





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

March 27-28, 2017 Abidjan, Côte d'Ivoire



## Content

Session 1:

**Energy and Electricity Policy for Clean Energy Mini-Grids (CEMGs)** 

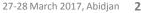
- An example from Liberia
- An example from Ivory Coast 2.
- An example from Cape Verde 3.
- 4. An example from Sierra Leone

Session 2:

**Economic, Customer and Environmental Policy and Regulation for CEMGs** 

- An example from Ghana
- An example of a quality assurance framework
- An example from Senegal







## **Content - continued**

Session 3:

Licenses, Contract Regulation and Financial Support Schemes for CEMGs

- 1. An example from Mali
- 2. An example from Nigeria
- 3. An example from the Gambia
- 4. An example from Niger

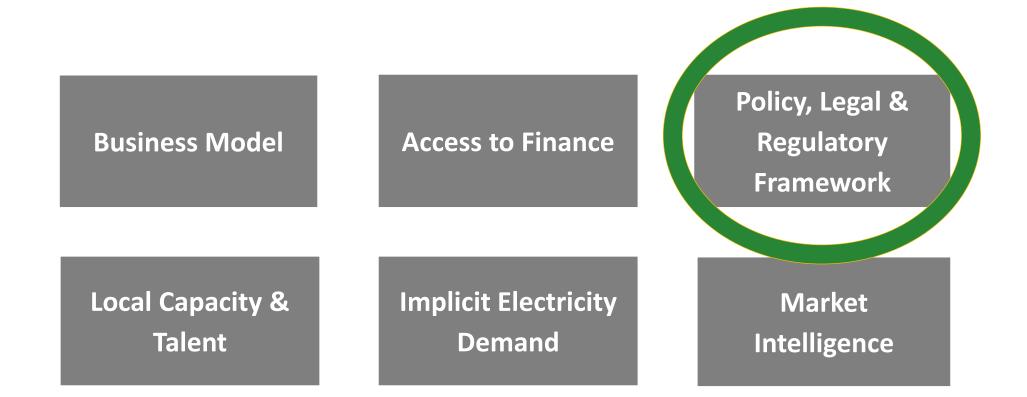
**Technical Assistance and Capacity Building for CEMGs** 







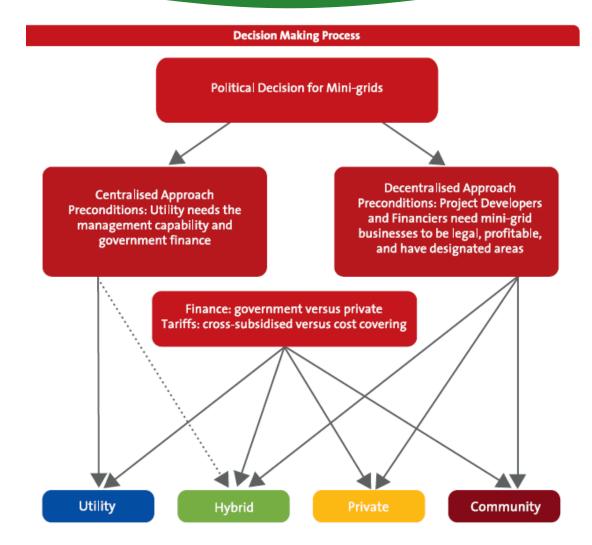
What barriers are to overcome for a quick scale-up of rural energy access programmes?







## Decision making for CEMGs: No one size fits all solution!

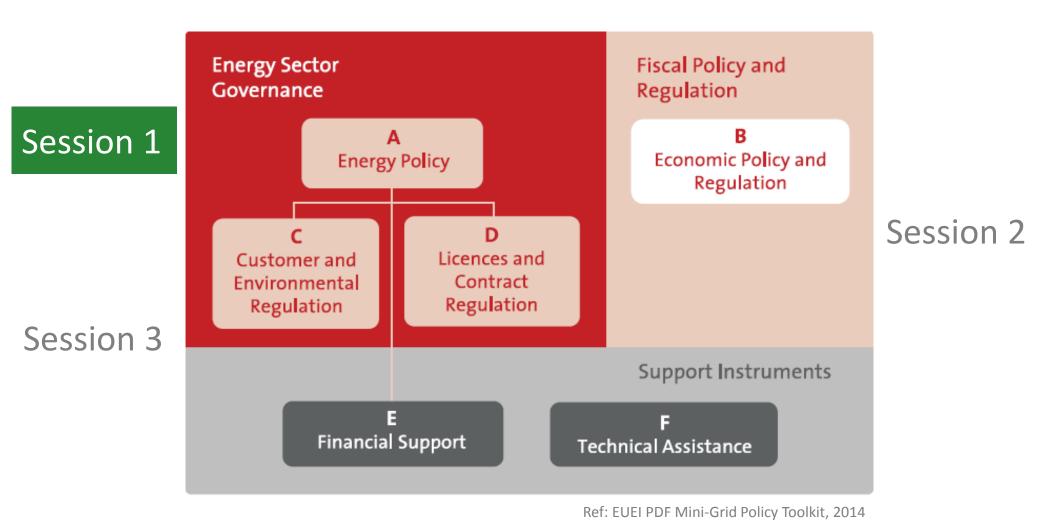








A conducive policy and regulatory framework for Clean Energy Mini-grids (CEMGs) is needed.







Thematic focus:

- National Electricity or Electrification Policy
- Rural Electrification Strategy and Master Plan
- Energy and Electricity Law
- Tariff Policy and Regulation





#### A National Electricity or Electrification Policy:

- defines objectives, identifies priorities, and outlines the broad guidelines for sector development, as a whole, or with focus on a specific sub-sector, such as rural electrification;
- is a pillar of public support of rural electrification strategies, targets and programmes, including mini-grid initiatives;
- is guided by the political aim for universal national electricity access;
  This policy lays the groundwork for the entire enabling environment and could include an explicit decision to integrate mini-grids into a rural electrification approach.





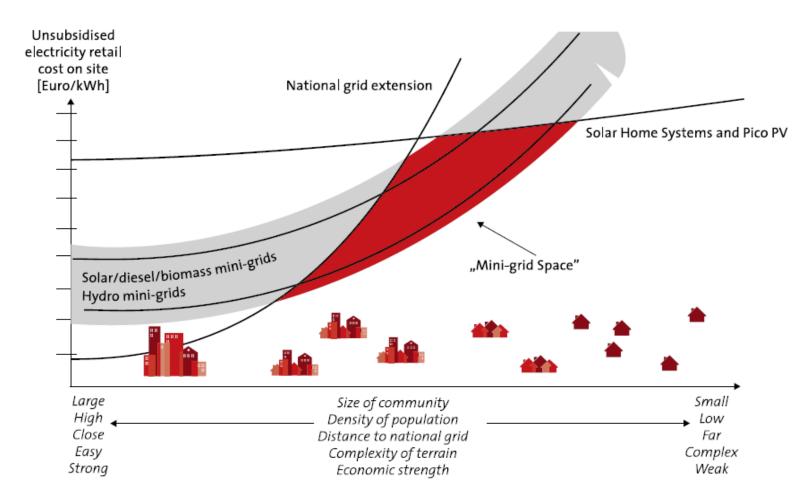
#### A Rural Electrification Strategy and Master Plan:

- includes a roadmap how to achieve national electricity targets on the base of a longer term planning horizon;
- indicates grid and off-grid areas on the basis of state of the art planning tools to assist with the selection of mini-grid project sites;
- provides key planning data to mini-grid project developers, e.g.
  renewable energy resource potentials, population density, current energy access situation, costs;
- needs to be reviewed periodically to adapt to changing circumstances and evolving energy access targets.





## Rural electrification planning is more than just minigrids!



Ref: EUEI PDF Mini-Grid Policy Toolkit, 2014





#### An Energy, Electricity or Renewable Energy Law:

- establishes the legal and institutional framework for public planning and the implementation and enforcement of regulations for rural electrification in general and mini-grids in particular;
- specifies the responsibilities of important actors and provides the basis for any specific regulations or promotion instruments, such as a rural energy fund;
- is usually established through an act of parliament.





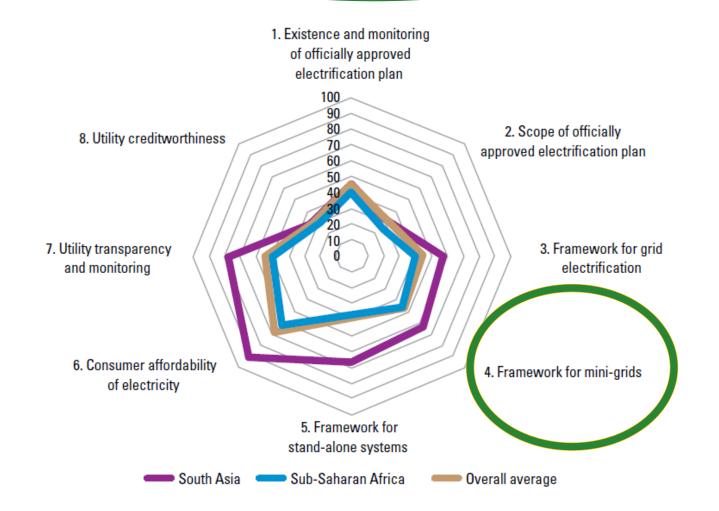
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A recent global benchmarking of regulatory indicators for energy access includes mini-grid frameworks.





Ref: ESMAP RISE, 2016



Country experiences:

Mr. Dele Shobayo

Ministry of Lands, Mines and Energy

Liberia







Country experiences:

# Mr. Ghislain Tanoh / Mr. Ahamed Diarrassouba Société des Énergies de Côte d'Ivoire (CI- Énergies) Ivory Coast





### Tariff Policies and Regulations (including Connection Fees):

- comprise any charge, fee, price or rate that has to be paid for purchasing energy and electricity services;
- are central to the **viability** of any rural electrification initiative, including **mini-grid businesses**;
- depend on the mini-grid business model: uniform national tariffs versus site and project-specific cost-reflective tariffs.

Tariffs must allow for a **balance** between **commercial viability** of a **minigrid project** and the **consumers' ability and willingness to pay**, often considering targeted **subsidies**.





Country experiences:

Ms. Karine Monteiro

**Economic Regulatory Agency (ARE)** 

Cape Verde







Country experiences:

Mr. Benjamin Kamara

Ministry of Energy

Sierra Leone







**Questions and Answers** 







## Thank you for your attention!

intec GOPA - International Energy Consultants GmbH EU Energy Initiative Partnership Dialogue Facility (EUEI-PDF)

c/o Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH ECOWAS Centre for Renewable Energy & Energy Efficiency (ECREEE)

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