African Forum for Utility Regulators

Forum Africain pour la réglementation des services publics

HARMONISING REGULATIONS ON THE AFRICAN CONTINENT

INSIGHTS AND OUTLOOK

OCTOBER 2025

RE POWER WEBINAR ON REGULATORY SUCCESS FOR MICROGRIDS IN AFRICA

POLICY & REGULATIONS

Policy

- A set of guiding principles or strategic objectives established by a government to achieve specific goals.
  - It provides a framework for decision-making and planning.
  - Are broad, general and aspirational

  Examples in Mini-Grids:
  - National electrification strategies.
  - Policies encouraging private sector participation in rural electrification

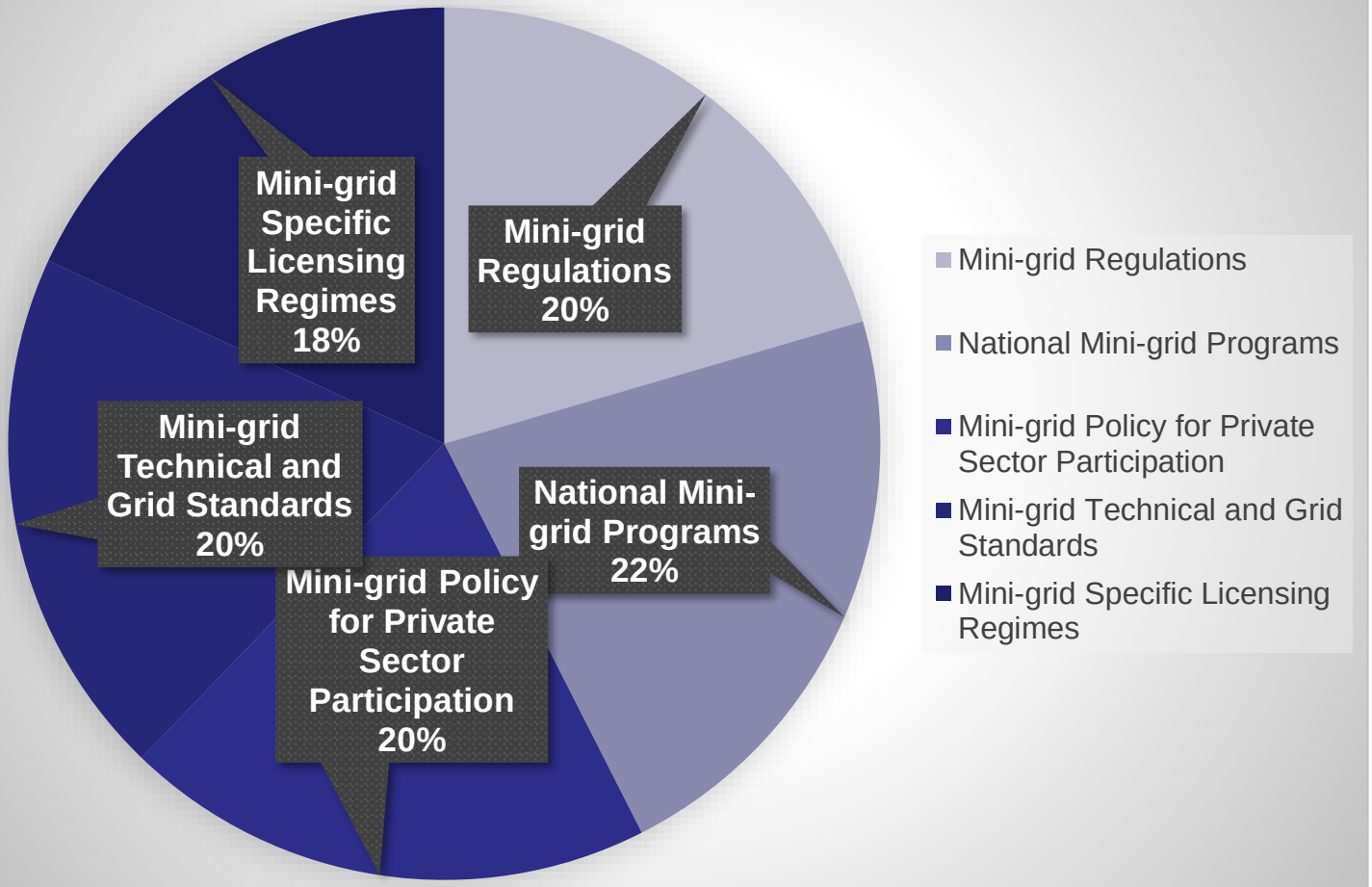
Regulation

- Legally binding rules created by government authorities to implement policies.
  - They ensure compliance and govern specific activities.
  - Detailed and prescriptive imposing obligations, set standards & include penalties for non-compliance

  Examples in Mini-Grids:
  - Licensing requirements for mini-grid operators.
  - Rules governing tariffs, including cost-reflective pricing mechanisms.
  - Compensation mechanisms for mini-grid developers when the main grid expands into their service areas

CURRENT OUTLOOK

Aspects on Mini-grid Frameworks



NOTE: This is based on the African Development Bank Electricity Regulatory Index (ERI) for Africa from 43 countries surveyed on the continent

CURRENT OUTLOOK

MATURITY	SOME CHARACTERISTICS	EXAMPLES
High maturity/Well-developed frameworks	A. Mini-grid policy/regulation B. Technical/connection standards C. licensing/registration rules D. cost-reflective tariffs E. mini-grids included in national electrification plans F. rules for grid arrival	A. Nigeria B. Kenya C. Ghana D. Senegal
Moderate maturity	A. Some frameworks exist (licensing, technical standards, electrification plan inclusion) B. Gaps remain in implementation, tariffs, enforcement, or clarity around selling to grid or dealing with grid arrival.	A. Mozambique B. Mauritius C. Eswatini D. Benin E. Gambia
Low maturity/nascent/framework gaps	A. Limited or no clear mini-grid regulation; or policy exists but many of the key regulatory, technical, licensing or tariff tools are missing. B. Do not have national electrification plans that include mini-grids, or the plans only cover grid-connected mini-grids; some have no plan at all.	A. Cameroon B. Central African Republic C. Chad D. Democratic Republic of Congo E. Gabon F. Seychelles G. Guinea H. Mauritania

Some countries can be seen in two categories or more as there are many different factors affecting their status

One outlook to tell maturity and readiness of a country is the interest of the private sector in the mini-grid sector of that country

CURRENT OUTLOOK

SUMMARY VIEW OF SOME MARKETS

- Most Mature Market
- Comprehensive Regulations
- Reviewed Recently (2023)
- Regulatory decentralisation

- Earliest development
- Various owner categories
- Numerous mini-grids

- Innovative approaches
- Reviewed Recently (2023)
- Mini-grid electrification targets

- Innovative approaches
- Reviewed Recently (2023)
- Mini-grid electrification targets

GAPS ON CONTINENTAL DATA

- In some countries, the national electrification plans only cover grid-connected systems
- There are a number of countries (listed in the ERI) that do not have national electrification plans (or at least no published ones including mini-grid)
- Licensing or registration regimes for mini-grids exist in many countries (somewhat fewer than those with technical codes

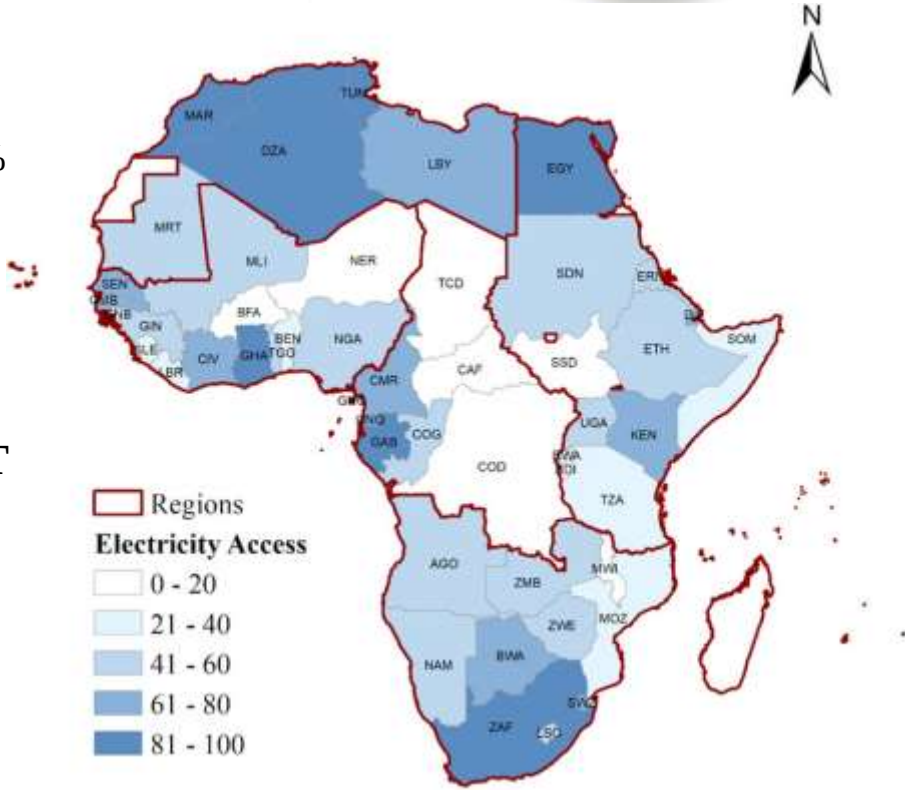
CURRENT OUTLOOK

BACKGROUND

Sub-Saharan Africa Electrification Rate – around 40% Sub-Saharan Africans without Electricity – around 590 million (80% of the global population without power in Africa)
North Africa – closer to 95% (Morrocco, Egypt etc.)
Countries with Renewable Energy investments – around 70% (Kenya, Ghana)
Regulation is important in addressing the issues around electrification of the continent

CHALLENGES OF LIMITED REGULATION AND HARMONISATION ON THE CONTINENT

1. Barrier to Regional Trade and Integration
2. Unattractive environment for private sector investment
3. Limited access to finance and technology
4. Inefficient utility performance
5. Energy Access and Affordability Challenges
6. Environment and Social Risks
7. Poor data collection and transparency
8. Slow green energy transition



Map of Africa Showing Electrification Rates 2019
Source: Pappis, Ioannis. (2022). Strategic low-cost energy investment opportunities and challenges towards achieving universal electricity access (SDG7) in forty-eight African nations. Environmental Research: Infrastructure and Sustainability. 2. 10.1088/2634-4505/ac7900.

CURRENT OUTLOOK

INTERVENTIONS IN PLACE

CONTINENTAL INIAITIVES

1. African Union – Africa Single Electricity Market
2. African Forum for Utility Regulators – AFUR African Model Mini-grid Regulations Tool & AFUR Enhanced Mini-grid Tariff Tool

REGIONAL INIAITIVES

1. Power Pools to ease trade
2. SADC's Regional Electricity Regulators Association (RERA)
3. ECOWAS Regional Electricity Regulatory Authority (ERERA)

GENERALINIAITIVES

1. Regulatory Capacity Building for national regulators.
2. African Energy Regulators Peer Review Mechanisms.
3. Standardised PPA frameworks promoted in Kenya, Ghana, and Nigeria.
4. Encouraging Private Sector Participation; Mini-grid and off-grid market regulation improvements in:
   a) cost-reflective mini-grid tariffs
   b) interconnected mini-grid regulation
   c) PPP model for rural electrification

IS THERE MORE TO DO?

1. Pan African alignment on regulatory issues and frameworks
   a) Empowering the regional regulators and continental regulators
2. Accelerated Unbundling of Sector
   a) If insistence on vertical bundling be TRANSPARENT
3. Embracing Digital Revolution
4. Encouraging Local Currency financing solutions
5. Clearer Off-grid Policy frameworks
6. Aligning planning at national level to regional level
7. Regulatory Independence and Capacity Building
8. Harmonising of technical and grid code standards

CURRENT OUTLOOK

AFUR EXPERIENCE OF MINI-GRID SECTOR

1. Regulatory Space for mini-grids
2. Tariff Methodology for mini-grids
3. Benchmarking and data issues
4. Relationship between the private and public sector

Merci beaucoup

Thank You

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