DBSA

Development Bank of Southern Africa

2017 SUSTAINABILITY REVIEW

DRIVING INVESTMENT IN INFRASTRUCTURE

COMMITTED TO DEVELOPING ECONOMIC AND SOCIAL INFRASTRUCTURE IN SOUTH AFRICA AND THE REST OF AFRICA

GUIDE

OUR STRATEGIC OBJECTIVES

SUSTAINED GROWTH IN DEVELOPMENTAL IMPACT

PROVIDING INTEGRATED INFRASTRUCTURE SOLUTIONS

MAINTAIN FINANCIAL SUSTAINABILITY

OUR OPERATIONAL OBJECTIVES

CONTINUOUS IMPROVEMENT OF INTERNAL SYSTEMS AND PROCESSES

CREATE AND MAINTAIN A HIGH PERFORMANCE ENVIRONMENT

WE TARGET INVESTMENTS IN:

- ENERGY
- TRANSPORT
- WATER
- ICT

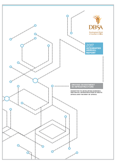
WE PROVIDE SUPPORT TO THESE SECTORS:

- HEALTH
- HOUSING
- EDUCATION

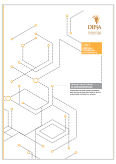
WWW.DBSA.ORG

CONTENTS

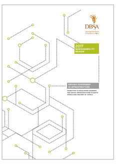
OUR REPORTING SUITE FOR 2017 CONSISTS OF THREE REPORTS



THE 2017 INTEGRATED ANNUAL REPORT, WHICH IS OUR PRIMARY COMMUNICATION WITH OUR STAKEHOLDERS.



THE 2017 ANNUAL FINANCIAL STATEMENTS, WHICH INCLUDE THE DIRECTORS' REPORT AND THE INDEPENDENT AUDITOR'S REPORT.



THIS 2017 SUSTAINABILITY REVIEW, WHICH PROVIDES FURTHER INFORMATION ON OUR SUSTAINABILITY PERFORMANCE.

Indicates a website reference where more information can be found.

Indicates a page reference for further information which can be found elsewhere in this reporting suite.


HOUSING


EDUCATION


ICT


WATER


TRANSPORT


ENERGY


HEALTH

ABOUT THIS REVIEW

The DBSA is pleased to present our Sustainability Review for the year ending 31 March 2017.

This report focuses on material sustainability areas that affect the long-term success of our business and that relate to any significant impacts we have on the economy, environment or communities in which we operate. It also focuses on issues that are important to our key stakeholders.

The boundary of the review is the DBSA legal entity. There were no significant changes to the scope or aspect boundaries during the reporting period.

We have included a selection of case studies and a view of our estimated development impact to give the reader a sense of what we are seeking to achieve through our investments. While this report may be of interest to all our stakeholders, it deals with issues of particular interest to bond investors and analysts, sustainable development professionals and other parties who may have a specific interest in the DBSA's sustainability performance.

As a state-owned enterprise, it is important that the activities of the organisation are closely aligned to support key national imperatives. In this report we reflect on our contribution to the National Development Plan as well as the United Nations' recently adopted 17 Sustainable Development Goals (SDGs).

We produce a full suite of reports to cater for the diverse needs of our stakeholder base. The following reports supplement this Sustainability Review:

Integrated Annual Report Primary report to shareholder and bond investors providing an integrated view of the DBSA's strategy and performance	• Overview of strategy and value creation • Performance outlook • Corporate governance report • Remuneration report
Annual Financial Statements	• Statutory Annual Financial Statements • Directors' report

REPORTING FRAMEWORK

Our sustainable development reporting was developed in accordance with the Global Reporting Initiative's (GRI's) G4 Sustainability Reporting Guidelines (Core). A detailed GRI table, providing responses to each of the GRI criteria, can be found in Annexure A to this report. With respect to the Specific Standard Disclosures of the GRI 4 guidelines, we provide our management approach for all our material issues. We also disclose our support to the United Nations' Global Compact principles in Annexure B.

MATERIALITY

The Sustainability Review aims to provide an accurate, accessible and balanced overview of the DBSA's strategy, performance and outlook in relation to material economic, financial, social, environmental and governance issues. It concentrates on items of both a qualitative and quantitative nature that are material to the DBSA's ability to deliver on its mandate and strategy.

The DBSA defines material issues as those which have the potential to substantially impact our ability to create and sustain value for our stakeholders. In identifying matters which are material, we consulted a wide range of resources, including:

- The Shareholder's Compact and the DBSA's Corporate Plan
- The DBSA's key risks identified during the risk management process
- The business context of a development finance institution.

In compiling the Sustainability Review, three specific material areas were identified, namely our approach to sustainable governance, investment in infrastructure at a project level as well as our approach to investing in our staff. We have also included selected non-material information, around our fund management services in supporting the transitioning to a green economy as well as how we reduce the waste we use. We have also assessed the Financial Service Sector Specific Disclosure requirements and incorporated the material matter of 'product portfolio' into the G4 table in Annexure A.

ASSURANCE

The DBSA's management has assessed the viability to have the Sustainability Review, other than the elements mentioned hereafter, externally assured, and concluded that the benefits do not exceed the cost of doing so. The disclosures on the GRI tables have, however, been reviewed by the DBSA's Internal Audit team. Their findings are indicated as part of Annexure A. Our external auditor, in addition to providing assurance on the DBSA's Annual Financial Statements, is required to perform certain procedures on our predetermined performance indicators. Their report and findings are reflected in the External Auditor's report in the Annual Financial Statements.

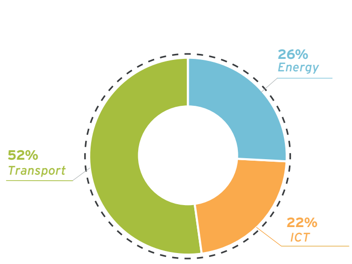
APPROVAL OF THE SUSTAINABILITY REVIEW

This report was prepared under the supervision of the Group Executive: Strategy, Mohan Vivekanandan. It was reviewed by the DBSA Audit and Risk Committee and, upon their recommendation, approved by the Board on 22 June 2017. Comments on this report can be sent to The Manager: Strategy at corporatestrategy@dbsa.org, or 1258 Lever Road, Headway Hill, Midrand, 1685.

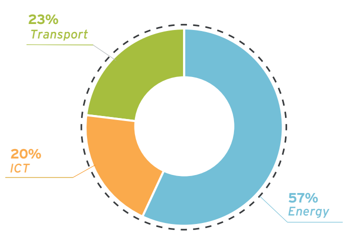
SUSTAINABILITY HIGHLIGHTS

ECONOMIC INFRASTRUCTURE AND GROWTH IN SOUTH AFRICA

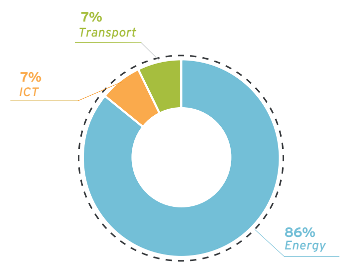
Approvals 2017



Commitments 2017



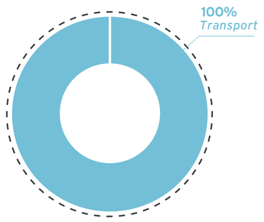
Disbursements 2017



in millions of rands	2017	2016
Approvals	**3 882**	5 476
Commitments	**3 622**	3 003
Disbursements	**2 695**	4 943

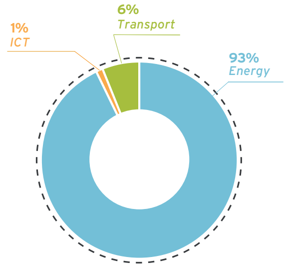
REGIONAL INTEGRATION

Approvals 2017



Commitments 2017

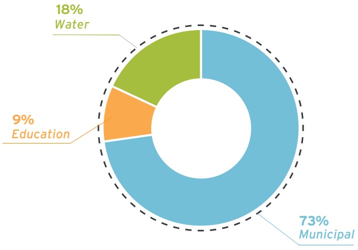
Disbursements 2017



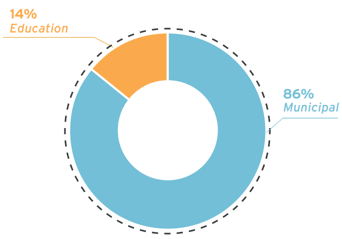
in millions of rands	2017	2016
Approvals	**1 844**	9 738
SADC (excluding South Africa)	**870**	6 199
Rest of Africa (excluding SADC)	**974**	2 539
Commitments	**3 621**	6 164
SADC (excluding South Africa)	**1 957**	4 131
Rest of Africa (excluding SADC)	**1 664**	2 033
Disbursements	**3 650**	3 475
SADC (excluding South Africa)	**1 853**	3 340
Rest of Africa (excluding SADC)	**1 797**	135

SUPPORTING SOCIAL DEVELOPMENT AND SERVICE DELIVERY

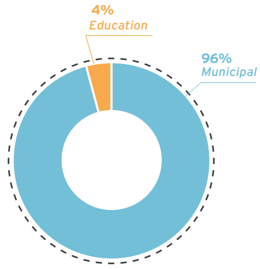
Approvals 2017



Commitments 2017



Disbursements 2017



in millions of rands	2017	2016
Approvals	**9 525**	10 287
Municipal	**6 974**	7 572
Other social	**2 551**	1 715
Commitments	**6 033**	8 874
Municipal	**5 182**	7 859
Other social	**851**	1 015
Disbursements	**5 817**	8 667
Municipal	**5 555**	8 055
Other social	**262**	612

SUPPORTING ENVIRONMENTALLY ORIENTATED INFRASTRUCTURE PROGRAMMES

	2017	2016
Electricity consumption in megawatts	**2.1**	2.8
Water consumption in kiloliters	**18 456**	7 789

> Delivering on our mandate and turning our sustainability roadmap into reality will help to ensure a more prosperous South Africa and region.

01

OVERVIEW

FOREWORD BY CHIEF EXECUTIVE OFFICER

224 000

households to benefit from funds committed to municipalities

We are proud to present the DBSA's 2017 Sustainability Review, a window on our effort to embedding sustainability in all our endeavours.

Enhancing the sustainable development of the social, economic and ecological environment is one of the foundational principles of the DBSA. At the core is our mandate to promote economic development and growth, human resources development and institutional capacity-building by supporting sustainable development projects and programmes, focusing on infrastructure and leveraging the private sector. In essence, we aim to:

- Provide our clients with compelling reasons to deal with the DBSA as a development finance institution of choice
- Provide our people with good reasons why they should invest their working lives at the DBSA
- Give communities sound reasons why they should trust and engage with the DBSA
- Assure the government that the DBSA can deliver on its commitments
- Give our investors sound reason why they should invest in the DBSA.

In our quest to build a sustainable future for the DBSA, our highlights for the year include:

- R12.4 billion (2016: R17.1 billion) infrastructure investment into our core sectors of energy, water, transportation and telecommunications. Of this, R5.6 billion (2016: R8.1 billion) was invested with municipalities, a key provider of social infrastructure in South Africa
- 224 000 households are estimated to benefit from new or upgraded infrastructure through funding committed to municipalities
- Accelerated support for the implementation of social infrastructure
  - 12 schools were completed as part of the Accelerated School Infrastructure Delivery Initiative Programme, benefiting 4 254 learners in 2017. More than 40 000 learners have benefited since the inception of the programme. An additional 49 KwaZulu-Natal storm-damaged schools were refurbished, 25 schools were fenced and one town library was completed during the period
  - 342 affordable houses were completed
  - 28 new additions to clinics were completed and six (6) storm-damaged clinics were refurbished
  - More than 266 000 people gained access to health counselling and testing in newly built clinics
  - 15 municipal projects were completed and 24 municipal projects refurbished covering roads, bulk water, water and sewer reticulation, and ablution park facilities
  - 284 traditional leaders and councillors were trained in visionary leadership and integrated development planning
  - 500 SMMEs benefited from construction contracts to the value of R493 million
  - 9 077 jobs were created through projects completed
- The DBSA continued to partner with the Department of Environmental Affairs on a green funding mechanism that will creatively address the need for a range of green and climate financing instruments and facilitate relations with similar global funds. R11.3 million (2016: R292 million) was disbursed to various projects.
- The DBSA was accredited as a Green Climate Fund (GCF) entity by the GCF Board together with organisations such as AfDB, Crédit Agricole, EIB, IFC and HSBC at a meeting held in Songdo, South Korea in March 2016.
- The DBSA's governance standards compared well with best practice. This was recognised by an A+ assessment rating based on the Association of African Development Finance Institution's (AADFI) Prudential Standards, Guidelines and Rating System during the year. Furthermore, using the Institute of Southern Africa's governance assessment instrument the assessment graded the DBSA an AAA, representing the highest application level
- Invested R15.2 million (2016: R10.3 million) in training DBSA staff members and continued to provide various wellness programmes in the organisation
- In our efforts to establish the DBSA as an employer of choice, we continue to carry out an employee culture survey to ascertain the progress made in embedding a high performance culture. Significant progress has been made and the results of the survey have already begun to inform human capital policies and practices.

Delivering on our mandate and turning our sustainability roadmap into reality will help to ensure a more prosperous South Africa and region. Our long-term prospects are ultimately closely connected to the requirements of all our stakeholders.

We therefore invite those with an interest in our operations to comment on this Sustainability Review and present their views on how we can work together to address the challenges and opportunities of the future.

Patrick Dlamini
Chief Executive Officer

SUSTAINABLE DEVELOPMENT GOALS

THE DBSA'S ROLE IN SUPPORTING THE SDG OBJECTIVES

The United Nations adopted 17 Sustainable Development Goals (SDGs) to shape a development agenda until 2030. The DBSA's investments are informed by the SDGs and it has identified six of these goals as its main priorities, with its strategy also being linked to these goals. The table below illustrates how the DBSA can play a direct role in achieving the SDG goals:

SDG	SDG outcome	The DBSA's role	Strategic initiative	Sector focus
1 NO POVERTY	End poverty in all its forms everywhere			
2 ZERO HUNGER	End hunger, achieve food security and improved nutrition and promote sustainable agriculture			
3 GOOD HEALTH AND WELL-BEING	Ensure healthy lives and promote well-being for all at all ages			HEALTH
4 QUALITY EDUCATION	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all			EDUCATION
5 GENDER EQUALITY	Achieve gender equality and empower all women and girls			
6 CLEAN WATER AND SANITATION	Ensure availability and sustainable management of water and sanitation for all	Direct	SUSTAINED GROWTH IN DEVELOPMENTAL IMPACT	WATER
7 AFFORDABLE AND CLEAN ENERGY	Ensure access to affordable, reliable, sustainable and modern energy for all	Direct	SUSTAINED GROWTH IN DEVELOPMENTAL IMPACT	ENERGY
8 DECENT WORK AND ECONOMIC GROWTH	Promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all			

SUSTAINABLE DEVELOPMENT GOALS

SDG	SDG outcome	The DBSA's role	Strategic initiative	Sector focus
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	Build resilient infrastructure, promote inclusive and sustainable industrialisation, and foster innovation	Direct	PROVIDING INTEGRATED INFRASTRUCTURE SOLUTIONS	TRANSPORT
10 REDUCED INEQUALITIES	Reduce inequality within and among countries			
11 SUSTAINABLE CITIES AND COMMUNITIES	Make cities and human settlements inclusive, safe, resilient and sustainable	Direct	SUSTAINED GROWTH IN DEVELOPMENTAL IMPACT	HOUSING
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	Ensure sustainable consumption and production patterns			
13 CLIMATE ACTION	Take urgent action to combat climate change and its impacts	Direct	SUSTAINED GROWTH IN DEVELOPMENTAL IMPACT	
14 LIFE BELOW WATER	Conserve and sustainably use the oceans, seas and marine resources for sustainable development			
15 LIFE ON LAND	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation as well as biodiversity loss			
16 PEACE, JUSTICE AND STRONG INSTITUTIONS	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels			
17 PARTNERSHIPS FOR THE GOALS	Strengthen the means of implementation and revitalise the global partnership for sustainable development	Direct	MAINTAIN FINANCIAL SUSTAINABILITY	ICT

More details regarding the United Nations Sustainable Development Goals can be found online at www.un.org/sustainabledevelopment/sustainable-development-goals.

OUR STRATEGY

Since 1994, the DBSA has positioned itself as a development finance institution (DFI) that champions, and often leads, infrastructure integration and development. It has sought to promote economic and social development by mobilising financial and other resources from the national and international private and public sectors for sustainable development projects in South Africa, the SADC region and the whole of the African continent.

In broad and aspirational terms, the DBSA has the following vision:

VISION

A prosperous and integrated resource-efficient region, progressively free of poverty and dependency.

More specific to its value proposition and comparative advantages, is its mission:

MISSION

To advance the development impact in the region by expanding access to development finance and effectively integrating and implementing sustainable development solutions to:

- Improve the quality of life of people through the development of social infrastructure
- Support economic growth through the investment in economic infrastructure
- Support regional integration
- Promote sustainable use of scarce resources

The constitution and conduct of the DBSA Board of Directors are primarily governed by the Development Bank of Southern Africa Act, No 13 of 1997 (Amended 41 of 2014) and further regulated by the Public Finance Management Act, No 1 of 1999 (PFMA), the principles of the King Code of Governance Principles for South Africa 2016 (King IV) and the Protocol on Corporate Governance in the Public Sector. The DBSA's mandate is defined in section 3 of the DBSA Act.

In fulfilling its mandate, the DBSA is guided by a number of international, regional and local policies, accords and agreements, and subscribes to the goals and targets of the United Nations' *Transforming our World: the 2030 Agenda for Sustainable Development.* Furthermore, in accordance with COP21, we support business innovation and bringing scale to the emerging green economy. At a national level, the DBSA strives to improve the lives of all South Africans through the investment in infrastructure and in keeping with the priorities and objectives of the National Development Plan.

THE DBSA'S SUSTAINABILITY APPROACH

The DBSA is a development finance institution, wholly owned by the South African government, with a mandate to support infrastructure integration and development. It seeks to promote economic and social development by mobilising financial and other resources from the national and international private and public sectors for sustainable infrastructure development projects in South Africa, the SADC region and more recently to the whole of the African continent.

In broad and aspirational terms, the DBSA has the vision of a prosperous and integrated resource-efficient region, progressively free of poverty and dependency. More specific to its value proposition and comparative advantages, is its mission to advance the development impact in the region by expanding access to development finance and effectively integrating and implementing sustainable development solutions to:

- Improve the quality of life of people through the development of social infrastructure
- Support economic growth through the investment in economic infrastructure
- Support regional integration
- Promote the sustainable use of scarce resources

In fulfilling its mandate, the DBSA is guided by a number of international, regional and local policies, accords and agreements. It subscribes to the goals and targets of the United Nation's *"Transforming our World: the 2030 Agenda for Sustainable Development"*. Furthermore, in accordance with COP21, it supports business innovation and bringing scale to the emerging green economy. At a national level, the DBSA strives to improve the lives of all South Africans through its investment in infrastructure, in keeping with the priorities and objectives of the National Development Plan as well as the United Nations' recently adopted 17 Sustainable Development Goals (SDGs).

MANAGEMENT APPROACH TO SUSTAINABILITY GOVERNANCE

The various senior governance bodies within the DBSA are responsible for ensuring that sustainability has the priority it deserves across the organisation.

Sustainability considerations are embedded in each of the various Board committees.

The DBSA applies sound corporate governance structures and processes, which the Board considers pivotal to delivering sustainable growth in the interests of all stakeholders. The DBSA's values-driven culture and Code of Ethics underpin its governance structures and processes, committing the organisation to high standards of business integrity and ethics in all its activities. Governance structures and processes are reviewed regularly, and adapted to accommodate internal developments and reflect national best practice.

The Board considers corporate governance to be a priority and endeavours to go beyond minimum compliance, where appropriate. The Board will therefore consider all new non-statutory corporate governance concepts carefully and will implement them if they are deemed to be in the DBSA's best interests. The application of governance requirements should facilitate, not detract from, the directors' ability to execute their statutory and fiduciary responsibilities, and their duty of care and skill. The Board and the Human Resources, Remuneration, Nomination, Social and Ethics Committee (HRNSEC) continue to review and benchmark the DBSA's governance structures and processes to ensure they support effective and ethical leadership, good corporate citizenship and sustainability.

MANAGING SUSTAINABILITY RISK AT A PROJECT INVESTMENT LEVEL

THE DBSA APPLIES THE DBSA ENVIRONMENTAL AND SOCIAL SAFEGUARDS (ESSs) TO CONDUCT THE DUE DILIGENCE FOR INVESTMENT PURPOSES. THE DBSA ESS ARE ACCREDITED WITH THE GREEN CLIMATE CHANGE FUND AND THE GLOBAL ENVIRONMENT FACILITY.

These safeguards have been based on the environmental and social safeguards of the AfDB and the Environmental and Social Standards of the International Financial Corporation (IFC). The DBSA ESSs (available through the DBSA website), inform potential DBSA clients of their obligations in adhering to these safeguards. The safeguards also endorse global good practice standards and guidelines such as those found in:

- The IFC Sustainability Framework
- The United Nations Development Programme's (UNDP) Principles of Good Governance
- Global Compact's Principles for Responsible Investment
- The International Organisation for Standardisation (ISO) 26000
- The Integrated Reporting Committee's Framework for Integrated Reporting
- The King IV Report on Corporate Governance for South Africa 2016
- Compliance with relevant country legislation/regulations
- Mainstreaming of gender and marginalised groups
- World Bank Operational Standard for Safety of Dams which includes World Commission on Dams
- UNEP Finance Initiative (www.unepfi.org)
- With respect to the classification of pesticides and their specific formulations:
  - World Health Organisation's Recommended Classification of Pesticides by Hazard and Guidelines to Classification (Geneva: WHO 1994-95)
  - United Nations Food and Agriculture Organisation (FAO) International Code of Conduct on the Distribution and Use of Pesticides (Rome, 2003)
  - Rotterdam Convention on the Prior Informed Consent Procedure (PIC) for Certain Hazardous Chemicals and Pesticides in International Trade
  - Vienna Convention on the Protection of the Ozone Layer and the Montreal Protocol on Substances that Deplete the Ozone Layer
  - The Stockholm Convention on Persistent Organic Pollutants (POPs).

The DBSA does not report directly against the Code for Responsible Investing in South Africa (CRISA) principles, but they are embedded in multiple DBSA governance principles, safeguards and practices such as the environmental and social safeguards and related appraisal guidelines and are applied as applicable.

Post-implementation evaluations are conducted on a sample of projects by the DBSA's Operations Evaluations team to evaluate the development effectiveness against planned activities.

SUSTAINABILITY FRAMEWORK

The DBSA's sustainability performance is reported in the form of economic, social and environmental dividends.

The framework does not only include financial or economic sustainability, but also addresses sustainable investment, especially in terms of the potential impact on the environment and communities, as well as monitoring sustainable human capital and procurement practices. The DBSA Sustainability Framework reflects the DBSA's contribution to economic, social and environmental dividends. Progress on each element is provided in this report.

*Refer to the **Integrated Annual Report** for more detailed information on the DBSA's strategy.*

STRATEGIC OBJECTIVES

The DBSA has refined its strategic objectives to support its transformation journey:

		METRICS
SUSTAINED GROWTH IN DEVELOPMENTAL IMPACT	Grow and entrench each of our businesses to maximise developmental impact.	• Be a catalyst for infrastructure by crowding-in third parties for between R16 billion and R43 billion per annum over the next three years • Disbursements of R20 billion in 2018 and growing annually to R23.5 billion in 2019 and R31 billion in 2020 • Infrastructure Delivery Division (IDD) funds under management: R3.9 billion in 2018, R4.4 billion in 2019 and R4.8 billion in 2020 • Project preparation – prepare and commit projects to the value of R10 billion in 2018, R11 billion in 2019 and R12.5 billion in 2020 • Value of projects disbursed for innovation project of R2 billion in 2018, R4 billion in 2019 and R10 billion in 2020 • Development impact • Maximise the value of infrastructure catalysed or facilitated • Development effectiveness
PROVIDING INTEGRATED INFRASTRUCTURE SOLUTIONS	Provide integrated infrastructure solutions across the value chain and be the partner of choice for infrastructure solutions.	• Client satisfaction rating
MAINTAIN FINANCIAL SUSTAINABILITY	Maintain profitability and operational efficiency to enable growth in equity and fund developmental activities.	• Return on equity of 4.7% • Cost-to-income ratio <30% • IDD: 5% profit margin

The strategy maintains focus on social and economic infrastructure development, but with an emphasis on driving financial and non-financial investments in the primary sectors of energy, transport, water and communications, whilst providing support to various social sectors such as health, education and housing.

OUR BUSINESS MODEL

HOW WE SUPPORT INFRASTRUCTURE DEVELOPMENT AND CREATE VALUE

The DBSA supports infrastructure development and creates value through the provision of a range of innovative services to South Africa and the broader region. To ensure our sustainability, our business model takes into account our vision, mission and strategy, supported by robust governance structures and processes. The environments in which we operate, as well as our engagement with our stakeholders, play a critical role in identifying risks and opportunities. Our strategy strives to maximise these opportunities and mitigate the risks effectively, and our management structure enables delivery of our strategy.

OUR RESOURCES

		DESCRIPTION	2017	2016
INTELLECTUAL CAPITAL	Our strong brand, reputation and relationships.	Experience in infrastructure development:	**33 years**	32 years
		Owned by the South African government.		
		Infrastructure development services: Project preparation, financing and implementation.		
SOCIAL CAPITAL	The communities in which we operate are at the core of what we do. Clients, partners and government relationships are central to our business to support infrastructure development.	Countries in which we have active exposures:	**14 countries**	13 countries
		Key regulators: National Treasury, Parliament, Department of Labour and the Johannesburg Securities Exchange.		
FINANCIAL CAPITAL	Funds available for use in our business, including financing resources, such as debt and equity, as well as funds generated through our operations and investments.	Capital and reserves:	**R32.0 billion**	R29.3 billion
		Additional capital received from government to support growth:	**R Nil**	R3.0 billion
		Financial market liabilities:	**R 50.6 billion**	R51.8 billion
		Cash generated from operations:	**R3.8 billion**	R3.0 billion
HUMAN CAPITAL	The people we employ as well as others we work with and their health, knowledge and skills.	Number of employees:	**491**	461
		Number of contract employees to support infrastructure delivery:	**97**	108

DEVELOPMENT OUTCOMES

INFRASTRUCTURE FINANCING

Municipal (South Africa)[1]

- Energy (includes upgrading of substations and electrification of households) – total households impacted: 182 727 [2016: 251 680]
- Rehabilitation of roads – total households impacted: 842 [2016: 33 450]
- Water (includes reticulation and provision of bulk water) – total households impacted: 22 814 [2016: 63 216]
- Sanitation (includes reticulation, upgrading and construction of waste water treatment works) – total households impacted: 15 533 [2016: 254 560]
- Residential facilities – total households impacted: 1 328 [2016: 34 889]

Implementation support to municipalities (non-lending)[2]

- Number of households that received access to new and improved services in water, sanitation and electricity: 7 545 [2016: 63 242]
- Temporary job opportunities created: 1 178 [2016: 5 240]

Non-municipal (South Africa and SADC)[1]

- Energy generation
  - Gas: nil MW [2016: 225 MW]
  - Coal: nil MW [2016: 65 MW]
  - Renewable (Solar IPP): 20 MW [2016: nil]
  - Total project impact: 20 MW [2016: 225 nil]
- Education
  - Student accommodation: 1 139 beds [2016: 1 000 beds]
  - Total project impact: 1 139 beds [2016: 1 000 beds]
- Transport
  - BusRapid transit: 210 buses [2016: 171 buses]
  - Total project impact: 210 buses [2016: 171 buses]
- ICT
  - Fibre-optic rollout: 564 km (2016: nil)
  - Total project impact: 564 km [2016: nil]

INFRASTRUCTURE IMPLEMENTATION

Schools

- Scholars enrolled during 2017: >4 254 [2016: >17 900]
- Total number of learners benefiting since inception: >40 254 [2016: >36 000]

Health

- More than 266 000 [2016: >35 000] people gained access to health counselling and testing in newly built clinics

Employment creation

- Jobs created: 9 077 [2016: 6 462]

SMME development

- Value of funds allocated to SMMEs: R449 million [2016: R710 million]
- SMMEs benefiting: 500 [2016: 665]

1. Anticipated development impact tased on signed commitments.
2. Actual development impact on 17 projects complete.

OUR STAKEHOLDERS

In all of its activities, the DBSA maintains an open dialogue with its stakeholders. We believe that this dialogue and the development of strategic partnerships are not only fundamental sources of information, but are also important for responsible corporate governance.

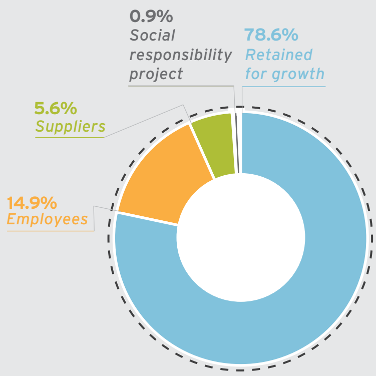
Stakeholder dialogue is also vital for the effective execution of the DBSA's mandate.

Refer to page 19 of the Integrated Annual Report for more detailed information on the DBSA's management of its stakeholder relationships.

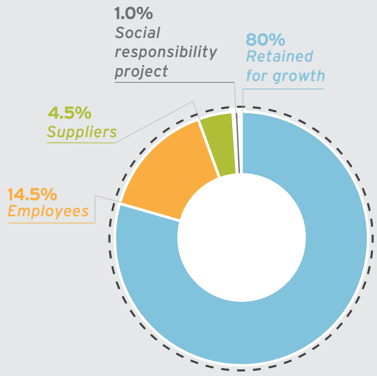
VALUE ADDED STATEMENT

Value added indicates the wealth the DBSA creates through its activities for our main stakeholders groups, being the shareholder, employees, financial institutions (providers of debt capital) and suppliers. It also illustrates how much we re-invest for future growth.

2017 distribution



2016 distribution



in thousands of rands	2017 Actual	%	2016 Actual	%
Interest income	**7 373 094**		6 541 028	
Interest expense	**(3 703 760)**		(3 355 429)	
Wealth created by trading operations	**3 669 334**		3 185 599	
Fee income	**318 266**		275 914	
Foreign exchange gain	**(618 649)**		1 002 172	
Surplus/(loss) from financial assets and financial liabilities	**(43 354)**		442 630	
Other operating income	**734 090**		134 355	
Total wealth created	**4 059 687**	100	5 040 670	100
Distributed as follows:				
Retained growth	**3 191 547**	79	4 033 431	80
Impairment loss on financial assets	**339 449**	9	1 426 159	28
Depreciation and amortisation	**31 249**	1	30 593	1
Profit for the year attributable to the shareholder	**2 820 849**	69	2 576 679	51
Employees: benefits and remuneration	**603 608**	15	730 937	15
Suppliers: expenses	**226 633**	5	228 304	4
Social responsibility projects	**37 899**	1	47 998	1
Total wealth distributed	**4 059 687**	100	5 040 670	100

The DBSA is exempt from normal taxation but is subject to all other South African taxes, including employees' tax and value added tax. The DBSA paid VAT amounting to R36.7 million (2016: R37.7 million) during the year.

OUR SIGNIFICANT RISKS

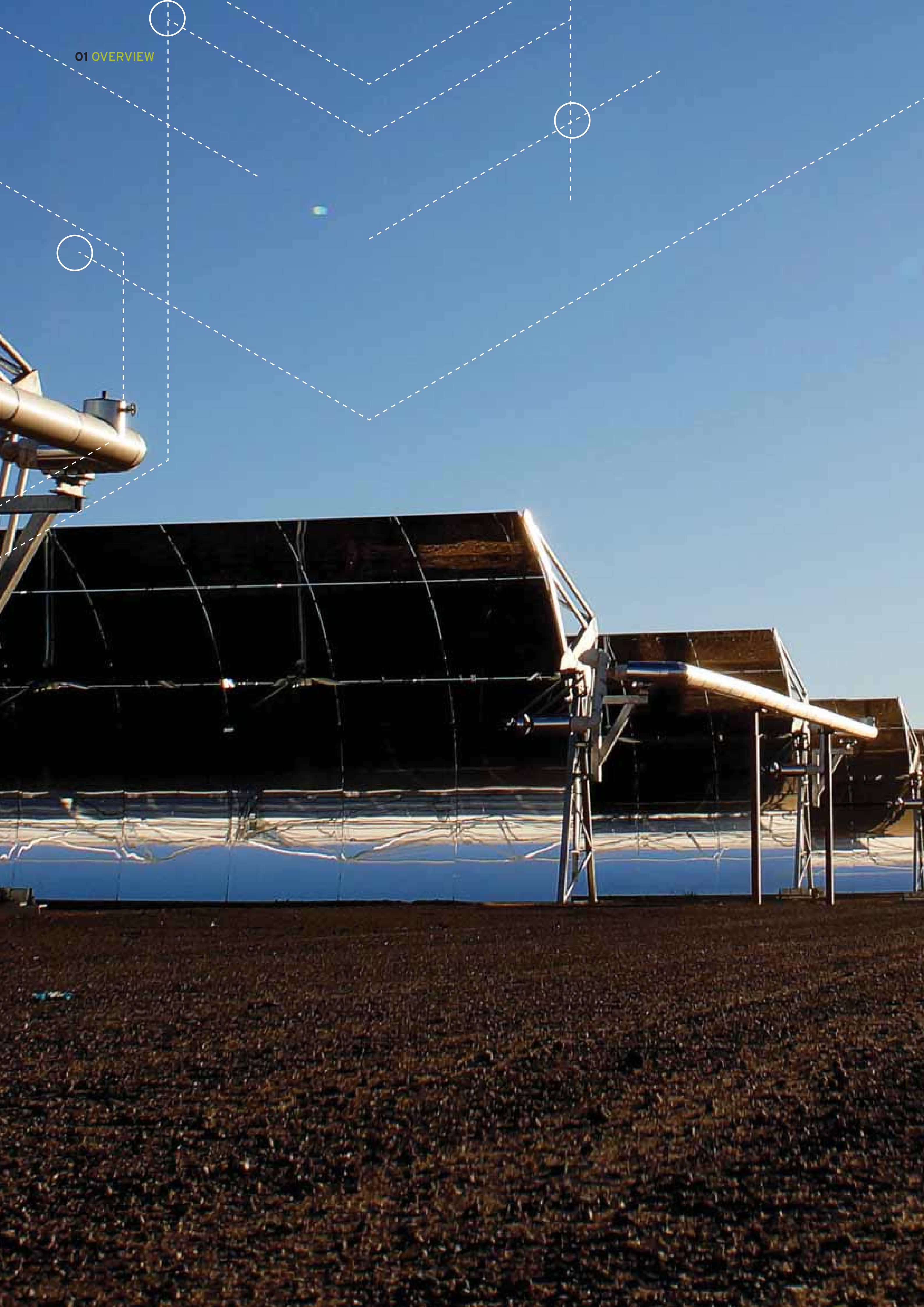
At the DBSA, anticipating and responding to our risks and opportunities is a fundamental part of delivering on our mandate and ensuring that we deliver on a sustainable basis. The DBSA Board is ultimately accountable for the effective management of risks and has adopted an enterprise-wide risk management (ERM) framework and approach to managing risk exposures. This approach ensures that the DBSA takes a holistic view of the risks inherent in its strategy, operations and business, and that the management of risks is embedded into the mainstream planning, business and decision-making processes.

KEY ENTERPRISE-WIDE RISKS

The DBSA Board and management team continuously review the top corporate risks to ensure an appropriate understanding of our operating environment.

	RISK	DESCRIPTION	RESIDUAL RISK
1	**Macro-economic**	Risk of an uncertain and volatile macro-economic environment	Critical
2	**Changing competitive landscape**	Failure to innovate and adapt to a changing infrastructure development market	Moderate
3	**Credit risk**	Ineffective credit default, concentration risk including ineffective pricing, capital allocation, and poor deal selection	High
4	**Country and political**	Risk of geo-political events in the countries in which the DBSA operates, leading to increase in credit impairments and reducing financing opportunities	High
5	**Capital and funding**	Risk of inadequate capital levels to sustain the business and execute our strategic growth, including potential increased cost of funding due to external events impacting competitiveness	High
6	**Occupational health and safety**	Risk arising from the events in the workplace leading to illnesses, accidents, injuries, fatalities and impacting the health and well-being of DBSA staff, and their partners in projects and operations	High
7	**Infrastructure implementation**	Failure to deliver on the DBSA's non-financing mandate, including the risks associated with construction-related activities, such as safety, pipeline and contractor management risks	High
8	**Development impact**	Risk of lower-than-expected development impact and supporting projects that impact society and environment negatively	Moderate
9	**Reputational**	Failure to prevent and respond to reputational risk events impacting on the DBSA's goodwill and reputation	Moderate
10	**Sustainability**	Risk of the DBSA's inability to be a responsible social citizen, preserve and maintain long-term social, economic and environmental balance in fulfilling its mandate and operations	Moderate
11	**Stakeholder management**	Risks from failure to identify and build effective relationships with key stakeholders, resulting in expectations not being met and impacting long-term sustainability	Moderate
12	**Delivery and execution**	Risk of inefficient processes, including inefficient collaboration and alignment impacting efficiencies and targets	High
13	**Human capital**	Failure to maintain a high performance culture, recruit, develop and retain key staff members	Moderate
14	**Information technology**	Cyber security risk as well as inadequate and unavailable ICT systems	Moderate
15	**Compliance and governance**	Risk of non-compliance to laws and regulations as well as fraud and corruption	Moderate

*Refer to pages 22 to 25 of the **Integrated Annual Report** for more detailed information on our enterprise risk management.*



GOVERNANCE STRUCTURE

MINISTRY OF FINANCE (SOLE SHAREHOLDER)
Minister Malusi Gigaba

DBSA Board
Chairman: Jabu Moleketi

	ARC	BCIC	HRNSEC	IDKC
BOARD COMMITTEE	AUDIT AND RISK COMMITTEE	BOARD CREDIT AND INVESTMENT COMMITTEE	HUMAN RESOURCES, REMUNERATION, NOMINATION, SOCIAL AND ETHICS COMMITTEE	INFRASTRUCTURE DELIVERY AND KNOWLEDGE MANAGEMENT COMMITTEE

DBSA Executive Management Committee
Chairman: Patrick Dlamini

STEERING COMMITTEE	ASSET-LIABILITY AND SUPPLY CHAIN MANAGEMENT COMMITTEE	INVESTMENT COMMITTEE	CORPORATE SERVICES COMMITTEE	INFRASTRUCTURE DELIVERY AND KNOWLEDGE MANAGEMENT COMMITTEE

*Refer to page 33 of the **Integrated Annual Report** for more detailed information on the DBSA's governance.*

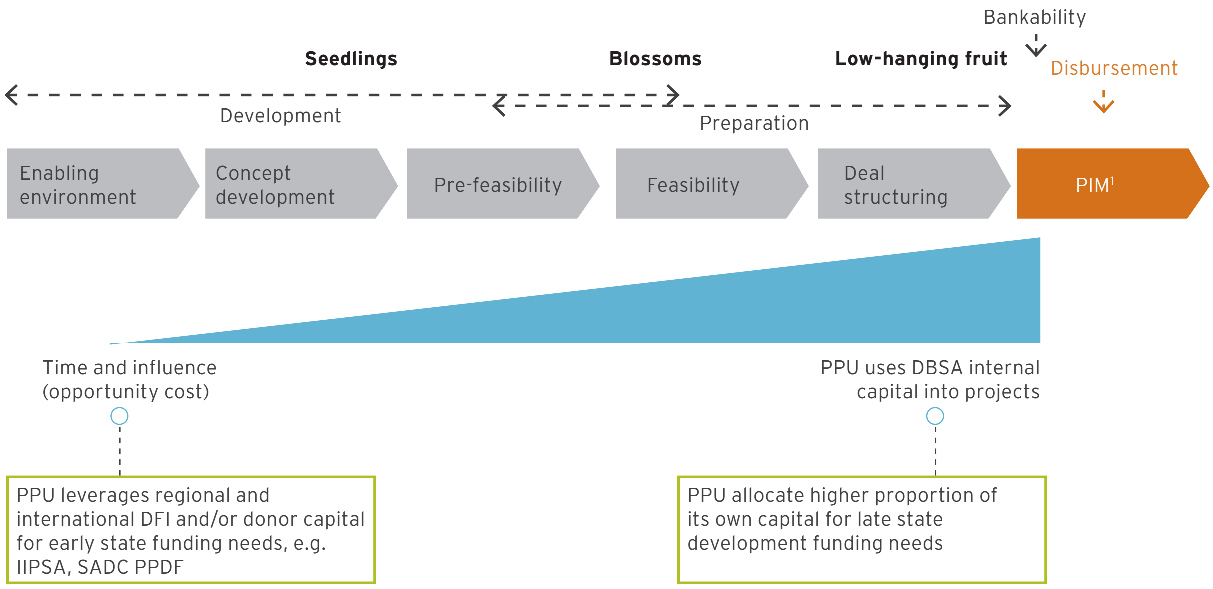
PROJECT PREPARATION

The Project Preparation Unit (PPU) was established in 2013 following a DBSA organisational review in 2013, where the preparation and development of projects were again highlighted to be key to a successful investment portfolio.

- It is widely accepted that a substantial portion of infrastructure projects presented for investment are identified as too risky due to insufficient planning, preparation and development. The implementation of these projects have cost and time overruns and are not appropriately packaged for funders. This identified gap in the project funding cycle has translated into an opportunity for the DBSA to assist by creating a highly skilled, scaled-up project development and preparation unit that enables projects to be significantly de-risked and delivered to bankability.
- To this end PPU covers the entire cycle of project preparation and includes the following services and activities:
  - Actively originating deals by:
    - Identifying project opportunities from a project developer/sponsor perspective
    - Defining project concept and scope
  - Engaging with clients and obtaining a mandate to act as project developer/ sponsor/owner
  - Employing a programmatic approach in developing projects to be rolled out for more than one client.
- The provision of project preparation funding is based on the following key value offering:
  - Strategic partnership capital, provided through third party funds, by leveraging government to government relationships to source concessional and/or grant funding for projects and supporting emerging project sponsors to partner with experienced and strategic partners to develop projects. These funds are key in catalysing and mobilising third party capital for investment when projects have reached bankability.
  - Intellectual capital by assisting in the scoping of projects so that they will be compliant with all relevant licences and procurement practices.
  - Financial capital by crowding in private sector and other DFI capital and resources into infrastructure projects.

PROJECT PREPARATION CONTINUED

The diagram below illustrates the stages across the project developmental lifecycle where PPU operates across the project value chain:



1. Project Information Memorandum.

To implement projects successfully, the PPU has sub-divided its core functions into four distinct but related activities:

- Project level preparation activities
- Strategic partnerships
- Strategic co-operation
- Programmatic approach to project preparation

PROJECT LEVEL PREPARATION ACTIVITIES

In carrying out its activities the PPU has focused on the following services in identifying and supporting projects that could be successfully funded and implemented:

- Project identification
- Project feasibility assessment
- Technical assistance
- Project structuring
- Financial structuring
- Managing project preparation funds

To this end, the PPU is supporting projects with an investment value in excess of R220 billion and includes infrastructure projects in South Africa, the SADC region and the rest of the African continent.

PPU approved 24 projects with a project preparation value of R724 million during 2017 using both its own funds and third party funds under its management. Once these projects have been prepared, they will create a potential investment opportunity of R40 billion for the DBSA and will attract third party funding of more than R100 billion over the next three years.

STRATEGIC PARTNERSHIPS

In assisting the DBSA deliver on its overall mandate of funding infrastructure projects across the sub-Saharan region, the DBSA has entered into following strategic partnerships:

THE EUROPEAN UNION'S INFRASTRUCTURE INVESTMENT PROGRAMME FOR SOUTH AFRICA (IIPSA)

IIPSA is a joint European Union and South African government initiative administered by the DBSA. It seeks to enhance sustainable economic growth and the delivery of key services affecting development in South Africa and in the SADC region by providing funding for infrastructure projects in South Africa and the SADC region. In the case of SADC projects the following qualifying criteria need to be met:

- A regional project, being a trans-border project involving two or more countries in the SADC region, or a
- National project in any of the SADC countries with a demonstrable regional impact on one or more other countries in the SADC region.

The sectors that IIPSA supports are:

- Energy
- Transport
- Water
- ICT
- Social Infrastructure (education and housing).

A total of €100 million in funding was provided to the South African government as the recipient, through the National Treasury, and the DBSA was appointed as the Fund Manager and Secretariat to administer and implement the programme in 2013. To date a total of R110.8 million in project preparation funding has been disbursed to assist and support the preparation of infrastructure projects

SADC'S PROJECT PREPARATION AND DEVELOPMENT FACILITY (PPDF)

The SADC PPDF is a programme financed by the European Union and the German government, through KfW, with a focus on SADC countries (excluding South Africa). The PPDF seeks to create a conducive investment environment by financing the preparation of projects that enable regional integration. It provides technical assistance for infrastructure project identification, preparation and feasibility studies as well as capacity training with a view to making the projects bankable and attractive to investors.

The funds are limited to projects within SADC that:

- Span over two or more SADC countries; or
- If located in one country facilitate and promote regional integration and/or
- will complete a missing link in another regional project.

The sectors for which the fund is available include:

- Transport infrastructure
- Energy generation and transmission
- ICT
- Water and sanitation
- Tourism-related infrastructure

The funds have been administered, managed and disbursed by the DBSA's PPU on behalf of the SADC Secretariat since 2008.

PROJECT PREPARATION CONTINUED

THE AFD'S (AGENCE FRANÇAISE DE DÉVELOPPEMENT) PROJECT PREPARATION AND FEASIBILITY STUDY FUND

The DBSA and the Agence Française de Développement (AFD), in September 2003, jointly set up the Project Preparation and Feasibility Study (PPFS) Fund, aiming to fund the preparation and development of infrastructure projects.

The funds are available for projects in sub-Saharan Africa.

The sectors for which the fund is available include:

- Transport infrastructure
- Energy generation and transmission
- ICT
- Water and sanitation

The funds are administered, managed and disbursed by the DBSA's PPU on behalf of the DBSA and AFD as co-funders to the PPFS. The DBSA has been administering the fund since 2003, and to date a total of R93.2 million in project preparation funding has been disbursed.

GREEN CLIMATE FUND

The Green Climate Fund (GCF) was established by 194 countries party to the UN Framework Convention on Climate Change in 2010. It is designed as an operating entity of the Convention's financial mechanism and is headquartered in the Republic of Korea. GCF aims to support a paradigm shift in the global response to climate change and allocates its resources to low-emission and climate-resilient projects and programmes in developing countries. The Fund pays particular attention to the needs of societies that are highly vulnerable to the effects of climate change, in particular least-developed countries (LDCs), small island developing states (SIDS), and African states. The DBSA became an accredited entity for the GCF in 2016 and, through this role, channels the GCF's resources to support approved GCF projects and programmes.

GREEN FUND

The Green Fund's objective is to assist with South Africa's transition to a low carbon, resource-efficient and climate-resilient development path in order to deliver high-impact economic, environmental and social benefits. Assistance is provided to projects through grants (recoverable and non-recoverable), loans (concessional rates and terms) and equity. The funding windows are green cities and towns, low carbon economy and environmental and natural resource management.

STRATEGIC CO-OPERATION

INDEPENDENT POWER PRODUCERS OFFICE

PPU assisted the Independent power producers Office (IPPO) with capacity support at administrative and legal levels by providing corporate and administrative services, which include the procuring of transaction advisors and office operating requirements including the contractual appointments of staff required to execute the responsibilities of the IPPO. The IPPO's function is to execute on the South African government's energy policy determined by the Department of Energy (DoE). Preferred Independent Power Producers are procured as per ministerial determinations for the different energy streams (e.g. renewable, gas, coal, etc.).
The DBSA has been responsible for internal institutional arrangements for the IPPO, including the adoption of appropriate policies, procedures and structures to give effect to the mandate instructions received from the DoE.

PROJECT PREPARATION FACILITY NETWORK

The Project preparation Facility Network (PPN) represents a network of project preparation facilities such as the NEPAD Infrastructure Project Preparation Facility (IPPF) and the United States Trade and Development Agency (USTDA) that, from time-to-time, collaborate on project preparation activities and experiences in selected sectors across the continent. In June 2016, the DBSA was selected as the PPN Secretariat for the first two years and, through this partnership, the DBSA will participate in project preparation activities of common interest with all the members and establish co-financing opportunities for implementation.

ECONOMIC COMMUNITY OF WEST AFRICAN STATES (ECOWAS) PROJECT PREPARATION AND DEVELOPMENT UNIT

The DBSA has concluded a Memorandum of Understanding (MoU) with the ECOWAS Project Preparation and Development Unit (PPDU) to jointly develop and co-finance infrastructure projects in West Africa. This partnership will enable the parties to jointly conduct due diligence assessments, co-fund infrastructure projects and collaborate on project preparation activities for projects of common interest in the region.

AFD AND PROPARCO

The DBSA has concluded an MoU with AFD and Proparco to collaborate on early-stage financing of programmatic opportunities with specific focus on transport, urban mass transit, renewable energy and utilising innovative funding mechanisms such as developing Special Purpose Vehicles focused on designing structured instruments where different investors can carry different levels of risk.

PROGRAMMATIC APPROACHES TO PROJECT PREPARATION

The PPU has embarked on a programmatic approach to identify projects that can be implemented under the umbrella approval and approach. The following programmes, for which individual projects will be identified and prepared, are currently underway:

- Municipal cost and revenue management – a programme aimed at municipal cost management, revenue management, revenue enhancement and cost recovery measures
- Water conservation and water demand management – a programme aimed at municipal water services' turnaround strategies

Municipal long-term financing plans – a programme aimed at developing long-term financing plans, identification of projects and assessment of their impact on the cash flows of the municipalities, and identifying funding sources. It is primarily focused at municipal water and sanitation projects.

CASE STUDY

WESTERN AND NORTHERN AQUEDUCTS PROJECT IN ETHEKWINI METRO

During October 2016, the eThekwini Municipality entered into 15-year loan agreements with the DBSA and the French Development Agency (AFD) to the total value of R700 million.

These long-term loans were made possible by the Infrastructure Investment Programme for Southern Africa (IIPSA) with a contribution of a R93 million grant to eThekwini Municipality. The IIPSA programme is funded by the European Union and administered and managed by the DBSA's PPU. The IIPSA programme is primarily aimed at preparing infrastructure projects but also has a component directed towards the implementation of projects that are ready for investment and meets the IIPSA criteria. This allowed the DBSA to crowd in and partner with other funders (IIPSA and AFD), thereby contributing towards funding a portion of the larger R3 billion Aqueducts project.

The funding secured by eThekwini Municipality through the loans and grant will be directed towards the implementation of the Western and Northern Aqueducts project in eThekwini. The Aqueducts project is a bulk water supply pipeline that will improve the delivery of potable water to the western and northern regions within the metro for the next 30 to 50 years. Funding provided will enable the eThekwini Municipality to also address backlogs for free basic water provision to around 100 000 indigent people. Completion of the Western and Northern Aqueduct projects will result in an assured water supply to over a million previously disadvantaged people living in the region, who at present are faced with daily water interruptions as a result of capacity problems in the existing supply system.

The purpose of the IIPSA funding is amongst others to improve the affordability of water services to the communities within eThekwini Municipality, to fast track the implementation of the project as well as to enable the implementation of other critical water projects within the municipality.
A portion of the IIPSA funding is earmarked for investment in ecological infrastructure linked to the Aqueducts project. This is the first IIPSA project that has resulted in a lending opportunity being created for the IIPSA participating DFIs.

The DBSA is proud to have partnered with IIPSA and AFD on this project and to be playing a part in providing much needed water infrastructure capacity within the eThekwini Municipality.

TRANSPORT, LOGISTICS AND ICT

MASS TRANSPORTATION SYSTEM STRATEGIC OVERVIEW

The South African constitution identifies the legislative responsibilities of different levels of government with regard to airports, roads, traffic management and public transport. Transport is a function that is legislated and executed at all levels of government. The development and maintenance of an efficient and competitive transport system is a key objective of the National Development Plan (NDP).

The long-term vision of the National Transport Master Plan (NATMAP) 2050 is to sustain South Africa's projected growth and focus on integrated transport planning to ensure that the different modes of transport complement each other, while the Public Transport Strategy (PTS) aims at migrating transport towards an improved quality, integrated mass rapid public transport network which includes rail, taxi and bus services. Rapid transit systems have been identified by national government as one of the viable transportation options that can ensure sustainable, equitable and uncongested mobility in the country. The long-term goal is to have 85% of the metropolitan cities' population within 1 km of a public transport service.

SIP 7 (Integrated Urban Space and Public Transport Programme) aims to coordinate planning, economic and social infrastructure and location into sustainable urban settlements connected by densified transport corridors. SIP 2 (Durban-Free State Gauteng Logistics and Industrial Corridor) and SIP 7 have identified the Johannesburg-Durban high speed passenger rail and Integrated Rapid Public Transport Network (IRPTN) in 12 cities. Phase 1 of the IRPTN entails the roll-out of Bus Rapid Transit (BRT) systems in 12 cities, as well as implementation of the taxi recapitalisation and accelerated rolling stock recovery plans for rail. To date, Johannesburg (Rea Vaya), Cape Town (MyCiti), Tshwane (A Re Yeng), Durban (GO!Durban), Ekurhuleni (Harambee) and Rustenburg (Yarona) are the cities that are most advanced in the planning and implementation of their BRT systems.

The National Land Transport Act (NLTA) provides the legal framework for the development and implementation of the IRPTN by the metropolitan cities in South Africa. Furthermore, the NLTA provides the framework for the negotiated 12-year contracts that metropolitan cities can enter into in the implementation of the BRT projects.

THE DBSA'S PARTICIPATION

To support government's initiatives to provide mass transport to all as encapsulated in the NATMAP and PTS, the DBSA is mandated and committed to investing in public transport networks to ensure safe, efficient and green transport systems. The DBSA has to date provided and/or committed to provide funding support to the following mass transportation projects:

- Tshwane BRT project (A Re Yeng)
- Ekurhuleni BRT project (Harambee)
- Gautrain rapid passenger rail project and its expansion

The DBSA provides long-term loan facilities (over 10-year tenors) with flexible availability, grace periods and amortisation profile to allow for the development and implementation of projects of this nature. All the South African BRT systems will expand in the phases over the next decade and the DBSA will continue to support these until the government's vision is achieved.

CASE STUDY

TSHWANE BUS RAPID TRANSIT PROJECT

Financing agreement period: 11 years

SUMMARY

The Tshwane Rapid Transit (Pty) Ltd (TRT) required a total of R786 million to procure 171 buses and for driver training required for the first phase of the A Re Yeng Bus Rapid Transit (BRT) project in Tshwane. The TRT signed a R786 million agreement with the DBSA in May 2015 to fund the purchases of 40 Mercedes-Benz Compressed Natural Gas (CNG) buses as well as the local content of 131 Volvo diesel buses. R394 million, which is about half the loan facility amount has been disbursed to date.

At the inception of the project, buses will run from Paul Kruger and Nana Sita Streets in the Pretoria Central Business District to the Hatfield Gautrain Station in Arcadia Street. The A Re Yeng BRT is forecast to transport about 127 000 passengers per day once phase one is operational.

The DBSA is committed to investing in public transport networks to ensure safe, efficient and green transport systems. Tshwane BRT project is the first of 12 BRT projects across South Africa, which are earmarked for further DBSA support.

DETAIL

South Africa's Public Transport Strategy (PTS), aimed at migrating transport towards an improved quality, integrated Mass Rapid Public Transport Network which includes rail, taxi and bus services. Rapid transit systems have been identified by national government as one of the viable transportation options that can ensure sustainable, equitable and uncongested mobility in the country. The 2020 vision is for 85% of the metropolitan cities' population to be within 1 km of a public transport service network line. Through a dedicated trust, the beneficial shareholders of the TRT are taxi and bus operators, on routes serviced by private buses and taxis, known as Affected Operators, through shareholding equivalent to their market share. TRT is managed as an independent corporate entity.

OBJECTIVE BEING ADDRESSED

The National Land Transportation Act (NLTA) provides the legal framework for the development and implementation of the Integrated Rapid Public Transport Networks (IRPTN) by the metropolitan cities in South Africa. The NLTA provides the framework for the negotiated 12-year contracts that municipalities can enter into during the implementation of the BRT projects. The City of Tshwane's IRPTN strategy sets out the network plan for BRT corridors and integration with rail services such as the Gautrain and PRASA commuter rail links in the short, medium and long term.

Other, key strategic objectives are to facilitate the corporatisation of the Affected Operators and to provide them with value-adding opportunities through training, so as to assist them to access sustainable income prospects.

APPROACH

The City of Tshwane is rolling out the buses in phases, with phase bus delivery in batches over two years. Ownership of the buses vests in TRT, which procured the buses and will charge a user fee on a take-or-pay basis using a fee per kilometre payment system that guarantees a minimum number of kilometres to cover debt services, all operating costs and a profit element.

OUTCOMES AND MEASURABLE IMPACTS

The project, once complete, will have a significant impact on the socio-economic and economic development of the city and its inhabitants as well as Gauteng as a whole, with the following development impact:

- An estimated increase of the provincial GDP by R437 million;
- An estimated provincial capital formation of R1.324 billion;
- An estimated 1 114 additional employment opportunities, of which 275 will be for unskilled workers;
- An estimated additional R259 million in household income, of which R48 million might accrue to low income households;
- A potential additional fiscal impact for government of R125 million;
- Improved quality of life through an efficient, safe and affordable transport system; and
- Empowerment, skills development and local economic development (TRT is 100% owned by a Trust whose beneficiaries are the affected taxi and bus operators on the planned BRT routes).

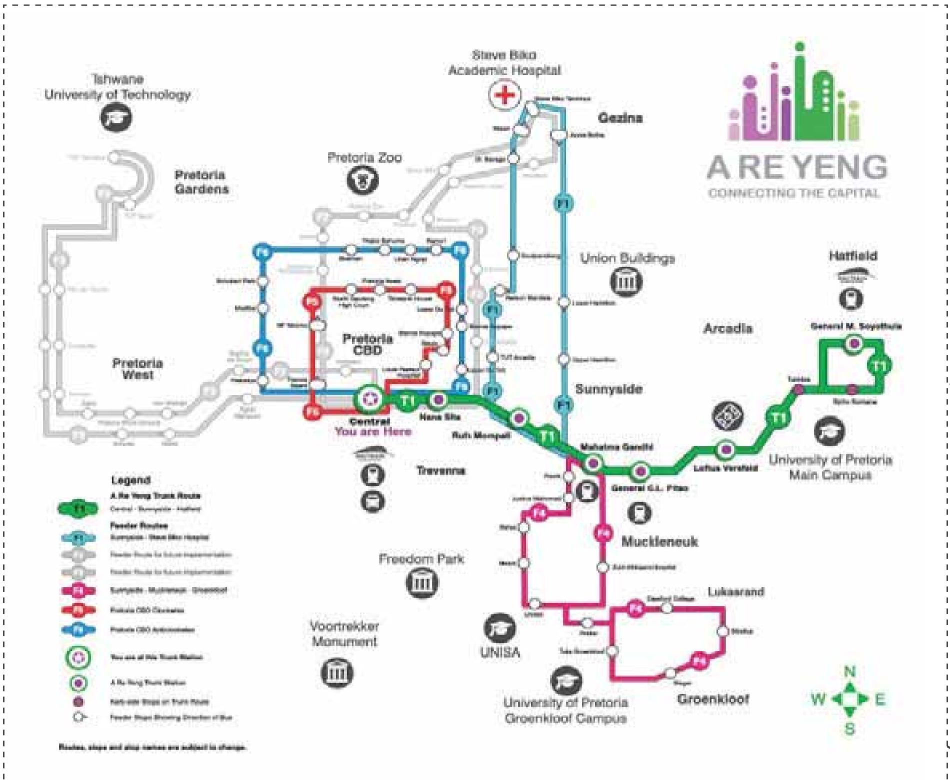
In Nov 2010, at the launch of the project, Mayor Ramokgopa expected over 10 000 jobs to be created during the construction phase, and about 1 000 sustainable jobs once the system was live. These included 529 bus operators and related personnel, 94 employees for the call centre and about 300 workers managing and maintaining the ticketing system.

SUSTAINABILITY

The loan period of 11 years, including availability and grace periods, is in line with typical development finance practice. As a leading metro, the City of Tshwane has a good credit rating with a stable outlook; therefore the risks associated with this project are mitigated. With 127 000 passengers on a daily basis, the BRT will have dedicated income throughout the project's lifespan. The take-or-pay model will also provide sustainable earnings to the company and ensure debt servicing.

IMPORTANT LESSONS LEARNT AND CRITICAL SUCCESS FACTORS

Transport is a critical success factor in South Africa's economy therefore this project was important to the country and received the DBSA's full support. The Tshwane project drew lessons from the Rea Vaya and MiCiti projects to avoid repeating earlier mistakes made by the Johannesburg and Cape Town counterparts, respectively. Government support was key to the success of this project as it allowed the City of Tshwane to use a portion of its grant income to cover the deficit in initial operating costs and for the A Re Yeng system. The project has the support of the Affected Operators and has trained a number of taxi drivers to operate the buses. This provides a more sustainable income for the drivers and a buy-in for the taxi industry. The Trust will provide capacity building for the Affected Operators who will become drivers as the project progresses. The critical success factor is a long, complex negotiated settlement through a process involving all stakeholders.



CASE STUDY

EKURHULENI HARAMBEE BUS RAPID TRANSIT (BRT) PROJECT

SUMMARY

The Ekurhuleni public transport industry agreed to partner with Ekurhuleni Metropolitan Municipality (EMM or the City) via a memorandum of agreement (MOA) to be the operators of the EMM Integrated Rapid Public Transport Network (IRPTN) to provide Bus Rapid Transit (BRT) transport services through a special purpose vehicle, KTVR Bus Service (Pty) Ltd (KTVR).

In March 2017, the newly established EMM bus operator, KTVR, signed an R842 million, 11-year loan agreement with the DBSA to fund the purchase of 210 buses required for the first phase of the Ekurhuleni Harambee BRT project.

The DBSA's funding was committed into a ring-fenced project finance structure, in which KTVR receives a minimum contracted bus service fee from EMM for the provision of the services (on a take-or-pay contract basis) on a monthly basis, to cover fixed (including debt service) and variable costs, in a typical public-private partnership. This funding is an example of the key role the DBSA plays in assisting municipalities establish efficient and effective passenger transport systems through various funding mechanisms.

The foundation of the name KTVR Bus Service emanates from the abbreviation KTVR (Kempton-Tembisa-Vosloorus-Reiger Park) which at the time of naming represented the names of areas in which the BRT would be operating. The Phase 1 Harambee BRT system with a 56 km trunk route and 71.4 km complementary route, is made up of three sections, with the main route of the IRPTN running from Tembisa in the north via Kempton Park, OR Tambo International Airport and Boksburg, to Vosloorus in the south.

OBJECTIVE BEING ADDRESSED

The Harambee BRT system aims to connect the areas that make up Ekurhuleni, including Benoni, Germiston, Springs, Kempton Park, Edenvale, Nigel, Brakpan, Boksburg, and Alberton in a bid to overcome the problems of apartheid spatial planning, allowing residents an effortless and affordable commute. The project is aimed at redressing past inequalities and creating socio-economic upliftment by addressing the following:

- Lack of an integrated transport system in the City and safety, reliability, affordability and convenience concerns about the existing transport system
- The historical legacy of apartheid spatial planning where the poor were forced to live furthest from work. The city has over 3 million citizens, with 65% of the citizens being previously disadvantaged people and living in remote townships, far from their places of work
- Longer travel times due to increasing congestion and difficult transfers
- Inaccessibility of public transport for people with disabilities, the aged and frail
- Inadequate historical investment in public transport, which has meant that both existing infrastructure and fleet are in a poor condition

APPROACH

EMM will roll out the buses in phases – the buses will be procured and delivered based on a staged roll out of the IRPTN, i.e. phase 1A, 1B, and 1C over two years. Ownership of the buses vests in KTVR, which will procure the buses and will charge a user fee on a take-or-pay basis using a fee per kilometre payment system that guarantees a minimum number of kilometres to cover debt services, all operating costs and a profit element. The take-or-pay model provides for sustainability to KTVR and ensures debt servicing.

Through a dedicated trust, the beneficial shareholders of the KTVR are taxi and bus operators, on routes currently serviced by private buses and taxis, known as Affected Operators, through shareholding equivalent to their market share. KTVR is managed as an independent corporate entity, with its own Board of Directors.

Government support is key to the success of this project as it allows EMM to use a portion of its grant income to cover KTVR initial operating costs and for the construction of the supporting BRT infrastructure. The project has the support and buy-in from the taxi industry as evidenced by signed MOUs between EMM and the various taxi associations in the affected routes. This was achieved through an ongoing long, complex negotiated settlement involving all stakeholders.

OUTCOMES AND MEASURABLE IMPACTS

The project, once complete, will have a significant impact on the socio-economic and economic development of the city and its inhabitants as well as Gauteng as a whole, with the following development impact:

Ekurhuleni Harambee BRT Phase 1 IRPTN system-wide indicators

EKURHULENI BRT TOTAL SYSTEM SPECIFIC INDICATORS	ANTICIPATED RESULTS
Project NPV	R44.165 million
Benefit to cost ratio	3.3
Journey time savings (passenger hours per day)	51 125 by 2021 105 902 by 2031
Journey time savings	R4.23 billion over 20 years
CONSTRUCTION PHASE	
Impact on Production (rands)	Total economy – R12.5 billion Indirect impact – R4.2 billion
Impact on GDP during construction	R4.3 billion
Direct impact on GDP during construction	R1.8 billion
Total number of job opportunities created during construction	21 177
Direct employment opportunities created during construction	4 742
Households impacted during construction due to employment	4 742
Impact on household income during construction	R1.1 billion
OPERATION PHASE	
Impact on national economy during operation	R757.9 million per annum
Impact on GDP	R795.8 million per annum
Direct impact on household income	R344.8 million per annum
Number of new direct jobs created during operation	731
Number of new jobs in the economy	4 154

Source: Economic Evaluation report by Goba and Mott

CASE STUDY

GMA GAUTRAIN PHASE 1 EXPANSION

The Gautrain project consists of the Gautrain Rapid Rail Link (Gautrain), which is a state-of-the-art rapid rail network operating in Gauteng. The Gauteng provincial government (GPG) undertook the Gautrain project, which was constructed between 2007 and 2010, commencing with partial operation in 2010 and full operation in 2012. The project comprised the construction, operation and financing of approximately 80 km of railway lines with 10 stations between Johannesburg and Pretoria, and Sandton and OR Tambo International Airport (ORTIA), with extensive feeder and distribution services at each station.

The system has been operating for five (5) years and performance has exceeded expectations as evidenced by higher than projected passenger demand and the standing-to-seated passenger ratio that is now breaching the comfort levels during peak hours. The growth experienced to date and that projected by the Gautrain Management Agency (GMA) management indicates that the Gautrain capacity is stretched to the point that in the peak periods the available rolling stock is now close to maximum capacity, and therefore not able to meet further market demand (current and forecast). Given the current capacity constraints during peak hours and future passenger growth projections made by the GMA, GMA management has determined that the Gautrain system will require a total of 48 new coaches and related infrastructure at an estimated cost of R4 billion, where debt funding requirement is approximately R3.5 billion.

THE DBSA'S CATALYTIC ROLE

The current concession ends on 31 March 2026. This leaves approximately nine years to fund the additional rolling stock and related infrastructure under the current structure. Given the timeframe left on the current concession, it is not economical for Bombela Concession Company (BCC) to fund the additional rolling stock and there is no incentive for BCC to encumber itself with further debt.

The GMA therefore mandated the DBSA as mandated lead arranger (MLA) to develop a funding solution that is independent of the current concession and that can be funded over a period of 15 years through a special purpose vehicle that will avail the additional rolling stock and related infrastructure to the system via a lease agreement. This structure will allow for the assets to be funded across concessions, given the constraints noted above.

As the MLA, the DBSA approved a facility of R3.5 billion to meet the full debt requirement of the project, allowing the GMA to implement the procurement process with assurance that the project is fully funded. In addition, the approved facility allows the GMA to perform an independent value-for-money benchmarking exercise (i.e. debt funding competition – DFC) to ensure that the DBSA's funding is priced competitively.

The DBSA's funding proposition meets the need for a funding solution that:

- Takes a view on provincial government risk
- Funds across concession periods
- Provides long-dated funding, in this case 15 years

In addition, in November 2016, the DBSA in its capacity as the Secretariat for the Infrastructure Investment Programme for South Africa (IIPSA), further secured a R40 million Project Preparation Grant from IIPSA to:

- Assist the GMA with direct transaction costs relating to outstanding project preparation activities
- Provide funding for the reimbursement of bidder costs incurred in relation to the design of the depot enhancements that are required as part of the bidder's response to the Request for Proposal (RFP). The concept of partial bidder reimbursements was used in the original Gautrain project and proved highly effective in accelerating and reducing risk, and improving the quality and pricing of bidder responses. As such, the GMA will do so in return for commitments from bidders to expedite the design process and achieve financial close faster.

OTHER PROJECT SUPPORT TO GMA GAUTRAIN

The DBSA is also currently involved in providing project preparation support to the GMA on the Gautrain expansion phase 2, which will entail Gautrain expanding the current rail network into new suburbs/ locations within the province.

INFRASTRUCTURE DELIVERY

THEME

IDD profile

THE STORY WE WANT TO TELL

- Where it fits in the value chain in accordance with our strategy, i.e. catalysing by implementing infrastructure projects that are financed/planned
- How it is a big catalyst for delivery of social critical infrastructure
- How it preserves the economic lives of assets through maintaining physical asset management

OTHER/MORE INFO

Details around the transactions, how we pulled in partners, challenges we had to overcome, problems we solved, development impact

CASE STUDY

SOCIAL FACILITATION IN IDD PROJECTS

The integration of social facilitation in projects implemented by the Infrastructure Delivery Division (IDD) of the DBSA has brought about progress, change and good success stories in the last three years. Infrastructure programmes are characterised by specific mandates and stringent timeframes for implementation, with communities as the major beneficiaries. These projects provide opportunities towards alternative construction methods and flexible labour employment methods that allow community participation, from project planning to asset maintenance.

Central to the construction and maintenance projects implemented by the DBSA is the social facilitation function that ensures that there is coordination and linkages among the stakeholders who range from national, provincial, and local municipalities, the project management team, contractors and communities. The aim of social facilitation is to ensure stakeholder buy-in and support of the projects throughout their lifecycle.

CHALLENGE

Over the past few years, IDD has been working in collaboration with the social facilitators appointed by professional service providers (PSPs) to ensure that day-to-day social facilitation matters are managed at each project. Experience has revealed that in many instances IDD social facilitators have to step in to ensure that issues are successfully resolved.

Due to the key challenges on sites, alignment between the IDD social facilitation and the PSPs' social facilitation becomes vital to managing dissatisfaction, maintaining confidence and giving hope to communities.

THE ALIGNMENT BETWEEN IDD AND PSPs' SOCIAL FACILITATORS

This case study highlights collaboration and alignment of purpose between the IDD social facilitators and those appointed by the PSPs in resolving community issues in IDD construction and refurbishment projects.

Social facilitation is about encouraging community participation in the development of their future and provision of interventions that promote ownership and sustainability of projects. Social facilitation ensures that:

- People are encouraged to be active and involved in managing their own development by exercising their responsibilities
- The community can successfully guide development planning and initiatives, resulting in a more inclusive, community-based and bottom-up planning process
- There are good working relationships that promote stability amongst stakeholders during the lifecycle of the project
- There is localisation by utilising of local material and labour thus reducing all unnecessary expenses

Social facilitation is one of the critical elements in the success of infrastructure projects as it ensures effective cooperation and facilitates coordination of roleplayers by creating a conducive environment for the smooth implementation across and beyond the implementation of the project cycle.

IDD SOCIAL FACILITATORS' ROLE

There are currently three IDD social facilitators responsible for IDD projects that require social facilitation across all provinces. For the infrastructure programme to be successful and sustainable, the social facilitator has to perform strategic and technical support in line with the expected deliverables of the programmes, namely:

- To develop a social facilitation implementing plan as a reference document for the programme

- To utilise existing governance structures for easy implementation of the programme at all levels and set up structures where there are none
- To facilitate stakeholder engagement both at management and stakeholder level
- To provide inputs to the risk management plan
- To develop and manage the communication plan
- To provide input into the Monitoring and Reporting tool for the projects (with reference to employment, training and SMME development reports)
- To develop and apply conflict resolution mechanisms
- To craft and implement interventions and mitigation strategies
- To develop social facilitation reporting templates for PSP social facilitators.

PSP SOCIAL FACILITATORS' ROLE

The PSP social facilitators deal with the day-to-day operations of the project such as:

- Environmental scanning
- Identifying of existing stakeholders and their role
- Setting up the local governing structures, providing capacitation and ensuring sign off of the Development Charters
- Ensuring smooth decanting and beneficiation processes
- Managing and monitoring risk
- Managing conflict resolution between the communities and site agents.
- Formulating co-ordination of the strategies and the implementation of the systems of regular reporting to the relevant structures such as PSP team, PSC Committee, the national departments, including local structures linked to the projects such as building steering committees for education programme and clinic management committees for the health programme and other stakeholders in accordance with relevant protocols
- Creating an enabling environment for the implementation of the programme, through the promotion of partnerships between the districts, community structures, government departments, SGBs and SMTs, implementing agents etc.
- Preparing documentation for proper handover of the projects once completed
- Ensuring that all relevant legislation is complied with during project implementation
- Engaging with communities and stakeholders on the new technologies to be used for the construction of new infrastructure going forward

CHALLENGES

There have been glaring challenges during implementation of the infrastructure projects. Some of these challenges are beyond the powers and scope of the PSP social facilitators and require intervention by IDD social facilitators, such as:

- Inconsistency in implementation and the expected deliverables
- Inconsistency in the commencement of social facilitation by PSPs
- Insufficient experience in dealing with difficult community structures
- Lack of urgency
- After care services.

LESSONS LEARNED

- **Experience of PSP social facilitators**
  Social facilitators working on the ground, especially in the rural communities, need to understand rural structures and dynamics to be able to know how to deal with chiefs and other rural community structures.
- **Induction**
  IDD social facilitators are to develop an induction pack for the PSP facilitators to ensure that the standards are uniform and there is proper understanding of the overall programme.
- **Communication between PSP technical team and the PSP social facilitators**
  To allow the PSP social facilitator to have more information on the progress of the site as well as contractor challenges, the technical teams should include the PSP social facilitator in progress meetings.
- **Regular visits to projects**
  There should be regular visits to projects by both IDD and PSP social facilitators – at least once a month. This will improve scanning of issues and result in their speedy resolution.
- **Inception team**
  The project management team is to include social facilitation during inception, when the team is discussing the inception plan and Integrated Programme Implementation Plan (IPIP).
- **Working relations between Construction Project Manager (CPM) and IDD social facilitator**
  The feedback and engagement between the CPM and the social facilitator should be improved. This will ensure that the facilitator has the correct information on the deliverables and the progress of the project and will minimise social facilitators promising communities what is not in the schedule of the project.

CASE STUDY

ACCELERATED SCHOOLS INFRASTRUCTURE DELIVERY INITIATIVE (ASIDI)

The Department of Basic Education (DBE) has been allocated funds by the National Treasury to address the backlogs in the eradication of inappropriate school structures and the provision of basic services (water, sanitation and electricity) to schools. The Accelerated Schools Infrastructure Delivery Initiative (ASIDI) is part of DBE's schooling 2025 plan, which is aimed at improving learning outcomes and bringing better access to education. ASIDI was conceived to be a medium- to long-term initiative, with the goal of eliminating the backlogs in schools' infrastructure.

Historically the DBSA, through its 2008 Education Roadmap and its role in infrastructure development, understood the dire need for appropriate school infrastructure.

The main goal of ASIDI is to eradicate inadequate, unsafe and poor physical infrastructure in schools by properly utilising funding that will be made available to the DBE under the Schools Infrastructure Backlog Grant (SIBG) allocations in the Division of Revenue Act.

The primary objectives of the ASIDI programme are to:

- Replace, in the medium term, schools that have been built with inappropriate materials (e.g. mud schools) with the new standards so as to meet the optimum functionality levels prescribed by norms and standards for schools infrastructure
- Address all targeted schools that need to be brought up to basic safety functionality levels (water, sanitation, electricity and fencing) in the medium term
- Upgrade schools in the long term to optimum functionality by providing associated and specialist classroom facilities, such as libraries, laboratories and administration blocks.

THE DBSA'S APPOINTMENT AS ONE OF THE IMPLEMENTING AGENTS

The DBE entered into a memorandum of agreement with the DBSA in July 2011, appointing the DBSA as the implementing agent for the construction of new schools under the ASIDI programme. Through its Infrastructure Delivery Division (IDD), the DBSA has been able to strengthen the DBE's capacity to deliver schools infrastructure.

The DBSA's implementation of the ASIDI programme has been grounded on the principles of the Infrastructure Delivery Framework as follows:

- Ensure delivery at scale by:
  - Increasing the speed with which infrastructure is delivered
  - Increasing the impact of infrastructure delivery on reduction of backlogs, job creation and skills development
- Increase the quality, cost efficiency and value for money of infrastructure delivery through standardisation
- Streamline infrastructure delivery and co-ordination
- Fast-track delivery whilst simultaneously building institutional capacity
- Pilot innovative infrastructure delivery models.

The DBSA has constructed 129 and completed 111 schools for the DBE. The schools have been completed in phases based on when handover to contractor took place and the size and scope of the school. The DBSA is currently managing the completion of the remaining 18 schools.

The schools constructed by the DBSA optimise functionality levels as prescribed in the DBE's Guidelines Relating to Planning for Public Schools Infrastructure. The schools provide for three space configurations – educational space (classrooms, grade R facilities and toilets), supporting space (multimedia space and nutritional facilities) and administrative space (principal office, HOD offices and staff room).

NUMBER OF LEARNERS THAT HAVE BENEFITED

The 111 schools completed have benefited 43 632 learners, who enrolled as follows:

- 3 344 learners in 17 schools completed in 2013
- 8 956 learners in 32 schools completed in 2014
- 9 162 learners in 15 schools completed in 2015
- 17 916 learners in 35 schools completed in 2016
- 4 254 learners in 12 schools completed in 2017.

The number of learners who have benefited from the schools in subsequent years after completion, would have multiplied over the years. This is the impact that the DBSA has been contributing in the provision of standard schools infrastructure on behalf of the DBE.

BENEFITS TO EMPLOYMENT AND THE DEVELOPMENT OF SMALL MEDIUM AND MICRO ENTERPRISES

The DBSA has been able to maximise the employment of SMMEs during the construction of school projects. The majority of the SMMEs have been subcontracted by the main contractors that are directly employed by the DBSA. To date, 1 267 SMMEs and subcontractors have benefited from these employment opportunities. In addition, 12 061 jobs were created.

The major challenge facing SMMEs has been access to working capital. It was therefore key for the DBSA to ensure payments are made on time within 30 days. The DBSA has a two-week payment cycle, which allows for any invoice to be paid within 14 days of approval. In some cases the DBSA paid material suppliers directly to ensure that materials were delivered to site and that work continued.

The DBSA successfully incorporated social facilitation in our projects as a critical element, which has assisted in drawing communities closer to the projects. IDD's development facilitators established project steering communities in all construction and maintenance projects and included representatives such as ward councillors and local chiefs in the case of rural projects. They were able to address conflict between workers and contractors/subcontractors, especially around payment of wages.

CHALLENGES

The roll-out of the ASIDI programme provided the DBSA with an opportunity to improve our implementing agent function.

There have been various challenges throughout the construction programme that caused delays at all the sites; including:

- One of the biggest challenges was that many contractors were not able to cope with the challenges posed by the difficult terrain and the accelerated nature of the programme, as evidenced by the rate of default and the number of contract terminations we exercised
- Contractors send non-technical personnel to tender briefing sessions and end up submitting unrealistic bids. This affects mostly projects which have difficult terrain and problematic access, which they should have mitigated and priced beforehand.
- Liquidation of some contractors, which inevitably affected the baseline completion programme agreed with DBE
- Poor access to sites, often with no roads, especially in the Eastern Cape
- Difficult and sloped terrain
- Adverse weather conditions resulted in man-days being lost.

IDD had to increase monitoring of project sites to speed up progress, availed an option to pay for material suppliers directly and worked with contractors to increase the number of subcontractors and resource teams on sites.

LESSONS LEARNED

INFRASTRUCTURE PLANNING

- The Infrastructure Portfolio Management Plan from DBE was crucial for the DBSA development of Infrastructure Programme Implementation Plan
- Timelines must be agreed to after detailed planning. Use historical experience and prevailing conditions in determining reasonable project durations
- Sensitivity towards client capacity challenges – broadened support to include planning.

PROCUREMENT PLANNING

- Maintain localisation for developmental benefits as well as understanding of terrain and local area
- Establish panels of suppliers
- Thorough risk assessment and background checks to be done on tenders and awards to be based on value for money.

PACKAGE PREPARATION

- Services bundling to be maintained as far as practical – at least five schools to a single principal agent
- Take previous experiences of contractors into consideration.

PACKAGE DEFINITION

- Develop a logistics support plan and request demand management plan from contractors
- Continue the good practice of development facilitation to unlock community conflict
- Early engagement with Eskom and consider the escalation protocol.

DESIGN DEVELOPMENT

- Maintain the practice
- Due diligence on appointment of PSPs.

PRODUCTION INFORMATION

- Align planning with construction delivery approach.
- Manufacture, fabrication and construction
- Incorporate alternative building technology in future programmes delivery

WORKS/CONSTRUCTION

- Use hybrid approach within reasonable limits
- One PA limited to less than 10 school clusters
- Allow for sectional completion in contracts
- Maintain the timeous payment practice to contractors
- Increase fees aligned to close-out.
- Handover
- The DBSA to be involved in planning of handover and to obtain information timeously.

IDD learned that there needs to be a review of the model used to accelerate delivery on the rural schools, particularly relating to the use of building technologies that may enhance the speed of construction without compromising quality as well as the mix of grades 7 to 9 GBE and smaller contractors within the context of fulfilling empowerment and developmental goals.

A CASE OF ACCELERATED DELIVERY FROM A CONTRACTOR POINT OF VIEW

The Langeni Senior Primary School (SPS) in the Libode Education District of the Eastern Cape is an example of a school that the DBSA has successfully completed within an 11-month construction period. The school, comprising seven classrooms, a Grade R classroom, media centre, science lab, nutrition centre, administration block, ablution facilities and external structures was completed in March 2015. Contractors such as Ishvuyo Building Construction were able to live up to the challenge of accelerating construction activities.

The projects' sites are in the deep rural areas of the Eastern Cape with poor access roads. The contractor familiarised himself with the area before construction commenced. In order to make the project a success, the contractor planned around the poor site location and derived solutions for the challenges at hand. Once appointed, the contractor did a resource plan and used capable technical personnel within his team to do proper scheduling and planning. It is critical that contractors have skilled personnel who can do scheduling and resource planning. The contractor was able to quickly assemble core staff and mobilise workers without delay. This also allowed the contractor to be able to order material on time.

The contractor had also built strong relationships with reliable buyers and material suppliers which enabled him to secure scarce material. What worked for the contractor was that he was able to split units of special deliveries using 4x4 trucks, cranes, etc. to assist with quick and easy access for delivering and offloading material, even if terrain was difficult as a result of rains in the Eastern Cape. Proper scheduling also assisted with proper cash flow planning and forecasting. This ensured that the contractor had sufficient financial resources to do this in line with his CIDB grading.

To maintain a high quality of construction, the contractor also had capable site agents, which made the task of construction much easier. There was mutual respect between the site agent and the workers. Senior directors of the contracting company were in contact with the site on a daily basis. They physically visited the site and coordinated work and planning items on the sites.

The value contribution by the IDD's development facilitators also played a critical role. The contractor found it easy to work as the development facilitators set up project steering committees, comprising the chief, chairperson of the school governing body and local councillor also as members. It was also easy to gain respect for the Steering Committee and the community at large when the contractor was honouring commitments made to local labour. These lessons assisted the IDD team in improving the management of other sites that are currently in implementation.

THE DBSA CONTINUES PROVIDING SUPPORT TO THE DEPARTMENT OF BASIC EDUCATION

The DBSA continues to support the DBE build schools in prioritised areas. For 2018, the DBE has allocated a further 15 schools to the DBSA. The partnership with the DBE has opened further relationships for the DBSA to also support the provincial departments of education. During 2017, IDD commenced the realignment, construction and refurbishment of storm-damaged schools for the KwaZulu-Natal, Limpopo and Eastern Cape departments of education.

CASE STUDY

ANGLO AMERICAN MUNICIPAL CAPACITY DEVELOPMENT PROGRAMME

Many mining operations are located in rural areas where the population is predominantly dependent on social grants due to widespread poverty and unemployment.

Alongside pockets of poverty, these areas also have high service delivery backlogs in water and sanitation.

In some cases, private sector collaborates with government or its agencies to address these challenges. An example of such collaboration is the Municipal Capacity Development Programme (MCDP), a partnership between the DBSA and Anglo American, which focused on building stronger communities that work together in the mining operations and/or labour sending areas. This partnership is governed by a memorandum of agreement signed with Anglo American South Africa (AASA) in 2011 and another with the Investment Climate Facility (ICF) in 2014.

OBJECTIVES OF THE PROGRAMME

The MCDP aims to build the requisite capabilities and enhance the ability of municipalities in Anglo American's mining operations and labour sending areas to provide basic services. In addition to that, the programme also focused on improving the investment climate for these municipalities to attract new business opportunities that would improve the local economies.

The programme focused on training and hands-on skills transfers; supporting municipalities to develop systems, processes and plans; promoting stable municipal management systems; increasing the investment climate and encouraging municipalities to efficiently manage social and economic matters. The initiatives were in the municipalities of Rustenburg, Greater Tubatse, Moses Kotane, Mogalakwena, Thabazimbi, Tsantsabane and Emalahleni. The programme was funded by AASA's business units, namely Kumba Iron Ore, Thermal Coal and Anglo Platinum.

Over R120 million was invested in the programme that ran over a three-year period. In addition, the ICF pledged R25 million to support initiatives in the platinum producing towns during the same period.

DEVELOPMENT OUTPUTS AND IMPACT

Key to the programme was the water and electricity loss management initiatives that were implemented in four of the supported municipalities.

The DBSA was able to reduce the electricity and water losses during 2016 as follows:

- Ga-Segonyana's electricity loss was reduced by 19%
- Rustenburg realised an 11% reduction in electricity loss
- Moses Kotane achieved a 31% reduction in water loss
- Thabazimbi achieved a 22% reduction in electricity loss.

During 2017, the programme managed further reductions in the four municipalities to achieve the following outputs:

- an average of 11.6% improvement in revenue collection
- an average 11.7% improvement in water and electricity losses.

Over the three years of the programme,

- 2 506 water meters were replaced
- 407 electricity meters were replaced
- 26 infrastructure master plans were completed
- 500 municipal officials were trained in areas such as water and electricity meter replacements, pothole repairs, meter physical verification, operations and maintenance, budgeting and planning as well as call centre management
- 205 employment opportunities were created, with 58 SMMEs benefitting from the programme.

FEEDBACK FROM BENEFICIARIES

The Anglo American MCDP model has been supported and commended by government key stakeholders. The governance structures, monitoring committees at various levels and close working relationships established with targeted programme beneficiaries indicated that the model can be replicated in other mining towns and other private partners to achieve meaningful development impact.

- Greater Tubatse local municipality reported that the revenue enhancement intervention has contributed to 75% recoveries
- In Mogalakwena local municipality the MCDP initiative benefited the municipality through the reinforcement of forward planning, improved stakeholder relations, enhanced revenue and it refocused the strategic intent of the municipality from the projects that were implemented
- The Mayor of Tsantsabane local municipality expressed his appreciation to the DBSA and Kumba Kolomela Mine for the initiative as this will take the municipality to another level
- Ga-Segonyana local municipality acknowledged that data cleansing and training of officials has helped the municipality to address billing issues.

CASE STUDY
ELLIOTDALE HOUSING PROGRAMME

The Elliotdale Rural Sustainable Human Settlements Pilot Project (ERSHSPP) is part of the Enhanced Peoples' Housing Process (EPHP) identified in 2004 for piloting the rural pilot projects in Limpopo and the Eastern Cape. The Eastern Cape Provincial Department of Human Settlements (ECDoHS) approved 7 000 housing subsidies for wards 17 and 26 with Mbhashe Local Municipality to implement a rural pilot on breaking new ground (BNG) principles.

The DBSA entered in a partnership with the ECDoHS in 2010 to initially pilot the construction of housing units in the upper Mncwasa and Ntsingizi in ward 17 and Ngqatyana in ward 26 in Elliotdale. Prior to appointing the DBSA as an implementing agent, the ECDoHS had called for an expression of interest for the construction of houses in Elliotdale, but failed to secure responses from contractors because of the difficult terrain, remoteness of Elliotdale and the thin margins that are typically associated to rural housing delivery initiatives.

OBJECTIVE OF THE PROGRAMME

The objective of the ERSHSPP was to model innovative strategic approaches that address the overwhelming lack of adequate shelter in the Elliotdale area of the Eastern Cape. The projects retained the rural character of the community without imposing an invasive and alien architectural and spatial planning theme of a township development that has been associated with typical RDP housing projects.

HOUSING UNITS CONSTRUCTED

The Elliotdale project allowed the subsidy budget from the department's Enhanced Public Housing Process to be utilised for housing products required by a rural homestead. Thus a bouquet of housing typologies bearing a range of products were developed together with an accompanying cost breakdown of each typology that fits within the quantum budget for a housing subsidy.

The housing typologies include housing plans of various sizes and shapes, a water harvesting tank, a stove, a solar panel, even a fridge, and homestead fencing works. Depending on the house type, building materials and size selected, the beneficiary may be able to fit in the quantum budget most of the additional housing products as preferred, depending on their most pressing need.

The qualifying Elliotdale community members were presented with a catalogue, from which they chose their preferred housing typology before construction commenced.

Since 2012, the DBSA has constructed and completed 4 300 houses in Elliotdale with over 12 900 households benefiting. The development impact of the project is encapsulated in the Elliotdale Sustainable Development Plan that looks at the planned investment through the lens of sustainable rural human settlement and not simply as a project to build houses.

LESSONS LEARNED

- **Beneficiary identification**
  Delays in loading beneficiary subsidy data on the Housing Subsidy Scheme (HSS) affected the readiness to construct. The beneficiary administration and selection of house typologies was therefore done upfront to enable bulk procurement of materials on site.
- **Social facilitation is a critical success factor**
  Though communities remained active in the project, the social facilitation programme during phase 1 was not structured to effectively resolve issues related to convincing beneficiaries and traditional leadership to provide alternative sites or relocate the beneficiary where it would be extremely difficult to build a house due to bad terrain. An adequate budget for social facilitation needed to be made to ensure regular engagement with all stakeholders, especially the community and beneficiaries.
- **Integration of access roads construction/re-gravelling**
  Due to bad terrain and sparsely populated sites and extremely uneven terrain, the construction programme is at risk as the contractors have to cut extensive kilometres of road which was not budgeted for in the allocation/subsidy.
- **Spatial planning not adequately factored**
  The spatial referencing of the sites had not been a focus though an intent. Adequate budget is required to enhance the planning scope to include proper surveying of the sites and development of GIS coordinates for the housing units under construction. This should translate into updates of the surveyor general information.
- **Allocation of appropriate number of housing units irrespective of capacity or higher grade**
  The terrain in the area challenged all contractors, both big and small. The strategy should therefore be focusing on allocating not more than 500 housing units to higher grade contractors (from CIDB Grade 8 and higher) while introducing a performance-based allocation model, where additional units will be allocated upon completion of the initial units within a specific timeframe.
- **Direct intervention on critical construction material components**
  Most of the delays attributed to contractors' claims for extension of time with or without cost are associated to the inability to acquire critical material, especially ready mix concrete and building blocks. The material is not necessarily unavailable but the biggest challenge is the unwillingness of suppliers to deliver due to bad terrain. Almost all the contractors are currently double handling or triple handling the material. The approach going forward will include issuing of guarantees to concrete suppliers and block brick manufacturers on supply with an option of direct supplier payment where the contractor fails to do so.
- **Management of contractors**
  South African contractors are highly familiar with the Joint Building Contract Committee (JBCC) Principal Building Agreement but not knowledgeable in terms of the obligations espoused in the contract. The area around claims relating to extension of time and realities of penalties in case of non-delivery has not been accepted by contractors as part of business. Contractors' meetings should be used as learning and education forums, where principal agents workshop contractors on the current contract administration pitfalls and what can be expected. This will ensure that the penalty regime and claims procedure is understood by contractors and will avoid disputed claims that often result in adjudication or arbitration.

CASE STUDY

HEALTH FACILITIES REFURBISHMENT AND MAINTENANCE

The National Department of Health (NDoH) appointed the DBSA as the programme implementing agent (PIA) for technical assistance with the implementation of the National Health Strategic Plan.

The plan identified four key outputs namely:

- Increasing life expectancy
- Decreasing maternal and child mortality
- Combating HIV/Aids and decreasing the burden of diseases from TB
- Strengthening health system effectiveness

The efforts to strengthen and improve the effectiveness of the health system was one of the core reasons for the conception of the National Health Insurance (NHI) system, by which government plans quality and universal health coverage to every citizen regardless of their socio-economic conditions, rather based on the principles of social solidarity, equity and fairness.

The National Health Amendment Act was written into law in 2013. With that followed the establishment of the Office of Health Standards Compliance and the publication of the guidelines and standards for health facilities in South Africa.

The appointment of the DBSA, amongst other implementing agents, is therefore to assist the NDoH in meeting its targets for infrastructure maintenance, refurbishment and upgrades of health facilities to comply with the minimum standards and alleviate the challenges faced by health facilities currently.

HEALTH FACILITIES ALLOCATED TO THE DBSA FOR IMPLEMENTATION

The NDoH allocated the construction of 136 health facilities for maintenance at a cost of R176 million and a total of 102 clinics for the addition of doctors' consulting rooms at a cost R218 million during the period June 2013 to June 2016 as follows:

	Maintenance and refurbishment	Doctors' consulting rooms
Eastern Cape	41 clinics	17 clinics
Free State	12 clinics	14 clinics
Gauteng	12 clinics	6 clinics
KwaZulu-Natal	1 clinic	15 clinics
Limpopo	12 clinics	15 clinics
Mpumalanga	22 clinics	19 clinics
Northern Cape	16 clinics	8 clinics
North West	10 clinics	8 clinics
Total	136 clinics	102 clinics

A further 54 health facilities (27 in Limpopo and 28 in Northern Cape), funded through and with the cooperation of the German development bank KfW, received additional rooms and space for the clinics to meet minimum functionality requirements and provided assistance with health, counselling and testing, at cost of €10 million.

After the successful completion of the maintenance and refurbishment, from July 2016 NDoH awarded further programmes to the DBSA for refurbishment in the Eastern Cape as follows:

Construction of new ideal clinics	44 clinics	R185 million
Back log maintenance	65 clinics	R218 million
Emergency works to hospitals	2 hospitals	R52 million
Revitalisation of hospitals	12 clinics	R120 million
Nursing college	1 college	R240 million
Programme Management Support Unit (PMSU)	studies	R54 million
Total		R816 million

Going forward we envisage a trend where more of the planned projects by NDoH would be for maintenance and refurbishment of existing infrastructure with additions to enhance the infrastructure, rather than entirely new green field projects.

HEALTH FACILITIES COMPLETED BY THE DBSA

The DBSA successfully completed all 136 clinic refurbishment and maintenance, and construction of 102 doctors' consulting rooms. The consulting rooms were built using innovative building technologies (IBT) in order to meet the programme requirements. The DBSA and NDoH opted for a turnkey project in which the contractor was required to manufacture, construct and manage the entire process, inclusive of professional services such as design and supervision of the project.

The relocatable units delivered by the DBSA had the benefit of:

- High delivery speed
- Superior thermal efficiency
- Higher longevity than conventional construction methods
- Higher acoustic control capabilities
- Low operating and maintenance costs – 30% to 50% lower than brick and mortar
- Higher resilience to earthquakes/tremors

The programme was implemented successfully. The use of innovative building technology (IBT) can accelerate the delivery of infrastructure and should be pursued by government departments. However, the communities and beneficiaries of the infrastructure need to be sensitised in order to accept this forms of alternative buildings.

ENERGY

THEME

The DBSA as a SADC energy player

THE STORY WE WANT TO TELL

- How we are a pioneer in the IPP space
- How we developed an innovative programmatic approach to creating scale with infrastructure finance
- How we are a player in SADC energy, and renewables in particular

THE DBSA'S ENERGY SECTOR

The DBSA has had a remarkable journey in the energy sector in South Africa over the past 11 years. This sector is the DBSA's largest portfolio and over the last decade it has had certain distinctive projects that have fundamentally transformed the sector and added much needed energy supply into the national grid for the benefit of all South African citizens.

INDEPENDENT POWER PRODUCERS (IPP) PEAKING PLANTS – AVON AND DEDISA

The DBSA's IPP footprint and journey in South Africa started off in 2006 with the IPP Peaking Plants, the Open Cycle Gas Turbines (OCGT) in Avon and Dedisa which have a combined capacity of 1005 MW.

The DBSA committed R1.942 billion in the form of senior debt of R1.4 billion and R542 million in B-BBEE equity funding. The two plants Dedisa (335 MW) and Avon (670 MW) have successfully reached commercial operation date and are producing energy into the national electricity grid.

RENEWABLE ENERGY INDEPENDENT POWER PRODUCERS PROGRAMME

In 2010, the Department of Energy, National Treasury and the DBSA collaborated in setting up the Renewable Energy Independent Power Producers Procurement Programme (REIPPP) and the IPP Office. The REIPPP opened up the market for renewable energy in South Africa.

The REIPPP has been widely acclaimed internationally as a success and has been running in a series of rounds. To date the Department of Energy has issued Request for Proposals for the following rounds of the REIPPP – round 1, 2, 3, 3.5, 4 and an expedited round. The technology profile has been onshore wind, solar photovoltaic (PV), Concentrated Solar Power (CSP), biomass, biogas, landfill gas and small hydro. As at October 2016, 2.8 GW had been procured from the IPPs and 53 of the IPPs were already operational (IPP Office).

The DBSA has been instrumental in financing renewable energy projects under the REIPPP. The DBSA's support for the programme includes the following aspects: programme management support to assist the Department of Energy; acting as a joint mandated lead arranger and underwriter for the projects the DBSA is involved in; and acting as a leading financier of the Broad-Based Black Economic Empowerment (B-BBEE) parties and community trusts.

To date the DBSA has a committed portfolio of 19 renewable energy projects and has invested approximately R13 billion with a total of approximately 1 550 MW across the technology profile. The DBSA lending commitments are in the form of senior debt and support for local empowerment parties and communities. Support for the B-BBEE Parties and community trusts is essential in order to enable them to acquire equity stakes in REIPPP projects.

The majority of the projects supported by the DBSA are located in the Northern Cape, which is well endowed with high solar irradiation levels. Consequently, in addition to providing much needed energy supply for the country, this has also led to the stimulation of the economy, the creation of jobs and improvement in the livelihood of the communities in the areas surrounding the projects.

For the year under review, 2017 specifically, the DBSA reached financial close on the Kathu CSP project. An overview of the project is provided in the following section.

KATHU CONCENTRATED SOLAR POWER PROJECT CONCLUDED IN MAY 2016

The Kathu Solar Park is a 100 MW concentrated solar power (CSP) plant located approximately 10 km from the town of Kathu in the Northern Cape, a region with one of the highest solar irradiation in the world. The project was awarded preferred bidder status in December 2014, following Round 3.5 of South Africa's RREIPPP.

The project achieved financial close on 15 May 2016 and construction commenced on 26 May 2016. Construction and commissioning will take 29 months to

September 2018 and thereafter operations will commence under a 20-year power purchase agreement signed with Eskom.

The shareholders consist of Engie (formerly GDF Suez), the Government Employees Pension Fund (PIC), SIOC Community Development Trust, Investec Bank Limited, Lereko Metier and the Kathu Local Community Trust. The Development Bank of Southern Africa together with Absa Bank, Investec, Nedbank and Rand Merchant Bank were the appointed mandated lead arrangers (MLAs) on the Project.

The total project cost is estimated at R13.6 billion. The DBSA's exposure under the project is R2.06 billion comprising R1.7 billion of the commercial facilities and R368 million of Empowerment Financing which enabled both the SIOC Community Development Trust and the Kathu Local Community Trust to acquire equity stakes in the project. The Kathu Local Community Trust will represent the interests of the local communities in the John Taolo Gaetsewe District Municipality in the Project.

Positive socio-economic impacts associated with the project include the creation of job opportunities, transfer of skills and contributions to the local, regional and national economies. Approximately 500 jobs will be created during the construction phase.

The local communities also stand to benefit from the dividend flows to the Kathu Local Community Trust, the provision of social infrastructure such as schools and libraries funded from the project cash flows and from the stimulation of the local economy through the provision of services to the Project by local entrepreneurs.

Upon completion, the project will contribute approximately 390 000 MWH per annum of clean energy to the national grid thereby powering an estimated 179 000 South African homes. The project will save approximately six million tons of CO_2 over the 20-year operational period.

LOOKING AHEAD

In the financial year under review, the Department of Energy launched the liquefied natural gas (LNG) to the Power IPP Programme and released a Preliminary Information Memorandum (PIM) and an Information Memorandum (IM) to the market on 3 October 2016. The Department of Energy has also assessed and earmarked sites and indicated that it will allocate 3 000 MW between two sites; one site is located at Richards Bay in Durban and the other site is located at Coega in Port Elizabeth. The next step is for the Department of Energy to release the Request for Qualification (RFQ) out to the market. The Integrated Resources Plan (IRP) sets out the country's plan for demand and supply and the energy mix, and is currently in the process of being updated. As a result it is anticipated that the RFQ will be released after the IRP process is completed and approved by Cabinet.

ENERGY SECTOR ACCOLADES

Over the years, the DBSA has received both local and international awards and recognition for its work in the energy sector as follows:

PFI AWARDS 2015

Wind Deal of the Year: Mainstream

PFI AWARDS 2015

Solar Deal of the Year: Ilanga 1

ABSIP

Project Financier or Deal of the Year 2015

IJGlobal Awards 2015

African Renewables 2015: Xina Solar One CSP

IJGlobal Awards 2016

African Renewables 2016: Kathu CSP

ProjectFinance Deals of the Year 2013

African Power Deal of the Year and Overall African Deal of the Year Renewables 2013 – Avon and Dedisa Peaking Power

African Utility Week

Pioneer in Project Finance-2015 Industry Awards

CASE STUDY

THE SMALL PROJECTS INDEPENDENT POWER PRODUCERS PROCUREMENT PROGRAMME (SPIPPP)

The Department of Energy established the SPIPPP to offer opportunities for small-scale renewable energy producers that will stimulate participation by small and medium sized enterprises (SMEs). The target capacity for projects is to generate and provide energy between 1 MW and 5 MW.

On 4 October 2015, as part of round one, the Minister of Energy appointed 10 (ten) preferred bidders, split across onshore wind, solar PV and biomass. Only five (5) projects in this window had access to project finance facilities from Industrial Development Corporation (IDC) and Mergence, having access to subsidised funding from AFD. The remaining five (5) preferred bidder appointed projects in this round bid on the basis of corporate finance support and are facing challenges to raise finance at the right price to ensure sustainability of the projects.

Bid Window 2 have 10 (ten) preferred bidders projects within the contract finalisation stage leading to financial close.

CHALLENGES FACED BY THE SPIPPP PROGRAMME

The constraints to private-sector financing of small renewable energy projects:

- The developers have found it extremely difficult to access equity and debt funding from commercial banks, mainly due to their SME profile and their limited track record in the renewable energy sector; none of the South African commercial banks have provided debt offers to any of the preferred bidders from Bid Windows 1 and 2;
- Some limited subsidised long-term debt was made available to participating bidders in Bid Window 1 by Development Finance Institutions but that offer was not sufficient to get all preferred bidders to reach financial close.
- The commercial debt facilities that developers and equity investors have been able to obtain feature credit margins that do not allow projects to maintain the tariffs that they have included in their bids (that included financing costs that were too ambitious) while at the same time ensuring a reasonable return.
- The transaction costs incurred by bidders in bidding the project under the programme are disproportionate to the larger financed project costs.

The challenges reflect on one hand a market failure, i.e. limited interest from commercial investors in providing funding to project sponsors with SME profiles and the fact that many SMEs have difficulty in providing a reasonable equity contribution.

PROPOSED DBSA INTERVENTIONS

A. IIPSA INTEREST RATE SUBSIDY

An intervention from the DBSA through IIPSA was required to ensure that Bid Windows 1 and 2 would be brought to successful conclusion, thus building support for future bid windows to proceed. The Interest Rate Subsidy proposal was presented as one of the interventions required in order to address the challenges being faced which thus far have prevented most of the qualified projects that did not benefit from subsidies from getting to financial close.

The Interest Rate Subsidy principles are:

- Maximum grant facility of R80 million be reserved by the IIPSA to cover eligible Projects from SPIPPP Bid Windows 1 and 2 allocation;
- Limitation period of 12 months during which applications can be submitted;
- Only SMEs with a B-BBEE shareholding of at least 50% will be able to benefit;
- Only IIPSA participating DFIs can qualify for the IIPSA Interest Rate Subsidy and should be used to crowd in other qualifying financial institutions such as commercial banks or fund managers to co-fund the senior debt with the IIPSA participating DFIs; and
- Amount of the Interest Rate Subsidy to be provided to a specific project will be limited based on fair and reasonable improvement to the Debt Service Cover Ratios (DSCRs) with consideration given to the risk and ability of a project to meet the required funding criteria. The impact on the DSCRs is an important indicator to determine if the funding challenges experienced are mitigated.

A total of 10 projects, totalling 49 MW of capacity, have been awarded preferred bidder status under BW1 and 10 projects, totalling 51 MW of capacity, have also been appointed for BW2. Given the challenges to attract debt funding for the BW1 projects, the IIPSA intervention is designed to support projects from both BW1 and BW2 for the total subsidy amount of up to R80 million (assumed 10 projects x R8 million), provided that specific economic development criteria are met.

Available projects

Available MW (current RfP) BW 1 and 2	MW available	Preferred Bidders appointed/to be appointed	Funding confirmed	Available for financing under this subsidy
Bid Window 1	49 MW	10	5	5
Bid Window 2*	51 MW	10	0	10
Total	100 MW	20	5	15

1. In the event that the impasse of government not signing the respective Power Purchase Agreements with the SPIPPP projects continues beyond the 12-month limitation period, a possible extension will be granted to ensure the objectives of the IIPSA support is still achieved.

2. The indicative minimum DSCR level is 1.26x.

B. GLOBAL ENVIRONMENT FACILITY (GEF) EQUITY FUND FACILITY

The objective of the GEF equity facility is to remove financial barriers in the small scale renewable energy projects through affordable equity funding. The GEF equity facility initiative will provide equity funding to SMEs that are preferred bidders under the SPIPPP in order to address the challenges faced.

The GEF equity facility principles are:

- The GEF-funded equity facility of US$15 000 000 is limited to Small IPP projects under the SPIPPP;
- Applicants must be SMEs, with a dominant Black ownership and meet B-BBEE requirements. The dominant ownership means a controlling ownership in the projects of >50%;
- The applicants have made a long-term commitment regarding their participation in the renewable energy sector and are to be actively involved in the business;
- GEF strongly encourages[3] women and other vulnerable groups to be prioritised as part of the project's Economic Development criteria such as, job creation, South African Entity Participation, shareholding in the project company, SME participation, management control, preferential procurement, enterprise and socio economic development contributions; and
- The sponsors would have to demonstrate an ability to contribute own equity contribution.

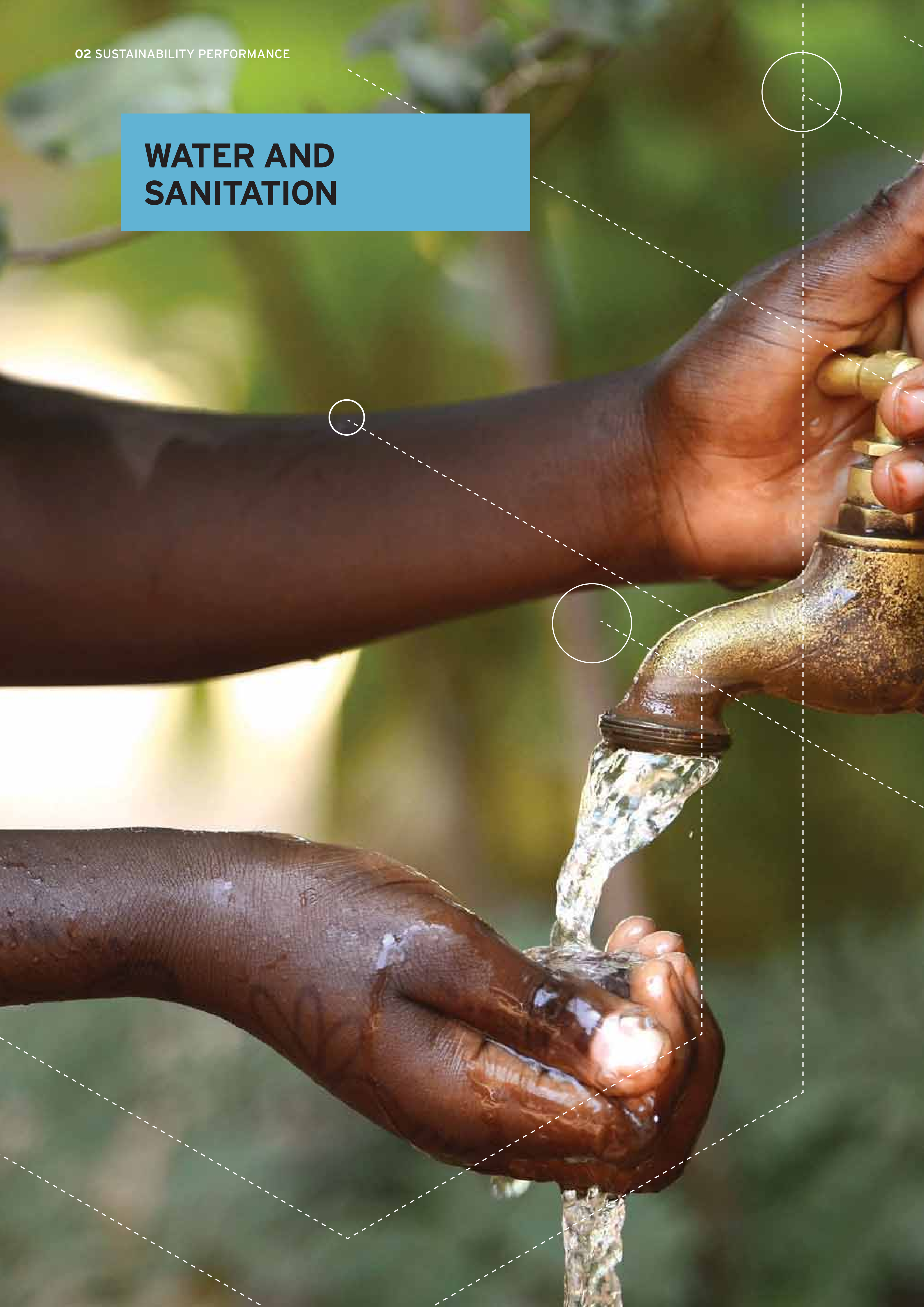
The GEF-funded equity facility is seen both as innovative and the most needed financial mechanism to address barriers for the participation of B-BBEE SMEs participating in the SPIPPP in order to catalyse this market thus resulting in social, economic and environmental benefits.

DEVELOPMENT IMPACT OF THE PROPOSED DBSA INTERVENTIONS

- Addresses the market failure for the lack of funding (equity and debt) due to i) limited interest from commercial investors and ii) participating SME's with limited financial and technical track records/resources for the size of the capital investments required in the renewable energy sector;
- Allow qualifying projects i) that did not benefit from subsidies or ii) have access to affordable equity funding to be bankable and able to achieve financial close;
- Ensure SMEs with a B-BBEE shareholding of at least 50% are able to benefit from the IIPSA and GEF interventions; and
- Qualifying financial institutions are afforded the opportunity to provide co-funding to the SPIPPP Bid Windows 1&2 projects, i.e. the Interest Rate Subsidy is to be used to crowd in other qualifying financial institutions such as Commercial banks or fund managers to co-fund the senior debt with the IIPSA participating DFIs (specifically avoiding crowding out of project finance facilities from IDC and Mergence supported with subsidised funding from AFD).

3. Such commitments will be monitored and reported on to the GEF.

WATER AND SANITATION



CASE STUDY

UMGUNGUNDLOVU DISTRICT MUNICIPALITY WATER AND SANITATION PROGRAMME

The uMgungundlovu District Municipality (UMDM) is one of the 11 district municipalities in KwaZulu-Natal. It is the water service authority (WSA) and water service provider (WSP) to six of its seven local municipalities, namely Richmond, Impendle, Umgeni, Mkhambathini, Mpofana, and uMshwathi. uMsunduzi Local Municipality is serviced directly by uMngeni Water.

UMDM is the second largest district in the province, with UMDM's economy contributing nearly 12% to value of goods and services produced in KwaZulu-Natal. Manufacturing remains the second major economic driver, contributing 22% to total gross value added (GVA) in the province, after community services (including government services). Manufacturing activities are driven by aluminium processing, clothing and textiles, and agro-processing (sugar milling, animal feed and leather and footwear production). In recent years, the construction and finance, insurance, real estate and business services and transport sectors have shown an increasing growth although these sectors are still small.

The unemployment rate within uMgungundlovu district is estimated at 26%, compared to 22% in the province and 25% country-wide. It has consistently declined from the level of 44.2% as per 2002 estimates. The Human Development Index (HDI) is currently estimated at 0.602, which has shown a continual improvement from the level 0.549 in 2003. Data published by Stats SA in its 2011 census indicates that the UMDM is still faced with some water and sanitation backlogs as follows:

- 9% of the population has no access to potable water although this was an improvement from the 16% backlog as at 2001
- 3% of the population has no form of toilet facilities whatsoever, a substantial improvement from the 6% backlog as at 2001.

Although significant progress had been made between 2001 and 2011 in the reduction of the water and sanitation backlogs, the UMDM had been experiencing a population growth rate of about 1% between 2001 and 2011. The demand for services in the UMDM remained high due to inward migration. In 2012, the UMDM estimated that the water and sanitation backlogs will require about R3.3 billion to eradicate, whereas the annual municipal infrastructure grant (MIG) allocations over the Medium-Term Economic Framework (MTEF) were about R300 million.

It is in the above context that the UMDM formulated a district-wide water and sanitation infrastructure development programme backed by a council decision to raise external loan funding (with the pledging of its MIG allocations) in order to expedite the eradication of the water and sanitation backlogs.

Following approvals received from National Treasury, the UMDM eventually entered into a loan agreement with the DBSA for R200 million. The DBSA supported the UMDM with project implementation support through the Project Implementation Support Unit (PISU).

PROGRAMME DESCRIPTION

The objectives of the UMDM Water and Sanitation Programme are to:

- Accelerate the reduction of the water and sanitation backlogs
- Improve the healthiness of community members by increasing household accessibility to basic water and sanitation services
- Create employment opportunities through the projects implementation
- Alleviate poverty in the local communities

The scope of the programme comprised the identification, prioritisation, planning, design and implementation of the 24 water and sanitation projects in the six local municipalities within the UMDM area.

The initial project list comprised of 39 projects, however this was reduced to 24, based on the implementation readiness, availability of the budget and construction period (to be within the loan availability period).

In general, the bulk water infrastructure projects comprised the construction of abstraction points, upgrades to water treatment plants, reservoirs, bulk water pipelines and associated reticulations. The projects were implemented in various areas of the district municipality. The main phases in these projects are project initiation, planning, design and implementation.

DEVELOPMENT IMPACT

As a result of the implementation of the 24 projects funded by the DBSA on the MIG front-loading, the following development impact has been achieved to date:

- A total of 13 133 households have benefited from new or improved access to water and sanitation services comprising:
  - 4 259 households that benefited from new or improved access to water supply services
  - 8 874 households that benefited from improved access to sanitation services – mainly through the implementation of VIP toilets.
- 989 temporary job opportunities were created as a result of the implementation of the MIG front-loaded projects

It is anticipated that significantly more temporary job opportunities will be created and more households will benefit from new or improved access to water and sanitation services upon the completion of the implementation of the full programme portfolio of projects.

The business case for the UMDM MIG front-loading was based on the following anticipated benefits:

- Faster completion of projects than would occur if the projects were implemented through the normal (business and usual) fiscus funding cycle
- Delivery of services (e.g. water connections) to communities ahead of time
- Reduced cost of projects executed.

Despite unforeseen delays and challenges encountered during the implementation of the programme, the UMDM was able to use the available portion of the MIG front-loaded funds (R200 million) to complete 11 projects, undertake detail design of seven projects, with five projects undertaken from planning to construction stage and one project under commission stage.

LESSONS LEARNED

The following lessons were learned during the implementation of the UMDM Water and Sanitation Programme:

- It is important to engage with, involve and obtain the commitment of key stakeholders such as Department of Water Affairs (DWA), Cooperative Governance and Traditional Affairs (CoGTA), KwaZulu-Natal Department of Environmental Affairs (KZN DEAT), and National Treasury (NT) up-front and prior to the implementation of the MIG front-loaded projects. The involvement, commitment and alignment of the key stakeholders around the programme were critical for the successful implementation of the programme and for the resolution of the challenges encountered
- Bulk infrastructure needs to be in place in order for successful water and sanitation reticulation to be achieved. The UMDM correctly prioritised the development of bulk infrastructure as well as the bulk water resources and gave the due priority and attention to these elements in order to lay a good foundation for successful service delivery in the municipality
- A challenge encountered during implementation of the projects was insufficient detailed project planning, which resulted in some projects not being implementation ready at the time of the approval of the MIG front-loading. This meant that the detailed planning had to be done first, thereby detracting somewhat from the acceleration of the delivery of the projects as contemplated under the MIG front-loading arrangement
- As the implementation of some projects were delayed due to prolonged procurement processes, it is important to improve the efficiency, timeliness, effectiveness and completeness of all procurement, administrative and project-related processes by the relevant municipal structures so as to avoid delays caused by prolonged procurement and contracting processes
- The UMDM initially identified too many projects for implementation (39 projects) with limited funds (R200 million). This was reduced to 24 projects, which was still too many. This had an impact on the completion rate as resources were spread out too thin. Project prioritisation is important where funds are limited. It is considered preferable to prioritise a few projects for implementation and completion rather than spreading the limited funds thin over many projects and not completing them
- Project implementation support by the DBSA to UMDM was useful in enhancing the capacity of the UMDM to resolve the challenges encountered during projects implementation

The DBSA's continuous engagement with UMDM's technical team on the programme led to the awareness that the water losses in the UMDM are relatively too high (in excess of 40%). The management of non-revenue water losses remains a serious challenge in UMDM.

CASE STUDY

NGAKA MODIRI MOLEMA DISTRICT MUNICIPALITY WATER AND SANITATION PROGRAMME

A memorandum of understanding (MoU) for partnership was concluded in July 2006 between the DBSA and the North West provincial government (NWPG). In terms of the MoU, the DBSA would provide technical assistance and resources to assist in the reduction of service delivery backlogs in the province. The two parties conceptualised the North West Water and Sanitation Programme (NWWSP), which was championed by the North West Department of Developmental Local Government and Housing (NWDDLG&H).

Between 2006 and 2009, the DBSA provided bridging finance of R100 million for the bucket sanitation eradication programme. Technical capacity support was also provided by the DBSA through a technical expert deployed to the NWDDLG&H in the same period. A technical assistance grant of approximately R5 million was also provided by the DBSA towards the provincial water and sanitation backlog study, which was completed in July 2008.

Based on the findings of the backlog study, the DBSA provided an additional technical assistance grant of R2 million in 2010 as a co-funding contribution with the NWDDLG&H towards the preparation of 60 water and sanitation project business plans in the North West municipalities. Fifteen (15) projects business plans were prepared in each of the four district municipalities of the province. The intention was to get the projects to registration stage with the Municipal Infrastructure Grant (MIG) so as to be able to unlock funding from the fiscal allocations.

The NMMDM's water and sanitation programme was initiated after the provincial water and sanitation backlog study was completed. The findings of the backlog study gave a quantification of the water and sanitation reticulation backlogs in the NMMDM, namely 56 387 and 91 102 households respectively at 31 December 2007. The backlog study estimated that about R1.44 billion would be required to address the bulk and reticulation backlogs over the MTEF, of which only R560 million was potentially available through fiscal allocations. This implied a funding gap of an estimated R880 million over the MTEF at that time.

The DBSA and NWPG agreed to a funding mechanism that would bridge the funding gap and front-load fiscal allocations to fast-track project implementation and reduce backlogs. The 15 project business plans completed by the DBSA and the NWDDLG&H in the NMMDM were used as part of the motivation to National Treasury (NT) for the approval of the MIG front-loading arrangement with the NMMDM, whereby the DBSA provided the required funding.

The initial MIG front-loading arrangement was approved in September 2011 in the amount of R219 million. However, due to the delays experienced in rolling out the programme, the amount was reduced to R152.7 million in May 2013. The reduction was to allow for alignment with fiscal allocations in the MTERF cycle. The DBSA supported the NMMDM with project implementation support from July 2013 through the Project Implementation Support Unit (PISU).

PROGRAMME DESCRIPTION

The main objectives of the NMMDM water and sanitation programme were to:

- Accelerate the reduction of the water and sanitation backlogs
- Increase household accessibility to basic water and sanitation services;

- Create employment opportunities through the projects implementation
- Alleviate poverty in the local communities.

The programme involved the implementation of 19 MIG projects in the five local municipalities of Ditsobotla, Ramotshere Moiloa, Mafikeng, Ratlou and Tswaing. The projects portfolio consisted of two bulk water schemes, 14 water supply schemes and three bulk sanitation schemes.

The scope of the programme comprised identification, prioritisation, planning, design and implementation of 19 water and sanitation projects in the five local municipalities within the NMMDM area in North West Province. The projects were identified by the NMMDM through community participation as part of its integrated development planning (IDP) processes.

North West Province is a generally dry province and the inadequacy of regional bulk infrastructure means that piped portable water supply from other district municipalities in the province is currently not an viable option for bulk water supply, through boreholes to access underground water resources. Projects were implemented in the rural areas of Verdwaal 1 & 2, Kaalpan, Brooksby, Makgori, Bapong, Naaupoort, Nooitgedacht, Lombaardslaagte, Weltevrede, Mooipan and the urban area of Itsoseng.

ACHIEVEMENT OF PROJECT OBJECTIVES

The business case for the NMMDM MIG front-loading was based on the following anticipated benefits:

- Completion of projects that such outputs would occur if the projects were implemented through the normal fiscus funding cycle
- Delivery of services (e.g. water connections) to communities ahead of time
- Reduced cost of projects executed.

The average completion period for the nine projects completed by the NMMDM to date is 20 months (nearly two years) ahead to time. Furthermore, the completed projects resulted in the local communities receiving the projects benefits faster than would have been the case under the normal MIG allocations funding cycle. This means that service delivery backlogs were eradicated much faster under the MIG front-loading arrangement when compared to the normal MIG allocations funding cycle.

At an average price escalation cost of 10% per annum, the total savings in cost for early completion of nine projects by the NMMDM is estimated at R22.15 million. Inevitably, the use of the MIG front-loading has also resulted in cost savings.

DEVELOPMENTAL IMPACT

A total of 624 temporary job opportunities were created as a result of the implementation of the NMMDM water and sanitation programme. In addition, in excess of 26 000 households are already benefiting from new or improved access to water and sanitation services. A further 12 969 households will benefit from new or improved access to services once projects in planning and construction stages are completed.

LESSONS LEARNED

The following lessons were learned during the implementation of the NMMDM water and sanitation programme:

- The establishment of the Steering Committee (SC) to serve as a co-ordinating and report-back forum contributed to the success of the programme
- The poor state of implementation readiness of some projects contributed to the delays experienced in getting these projects started and to cost escalations
- Key stakeholders such as Department of Water Affairs (DWA), Department of Cooperative and Traditional Affairs (CoGTA), and NT were successfully engaged with and were fully involved during programme implementation. These stakeholders were key in resolving challenges encountered
- Bulk infrastructure needs to be in place in order for successful water and sanitation reticulation to be achieved. The development of bulk infrastructure as well as the bulk water resources must be given priority before reticulation infrastructure
- The processing of the DBSA claims from the NMMDM was always a challenge as the municipality had challenges in collating the required documentation and proof of CPs
- Inadequate reporting and incomplete data was a major challenge in the programme, which was resolved with DBSA support
- Cooperation and collaboration from local municipalities in which projects are implemented is a key to project success
- Project implementation support to NMMDM was critical to the resolution of many challenges encountered during project implementation as well as to the expedition of the claims process to enable faster disbursements
- The management of non-revenue water losses, which is relatively high in the NMMDM (in excess of 40%), is a major challenge which needs to be resolved for sustainability.

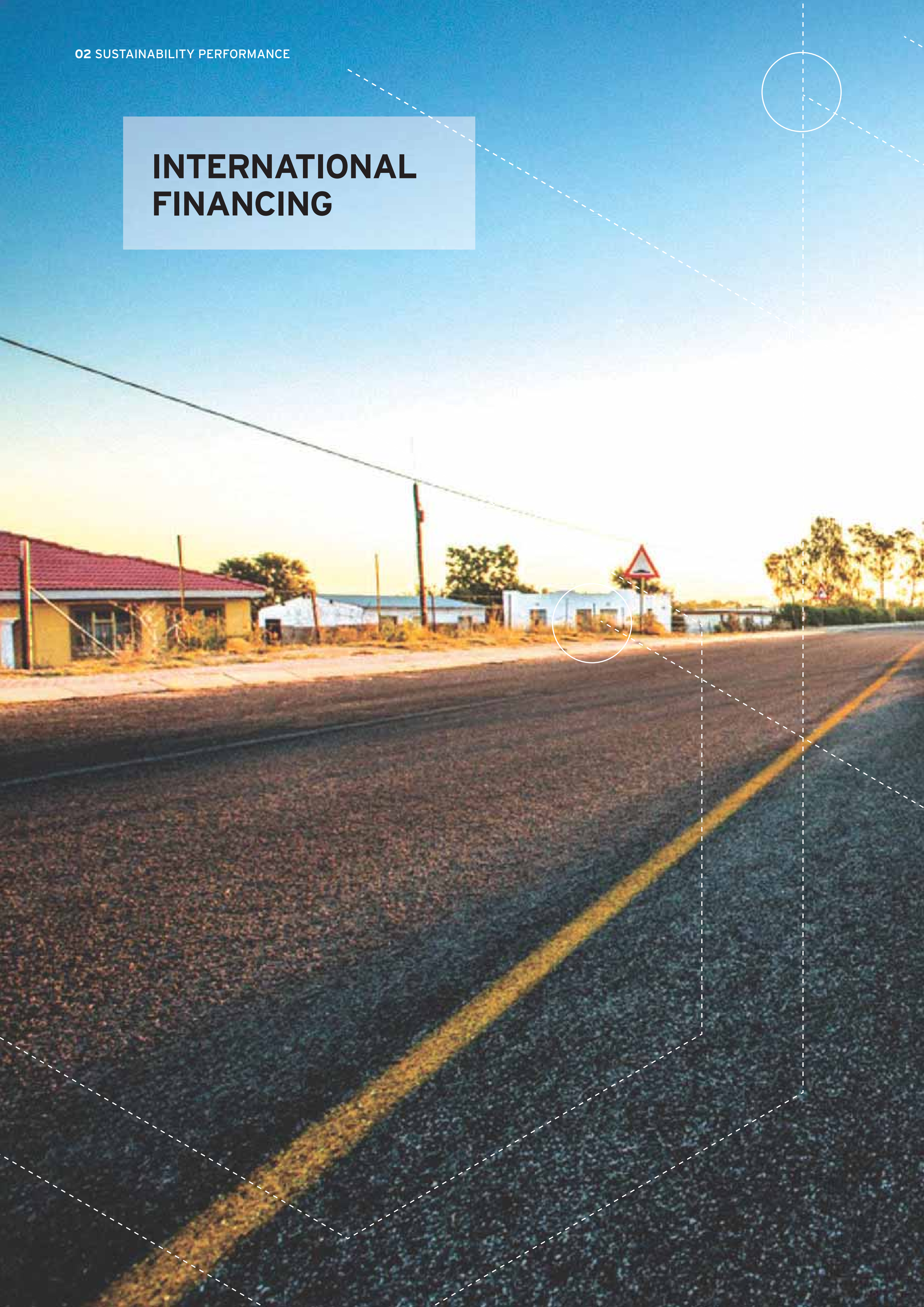
FURTHER RECOMMENDATIONS

The following recommendations are made in relation to ongoing and future MIG front-loading programmes;

- Adequate project planning is required before embarking on project execution in order to minimise delays to project completion, project cost escalations and contractual disputes during construction. The extension of the DBSA's project planning support to municipalities should be seriously considered in MIG front-loading programmes
- Project implementation support from the DBSA's M2/M3 sub-division to the DBSA-funded municipalities should be maintained and be provided in a targeted manner as the DBSA does not have the capacity to provide continuous on-site project implementation support
- Most municipalities receiving bridge financing support have high water losses. The DBSA should continue with its efforts to support and assist municipalities with an effective programme to reduce non-revenue water losses. The process for the appointment of the professional service provider for the development of the Water Demand Management Plan is at an advanced stage, with the plan anticipated to be completed soon

It is considered that municipalities, with the support of the DBSA, will implement future phases of bridge financing more efficiently given the experience gained and lessons learned from the first phase.

INTERNATIONAL FINANCING



BACKGROUND

Development Finance Institutions (DFIs) play an integral role as an impact investor and supporting structure to African governments to grow their struggling economies and to drive the implementation of infrastructure projects. Research found that lower-income countries can experience up to 1.3% positive growth from a 10% increase by multilateral DFI commitments, whereas higher-income countries with the same commitment will only experience up to 0.9% growth increase. Regional and national DFIs, such as the DBSA, capitalise on strategic partnerships with multilateral DFIs, governments and the private sector to ensure that African countries achieve their infrastructure and economic development goals.

MANDATE AND OBJECTIVE

The International Finance Division (IFD) of the DBSA operates in African countries outside South Africa with the mandate to invest in infrastructure projects in its four main sectors which include water, energy, transport and ICT. The main objective of the IFD in the DBSA is to support South Africa and the DBSA's regional development and integration strategy, aimed at facilitating trade in Africa by investing in infrastructure projects outside of South Africa. In essence, the IFD's aim is to address the continent's catalytic infrastructure needs through:

- Provisioning of funding and related products and services for commercially viable and sustainable projects which contribute to economic development and regional integration.
- Supporting project planning and development, advocacy and partnership building for resource mobilisation
- Promotion of inter-regional integration and cooperation between SADC and the adjoining regional economic communities in Africa

In order to achieve these objectives, the IFD identifies the projects that matter, prepares the projects that matter in collaboration with supporting divisions, and finances the projects that matter. These projects align to the regional infrastructure corridors and regional master plans as well as those projects that are linked to a country's national strategic infrastructure plans.

STRATEGIC PARTNERSHIPS

International Financing capitalises on strategic relationships with its Coverage Unit having identified the 4 (four) types of relationships which are core to the nature of deal origination, pipeline development and business development. Relationship managers have been assigned to constantly manage these significant stakeholders.

- Strategic involvement with "Economic Corridor Development" i.e. Central Corridor, Beira – Nacala Multimodal Corridors and North-South Corridor.
- Strategic partnership with other DFIs
- Strategic partnership with SA Contractors to enhance "SA Inc".
- Strategic partnership with "financial institutions" (Commercial Banks and other"

The aim in nurturing the above is to grow the utilities, SOEs and PPPs pipeline. Smart partnerships ensure constant feed into the IFD "internal project filters".

FINANCING

The major services provided by the IFD include vanilla and boutique financing services through:

- Debt
- Supporting project planning and development, advocacy and partnership for resource mobilisation.
- Promoting inter-regional integration and cooperation between SADC and the adjoining regional economic communities in Africa

IFD'S SADC FOOTPRINT

The IFD initially operated only in the region of the Southern African Development Community (SADC). The investment impact from 1998 to 2015 in the different sectors, which included non-core sectors i.e. manufacturing, health and financial services private sector deals:

The IFD development impact has been significant and AWARD WINNING across the continent

Period 2013-2016

SADC VS NON-SADC DISBURSEMENTS

120 MW hydropower plant in Zambia

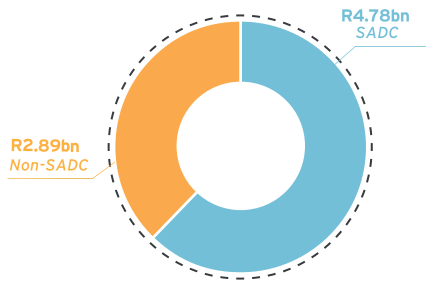
225 MW Ghana Powership

450 km of petroleum pipeline in Kenya

300 MW coal power plant in Zambia

Transport infrastructure Financing: Angola

340 MW combined cycle gas fired plant in Ghana



The IFD has further expanded its investments in SADC by investing in both the energy and ICT sectors.

ENERGY SECTOR

The biggest development impact of the DBSA's investments in 2016 went to the energy sector. Energy constraints in the Southern African region have become a common denominator for most SADC countries. IFD contributed an additional 420 MW to energy production in SADC and disbursed more than R1.4 billion into the SADC energy sector in 2015. Investments were split between two major energy projects in Zambia.

CORRIDORS – STRATEGIC PARTNERSHIPS

ONE-STOP BORDER POST

The DBSA's geographic investment mandate was amended by National Treasury by way of Government Notice No. R. 1026 published on 18 December 2013. In terms of the notice, the definition of region, as stipulated in the Regulations to the DBSA Act No 13 of 1997 (Amended Act No 41 of 2014), was amended to read as follows:

"The region as defined in the act includes the national territories of all countries on the continent of Africa."

CENTRAL CORRIDOR DIAGNOSTIC

The Central Corridor Diagnostic study was undertaken in collaboration with different partners. The Africa Strategic Infrastructure Initiative of the WEF and partners such as AUC, NEPAD Agency, AfDB and the DBSA undertook a diagnostic study to accelerate the implementation of infrastructure projects in the Central Corridor. A group of four interventions was utilised to raise finance for the implementation of infrastructure projects in the following way: private finance opportunities; private finance opportunities (project development/project preparation); development finance opportunities and other sources of finance.

NORTH-SOUTH CORRIDOR

Working with the Boston Consulting Group (BCG) and the Presidency of South Africa, the DBSA has undertaken to explore the acceleration of key projects on the North-South Corridor. The objective of the acceleration is to release the NSC projects' potential impact. Key flagship projects include Inga 3 Low Head Project, Beitbridge Border Post and Chirundu Road, and the Lesotho Highlands Water project Phase II. The diagnostic study was intended to bring about a solution to bottlenecks and challenges by proposing actions to accelerate a short list of projects.

IN CONCLUSION

IFD has in the past few years made in roads in the infrastructure space by investing in the right projects and reaping the rewards. The outlook for IFD is positive with more projects reaching financial closure, especially in the energy sector.

DBSA IFD will not be able to develop the infrastructure economy of Africa alone. Thus, we will strengthen our partnership with other African DFIs, the African Union, NEPAD Planning and Coordination Agency, regional economic communities in Africa, global institutions such as the World Economic Forum and USAID, Power Africa and leading multilateral development banks such as the African Development Bank.

DBSA IFD will continue to support South Africa's regional development and integration strategy and drive the SA Inc. agenda in Africa, while simultaneously capacitating the local skills base in those countries by creating more employment through infrastructure development.

VENTURING OUTSIDE SADC

The DBSA's geographic investment mandate was amended by National Treasury by way of Government Notice No. R. 1026, published on 18 December 2013. In terms of the notice, the definition of region was amended to include all countries in Africa.

CASE STUDY

ITHEZI-THEZI (ITT) HYDROPOWER GENERATION PROJECT EXPANSION

ENERGY SECTOR: SADC

In 2010, the Zambia Power System Development Plan (PSDP) approved the development of the Hydropower Generation Project on the Kafue River in Zambia, an expansion of the Ithezi-Thezi (ITT). This was identified as a critical energy generation project, which will assist with the country's targeted projected growth of 4.4% per annum in electricity demand for the following 25 years.

The expansion of the ITT project will not only have a significant impact on Zambia's economy, but will also provide more cost-effective and reliable electricity to the consumers of member countries of the Southern Africa Power Pool (SAPP).

It was estimated that a total of 550 people would be employed during the construction phase, of which a 100 will be skilled expatriates. Approximately 60% of those employed are Zambians.

The DBSA has contributed US$23 million (of its US$35 million facility) to ITT Independent Power Producer for the generation of 120 MW from a hydropower plant. The plant is already fully operational, with commercial operation debt being reached in March 2016, and had a total cost of US$244 million. ITT is an SPV owned by Tata Africa Holdings (SA) Pty Limited and ZESCO Limited in a 50:50 share ownership.

CASE STUDY

COAL POWER IPP IN MAAMBA

ENERGY SECTOR: SADC

Approximately 1 850 MW of the 1 860 MW of Zambia's generation capacity is hydro-based. Zambia's short-term generation expansion plans up to 2020, include approximately 1 280 MW to be generated from hydropower and only 300 MW to be generated from thermal power. Due to its reliance on hydropower, Zambia had to consider alternative generation capacity. As heavy fuel oil (HFO) is too expensive and gas and oil are not viable options for Zambia, coal power was the next most viable option.

Maamba Collieries Limited (Maamba) is owned jointly between Nava Bharat Singapore (NBS) and the Zambian Consolidated Copper Mines (ZCCM). NBS is a wholly owned subsidiary of Indian Nava Bharat Ventures (NBV) while the government of Republic of Zambia (GRZ) owns 88% of ZCCM (12% listed on Lusaka Stock Exchange).

The project entails the construction of a 300 MW base load coal-fired power plant at Maamba, Sinazongwe in Zambia on the site of an existing coal mine.

The Maamba project was identified as one of the priority projects for Zambia that will assist ZESCO (and the Zambian economy) to diversify their energy mix and reduce their reliance on hydro generation. This project will contribute to ZESCO's power portfolio and will ensure future supply that can be sold to Eskom in South Africa, as part of their approved resource plan.

AWARDS

The Maamba project won two international awards.

The project received the IJ Global Award in March 2016 for excellence in project finance in the energy space. These awards are considered to be one of the most prestigious awards in global project finance and are in recognition of industry excellence.

Maamba also received the Global Trade Review 2015 Best Deal award

List of other project finance awards received by Maamba Collieries Limited (MCL):

- "Power Deal of the Year" for Middle East and Africa awarded by Project Finance International of Thompson Reuters
- "Project Finance Deal of the Year 2016" awarded by World Finance
- "Middle East and North Africa - Deal of the Year" awarded by Trade Finance of Euromoney
- "Best Natural Resources Deal: Africa" awarded by EMEA Finance
- "Environmental Award for Overall Contribution to sound Management Practices in Industry 2016" from Zambia Environmental Management Agency (ZEMA). This was awarded for a history of sustained regulatory compliance over two to three years and demonstrated commitment of MCL to continuous environmental improvement
- "Environmental Award 2012" from ZEMA. This was awarded in recognition of positive improvements towards sound environmental management practices adopted by MCL with modern, eco-friendly mining and processing facilities.

CASE STUDY

ZESCO

ENERGY SECTOR: SADC

ZESCO, the electricity utility of Zambia, embarked on an aggressive capital five- year expansion programme, which included building new power stations (generation), transmission lines, electrification of selected settlements and improving its distribution and supply networks in Zambia).

The DBSA was mandated by ZESCO to arrange US$250 million to finance four projects in the programme. These projects are the Mungwi Rural Electrification, Kariba Lake Shore Transmission line, Lusaka Transmission and Distribution Rehabilitation Project and Distribution Backlog Dismantling.

The DBSA's ZESCO participation amount was approved at US$100 million and balance of US$150 million funded through a club or syndicate.

CASE STUDY

THE SMILE TELECOMS

ICT SECTOR: SADC

The Smile Telecoms project is a regional project which spans across Tanzania, the Democratic Republic of Congo (DRC), Uganda and Nigeria. It involves a three- to four-year network roll-out programme, which provides affordable high quality broadband and voice services to its consumers via Internet Protocol technology.

The project's cost was estimated at US$945 million, of which US$315 million was raised in senior debt. The DBSA participated in the non-ECA tranches with an exposure of US$50 million with the Industrial Development Corporation, and the Public Investment Corporation adding an additional US$70 million.

The Smile Telecoms projects was awarded the Global Trade Review (GTR) Best Deal Status to Industry Newcomers, as the transaction helped finance a ground-breaking project supporting a relatively young and inexperienced company compete in a market that is heavily dominated by a handful of industry giants.

CASE STUDY

ROADS SECTOR: SADC

MINISTRY OF FINANCE, ANGOLA

The DBSA was mandated by the Ministry of Finance of the government of Angola (GoA) to lead arrange a 10-year US$700 million loan facility needed for a basket of road projects across the country for roads destroyed during the civil war. The DBSA directly contributed US$150 million of the US$700 million in 2014, which has been fully utilised in the upgrading and rehabilitation of several national roads in the eastern part of the country badly affected by the war. The roads projects are part of Angola's objectives of integrating the country after the brutal civil war, as well as part of their strategy to decentralise the economy out of Luanda by building infrastructure that will facilitate investment and trade across the country.

THE NATIONAL ROAD FUND AGENCY (NRFA), ZAMBIA

The National Road Fund Agency (NRFA) is responsible for administering and managing all financial resources in the Zambian roads sector. The functions of the NRFA includes the administration and management of the Road Fund and recommendations to the Minister on fuel levy and road-user charges and tariffs.

The Road Fund is an umbrella fund where all roads levies, licensing fees, fuel levies, loans, grants and donations for the roads and all monies appropriated by Parliament for the roads in Zambia are held. The NRFA may raise money by way of loans to discharge its functions.

The DBSA granted a loan of US$262 million in December 2010 for a rehabilitation programme of five roads namely: Kabompo-Chavuma; Chipata-Lundazi; Senanga-Sesheke; Mumbwa-Landless; and Kalulushi-Lufwanyama. The government of Zambia contributed US$90 million. The project is complete.

Zambia is a key transit country in the North-South Corridor, as it borders on eight other countries. The rehabilitation of the Western Corridor will fit into the wider corridor network programme for the region, which will help to unlock the vast unrealised economic potential inland and attract the necessary investment.

The Road Development Agency (RDA) is responsible for the care, maintenance and construction of public roads in Zambia. The principal function of the RDA is to plan, manage and coordinate the road network in Zambia, including maintaining the roads, preparation and awarding of contracts for construction and maintenance of the roads, and certification of roads and, to review design standards and classification of roads and traffic signs. It manages the core road network (CRN) stretching approximately 40 500km.

The RDA implemented the Highway Management System (HMS) in 2009 based on the World Bank highway design and maintenance model standards. Of the CRN, 35 163 km were surveyed (86.8%) with the balance of 4 406 km unsurveyed due to impassability. The results are tabled below:

Condition	% of network 2007	% of network 2008	% of network 2009	% of network 2011	% of network 2013	% of network 2014
Good	19	33	18	33	83	87
Fair	71	61	76	55	12	7
Poor	10	6	6	12	5	6

Source: RDA

The road status is dependent on roughness index for paved roads and gravel thickness for unpaved roads as per the HMS model. With regard to the specific truck roads funded by the DBSA, there are 828 kilometres that form part of the overall paved TMD. Compared to 2007 where they were 8% of paved truck roads in poor condition, this has been reduced to 1% in 2014 indicating a high level of investment in the past three (3) years. This is the period that the DBSA loan was also disbursed and utilised.

CASE STUDY

FINANCING CENPOWER KPONE 340 MW IPP: GHANA

Energy Sector: Outside SADC

The Kpone Independent Powerplant (KIPP) project will be the largest private IPP in Ghana when it comes on stream in 2017, accounting for approximately 10% of Ghana's total installed capacity and approximately 20% of its available thermal generation capacity. As a combined cycle gas turbine (CCGT) plant, it will be amongst Ghana's most fuel-efficient thermal power stations. Once in production, KIPP will be become a critical base-load component in meeting Ghana's growing electricity demand.

IFD's inaugural investment in a country outside of SADC was into a 340 MW CCGT that is also able to use light crude oil (LCO) in Kpone, Ghana.

The Infrastructure Consortium for Africa defined the project as a landmark energy project.

The project also received four international awards:

- The African Banker Award: African Banker's 2015 Infrastructure Deal of the Year
- The EMEA Finance Magazine : Best Power Deal in EMEA
- The Pan-African Africa Investor (AI) Award: AI Best Power Deal of the Year 2015
- Thomson Reuters PFI Award (London): Africa's Power Deal of the Year 2014.

Financial close of the required US$ 900 million of project finance to develop the KIPP in the Tema industrial zone, close to Ghana's capital, Accra, was in October 2014. The DBSA committed to US$53 million of the total project cost to the deal. The financing was part of the senior debt portion that was led by Nederlandse Financierings-Maatschappij voor Ontwikkelings Landen N.V. (FMO).

The project finance comprises two components: a US$650 million debt tranche and a US$250 million equity tranche. The debt is being funded under export credit cover by a consortium of South African commercial banks and international development finance institutions (DFIs). Rand Merchant Bank (RMB) acted as the global lead bank and mandated lead arranger for the commercial banking tranche. Other South African banks involved in the transaction as mandated lead arrangers were Nedbank and Standard Bank. Nederlandse Financierings-Maatschappij voor Ontwikkelings Landen N.V. (FMO), the Dutch Development Bank, acted as the mandated arranger for the DFI tranche.

Via the equity raising, three leading investment groups will be joining the equity consortium, whilst InfraCo, the principal project co-developer since inception, will be exiting. The new investors are Sumitomo Corporation of Japan, African Infrastructure Investment Fund II and its co-investors (via an investment vehicle called Mercury Power) and FMO. Post-financial close, the equity holders in Cenpower now are AFC Equity Investments Limited (a wholly owned subsidiary of the Africa Finance Corporation (AFC) (31.85%), Cenpower Holdings Limited (21%), a consortium of Ghanaian investors (21%), Sumitomo Corporation (28%), Mercury Power (15%) and FMO (4.15%).

CASE STUDY

SOCIÉTÉ NATIONALE DES PÉTROLES DU CONGO (SNPC)

Energy Sector: Outside SADC

The main role of DFIs has always been to play a counter-cyclical role where economic markets of countries are experiencing a critical downturn and private sector investors evade the risks of investing in those markets. With the downturn in commodity prices impacting the foundation of African growth in sub-Saharan Africa, especially in the oil industry, the DBSA took a major calculated risk in investing in the Republic of Congo (RoC), where the oil sector is the driving force of the country's economy. This was the DBSA's first exposure in the RoC.

The DBSA invested debt of R1.5 billion into the oil and gas sector of the RoC.

The RoC economy is resource-based with the oil and gas sectors accounting for more than 80% (2007-2009) of total revenues for the country. Given the extensive upstream and downstream activities within the oil market value chain – through its subsidiaries – Société Nationale des Pétroles du Congo (SNPC) plays a significant development role in the RoC economy. Therefore corporate finance for SNPC constitutes much more than just financing of the oil trade, but rather it is more about the financing of an oil-dominated group whose commercial activities are inextricably linked to the development of the rest of the economy.

CASE STUDY

KENYA PIPELINE COMPANY

Roads Sector: Outside SADC

The DBSA made its first investment in Kenya through a loan facility to the Kenya Pipeline Company (KPC). KPC is utilising the funding for the construction of the replacement of an existing, but very old 450 km multi-product fuel pipeline running from Mombasa to Nairobi, which the main artery feeding all imported fuel delivered at Mombasa inland to Nairobi for further distribution. The DBSA provided US$35 million of the US$350 million syndicated loan facility.

KPC operates approximately 84% of the fuel transportation market in Kenya and is also the primary transporter of refined fuel products to Kenya's landlocked neighbouring countries: Uganda, Rwanda and Burundi, as well as northern Tanzania, DRC and South Sudan. As such, this first investment in Kenya provides the DBSA not only with a footprint in this strategic East African market, but also meets the DBSA's objective of supporting critical infrastructure that enhances regional integration on the continent.

CASE STUDY

O3B NETWORKS LIMITED (O3B)

ICT Sector: Outside SADC

O3b Networks Limited (O3b) is a global satellite service provider operating a constellation of 12 medium earth orbit (MEO) satellites, servicing telecommunications operators, internet service providers, and enterprise and government customers in emerging markets. O3b is short for the "other 3 billion" people that do not have ready access to the internet. Due to its close proximity to earth at 8 000 km above the earth versus geostationary orbit at approximately 36 000 km, O3b's system combines the global reach of satellite with the speed of a fibre-optic network to provide low-cost, low-latency, high-throughput internet and mobile connectivity to its customers.

In November 2010, the company secured a debt and equity funding package amounting to a total US$1 180 million, to finance the procurement and launch of eight satellites. The funding was sourced from a diverse mix of investors, including strategic shareholders, commercial banks and DFIs, including the DBSA.

The DBSA participated in both the debt and the equity funding packages with a total facility of US$76 million (US$40 million debt and US$36 million equity).

	Commitment	Exposure
Senior term loan	US$29.6 million	US$29.6 million
Standby senior facility	US$10.4 million	US$10.4 million
Equity	US$36.0 million	US$36.0 million
Total (US$)	US$76.0 million	US$76.0 million

Following the successful fundraising for the procurement and launch of the eight satellites, the company successfully raised additional senior debt funding amounting to US$85 million in 2011 to finance the procurement and launch of four additional satellites.

On 25 June 2013, O3b successfully launched the first four satellites and on 10 July 2014 the next four, bringing the constellation to a total of eight in-orbit satellites (five operational satellites and three in-orbit spares). In September 2014, the company began full commercial operations. On 18 December 2014, the company successfully launched satellites 9 to 12, which went into service on 15 March 2015, bringing the constellation to a total of 12 satellites (nine operational satellites and three in-orbit spares).

To date, there are nine (9) revenue generating satellites and more than 40 customers in commercial service on O3b's satellite network operating across 31 countries. In December 2015, O3b secured additional funding (US$215 million debt and US$143 million equity) to finance the procurement of eight additional satellites (satellites 13 to 20) and the launch of satellites 13 to 16. It is envisaged that the additional eight satellites will enable O3b to meet expected future demand and provide the company with the economies of scale required to generate sufficient revenue and cash flows to service debt and replace the constellation at the end of its life.

TRENDS AND DRIVERS

In terms of developmental impact in Africa, O3b has been particularly successful. Africa as a continent has most fibre optic cable internet solutions centred on the large population centres which are typically centred around the coastal areas. However, large tracts of land on the continent that are sparsely populated have largely been left uncovered by internet services. O3b, with its satellite solution, has provided fast broadband services where historically nothing existed. Internet connectivity/ broadband enablement is now recognised as a GDP growth driver, leading to governments enforcing roll-outs and service levels to ensure availability for the population. In addition, increasing economic interconnectedness between nations continues to drive investments in international capacity links between them.

Mobile broadband is gaining momentum in emerging markets as 3G/4G networks are being rolled out whilst increasing smartphone penetration, lower smartphone costs, and video usage over mobile devices and ecommerce are driving new applications and consumption.

The volume of mobile data has exceeded forecasts in most geographies and is expected to maintain its trajectory. However, this explosion in traffic may not lead to the expected increase in backhaul capacity if alternate technologies such as Wi-Fi offload are used to direct traffic away from mobile networks. Wi-Fi offload is expected to carry 60% of all mobile data traffic by 2019.

Digitisation, regulation, remoteness and crew welfare are driving increased connectivity needs in the energy sector. However, the recent low oil price levels have resulted an industry profitability squeeze and postponements of investments in new offshore assets by oil majors.

Maritime industry trends suggest a steady increase in demand for connectivity from very large and large ships driven by the cruise industry growth, requirements for real time connectivity by both passengers and crew, and the need for high reliability of connectivity.

PEER ANALYSIS

There are three ways to deliver bandwidth via satellite, each with their advantages and disadvantages. These are:

- Geostationary earth orbit satellites (GEO)
- Medium earth orbit satellites (MEO)
- Low earth orbit satellites (LEO)

Alternative delivery mechanisms by drone and balloons are being investigated.

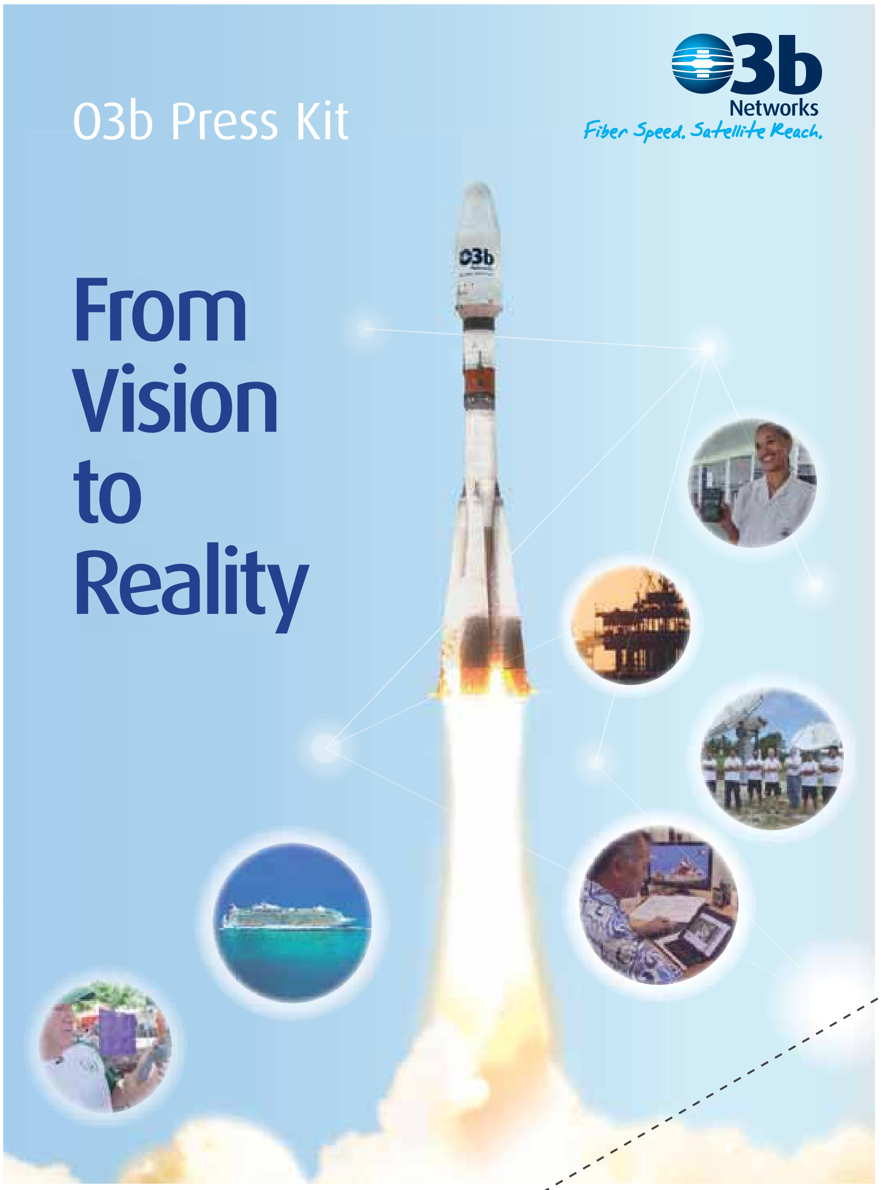
O3b's satellites operate in the MEO space. The company enjoys at least a five-year lead time in the MEO space.

GEO satellites have low equipment capital expenditure and large choice of equipment when compared to O3b's business model, which is highly capital intensive. GEO satellites are, however, characterised by high latency, high operating expenses and lower throughput when compared to O3b's satellites.

Three new LEO ventures were announced in the last 12 months but none of them have progressed beyond the design stage. If delivered, these projects would represent a threat in all of O3b's verticals except trunk in the 2020+ timeframe as LEO satellites also promise low latency and global coverage. The first LEO systems are expected to be operational by 2021 and expected to exert pressure on prices, particularly in the cellular backhaul market. When compared to O3b's satellites, LEO satellites are however expected to result in high inefficiencies, lower throughput, very large numbers of satellites and gateways, large network of distributors required and refurbishing costs. In addition, venture projects have significant financing and execution risks as their time to market is uncertain.

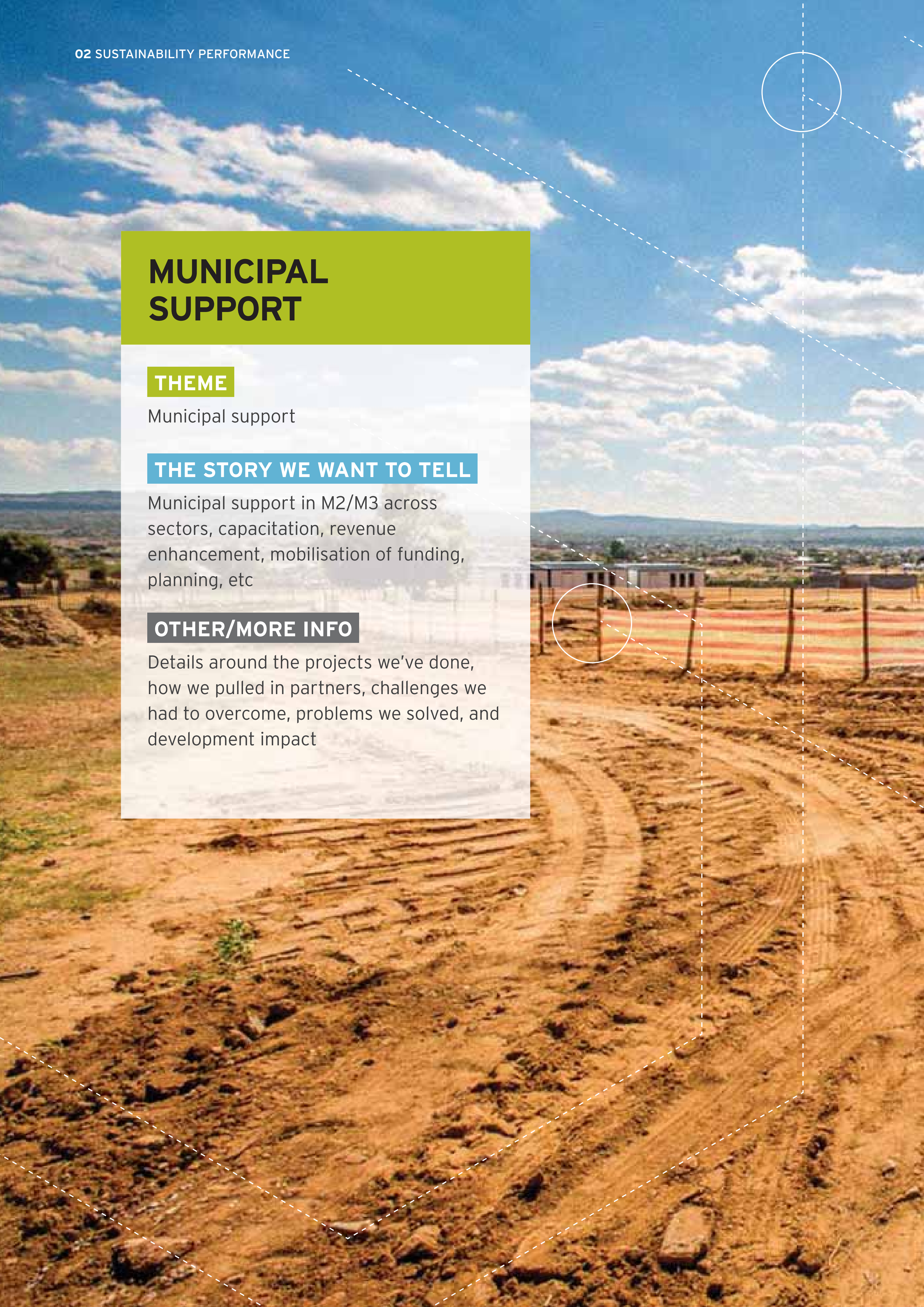
KEY SUCCESS FACTORS

- Low latency compared to GEO satellites
- High availability compared to many fibre networks
- High throughput
- Low operating expenditure
- Beams are steerable to provide near global uniform coverage
- Optimum orbit for maximum efficiency of the fleet
- The satellite configuration is easily scalable to address growing demand
- O3b's technology is inherently less susceptible to unfavourable climate interference compared to GEO/MW
- Short deployment times. Together with other satellite offerings, O3b still leads the market in terms of ease of deployment. O3b services enable operators to extend networks without long lead times
- O3b's technology is referred to as Fibre in the sky. The technology is considered to have the speed of fibre with the global reach of satellite



CONCLUSION

In the short to medium term, O3b's write-to-win and the already captured market appear secure and protected from competition. The business case is fully supported by industry growth and positive industry trends and the company's technology appears unparalleled to that of existing competitors. The addressable demand appears significant enough to accommodate both O3b and existing satellite technologies. However, in the long term the company is likely to face significant competition from rivalling new technologies and continued roll out of fibre. O3b will, however, benefit to some extent from first mover advantage. Based on the above, O3b's business risk profile is considered medium and stable.



MUNICIPAL SUPPORT

THEME

Municipal support

THE STORY WE WANT TO TELL

Municipal support in M2/M3 across sectors, capacitation, revenue enhancement, mobilisation of funding, planning, etc

OTHER/MORE INFO

Details around the projects we've done, how we pulled in partners, challenges we had to overcome, problems we solved, and development impact

MUNICIPALITY LONG-TERM FINANCIAL PLANS

The project involves funding long-term financial plans and as well as identification of projects that (LTFPs) will be funded from debt funding as well as other sources of funds as per the LTFPs.

PLANS AND PROJECT IDENTIFICATION

The objective is to prepare long-term financial plans to assist municipalities in identifying funding sources that the municipality can mobilise to achieve its infrastructure goals without negatively impacting the municipality's long-term financial sustainability. Part of the process of formulating the LTFP is the identification of new infrastructure as well as replacing aged infrastructure and maintaining existing infrastructure to achieve the municipality's development objectives. The outcome will provide the basis for the municipality's long-term funding policies, financing strategy and how to the funding will be mobilised.

This involves providing funding to National Treasury to appoint consultants who will prepare plans with municipalities, and out of those plans projects will be identified in the municipalities with already finalised LTFPs and have the ability to borrow and to prepare fact sheets for these projects. This was necessitated by applications that were received during the early days of IIPSA, which were not coherent and were not supported by the municipality's sustainability.

Detailed description of the project [Link with Value Chain, Early Risk, Catalysing Third Party Funds, Strategic Partnerships)

- South African National Treasury is targeting second tier (M2) and third tier (M3) municipalities with emphasis on second tier municipalities with technical capacity (in both financial management and implementation).
- The long-term financial plans done on behalf of municipalities will culminate in quantification of infrastructure requirements, and modelling these needs in relation to (i) maintenance of, (ii) replacement of, or (iii) creation of additional infrastructure over the long term to ensure the financial sustainability and viability of these municipalities.
- The process will also lead to identification of projects and thereafter IIPSA will fund project preparation as well as capital grants for the projects. To date the advisory services work has involved drafting of policies and workshopping of the long-term plans, models and the related policies to the municipality Exco and Mayor.
- Once projects are prepared, the municipality will be expected to raise funding on competitive terms and the IIPSA participating DFIs (DBSA, AfD, EIB and KfW) can get to participate.

How partners were pulled in as partners, challenges we had to overcome, problems solved, and development impact

- National Treasury is responsible for the sustainability and funding of municipalities and hence is the sponsor of the project.
- COGTA, National Treasury and DBSA

attend meetings where projects are assessed and cleared.
- Municipalities are selected on the basis of recommendations from COGTA and National Treasury.
- Municipality infrastructure has a high developmental impact and the expected impact will be assessed during feasibility.

M2/M3 MUNICIPALITIES' INFRASTRUCTURE PROJECT PREPARATION AND INVESTMENT (INTEREST RATE COSTS SUBSIDISATION) INITIATIVE

The initiative seeks to address two main challenges faced by M2 and M3 municipalities, namely project preparation and payment of interest rate costs where the municipalities have to raise capital.

The M2 and M3 municipalities are faced with the challenges of planning and implementing of the infrastructure projects as well as the payment of the interest costs for raising finance.

Lack of proper planning for the infrastructure projects, in particular, for registration for conditional grants is made worse by the approach followed by most municipalities. Most municipalities appoint professional service providers to prepare projects at risk for the conditional grants' registration process which includes the following requirements:
- Conducting feasibility studies
- Development of business plans including the technical reports

In most cases, business plans with technical reports submitted by professional service providers appointed on a risk basis result in delays in the registration process due to inadequate project information being submitted to the relevant authority. Furthermore, the delay in project registration mean projects cannot be implemented as scheduled and consequently delaying service delivery to communities and non-spending of the conditional grants.

The majority of M2 and M3 municipalities which are mostly under-resourced are mainly dependent on the conditional grants to implement capital projects as they have limited debt absorption capacity and credit worthiness. These municipalities are unable to pay for finance cost (interest) of raising capital.

Furthermore, allocated conditional grants are insufficient to eradicate the infrastructure backlog of the municipalities and this factor, amongst others, results in delays in projects being implemented.

GRANT FUNDING MADE AVAILABLE THROUGH INFRASTRUCTURE INVESTMENT PROGRAMME FOR SA (IIPSA)

In 2012 the Government of South Africa (GoSA) and European Union (EU) jointly developed IIPSA, capitalised with a Đ100 million. The key aim of IIPSA is to assist the GoSA to address its Medium-Term Strategic Framework and the National Development Plan which seeks to improve the conditions of life of South Africans by addressing poverty and unemployment, as well as contributing to enhancing regional economic integration in the South African Development Community (SADC) region. IIPSA is to support the implementation of the government's infrastructure programme and to address the constraints experienced in infrastructure development in South Africa.

The DBSA has been appointed as the IIPSA Secretariat and Fund Manager to implement the IIPSA Programme providing support to eligible public entities and private entities with a public service mission through IIPSA grant funding in order to develop bankable/implementation-ready projects for the financing of infrastructure investment projects by IIPSA-participating DFIs.

In November 2016, the IIPSA Project Steering Committee (PSC) approved 'ring fenced' grant funding to the value of R250 million for the IIPSA-Secretariat to specifically support under-resourced municipalities with project preparation and interest costs subsidisation, where required. The breakdown of the allocated grant funding is split between:

- R100 million for project preparation, and
- R150 million for interest costs subsidisation.

PROJECT PREPARATION FUND

Based on the analysis of the Division of Revenue Act (DoRA), M2 and M3 municipalities receive in total conditional grants to the order of R15 billion per municipal financial year. Looking closely at expenditure pattern over the financial years, the majority of municipalities have not been able to spend their allocated funds, on average R1 billion of these funds ends up being returned to National Treasury. This is attributed to, amongst other factors, projects not being prepared adequately and on time as discussed above.

R100 million grant funding was approved for project preparation. It is envisaged that these funds will unlock the planning challenges faced by the M2 and M3 municipalities and at the same time create project pipelines which will attract investment for other private sector funders, thus having a crowding in effect of private capital.

INVESTMENT (INTEREST RATE COSTS SUBSIDISATION)

Furthermore, on analysis of M2 and M3 capacity to borrow, it is evident that this category of the municipalities has limited or no borrowing capacity to service capital required to implement infrastructure programmes coupled with the inability to service the interest rate costs for raising capital. In order to support these under-resourced municipalities IIPSA PSC has approved R150 million for interest rate costs subsidisation.

DBSA, NATIONAL TREASURY AND COGTA COLLABORATION IN SUPPORTING M2 AND M3 MUNICIPALITIES

The DBSA is working closely with National Treasury (Provincial Local Government Infrastructure Unit) and CoGTA (MIG Unit and Municipal Infrastructure Support Agent) to identify and prioritise municipalities that could benefit from the initiative. The 27 priority district municipalities have been prioritised as there are the national government priority with regard to addressing service delivery challenges faced by some of our communities in these municipalities.

The funds are allocated and ring fenced to support M2 and M3 municipalities for the period of two years, starting from November 2016.


OUR
VALU
High Performance
We are enabled inspired and accountable for the delivery of consistent quality results for which we are rewarded.
Integrity
Our deals, interactions and actions are proof of transparent and ethical behaviour that show respect and care for all our stakeholders.

HUMAN CAPITAL

THEME

Human Capital

THE STORY WE WANT TO TELL

Share our approach and philosophy towards human talent

OTHER/MORE INFO

Details and good stories/outcomes

INVESTING IN OUR MAJOR ASSET - OUR EMPLOYEES

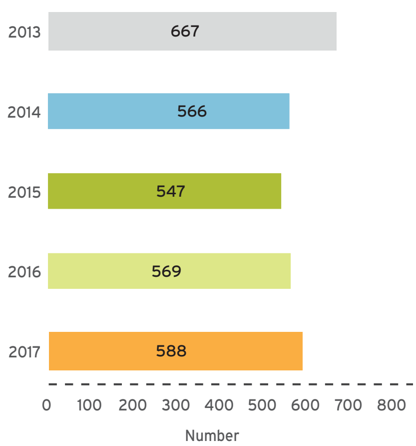
Employees are a critical driver of the DBSA's business performance and sustainability and the high calibre of current management at senior operational level is instrumental in creating value and long-term sustainability for the organisation. However, there is a shortage in the supply of many of the business-critical skills we require to deliver on our strategy. As a result, we have undertaken a number of initiatives to attract the best talent and make the DBSA an attractive place for our staff to work and develop their careers.

Post the restructuring in 2013, we recognised the need to implement a culture improvement project as one of our key strategic initiatives. It aims to build a new culture as a prerequisite to foster high performance in the organisation. Although implementation started off slowly, significant work has been done in recent months, including management coaching sessions, chemistry of wellness and performance workshops. These efforts are starting to yield significant improvements.

EMPLOYMENT

The DBSA has an employment policy that informs and regulates the management of people within the organisation. The policy outlines employee benefits, general working conditions, and learning and development opportunities. The management of discipline is guided by the disciplinary code and procedures. All employee-related policies are available on the DBSA's internal portal. Policies are reviewed from time to time to ensure compliance with legislation and to accommodate a flexible working environment. Decision-making with respect to human capital policies is informed by a structured consultation process via internal committees, such as the Human Capital Management Committee (which has employee representation across the various business units) and the Employment Equity and Skills Development Committee.

Headcount



At year end, the DBSA employed 491 (2016: 461) permanent and fixed-term contract people as well as 97 (2016: 108) fixed-term contractors for selected programmes and agencies. Staff retention remains a crucial focus area and the Board approved various retention incentives for critical skills in the year. The retention rate of critical skills was 89% (2016: 95%) at the end of March 2017 against a target of 85%.

DIVERSITY AND EQUAL OPPORTUNITY

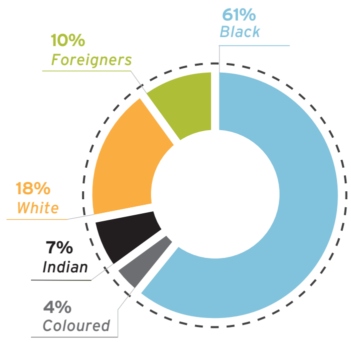
The DBSA is committed to creating and maintaining an environment which provides equal opportunities for all employees, with special consideration given to previously disadvantaged groups. The formal company Employment Equity Policy codifies this commitment and stipulates the promotion of equal opportunity, the elimination of unfair discrimination and the implementation of positive measures to redress disadvantages previously experienced by designated groups.

In establishing the numerical employment equity goals for the DBSA, the methodology, key challenges, lessons learnt, potential growth rate of the DBSA, benchmarks and the B-BBEE scorecard have been taken into consideration in setting the target for 2017. The key focus is to improve or set realistic targets to ensure that the DBSA has a representative workforce.

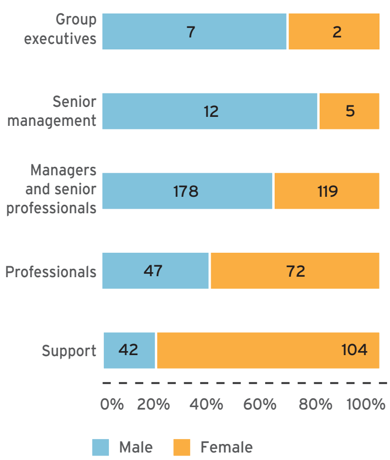
EMPLOYMENT DIVERSITY

Gender

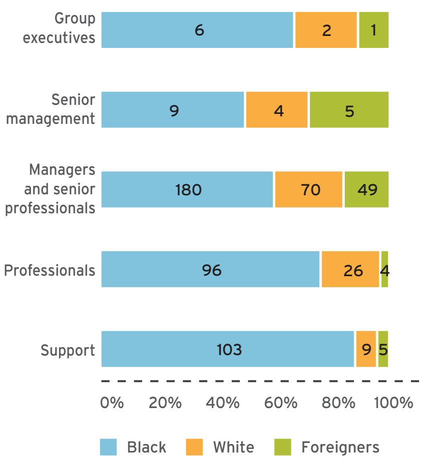
Ethnicity



Gender diversity per job category



Ethnic diversity per job category



EQUAL REMUNERATION FOR WOMEN AND MEN

Remuneration and employee benefits are attractive, well-structured, competitive and are aligned with legislation.

Remuneration practices are regularly reviewed and the DBSA is committed to removing discrimination in pay scales.

Pay differentials are disclosed in terms of employment equity legislation. The income levels of men and women are continually reviewed and any possibly unfair anomalies are addressed.

Positions are evaluated and graded in terms of job outputs – race and gender are not considered in the evaluation process. This ensures a like-for-like comparison in the marketplace. The DBSA has only one pay scale, based on job contribution and market comparisons.

SKILLS DEVELOPMENT INVESTMENT

Research consistently highlights the importance of talent management to the success of an organisation. It has become one of the key focal points for executive teams. Success, though, depends on the degree to which an organisation's policies and processes support one another and the single goal of talent management. To this end, the DBSA has critically reviewed and updated policies associated with talent management, including the Employee Policy and the Development Policy.

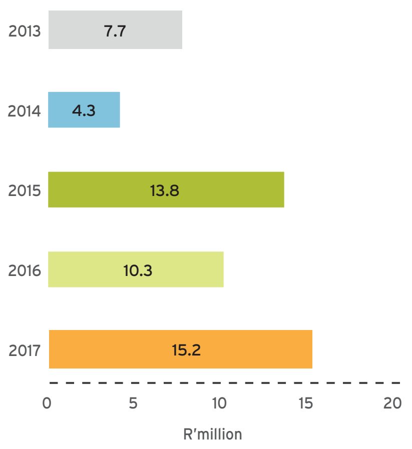
In addition, a particular focus has been placed on executive and leadership development, with the creation of a behavioural competency framework for leadership and an associated development strategy.

The DBSA is firmly committed to the development of its employees. The DBSA invests heavily in developing an internal skills pipeline and resourcing from the external talent base to combat the skills shortage that exists in the development finance sphere.

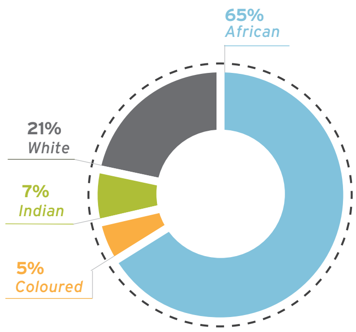
At least 3% of the DBSA's payroll is set aside for training and development of staff.

All employees are encouraged to take ownership of their developmental journey. Employees, together with their managers, are expected to complete individual development plans on an annual basis. This is to ensure that they consistently stay relevant in their field of expertise, close any skills gaps and build their careers accordingly.

Training spend



2017 spend by ethnic group



During the year, R15.2 million (2016: R10.3 million) was invested in staff training.

EMPLOYEE WELL-BEING

The DBSA wellness programme helps reduce costs related to healthcare, productivity and absenteeism.

It helps encourage the healthy behaviour of our employees in both the workplace and at home. A targeted wellness programme may therefore help to improve not only the DBSA's financial performance, but also the health and sustainability of our communities in the long term.

The DBSA will continue to increase the level of participation in these offerings and is currently reviewing its wellness programme, in which it invested R154 000 (2016: R368 000) in the year.

OCCUPATIONAL HEALTH AND SAFETY

Occupational health and safety standards are covered by prevailing legislation.

The DBSA's operations conform to the principles of the International Labour Organisation's Guidelines on Occupational Health and Safety. Occupational health and safety concerns are the direct responsibility of the Chief Executive Officer. The corporate health and safety policy statement outlines the intentions and principles in relation to the DBSA's overall safety and health performance.

The policy statement provides the basis for the framework for action during the year. Formal health and safety committees with management and worker representatives cover all staff.

To provide an operational forum for the management and governance of health and safety in the workplace, the DBSA implemented an Occupational Health and Safety Committee. All divisions are required to nominate a representative to serve on the committee. In total, 15 staff members form part of the committee, whilst 159 trained emergency response team members support the DBSA. Five evacuation drills were conducted during the year. Twelve (12) lost-time injuries were reported to the Commissioner and 19 minor injuries were reported and treated by our on-site occupational nurse. These injuries all occurred at the DBSA premises in Midrand. The table on the next page summarises these incidences and their impact.

Occupational health and safety incidents during the year include:

	2017 Number of incidents	2017 Impact	2016 Number of incidents	2016 Impact
First aid (minor)	**19**	**5 working days lost**	23	Immaterial
Lost-time injury (disabling)	**12**	**19 working days lost**	3	Zero workdays lost

As part of the DBSA's Infrastructure Delivery operations, a civilian who gained unauthorised access to the construction site passed away due to drowning. In a separate incident, a contractor sustained injury due to a fall from height.

BROAD-BASED BLACK ECONOMIC EMPOWERMENT

The DBSA strives to create value for local suppliers through its preferential procurement practices and supports the appointment of previously disadvantaged individuals, benefiting communities in South Africa and the region. The DBSA is a Level 6 contributor based on the new B-BBEE codes.

	Target	Score
Management control	**20**	**15.31**
Skills development	**25**	**16.56**
Enterprise and supplier development	**50**	**35.50**
Socio-economic development	**5**	**5.00**
Total	**100**	**72.37**

CORPORATE SOCIAL INVESTMENT

THEME

Corporate Social Investment

THE STORY WE WANT TO TELL

Share our approach and philosophy towards CSI

OTHER/MORE INFO

Details and good stories/outcomes

SUPPORTING ENVIRONMENTALLY ORIENTATED INFRASTRUCTURE PROGRAMMES

GREEN FUND

The Green Fund is an R800 million national fund aimed at supporting South Africa's transition to a green economy. The vision of the Green Fund is to "provide catalytic finance to facilitate investment in green initiatives". The DBSA manages the Green Fund on behalf of the Department of Environmental Affairs (DEA) on a full cost-recovery basis.

The United Nations Environmental Programme (UNEP) defines the green economy as one that results in "improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities". The South African government has initiated a range of strategic policy imperatives to accelerate the entrenchment of green approaches in the development process and thus aid South Africa in transitioning to a green economy. The Green Fund is one of the key initiatives which has emerged from this national policy framework.

The Green Fund aims to support initiatives contributing to South Africa's transition to a low-carbon, resource-efficient and climate-resilient development path delivering high-impact economic, environmental and social benefits.

The Fund responds to market weaknesses currently hampering the transition to a green economy by:

- Promoting innovative and high-impact green programmes and projects
- Reinforcing sustainable development objectives through green interventions
- Building an evidence base for the expansion of the green economy
- Attracting additional resources to support South Africa's green economy development.

The focus area of the Green Fund is defined through three thematic windows. The window design reflects the policy priorities in the National Development Plan, the New Growth Path and the National Strategy on Sustainable Development. Funding Windows, through which project proposals are solicited, are as follows:

- Green cities and towns – strive for well-run, compact and efficient cities and towns that deliver essential services to their residents, utilising available natural resources efficiently and sustainably
- Low-carbon economy – strive towards a low-carbon growth trajectory in line with national climate change policy principles
- Natural resource management – strive for protected and conserved resources for sustained development.

The Green Fund was established during April 2013. Since then, the Fund's funding activities have significantly progressed. To date, R1.1 billion has been approved. During 2017, the fund disbursed an amounted of R11.3 million, bringing the total value of disbursement since inception to R757 million, in areas such as waste management, biodiversity and renewable energy. To date the fund has committed R851.5 million to 43 approved projects across all thematic windows.

On the back of the successes achieved to date, the Fund is starting to attract additional resources through engagements with strategic partners from European and local DFIs as well as various local financial institutions. Going forward, the Fund will continue to build partnerships to accelerate and increase the development outcomes sought.

The Green Fund also plays a key co-ordinating role in the DBSA's accreditation to the Global Environment Fund (GEF) and the Green Climate Fund (GCF), which are global funding mechanisms to support sustainable economic growth and development, a key DBSA mandate.

REDUCING THE WASTE WE GENERATE

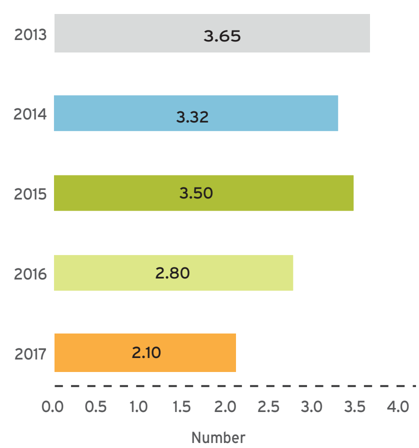
RECYCLING

An important aspect of the DBSA's waste management strategy is the extensive recycling of various types of waste, including cans and tins, cardboard, newspapers and magazines, plastic and paper. During the year we used 5.8 tonnes of printing paper and generated 56.3 tonnes of unrecyclable waste; 10.9 tonnes of paper-based items, 1.1 tonnes of plastic-based items, 367 kilograms of glass and 348 kilograms of cans were recycled.

ENERGY

The DBSA focuses on reducing its consumption of energy, mainly in the form of electricity. We have implemented a range of initiatives to reduce consumption, including installing timers on light switches and on circuits to control air conditioning. During 2016, energy consumption decreased marginally from 3.5 MW to 2.8 MW. As a responsible corporate citizen, aligned with global imperatives, we have set an aspirational target to improve our non-renewable energy efficiency by 10% in the short to medium term.

Electricity consumption in MW

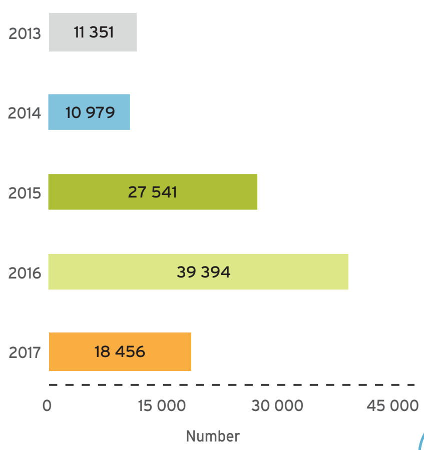


WATER

The DBSA is committed to being a responsible custodian of water by measuring, monitoring, managing and reporting our water use as standard business practice and, where possible, proactively implementing initiatives to conserve water. The DBSA recognises that water is an increasingly scarce and critical global resource. Although our operations are not particularly water-intensive, we have committed to more efficient water consumption through reduced consumption on our campus. We also support various projects that enhance the capacity of the population to adapt to water scarcity, as well as water management solutions.

Total water used on the DBSA campus from municipal water sources is reflected in the graph. During the year, we noticed a marked decrease in the average monthly water consumption. The reduction in the water usage was due to the replacement of a faulty water meter for which the DBSA was billed although no water was pumped through it.

Water consumption in kiloliters



EMISSIONS, EFFLUENTS AND WASTE

We have implemented a wide range of energy-reduction initiatives to lower our greenhouse gas emissions. These include communication, monitoring and reporting, as well as operational initiatives such as efficient maintenance and the use of environmentally friendly cleaning products. Effluents emanate mainly from the routine cleaning and maintenance of the campus. All effluents are cleaned of pollutants and grey water is discharged into municipal reticulation systems. Waste material is disposed of through legitimate contractors at certified waste disposal facilities. Although the DBSA does not generate significant volumes of waste, we aim to recycle as much as possible.

FINANCIAL DEFINITIONS

Callable capital	The authorised but as yet unissued share capital of the DBSA
Cost-to-income ratio	Operating expenses, including personnel, other, depreciation and amortisation expenses, as a percentage of income from operations
Income from operations	Net interest income, net fee income and other operating income
Interest cover	Interest income divided by interest expense
Long-term debt-to-equity ratio	Total liabilities, excluding other payables, provisions and liabilities for funeral benefits, as a percentage of total equity
Debt-to-equity ratio (including collable capital)	Total liabilities, excluding other payables, provisions and liabilities for funeral benefits, (including callable capital) as a percentage of total equity and callable capital
Net interest margin	Net interest income as a percentage of interest income
Return on average assets	Net profit or loss for the year expressed as a percentage of average total assets
Return on average equity	Net profit or loss for the year expressed as a percentage of average total equity
Sustainable earnings	Profit or loss from operations before net foreign exchange gain/(loss) and net gain/(loss) from financial assets and financial liabilities, but including revaluation on equity investments

ABBREVIATIONS AND ACRONYMS

AADFI	Association of African Development Finance Institutions
AFD	Agence Française de Développement
AfDB	African Development Bank
ASIDI	Accelerated Schools Infrastructure Delivery Initiative
B-BBEE	Broad-based Black Economic Empowerment
BRIC	Brazil, Russia, India and China
BRT	Bus Rapid Transit
BRICS	Brazil, Russia, India, China and South Africa
BSC	Balanced Scorecard
COMESA	Common Market for Eastern and Southern Africa
DBE	Department of Basic Education
DBSA	Development Bank of Southern Africa Limited
DFID	The United Kingdom's Department for International Development
DFRC	Development Finance Resource Centre
DIRCO	Department of International Relations and Cooperation
DTI	Department of Trade and Industry
ECOWAS	Economic Community of West African States
EIB	European Investment Bank
EPC	Engineering, procurement and construction
GDP	Gross domestic product
ICAS	Independent Counselling and Advisory Services
ICT	Information and communications technology
IDIP	Infrastructure Delivery Improvement Programme
IFRS	International Financial Reporting Standards
IIPSA	Infrastructure Investment Programme for South Africa
KfW	The German agency Kreditanstalt für Wiederaufbau
JICA	Japan International Cooperation Agency
MIG	Municipal Infrastructure Grant
MTEF	Medium-Term Economic Framework
NDP	National Development Plan
NEPAD	New Partnership for Africa's Development
NSC	North-South Corridor
PFMA	Public Finance Management Act
PICC	Presidential Infrastructure Coordinating Commission
PPP	Public/private partnership
PRASA	Passenger Rail Agency of South Africa
REIPPP	Renewable Energy Independent Power Producers Procurement
SA Inc	South Africa Incorporated
SADC	Southern African Development Community
SANRAL	South African National Roads Agency Limited
SIP	Strategic integrated project
SMME	Small, medium and micro-enterprise
SOC	State-owned company
SPIPPP	Small Projects Independent Power Producers Programme
UNOPS	United Nations Office for Project Services

APPENDIX A: GLOBAL REPORTING INITIATIVE TABLE

We report in line with the requirements of the Global Reporting Initiative (GRI). Based on our internal assessment, we believe our 2017 Sustainability Review is compliant with the "core" option of the G4 Guidelines. The DBSA's Internal Audit department has conducted a review of the disclosure items.

PROFILE DISCLOSURE	DISCLOSURE	ASSURANCE BY DBSA INTERNAL AUDIT	CROSS-REFERENCE/DIRECT ANSWER
STRATEGY AND ANALYSIS			
G4-1	CEO/Chair statement	Compliant	Refer to pages 4 to 5 for the statement from the CEO.
ORGANISATIONAL PROFILE			
G4-3	Report the name of the organisation	Compliant	Development Bank of Southern Africa.
G4-4	Report the primary brands, products, and/or services	Compliant	Refer to the 2017 Integrated Annual Report from pages 9 to 11 as well as divisional reports from pages 68 to 71.
G4-5	Report the location of the organisation's headquarters	Compliant	The DBSA operates from its offices in Midrand, Gauteng, South Africa.
G4-6	Countries of operation	Compliant	The DBSA's mandate covers the whole of Africa with a strong focus on the SADC region and selected countries outside SADC.
G4-7	Report the nature of ownership and legal form	Compliant	The DBSA is wholly owned by the South African government.
G4-8	Report the markets served	Compliant	Refer to the 2017 Integrated Annual Report from pages 9 and 11.
G4-9	Report the scale of the organisation	Compliant	The DBSA is a single entity, with no subsidiaries.
G4-10	Workforce scale and split	Compliant	Refer to pages 78 and 79.
G4-11	Percentage of total employees covered by collective bargaining agreements	Compliant	The DBSA does not have a recognised labour union or collective bargaining agreements.
G4-12	Describe the organisation's supply chain	Compliant	The DBSA has a fully functional Supply Chain unit, which is part of the Finance Division. The DBSA Supply Chain Policy finds expression within the provisions of the applicable statutes and regulations i.e. PFMA and Preferential Procurement Regulations.
G4-13	Significant changes to the organisation (size, structure, ownership, etc.)	Compliant	None.
G4-14	Report whether and how the precautionary approach or principle is addressed	Compliant	The principles that form the precautionary approach inform our governance framework for sustainability development reviewed in our Sustainability Review, particularly our management of our economic, social and environmental dividend. Refer to pages 2 to 21 of the Sustainability Review.
G4-15	List external initiatives signed up	Compliant	Refer to page 39 Integrated Annual Report, as well as pages 9, 10, 78 and 79 of the Sustainability Review.
G4-16	List association memberships/ participation	Compliant	Refer to page 39 Integrated Annual Report.
IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES			
G4-17	List all entities included in reporting scope	Compliant	Only DBSA.
G4-18	Explain implementation of principles for defining report content	Compliant	Refer to page 1 of the Sustainability Review.
G4-19	List material aspects identified in the process for defining report content	Compliant	Refer to page 1 of the Sustainability Review.
G4-20	For each material aspect, report the aspect boundary within the organisation	Compliant	Refer to page 1 of the Sustainability Review.
G4-21	For each material aspect, report the aspect boundary outside the organisation	Compliant	Refer to page 1 of the Sustainability Review.

G4-22	Report effect of, and reasons for, any restatements of information	Compliant	None.
G4-23	Report significant changes in the scope and aspect boundaries	Compliant	None.
STAKEHOLDER ENGAGEMENT			
G4-24	List stakeholder groups engaged by the organisation	Compliant	Refer to the Integrated Annual Report from page 19.
G4-25	Basis for identification and selection of stakeholders with whom to engage	Compliant	Refer to the Integrated Annual Report from page 19.
G4-26	Report the organisation's approach to stakeholder engagement	Compliant	Refer to the Integrated Annual Report from page 19.
G4-27	Report key topics and concerns raised and how they have been addressed	Compliant	Refer to the Integrated Annual Report from page 19.
REPORT PROFILE			
G4-28	Reporting period (e.g. fiscal or calendar year) for information provided	Compliant	The report relates to the financial year from 1 April 2016 to 31 March 2017.
G4-29	Date of most recent previous report	Compliant	31 March 2016.
G4-30	Reporting cycle (annual, biennial, etc.)	Compliant	Annual.
G4-31	Provide contact point for questions regarding the report or its contents	Compliant	Refer to page 1 of the Sustainability Review.
G4-32	Report the "in accordance" option, content index, external assurance	Compliant	Refer to page 1 and Annexure A of the Sustainability Review.
G4-33	External assurance policy, practice and scope	Compliant	Refer to page 1 of the Sustainability Review.
GOVERNANCE			
G4-34	Report the governance structure of the organisation	Compliant	Refer to page 21 and also refer to the Integrated Annual Report from pages 28 to 43.
G4-56	Describe the organisation's values, principles, standards and norms of behaviour such as codes of conduct and codes of ethics	Compliant	Refer to pages 8 and 21.
G4 SECTOR DISCLOSURE: FINANCIAL SERVICES - PRODUCT PORTFOLIO			
G4-FS6	Percentage of the portfolio for business ,lines by specific region, size (e.g. micro, SME, large) and by sector	Compliant	Refer to the Integrated Annual Report for the divisional reports from pages 68 to 71. Refer to the notes to the Annual Financial Statements for a breakdown of equity investments, development loans and bonds where a detailed analysis of the sector and client split is provided for development loans.
G4-FS7	Monetary value of products and services designed to deliver a specific social benefit for each business line, broken down by purpose	Compliant	Refer to the Integrated Annual Report for a reflection of our strategy (pages 9 to 11), outputs and estimated development impact (pages 14 and 15).

Refer to the separate Integrated Annual Report for more information on the DBSA's efforts in meeting the guidelines outlined above.

APPENDIX B: UNITED NATIONS GLOBAL COMPACT

The United Nations Global Compact (UNGC) is a United Nations initiative to encourage businesses worldwide to adopt sustainable and socially responsible policies, and to report on their implementation. The UN Global Compact is a principle-based framework for businesses and the world's largest corporate sustainability initiative with 13 000 corporate participants and other stakeholders in over 170 countries.

The DBSA became a signatory to the UNGC on 9 September 2014, committing the organisation to the 10 universal principles of the UNGC and reflecting the importance that the DBSA Board and management team place on good corporate citizenship. The DBSA is committed to upholding fundamental human rights, ensuring fair labour practices, working against corruption in all its forms, and protecting the natural environment within which it operates.

UNGC PRINCIPLE	DBSA'S SUPPORT OF UNGC PRINCIPLE	DBSA POLICY
HUMAN RIGHTS *Businesses should:* Support and respect the protection of internationally proclaimed human rights; and Make sure that they are not complicit in human rights abuses	The DBSA supports the United Nation's Universal Declaration of Human Rights. The DBSA is bound by the Constitution of the Republic of South Africa, which contains the Bill of Rights. All DBSA employees are bound by the DBSA's Code of Ethics and are guided in their behaviour in terms of integrity, loyalty, equity, tolerance, impartiality and discretion. The DBSA's service providers, suppliers and trade partners are bound by the Code. At a project investment level, the DBSA considers the advancement and protection of human rights an imperative. Various social safeguards have been built into the DBSA's due diligence process.	Code of Ethics Policy Employment Policy
LABOUR *Businesses should uphold:* The freedom of association and the effective recognition of the right to collective bargaining; The elimination of all forms of forced and compulsory labour; The effective abolition of child labour; and The elimination of discrimination in respect of employment and occupation.	The DBSA is committed to fair employment opportunities for all and to create an environment that permits such equal opportunities for advancement in order to redress past imbalances and to improve the conditions of individuals and groups who have been previously disadvantaged on the grounds of race, gender and disability. In the spirit of promoting organisational policies and practises that are fair and equitable, the DBSA affirms its commitment to comply with the spirit of the Employment Equity Act to the strategic benefit of the DBSA. South Africa is a signatory to the International Labour Organisation convention, as applicable to fair labour practices, and South Africa has a plethora of labour legislation that reflect the standards. The DBSA's employment policies incorporate these legislative provisions. South African law prohibits forced, compulsory and child labour. The DBSA practises freedom of association and recognises the right to collective bargaining as prescribed in the Constitution of the Republic of South Africa and set out specifically in the South African Labour Relations Act. For the past two financial years, no collective bargaining agreement has been in place.	Employment Policy
ENVIRONMENT *Businesses should:* Support a precautionary approach to environmental challenges; Undertake initiatives to promote greater responsibility; and Encourage the development and diffusion of environmentally friendly technologies.	The DBSA recognises the importance of placing poverty eradication and achievement of sustainable development at the centre of its development agenda. The DBSA is legally obliged to promote sustainable development through its operations and this is integrated into the DBSA's strategy, which highlights the need for effective integration of environment and sustainability issues as the key to ensuring sustainable economic and social development. The DBSA supports the precautionary approach to environmental challenges. Environmental and sustainability considerations at the DBSA are founded on the following key documents: the DBSA Environmental Sustainability Strategy, the DBSA Environmental Policy, the environmental management system and the DBSA Environmental Appraisal Procedures. These documents combine to form the DBSA environmental management framework. The DBSA environmental management framework serves as the structure that ensures the DBSA's operations, programmes and projects are socially responsible, environmentally sound and in line with government requirements.	Environmental Policy
ANTI-CORRUPTION Businesses should work against corruption in all its forms, including extortion and bribery	The DBSA has adopted a Code of Ethics articulating the values and acceptable ethical standards to which all persons associated with the DBSA are required to adhere. This notwithstanding, the DBSA acknowledges that in today's business environment, fraud is prevalent and all business organisations are susceptible to the risk of fraud. In this regard, the DBSA's Fraud Prevention Plan sets out and reinforces its policy of zero-tolerance towards fraud and corruption as well as management's commitment to combating all forms of fraud inherent in its operations. The DBSA's fraud hotline forms an integral part of its anti-fraud and anti-corruption efforts. The toll-free hotline is independently managed and administered. The Conflict of Interest Policy for the DBSA Board and employees requires the disclosure of all direct or indirect personal or private business interests. All employees sign confidentiality and declaration of interest forms when adjudicating on procurement panels.	Code of Ethics Conflict of Interest Policy Gift and Hospitality Policy Whistle-blowing Policy Fraud Prevention Plan

Go to www.unglobalcompact.org for more information on the UNGC.

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