

ENABLING POLICY AND REGULATORY FRAMEWORK FOR GREEN MINI-GRIDS DEVELOPMENT

The Context and the Process

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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!



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Challenges inherent to private sector investment in GMGs

- 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

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 uptake 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.

Enabling environment issues

- 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 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

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



Principles of policy & regulations

- **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.

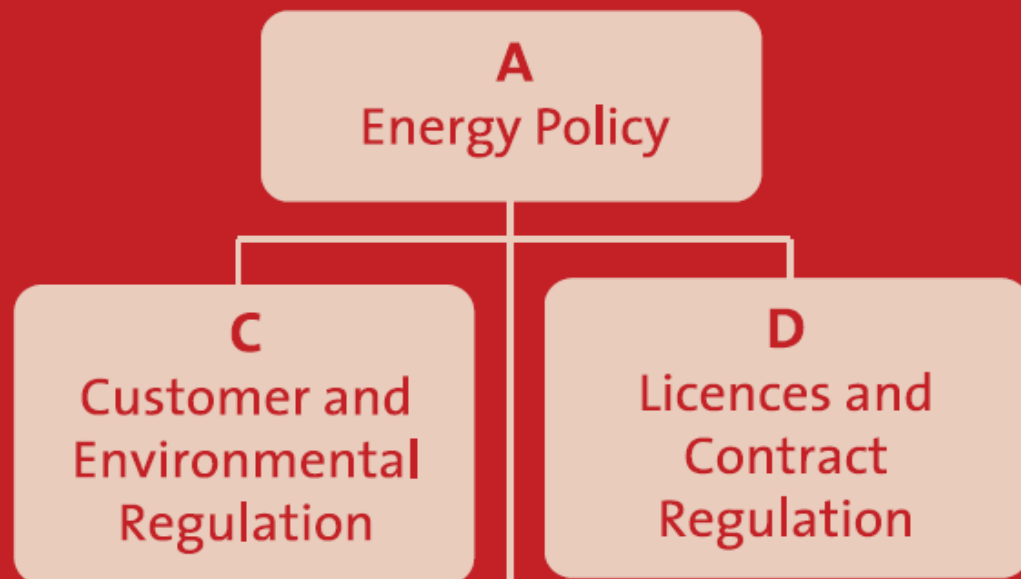
Principles of policy & regulations

- **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

Energy Sector Governance



Fiscal Policy and Regulation

B
Economic Policy and Regulation

Support Instruments

E
Financial Support

F
Technical Assistance

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)



- 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

SE4ALL

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

21 PROJECTS

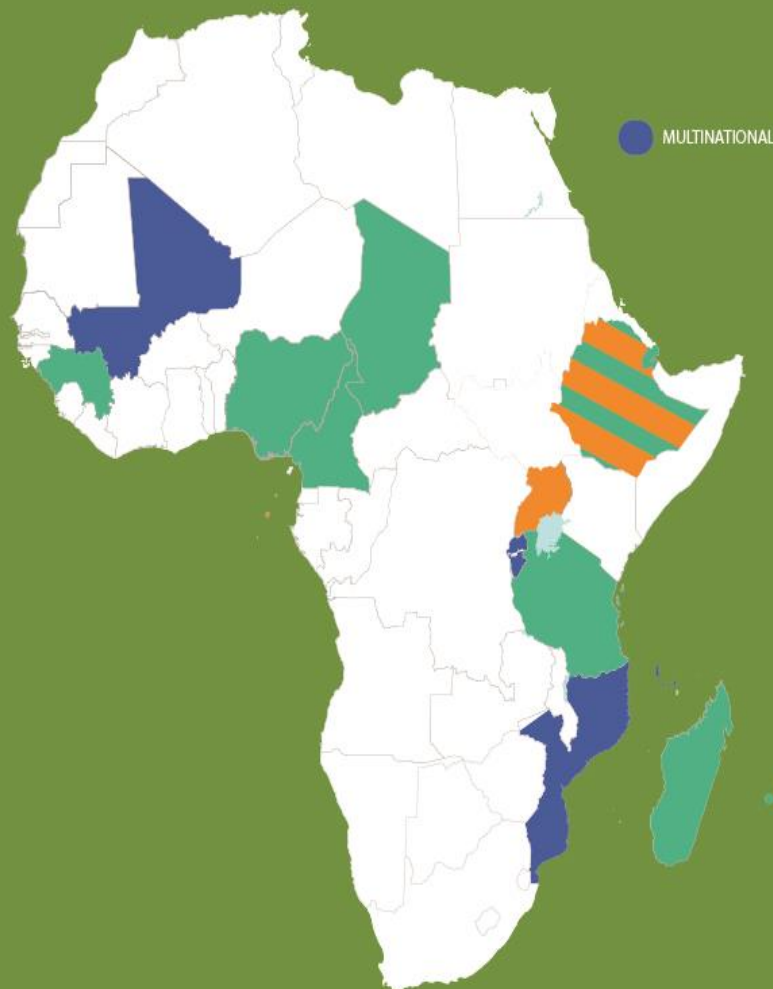
16 COUNTRIES + 3 multinational projects

3 COMPONENTS = \$15.28 MILLION



\$711 MILLION in investments

230 MW of installed capacity

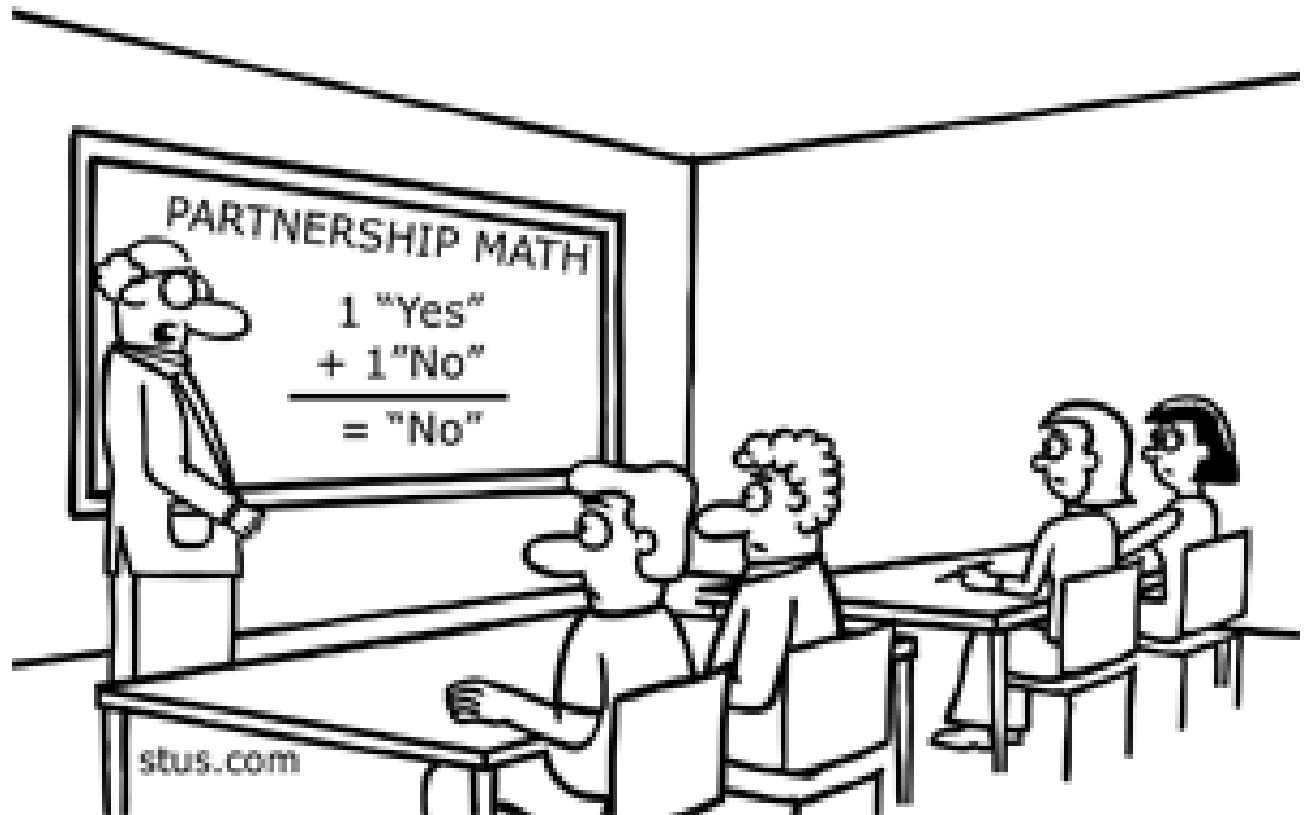


Intervention and scope - 3 financing windows



	I - PROJECT PREPARATION GRANTS	II - EQUITY INVESTMENTS	III - SE4All AND ENABLING ENVIRONMENT (Q4 2013)
SCOPE (Size range)	<i>Preparation support to medium-size RE/EE Projects</i> [USD 30m - 200m]	Seed/growth capital for small to medium sized RE/EE Projects [USD 10m - 80m]	Enabling environment for private investments and SE4All activities
FINANCING INSTRUMENT	Grants to project developers / sponsors	Equity and TA through a Private Equity Fund	Grants for TA and capacity building of public actors
MANAGEMENT	SEFA Secretariat	Berkeley Energy*	SEFA Secretariat / SE4All Africa Hub

Enabling Environment Framework is essential for developing “Green Mini-Grids” in Africa the Governments have to uphold the true partnerships!





Thank You

Merci