Financing Rural Electrification

Global Conference on Rural Energy Access
5 December 2013
Introduction

Increasing energy access is a core priority for the Bank

- Energy objective: scaling up access to energy services while assisting Africa adopt a sustainable path to a low-carbon economy

- AfDB has made significant investments to improve energy access mainly focused on on-grid electrification/densification

- In the past, the Bank’s interventions in off-grid connectivity projects were limited to the electrification of rural schools, health centers, etc. as part of larger rural development projects

- The Bank has more recently been involved in developing off-grid systems to power households and local businesses in rural areas
Introduction

Between 2011 and 2012 AfDB doubled its clean energy commitments and became the largest financier in the continent.
Challenges related to rural electrification (1)

Multiple challenges exist ranging from policy & regulatory challenges to financing challenges...

<table>
<thead>
<tr>
<th>Policy &amp; regulatory challenges</th>
<th>Market development challenges</th>
<th>Financing Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of long-term sector planning</td>
<td>Lack of innovative business models for rural energy markets</td>
<td>Adequate financing terms (e.g. maturity, interest, grace)</td>
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<td>Lack of political priority and commitment</td>
<td>Inadequate market knowledge</td>
<td>Lack of risk mitigation tools</td>
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<td>Lack of integrated vision of the energy sector</td>
<td>Resource availability and predictability</td>
<td>Insufficient early stage/seed support</td>
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<td>Poorly designed tariff regimes</td>
<td>Technology risk</td>
<td>Currency risk (e.g. convertibility, exchange stability)</td>
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<td>Demand-side barriers</td>
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Challenges related to rural electrification (2)

...from technical and capacity challenges to information challenges. Addressing these challenges is fundamental for success...

- **Technical and capacity challenges**
  - Lack of capacity to manage, operate and maintain systems
  - Knowledge gap in relation to available technologies
  - Difficulties in pricing risk
  - Lack of pilot projects to demonstrate technology
  - Insufficient management and enforcement capacity

- **Structural challenges**
  - Lack of commercially viable utilities
  - Poor condition of National Grids
  - Need for Base Load and interconnections
  - High transaction costs vis-à-vis project size
  - “Business as usual” bias

- **Information challenges**
  - Lack of communication between public and private sectors
  - Limited local involvement and participation
  - Lack of public support (notably for off-grid solutions)
AfDB’s Financing Instruments

AfDB’s instruments to address these challenges, crowding-in other financiers and mitigate project risks

AfDB’s instruments:
- AfDB Statutory Resources
  - AfDB-managed Donor Resources (TFs, programs, etc.)
  - Additional External Resources
- Non-sovereign Operations
- Sovereign Operations
  - Debt
  - Equity
  - Guarantees
  - Concessional
  - Grants
  - Non-concessional
- CBFF
- AWF
- SEFA
- CIFs
- GEF
- ITF
- Other Initiatives:
  - Africa50 Fund, FAPA, ACSP, NEPAD-IPPF, RWSSI, ICA, AFP, ClimDev Africa, several bi-lateral funds, etc.
AfDB’s project risk mitigation instruments

AfDB has targeted instruments to mitigate selected risks and improve bankability of projects

**Partial Credit Guarantees**
- Guarantee to covered a portion of *scheduled loan repayments*
- Can support mobilization of funds for project finance and financial intermediation

**Partial Risk Guarantees**
- Financial Guarantee that covers non-performance of a Gov’t or GOE on its obligations, for instance linked to a PPA
- Specifically it can cover:
  1. currency inconvertibility
  2. political force majeure
  3. expropriation
  4. breach of contractual payment obligations
- Only covers debt service, including principal and interest
- Counter indemnity required from the Government
Sustainable Energy Fund for Africa

SEFA is a USD 60 million Multi-Donor Trust Fund designed to improve the risk-return profile of clean energy investments including in rural areas.

<table>
<thead>
<tr>
<th>SCOPE (Size range)</th>
<th>I - PROJECT PREPARATION GRANTS</th>
<th>II - EQUITY INVESTMENTS</th>
<th>III - SE4All AND ENABLING ENVIRONMENT (Q4 2013)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation support to medium-size RE/EE Projects [ USD 30m - 200m ]</td>
<td>Seed/growth capital for small to medium sized RE/EE Projects [ USD 10m - 80m ]</td>
<td>Enabling environment for private investments and SE4All activities</td>
<td></td>
</tr>
<tr>
<td>FINANCING INSTRUMENT</td>
<td>Grants to project developers / sponsors</td>
<td>Equity and TA through a Private Equity Fund</td>
<td>Grants for TA and capacity building of public actors</td>
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<tr>
<td>RISKS</td>
<td>Development risk</td>
<td>Development risk, Financing risk</td>
<td>Policy risk</td>
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Africa Renewable Energy Fund

AfDB/SEFA incubated the “African Renewable Energy Fund”
Rural Electrification Example

The Senegal Rural Electrification Project involves among others the installation of 6 mini-grids and 177 solar PV systems in rural areas

- The project is structured as a Public Private Partnership (PPP), using a concession model with Output Based Aid (OBA) capital subsidy

- A subsidy is provided to the concessionaire through the Agence Sénégalaise d’Électrification Rurale (ASER) to enable recovery of the investment through regulated tariffs over time

- The winning bidder for a concession is the firm that offers to provide the most number of connections in the first three years for a pre-determined subsidy amount

- The Bank is financing part of the concession subsidies
SE4All Africa Hub

SE4All Africa Hub can be a facilitator

- Catalyst for SE4All country action (SE4All Action Plans and Investment Prospectuses)
  - Provision of guidance (Action Plan guidelines, decentralized energy strategy etc.)
- Mobilization of financing
- Exchange of best practices
- Linking African opt-in countries with so-called High Impact Opportunities (HIOs) and thematic Hubs
THANK YOU