Electricity Regulatory Index for Africa (ERI) 2022
The ERI is an empirical assessment of the Regulatory Environment and Performance of Electricity Regulators in Africa

- The ERI instrument includes benchmarks based on a continuously growing, proprietary database of utilities and regulators across the African continent. It also tests the actual impact of the regulator’s actions on the power sector to:

  - Assess underlying regulatory factors that impact performance
  - Understand regulatory shortcomings to identify a set of interventions for success
  - Prioritize the intervention programs needed to improve regulatory performance
  - Regularly track ongoing progress and catch potential issues early on
The ERI measures the performance of national regulatory systems against international best practices, and provides tailored recommendations.

18 Indicators across 3 Regulatory Dimensions/Pillars

1. Regulatory Governance Index (RGI)
2. Regulatory Substance Index (RSI)
3. Regulatory Outcome Index (ROI)

- Legal Mandate
- Clarity of Roles and Objectives
- Independence
- Accountability
- Participation
- Transparency
- Predictability
- Open Access to Information

**POLICY AND REGULATORY RECOMMENDATIONS** (indicative)

**SHORT TERM (1-2 years)**

- Develop model regulatory accounting framework
- Develop action to reduce distribution losses
- Undertake quality of service performance assessments
- Develop fully documented Licensing Framework & Procedures

**MEDIUM TERM (3-5 years)**

- Amend Laws for Regulatory Independence
- Establish a law on renewable energy
- Establish a law on development of mini-grid and off-grid systems
- Establish a law on energy efficiency

**ACTION-ORIENTED DIAGNOSTIC TOOL**

- **Economic Regulation**
- **Technical Regulation**
- **Licensing Framework**
- **Institutional Capacity**
- **Renewable Energy Development**
- **Mini-grid and Off-grid Systems**
- **Energy Efficiency Development**
- **Quality of Service Delivery (Commercial and technical)**
- **Facilitation of Electricity Access**

**Regulatory Substance Index (RSI)**

- Participation
- Legal Mandate
- Clarity of Roles and Objectives
- Independence
- Accountability
- Predictability
- Open Access to Information

**Regulatory Outcome Index (ROI)**

- Financial Performance and Competitiveness
- Quality of Service Delivery (Commercial and technical)
- Facilitation of Electricity Access

**Regulatory Governance Index (RGI)**

- Regulatory Governance Index
- Regulatory Substance Index
- Regulatory Outcome Index

**“Institutional and legal design of the regulatory system and framework within which decisions are made”**

The “how” of regulation

**“Assesses the impact of regulator’s actions and decisions on the performance of the power utility and consumers”**

The “what” of regulation
Once computed, the ERI results of the countries that are surveyed are ranked in four categories, from the lowest to the highest level of regulatory development according to best practice.

What are the ERI performance bands?

<table>
<thead>
<tr>
<th>COLOR</th>
<th>SCORE RANGE</th>
<th>INTERPRETATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green</td>
<td>0.800 to 1.000</td>
<td>High level of regulatory development, with most elements of a strong policy,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>regulatory, legal and institutional framework in place</td>
</tr>
<tr>
<td>Yellow</td>
<td>0.600 to 0.799</td>
<td>Substantial level of regulatory development, with many elements of a supportive</td>
</tr>
<tr>
<td></td>
<td></td>
<td>regulatory framework, alongside some weaknesses in legal and institutional</td>
</tr>
<tr>
<td></td>
<td></td>
<td>structures</td>
</tr>
<tr>
<td>Orange</td>
<td>0.500 to 0.599</td>
<td>Medium level of regulatory development, with basic elements of a supportive</td>
</tr>
<tr>
<td></td>
<td></td>
<td>regulatory framework, with implementation constrained by legal and institutional</td>
</tr>
<tr>
<td></td>
<td></td>
<td>gaps and low regulatory capacity</td>
</tr>
<tr>
<td>Red</td>
<td>0.000 to 0.499</td>
<td>Low level of regulatory development, with few or no elements of a supportive</td>
</tr>
<tr>
<td></td>
<td></td>
<td>regulatory framework and insufficient or nonexistent legal and institutional</td>
</tr>
<tr>
<td></td>
<td></td>
<td>structures and regulatory capacity</td>
</tr>
</tbody>
</table>
How are countries performing?

Sample composition
- 43 countries
- 44 Regulatory Authorities
- 44 Power Utilities

Geographic distribution
- East (9 countries)
- Central (7 countries)
- North (2 countries)
- South (10 countries)
- West (15 countries)
Key findings of ERI 2022

**Governance**

- 84% of countries surveyed fell within the green and yellow performance bands on RGI.
- Another positive change is that the number of countries with low level of regulatory development (Red Band) in RGI reduced from 4 in 2021 to 2 in 2022 (50% reduction).
- Regulatory Independence remains the weakest sub-indicator under RGI as Government and Stakeholders continue to exert some amount of influence on regulators in most countries.
- 81% of the countries surveyed showed a lack of full independence of the regulatory authorities from stakeholders and government.

**Substance**

- Regulators in most countries have developed or updated regulatory instruments to enable them to be assertive over the sector they regulate.
- Number of countries confirmed to have conducted Cost of Service Study (CoSS) increased from 9 in 2021 to 27 in 2022 with 17 of them confirming having implemented the CoSS.
- Number of countries without Tariff Methodologies reduced from 13 in 2021 to 9 in 2022 as more countries take steps to either develop and publish their TM or update existing ones.
- Countries with quality-of-service code and transmission grid code increased from 21 in 2021 to 27 in 2022 as more countries take steps to finalise and publish these documents.

**Outcome**

- Financial performance is the weakest dimension of the ROI, with an average score of 0.396.
- However, ROI recorded the biggest improvement in 2022 (17% improvement over the average score of 2021).
- Improvements that have been recorded in ROI in 2022 is attributed to actions taken by the regulators and utilities to improve the financial performance of the utilities by focusing on improvements in Tariff Methodologies (TMs) and utility financial performance.
- Sixteen (16) countries developed and implemented regulatory instruments that impacted ROI. These are mainly utility related involving tariffs, quality-of-service, and loss reduction among others.
## Deficiencies in Stakeholder Independence

<table>
<thead>
<tr>
<th>Indicator</th>
<th>North Africa</th>
<th>West Africa</th>
<th>Central Africa</th>
<th>Eastern Africa</th>
<th>Southern Africa</th>
<th>Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independence from stake holder</td>
<td><strong>38%</strong></td>
<td><strong>32%</strong></td>
<td><strong>18%</strong></td>
<td><strong>33%</strong></td>
<td><strong>24%</strong></td>
<td><strong>28%</strong></td>
</tr>
<tr>
<td>Are there provisions in the Law that prohibit the appointment of Commissioners/CEO/ Director General of the Regulatory Authority, if any of them has previously held a position in the regulated utility company? Yes=1; No=0</td>
<td><strong>0%</strong></td>
<td><strong>0%</strong></td>
<td><strong>0%</strong></td>
<td><strong>22%</strong></td>
<td><strong>10%</strong></td>
<td><strong>7%</strong></td>
</tr>
<tr>
<td>Are there provisions in the Law that prohibit the Commissioners or CEO/Director General of the Regulatory Authority from accepting employment in the regulated utility company after the end of their term in office? Yes=1; No/ Not specified=0</td>
<td><strong>50%</strong></td>
<td><strong>47%</strong></td>
<td><strong>28%</strong></td>
<td><strong>33%</strong></td>
<td><strong>20%</strong></td>
<td><strong>35%</strong></td>
</tr>
<tr>
<td>Are there any provisions in the Law prohibiting the CEO/Director General or Commissioners, from having any personal interest in the regulated electricity utility? Yes=1; No/ Not specified=0</td>
<td><strong>100%</strong></td>
<td><strong>87%</strong></td>
<td><strong>57%</strong></td>
<td><strong>78%</strong></td>
<td><strong>80%</strong></td>
<td><strong>79%</strong></td>
</tr>
</tbody>
</table>
## Deficiencies in Economic Regulation – Tariff Setting

<table>
<thead>
<tr>
<th>Indicator</th>
<th>North Africa</th>
<th>West Africa</th>
<th>Central Africa</th>
<th>East Africa</th>
<th>Southern Africa</th>
<th>Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Economic Regulation: Tariff Setting</td>
<td>84%</td>
<td>46%</td>
<td>22%</td>
<td>66%</td>
<td>45%</td>
<td>48%</td>
</tr>
<tr>
<td>2 Has the regulator developed a well-documented Tariff-Setting Methodology? Yes=1; No=0</td>
<td>100%</td>
<td>73%</td>
<td>43%</td>
<td>89%</td>
<td>100%</td>
<td>79%</td>
</tr>
<tr>
<td>3 Does the Tariff Methodology include an Automatic Tariff Adjustment or Tariff Indexation Mechanism? Yes=1; No=0</td>
<td>50%</td>
<td>47%</td>
<td>29%</td>
<td>78%</td>
<td>40%</td>
<td>49%</td>
</tr>
<tr>
<td>4 Does the Tariff Methodology include a schedule for major tariff reviews? Yes=1; No=0</td>
<td>100%</td>
<td>60%</td>
<td>43%</td>
<td>67%</td>
<td>70%</td>
<td>63%</td>
</tr>
<tr>
<td>5 Is there a written formula that prescribes how end-user tariff levels are to be set? Yes=1; No=0</td>
<td>100%</td>
<td>80%</td>
<td>14%</td>
<td>78%</td>
<td>90%</td>
<td>72%</td>
</tr>
<tr>
<td>6 Are there regulatory mechanisms to compensate generators for the provision of firm capacity or ancillary services (e.g., frequency or voltage control, spinning reserve)? Yes=1; No=0</td>
<td>100%</td>
<td>47%</td>
<td>14%</td>
<td>67%</td>
<td>30%</td>
<td>44%</td>
</tr>
<tr>
<td>7 Does the regulatory entity ensure utilities are compensated for the costs of stranded assets (i.e., assets that have lost their value due to regulatory changes)? Yes=1; No=0</td>
<td>100%</td>
<td>60%</td>
<td>71%</td>
<td>67%</td>
<td>10%</td>
<td>53%</td>
</tr>
<tr>
<td>8 Has the regulator developed/validated a network connection policy as part of its tariff? Yes=1; No=0</td>
<td>75%</td>
<td>37%</td>
<td>14%</td>
<td>44%</td>
<td>25%</td>
<td>34%</td>
</tr>
<tr>
<td>9 Has the regulator carried out a recent (less than 5 years) study on the cost of service? Yes=1; No=0</td>
<td>100%</td>
<td>47%</td>
<td>29%</td>
<td>78%</td>
<td>80%</td>
<td>60%</td>
</tr>
</tbody>
</table>
Key recommendations of ERI 2022

Governance

- Amend regulations or enact new regulations to prevent commissioners or the CEO being appointed if they are from the utility company or vice-versa, in order to enforce required cooling-off periods.
- Reduce the level of financial influence from the government on regulators. This can be achieved by amending laws enabling the regulator to generate revenues from levies and fees with levels approved by parliament.

Substance

- Implement tariff reviews in accordance with the approved Tariff Methodologies and schedules.
- Develop and enforce grid codes, distribution codes and quality-of-service codes.
- The regulator should develop regulatory tools and instruments including draft Power Purchase Agreements (PPAs), proposed tariff structures and other mechanisms to drive the sector’s growth.
- Develop and implement supply-side and demand-side energy efficiency policies, regulations and action plans to reduce technical and non-technical losses in the electricity sector.

Outcome

- Develop and implement Regulatory Accounting Frameworks to guide utilities in tariff data collection and application.
- The survey shows that for 75% of electricity utilities, their tariffs fail to cover their prudent costs. Countries should conduct a Cost of Service Study (CoSS) regularly (at least once every 5 years) to aid in unbiased tariff determination.
- Revise tariff methodologies to include all important attributes relevant for a country’s own context. e.g Tariff schedules should be included in the tariff methodology. The tariff regime, tariff review procedures and the timetable must be clearly stipulated in the regulatory framework across all regions.
Collaboration

➢ Development of Guidelines for Advancing Economic and Commercial Quality of Service Regulation in Africa’s Power Sector based on the ERI results in partnership with USAID/ NARUC.

➢ Following the publication of the Guidelines, technical assistance projects are being implemented in two countries (Eswatini and Togo) to directly address gaps in their Economic and Commercial Quality-of-Service Regulations, highlighted in the ERI.

➢ Working with Power Africa under the West Africa Energy Programme (WAEP) to implement ERI recommendations in some West African Countries

Regional Harmonization Initiatives

Providing Technical Assistance to regional regulatory bodies for the development of tools and frameworks for harmonization of regulatory frameworks in the respective regions of Africa

➢ TA for ECOWAS, COMESA, and SADC for regional KPIs and tariff reviews under implementation by ERERA, RAERESA and RERA

➢ TA for ECCAS to support the development of the Institutional and Regulatory Framework for Electricity in Central Africa

National Initiatives

The Bank is deploying bespoke regulatory digitalisation initiative through the deployment of functional Database management Systems (DBMS) for national regulators. To enhance transparency and stakeholder participation in the regulatory process, obtain accurate and timely information to enhance regulatory decision and improve quality of service regulation

➢ Functional DBMS deployed and commissioned for PURC in Ghana in 2021

➢ On-going digitalization initiatives in Uganda, Tanzania, and Nigeria.
Thank you