AfDB’s Activities in the Energy Sector: Strategies and Pipeline of Projects

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African Development Bank
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Africa, especially Sub-Saharan Africa, is energy starved

- Around 634 million people in Africa live without access to electricity – the bulk, about 632 million, live in SSA
- Africa has an overall electricity access rate of around 45% and SSA an even lower rate of 35 percent
- Even when Africans have electricity access, they must contend with unreliable supply, owing to the weak transmission and distribution infrastructure
- Access rate has been increasing at a very slow growth rate - from 23% in 1990 to 35% in 2014

**ENERGY SITUATION OVERVIEW**

**ELECTRICITY ACCESS IN AFRICA (IEA, 2014)**

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<tr>
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<th>Africa</th>
<th>Sub-Saharan Africa</th>
<th>North Africa</th>
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<tbody>
<tr>
<td>Electrification rate</td>
<td>45%</td>
<td>35%</td>
<td>99%</td>
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<tr>
<td>Electrification rate</td>
<td>71%</td>
<td>63%</td>
<td>100%</td>
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<tr>
<td>Electrification rate</td>
<td>28%</td>
<td>19%</td>
<td>99%</td>
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<tr>
<th></th>
<th>National</th>
<th>Urban</th>
<th>Rural</th>
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The AfDB Strategy for the New Deal on Energy for Africa 2016-2025 aspires to achieve universal access by 2025

- **On-grid generation** to add 160 GW of new capacity
- **On-grid transmission & distribution** that will create 130 million new connections
- **Off-grid generation** to add 75 million new connections
- **Access to clean cooking energy** for around 150 million households
Several approaches required to achieve the New Deal on Energy

**Policies & Measures**

- Strong and sustained political commitment
- Support to utility transformation initiatives
- Measures to attract private sector investment
- Creating an enabling environment to spur off-grid growth
- Promoting access to clean cooking solutions

**Investments**

- Need to boost the overall investments in the sector from USD 35 billion in 2015 to between USD 65 - USD 90 billion annually up to 2025
- The AfDB will focus on leveraging and catalysing investment
The Bank has now a dedicated energy complex that focuses on key areas.
Energy sector commitments over the last 5 years (2012 to 2016)

Total investment of ~USD 19 billion

- USD 1.6 billion mobilized & channeled by AfDB
- USD 6.4 billion invested by AfDB
- USD 11 billion in external co-financing
From 2012 to 2016, the AfDB committed USD 4 billion for energy infrastructure projects

- Over 6 GW additional capacity
- 6,300 km of transmission lines (of which 5,100 km of regional interconnections) along with 36,300 km of distribution lines and associated substations / transformers
- 1.3 million new electricity connections along with 500,000 prepaid meters and 30,000 public lighting units
- ~21 millions tons of CO2 avoided per year
- ~40,000 jobs created during construction phase and ~9,000 during maintenance phase (of which around 30% for women) and 1,700 staff trained
2017/early 2018 lending pipeline opportunities

~40 energy sector pipeline opportunities (public/private) amounting to over USD 2.2 billion in Bank financing and USD 250 million in co-financing to be channeled by the Bank and up to 3.5 times the Bank’s expected contribution in external co-financing.

Pipeline opportunities encompass: power generation – mainly IPPs (~50%), national transmission & distribution (~15%), regional power grid interconnection (~20%), enabling environment and project preparation (~10%), and oil & gas (~5%)

Majority of opportunities are in Low Income Countries (~75%)

Expected outputs/outcomes include: capacity (~3GW), network expansion (~3,500km of transmission/interconnection and ~500 km of distribution), end-user connections (~10,000) and training
2017 lending pipeline – public sector project examples

**Power Generation**
- Morocco - Midelt solar complex project – Phase I (CSP/PV 600 – 800 MW)

**Transmission & Distribution**
- Nigeria Niger Burkina Faso Benin Power Interconnection (“Northcore”)
- Ethiopia - Addis Ababa Distribution and Transmission System Improvement

**Off-grid Solutions**
- Green Mini Grid Market Development Programme Phase 2

**Energy Sector Strengthening**
- Zambia - Power Sector Budget Support Operations
Focus on the new Facility for Energy Inclusion (FEI): a USD 500 million debt financing platform for small-scale RE projects

FEI is a debt financing platform for small-scale RE projects—off-grid solar, small IPPs and mini-grids—with the objectives of aggregating capital, structuring bankable projects and accelerating delivery as to increase access to clean energy across Africa. FEI has two distinctive windows managed by separate fund managers:

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<th>On-Grid Window - USD 350 – USD 400 million</th>
<th>Off-Grid Window- USD 100 million</th>
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<td>Will provide long-term debt in project finance structures:</td>
<td>Will offer short/medium tenor debt instruments:</td>
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<tr>
<td>• Supports small-scale IPPs, mini grids and captive power projects</td>
<td>• Supports PAYGO and other energy access product distribution companies</td>
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<tr>
<td>• Focuses on renewable energies, primarily solar PV, small hydro, biomass/ biogas and wind</td>
<td>• Also serves other intermediaries structuring securitized receivables transactions (i.e. SPVs)</td>
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<td>• 3 tranches with a mixture of equity, mezzanine, and senior concessional senior debt</td>
<td>• Provides short-tenor debt instruments</td>
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<td>• Offers debt instruments between USD 2 million to USD 20 million senior/subordinated loan in USD or local currency with project sizes &lt; USD 30 million, with tenor up to 12-15 years</td>
<td>• 2-3 tranches including DFIs and commercial investors</td>
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<td>• Offers a wide range of flexible debt instruments between USD 2million to USD 10 million in USD and local currencies with a tenor up to 2-4 years</td>
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Other new focus areas/initiatives under development: main objectives

**Off-grid Revolution**
- To converge towards a suite of interventions to support the scale-up of “off-grid” investment and agree on basic partnership arrangements across different stakeholder groups

**Africa Green Financing Facility**
- To finance energy efficiency and small scale renewable energy projects in selected African countries

**Renewable Energy Co-guarantee Platform**
- To establish a co-guarantee platform for renewable energy projects which envisages that IFIs will jointly work on extending more guarantees by relying on the due diligence of participating IFIs and thereby leveraging more private investment

**Scaling up Clean Cooking**
- To develop financial solutions for suppliers and consumers, coupled with mobile payment solutions and innovative distribution models
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