TRANSFORMING SUB-SAHARAN AFRICA VIA ENERGY SECTOR REFORM AND INVESTMENT
OUTLINE

- Addressing development challenges in the presence of vast unharnessed energy resource potential in SSA
- Transforming SSA: high-impact investment opportunities for public private partnerships
Increased energy access leads to **economic growth, poverty reduction, and shared prosperity**

- 600 million people and 10 million SMEs have no access in Africa
- Energy growth is not keeping pace with GDP growth

Source: EU and World Bank estimates
ACFRICA’S ENERGY RESOURCE POTENTIAL

- Abundance of low carbon, low cost energy development resources
  - 45 GW of feasible Hydropower - One of Africa’s most promising drivers for green growth
  - Major reserves of Natural Gas - West: Nigeria, Gulf of Guinea, East: Mozambique, Tanzania
  - 15 GW of Geothermal potential - African Rift Valley
  - Over 1,000 GW of Wind and Solar - Needs to be economically dispatched with attentive siting and infrastructure

- Over 1,000 GW of Wind and Solar
- 45 GW of feasible Hydropower
- 15 GW of Geothermal potential
- Major reserves of Natural Gas

Source: Africa Energy Outlook and World Bank Estimates
Africa needs to add 6-7 GW of installed capacity annually for universal access by 2030.

BUT

- Currently, about 1-2 GW of new installed capacity deployed a year.
- Access growing no more than 1% per year in the last decade.
- At this rate, less than 60% of Africans will have electricity in their homes by 2030.

GREATER INVESTMENT NEEDED TO HARNESS RESOURCE POTENTIAL: ELECTRICITY SUPPLY GAP
GREATER INVESTMENT NEEDED TO HARNESS RESOURCE POTENTIAL: INVESTMENT GAP

Africa needs up to $40-50 billion yearly for universal access by 2030

BUT

- Currently, $9-10 billion invested yearly to provide first access to modern energy

### African Power Pool Regions

<table>
<thead>
<tr>
<th>African Power Pool Regions</th>
<th>Avg. Yearly Investment ($B)</th>
<th>Cumulative Till 2020 ($B)</th>
<th>Financing shortfall of 80%</th>
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<tbody>
<tr>
<td>CAPP</td>
<td>6.5</td>
<td>52.0</td>
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<tr>
<td>EAPP</td>
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<tr>
<td>SAPP</td>
<td>18.5</td>
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<tr>
<td>WAPP</td>
<td>10.5</td>
<td>84.0</td>
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<tr>
<td>Total</td>
<td>50.0</td>
<td>400.0</td>
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### Current Investment Trend

<table>
<thead>
<tr>
<th>Financiers</th>
<th>Avg. Yearly Investment ($B)</th>
<th>Cumulative Till 2020 ($B)</th>
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<tbody>
<tr>
<td>World Bank</td>
<td>1.5</td>
<td>12.0</td>
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<tr>
<td>Other Multilaterals</td>
<td>1.5</td>
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<tr>
<td>Emerging financiers</td>
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<td>15.0</td>
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<tr>
<td>Private sector</td>
<td>5.0</td>
<td>41.0</td>
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<tr>
<td>Total</td>
<td>10.0</td>
<td>80.0</td>
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</tbody>
</table>
- Private sector investments in energy in Africa is **1% of all such investments** in developing regions (vs. 34% for South Asia, 26% for LAC, or 25% for ECA)
- Six SSA countries concentrate 80% of these investments*
- Leveraging **private sector partnerships** with innovative mechanisms/increased focus on instruments such as **guarantees** critical

* Nigeria, Uganda, Cameroon, Ghana, Kenya, and Tanzania. Source: PPI database
THE WORLD BANK GROUP

- The World Bank
  - International Bank for Reconstruction and Development (1944)
  - International Development Association (1960)
- International Finance Corporation (1956)
- International Centre for Settlement of Investment Disputes (1966)
End extreme poverty and boost shared prosperity by 2030

- Reduce the percentage of people in this world living on less than US$1.25 per day to 3% by 2030
- Promote income growth of the bottom 40% of the population in every developing nation
ROLE OF THE WBG INSTITUTIONS

IBRD
IBRD lends to middle-income and credit-worthy low income governments. It provides financial products as well as Advisory Services and Analytics.

IDA
IDA provides interest-free loans and grants to governments of the poorest nations. It follows the same structure as IBRD and is identical in terms of services and products that it offers.

IFC
IFC’s investments, advice, and asset management services are designed to help the private sector in developing countries succeed in ways that promote prosperity for all.

MIGA
MIGA provides guarantees to promote foreign direct investments in developing member countries.

ICSID
ICSID provides facilities for conciliation and arbitration of international investment disputes.
LEVERAGING PARTNERSHIPS TO SCALE UP INVESTMENTS

Significantly increasing investment: a challenge but also opportunity to leverage partnerships

- **Limited public resources** can be utilized to reduce investment risk and promote growth.
Addressing development challenges in the presence of vast unharnessed energy resource potential in SSA

Transforming SSA: high-impact investment opportunities for public private partnerships
OPPORTUNITIES FOR TRANSFORMATIVE IMPACT

Clean energy resource development includes linking supply to demand – **regional perspective**

*World Bank Group is actively engaged in investment in large-scale high impact projects supporting renewables (including large hydro), natural gas and facilitating electricity trade*
EAST AFRICA POWER POOL
GEOTHERMAL SECTOR DEVELOPMENT PROJECT
(ETHIOPIA)

Overview

• Estimated installed capacity: 70+ MW
• Estimated cost: US$ 220 million
• Phase 1: Confirm the geothermal resources and support the Government in establishing its institutional framework for geothermal development using World Bank concessional financing
• Phase 2: 1st geothermal site developed through public finance: government contribution + concessional financing from development partners
• 2nd geothermal site developed as PPP: with upstream reconnaissance, exploration and test drilling supported through public (concessional) financing + competitivel bidding to attract private financing in production field development and power plant construction

Benefits to Governments and Utilities

• Improved country’s electricity generation mix;
• strengthening the Government’s agenda to expand access through increase in base load electricity generation potential and reliability of supply;
• Facilitated export to neighboring countries;
• Improved capacity of EEP; and strengthened institutional, legal and regulatory framework to attract private capital to geothermal development;
• Eventual transfer of cost savings from policy and business environment improvements to electricity consumers through a competitive tariff.

Projected Timeline

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<td>Drilling of wells, preparation of feasibility studies</td>
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<td>Construction of a power plant</td>
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<td>Drilling tests</td>
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<td>PPP tender and construction</td>
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SINGIDA WIND PROJECT
(TANZANIA)

Overview

• Estimated installed capacity: 100 MW
• Estimated cost: US$280 million
• Structuring: IPP with private financing, no concessional financing foreseen
• Expected to be the first operating wind IPP in Tanzania
• Part of a series of wind farm projects situated east of Singida, Northern Tanzania, approximately 700 km from Dar-es-Salaam.
• Will benefit from the close proximity (about 11 kilometers) to the prospective high voltage (400 kV) transmission infrastructure, to be commissioned in March 2016.
• An international private sector developer has been developing the project with a local partner.
• IFC has taken an equity stake in the project. WB requested to provide guarantees to cover the risks of the national electric utility.

Benefits to Governments and Utilities

• Increase generation capacity for the existing and new consumers, thus supporting expanding access;
• Supporting the Government in its goal to increase share of wind generation capacity in country’s fuel mix
• Complementary to the existing hydropower generation as the windiest months typically fall during the dry season.
• Stable wind energy tariff over the years (as no fuel source is required which could cause fluctuations in the tariffs); in the longer term wind energy is likely to become cheaper.

Projected Timeline

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<thead>
<tr>
<th>Activity</th>
<th>2015</th>
<th>2016</th>
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<td>Operation</td>
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Overview

- Estimated installed capacity: 250 MW
- Estimated cost: US$250 million
- Structuring: PPP/IPP
- The Government has developed a gas-to-power program, which includes investments in the gas producing fields, gas transport infrastructure, and power plants.
- The Government is looking for private investors to develop a gas-fired power plant of about 250 MW, under a long-term power purchase agreement with TANESCO.
- TANESCO has hired a transaction advisor, financed from an IDA Credit, to help structure the transaction and identify investors.

Benefits to Governments and Utilities

- Increase generation capacity for the existing and new consumers, thus supporting expanding access;
- Attract private investment in the power sector, reducing pressure on public financing and electricity tariffs;
- Mitigate the variability of hydropower and the risk of electricity shortages during the “dry periods” in a cost-effective manner.

Projected Timeline

<table>
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<tr>
<th>Activity</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
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<tr>
<td>Preparation of transaction documents</td>
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<td>Selection of developer</td>
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PARTIAL RISK GUARANTEE FOR RENEWABLE ENERGY DEVELOPMENT (UGANDA)

**Overview**
- Estimated installed capacity: 200 MW
- Estimated cost: US$ 160 million
- Structuring: Partial Risk Guarantee to support IPP financing
- GoU’s GET FiT program intends to fast-track about 20 small-scale renewable energy generation projects, promoted by private developers to transform Uganda’s energy mix within a period of 3-5 years.
- Series of WB (IDA) Guarantees harnesses renewable energy resources, including small hydro, solar and wind by promoting small private power producers (SPPPs) by complimenting GET FiT.
- Reduced cost of financing for the developers with partial risk guarantee support

**Benefits to Governments and Utilities**
- Attract more private investment to develop Uganda’s renewable energy resources;
- Help the Government to maintain current level of Feed in Tariff;
- Quick signing of contracts, with use of standard Power Purchase Agreement and Implementation Agreement.

**Current status and next step**
- The Project is at implementation stage.
- About 5 small hydro projects and 2 small solar PV projects have signed PPA and IA. (Projects received financing from DFIs and did not require Bank supported PRG).
- Muvumbe hydro power project (6.5 MW) is raising funds from conventional banks and have requested support from PRG to reduce its cost of financing.
- WB is closely working with Muvumbe to offer PRG support to this project.
- Muvumbe PRG is expected to become operational in 2016.
SOUTHERN AFRICA POWER POOL
**Overview**

- Estimated installed capacity: 1,600 – 2,400 MW
- Estimated cost: US$ 2 – 2.6 billion
- Structuring: TBD
- The Project shall also entail construction of other infrastructure such as power transmission lines, access roads and housing.
- Project ranks high as a least cost (unit cost of generation) option for both Zambia and Zimbabwe.

**Benefits to Governments and Utilities**

- Increased base-load generation capacity;
  - Increased reliability of electricity supply in both countries
  - Increased capacity to connect new consumers to the national grids of the two countries, this supporting access expansion agenda;
  - Possibility to export electricity to wider Southern Africa region.

**Projected Timeline**

| Activity                        | 2015 | 2016 | 2017 | 2018 | 2019 | 2021 | 2022 | ...
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## Overview

- Estimated installed capacity: ~500 MW
- Estimated cost: TBD
- Structuring: Technical Assistance and Guarantee to support IPPs
- Objective is to improve efficiency of Zambia’s procurement process to allow GoZ to award contracts to qualified developers to construct hydropower plants following a transparent and competitive process
- World Bank may finance feasibility studies of selected hydropower plants and help the GoZ in following a transparent and competitive procurement process to award contracts for up to 500 MW of hydro power plants.
- WB technical assistance to manage a procurement process
- WB may also provide risk enhancement options, upon Government’s request.
- Private sector entering the procurement process with assurance that bid evaluation will be carried out as per a pre-determined timeline

## Benefits to Governments and Utilities

- A transparent and competitive procurement process to select qualified developers;
- Preparing bidding documents based on findings of a feasibility study to reduce development risk;
- Speedy contract award after bid evaluation.

## Current status and next step

- Discussion between the Government and the World Bank is ongoing.
- Preparation of a Technical Assistance project would commence upon receiving a formal request from the Government of Zambia by the World Bank.
GUARANTEE FOR UTILITY SCALE SOLAR (ZAMBIA)

Overview

• Estimated installed capacity: 300 MW
• Estimated cost: US$ 60 million as guarantee
• Structuring: World Bank Guarantee to promote PPP approach
• Private sector sponsors will be selected following open and transparent procurement process, to set up solar PV power plants of 50 MW size each, at different locations
• Government of Zambia has signed a Financial and Advisory Services Agreement with IFC.
• IFC will act as the Government’s Transaction Advisor to manage a procurement process for the first two 50 MW solar PV power plants.
• Standardized bidding document developed by WBG’s Scaling Solar initiative, along with a model Power Purchase Agreement will be used.
• World Bank will provide a Guarantee to reduce payment risks of the electricity purchaser (ZESCO) from up to 300 MW of solar PV power plants, with private sector investment financing

Benefits to Governments and Utilities

• Ensuring predictability of the process through:
  • a transparent and competitive procurement while awarding utility-scale solar PV power plants;
  • using standard contract documents to ensure efficiency;
  • disallowing any negotiations on a Power Purchase Agreement;
• Complimenting large hydropower reservoirs with utility-scale solar PV plants, thus increasing overall power supply reliability in Zambia and facilitating access expansion.

Projected Timeline

<table>
<thead>
<tr>
<th>Activity</th>
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<tr>
<td>Construction</td>
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REGIONAL TRANSMISSION DEVELOPMENT PROGRAM (MOZAMBIQUE)

**Overview**
- Estimated transmission line: 1,400-km system (HVDC and HVAC)
- Facilitated installed capacity: 1,500MW Mphanda Nkuwa hydropower plant, 1,245MW expansion of Cahora Bassa hydropower plant, 400MW gas-fired power plant at Temane
- Estimated cost: Over US$ 5 billion for integrated Program:
  - US$ 2 billion transmission system, US$ 3 billion Mphanda Nkuwa hydropower plant, US$ 0.5 billion Temane gas-fired plant
- 2 phase structuring
- Expected Phase 1: publicly funded AC line (0.5 billion), gas-fired power plant at Temane as a PPP (0.5 billion)
- Expected Phase 2: DC lines, financed with Mphanda Nkuwa hydropower project + significant financing from foreign and local investor + significant financing from commercial banks

**Benefits to Governments and Utilities**
- AC line will significantly increase transmission coverage and enable access (currently estimated at 25%);
- Unlock development of considerable power generation potential in renewables and lower-carbon technologies;
- Enable economically important industrial activities (especially at Chibuto in expected Phase 1 area);
- DC line will increase regional trade, benefit regional utilities through access to sustainable hydropower at competitive cost;
- Strengthen EdM’S finances and reduce pressure on domestic tariffs.

**Projected Timeline**

<table>
<thead>
<tr>
<th>Activity</th>
<th>2015</th>
<th>2016</th>
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<td>Indicative financing terms</td>
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<td>EPC tenders</td>
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<td>Construction</td>
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WEST AFRICA POWER POOL
Overview
- $171 mmcf/d of base-load supply for nearly 15 years - sufficient to supply up to 1,000MW of power generation
- Sankofa will come on line in the first half of 2018 (production at other Ghanaian gas fields is expected to start declining in 2020)
- Sankofa non-associated gas fields is part of the OCTP block together with separate oil field.
- OCTP Block will be developed by Eni and Vitol Group together with GNPC of Ghana.
- The total cost of over the lifetime of the OCTP (oil and gas) is US$ 7.9 billion.

Project Impact
- Project offers large fiscal benefits to the Government in the form of royalties and taxes from oil and gas sales
- Project will be a game-changer for the power sector
  - signification reduction of power generation cost through fuel price savings
  - Possibility to increase generation capacity

Risk and how they are mitigated
- Macro: Fiscal management risks at sovereign level can spill over to energy sector
- Downstream Energy Sector risks: The time lag between investment decision and First Gas (three years from now) provides a time window to move forward on improving efficiency and reestablishing the financial equilibrium of the sector.
- Security structure (including cash waterfall of National Oil & Gas company, Cash Collateral, and WBG guarantees) reduces risks for GoG
**Overview**

- Ghana has one of the highest access rates in West Africa (70%) but still has a lot of suppressed demand
- Jubilee, Ten and Sankofa gas will come on line in 2016-2018 – availability of gas will unlock investments in the IPP program
- The Government of Ghana is engaging in a priority IPP program with a cumulative installed capacity of 1,500 MW
- World Bank Group gearing up to provide support in terms of financing and guarantees

**Benefits to Governments and Utilities**

- Increase access to sustainable and reliable energy
- Reduced reliance on expensive liquid fuel for power generation
- Ensuring a gas offtaker for gas fields that will become online in 2016-18 and that will bring important government revenues
- Increase visibility of Ghana as destination for private investment

**Table 1: Planned IPP Developments**

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<thead>
<tr>
<th>Plant/Developer</th>
<th>MW</th>
<th>Assumed Start</th>
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<tr>
<td>Amandi</td>
<td>192</td>
<td>2018</td>
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<td>Jacobsen</td>
<td>360</td>
<td>2018</td>
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<tr>
<td>EDF/VRA</td>
<td>200</td>
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<td>Ghana1000</td>
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<td>2019</td>
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<td>Globeeq</td>
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<td>2019</td>
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*Source: World Bank Team due diligence*
IMPORT AND REGASIFICATION OF LNG (COTE D’IVOIRE) - 1

Overview

- Growing power demand in Cote d’Ivoire and sub-region
- A recent World Bank study has confirmed that the import of liquefied natural gas (LNG) via a Floating Storage and Regasification Unit (FSRU) is a viable option for Cote d’Ivoire
- Estimated cost of terminal infrastructure up to US$ 180 million
- Complex negotiations with multiple public and private parties key to a successful outcome
- Gas supplied can generate up to 3,000 MW of power

Benefits to Governments and Utilities

- Increase access to sustainable and reliable energy;
- Energy Security for West Africa Power Pool;
- Allow Cote d’Ivoire to continue to export power to neighboring countries and to become an energy hub for the region;
- Opportunity of importing, storing and regasifying liquefied natural gas (LNG) at lower cost;
- Diversification of the sources of supply in natural gas for the country.
Contractual Structuring of a Terminal Project Agreements required for project realization

Cash flow: between US$ 1 to 2 billion/year.*

LNG Supplier

LNG Supply & Purchase Agreement

Ownership

Land Acquisition

FSRU Service & Operations Contracts

Vessel Owner

Cash flow: around US$ 60 million/year

Terminal Project Contractual Structure

Cash flow: Upfront Capex of up to US$ 180 million

Engineering Companies

FEED

EPC

FSRU

Berths, pipelines and onshore regasification facilities

Gas Sales Agreement

End User

Contracts to be negotiated

* Depending on demand levels
AZURA-EDO IPP (NIGERIA)

**Overview**

- $900 million project cost, 459 MW gas-fired IPP to be build in Edo State Nigeria
- Financing provided by 6 equity investors and a large consortium of 14 financial institutions (including 9 DFIs)
- Flagship transaction for the ongoing power sector reforms
- WBG’s multiple key roles: WB PRG covers for lenders, IFC arranger & provider of senior and subordinated debt, MIGA PRI for lenders and investors….in addition to pioneering balanced, bankable contracts and engaging in continuous sector dialogue.

**WBG Instruments**

- IBRD: providing two separate PRGs, a direct debt cover for commercial lenders of $117 million, and a Liquidity PRG backing the Power Purchase Agreement payments from the national offtaker, NBET
- IFC: co-MLA for DFI senior debt tranche, mobilizing $177.5 million of senior and $35 million subordinated debt financing. In addition, IFC is providing $50 million of senior and $30 million of subordinated debt for its own account.
- MIGA: providing PRI both for equity, and $117 million of commercial bank funded senior debt

**A landmark project for Nigeria**

- A pathfinder for the IPP market in Nigeria: the first IPP emerging from Nigeria’s power sector reform effort to reach financial closure.
- Its expected low cost of generation: levelized cost of $10.5c/kWh vs. $30-50c/kWh for self-generated electricity
- The replicability of its structure – template PPA / PCOA agreements established.
INVESTMENTS ALONG THE ENERGY VALUE CHAIN (NIGERIA)

Inaugural address of President Bahara confirmed priority of energy sector and commitment to comprehensive reform across the value chain:

- **Institutional Reform** – unbundling of utilities, stronger independent regulator, gas aggregation company, central buyer (Nigerian Bulk Electricity Trading PLC, NBET)
- **Cost-Reflective Tariff Regime** – Multi Year Tariff Order (MYTO)
- **Asset Privatization** – 5 generation companies (GENCOs) and 10 distribution companies (DISCOs) have been privatized
- **Generation** - target installed capacity of 40,000 MW by 2020 (against ~3500MW available today), including pipeline of Independent Power Projects (IPPs)
- **Transmission Company of Nigeria (TCN)** under Management Contract
- Privatized DISCOS to catalyze investments to achieve rapid turn-around of dilapidated infrastructure and improved service delivery
- World Bank Group and other IFIs/donors are backstopping reform and investments

### Investment opportunities

- **Gas Supply**
  - Unblocking Gas Supply
    - NIPP plant gas supply
    - Gas pipeline/CPF investment

- **Generation**
  - Increasing Power Generation
    - Gas to Power IPPs
    - Solar IPPs

- **Transmission**
  - Increasing Wheeling Capacity
    - Transmission PPP type investments

- **Distribution and Access**
  - Distribution Investments and Access
    - Distribution sector long-term capex investment for expansion
    - Access investments – small and medium enterprises

**US$74 billion of investment required**
- Distribution, 16B
- Transmission, 9B
- Generation, 50B
BANDA GAS TO POWER IN MAURITANIA
(WITH EXPORTS TO SENEGAL AND MALI)

Overview
- Gas field could produce up to 60 mmscfd
- Expected commissioning early 2019
- Bidding process for selection of private gas developer to be launched early 2016
- Estimated US$ 1 billion for upstream and downstream projects combined
- 300 MW of gas fired capacity to serve power in Mauritania, Senegal and Mali of which 180MW already in place
- Structured as a PPP with governments of Mauritania, Senegal and Mali as shareholders
- WBG is providing transaction support, financing and guarantees

Benefits to Governments and Utilities
- Increase access to sustainable and reliable energy
- Cost reduction of supply by reduced reliance on expensive liquid fuel for power generation
- Certainty: project will provide utilities with power at fixed tariffs over a 20 year period
- Increase visibility of Mauritania as destination for private investment
SOUAPITI HYDROPOWER DEVELOPMENT (GUINEA)

Overview

• Two phase development:
  • First phase - 400 MW capacity (241 km² reservoir, 15,000 people to be resettled, estimated cost US$1.1 Billion)
  • Souapiti will also regulate the Konkoure River, thus increasing firm capacity of the 240 MW Kaleta dam
• Offtakers include: i) Guinean national utility EDG, ii) mining companies and iii) exports to neighboring countries (OMVG and CLSG)
• IDA is financing the feasibility study to help structure the project as a PPP while AfDB is financing environmental and social studies
• Bidding process for selection of private developer to be launched by end of 2015

Benefits to Governments and Utilities

• Increase access to energy services (currently estimated at 12%);
• Enable mining projects: Competitive energy provided by Souapiti will enable mining projects, such as Simandou iron ore project, to materialize resulting in job creation, increased exports and enhanced government revenues;
• Create revenues through power export and reduce cost of supply in neighboring countries, substituting to expensive fuel oil;
• Regulate Konkoure River flows: The project will increase firm capacity of the 240 MW Kaleta dam and facilitate further hydropower development in Guinea;

Projected Timeline
## Overview

- Estimated installed capacity: 42 MW
- Estimated cost: US$165 M
- Structuring: PPP with IDA guarantees and IFC Financing
- Located on the Niger River, 35 km downstream of Bamako
- Run-of-the-river dam: 1km long dam with a max height of 8 m, with 3x14MW units
- Generate nearly 200 GWh/year with a peak load of 34.4MW

## Benefits to Governments and Utilities

- Increase access to energy services (currently estimated at 30%);
- Reduce reliance on expensive diesel generation and required government subsidies;
- Provide energy to small businesses resulting in job creation, increased exports and enhanced government revenues;

## Current Status and Next Steps

- The Concession Agreement between Eranove and Government of Mali was signed on June 18, 2015.
- Reach Financial Closure by June 2016
- COD by 2020
Overview
- Estimated capacity: 50-100 MW
- Estimated cost: US$ 100-250 M
- Structuring: PPP project
- WBG – in cooperation with other donors – is supporting the Government of Senegal in the competitive selection of a private developer.
- WBG will provide stapled financing and guarantees for selected developer to ease financial close.
- Standardized and bankable documents along with transparent award process will facilitate faster financial close and provide a level playing field for lowest cost development.

Benefits to Governments and Utilities
- Speed: standardized processes and documents enable rapid tendering and financial close without the delays typically associated with project development and contract negotiations
- Certainty: balanced, bankable documents that can be offered on a non-negotiable basis with the comfort of pre-approved, financing attached to the tender and available to all bidders
- Competitive fixed-rate tariffs: tenders designed to attract competition amongst top tier industry investors, reduced transaction costs, and competitive financing terms to drive down tariff bidding.

Current Status and Next Steps
- Launch request for proposals by the end of December 2015 for financial close in mid-2016.
SUMMARY: AREAS FOR WHICH NAMIBIA MIGHT WISH TO GET WBG SUPPORT

- Natural gas to power (see Ghana and Mauritania examples)
  - Technical assistance including transaction support
  - Financing (public/private)
  - Guarantees (public/private)

- Renewable energy development (Senegal, Zambia, Tanzania, Uganda)
  - Technical assistance
  - Financing
  - Guarantees

- Energy sector reforms
  - E.g. via reimbursable advisory services
    - Client contracts WB for services
    - WB leads team comprising WB and external experts
THANK YOU

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