ENABLING POLICY AND REGULATORY FRAMEWORK FOR GREEN MINI-GRIDS DEVELOPMENT

The Context and the Process

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Presented at the workshop on Green Mini-Grids For Improving Electricity Access,
Abidjan, Côte d’Ivoire, September 21, 2016
Topics

- The context
- Principles of policy and regulatory framework
- The process of creating policy and regulatory framework
- Case study?
- Sustainable Energy Fund for Africa (SEFA)
THE CONTEXT
Characteristics of Green Mini-Grids Development in Africa

- Relatively new agenda in the continent as power sector has been dominated by government for many years focusing on meeting “urban” energy demand
- Private participation has been a top agenda of recent
- Policy interventions (statements and strategies)
- Regulatory environment (regulations, Electricity Acts)
- Financing options (governments, donors, private joint venture)
- Resource potential (solar, small hydro, geothermal, wind, tidal, biomass, Municipal wastes)
- Many projects which are perceived to be “small for private sector investment” but crucial for rural electrification
Rationale

**FUNDAMENTAL PROBLEMS**

Growing energy demand *(annual growth between 10-15%)*

The number of people without access to electricity *(65% without access in Sub-Saharan Africa)*.

Ensuring the supply of energy sources to remote areas *(some as low as 10% access)*

Volatile oil price *(dropping but no guarantee)*

Rising carbon dioxide emissions growth *(environmental concerns)*

Energy Security

**GREEN MINI-GRIDS**

Reliable and affordable energy services *(increasing the ratio of energy mix)*

Viable option at most places through on/off grid *(grid extension costs is prohibitive)*

Enhance productivity and competitiveness

Alternative to fossil fuels

Sustainable and clean energy

Decreasing the carbon dioxide emissions
Private sector engagement

- Private sector engagement in developing renewable energy resources is KEY
Private sector engagement

Is there conducive investment regime for private sector?.....

Expecting more output
..........from less input!
Projects development requirement: Tedious and unclear projects development procedures (the case of ESIA, etc)

Project financing: sometimes the financing windows available are accompanied with difficult procedures for the projects developer. A need for Dedicated financing schemes to support private sector investments

Energy pricing and payments issues (REFIT, payments by the off-taker, etc)

Management capacities: private sector is still infant, don’t have the capacity to take through the projects on the entire project cycle
Challenges inherent to private sector investment in GMGs

- **Information barriers**: information on various issues related to projects development are not available (data, legal requirements, etc).

- **Development capacity**: Lack of entrepreneurial attitude (possibilities for JV, etc).

- **Projects scales**: Many investors would like to engage into large scale projects which are not many – the question of Private sector interest and investments.

- **Planning**: Unsustainable energy infrastructure development plan (when will the grid come to my site?)
ENABLING ENVIRONMENT ISSUES
GMGs face some difficulties down the line

Enabling environment is especially the key in supporting the realization of mini grids for a wide update of electrification process of the majority of the African population

Creating an environment conducive to investment in renewable energy requires the right mix of institutional capacity
  - regulatory frameworks
  - financial incentives
  - technical assistance
  - and other factors

Regulatory Frameworks and Financing:
  - Increase transparency and accountability around decision making processes to build stakeholder/investor confidence
  - Develop supportive financial regulations and mechanisms
    - Cost-competitiveness for renewable energy in country
    - Trade incentives for renewable energy technology and infrastructure
Enabling environment issues

• Institutional Capacity:
  • Identify clear management roles and responsibilities across institutions and agencies
    • Renewable energy data and information
    • Management guidelines and processes
  • Ensure sufficient investment in human capacity and local skills development in country
    • Dedicated budget and staff to renewable energy development
    • Develop technical and vocational training opportunities
  • Building institutional capacity in terms of
    • technical know-how and
    • The efficient management of and access to crucial energy data and information is also essential to creating an enabling environment.
    • This requires budgeting for sufficient human capacity and technical systems, as well as promoting skills development by offering vocational training opportunities.
The mini-grid policy decisions should be based on sound data and information, and address:

- Whether or not to integrate mini-grids as an option for rural electrification
- Strategic approach to take (centralized or decentralized)
- Financing modalities for mini-grids
- Subsidy schemes for mini-grids
- Electricity tariffs set up
PRINCIPLES OF POLICY & REGULATIONS
Regulation is always based on principles – either intended or unintended ones.

**Stability and sustainability**

A stable policy and regulatory environment is the basis for attracting investment into mini-grids.

Mini-grid investors require reassurance that both macro-scale and specific regulatory support mechanisms will remain **stable and predictable** for the life of the project.

**Clarity and Comprehensiveness**

An incomplete or unclear mini-grid policy and regulatory framework will hinder rather than foster mini-grid roll-outs.

There should be full clarity on **permitted tariffs, license and permit requirements, import duties, VAT, company taxes, and other possible incentives and subsidies**, as well as the other policy and regulatory issues.
• **Accessibility**
  • Contact points for permitting, technical and financing support are easily accessible and available.

• **Cost-effectiveness and Efficacy**
  • Regulations, procedures, and potentially resulting delays create transaction costs for the project developer, which are particularly critical for smaller developers.
  • minimizing bureaucratic delays for granting licenses and permits, responding to inquiries, or providing other support.

• **Light-handedness and Simplicity**
  • The lesser the regulation the better, especially with small mini-grids
  • Very small mini-grids can be exempted from all regulation.
Principles of policy & regulations

- **Transparency and Predictability**
  - Regulatory decisions must be *transparent, fair, independent* of power suppliers, and prevent government interference in day-to-day operations.
  - Regulatory decisions on similar issues should be *consistent* with previous decisions to give greater credibility to the regulatory process.

- **Technology Neutrality**
  - Incentives for mini-grids should allow a *level playing field* between rural electrification technologies, and between alternative energy sources.
  - All potential cost effective mini-grid technologies should be considered in a mini-grid policy and regulatory framework.
THE PROCESS FOR CREATING ENABLING ENVIRONMENT
Overview of policy and regulatory levels and their linkages
(Source: African–EU Renewable Energy Cooperation Programme- RECP)
The process for creating policy & regulatory framework for GMGs

- **Energy policy**
  - National electrification policy
  - Rural electrification strategy and plan
  - Energy and electricity law
  - Tariff policy and regulation

- **Economic policy and regulation**
  - Fiscal policy and regulation

- **Customer and environmental regulation**
  - Technical regulations
  - Quality of service policy and regulation
  - Environmental policy and regulation
The process for creating policy & regulatory framework for GMGs

• **Licensing and contract regulations**
  • Permit regulations
  • Power purchase agreements
  • Concession contracts and schemes

• **Financial support**
  • Grants and subsidies
  • Loan support – loan provision and/or loan guarantees

• **Technical support**
  • To the developers (financial, managerial, technical)
  • To the institutions (managerial)
ABOUT SUSTAINABLE ENERGY FUND FOR AFRICA (SEFA)
Sustainable Energy Fund for Africa (SEFA) is a multi-donor trust fund administered by the African Development Bank – funded by the Governments of Denmark, the United States, the United Kingdom and Italy – to support small- and medium-scale Renewable Energy (RE) and Energy Efficiency (EE) projects in Africa.

The objective of SEFA is to support sustainable private-sector led economic growth in African countries through the efficient utilization of presently untapped clean energy resources.
Project Preparation
- Access to Finance
- Technical Assistance

Equity Investments
- Private Equity Capital
- Technical Assistance

Enabling Environment
- Policy and Regulatory Development
- Public Sector Support
- Capacity Building and Advisory
- Market Development and Preparation

SE4ALL
SEFA Portfolio

21 PROJECTS
16 COUNTRIES + 3 multinational projects
3 COMPONENTS = $15.28 MILLION

Project Preparation  Equity Investments  Enabling Environment

$711 MILLION in investments
230 MW of installed capacity
## Intervention and scope - 3 financing windows

<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>
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<tbody>
<tr>
<td><strong>Preparation support to medium-size RE/EE Projects</strong> [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>
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<tr>
<td><strong>FINANCING INSTRUMENT</strong></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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<td><strong>MANAGEMENT</strong></td>
<td>SEFA Secretariat</td>
<td>Berkeley Energy*</td>
<td>SEFA Secretariat / SE4All Africa Hub</td>
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Enabling Environment Framework is essential for developing “Green Mini-Grids” in Africa the Governments have to uphold the true partnerships!
Thank You
Merci