the program. In total 354 companies have been recruited into the WISP network since the program's inception in 2013.



Key performance indicators		Year 1 (2013–14)	Year 2 (2014–15)	Year 3 (2015–16)	Cumulative to date (2013–16)	Estimated 5 year impact [*]
Waste diversion (tonnes)		59	339	1,357	1,752	8,455
Additional revenue (ZAR million/US\$ million)		2.90 / 0.20	1.28 / 0.09	1.47 / 0.10	5.11 / 0.34	7.40 / 0.50
Cost savings (ZAR million/US\$ million)		2.70 / 0.18	2.30 / 0.15	3.14 / 0.21	7.04 / 0.47	14.4 / 0.97
Private investment (ZAR/US\$)		100,000 / 6,738			100,000 / 6,738	100,000 / 6,738
Fossil greenhouse gas savings	(tonnes CO2eq) [†]	1,100	1,500	2,800	4,900	22,100
	Electricity use of SA households	290	400	750	1,320	8,930
Jobs created		11 temporary 4 permanent 0 indirect 1 induced	0 temporary 6 permanent 2 indirect 1 induced	3 temporary 2 permanent 3 indirect 3 induced	14 temporary 12 permanent 5 indirect 5 induced	14 temporary 12 permanent 5 indirect 5 induced

Table 1 Achievements—aggregated list of verified outcomes of WISP (April 2013–March 2016)

[†] Carbon savings measured as fossil greenhouse gas savings in carbon dioxide equivalents (CO₂eq).

Catalyzing other regional programs, a national program, and a national strategy

The presence of the national government agency responsible for industrial resource efficiency and competitiveness (the DTI funded National Cleaner Production Centre) on the program steering committee, as well as interactions between government officials responsible for the green economy in different provinces, led to national awareness of the success of WISP as a program leading to business and environmental benefit. These interactions lead to the initiation of industrial symbiosis programs in two other provinces (Gauteng and KwaZulu-Natal) as well as the opening of dialogue on a national program and national strategy for industrial symbiosis. The success of WISP led to the inclusion of industrial symbiosis in the national Industrial Policy Action Plan for 2016/17, aiming to mainstream industrial symbiosis into industrial practice in South Africa.

Key to the rapid traction for industrial symbiosis in South Africa was the constitution of a steering committee for the national program, which had representation from government departments and agencies at national and provincial levels, as well as business, as follows:



- national government departments: DTI, DEA, Department of Economic Development and Department of Science and Technology
- business/industry: National Business Initiative and South African Chamber of Commerce and Industry
- government agencies: the National Cleaner Production Centre of South Africa (national) and the GreenCape Sector Development Agency (provincial).

The three regions with industrial symbiosis programs were represented by:

- Western Cape: DEDAT (represented by GreenCape Sector Development Agency)
- Gauteng: Department of Economic Development and Department of Agriculture and Rural
 Development
- KwaZulu-Natal: Department of Economic Development and Environmental Affairs .

This national level activity was enabled by funding via the UK Prosperity Fund.

Beyond South Africa

As part of the UK Prosperity Fund project, an activity on knowledge sharing and awareness raising with other African countries was initiated. Representatives from both government and industry from Namibia, Mauritius, Mozambique, and Tanzania attended training in South Africa which culminated in the development of a draft strategy and implementation plan for the initiation of an industrial symbiosis program in the attendees' countries. Mauritius has been able to take this forward and is initiating a national industrial symbiosis program.

WISP receives international recognition

WISP was nominated and was a finalist in the Cities and Regions category for the international Circular Economy Awards presented at the 2015 World Economic Forum in Davos.

Notes

⁹ <u>GreenAgri</u>.

¹ GreenCape: Resources—<u>Market Intelligence Reports</u>.

² lbid.

³ Western Cape Government (2013) 'Green Finance Investment Case: Executive Summary.'

⁴ SANEDI: <u>South African Sustainable Energy Finance Information Database (SASEFID)</u>.

⁵ lbid.

⁶ infoDev: <u>Connecting green technology entrepreneurs: implications for public program design</u>.

⁷ International Cleantech Network: <u>Global network of leading cleantech clusters</u>.

⁸ Department of Environmental Affairs: <u>Alternative waste treatment guide</u>.



The Low Emission Development Strategies Global Partnership (LEDS GP) was founded in 2011 to enhance coordination, information exchange, and cooperation among countries and international programs working to advance low emission, climate resilient growth. LEDS GP currently brings together LEDS leaders and practitioners from more than 160 countries and international institutions through innovative peer to peer learning and collaboration via forums and networks. For the full list of participants and more information on partnership activities, see www.ledsgp.org

This document is from the LEDS GP, a global program for which the United States National Renewable Energy Laboratory (NREL) and the Climate and Development Knowledge Network (CDKN) serve as the Secretariat. NREL is a national laboratory of the U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, operated by the Alliance for Sustainable Energy LLC. CDKN is a program funded by the UK Department for International Development (DFID) and the Netherlands Directorate-General for International Cooperation (DGIS) for the benefit of developing countries; with further funding from the United States Department of State for the co-management of the Low Emission Development Strategies Global Partnership (LEDS GP). The views expressed and information contained in it are not necessarily those of, or endorsed by, DFID, DGIS, the US Department of State, NREL, US Department of Energy, or the entities managing the delivery of CDKN, which can accept no responsibility or liability for such views, completeness or accuracy of the information or for any reliance placed on them. This publication has been prepared for general guidance on matters of interest only, and does not constitute professional advice. You should not act upon the information contained in this publication without obtaining specific professional advice. No representation or warranty (express or implied) is given as to the accuracy or completeness of the information contained in this publication, and, to the extent permitted by law, the entities managing the delivery of CDKN and NREL do not accept or assume any liability, responsibility or duty of care for any consequences of you or anyone else acting, or refraining to act, in reliance on the information contained in this publication or for any decision based on it.

Copyright © 2016 Low Emission Development Strategies Global Partnership All rights reserved

Cover photo: Darling National Demonstration Wind Farm in Cape Town, South Africa (photo credit: Warren Rohner)