FINANCING CLIMATE RELATED INFRASTRUCTURE

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DEVELOPMENT BANK OF SOUTHERN AFRICA
Building Africa's Prosperity




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DBSA: BACKGROUND

DBSA was created to catalyse economic growth through investment in economic & social infrastructure and supporting regional integration

1 **Founding year**	1983
2 **Shareholding structure**	100% owned by SA Government through the Ministry of Finance
3 **Vision**	A prosperous and integrated region, progressively free of poverty and dependence
4 **Mission**	▪ To advance the development impact in the region **by expanding access to development finance** and effectively integrating and implementing **sustainable development solutions** – Improve the **quality of life** of people through the development of **social infrastructure** – Support **economic growth** through investment in **economic infrastructure** – Support **regional integration**
5 **Strategic objectives**	▪ Sustained growth in development impact ▪ Integrated infrastructure solutions ▪ Financial sustainability

DBSA: VALUE PROPOSITION

	1 Plan	2 Prepare	3 Finance	4 Build	5 Maintain / improve
Services	▪ Infrastructure plans ▪ Sector and master plans	▪ Project identification ▪ Feasibility assessments ▪ Technical assistance ▪ Financial structuring ▪ Project Preparation funds ▪ Lead arranger	Provide vanilla and boutique financing opportunities ▪ Debt ▪ Mezzanine Finance ▪ Limited non–recourse lending	▪ Managing the design and construction of key projects in the education, health and housing sectors ▪ Project Management support	▪ Supporting the maintenance and/or improvement of key infrastructure projects
Clients	**South Africa** ▪ Municipalities	**South Africa** ▪ Municipalities ▪ SOE ▪ PPP ▪ Private sector **Rest of Africa** ▪ SOE ▪ Public–Private Partnerships ▪ Sovereigns	**South Africa** ▪ Municipalities ▪ SOE ▪ PPP ▪ Private sector **Rest of Africa** ▪ SOE ▪ Public–Private Partnerships ▪ Sovereigns	▪ National and provincial government departments ▪ Municipalities	▪ National and provincial government departments ▪ Municipalities

PRIMARY: Energy; Transport, ICT, Water & Sanitation
SECONDARY (ONLY IN SA): Education, Housing, Health

DBSA offers a unique value propositions along the value chain; playing a leading role in project preparation, funding and implementation

WHY GET INVOLVED IN GREEN ECONOMY?

The South African government has over the years adopted a range of national legislation and plans in support of its vision of a greener and more sustainable economy.

South Africa's vision of sustainable economic development and commitment to a greener economy was re-affirmed at the Conference of Parties 17th Meeting (COP17) held in Durban, South Africa during December 2011.

The DBSA in support of government's commitment to contribute to a wide range of goals of transitioning to a greener economy aims to:

- *To be a leading DFI with regard to its contribution towards the country and region's transition to a low carbon economy*
- *Support government and region in meeting its NDCs*
- *Achieve excellence in climate change reporting and development of appropriate frameworks*

DBSA CLIMATE CHANGE POLICY FRAMEWORK

1	The DBSA board has approved a climate change policy framework. The policy framework enables the DBSA to communicate to stakeholders the DBSA intentions with regard to supporting climate change.
2	This policy framework provides the DBSA with a vehicle to progressively transition to a greener portfolio over a reasonable period of time by providing a cohesive, measurable and accountable response to climate change
3	The targets proposed within the policy framework provide goals to enable the DBSA to transition to a greener portfolio and are supported by identified opportunities, baselines indicators, and reporting frameworks to track progress in responding to climate change.
4	To Policy is further aligned with the Bank's 100 billion target in partnership with other key stakeholders.

DBSA ACCREDITATION AND PARTNERSHIPS

The DBSA has created a new Climate Finance Unit to strategically advance sustainable and environmentally friendly infrastructure solutions

DBSA

GF

The Green Fund is managed by the DBSA on behalf of Department of Environmental Affairs.

Current portfolio (46):

- *8 capacity development projects*
- *16 R&D projects*
- *22 Investment projects*

GCF

DBSA 's accreditation to GCF allows the bank to access GCF funds in order to support innovative and risk-sharing approaches in projects that contribute towards low-carbon and climate-resilient development.

Current Pipeline:

- *5 project approved (2 FP, 2 PPF & 1 readiness support)*
- *6 being prepared for GCF board consideration, pipeline being developed.*

GEF

The DBSA is also accredited as a National Project Agency (NPA) for the Global Environment Facility (GEF) since 2014.

Current Pipeline:

- *6 projects approved*
- *Pipeline of projects being prepared for GEF 7*

IDFC

DBSA is an active member of the International Development Finance Club, IDFC, formed in 2011. IDFC is a network of 23 leading national, regional and international development banks from across the planet that share a similar vision of promoting of low-carbon and climate resilient futures **(lessons sharing and joint reporting)**

GILFCC (The Lab)

DBSA is a member of the Global Innovation Lab for Climate Change, whose mandate is to support the **identification and piloting of climate change financing instruments and products** to catalyze private sector money into Climate Change mitigation projects in developing countries.

FINANCING INSTRUMENTS FOR CLIMATE INFRASTRUCTURE

Instrument	Key Features
General Obligation Loans/Bonds	• Funds may be used for any municipal project • Minimal reporting requirements, i.e., standard financial covenants requirements • Interest rates dependent on the credit rating of the city • Sources of repayments backed by all municipal revenue streams
Concessional Loan or Grants	• Special funds set aside for high-impact projects by donors or MDB's • The proceeds of the loan are typically restricted to the project • Subsidized or zero interest rates are aimed at achieving a blended WACC • Flexible repayment terms, e.g., longer tenor and grace period • High and frequent monitoring of use of funds and implementation of the project

FINANCING INSTRUMENTS FOR CLIMATE INFRASTRUCTURE

DBSA

Instrument	Characteristics
Green/Climate Bonds	• Listed fixed income instrument at a stock or bond exchange • Proceeds are exclusively used for eligible green infrastructure Attracts pool of investors with interest in the environment • Generally pays low coupon than GO bonds • Instrument can be rated independent of the city • Repayments of bonds are backed by the balance sheet • High and frequent monitoring requirements until maturity of debt • High set up costs, lead arranger, project certification, audit fees, etc.
Public Private Partnerships/Project Bonds	• Private sector involvement in delivering government infrastructure using various models, e.g., BOT, DFBOT, • Off-balance sheet structure which alleviates balance sheet constraints • Private sector assumes the majority of the risk, incl. market risk • Credit assessment is based mainly on project revenues and off-taker • Debt is repaid from project revenues

ROADMAP TO FINANCING

DBSA

Planning/ Pre-feas

- Masterplans
- Integrated and sustainable
- Pre-feas (concept)
- Project scoping
- Preliminary designs
- Preliminary benefits

Bankable Feasibility

- Baseline inventory
- Technical and bankable feasibility
- Site identification
- EIA
- Legislative authorizations (energy generation, WUL, etc)
- Socio-economic assessment
- Develop Key indicators
- Financial modeling and structuring
- Technical Designs

Credit Worthiness

- Revenue enhancements (Improve collections, increase tax base, minimize non-revenue water and electricity)
- Improved governance (Positive audit outcomes)
- Build institutional capacity

Financial Closure

- Facility agreements
- Conditions precedent (CP's) fulfilment
- Log frame and Reporting Framework
- Financial Covenants

Monitoring & Evaluation

- Disclosure of proceeds
- Monitoring of implementation
- External and Independent review
- Post issuance reporting
- Evaluation of the project performance - actual outcomes vs baseline
- Monitoring of covenants

CURRENT ACTIVITIES
Climate Finance Facility (CFF)

Location	Lesotho, eSwatini, South Africa and Namibia
Objective	Facility to leverage private sector investment in Climate Change projects
Project Development Stage	Implementation Stage (contracting in progress)
DBSA Investment GCF investment	ZAR 650 mn USD 55 mn

Project Description & Status

Project Description

- The CFF will use its capital to ***fill market gaps*** and crowd-in private investment, targeting commercially viable technologies that cannot currently attract market-rate capital at scale
- It will focus on infrastructure projects that mitigate or adapt to climate change and utilise two main instruments: ***subordinated debt/first-loss and credit enhancements*** such as tenor extension to projects that are commercially viable but not currently being financed by the private sector banks
- Covers energy generation, energy efficiency, water, sustainable transport and waste management

Project Status

- Contracting phase
- Approved by GCF board in October 2018.

Development Impact

- Shift to low-emission sustainable development pathways
- Reduced CO2 emissions
- Economic growth through climate resilience
- Increased capacity within region for climate mitigation, adaptation and resilience

CURRENT ACTIVITIES (CONT.)

Embedded Generation Investment Programme

Location	South Africa
Objective	Facility to support non-sovereign backed IPPs (embedded generation).
Project Development Stage	Implementation expected to commence mid 2019.
DBSA Investment GCF investment	~ZAR 3.7 bn USD 100 mn

Project Description & Status

Project Description

- To support embedded ***generation renewable energy*** projects that have no demonstrable track record of successfully reaching financial close.
- The key objective of the EGIP is to formulate this track record to ensure that the initial Projects reach financial close, by so doing, a market for embedded generation is created in South Africa.
- EGIP is a credit support mechanism to ***support non-sovereign backed PPAs*** for renewable energy projects in South Africa
- In addition, this financing mechanism is intended to crowd-in funding from commercial lenders and to assist South Africa to make further inroads towards their climate change objectives.

Project Status

- Approved by GCF board of February 2019.
- Contracting Phase

Development & Climate Impact

- Shift to low-emission sustainable development pathways
- Addition of 330 MW of new generating capacity, generating approx. 744,600 MWh of clean electricity annually, thereby directly avoiding emissions of more than 717,794 tCO2e per annum.
- Provision of clean energy to households
- Socio-economic co-benefits through job creation
- Socio-economic benefits through lower electricity costs
- Socio-economic through the inclusion of women

CURRENT ACTIVITIES (CONT.)

Public and Private Sector Energy Efficiency Programme (PPSEEP)

Location	South Africa
Client	National Business Initiative
Project Development Stage	Project Preparation
GCF Investment	USD 0.32 million

Project Description & Status

Project Description

- Project preparation funding (PPF) will be used to conduct a detailed feasibility to evaluate the optimal financial & institutional model for a Public & Private Sector Energy Efficiency Programme (PPSEEP) in South Africa.
- Additionally, PPF funding will be used to prepare the full concept feasibility study and application to the GCF, and to conduct both gender impact, and ESS studies. The estimated budget is $ 318 060, to complete the studies within 9 months.

Project Status

- Execution and Implementation started in Feb 2019

Climate and Development Impact

- Lifetime energy and carbon savings in public and private sector
- Improved job security and job creation in industry

CURRENT ACTIVITIES (CONT'D)

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Building a Resilient and Resource-efficient Johannesburg (GEF 6)

Grant and co-financing amount	Grant: US$ 8 million Co-financing: US$ 119 million
Key project components	• Ensuring ***sustainability, integration,*** in the development and implementation of the city's physical plans. • Improving urban ***food security*** in Johannesburg by increasing the efficiency of food flows and improving peri-urban agriculture techniques. • Adopting evidenced-based ***biodegradable waste management*** strategy. • Improving evidence-based ***planning*** in South Africa
Implementation status	In procurement
Timelines	January 2018 – December 2022 (delayed due to contracting)
Key indicators for M&E	Direct: 3.3 Mt CO2eq, Indirect: 1.1 Mt CO2eq

CURRENT ACTIVITIES (CONT.)

Municipal Solid Waste Programme

Location	Rustenburg Local Municipality (LM), Emfuleni LM, uMhlathuze LM, Msunduzi LM, Mbombela LM and Mangaung Metro Municipality (MMM)
Client	Department of Environmental Affairs / Municipalities
Project Development Stage	Project Preparation
GCF Investment	USD 1.41 million

Project Description & Status

Project Description

The purpose of the Programme would be to implement various organic waste treatment solutions identified in 6 pilot municipalities and thereafter upscale implementation to 24 additional municipalities through a programmatic approach. The programmatic approach will allow subsequent 24+ sub-projects to learn from the first 6 fore-runners and replicate the solutions in a streamlined, cost-efficient manner.

Project Status

- Contracting phase
- Project preparation phase to start in early 2019

Development Impact

- significant methane emission reductions, as a result of waste diverted from landfill, fuel switch to AD and improved soil carbon sequestration due to compost applications;
- reduced air pollution;
- job creation for both men and women;
- improvement of waste collection services, thus reducing public health risks to vulnerable segments of the population;
- enhanced food security and ecosystem services as a result of compost applications and the reduction of inadequate waste practices.

THANK YOU

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