



Powering the continent through a sustainable approach

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Standard Bank
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Africa is our calling card!

Introduction to Standard Bank



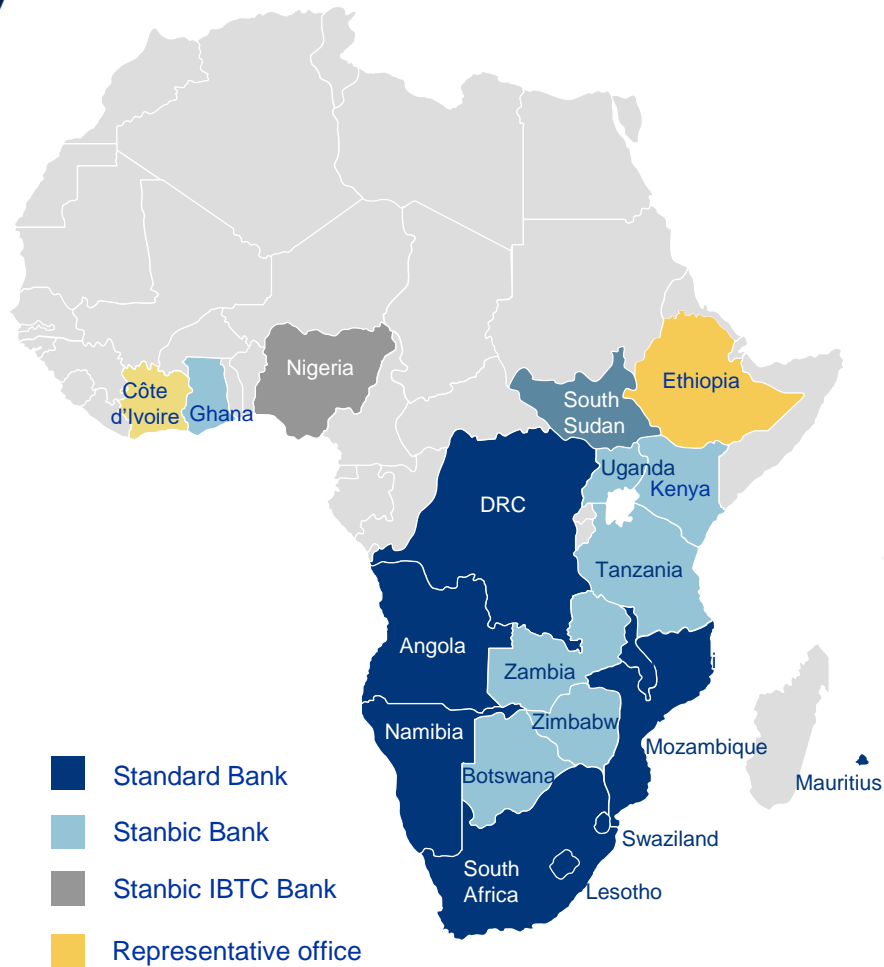
- Universal bank
- Established in 1862
- Africa's top bank (by Tier 1 capital) in the annual ranking of 1,000 banks globally – ranked 116 and only African bank in top 150 – *The Banker*
- Headquartered in Johannesburg, South Africa
- ICBC, the largest bank in China, is a 20.1% shareholder in Standard Bank
- ICBC is currently ranked No.1 in *The Banker's* annual ranking of the top 1,000 banks global
- Representation in major financial centres, including London, New York and Beijing



Introduction to Standard Bank (Contd...)



Local on-the-ground expertise supported by a strong retail presence



Country	Standard Bank branches*	ATMs	Corporate Banking	Retail Banking	Investor Services	Investment Banking
South Africa	632	7,636	✓	✓	✓	✓
Angola	27	31	✓	✓		✓
Botswana	11	26	✓	✓	✓	✓
Côte d'Ivoire	-	-	-	-	-	✓
DRC	5	-	✓			✓
Ethiopia	-	-	-	-	-	-
Ghana	34	67	✓	✓	✓	✓
Kenya	24	43	✓	✓	✓	✓
Lesotho	17	77	✓	✓		✓
Malawi	25	64	✓	✓	✓	✓
Mauritius	1	-	✓	Private clients	✓	✓
Mozambique	42	93	✓	✓	✓	✓
Namibia	47	166	✓	✓	✓	✓
Nigeria	179	390	✓	✓	✓	✓
South Sudan	1	1	✓	✓		✓
Swaziland	10	62	✓	✓	✓	✓
Tanzania	10	33	✓	✓	✓	✓
Uganda	94	174	✓	✓	✓	✓
Zambia	22	82	✓	✓	✓	✓
Zimbabwe	19	27	✓	✓	✓	✓
TOTAL	1,200	8,972	✓	✓	✓	✓

* Includes service centers and access banking centers



Themes impacting the power sector

Global themes

General	
Banking regulation	<ul style="list-style-type: none"> Basel Regulation has fundamentally increased cost of capital and liquidity thereby decreasing the Commercial Banks' ability to support long dated financing structures
Capital enhancement products and structures	<ul style="list-style-type: none"> DFIs and ECAs more willing to provide necessary structural support to commercial Banks to fund P&I opportunities – particularly with regards to tenor
Power specific	
Climate change	<ul style="list-style-type: none"> Regulation and activism makes it increasingly difficult for Commercial Banks to support non-renewable technology Funds set up with specific green / responsible mandate looking for investment opportunities
PPP	<ul style="list-style-type: none"> Global move towards PPP with less investment funded directly by government balance sheets
Off-grid	<ul style="list-style-type: none"> Movement away from reliance on centralized utilities to grid tied solutions and self contained systems through a modular approach including rural development and captive power solutions
Renewables efficiency	<ul style="list-style-type: none"> Significant improvements in the cost and quality of renewable technology, in particular solar panels, further enhancing feasibility and attractiveness of sector
Storage	<ul style="list-style-type: none"> Rapid advances in the battery storage changing the renewable energy proposition – sustainable cost effective solutions will fundamentally change the power sector

Africa-specific themes

General	
Significant power and infrastructure investment required across Africa	<ul style="list-style-type: none"> More than six hundred million people across the continent do not have access to electricity Infrastructure spend required is between USD130m – USD150m per annum and the financing deficit is c.USD70bn per annum over the next decade
Macroeconomic concerns limit sovereign appetite	<ul style="list-style-type: none"> Bank / investor appetite for sovereign assets is constrained due to generally high levels of sovereign indebtedness and low levels of growth
Policies	<ul style="list-style-type: none"> Policy uncertainty and non-existence complicates ability for investors to take long term view on many Sub-Saharan markets
Significant appetite for African risk from Asian giants in particular China	<ul style="list-style-type: none"> China is the source for 21% of Africa total imports and 17% of its exports China policy banks have extended nearly USD100bn in loans to Africa sovereigns Chinese FDI in Africa is close to USD30bn
Power specific	
Off-grid	<ul style="list-style-type: none"> Off grid and Captive Power Solutions increasingly a solution to solving electrification rates and reducing reliance on sovereigns to fund power infrastructure Significant improvements in the cost and quality of renewable technology, in particular solar panels, further enhancing feasibility and attractiveness of sector

Five Ways Disruption Can Occur in the Power Sector



Greater access



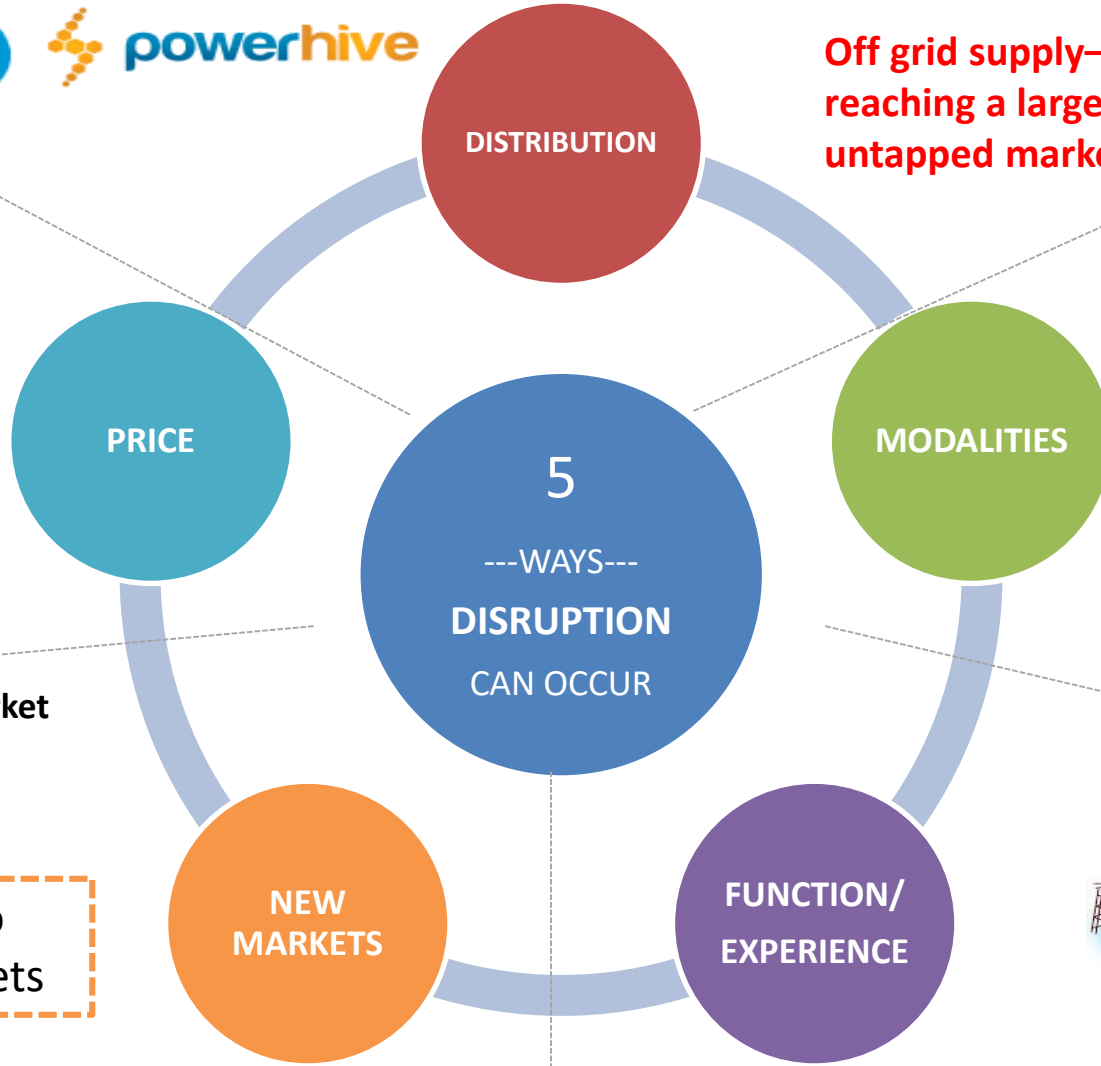
Lower prices due to scalability

Substantial reduction in cost of renewable energy.. Reaching a tipping point

Off grid supply- power reaching a larger, untapped market

New power technologies & energy mixes

Different ways to 'consume' or in this case produce the same product



Expanding access to unconventional markets



Focus on markets with power under-supply



Creating new functionality and a better experience

Independence from large unreliable utilities

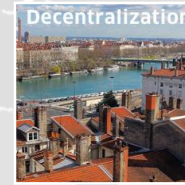


The Energy Revolution

Disruption in the energy sector is evident through four structural global trends



1. Decarbonization



2. Digitalization



3. Decentralization



4. Energy Efficiency





1. Decarbonization

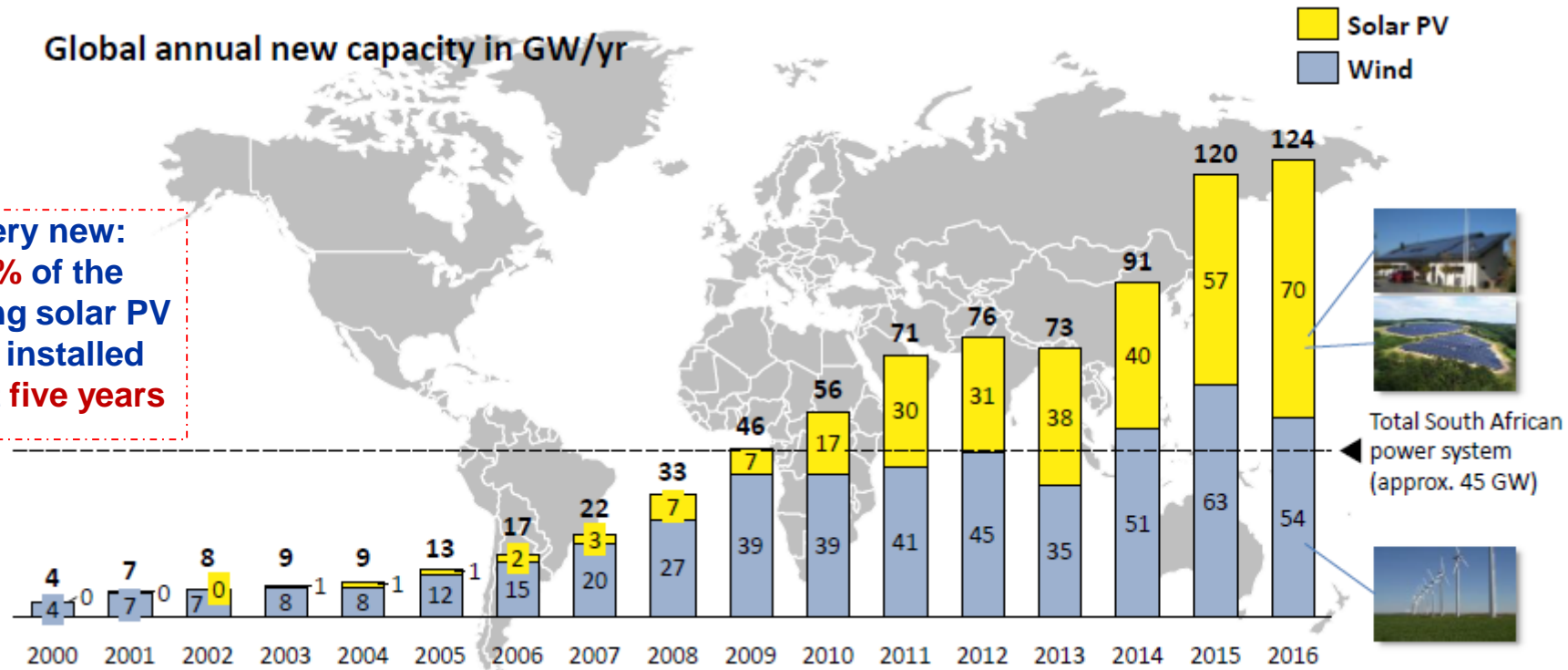
Working towards low-carbon or zero-carbon energy generation

Challenge 1: to ensure that future global warming does not exceed 2°C by reducing greenhouse gas emissions by 40-70% by 2050

Challenge 2: to increase the contribution made by renewables to global power generation through the use of solar, wind and biogas.



Global annual new capacity in GW/yr



This is all very new:
Roughly **80%** of the globally existing solar PV capacity was installed during the last **five years**





2. Digitalization

Working towards a digital customer offering by exploiting the technological revolution and digital transformation

The digital utility of the future captures opportunities all along the value chain



Challenge 1: the number of smart objects will quadruple by 2020, so energy consumption in the future will be smart and autonomous

Challenge 2: the high-speed, expansive development of digital technologies is dramatically changing customer needs and uses



Trends in technology and consumer financing (Pay-As-You-Go) is causing an explosion in the market in emerging markets.

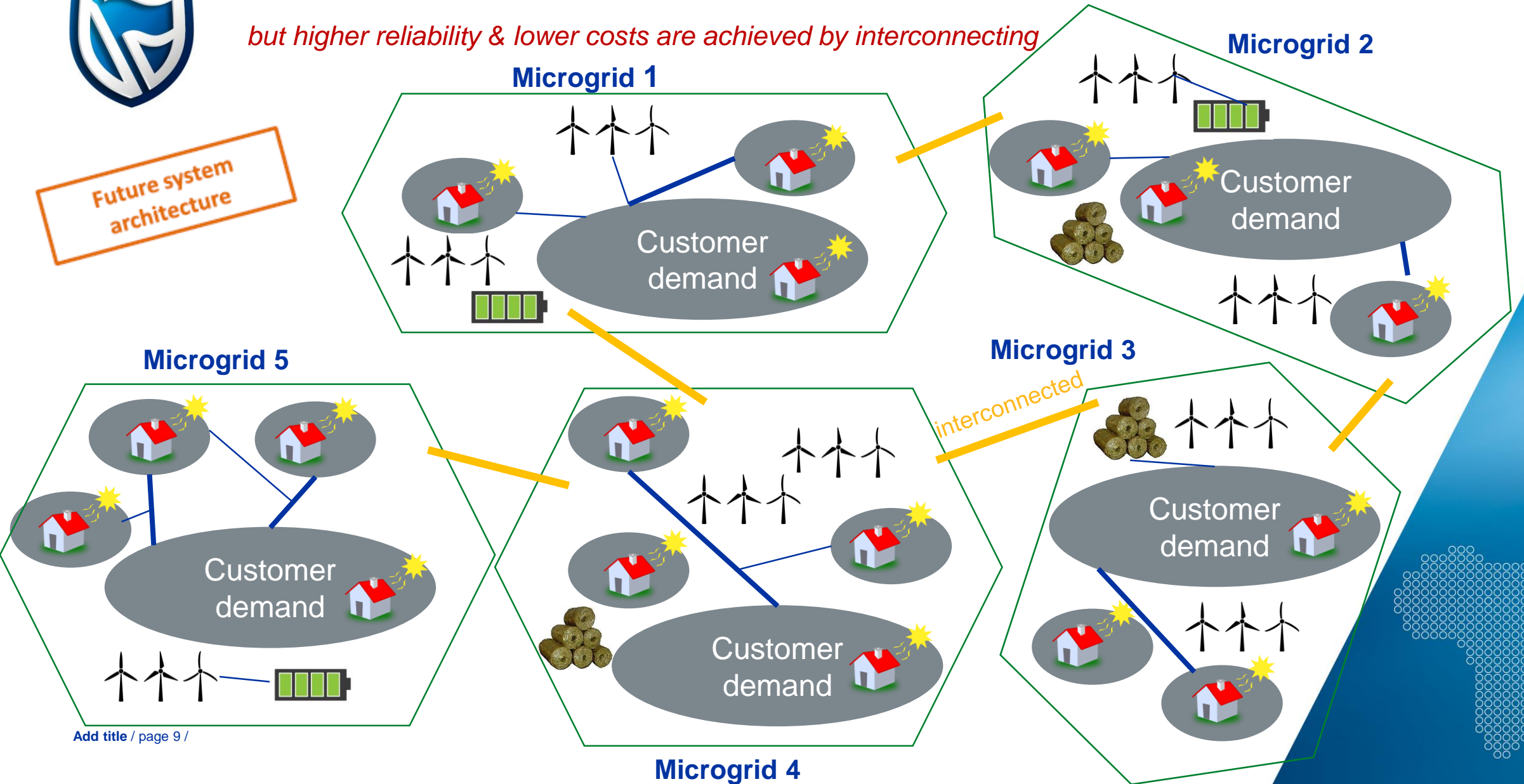




3. Decentralization

but higher reliability & lower costs are achieved by interconnecting

Future system architecture



The Off-Grid landscape & key players

We are prioritizing the following sectors:



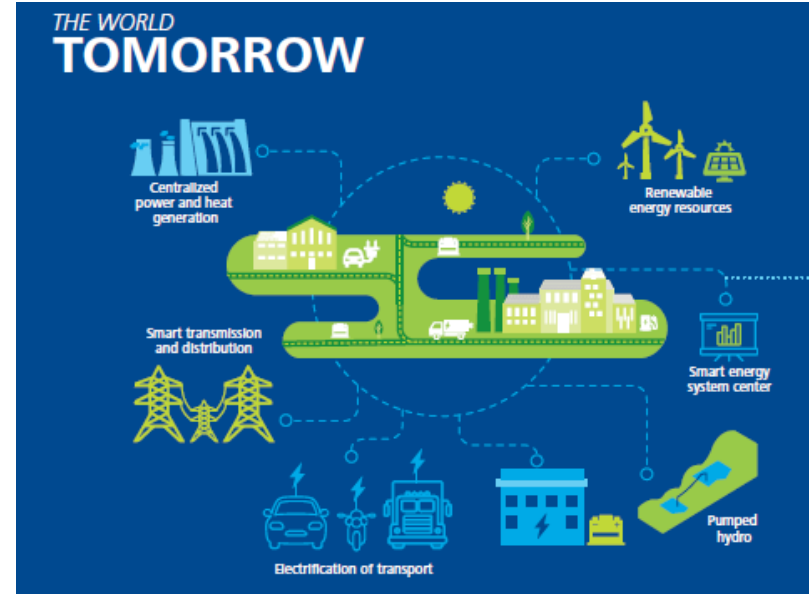
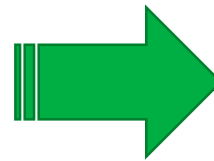
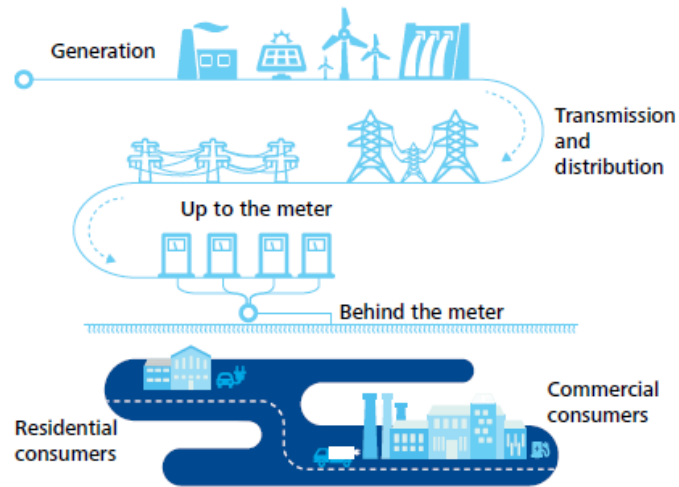


4. Energy Efficiency

Doing more with less....

- Advances in energy efficient products and demand side management are helping to boost distributed energy resources. The increased electrification of heating and cooling systems using high-efficiency heat-pump technology, the application of efficient LED lighting and appliances, and the smart charging of electric vehicles all contribute to greater capacity and lower life-cycles costs for **net-zero energy buildings and off-grid**

THE WORLD
TODAY



- The aggregation and centralized management of distributed energy resources, sometimes referred to as “**virtual power stations**” can transform zero-energy buildings and community-scale microgrids into regional resources by providing, or freeing up, critical electrical system capacity when needed.
- In developing economies, these changes might allow those **communities not currently connected to a national grid to completely bypass these forms of energy services**



M-Kopa : USD 65 million Syndicated Receivables Based Term Loan

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Client Overview



M-Kopa Group

2017



USD65 million

Receivables Based Term Loan

Mandated Lead Arranger/Book
Runner/Local Account Bank

- M-Kopa headquartered in Nairobi, Kenya is the **global leader in “pay-as-you-go”** energy, leasing solar home systems to off-grid customers on an affordable 12-month payment plan
- Founded in 2010, M-Kopa combines mobile money payments with Global System for Mobile communication (“GSM”) sensor technology to enable affordable consumer financing for solar powered systems.
- To date M-Kopa has connected over **500,000 homes** in East Africa to affordable, safe and clean energy. Its predominantly low-income customer base is **accessing lighting, phone charging, radio and TV** on daily mobile money payment plans that are less than the typical cost of kerosene
- M-Kopa’s equity investors include Gray Ghost Ventures (a U.S based venture capital fund), General Investment Management (an asset management fund founded by former U.S Vice President Al Gore), CDC (a DFI owned by the U.K government), among others

Stanbic Bank Involvement

- Stanbic Bank Kenya (“SBK”), the Kenyan affiliate of Standard Bank Group, was appointed as Mandated Lead Arranger to arrange the local currency equivalent of USD 65 million of receivables based financing for M-Kopa in Kenya and Uganda
- The debt facility includes CDC, FMO and Norfund as part of the lending syndicate
- Our role in the transaction included:
 - Arranging local currency equivalent of USD40 million of debt for M-Kopa Kenya and USD25million for M-Kopa Uganda
 - Providing local accounts
 - Payment and administration agent role
- Other roles for the group included:
 - Standard Bank of South Africa as facility agent and security agent
 - Standard Bank Isle of Man as cash collateral account bank

M-Kopa : USD 65 million Syndicated Receivables Based Term Loan

Highlights / Key Features

- Key features of the transaction include:
 - M-Kopa is the market **leader** in “pay-as-you-go” off-grid energy
 - This facility is the **largest** commercial debt facility to date in the “pay-as-you-go” off-grid energy sector
 - Brought together **three DFIs** to fund **local currency** facilities
 - **No capital outlay** by SBG in Kenya yet we make significant revenues

Transaction Overview

Borrower	M-Kopa Kenya	M-Kopa Uganda
Stanbic Bank Role	Mandated Lead Arranger, Bookrunner, Local Account Bank	
Transaction Value	USD40m (LCY equivalent)	USD25m (LCY equivalent)
Industry	Power & Infrastructure – Off Grid	
Purpose	General working capital purposes based on the borrower’s performing receivables	
Facilities	Kenya	Uganda
	Stanbic: -	Stanbic: USD16m
	CDC: USD18m	CDC: USD3m
	FMO: USD11m	FMO: USD3m
	Norfund: USD11m	Norfund: USD3m
Tenor	4 years	
Status	CLOSED	



M-Kopa Group

2017



USD65 million

Receivables Based Term Loan

Mandated Lead Arranger/Book Runner/Local Account Bank



Namibia - Alten Hardap PV Project



Standard Bank Involvement

Standard Bank was the co-mandated lead arranger and underwriter for the transaction with Proparco. Standard Bank also provided long-dated interest rate and currency hedges and was account and agent bank.

The facilities granted included Jibar term loan, VAT facility and Debt service reserve facility.

The Jibar term loan was funded by Standard Bank on the back of a guarantee from Proparco which started at 30% and stepped up to 100% at the end of year 8 of operations

Project was funded on approximate 80:20 basis with Standard Bank Namibia as lender of record with sub participation of Jibar term loan and Debt service reserve facility due to currency (ZAR)

Company Overview

The project is a 37MW solar photovoltaic IPP in Mariental, Namibia with a 25 year offtake with NamPower (the Namibian power utility).

Alten Hardap was awarded preferred bidder status in December 2016 with documentation signed in January 2018 and financial close in February 2018.

Construction is expected to be 6 months with Sterling & Wilson being the EPC and O&M contractor.

The main Sponsor and developer is Alten Energías Renovables (Spain) which was founded in 2006 has experience in developing, financing and operating solar PV power plants. It owns 33MW of operational assets in Spain and is awaiting Financial Close ("FC") of another 467MW (Kenya, Mexico, Nigeria and Namibia).

Alten has partnered with Sojitz for its Latin America portfolio and will be partnering with Inspired Evolution for its African projects (including Alten). The latter is a known sponsor in SA REIPP projects and has an active fund size of USD90m (aiming for USD250m by end 2018) and has, under its Evolution 1 Fund, invested in three SA REIPP plants to date

Transaction Overview

Project Developer	Alten Renewable Energy Developments B.V.
Main Shareholders	Alten, Nampower
Borrower	Alten Hardap PV (Pty) Ltd
Debt Amount	ZAR 760mln
Standard Bank Role	Mandated Lead Arranger, Underwriter and Hedge Provider
Purpose	Design, construction and operation of 45 MW solar photovoltaic projects under Power Purchase Agreement with NamPower
Transaction Value	ZAR 950mln
Tenor	15 years
Country	Namibia
Deal Maker	Sherrill Byrne - Sherrill.byrne@standardbank.co.za

Highlights / Key Features

This is the first large scale IPP in Namibia. Namibia has been looking to develop a large scale IPP since before 2010 but this is the first project to reach financial close. The project will add 7% to Namibia's own generation capacity and actual MWh produced saving 120,000MWhs per year from needing to be imported from the region. The reliance of Namibia on its neighbours for power security is a key concern from the Government who want Namibia to be self-sufficient in terms of energy generation given the importance to economic growth.

The project does not benefit from a government guarantee and there is no political risk protection in the power purchase agreement. In order to assist with these limitations without the need to procure political risk cover, Standard Bank partnered with Proparco. Proparco was unable to lend direct due to the currency (ZAR) and hence a hybrid guarantee structure was developed where Proparco provides a guarantee to Standard Bank (as lender under the term loan only) which starts at 30% and increases to 100% by the end of year 8 of operations mitigating a number of key risks including tenor related concerns.



First large scale IPP in Namibia






Riverbank Wind Power Pty Ltd
(Wesley)

April 2018
ZAR 800 million

33 MW Wind Project
Mandated Lead Arranger, Underwriter & Hedge Provider



Standard Bank Involvement

Standard Bank was the sole mandated lead arranger and underwriter for the transaction. Standard Bank Also provided long-dated interest rate and currency hedges

The facilities granted included JIBAR senior debt, VAT facility and a Debt Service Reserve Facility

The project of 33 MW has a 20 year Power Purchase Agreement with ESKOM and was procured under Round 4 of the Renewable Energy Independent Power Producers Programme (REIPPP)

Standard Bank brought FutureGrowth in as an additional lender on the senior debt facility at financial close

Company Overview

The primary shareholder and developer of the Wesley project is Innowind Limited ("Innowind")

A long term player, Innowind is a South African based integrated renewable energy company that develops, finances, builds, owns and operates commercial renewable energy generation facilities

Innowind is an expert in the field of wind energy and with its French parent company, EDF Energies Nouvelles, brings experience in cutting edge clean energy technologies such as stealth wind turbines, solar PV and energy storage

Innowind has offices located in Cape Town and Port Elizabeth and provide oversight services for renewable energy projects by managing the projects and their commercial agreements to optimize returns over the project's life cycle

The EPC and O&M contract is being fulfilled by Vestas



Transaction Overview

Project Developer	Innowind Limited (parent company is EDF Energies Nouvelles)
Main Shareholders	Innowind (60%); Telagystix Proprietary Limited (22.50%); Uncedo Lwethu Winds of Change (RF) Pty Ltd (5%); Riverbank Winds of Change BBBEE Co (RF) Pty Ltd (12.50%)
Borrower	Riverbank Wind Power (RF) Pty Ltd
Debt Amount	R800 mn
Standard Bank Role	Mandated Lead Arranger, Underwriter and Hedge Provider
Purpose	Design, construction and operation of a 33 MW wind project under Round 4 of REIPPP
Transaction Value	R1.03 bn
Tenor	Construction plus 18 years
Country	South Africa
Hedged value	R800 mn
Deal Maker	Vincenzia Leitich – Vincenzia.Leitich@standardbank.co.za

Highlights / Key Features


The Wesley projects was one of the 27 Round 3.5 signed projects, and one of the 4 projects that were signed with unconditional PPAs

Some of the first projects of this round to reach Financial Close

The Wesley-Ciskei project holds great significance for the Eastern Cape Province, it is the first and only wind energy project located in a former homeland region of the Eastern Cape, despite such regions representing almost 40% of the Province's landmass and being host to 60% of the Province's population.




South Africa - Scatec Solar Bid Date 4 REIPPP Projects

Scatec Solar ASA
(Sirius Solar PV, Dyasons Klip 1 & Dyasons Klip 2)

April 2018
ZAR 2.29 billion

3 x 75 MW Solar PV Projects
Mandated Lead Arranger, Underwriter & Hedge
Provider




Standard Bank Involvement

Standard Bank was the sole mandated lead arranger and underwriter for the transaction. Standard Bank Also provided long-dated interest rate and currency hedges

The facilities granted included both Jibar– and CPI senior debt and subordinated debt

Additional guarantees were also issued by Standard Bank to Eskom

The three projects totaling 258 MW has a 20 year Power Purchase Agreement with Eskom and was procured under Round 4 of the Renewable Energy Independent Power Producers Programme (REIPPP)

Standard Bank brought Liberty Group, Prescient Investment Management, Sanlam Capital Markets and Development Bank of Southern Africa in as additional lenders into the transaction at financial close for an amount of ZAR1.9 billion across the projects

Company Overview

The primary shareholder and developer of the three projects are Scatec Solar ASA

A long term player, Scatec Solar develops, builds, owns, operates and maintains solar power plants, and already has an installation track record of 1,000 MW.

Currently, the company is producing electricity from 322 MW of solar power plants in the Czech Republic, South Africa, Rwanda, Honduras and Jordan and another 434 MW are under construction.

With an established global presence, the company is growing briskly with a project backlog and pipeline of more than 1.5 GW under development in the Americas, Africa, Asia and the Middle East. Scatec Solar is headquartered in Oslo, Norway.

The EPC and O&M contract is being fulfilled by Scatec Solar ASA group entities

Transaction Overview

Project Developer	Scatec Solar AS
Main Shareholders	Scatec Solar AS (42%), Norfund (18%) & Black Industrialist Investor (35%), BEEE Trust (5%)
Borrower	Sirius Solar PV Project One (RF), Dyasons Klip 1 (RF) & Dyasons Klip 2 (RF)
Debt Amount	R2,29 bn (R764m x 3)
Standard Bank Role	Mandated Lead Arranger, Underwriter and Hedge Provider
Purpose	Design, construction and operation of 3 x 75 MW solar photovoltaic projects under Round 4 of REIPPP
Transaction Value	R3.68 bn
Tenor	COD + 17 years
Country	South Africa
Deal Maker	Sherrill Byrne - Sherrill.byrne@standardbank.co.za

Highlights / Key Features

These projects were 3 of only 6 projects of the 27 Round 3.5 and Round 4 projects that were signed with unconditional PPAs

Some of the first projects of this round to reach Financial Close

Standard Bank providing CPI debt to Renewable Energy project in SA for first time

Innovative structuring to provide long dated guarantees to Eskom





Thank you



Many partnerships
ONE PURPOSE