

Policy and regulatory framework for Clean Energy Mini-grids

National Experiences in the ECOWAS region



Moderator: Dr. Peggy Mischke, RECP Policy Advisory

High-level workshop on energy access in West-Africa

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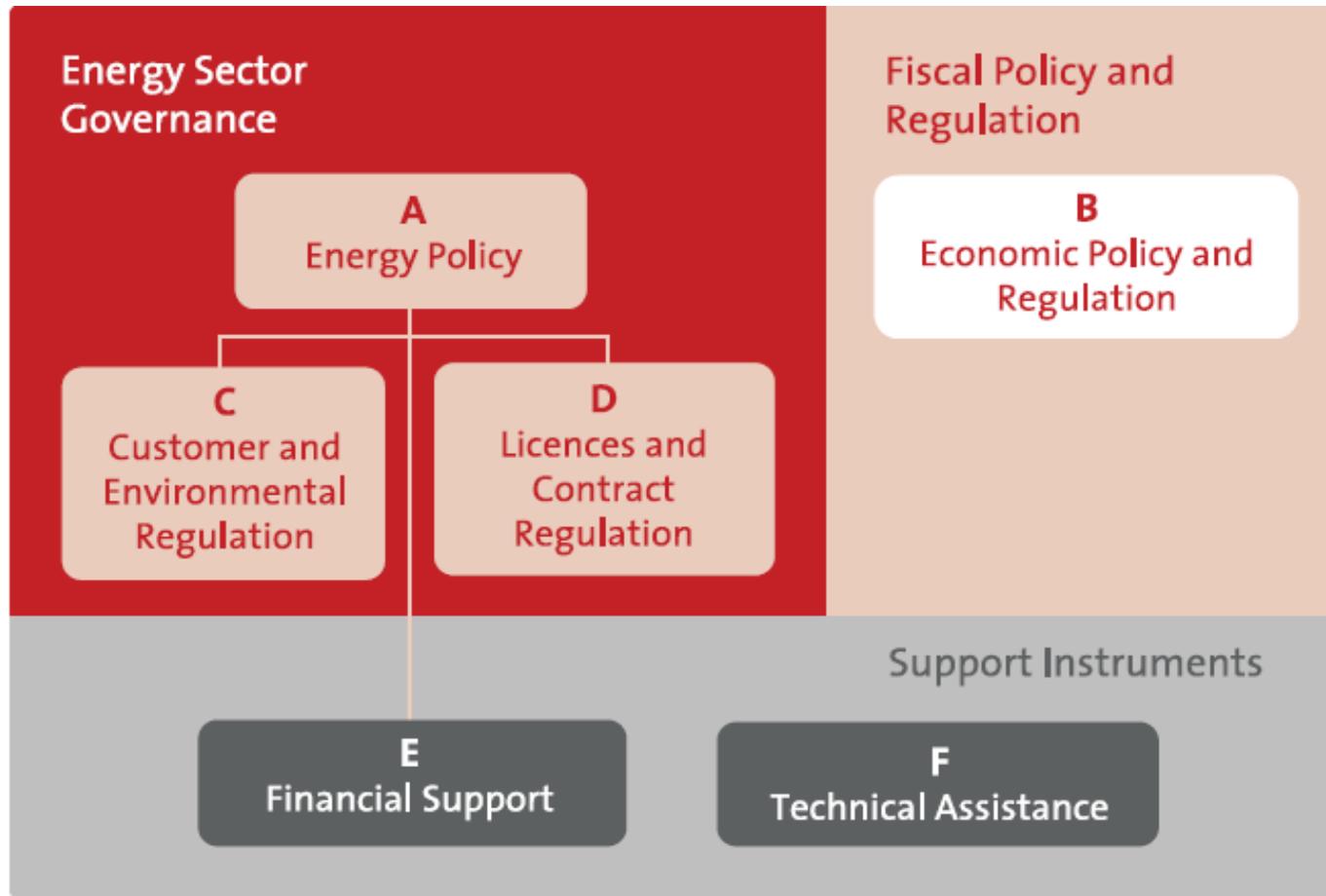
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Technical Assistance and Capacity Building for CEMGs

A conducive policy and regulatory framework for Clean Energy Mini-grids (CEMGs) is needed.

Session 1

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Session 2

Ref: EUEI PDF Mini-Grid Policy Toolkit, 2014

Session 2: Economic, Customer and Environmental Policy and Regulation for CEMGs

Thematic focus:

- Fiscal Policy and Regulation
- Technical Regulation
- Quality of Service Regulation
- Environmental Policy and Regulation

Session 2: Economic, Customer and Environmental Policy and Regulation for CEMGs

Fiscal Policy and Regulation:

- can **support mini-grid implementation** through low taxes and import duties, accelerated depreciation, or subsidies;
- can define **specific taxes on income, company profits, sales, property, value added**, for example for **mini-grid developers**;
- can specify **reduced or exonerated import duties, taxes and fees for mini-grid equipment or components**, such as solar PV modules.

The lower these taxes and import costs are, the lower **mini-grid electricity tariffs** can be. Clear and reliable regulations increase **investor trust**.

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Country experiences:

Mr. Kwabena Ampadu Otu-Danquah

Energy Commission

Ghana

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Technical Regulations, Codes and Standards:

- are required for all **mini-grid operator models** to ensure **safe and reliable operations** for the protection of customers;
- are designed, published, controlled and reviewed by a **regulator**;
- define **minimum technical standards** for generation and distribution networks and O&M requirements for products and equipments;
- define **interconnection rules** for safe and robust interconnections between the main grid and a **mini-grid**.

The **access and disbursement of public subsidies** can be linked to the adherence to such standards.

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Quality of Service Regulations and Standards:

- comprise the **quality of the energy product and service** (e.g. frequency and voltage levels), the **quality and availability of its supply** (e.g. hours per day served), and the **quality of commercial service** (e.g. days to connect a new customer);
- are established, monitored and enforced by a **regulator** or a specialised **rural energy agency**;
- must be **realistic and affordable** to all parties and should include a mechanism for **consumer complaints**.

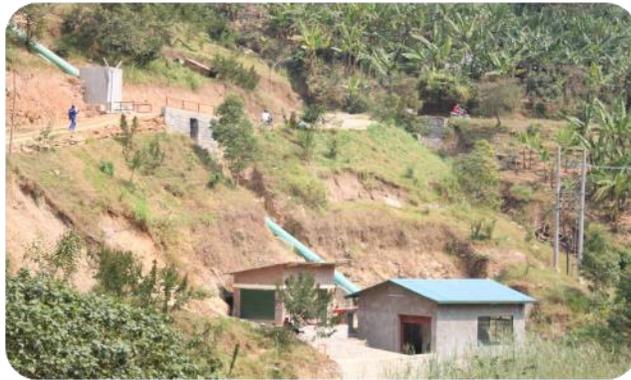
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Environmental Policies and Regulations:

- are needed to **protect the local environment and community** from harmful project-induced impacts;
- assist in defining **environmental and social risk mitigation measures**;
- lay out procedures and requirements for conducting preliminary or full **environmental and social impact assessments**;
- specify procedures and fees for obtaining **environmental permits**.

The local sustainability of **clean energy mini-grids** can often be ensured with **simplified standards and norms**.

CEMGs are usually environmentally friendly, compared to traditional fossil-fuel based power generators.



Ref: EUEI PDF Mini-Grid Policy Toolkit Workshop, 2013

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An example of a quality assurance framework:

Mr. Ian Baring-Gould

National Renewable Energy Laboratory (NREL)

United States of America

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Country experiences:

Dr. Alfred Dieng / Mr. Baba Diallo

Rural Electrification Agency of Senegal (ASER)

Senegal

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Questions and Answers

Thank you for your attention!

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GOPA - International
Energy Consultants GmbH

Bad Homburg, Germany

www.gopa-intec.de

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ECOWAS Centre for
Renewable Energy &
Energy Efficiency
(ECREEE)

Praia, Cape Verde

www.ecreee.org

www.africa-eu-renewables.org



Dr. Peggy Mischke
EconergyPM – Clean Energy Expertise
www.peggymischke.com