



CORPORATE STRATEGY

2020/21-2024/25

#Reliable and Affordable Electricity Supply
for Socio-Economic Transformation.





Executive Summary

To contribute to the achievement of the Energy Sector Strategic Objectives of increased Access to and Consumption of Clean Energy as outlined in NDP III, as well as Vision 2040, ERA's Aspiration is: "To be a Recognized Regulator in the promotion of Sustainable Electricity Supply for Socio-Economic Transformation".

ERA has defined the strategic stakeholders and partners who include the Electricity Consumers, Licensees, Government, Development Partners, and prospects. Feedback from these stakeholders revealed the need for Reliable and Affordable Electricity Supply as one of the most critical.

To this end, ERA's Strategic Theme for the next Five Years is #Reliable and Affordable Electricity Supply for Socio-Economic Transformation. This theme directs the choices as detailed in Figure 1.



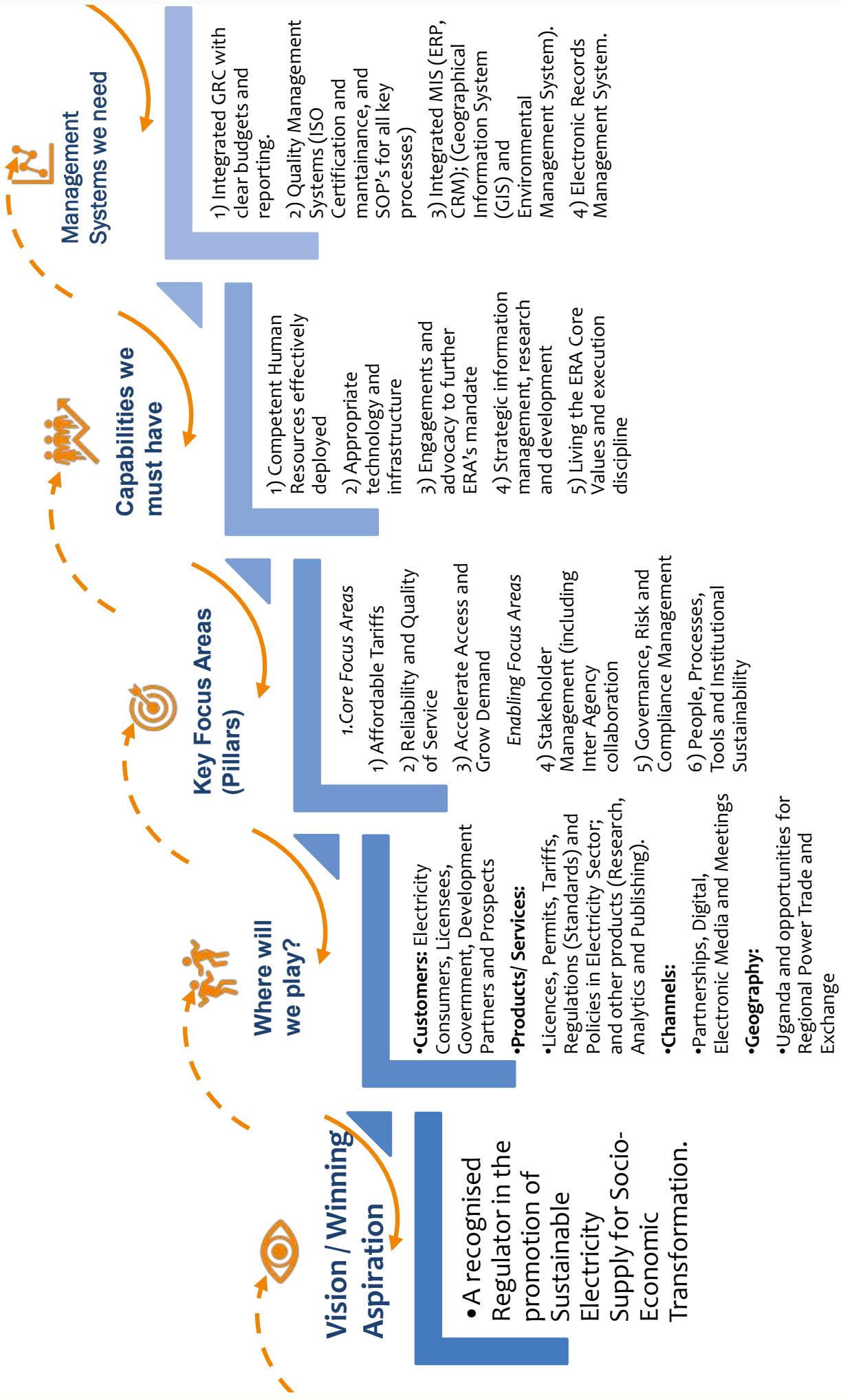


Figure 1: ERA's 5 - Year Strategic Outlook Summary



In pursuance of our Vision, “to be a Recognized Regulator in the Promotion of Sustainable Electricity Supply for Socio-Economic Transformation”, ERA will work with different stakeholders including the Electricity Customers, Government of Uganda, Licensees and Development Partners to ensure that we achieve our Strategic Objectives.

Six (6) Strategic Pillars aligned to ERA's mandate and national aspirations have been identified to drive our Performance – (1) Affordable Tariffs; (2) Reliable and Quality Service; (3) Accelerate Access and Grow Demand; (4) Stakeholder Management and Inter-agency collaboration; (5) Strong Governance, Risk, and Compliance Management; and (6) People, Processes, Tools and Institutional Sustainability. These Pillars will guide ERA's priorities and enable the Authority to win.

Over the years, ERA has contributed greatly to the Electricity Supply Industry and will continuously share the success stories and lessons learnt. During the Strategy Implementation period, research, analytics, and publishing will be used to promote visibility, including institution impact profiling.

ERA is cognizant of the effect of Climate Change on the Electricity Supply Industry operations, which creates the need for adaptation of measures for ESI sustainability. To this end, ERA's strategy is to consider increased Access and utilization of Electricity; Increased Generation, Transmission and Distribution capacity; Increased adoption and use of Clean Energy; Promotion of Energy-Efficient practices and technologies. ERA plans to increase the following:

- (i) The proportion of the population with Access to Electricity from 24% to 60%;
- (ii) Per capita Electricity Consumption from 100 kWh to 578 kWh;
- (iii) Transmission capacity from 2354 km to 4354 km of High Voltage Transmission Lines; and,
- (iv) Grid Reliability to 90% during the next Five Years.

For effective execution of the strategy, ERA will invest UGX 3,808,286,385 for capital expenditure in FY 2020/21. During the execution period, ERA plans to increase the revenue from the Generation Levy from the current total contribution to the annual organization budget of 21.6% to 32.2%, while reducing License Fees from the current 74.7% to 65.1% by the end of FY 2024/25.



ERA Targets to increase the proportion of the population with Access to Electricity from 24% to 60%.



List of Acronyms

| Acronym | Meaning |
|---------|--|
| AfDB | African Development Bank |
| BOU | Bank of Uganda |
| CEO | Chief Executive Officer |
| CMA | Capital Markets Authority |
| CRM | Customer Relationship Management |
| DCCA | Director Corporate and Consumer Affairs |
| DER | Director Economic Regulation |
| DFS | Director Financial Services |
| DLAA | Director Legal and Authority Affairs |
| DSM | Demand Side Management |
| DTR | Director Technical Regulation |
| DWRM | Directorate of Water Resources Management |
| EE | Energy Efficiency |
| ERA | Electricity Regulatory Authority |
| ERP | Enterprise Resource Planning |
| ESI | Electricity Supply Industry |
| FY | Financial Year |
| GET FiT | Global Energy Transfer for Feed-In Tariffs |
| GIS | Geographic Information System |
| GoU | Government of Uganda |
| GRC | Governance, Risk and Compliance |
| IGG | Inspector General of Government |
| ISO | International Organization for Standardization |
| KCCA | Kampala Capital City Authority |
| KRA | Key Result Area |
| MDAs | Ministries, Departments and Agencies |
| MEMD | Ministry of Energy and Mineral Development |
| MIS | Management Information Systems |
| MoFPED | Ministry of Finance, Planning and Economic Development |
| MoICT | Ministry of Information and Communication Technology |
| MWE | Ministry of Water and Environment |
| NDP II | National Development Plan II |
| NDP III | National Development Plan III |
| NEMA | National Environment Management Authority |
| NFA | National Forestry Authority |
| NPA | National Planning Authority |
| NSSF | National Social Security Fund |
| OAG | Office of the Auditor General |
| PPDA | Public Procurement and Disposal of Public Assets Authority |
| PPP | Public-Private Partnership |
| QoS | Quality of Service Standards |
| REA | Rural Electrification Agency |
| UBOS | Uganda Bureau of Statistics |
| URA | Uganda Revenue Authority |
| USE | Uganda Securities Exchange |
| UWA | Uganda Wildlife Authority |



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STATEMENT BY THE CHAIRMAN

Electricity is an essential factor in enabling Uganda to achieve Vision 2040. As the Industry Regulator, the Electricity Regulatory Authority is central in the planning process for this industry. ERA formulated and implemented a Three-Year Business Plan, covering the period 2017/18 to 2019/20.

The Authority has made remarkable achievements over the past Three (3) Years, some of which are highlighted below:

- (a) Increased Generation Capacity;
- (b) Implementation of the Quarterly Tariff Adjustment Methodology;
- (c) Bujagali Debt Refinancing;
- (d) Implementation of several Global Energy Transfer for Feed-in-Tariff Projects;
- (e) Increased Industry Investments;
- (f) Improved Industry Efficiency;
- (g) Improved Legal and Regulatory Framework;
- (h) Implementation of the Quality of Service Standards;
- (i) Conducted a Cost of Service Study;
- (j) Implementation of the Uniform System of Accounts; and,
- (k) Attainment of ISO Certification 9001:2015.

The aforementioned achievements, in addition to a Transparent and Predictable Regulatory Regime, among others, have led to ERA being recognized as a Model Regulator, with several National and International awards, including being ranked Number One in the Electricity Regulatory Index (ERI) for Africa, released by the African Development Bank in 2018 and 2019.

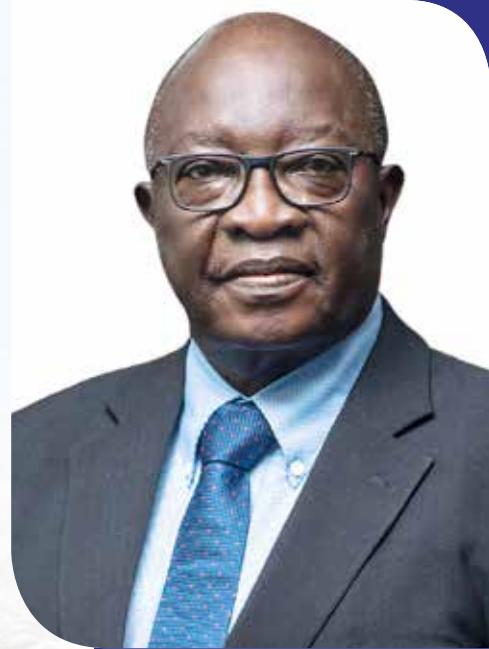
It is my pleasure, therefore, to present the ERA Strategic Plan for the next Five Years, 2020/21 to 2024/25. The Plan is a product of wide consultation with both internal and external stakeholders. The inputs received from these stakeholders were analyzed and a consensus reached on the most suitable strategic direction that ERA should adopt during this period to better serve its stakeholders. I, therefore, trust that the Strategic Plan reflects the expectations of our stakeholders.

This Strategic Plan takes cognizance of the existing Policy and Legal Framework at International, Regional and National Levels. More specifically, the Plan has taken into consideration the Common Market for Eastern and Southern Africa (COMESA), East African Power Pool (EAPP) and East African Community (EAC) Energy Agenda, Uganda's Vision 2040, the Five-Year National Development Plan covering the period up to 2025, the Energy Policies of Uganda and the Rural Electrification Strategy and Plan.

During this Strategic Plan Implementation period, ERA's focus will be directed towards enhancing Tariff Affordability, increasing Electricity Access and Demand, and improving Reliability and Quality of Service and Supply. Our role will, therefore, be to maintain a Regulatory Framework that will facilitate achievement of these key outcomes and hence contribute to National Socio-Economic Development. During this implementation period, ERA will continue to remain alert to emerging issues and developments and where appropriate, revise the Strategic Priorities in line with the evolving conditions. We at ERA have the Will, Ability and Commitment to implement this Strategic Plan, and we believe that with the support of all stakeholders, we will make a significant contribution to the Socio-Economic Transformation of Uganda.



Richard Santo Apire
Chairman



STATEMENT BY THE CHIEF EXECUTIVE OFFICER

During the next Five (5) Years (2020/21 to 2024/25), ERA's strategy implementation will be underpinned by our Strategic Theme, "Reliable and Affordable Electricity Supply for Socio-Economic Transformation".

Our Winning Aspiration for the next Five (5) Years is "to be a Recognized Regulator in the Promotion of Sustainable Electricity Supply for Socio-Economic Transformation".

To be able to achieve our Winning Aspiration, this Plan focuses on Three (3) Core Areas and Three (3) Enabling Areas, which the institution will implement as indicated:

Core Focus Areas/Organizational Priorities

- (a) Affordable Tariffs.
- (b) Accelerate Electricity Access and Grow Demand.
- (c) Reliable Power Supply and improved Quality of Service.

Enabling Focus Areas

- (d) Stakeholder Management.
- (e) Strong Governance, Risk and Compliance Management.
- (f) People, Processes and Tools for Institutional Sustainability.

This Five-Year Strategic Plan has been developed following extensive consultation with our key stakeholders. The Plan has been aligned with key Government Priorities as highlighted in the Vision 2040, NDP III and other Policy Documents.

This Strategic Plan will be delivered by a team of Qualified and Dedicated Staff whose performance and conduct will be underpinned by Professionalism, Integrity, Innovation, Transparency and Accountability, Equal and Fair Opportunity, Stakeholder Sensitivity and Teamwork.

I thank all stakeholders for their contribution and support to the execution of ERA's Mandate over the years, and request for your continued support.

I pledge ERA's commitment to implement this Plan and thereby contribute to the Socio-Economic Transformation of Uganda.



Eng. Ziria Tibalwa Waako
Chief Executive Officer



1. INTRODUCTION

1.1 ERA MANDATE AND OVERVIEW

The Electricity Regulatory Authority (the “Authority”) is a Statutory Body established in the year 2000, in accordance with the Electricity Act, 1999, (Chapter 145 of the Laws of Uganda) to regulate the Generation, Transmission, Distribution, Sale, Export, and Import of Electrical Energy in Uganda.

ERA is mandated by the Act to issue Electricity Generation, Transmission, Distribution, Sale, Export and Import Licenses; to set License Terms and Conditions; and to ensure Compliance with the License Terms and Conditions by the Licensees. ERA is also mandated to establish a Tariff Structure; to Approve rates of Charges and advise the Minister of Energy and Mineral Development on projects needed in the Electricity Supply Industry, among other functions. ERA is committed to ensuring Sustainable Electricity Supply for Socio-Economic Transformation.

ERA is governed by a Board (the Authority), which is composed of Five (5) Authority Members appointed by the Minister of Energy and Mineral Development, with the Approval of Cabinet, in line with Section 5 of the Electricity Act, 1999. The functions of the Authority are laid out in Section 10 of the Electricity Act. The Authority operates in coordination with several other players in the Energy Sector as highlighted in Figure 2.

The ERA Secretariat is the central implementation structure for the Authority. It is led by the Chief Executive Officer, supported by a Staff team charged with the day-to-day operations of the Authority. The Secretariat is composed of Staff with diverse skills in Engineering, Environment, Economics, Finance, Law, Administration, Management, Communication, and Procurement, among others.

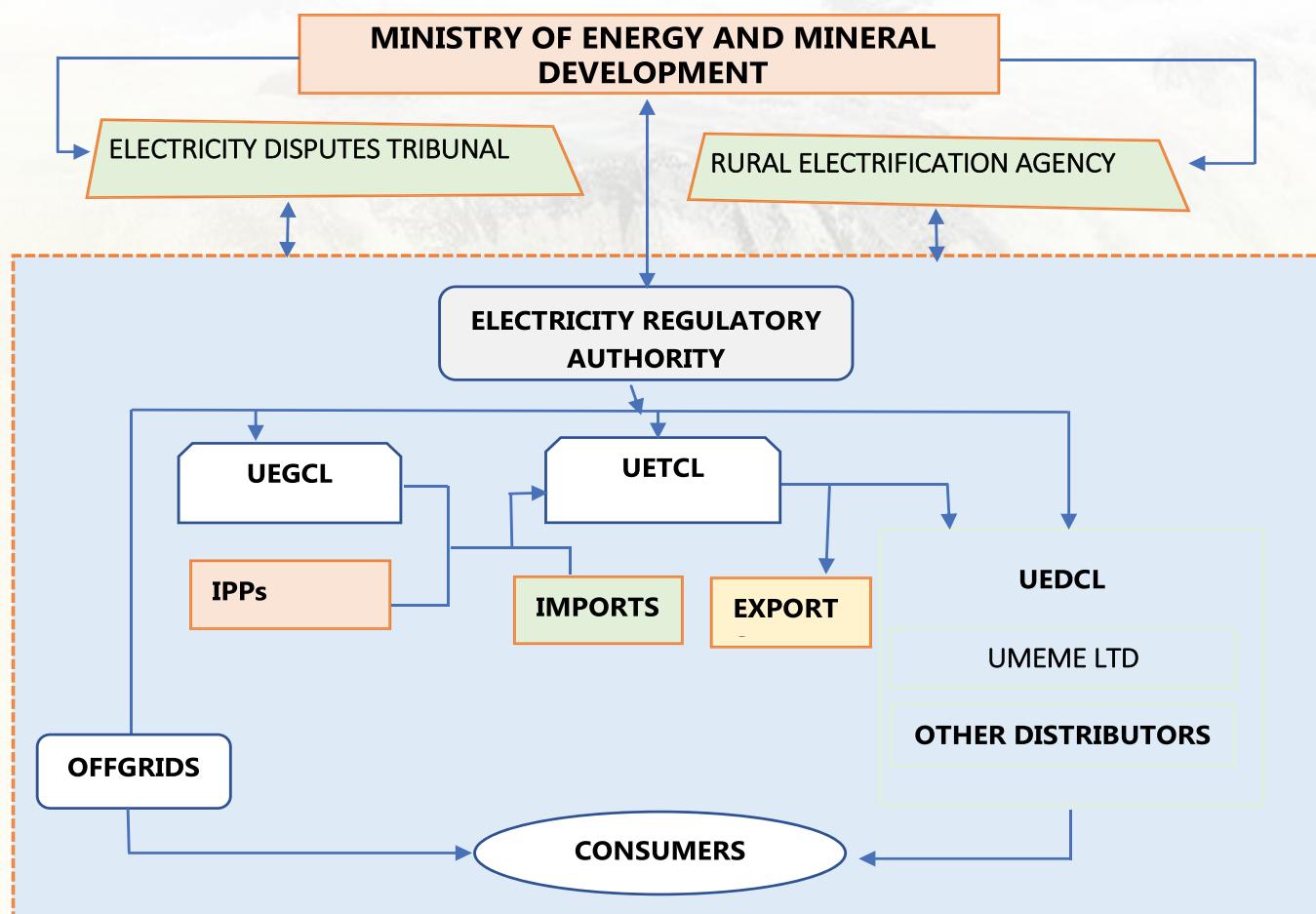


Figure 2: The position of ERA in the Electricity Supply Industry of Uganda

Source: Electricity Regulatory Authority



To deliver ERA's functions and create stakeholder alignment to drive Institutional Growth and Sustainability, ERA has developed Strategic Plans over the years. From the implementation of these plans, several achievements have been realized, including: the development of Regulatory Instruments and Tariff Methodologies, the setting of Performance Parameters for Licensees, increase in Generation Capacity, network rehabilitation and expansion, and organizational capacity development. The Third Strategic Plan (2014/15 to 2023/24) took advantage of the foundation laid by previous plans and achieved the following:

- (i) Positioning the Electricity Supply Industry as a key enabler for the achievement of Uganda's Vision 2040 and the Sustainable Development Goals;
- (ii) Enhancement of the Regulatory Framework to facilitate Investments by both the Government and the Private Sector;
- (iii) Promoting Environmental Sustainability through promoting Renewable Energy technologies;
- (iv) Ensuring the security of Electricity Supply through optimized development of Least Cost Generation resources and promoting Energy Efficiency and Demand-Side Management measures;
- (v) Promoting Efficiency and Effectiveness in the Electricity Supply Industry; and,
- (vi) Improving the Quality of Electricity Supply.

To align ERA's Strategy to National priorities, ERA revised the running Ten-Year Strategic Plan (2014/15 – 2023/24) to a Five-Year Strategic Plan (2020/21-2024/25), taking into consideration new developments in the Global Energy Sector and Government priorities highlighted in the National Development Plan III and the Vision 2040. The Five-Year Strategic Plan recognizes the priorities set out in the latter and focuses on achieving the previously set out objectives, in addition to incorporation of the new National priorities.

1.1.1 CORE FUNCTIONS OF ERA

The Authority is statutorily charged with the following functions, under Section 10 of the Electricity Act, 1999:

- (a) To issue Licenses for:
 - (i) The Generation, Transmission, Distribution or Sale of Electricity; and,
 - (ii) The Ownership or Operation of Transmission Systems;
- (b) To receive and process Applications for Licenses;
- (c) To prescribe Conditions and Terms of Licenses issued under the Act;
- (d) To modify Licenses issued under the Act;
- (e) To make and enforce directions to ensure compliance with Licenses issued under the Act;
- (f) To establish a Tariff Structure and to investigate Tariff Charges, whether or not a specific complaint has been made for a Tariff Adjustment;
- (g) To approve Rates of Charges and Terms and Conditions of Electricity services provided by Transmission and Distribution Companies;
- (h) To review the organization of Generation, Transmission and Distribution Companies or other legal entities engaged in the Generation, Transmission and Distribution of Electricity to the extent that that organization affects or is likely to affect the operation of the Electricity sub-Sector and the Efficient Supply of Electricity;
 - (i) To develop and enforce Performance Standards for the Generation, Transmission, and Distribution of Electricity;
 - (j) To encourage the development of Uniform Electricity Industry Standards and Codes of Conduct;

- 
- (k) To establish a Uniform System of Accounts for Licensees;
 - (l) To advise the Minister regarding the need for Electricity sub-Sector Projects;
 - (m) To prepare Industry Reports and to gather information from Generation, Transmission and Distribution Companies;
 - (n) To prescribe and collect License Fees;
 - (o) To provide for the procedure for Investment Programs by Transmission and Distribution Companies;
 - (p) To approve Standards for the Quality of Electricity Supply Services provided;
 - (q) To approve Codes of Conduct in respect of the operation of Transmission and Distribution Systems;
 - (r) To acquire information and carry out investigations relating to any of its functions; and,
 - (s) To perform any other function that is incidental or consequential to its functions under this section, or as may be conferred on it by any other law.

1.2 VISION, MISSION, AND ORGANIZATIONAL VALUES

1.2.1 Our Vision

The Vision that has guided ERA during the last Strategic Plan implementation is “to be an Effective Regulator that promotes Safe, Efficient, Reliable and Sustainable Electricity Supply”. To respond to the emerging needs of the stakeholders, ERA’s New Vision is “to be a Recognized Regulator in the promotion of Sustainable Electricity Supply for Socio-Economic Transformation.” The New Vision provides a winning dimension, a statement of intent, and a sense of urgency. ERA’s Vision will continuously be revised accordingly.

1.2.2 Our Mission

“To Regulate the Electricity Supply Industry in accordance with Applicable Laws, Policies, Standards, and International Best Practice.”

1.2.3 ERA’s Five-Year Strategy Theme

“Reliable and Affordable Electricity Supply for Socio-Economic Transformation.”

1.2.4 Organizational Values

ERA’s business conduct is anchored on the Core Values summarized in the Table.



ERA Core Values

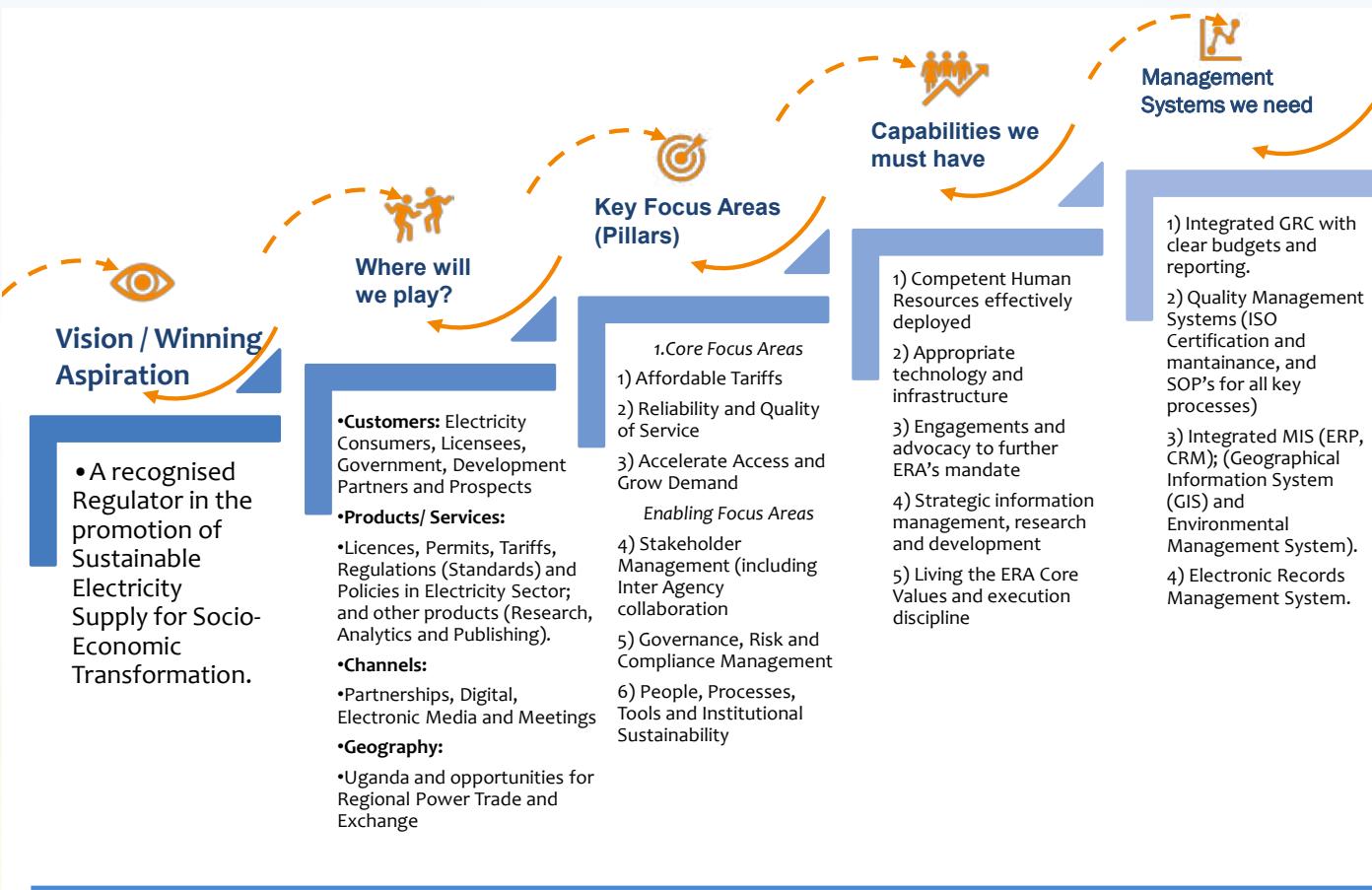
| Value | How we Live it |
|--|---|
| Professionalism | We are dedicated to Quality, Timeliness and Excellence in our service and live up to the commitments we set. We perform our tasks and deliver our outputs to the best of our ability with a focus on continuously improving quality, productivity and professional development. |
| Integrity | We are Honest and adhere to Moral and Ethical Principles. |
| Innovation | We are creative in delivering value to our stakeholders. As a learning organization, we believe in continuous improvement, promote and reward creativity and adapt to new ways of doing things. |
| Transparency and Accountability | We are Clear and Open while exercising our mandate. We serve the needs of our stakeholders in a responsible manner and recognize our obligation to bear the consequences of our actions and decisions. |
| Equal and Fair Opportunity | We conduct our functions and duties in ways that are Just, Unbiased and Non-Discriminatory. |
| Stakeholder Sensitivity | In arriving at decisions, we endeavour to strike a balance and recognize the interests, expectations and aspirations of various stakeholders in the Electricity Industry. We, therefore, continually seek to Identify, Understand and Respond to the Legitimate Interests and Concerns of our stakeholders as the basis for sustaining mutually beneficial and respectable operational relations. |
| Teamwork | We embrace Togetherness, promote and support a diverse, yet unified team. We believe in partnerships and collaboration while maintaining individual accountability. We combine resources, competences, skills and work as a team in pursuit of the Vision. |

2.0 ERA 5-YEAR STRATEGY TO 2025

2.1 ERA Strategic Outlook

To contribute to the achievement of the Energy Sector Strategic Objectives of increased Access to and Consumption of Clean Energy as outlined in the NDP III and Vision 2040, ERA's Strategic Choice is offering: Effective Regulatory Services across the Electricity Supply Industry to increase Access to and Utilization of Electricity; the Generation Capacity; Adoption and use of Clean Energy; utilization of Energy-Efficient Practices and technologies in an environmentally sustainable manner.

During the next Five (5) Years to 2025, ERA's strategy implementation will be underpinned by our Strategic Theme: "**Reliable and Affordable Electricity Supply for Socio-Economic Transformation**". ERA has defined the target strategic partners, playing field, pillars, capabilities, and systems needed to win, as defined in the ERA Five-Year (2020/21 to 2024/25) Strategic Outlook.



ERA's Strategic Pillars are:

- (a) Affordable Tariffs – implement initiatives that lower the Cost of Electricity to users, so that all people who are connected use the Electricity supplied;
- (b) Reliability and Quality of Service – Increase the Reliability and Quality of Service and Supply;
- (c) Accelerating Access and Growing Demand – connect more people onto the National Grid while creating awareness for productive use of Electricity for Economic Transformation;
- (d) Stakeholder Management - to build and maintain mutually beneficial relationships with the Authority's Stakeholders;
- (e) Strong Governance, Risk, and Compliance Management – for prudent Leadership and Stewardship of all resources in our care; and,
- (f) People, Processes, Tools, and Institutional Sustainability – to attain Value-for-Money and Growth for a competitive Electricity Regulatory Authority.

ERA is cognizant of the effect of Climate Change on the Energy Sector, which creates the need for adaptation measures for Energy Sector Sustainability. To this end, ERA's strategy is to deepen Access



to and utilization of Electricity; Reliability and Quality of Service and Supply; Generation Capacity; Adoption and Use of Clean Energy; promotion of Energy-Efficient Practices and Technologies, and Consumer Protection.

In the next Five (5) Years, ERA will aim at contributing to the NPD III Objectives to increase the percentage of the population with Access to Electricity from 24% to 60%; the per capita Electricity Consumption from 100 kWh to 578 kWh; Transmission Capacity from 2354 km to 4354 km of High Voltage Transmission lines and Grid Reliability to 90%.

To achieve this, ERA will invest UGX 3,808,286,385 for Capital Expenditure in Financial Year 2020/21. During the execution period, ERA plans to increase Revenue from the Generation Levy from the current 21.6% to 32.9%, while reducing License Fees from the current 74.7% to 63.7% by the end of FY 2024/25. The financial projections have been adjusted for the anticipated negative impact of the COVID-19 pandemic on the Local and International Economy.

2.2 ERA Scorecard to Monitor Strategy

Stakeholders are critical for the successful delivery of ERA's mandate. Table 1 defines the Performance Areas (which together form the ERA Scorecard) that summarize the major expectations of key stakeholders. The Scorecard has been further aligned to ERA's Mandate and Strategic Pillars. During implementation, the Scorecard will be updated with the Responsibility Centers for effective Accountability organization-wide to facilitate the Monitoring and Evaluation of the Strategy implementation effectiveness. The Board and the Top Management Team will formulate critical targets from the respective Strategic Pillars on an annual basis for Quarterly Monitoring. The Authority's Scorecard and Priority Indicators selected will inform ERA's Annual Work Plans and Budgeting for each Financial Year.



Cognizant of the effect of Climate Change on the Energy Sector, there is need for adaptation measures for Sustainability.

Table 1: ERA Scorecard to Monitor the Strategy

| Pillar / Focus Area | Performance Area/ Outcome | Ref. | Monitoring Indicator | Measure | FY 2019/20 (Baseline) | FY 2020/21 | FY 2021/22 | FY 2022/23 | FY 2023/24 | FY 2024/25 | Responsibility |
|--|--|---------|----------------------|---|-----------------------|--------------|--------------|--------------|--------------|--------------|----------------|
| 1. Affordable Tariffs | 1.1 Reduced Weighted Average End-User Electricity Tariffs across Customer Categories | Table 9 | Track %age | Ush/Kwh | 497.2 | 2% Reduction | 3% Reduction | 4% Reduction | 5% Reduction | 5% Reduction | DER |
| | 1.2 Sustain End-User Off-Peak Tariffs for Extra-Large Industrial Customers | Table 9 | Track %age | Ush/Kwh | 230.9 | 230.9 | 230.9 | 230.9 | 230.9 | 230.9 | DER |
| | 1.3 Lifeline Tariff for all Service Territories | Table 9 | Track %age | %age Coverage | 37.5% | 75% | 100% | 100% | 100% | 100% | DER |
| | | | | | | | | | | | |
| 2. Reliability and Quality of Service | 2.1 Reduce the Duration of Interruptions per Customer per year | Table 9 | Benchmark (Hours) | System Average Interruption Duration Index (SAIDI) | 191 | 86.57 | 82 | 78 | 74 | 72 | DTR/DER |
| | 2.2 Reduce the Frequency of Interruptions per Customer per year | Table 9 | Benchmark (Number) | System Average Interruption Frequency Index (SAIFI) | 86.0 | 82 | 78 | 74 | 70 | 68 | DTR/DER |
| | 2.3 Increase Compliance with Quality of Service Standards | | Track %age | %age Compliance with QoS Standards | 79.0% | 81.0% | 83.0% | 85.0% | 87.0% | 88.0% | DTR/DER |
| | 2.4 Investment in Asset Replacement | | Track US\$ | US\$ (Million) | 28.8 | 17.66 | 23.53 | 9.7 | 7.9 | 3 | DTR/DFS |
| | 2.5 Reduce the Energy not Served for Transmission Network | Table 9 | Track %age | Energy not Served (MWh) | 9,626 | 9,145 | 8,687 | 8,253 | 8,005 | 7,765 | DTR/DER |
| 3. Accelerate Access and Grow Demand | Access + Demand | | | | | | | | | | |
| | 3.1 Increase National Electricity Access Rate | Table 9 | Track %age | %age of Households with Access to Grid Electricity | 24% | 27% | 30% | 40% | 50% | 60% | DTR/DER |

| | | | | | | | | | |
|---|-----------------|--------------------|--|---------|---------|---------|---------|---------|-------------|
| 3.2 Increased Adoption of Off-Grid Systems | Track %age Rate | %age Access | 26% | 28% | 31% | 34% | 37% | 40% | DTR/DER |
| 3.3 Increase in Customer Connections | Track %age | No. of Connections | 192,034 | 300,000 | 300,000 | 300,000 | 300,000 | 300,000 | DTR/DER |
| 3.4 Promote and encourage Growth in Demand | Table 9 | Track %age Growth | %age Demand Growth | 8% | 10% | 12% | 12% | 12% | DTR/DER |
| 3.5 Promote the Increase of Electricity Consumption per Capita | Table 9 | Kwh | Consumption per Capita | 100 | 200 | 250 | 300 | 400 | DTR/DER |
| 3.6 Increase in Generation Capacity | Table 9 | Track Number | Capacity (MW) | 1,254.2 | 1,952 | 2,028 | 2,159 | 2,173 | 2,659 |
| 3.7 Increase Generation of Renewable Energy to mitigate Climate Change | Table 10 | Track %age | %age of Renewable Energy in the Generation Mix | 92% | 93% | 94% | 94% | 955 | DTR |
| Investments | | | | | | | | | |
| 3.8 Approved Investments for Demand Growth | Table 10 | Track US\$ | Amount approved by ERA in US\$ | 25.56 | 42.39 | 56.57 | 63.16 | 71.77 | 73.67 |
| 3.9 Approved Investments to Accelerate Access | Table 10 | Track US\$ | US\$ (Million) | 17.04 | 27.69 | 31.68 | 36.25 | 41.48 | 47.46 |
| 3.10 Approved Investments for Reliability | Table 10 | Track US\$ | US\$ (Million) | 56.33 | 66.43 | 61.8 | 30.08 | 17.28 | DTR/DER/DFS |
| 3.11 Approved Investments for Technical Loss Reduction | Table 10 | Track US\$ | US\$ (Million) | 0.33 | 1.68 | 1.73 | 1.71 | 1.47 | 2 |
| 3.12 Develop and Update Sector Plans (Investment Plans, Least Cost Generation Plan) | | Track %age | %age Loss Reduction | 17.2 | 17.66 | 17.2 | 16 | 15.72 | DTR/DER/DFS |
| | | Track %age | Completion %age | 80% | 100% | 100% | 100% | 100% | DER/DTR |



| | | | | | | |
|---|------------------|---|---|-------|-------|-------|
| | | | | | | |
| 5.3 Monitor and Enforce Compliance of Licensees to Electricity Act, Other relevant Laws, Regulations, Guidelines and Conditions | Table 10 | Track %age | %age of Licensees complying | 75.0% | 80.0% | 85.0% |
| 5.4 Ensure Environmental Sustainability for the Electricity Industry | Table 10 | Track %age | Certificate of Environmental Compliance issued by NEMA | 0% | 100% | 100% |
| Risk, Business Continuity Management and Internal Compliance | | | | | | |
| 5.5 Improved Management of Enterprise Risk | Tables 14 and 15 | Track %age | %age Implementation of Risk Management Framework | 75% | 80% | 84% |
| 5.6 Ensure ERA's Business Continuity Management | Tables 14 and 15 | Track %age Development and implementation of the Business Continuity Management Framework | %age Implementation of the Business Continuity Management Framework | 0% | 100% | 100% |
| 5.7 Improved Internal Compliance to Laws, Policies and Procedures | Table 10 | Track %age | %age Compliance | 95% | 100% | 100% |
| 6. People, Processes and Tools for Institutional Sustainability | People | | | | | |

| | | | | | | | | |
|---|----------|--------------|--|-------|-------|-------|-------|------|
| | | | | | | | | |
| 6.1 Attract Competent Potential Staff | Figure 2 | Track %age | %age of Qualifying applicants (shortlisted) who have responded to job advertisements | 70.0% | 72% | 74% | 76% | 78% |
| 6.2 Fill ERA Structure with Competent Staff | Figure 2 | Track %age | %age of Structure Filled | 79.0% | 90.0% | 93% | 95% | 95% |
| 6.3 Manage Employee Attrition | Table 20 | Track %age | Number of Staff Leaving/Total Staff | < 5% | < 5% | < 5% | < 5% | < 5% |
| 6.4 Increase Employee Satisfaction | Table 20 | Track %age | %age of Satisfied Employees | 85.0% | 90.0% | 90% | 90% | 90% |
| 6.5 Increase Knowledge Transfer Index | Table 20 | Track Number | Number of Knowledge-Sharing Sessions per Department or Unit | 12 | 14 | 15 | 16 | 17 |
| 6.6 Enhance Employee Innovativeness | Table 20 | Track Number | Number of New Ideas Generated, Adopted & Implemented | 2 | 3 | 4 | 5 | 6 |
| 6.7 Increase Employee Productivity | Table 20 | Track %age | %age Completion of Work Plans | 85.0% | 85.0% | 88.0% | 90.0% | 92% |
| 6.8 Implement Employee Value Award System | Table 20 | Track Number | Number of Awards based on Demonstrating Values | 3 | 4 | 5 | 6 | 7 |
| 6.9 Enhance Staff Development and Training | Table 20 | Track %age | %age of Staff Trained | 100% | 100% | 100% | 100% | 100% |
| 6.10 Improved Industry Skills | Table 20 | Track %age | %age of Implementation | 100% | 100% | 100% | 100% | 100% |
| Processes | | | | | | | | |
| 6.11 Attain and Maintain ISO Certification | Table 4 | Track %age | %age Certification | 100% | 100% | 100% | 100% | 100% |

| | | | | | | | | | | |
|-------------------------------------|--|---------|------------------|--|-------|-------|-------|-------|-------|------|
| | 6.12 Increased Compliance to SOPs | Table 4 | Track %age | %age Compliance | 94% | 100% | 100% | 100% | 100% | DCCA |
| | 6.13 Increase Process Automation | Table 4 | Track %age | Proportion of Automated Processes | 55.0% | 70.0% | 80.0% | 85.0% | 90.0% | DLAA |
| | 6.14 Strengthened and Secure ICT Infrastructure, Systems and Services | Table 4 | Track %age | %age Reliability of ICT Systems | 97% | 100% | 100% | 100% | 100% | DLAA |
| | 6.15 Strengthened Data Management and Information Sharing across the board | Table 4 | Track %age | %age of up-to-date ERA Network and Core Systems/ Servers | 95% | 99% | 99% | 99% | 99% | DLAA |
| Institutional Sustainability | | | | | | | | | | |
| | 6.16 Optimized Resource Utilization | Table 3 | Track %age | %age Budget Utilization | 100% | 100% | 100% | 100% | 100% | DFS |
| | 6.17 Financial Sustainability of ERA | Table 3 | Track %age Ratio | Income to Cost Ratio | >1 | >1 | >1 | >1 | >1 | DFS |
| | 6.18 Improved Asset Management | Table 3 | Track %age | %age Implementation of Asset Management Policy | 100% | 100% | 100% | 100% | 100% | DFS |
| | 6.19 Attain Revenue Targets for ERA Growth | Table 3 | Track Ratio | Actual Revenue/ Budgeted | 100% | 100% | 100% | 100% | 100% | DFS |
| | 6.20 Reduce Cost Variance to +/- 5% of Budget | Table 3 | Track %age | %age Change | -4% | +/-5% | +/-5% | +/-5% | +/-5% | MPDU |
| | 6.21 Improve Operational Effectiveness | Table 4 | Track %age | %age Implementation of the Procurement Plan | 100% | 100% | 100% | 100% | 100% | MPDU |

The ERA Work Plan and Annual Operational Budgets will be aligned to the Strategy and Scorecard. The detailed Work Plan together with the ERA-wide Scorecard will form part of the Annual Monitoring and Evaluation benchmarks during Strategy Implementation.

2.3 ERA Structure Aligned to the Strategy

To facilitate effective execution of the strategy, ERA has aligned its Organizational Structure to the Strategy. During Annual Work Planning and Budgeting, the respective Departments will specify the resources required in terms of capabilities and systems to facilitate the attainment of the set Scorecard Targets. The alignment of the structure to the Strategy will ensure that Staff work as a team and their daily activities contribute towards the achievement of the ERA Strategy as a whole.

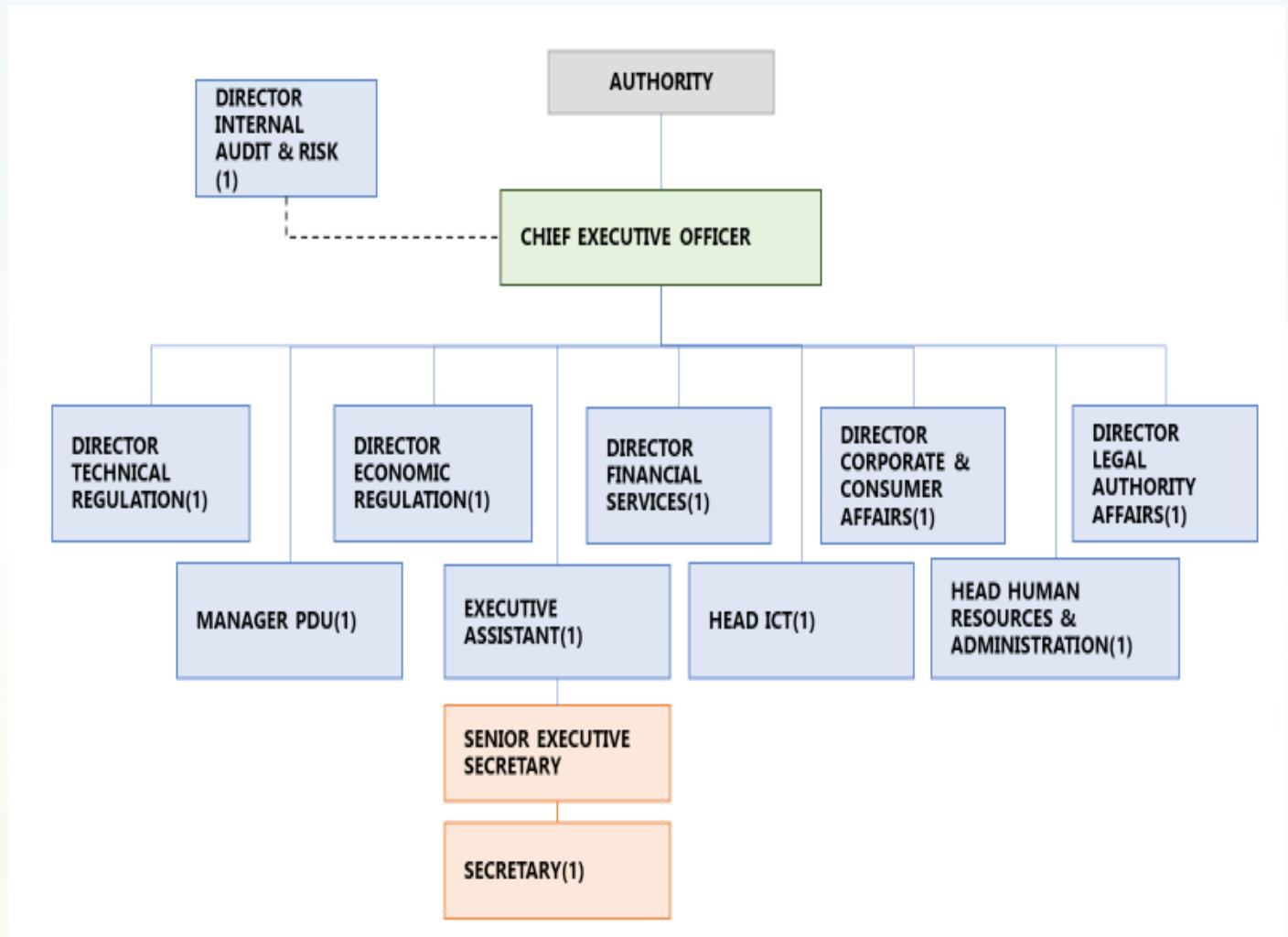


Figure 3: ERA Organizational Structure



2.4 ERA Staffing Aligned to the Strategic Pillars

For Strategic Outlook and Corporate Succession Planning, each Strategic Pillar is a Directorate headed by a Director, supported by Qualified and Competent Professionals at Manager Level. The Directors, together with the Chief Executive Officer, make up the ERA Top Management Team (TMT).

Table 2: ERA Structure Aligned to the Strategy

| Title | 1. Affordable Tariffs | 2. Reliability and Quality of Service | 3. Accelerate Access and Grow Demand | 4. Stakeholder Management and inter-Agency collaboration | 5. Strong Governance, Risk and Compliance Management | 6. People, Processes and Tools for Institutional Sustainability |
|--|-----------------------|---------------------------------------|--------------------------------------|--|--|---|
| Chief Executive Officer | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Director Technical Regulation | | ✓ | ✓ | | | |
| Director Economic Regulation | ✓ | | | | | |
| Director Legal and Authority Affairs | | | | | ✓ | |
| Director Financial Services | | | | | | ✓ |
| Director Corporate and Consumer Affairs | | | | ✓ | | |
| Manager Procurement and Disposal | | | | | | ✓ |
| Head of Human Resources | | | | | | ✓ |
| Head Information and Communication Technology | | | | | | ✓ |

2.5 Revenue Growth Strategy

During the planning process, analysis of the Electricity sub-Sector and financing landscape was made to examine the opportunities for growth assessed during the Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis. ERA's strategy to diversify to other revenue sources to reduce over-reliance on a single revenue source has been affected by the Covid-19 pandemic. ERA plans to diversify its revenue through Consulting in the Energy Sector, Rental Income, as well as Selling of Quality Research in addition to Demand Growth to increase the Generation Levy. Taken together, these sources will finance the implementation of the ERA Five-Year Strategic Plan. Many of the new sources of income are dependent on the Amendment of the Electricity Act. To this end, a Pessimistic Outlook has been considered in the Revenue Growth Strategy illustrated in Table 3.

Table 3: ERA Revenue Growth Strategy - Existing Revenue sources Vs Other Revenue sources

| DESCRIPTION | Approved Budget FY 2019/20 | % | Approved Budget FY 2020/21 | % | Proposed Budget FY 2021/22 | % | Proposed Budget FY 2022/23 | % | Proposed Budget FY 2023/24 | % | Proposed Budget FY 2024/25 | % |
|--|----------------------------|-------------|----------------------------|-------------|----------------------------|-------------|----------------------------|-------------|----------------------------|-------------|----------------------------|-------------|
| REVENUE ESTIMATES | UGX | |
| License Fees | 21,129,362,071 | 75% | 21,864,237,000 | 66% | 22,957,448,850 | 66% | 24,105,321,292 | 63% | 25,310,587,357 | 62% | 29,107,175,460 | 64% |
| Generation Levy | 6,111,793,399 | 22% | 10,275,961,968 | 31% | 10,275,961,968 | 30% | 12,766,918,686 | 33% | 13,915,941,368 | 34% | 15,029,216,677 | 33% |
| Application Fees | 587,475,000 | 2% | 594,205,335 | 2% | 534,784,802 | 2% | 508,045,561 | 1% | 497,884,650 | 1% | 448,096,185 | 1% |
| Installation Permits | 212,220,162 | 1% | 258,908,598 | 1% | 388,362,896 | 1% | 446,617,331 | 1% | 513,609,931 | 1% | 564,970,924 | 1% |
| Rental Incomes | 111,900,000 | 0% | 223,800,000 | 1% | 223,800,000 | 1% | 223,800,000 | 1% | 223,800,000 | 1% | 223,800,000 | 0% |
| Interest Income | 121,000,000 | 0% | 128,000,000 | 0% | 128,000,000 | 0% | 128,000,000 | 0% | 128,000,000 | 0% | 128,000,000 | 0% |
| Other sources of Income | - | 0% | - | 0% | 79,800,000 | 0% | 159,600,000 | 0% | 167,580,000 | 0% | 175,959,000 | 0% |
| TOTAL REVENUE | 28,273,750,632 | 100% | 33,345,112,901 | 100% | 34,588,158,516 | 100% | 38,338,302,871 | 100% | 40,757,403,305 | 100% | 45,677,218,246 | 100% |
| EXPENDITURE ESTIMATES | UGX | |
| Staff Costs | 14,658,584,530 | 52% | 20,042,047,422 | 60% | 20,821,015,059 | 60% | 23,106,871,936 | 60% | 24,692,053,509 | 61% | 27,524,446,267 | 60% |
| Board Expenses | 1,265,538,140 | 4% | 1,536,251,340 | 5% | 1,589,843,530 | 5% | 1,758,940,916 | 5% | 1,870,024,271 | 5% | 2,096,300,309 | 5% |
| Stakeholder Management | 1,760,762,172 | 6% | 1,881,733,619 | 6% | 1,947,377,973 | 6% | 2,154,503,089 | 6% | 2,290,567,597 | 6% | 2,567,730,075 | 6% |
| General Administration | 2,154,422,816 | 8% | 2,729,522,147 | 8% | 2,824,741,638 | 8% | 3,125,184,051 | 8% | 3,322,550,503 | 8% | 3,724,584,625 | 8% |
| Training Costs | 1,191,883,042 | 4% | 1,535,733,637 | 5% | 1,589,307,768 | 5% | 1,758,348,169 | 5% | 1,869,394,090 | 5% | 2,095,593,875 | 5% |
| Consultancy & Strategic Focus | 856,285,000 | 3% | 846,798,350 | 3% | 876,338,945 | 3% | 969,547,252 | 3% | 1,030,777,599 | 3% | 1,155,503,398 | 3% |
| Monitoring and Compliance | 881,240,000 | 3% | 964,740,000 | 3% | 998,394,994 | 3% | 1,104,585,308 | 3% | 1,174,343,786 | 3% | 1,316,441,332 | 3% |
| TOTAL Recurrent | 22,768,715,700 | 81% | 29,536,826,516 | 89% | 30,647,019,906 | 89% | 33,977,980,722 | 89% | 36,249,711,355 | 89% | 40,480,599,882 | 89% |
| Capital Expenditure | 5,505,034,932 | 19% | 3,808,286,385 | 11% | 3,941,138,610 | 11% | 4,360,322,149 | 11% | 4,531,631,950 | 11% | 5,196,618,365 | 11% |
| TOTAL EXPENDITURE | 28,273,750,632 | 100% | 33,345,112,901 | 100% | 34,588,158,516 | 100% | 38,338,302,871 | 100% | 40,781,343,305 | 100% | 45,677,218,246 | 100% |



Budget Assumptions

- (i) We anticipate that by December 2021, the Amendment of the Electricity Act will be passed by the Parliament of Uganda and this will give ERA a leeway to increase the resource envelope through; Increase of the Generation Levy from 0.3% to 0.7%; the possibility of selling data; and undertaking Consultancies.
- (ii) The Ayago and Kiba Power Projects are expected to progress to Licensing Stage by December 2021 and December 2024, respectively.
- (iii) ERA Regional Offices are expected to be operational by 2024.

2.6 Capital Expenditure (CAPEX) to deliver the Strategy

An analysis of the capabilities and systems needed to implement the ERA Five-Year Strategy was made. Table 4 shows the Capital Expenditure (CAPEX) and corresponding Annual Cost Estimates required to implement the strategy. The CAPEX estimates do not include the Annual Work Plan one-off costs, which will be concretized once the Work Plans are drawn. The Capital Expenditure will be revised to meet the timings of Cash inflows.

Table 4: ERA Five-Year Capex Budget Expenditure Estimates

| Focus Area (Pillar) | Resource Needed | Category | Type | Status | What is required | Cost UGX (Million) | Ongoing Costs UGX (Million) | Due date | Next Action |
|----------------------------------|--|---|------------|--|---|--------------------|-----------------------------|--------------|--|
| 1. Stakeholder Management | Competent human resources effectively deployed | Effective Staffing (People Agenda (Attract and Retain best talent)) | Capability | Partially implemented | Ongoing Staff Training, Recruit and Train | Table 3 | Table 3 | Over 5 Years | Mobilize funds as per Financial Scorecard |
| | Advocacy for enabling Laws and Regulations and Regulatory Independence | Effective Staffing and Governance practices to deliver the strategy | Capability | Low stakeholder awareness levels – ongoing efforts | Implement stakeholder management as a strategic priority and enhance visibility | -do- | -do- | Years 1 & 2 | Engage Consultant and develop Strategic partnerships through engagements |

| | | | | | | | | |
|---|---|--|------------|--|--|------|--------------|--------------------------------------|
| | Living the ERA Core Values and execution discipline | Effective Communication | Capability | Ongoing investment needed | ERA Communications Strategy | -do- | Over 5 Years | Work Plan |
| 2. People, Processes, Tools & Institutional Sustainability | Strategic information management, research, and development | Governance structure setup and institution development, and strategy execution support | Capability | Partially implemented | Strategy implementation support services required | -do- | Over 5 Years | Engage Consultant |
| | Appropriate Technology and Infrastructure | Training of Skilled Expertise and Reskilling | Capability | Ongoing | Document business case for the project and look for funding | -do- | Over 5 Years | |
| 3. Affordable Tariffs | Electronic Records Management System, Integrated MIS (ERP, CRM, HMS, Membership Management) | Enterprise Resource Planning | System | Partially Implemented Microsoft Dynamics for Finance and Procurement | Business case | -do- | Year 3 | Conduct business case |
| | Business intelligence, publishing, and analytics | Stakeholder Engagement | System | Not in place | Business intelligence and data analysis tools & staff training | -do- | Year 2 | The business case for board approval |

| | | | | | | | | | |
|---|---|---|------------|-----------------------|--|------|------|---------|------------------------|
| 4. Reliability and Quality of Service | Regulatory Information Management System | A Regulatory Management System that links all stakeholders | Capability | Partially implemented | Completion of the procurement process and selection of Best Evaluated Bidder | -do- | -do- | Year 2 | Engage the Consultant. |
| 5. Accelerate Access and Grow Demand | ISO Certification and SOPs for key processes, as well as Environmental Management Systems | ISO Certification and SOPs for all key processes (Quality Management) | System | Partially implemented | Start ISO Certification for 9001; 27001 and 31000 processes | -do- | -do- | Ongoing | Conduct business case |
| 6. Strong Governance, Risk and Compliance Management | Integrated GRC with clear budgets and reporting | Risk Management framework | System | Partially implemented | Business case | -do- | -do- | Year 1 | Conduct business case |

For effective execution of this Strategic Plan, ERA will invest UGX 3,808,286,385 for Capital Expenditure in Financial Year 2020/21. The diversification of the revenue sources is a mitigation factor for any negative impact of the Covid-19 pandemic on the Global Economy in general, and the Ugandan Economy. Other required capabilities will be considered in subsequent years depending on the recovery of the economy following the expected slow growth due to the Covid-19 pandemic.

BACKGROUND TO THE STRATEGY

3. CONTEXT (INTERNAL ANALYSIS)

3.1 ERA's Key Milestones and Achievements from 2000 to-date

The Authority has registered the following milestones since its inception.

Table 5: ERA's Achievements since Inception

| No. | Performance Description |
|-----------------------------|--|
| GENERATION SEGMENT | |
| 1 | Growth in Installed Capacity - from 404.4 MW to 1,252.3 MW. |
| 2 | Growth in the Number of Generation Plants - from Four (4) Plants to 44 (Forty Four). |
| 3 | Diversified Renewable Energy technologies - from One (1) technology (Hydro) to Grid-Connected Solar, Co-Generation, Biomass and Thermal. |
| 4 | Transparency and Predictability of the ESI and Investment Incentives such as GET FiT. |
| 5 | Commissioning of the Bujagali (250 MW) and Isimba (183 MW) Hydropower Plants. |
| TRANSMISSION SEGMENT | |
| 6 | Expansion of the Network Length - from 730 Km in 2001 to 3220 Km. |
| 7 | Growth in the Number of Substations - there are currently 22 Transmission Substations with a Transformation Capacity of 1738.5 MVA. |
| 8 | Reduction of Transmission Losses - from 5.4% to 3.6%. |
| 9 | Regional Interconnection of the Grid to enhance the Security of Electricity Supply. |
| 10 | Introduction of the Supervisory Control and Data Acquisition (SCADA) System. |
| DISTRIBUTION SEGMENT | |
| 11 | Expansion of the Distribution Grid - from 3,335 Km to 35,856 Km. |
| 12 | Growth in the Number of Customers – from 200,217 to 1,601,071. |
| 13 | Reduction in Distribution Losses - from 34.4% to 17 %. |
| 14 | Growth in the Number of Substations from 25 Substations (369.5 MVA) to 60 Substations with a Transformation Capacity of 651.6 MVA. |
| 15 | Introduction of Prepayment Metering Technology. |
| GENERAL ACHIEVEMENTS | |
| 16 | Conducive Investment Environment for the ESI – the Electricity (Approval and Verification of Investments) Regulations, 2020. |
| 17 | Approved over US\$ 445 Million of Investments into the ESI. |
| 18 | Employment opportunities created by the ESI (the GET FiT Program has created over 10,000 jobs from 2013 to 2019). |
| 19 | Best Regulatory Framework in Africa, benchmarked by other institutions. |
| 20 | Development and Roll out of the Uniform System of Accounts (USoA) for Licensees. |
| 21 | Financial Reporting Award - Regulatory Bodies and Associations Category, 2017 and 2018. |
| 22 | Attained ISO 9001:2015 Certification in 2018. |

3.2 Strategic Plan 2014-2019 Achievements and Lessons Learnt

In 2014, ERA adopted the Third (Ten-Year) Strategic Plan (2014/15 - 2023/24), which was pegged on Four (4) areas of focus: **Power Supply Security and Sustainability of the ESI, Electricity Industry Efficiency, Transparency and Accountability to stakeholders, and Operational Excellence**. The Strategic Plan had a Scorecard that provided the basis against which stakeholders would evaluate ERA's performance. Stakeholder consultations, desktop reviews and analysis, as well as an evaluation report on the performance of the ERA Strategy show great achievements made over the implementation period. Table 6 gives an independent audit of the performance of the Strategic Plan (2014/15 - 2023/24) and summarizes the key achievements and lessons learnt from 2014 to 2019. These lessons have helped to inform the new focus areas and targets for ERA, and will further inform the Annual Work Plans, Monitoring and Evaluation framework.

Table 6: ERA Strategic Plan Achievements and Lessons Learnt, 2014-2019

| STRATEGIC PLAN BALANCED SCORECARD | | | | | |
|-----------------------------------|--|-------------------------|---|---|---|
| | Theme | No. Strategic Objective | No. Strategic Initiative | Performance Indicator | Target |
| 1 | Power Supply Security and Sustainability of the ESI | A1 | Increasing Electricity Generation to meet present and future Demand through the attraction of both Private and Public Sector Investment and integration of Environmental concerns | 1 Develop policies that promote Sustainable Energy Development (e.g. Interconnection Policies, Wheeling Framework, the competitive procurement process for Generation projects, transparent Licensing regime) | BL=0 Y3=33 Y7=95 Y10=160 a) Increase in Generation Capacity (%age) |
| | | | | 2 Review and update relevant Legal Framework (Renewable Energy Policy, 2002, REFIT Policy, Standardized Agreements, and Licenses) | BL=88 Y3=97 Y7=100 Y10=100 b) The proportion of Renewable Energy in the Generation Mix (%age) |
| 3 | | | | | |
| | | | | a) Supply equals Demand plus 10% reserve margin | BL=0 Y3=0 Y7=0 Y10=0 100% |
| | | | | | Supply exceeds Demand by 15%. Available capacity is at 1,254.2 MW compared with Demand of 725 MW. |

| | | | | | | |
|----|---|---|--|---|--|--|
| | | b) %age reduction in the real Cost of Generation | BL=0 Y3=2 Y7=5 Y10= 9 | 43% | The Weighted Cost of Generation reduced by 43% from US Cents 10/kWh in 2014 to US Cents 5.4/kWh in 2020. | |
| | 4 | Integrate Environmental and Social concerns into all Regulatory activities | %age of Licensed Projects with Environmental clearance | BL = 100 Y3 = 100 Y7 = 100 Y10= 100 | 100% | All Licensed Projects were given environmental clearance. |
| A2 | 1 | Develop a Demand-Side Management Plan and facilitate the implementation of Demand-Side Management measures by Distribution Utilities | a) Improvement in the Load Factor (%age) | BL=70% Y3=75% Y7=78% Y10=80% | 63.32% | The Load Factor currently stands at 63.32%. |
| | 2 | Collaborate with the relevant authorities to advocate for the enactment of Laws that will incentivize consumers to implement Energy-Efficiency measures | b) %age of Energy saved through DSM and EE measures | BL=0% Y3=5% Y7=7% Y10=8% | 100% | Over 730,000 LED bulbs distributed with an Annual Saving of 28 MW in 2016. |
| | 3 | Develop an Incentive Program for Large Electricity Users to exploit the Time-of-Use Tariff Regime | | | 100% | Adopted the Extra-Large Industrial Consumer Tariff Category for the Large Power Users in the Manufacturing Sector in the Tariff Year 2017. |
| | 1 | Develop Uniform Industry Standards for Electrical Infrastructure | %age Availability of the Network (Transmission and Distribution) | (Tx; Dx) BL= 98; 65 Y3= 98.5; 75 Y7=99; 80 Y10=99; 80 | 98% Tx 98.2% Dx | Adopted the Declining Block Tariff Mechanism for consumption beyond set monthly thresholds for Large and Extra Large Users. |
| A3 | 1 | Strengthen the National Electricity Transmission and Distribution Infrastructure and enhance Regional Collaboration in Electricity Regulation | | | | The Transmission Network Availability is currently at 98% and the Distribution Network Availability at 98.2%. |



| | | | | |
|---|---|---|---|---|
| | | | | |
| 2 | Coordinate Industry-wide Network Planning and Development | a) Transmission and Distribution Line Length (Km) b) Increased Transmission and Distribution Transformation Capacity (MVA) c) %age increase in the National Electricity Connection Rate | (Tx; Dx) BL= 1,627; 26,202 Y3=3,566; 57,056 Y7=4,971; 79,536 Y10=4,971; 95,443 (Tx; Dx) BL= 940; 2,168 Y3= 3,520; 3,520 Y7= 3,640; 3,640 Y10=4,140; 4,140 BL=0 Y3=52 Y7=166 Y10=300 | Transmission Line Length – 3,220 Km Distribution Line Length – 35,856 Km 98% Tx 37% Dx 74% Tx 50% Dx 51% |
| | | | | Current Transformation Capacity = 2,612.5 MVA Tx 1749 MVA Dx Electricity Access Rate is currently at 51%, for both Grid and Off-Grid Customers. |
| | | | | Quality of Supply at; Generation-100% Transmission-100% |
| 2 | Electricity Industry Efficiency | B1 Increase Technical, Commercial, and Operational Efficiency in Electricity Generation, Transmission, and Distribution | 1 Develop and Enforce Minimum Performance Standards for Quality of Supply and Quality of Service 2 Develop and Enforce Performance Standards for the Generation, Transmission, and Distribution of Electricity | (Gx; Tx; Dx) BL= 100;100;50 Y3= 100;100;70 Y7=100;100;80 Y10=100;100;100 b) Level of Quality of Service (%age) BL=50 Y3=70 Y7=80 Y10=90 Improvement in Operational Efficiency a) Target Availability for Generation (%age) |
| | | | | 100% 100% 81% Compliance to QOSS as at end of FY 2018/19 against the target of 80% for Year 7. 98% |
| | | | | Availability is currently over 98%. |

| | | | | | |
|---|---|---|---|---|---|
| | | b) Transmission and Distribution Losses (%age) | BL=3.8; 20 Y3=3.3; 14.7 Y7=3.0; 10 Y10=2.8; 8 | 3.6% (TX) 17% (DX) | The Transmission Losses are at 3.6% and Distribution Losses at 17%. |
| 3 | Undertake Technical (i.e. Engineering, Financial, etc.) Audits of Licensees' activities to ensure Value-for-Money | 4 | Develop and Enforce the preparation and implementation of Optimal Maintenance Plans by the Electricity Generation, Transmission, and Distribution Companies | SAIDI; SAIFI; CAIDI a)SAIDI b)SAIFI c)CAIDI BL=257; 109; 2.4 Y3=100 ; 50; 2.0 Y7=50; 30; 1.7 Y10=30; 20; 1.5 | 75% The Average Customer Outage Duration is at 189.6 Hours. The Average Customer Outage Frequency is at 84 Times. |
| | B2 | Promote Reasonable and Fair Pricing of Electricity Services | 1 | Establish a dynamic Tariff Structure that delivers Reasonable and Fair Prices of Electricity Level of Cost Reflectiveness of the Tariffs (%age) BL=81.4 Y3=81.4 Y7=100 Y10=100 | 97% - Conducted a Cost of Service Study to determine the Cost-Reflective Tariffs and other charges of delivering Electricity. - Developed Main Grid and Mini-Grid models for Tariff periods after 2019. - Adopted the Quarterly Tariff Adjustment Methodology for determination of the End-User Tariffs in 2014. - Implementation of the Lifeline Tariff Structure for the Domestic Customer category for different Distribution Utilities. |
| | | 2 | Develop and Enforce Regulatory Accounting Guidelines for Licensees | BL=0 Y3=100 Y7=100 Y10=100 Level of Compliance to Accounting Guidelines (%age) | 80% The Uniform System of Accounts were developed, and their enforcement is ongoing. |

| | | | | |
|---|--|--|--|--|
| 3 Transparency and Accountability to Stakeholders | C1 Promote Objectivity, Transparency, and Accountability to Stakeholders | 1 Develop and Implement a Stakeholder Engagement Framework, Awareness and Advocacy Strategy | <p>a) Stakeholder Awareness Index BL=50 Y3=70 Y7=80 Y10=95</p> <p>b) Level of Stakeholder participation in ERA activities BL=70 Y3=80 Y7=85 Y10=95</p> | <p>64%</p> <p>The figure indicated is from the latest survey report. Some of the stakeholder engagements undertaken include;</p> <ul style="list-style-type: none"> - Consistent consultations on proposed Power Projects and Tariff Reviews. - Consistent Annual Consumer Awareness drives. - Consistent communication materials published. - Consistent publication of Authority decisions. - Dedicated Consumer Affairs Office established and maintained to interface with consumers. - Consumer Protection Framework developed and implemented with periodic compliance checks on Distribution utilities. |
| 4 Operational Excellence | D1 Enhance Good Governance, Internal Operating Efficiency, and Sustainability of ERA | 1 Review, maintain and implement a system of Internal Controls and Risk Management 2 Ensure Financial Viability and Sustainability of ERA | <p>94%</p> <p>The SOP Compliance Audits are done annually. SOP Compliance Level is at 94%.</p> | |
| | D2 Enhance Human Capital Management | 1 Develop Policies, Systems and work methods that will provide an enabling environment that will Attract, Develop and Retain Skilled Labor | <p>153%</p> <p>153% Growth in Revenues UGX 10,651,665,403 in FY 2014/15 and UGX 26,957,402,920 in FY 2017/18.</p> | |
| | | a) Percentage of Organization Structure that is filled | <p>67%</p> <p>The structure is filled up to 67% as at FY 2018/19.</p> <p>The approved structure to be filled for FY 2018/19 is 89 Staff. Currently, ERA has 60 Staff.</p> | |

| | | | | | |
|---|--|--|---------------------------------------|---|---|
| | b) Staff Retention Rate | BL=90 Y3=95 Y7=95 Y10=95 | 66% | 21 (Twenty One) Staff have left the Organization over the last Six (6) years as compared to a Staff complement of 61. | |
| | c) Employee Satisfaction Index (%age) | BL=80 Y3=85 Y7=90 Y10=95 | 88% | From the Employee Satisfaction Survey done in the FY 2018/19, Employee Satisfaction was reported at 88%. | |
| 2 | Develop and implement Staff Development Plan to improve knowledge, skills, and abilities | a) Level of Employee and Organizational Performance (%age) | BL=70 Y3=80 Y7=90 Y10=95 | 90% | Staff Work Plan Performance is 90%. |
| | | b)%age of positions filled Internally | BL=80 Y3=90 Y7=90 Y10=90 | 20% | 12 (Twelve) roles have been filled internally since the base year of 2013/14. The current staff complement is 61. |
| | | c) Compliance to Staff Development Plan (%age) | BL=70 Y3=80 Y7=90 Y10=90 | 100% | The implementation of the Staff Training Plan is at 100%. |
| 3 | Review, implement and continuously improve the Performance Management System | a)%age improvement in Staff Performance | BL=70 Y3=80 Y7=90 Y10=95 | 90% | Staff Work Plan Performance is at 90%. |
| | | b) Improvement in Institutional Performance | BL=70 Y3=80 Y7=90 Y10=95 | 94% | The Scorecard Performance is at 94%. |
| 4 | Promote Knowledge Sharing within ERA by implementing a Knowledge Management Program | Knowledge Sharing Index | BL=70% Y3=80% Y7=90% Y10=90% | 50% | Knowledge sharing is at 50%. The Human Resource Office developed a Knowledge Sharing Plan which is implemented through Departmental and General Staff Meetings. |



| | | | | | |
|---|--|--|--|--------|--|
| D3 Improve the use of Technology and promote Optimal Utilization of Organizational Assets | 1 Establish and maintain a Fully Automated and Integrated System | Level of System Automation (%age) | BL=60 Y3=100 Y7=100 Y10=100 | 28% | The automation level is at 28%. The Automation of new processes will be completed with the implementation of the Regulatory Information Management System (RIMS), Human Resource Information System, Performance Management Customization, and Board Portal solutions. The RIMS and Performance Management Systems are currently under development, while the other systems are being implemented. |
| | | User Satisfaction Index | BL= 50% Y3= 100% Y7= 100% Y10= 100% | 100% | The Statistical Database is in place and was updated in a timely manner. It can be accessed on the ERA Website. |
| | | Maintain an up-to-date sub-Sector Statistical Database and provide accurate, up-to-date and relevant information resources | | | |
| | | Acquire and maintain a reliable, highly available and scalable computing and communication infrastructure | BL=60 Y3=100 Y7= 100 Y10=100 | 97.63% | The Average Reliability of ICT Systems is at 97.63%. |
| | | Acquire and maintain Physical Infrastructure for the organization | BL=90 Y3=100 Y7=100 Y10=100 | 76% | Progress is currently at 76%. Completion of the New ERA House is expected at the end of May 2020. |

3.3 ERA's Revenue Strategy To-Date

ERA continues to rely largely on License Fees to finance its programs and budget. Given the emergence of the Covid-19 Pandemic in the First Quarter of 2020, and the increasing pressure on the demand for funding from the Consolidated Fund, ERA must explore alternative Sources of Revenue. An analysis of the Authority's Revenue Sources over the past years reveals the need to develop a Resource Mobilization Strategy. To this end, ERA will put more emphasis on advocacy for the Amendment of the Electricity Act, 1999, to allow for New Sources of Revenue that are internally managed to finance the strategy.

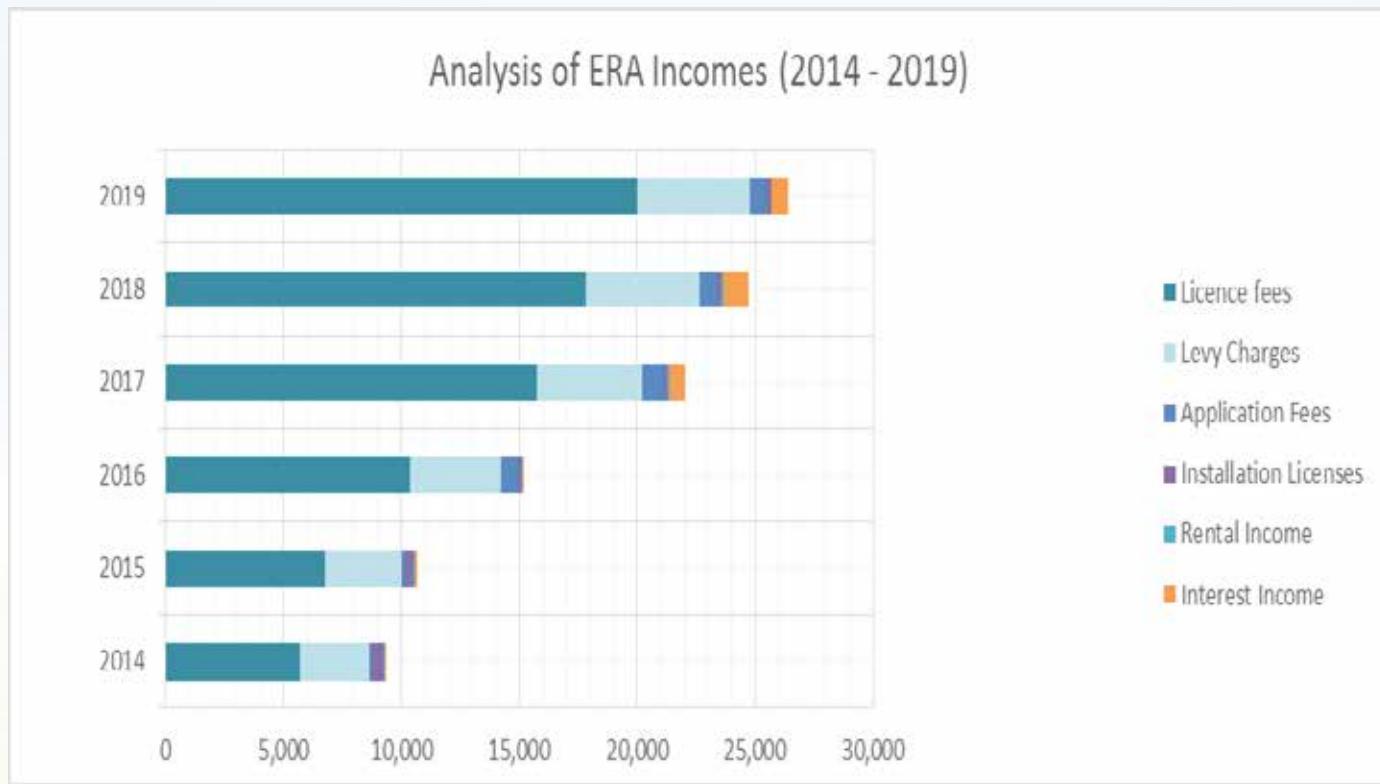


Figure 4: Income Diversification Analysis

Figure 4 shows that the bulk of ERA's Revenue comes from Licence Fees, and its proportion has steadily grown from 60% in 2014 to 75% in 2019. Given the fact that Licensing as a Revenue Source is definite and likely to get restricted as New Projects in need of Licences reduce, ERA should deliberately influence the Amendment of the Electricity Act, 1999, to open doors to the exploration of alternative Revenue Mobilization and Growth options. Total Revenue has grown by 188% from UGX 9 Billion in 2014 to UGX 26 Billion in 2019. Despite this exponential growth, a Resource Mobilization Strategy remains critical.

3.4 ERA Stakeholder Analysis

ERA's key stakeholders were identified during the Top Management and Board Strategic Planning sessions. Each stakeholder was assessed based on their Influence and Interest in ERA. A Stakeholder Analysis Matrix that maps the stakeholders of an organization on Four (4) quadrants, depending on their level of Influence on the organization's decisions and Interest in ERA's business was made. The stakeholders with High Influence and High Interest were scored with a Four (2 x 2) for both High Influence and High Interest as detailed in Table 7.

Table 7: ERA National Stakeholder Mapping

| No. | Stakeholder | Responsible Person | Nature of Relationship | Expectation/Interest | Influence and Interest | Strategy to Obtain Support | Balanced Scorecard Performance Area |
|-----|--|-----------------------------|---|--|----------------------------------|--|--|
| 1 | The Government of Uganda (the Presidency and Parliament) | The Chief Executive Officer | Ownership/Control and Policy oversight | <ul style="list-style-type: none"> - Effective Regulation of the Electricity Supply Industry. - Promotion of Investment in the Electricity sub-Sector, - Ensure Compliance with Performance Standards by Licensed entities. - Affordable Electricity, Quality and Reliable Electricity Supply for Economic Growth. | Interest: H Influence: H 2x2 = 4 | <ul style="list-style-type: none"> - Maintain a Robust and Effective Regulatory Framework that promotes the delivery of Quality and Reliable Electricity Supply. - Carry out Regulatory Impact Assessments regularly. - Enhance Licensing Framework and establish Investment Incentives. - Timely reporting to enable monitoring of Licensees' Performance. - Promote development of Least Cost Generation. | Direct on the deliverables of ERA – Reliable and Safe Power, Quality of Service and Affordable Tariffs, Amendment of the Electricity Act. |
| 2 | Authority (Board Members) | The Chief Executive Officer | Governance and oversight. | <ul style="list-style-type: none"> - Governance and oversight. - Implementation of Strategy and Compliance with the Act and other relevant Laws. | Interest: H Influence: H 2x2 = 4 | <ul style="list-style-type: none"> - Enhanced Visibility of ERA. - Enhanced Institutional Capacity, Sustainability of ERA, Effective and Robust Regulatory Framework. - Facilitation to conduct the business of the Board. | <ul style="list-style-type: none"> - Delivery of approved Scorecard. - Effective Stakeholder Engagement mechanism. - Continuous review of Human Resources Policies and Structures to align the structure with the business needs. - Explore ways of increasing ERA's Revenue. - Quality and timely information to guide decision making. - Carry out Regulatory Impact Assessments Regularly. - Timely and adequate facilitation for delivery on ERA's mandate. |
| 3 | ERA Secretariat | Chief Executive Officer | Contractual implementation of the Board Resolutions | <ul style="list-style-type: none"> - Continuous improvement in Human Resource Management and Development, Policies and Procedures. - Adequate infrastructure, facilities, equipment, and materials to execute the Authority's functions. | Interest: H Influence: H 2x2 = 4 | <ul style="list-style-type: none"> - Regular review of Human Resource Manual and Staff Emolument Scheme to sustain competitiveness. - Capacity Building, Regular upgrade of institutional facilities and equipment to match the regulatory demands of the ESI, Job Security. | Implementation of the Scorecard. |

| | | | | |
|--|-----------------------------|---|---|---|
| | | | <p>Approval of the Financial, Technical and Support Resources.</p> | |
| 4 Key MDAs - These include: MEMD, MOPPED, REA, DWRM, NEMA, UWA, NFA, URA, NPA, UBOs, MOICT, CMA, NSSF, KCCA, BOU, PPDA, OAG, USE | The Chief Executive Officer | Collaboration, Regulation, and Oversight | <ul style="list-style-type: none"> - Better management of Hydropower resources in liaison with MWE. - Improved water catchment management. - Close liaison with MOPPED on issues related to sub-Sector financing. - Regular provision of reliable information and data on the Electricity sub-Sector to facilitate National Planning. | <ul style="list-style-type: none"> - Interest: H Influence: L 2x1 = 2 - Enhance collaboration framework with Agencies. - Maintain an up-to-date Website. |
| | | | | |
| 5 Operators in the Electricity Supply Industry. | | The Chief Executive Officer | <ul style="list-style-type: none"> - Coordination and Regulation | <ul style="list-style-type: none"> - Interest: H Influence: L 2x1 = 2 - Effective co-ordination with sub-Sector Players. - Greater coordination with relevant Government Agencies. - Rationalize Regulatory Systems, Policies, and Procedures and put in place mechanisms for sharing information and engagement. - Develop and implement a strong Investment Incentive Advocacy Program in consultation with the Uganda Investment Authority. - Develop effective mechanisms for engagement with ESI players. - Acquire a Regulatory Information Management System and improve Internal Efficiency. |
| | | | | |
| | | Chief Executive Officer | <ul style="list-style-type: none"> - Financing/ Partnerships | <ul style="list-style-type: none"> - Share information on Power sub-Sector developments and Best Regulatory Practices in Cross Border/ Regional Power Pool Trading, Partnerships. |
| | | 6 Regional and International Collaborating Agencies, e.g. AfDB, EAC, African Union. | | <ul style="list-style-type: none"> - Information exchange and benchmarking to promote International Best Practices. - Establish, operationalize, and coordinate Regulatory Framework for Cross Border/Regional Power Pool Trading. - Establish a mechanism for joint Regulatory actions to enhance Cost Effectiveness and Efficiency, especially at a Regional level (EAC). |

| | | | | |
|---|--------------------------------|---|---|--|
| <p>7. Electricity Customers (Manufacturers and Industrial Consumers)</p> | <p>Chief Executive Officer</p> | <p>Source of business and service delivery</p> <ul style="list-style-type: none"> - Improved Reliability of Supply. - Competitive End-User Tariffs. | <p>Interest: H Influence: H $2 \times 2 = 4$</p> | <ul style="list-style-type: none"> - Prioritize monitoring Compliance to Laws, Regulations and License Conditions. - Ensure that Licensees focus on improving Quality and Reliability of Service. - Review and update Tariff Structure to ensure Fair and Reasonable Prices, and Financial Sustainability of the ESI. <p>Regularly engage the Media on Technical matters.</p> |
| | <p>8. The Media</p> | <p>Chief Executive Officer</p> | <p>Collaborative and Supportive</p> <ul style="list-style-type: none"> - Transparent delivery of Service. - Reliable Supply of Electricity. | <p>Interest: H Influence: H $2 \times 2 = 4$</p> <p>Provide information to build understanding of the ESI.</p> |
| | | <p>Source of business and service delivery</p> | <p>Interest: H Influence: L $2 \times 1 = 2$</p> <ul style="list-style-type: none"> - Creating a direct linkage between Consumers while delivering in terms of Affordable, Quality, Safe and Reliable Electricity Supply. - Increased Public Awareness of ERA and its mandate. | <p>Affordable Tariffs, Reliable Power and Good Quality of Service.</p> <p>Provide information to build Understanding of the ESI. Enhanced Verification of Investments.</p> <p>Prioritize monitoring Compliance to Laws, Regulations and License Conditions.</p> <p>Ensure that Licensees focus on improving Quality of Service.</p> <p>Establish Electricity Consumer Touch points and platforms.</p> <p>Put in place Electricity Consumer Ambassadors.</p> <p>Set up a National Forum for Large Industrial Users of Electricity.</p> <p>Organize Regional Electricity Consumer Days.</p> <p>Carry out Brand Perception and Customer Satisfaction surveys.</p> <p>Establish Regional Offices, bringing services close to the people.</p> |

4. PERSPECTIVE (EXTERNAL ANALYSIS)

4.1 Developments in the Energy Sector

Over the years, fundamental developments have occurred in the Energy Sector, making ERA experience challenges in executing its mandate. Globally, the Energy Sector is greatly inclined towards the adoption of Renewable and Clean Energy sources due to the need to reduce Carbon Dioxide emissions that greatly lead to Climate Change. The need for Adoption and Use of Renewable and Clean Energy; promotion of Energy-Efficient practices and technologies; and rapid Industrialization of the economy through increased Access to and Utilization of Electricity necessitates that ERA aligns its Strategy to National priorities and Global developments around Renewable Energy and the Sustainability agenda.

The International Renewable Energy Agency (IRENA) estimates that to meet the goals of the Paris Agreement, there is need to increase the share of Renewables in the Annual Global Electricity Generation from 25% today to 86% by 2050. Despite the Optimistic Outlook of Renewable Energy, the shift from Fossil Fuels is not happening fast enough to satisfy the growing demand for Clean Energy. This has resulted in the continued exploitation of Fossil Fuels, including: Oil, Gas, and Coal. To balance the demand for Renewable Energy with the staying power of Fossil Fuels, there is need to invest heavily in the Solar and Hydro technologies, the main sources of Renewable Energy.

4.2 Uganda's Vision 2040 and the National Development Plan III and ERA's Role

Uganda's Vision 2040 is a blueprint for Uganda's development agenda from 2013 to 2040. It recognizes that Energy and in particular Electricity, is a key driver of Socio-Economic Growth.

To drive Industrialization, Uganda will need to increase Access to the National Grid to 80% and attain per capita Electricity Consumption of 3,668 kWh by 2040. It is estimated that to meet the Country's Energy needs, Uganda will require a Generation Capacity of 41,738 MW by 2040. This will be obtained from a combination of sources, including: Hydropower, Solar, Wind, Geothermal, Nuclear, Biomass, Peat, and Thermal. To achieve this, ERA will encourage the development and exploitation of Renewable Forms of Energy such as Wind, Solar and Biomass, to complement Hydropower.

The National Development Plan III's Goal is to "Increase Average Household Incomes and improve the Quality of Life of Ugandans." This goal is to be achieved under the overall theme of "Sustainable Industrialization for Inclusive Growth, Employment, and Sustainable Wealth Creation". To achieve this goal, the NDP III focuses on: Enhancing Value Addition in Key Growth Opportunities (Agriculture, Tourism, Minerals, Oil and Gas and Knowledge); Strengthening the Private Sector to Drive Growth and Create Jobs; Consolidating and increasing the Stock and Quality of Productive Infrastructure; Increasing Productivity, Inclusiveness, and Wellbeing of the Population; Strengthening the role of the Public Sector in the Growth and Development Process.

In a bid to achieve the NDP III Goals, the Energy Sector Government Priorities to foster transformation are:

- (i) Increase Access to and Utilization of Electricity;
- (ii) Increase the Generation Capacity of Electricity;
- (iii) Increase Adoption and Use of Clean and Renewable Energy; and,
- (iv) Promote the Utilization of Energy-Efficient Practices and Technologies.

ERA as a Regulator will have to ensure that the strategies stipulated in the NDP III are adopted to facilitate achievement of the set goals. The Uganda Vision 2040 and NDP III Energy Sector Objectives are illustrated in Table 8.

Table 8: Uganda Vision 2040 and NDP III Energy Sector Objectives

| No. | Vision 2040 and NDP III Objective | Vision 2040 and NDP III Strategic intervention | ERA Strategic Implication | ERA Scorecard Item |
|-----|--|---|---|---|
| 1 | Increase Access to and Utilization of Electricity. | <ul style="list-style-type: none"> - Expand Transmission Network to key Growth Economic Zones (Industrial and Science Parks, Mining areas and Free Zones). - Develop an Incentive Program for the Large Electricity Users to exploit the Time-of-Use Tariff regime. | <ul style="list-style-type: none"> - Attract Private and Public Sector Investment in Transmission and Distribution Infrastructure. - Increase Consumption by Large Electricity Users. | <ul style="list-style-type: none"> - Several Private Investors Licensed in the Transmission Segment. - Increase in the Transmission and Distribution Line Length (Km). - Percentage of Households with Access to Electricity. - Increased Consumption by Large Electricity Users. |
| | | <ul style="list-style-type: none"> - Promote coordinated System Planning, in particular, Transmission and Distribution Planning, both Nationally and Regionally. | <ul style="list-style-type: none"> - Increased Transmission and Distribution Transformation Capacity (MVA). - Investment in Transmission and Distribution Infrastructure. | |
| | | <ul style="list-style-type: none"> - Develop Renewable Off-Grid Energy solutions (10,000 Km of Medium Voltage Networks and 15,000 Km of Low Voltage Networks). | <ul style="list-style-type: none"> - Develop Standards for Off-Grid Energy solutions. | <ul style="list-style-type: none"> - Increase in Distribution Network Length. - Increase in Transmission Network Length. |
| | | <ul style="list-style-type: none"> - Establish mechanisms to reduce End-User Tariffs. | <ul style="list-style-type: none"> - Reduce Technical and non-Technical Power Losses and the Cost of Generation. | <ul style="list-style-type: none"> - Percentage reduction in the Cost of Generation; and the Transmission and Distribution Losses. - Optimize Operations and Maintenance Costs. |
| | | <ul style="list-style-type: none"> - Develop and Enforce Standards of Quality in the Energy Sector. | <ul style="list-style-type: none"> - Develop and Enforce Minimum Performance Standards for Quality of Supply and Quality of Service. | <ul style="list-style-type: none"> - Percentage Compliance to Quality of Supply Standards. - Reduction in SAIDI. |
| | | <ul style="list-style-type: none"> - Review the existing Acts (Electricity Act, 1999, and Atomic Energy Act, 2008) and develop Legislation for Geothermal and Energy Efficiency to provide for emerging issues. | <ul style="list-style-type: none"> - Influence Legislation Amendment to enable ERA implement its mandate. - Improvement in Operational Efficiency. - Enforce Energy Efficiency measures. | <ul style="list-style-type: none"> - Improved Level of Compliance with License Terms and Conditions. - Support to the Amendment of the Electricity Act, and other applicable Laws, Regulations, Guidelines, and License Terms and Conditions. |
| 2 | Increase the Generation Capacity of Electricity. | <ul style="list-style-type: none"> - Develop Medium and Small Power Plants (Muzizi HPP, Nyagak, and Bagasse Co-generation Plants). | <ul style="list-style-type: none"> - Promote Least Cost Generation. - Enhance capacity to regulate Public-Private Partnerships. | <ul style="list-style-type: none"> - Percentage increase in Installed Generation Capacity from both Grid-Connected and Off-Grid Plants. |

| | | | | | |
|--|--|---|--|--|--|
| | | <p>Undertake preliminary development of Large Generation Plants (Construction of Ayago -840 MW, Feasibility for Kiba - 330 MW and Oriang - 392 MW).</p> | <ul style="list-style-type: none"> - Issue Permits and Licenses in line with the Statutory and Standard Operating Procedure timelines. - Monitor and Enforce Compliance of Projects at Construction Stage to the approved Project Implementation Schedules and Environmental Impact mitigation measures in line with the License Terms and Conditions. | Improved Level of Compliance with License Terms and Conditions. | |
| | | <p>3 Increase Adoption and Use of Clean Energy.</p> | <p>Construct 200 Off-Grids and Mini-Grids based on Renewable Energy.</p> | <p>Issue License Exemptions and Develop Regulations for Clean Energy.</p> | <ul style="list-style-type: none"> - License Exemptions issued in line with Statutory and Standard Operating Procedure timelines. - Regulations and Standards for Monitoring of Performance and Enforcement developed. |
| | | <p>Promote the use of New Renewable Energy solutions (Solar Water Heating, Drying, Cooking, Wind Water Pumping and Solar Water Pumping solutions).</p> | <p>Develop strategies to promote/ Accelerate Renewable Energy Generation and Use.</p> | <ul style="list-style-type: none"> - The proportion of Renewable Energy in the Generation Mix. - Reduction in the Weighted Average Generation Tariff (US\$/KWh). | |
| | | <p>Introduce a Net Metering Billing mechanism.</p> | <p>Develop a Framework for Net Metering.</p> | Policy for Net Metering implemented. | |
| | | <p>4 Promote Adoption and Utilization of Energy-Efficient Practices and Technologies.</p> | <p>Promote uptake of Alternative and Efficient Cooking Technologies (Electric Cooking, Domestic and Institutional Use of Biogas and Liquefied Petroleum Gas).</p> | <p>Participate in the development of Policies and Regulations on Energy Efficiency.</p> | |
| | | | <ul style="list-style-type: none"> - Promote the use of Energy-Efficient Equipment for both Industrial and Domestic Consumers. - Introduce Minimum Performance Standards for selected Electrical Equipment. | <ul style="list-style-type: none"> - Percentage of Energy saved through DSM and EE measures. - Reduction in the Weighted Average Generation Tariff (US\$/KWh). | |
| | | | <ul style="list-style-type: none"> - Promote and encourage Growth in Demand. - Strengthen Monitoring and Enforcement of Compliance. | <ul style="list-style-type: none"> - Percentage increase in Demand Growth. - Percentage increase in Compliance to Quality of Service Standards. | |

4.3 Electricity as an Engine for Economic Development

There is a direct relationship between Electricity Supply and National Development. With every 10% increase in Electricity Generation Capacity, the Country's Gross Domestic Product and Employment Creation capacity grow by 0.62% and 0.32%, respectively. At the Household level, Household Incomes in Electrified Villages are 2.22 times better than those in Villages without Electricity. Electrification further leads to:

- (i) Improved Quality of Education and Health Care in Schools and Hospitals, respectively;
- (ii) Increased Home Study Time for children and adults; and,
- (iii) Enhanced Sense of Security and Safety for the Community at night.

ERA facilitates Uganda's Economic Transformation through Regulating the Generation, Transmission, and Distribution and Supply of Safe and Reliable Electricity to End-Users composed of Households, Commercial and Industrial Customers.

4.4 The Electricity Supply Industry Projections by 2025

Uganda's Effective Electricity Generation Capacity is projected to double from 1182 MW in F/Y 2018/19 to 3500 MW in 2025. The Transmission Capacity is projected to increase from 2,354 Km in FY 2018/19 to 4,354 Km of High Voltage Transmission Lines, while Household Access to Electricity is set to increase from 24% to 60%. This will be achieved through expansion of the Electricity Transmission and Distribution Infrastructure and Accelerated Customer Connections. The Power sub-Sector further projects an increase in per Capita Electricity Consumption from 100 kWh in FY 2018/19 to 578 kWh. A total of US\$ 6 Billion of Investments is required upto 2030 to prepare the Distribution and Transmission Infrastructure for New Generation Capacity coming on stream, to improve efficiency and grow Grid Connections.



Once Commissioned, the 600 MW Karuma Hydropower Project is expected to further boost Uganda's Installed Generation Capacity.

4.5 Key Developments in the ESI and Implications for ERA

Table 9: Energy Sector Developments

| Issue | Explanation | Implication to ERA | Possible Strategic Action/Response | Scorecard Targets to address the Issue |
|---|---|--|--|--|
| 1. Climate Change | <p>There is a heightened interest in Climate Change. The Electricity sub-Sector is in a privileged position to contribute positively to the Climate Change Agenda.</p> | <p>Integrate Climate Change into the Corporate Strategy.</p> | <ul style="list-style-type: none"> - Increase Adoption and Use of Clean Energy in the ESI. - Promote uptake of Alternative and Efficient Cooking Technologies (Electric Cooking, Domestic and Institutional Use of Biogas, and Liquefied Petroleum Gas). - Promote the Use of Energy-Efficient equipment for both Industrial and Domestic Consumers. - Collaborate with NEMA in ensuring the Environmental Sustainability of Energy resources. | <ul style="list-style-type: none"> - Reduction of Use of Biomass Energy for Cooking. - Increase Adoption and Use of Clean Energy. |
| 2. Enactment of the New Environmental Act, 2019, and the additional functions under Section 11 of the Act. | <p>Plan, Regulate and Manage the segment of the Environment within ERA's mandate.</p> <p>Carry out Strategic Environmental Assessment under Section 47 of the Environmental Act.</p> <p>Prepare an Environmental Action Plan under Section 45 of the Environmental Act.</p> <p>Prepare the State of Environment Report under Section 46.</p> <p>Undertake Environmental Inspections and review Environment Assessments and Environmental Audits under this Act and any other applicable Law.</p> <p>Ensure that any activity undertaken in its area of jurisdiction complies with this Act.</p> <p>Implement the decisions of the Authority [NEMA] concerning the segment of the Environment under its mandate.</p> <p>Report on progress quarterly and account to NEMA for ERA's execution of its role concerning Environmental Management within Three (3) Months after the end of the financial year.</p> <p>Implement and Enforce the provisions of this Act.</p> | <p>The expanded mandate of ERA to ensure Compliance to Environmental Provisions.</p> | <ul style="list-style-type: none"> - Develop the Institutional Capacity to execute additional roles. - Strengthening Inter-Sectoral collaboration. | <ul style="list-style-type: none"> - ERA complies with the NEMA Act, 2019, and ensures Compliance by other Electricity Industry Players. - Certificate of Environmental Compliance with the relevant provisions of the National Environment Act, 2019; issued with a Certificate by NEMA to ERA. |



| | | | |
|---|---|---|--|
| <p>3. Vision 2040, National Energy Policy 2019, NDP III</p> <p>These Strategic Plans dictate Government priorities and goals. Both the Energy Policy and NDP III are in the final draft stages.</p> | <p>To align ERA's Strategy with Government direction.</p> | <p>Develop a New Strategic Plan and Business Plan highlighting the Government priorities.</p> | <p>New Strategic Plan highlighting Government priorities.</p> |
| <p>4. Amendment of the Electricity Act of 1999</p> <p>The Electricity Act of 1999 is currently under review to strengthen ERA's Regulatory Regime, remove the Single Buyer model, and introduce stringent penalties against Power Theft.</p> | <ul style="list-style-type: none"> - The Amended Act should give ERA more Authority and resources for the execution of its mandate. - Increased competition for more Industry Efficiency. - Support Loss Reduction Strategy to enable Affordability. | <ul style="list-style-type: none"> - Increase in ERA Income through Generation Levy. - More stringent penalties for Licensees and Power Theft. - Strengthen the Regulatory function in readiness to the changes. | <ul style="list-style-type: none"> - Improved Level of Compliance with License Terms and Conditions, the Electricity Act, and other applicable Laws, and Standards. - Reduced Energy Distribution and Transmission Losses. |
| | | | |
| | | | |
| | | | |
| <p>5. Enhancing Value Addition in Key Growth Opportunities (Agriculture, Tourism, Minerals, Oil and Gas and Knowledge)</p> | <p>Electricity is a key driver for Industrialization.</p> | <p>ERA needs to ensure Adequate and Reliable Supply of Electricity.</p> | <ul style="list-style-type: none"> - Reduce End User Tariffs. - Invest in Transmission and Distribution facilities. - Increase Installed Capacity. - Improve Reliability of Supply. |
| | | | |
| <p>6. Net Metering</p> | <p>Net Metering is a Billing mechanism that allows Consumers who generate some or all of their Electricity to use that Electricity any time instead of when it is generated.</p> | <p>Currently, ERA does not have a Framework and Regulation for Net Metering.</p> | <p>Develop a Framework for Net Metering.</p> |
| | | | |
| <p>7. Private Investment in the Transmission Grid</p> | <ul style="list-style-type: none"> - As a measure for fast-tracking development of the Transmission Segment, this segment has been opened up to Private Investors. - There is an urgent need to develop a Transmission Investment Framework to attract and mainstream the much-required investment which the Government of Uganda cannot afford in the short-run. | <p>Investments required for the Transmission Segment are substantial hence ERA has to quickly evaluate the possibility of Private Investment into this segment.</p> | <ul style="list-style-type: none"> - Increase Transmission Capacity and Reduce Transmission Losses. - Percentage of Actual and Verified Investments in the Approved Investment Plan. |

| | | | | |
|--|---|---|---|---|
| 8. Adoption of New and Emerging Technologies for Power Generation, e.g. Nuclear | <p>The Government has expressed significant interest in the peaceful exploitation of Nuclear Energy to generate the much-needed Electricity. This will contribute to the diversification of the Power Generation Mix.</p> | <p>ERA has traditionally regulated other Power Technologies and may not have appropriate Human Resource and Standards for Regulation of Nuclear Power. This may create a vacuum in the Regulatory Environment, resulting in a hostile takeover from the Atomic Energy Agency.</p> | <p>Develop Internal Capacity and Standards for the Regulation of Alternative Sources of Power.</p> <ul style="list-style-type: none"> - Number of appropriately Trained and Qualified Human Resources. - Several Knowledge Sharing sessions per Department or Unit. - The number of New Ideas Generated, Adopted, and Implemented. | <ul style="list-style-type: none"> - Framework and Regulation for Net Metering developed and implemented. |
| 9. Increasing Adoption of Off-Grid Systems such as Solar Home Systems by Consumers | <p>Several Domestic Consumers have installed Solar systems as a result of the declining prices of Solar Photovoltaic panels.</p> | <p>This may have an impact on Demand Growth and Energy Sales; with Corresponding impact On the Revenue Requirement for the Electricity Supply Industry.</p> | <p>Make provision for Net Metering.</p> | <p>Lower Distribution and Transmission Losses leading to reduced End-User Tariffs.</p> |
| 10. Inadequate Power Evacuation Capacity | <p>There is lack of synchronization between Generation and Transmission Projects, and Demand. Some Power Generation Projects have been completed without corresponding Evacuation Lines and/or Demand.</p> | <p>The Power Purchase Agreements that Compel UETCL to pay for all Generated Energy result in a Higher Cost to the Consumer.</p> | <ul style="list-style-type: none"> - Renegotiate Power Purchase Agreements. - Synchronize Generation and Transmission Project completion. | <p>Clarify the mandate of the Rural Electrification Agency to ensure that there is no ambiguity on the role of ERA as the Regulator under the Electricity Connections Policy.</p> |
| 11. Rural Electrification Policy | Waiver of Connection Fees to increase Access to Electricity across the Country. | Loss of Revenue on the side of the Distribution Utilities. | <ul style="list-style-type: none"> - Licensing of all sub-Sector Players. - Compliance with Quality of Service Standards. | |

4.6 Benchmarking Partner Analysis

An analysis of ERA's major benchmarking peers was done. During the Internal Stakeholders' Survey, Two (2) major Benchmarking Partners were identified, that is the Energy and Petroleum Regulatory Authority (EPRA) Kenya and the Office of Gas and Electricity Markets (OFGEM) – United Kingdom, based on their operating environment and capabilities as Regulators in the Energy Sector. Tables 10 and 11 show an analysis of their Strategy and Lessons to inform the ERA Five-Year Strategy. During the selection of ERA's Strategic Choices, consideration of what makes the peers win was considered.

Table 10: Analysis of ERA's Key Benchmarking Partner 1: EPRA

| No | Strategy Question | EPRA | Lessons Learnt | ERA Scorecard Target |
|----|---------------------------------------|---|---|--|
| 1 | What is their Winning Aspiration? | To be a World-Class Energy Regulator. | Work to excel at Regulation Globally. | Number of Regional/Global Recognition Awards. |
| 2 | Where are they playing? | Petroleum, Electricity and Renewable Energy Sectors in Kenya. | Have an expanded mandate of inter alia, Regulation of Upstream Petroleum Products, Gas and Coal. | The Electricity Act, 1999, stipulates ERA's mandate. |
| | Customers: | Website, publishes lay versions of complex study reports, social media (Facebook and Twitter) and regular updates to keep Staff and Partners informed about the Industry developments, Libraries (physical and online). | Regular Update of the ERA Website for information and representation with all work done at ERA and new developments in the ESi. | Number of publications and reports shared with stakeholders, physical engagements (Annual Public Hearings and Lectures). |
| | Products and Services: | Licensing and Regulation, Economic Regulation, Enforcement and Compliance, Complaints and Dispute Resolution. | Area to benchmark for ERA to improve service delivery. | The Number of Licensees Complying with License Terms and Conditions. |
| | Geography: | Kenya | | |
| 3 | How are they Winning? | ISO 9001:2015 Certified Quality Management Systems. | Adopt Quality Management Systems. | Number of ISO 9001:2015 Certified Quality Management Systems. |
| 4 | What Capabilities do they have? | Skilled and Empowered Staff | Capacity Building | <ul style="list-style-type: none"> - Number of Staff equipped with the necessary skills to enhance performance. - The Number of Knowledge Sharing Sessions per Department or Unit. |
| 5 | What Management Systems do they have? | An updated Website, strong Governance Structures comprising of the Executive Body and the Governing Body. | Good Governance is critical for Strategic Success. | Percentage of Employee Compliance with Internal Controls. |

Table 11: Analysis of ERA's Key Benchmarking Partner 2: OFGEM

| No | Strategy Question | OFGEM | Lessons Learnt | ERA Scorecard Target |
|----|-----------------------------------|--|---|---|
| 1 | What is their Winning Aspiration? | Delivering better outcomes for all Consumers, through the creation of smarter markets that are Efficient, Dynamic, and Competitive. | Operation is driven by Consumer Interests. | Consumer Satisfaction Index |
| 2 | Where are they Playing? | Customers: Water and Energy Supply Sector, Water and Energy Sector Consumers. | Widen mandate of Regulation for inter-related Sectors. | The Electricity Act stipulates ERA's mandate. |
| 3 | How are they Winning? | Channels: - Research Hub and Steering Committee established in the Year 2018/19, to reduce the number and frequency of consultations and focus on making stakeholder engagement more accessible, less burdensome and more representative. - The website publishes lay versions of complex study reports, social media (Facebook and Twitter) are updated regularly to keep Staff and Partners informed about the Industry developments, Libraries (physical and online). | Need for improved Stakeholder Engagement. - The website publishes lay versions of complex study reports, social media (Facebook and Twitter) are updated regularly to keep Staff and Partners informed about the Industry developments, Libraries (physical and online). | ERA is concerned with the Level of Stakeholder Participation in the Authority's activities. ERA conducted a Stakeholder Satisfaction Survey in 2019. Compliance with the Electricity Act and other relevant Laws and Regulations, including Environmental Regulations. |

4.7 Analysis of ERA's International Partners

ERA's major International Stakeholders are summarized in "Table 12: Analysis of ERA's International Partners". All stakeholders with High Interest and High Influence in ERA's business have been identified and prioritized to be managed effectively. All stakeholders with High Influence, but Low Interest will be managed and engaged to increase their interest in ERA for support optimization.

Table 12: Analysis of ERA's International Partners

| Partner Name | Nature of Relationship | Interest and Influence | Strategic Partner Engagement and Priorities | Scorecard Insights |
|--|--------------------------|---|---|--|
| 1. The Government of China | Strategic Sector Partner | - High Influence right from Financing to Technical Capacity development. - Key sub-Sector Investment Potential and Strategic Partner for Commercial and Technical Transfer of Resources. | Concessional Debt/Grant Financing below market rates for Technical Assistance and Project development. a) ERA has to ensure Transparent Regulatory Environment. Develop Legal Framework (Power Purchase Agreements) to facilitate the implementation of Project Financing. Develop and share Technical Concept Notes for Financing with the Partner. | a) Partner to identify potential opportunities for Investment. b) Document Viable Projects and seek Funding Support and Partnerships. |
| 2. European Union and Europe – (United Kingdom, Germany, Norway, and Denmark) | Strategic Sector Partner | Influence is high in Mini Hydros, Renewable Energy development, Rural Electrification and Transmission Networks. | Grant Financing to make Renewable Energy development affordable to the Rural communities. Debt Financing for Capacity development and Access to Electricity in Rural Areas. c) Maintain a Transparent Regulatory Environment. d) Develop Legal Framework (Power Purchase Agreements) to facilitate the implementation of Project Financing. e) Develop and share Technical Concept Notes for Financing with the Partner. f) Technology transfer. | a) Partner to identify potential opportunities for Investment. b) Document Viable Projects and seek Funding Support and Partnerships. |
| 3. The World Bank | Strategic Sector Partner | Its Influence is High in Electricity Access. | Concessional Debt Financing below market rates for Electricity Access, Distribution, Capacity Building and development of Transmission Networks. | a) Partner to identify potential opportunities for Investment. b) Document Viable Projects and seek Funding Support and Partnerships. |

Appendix I: STRATEGY CHOICE ANALYSIS

(a) Two (2) Strategic Possibilities were examined to assess the best fit to transform ERA during the Strategic Plan Implementation period. The Strategic Possibility 2 (Figure 5) was considered to be the most ideal considering the Current and Emerging Issues identified in the Electricity Supply Industry, Global Trends, and Government Priorities examined in the Perspectives Section.

(b) A Hypothesis was developed, and conditions specified that needed to be true for the selected Strategic Possibility to give better chances of Success for ERA. Thereafter, the risks in the respective categories were assessed by the Authority. Any Condition or Risk Factor considered as “nice to have” was crossed out and indicated with a crossline in the middle of the text as shown in Table 13. In Table 13, the Major Risk Areas identified are **not** crossed out.



ERA's Internal and External Stakeholders will be critical for the most ideal Strategic Possibility to succeed.

Table 13: Analysis of Risks affecting ERA's Strategic Possibility 1 – What would have to be True for Strategic Possibility 2 to be a Great Strategy?

| Industry | Customer Value- Channel | Relative Position | Competitor (for same National Resource Envelop) |
|---|--|--|---|
| Segments | Targeted Meetings, Dialogues, Digital, etc. | Capabilities | Reaction |
| a) There is an adequate number of Consumers who can absorb all Electricity supplied at the stated Tariff (2) b) Government, Development Partners and Private Sector Players are willing to partner with and finance ERA to develop Uganda's Energy Sector with mutually beneficial terms (1) c) The ERA is not dominated by players who lack the interests of consumers d) The Government would provide for focal persons from ERA to participate in strategic meetings at MEMD e.g. to inform Policy over emerging technologies like Nuclear Power to empower ERA to execute her mandate e) International Energy Players, Partners, and Researchers would be supportive/receptive of ERA for strategic benchmarking and other f) High Tariffs and Unreliable Power Supply would not affect Demand to Unsustainable Levels (6) | a) Value Targeted Meetings, and Public Hearings, Engagements with ERA b) Value Quality Energy Sector Research, Tariff Guides, Publishing and Dissemination (3) c) Appreciate attending training and events organized by ERA d) Some customers find digital channels convenient and cheaper e) End Customers/ Electricity Users | a) ERA can attain and retain Independence through Advocacy or Law (2) b) ERA can recruit, train, manage and offer better pay and benefits to a Team of Professionals who find pride in being associated with ERA and, therefore, have restrictive Transfer Price (1) c) ERA can set Policy Standards that all other sub-Sector Players and Partners would respect without question (3) d) ERA can anticipate and develop better readiness for proactive Disaster Management as well as require respective players to do so e) ERA can hold any Energy Sector Player/ Licensee to account without any external interference at a loss to Government (4) | a) To advocate for the merger of ERA with other entities would not succeed (1) b) To initiate collaboration with ERA in Research, Pricing and Public Engagements would be a priority (2) c) Supports ERA to become independent, retain Internally Generated Funds and get more funding d) Reaching Staff from ERA does not affect Human Resource planning levels by causing an adverse turnover rate |
| Structure | Costs | | |
| a) Any Political Interference would not lead to Regulatory Capture or undermine ERA's ability to deliver her core mandate b) The continuing monopoly of Umeme Limited over the Main Grid with current concession terms is not absolute (3) c) Mergers of Government Agencies would not dilute ERA's mandate, Authority, and current efficiencies or Independence (4) d) The Government can find the money for investment in Power Evacuation, Access, and Demand without affecting ESI sub-Sector Effectiveness (5) e) Amendment of the Electricity Act would make ERA a more Effective Regulator f) Unregulated Sector Players like ERA, Nuclear Energy Regulator, etc. can co-exist without undermining delivery of ERA's mandate. | a) Understand the drivers of Tariffs and the mandate of ERA (2) b) Value Access to the Grid and Use Productively (1) c) Are responsive to training on better use of Electricity and would report those engaged in power theft | f) No new Policy affecting the Electricity sub-Sector would be announced without the involvement of ERA as the Regulator g) ERA can cause a forum of all Energy Sector Players to meet quarterly or bi-annually to discuss Policy with Top Policy Leaders | a) Costs compared to other Authorities and Agencies b) ERA is a go-to Authority by Government and other stakeholders for ESI Policy issues due to Operational Efficiencies c) ERA can deliver on its mandate at lower costs |

Ranking of the Top Four Risks to ERA's Strategic Choice

During the Strategic Planning process, the Authority examined the major conditions that could threaten ERA from achieving its Targets, referred to as Barriers to the Identified Strategic Possibility. The Major Risks are ranked in Table 14.

Table 14: Key ERA Strategic Risks Identified

| Industry Segments | Customer Value- Channel | Relative Position Capabilities | Competition Reaction |
|--|---|---|--|
| Government, Development Partners and the Private Sector Players are willing to partner with and finance ERA to develop Uganda's Electricity Supply Industry on mutually beneficial terms (1) | Value Access to the Grid and have Productive Use of Electricity (1) | ERA can Recruit, Train, Manage and Offer better pay and benefits to a Team of Professionals who find pride in being associated with ERA and, therefore, have restrictive Transfer Price (1) | ERA's competition advocating for the merger of ERA with other entities would not succeed (1) |
| 1 | 3 | 2 | 4 |

The Team established the most worrisome risk as "Government, Development Partners, and Private Sector Players are willing to partner with and finance ERA to develop Uganda's Electricity Supply Industry on mutually beneficial terms" and went ahead to test it. Considering the nature of the Industry, the Team preferred the Guerrilla Style Test, which revealed that ERA has high chances of success if more effort is applied to establish Effective Governance Mechanisms as well as Advocacy and Stakeholder Management, Resource Mobilization and Project Execution, with Timely Project Reports and Information Dissemination to the respective stakeholders. Since the Biggest Risk to the Strategy calls for Effective Stakeholder Management on the part of ERA, the Strategic Possibility has been accepted, as one offering better chances of success.

TESTS FOR BARRIERS

The Authority designed barriers for the proposed strategy as follows:

Table 15: Barriers to ERA Strategy

| Barrier No. 1 | Guerrilla-Style Test | Small-Scale Test | Definitive Test |
|---|--|--|---|
| | Get a sense of how ERA could Effectively Engage Stakeholders to Drive Interest, Increase Investment into the Power Sub-Sector and obtain Budget Support from the Government and Development Partners. | Identify reactions from the specific key stakeholders such as Government of what drives interest in ERA; and their plans for the Power Sub-Sector. | Gain deeper insights into what the major stakeholders want through engagement – by requesting for commitment and examining the responses. |
| Barrier No. 1: Inability of ERA's Stakeholders – Government, Investors and Development Partners to finance ERA's Strategy Implementation as well as Invest in the Electricity Sub-Sector | Guerrilla-Style Test Objective: Assess the ability to obtain full Government Budget Support as well as attract Investors into Uganda's Energy Sector. Test: Make appointments for meetings on advocacy with critical Public Officers in the respective Ministries e.g. Energy, Finance, and Parliament of Uganda. If/Then Hypothesis: If the stakeholders are receptive to ERA, and show a willingness to support, then the strategic risk is manageable. Standard of Proof: Any 10 critical Public Officers in Energy, Finance, and Parliament show genuine support to ERA's requests. | Small-Scale Test Objective: Obtain feedback from the Top Political Leaders and Development Partners – current perspectives over the future of ERA in respect to mergers and funding commitments; and Investments in the Power Sub-Sector. Test: Arrange meetings with top Political Leaders and Executives for their commitment to ERA's Legal status; and Power Sub-Sector Investment Preference. If/Then Hypothesis: If the Political Leaders give positive feedback on ERA's Independence, then effective strategy execution shall be facilitated. Standard of Proof: 40% of the 30 Leaders met provide positive feedback showing support to ERA as a Critical National Authority. | Definitive Test Objective: Establish whether ERA is a Strategic Authority in the eyes of Government and, therefore, a priority. Test: Request to meet the President to discuss fast-tracking of the Electricity Act Amendment by FY 2020/21. If/Then Hypothesis: If the President confirms the appointment and gives positive remarks, then ERA is critical and strategic. Standard of Proof: Minuted responses from the meeting with the President. |

The Authority then tested the Top Barrier or the Most Worrisome Condition as follows:

| Barrier No. 1: Inability of ERA's Stakeholders – Government, Investors and Development Partners to finance ERA's Strategy Implementation as well as Invest in the Electricity Sub-Sector | Guerrilla-Style Test | Small-Scale Test | Definitive Test |
|--|----------------------|------------------|-----------------|
| | | | |

The results of the Guerrilla Style test show that ERA could improve its odds of success with the chosen Strategic Possibility. However, the Authority agreed to also use the Definitive Test as the Strategy Possibility is being implemented.



Appendix II: ERA'S CHALLENGES AND OPPORTUNITIES

An analysis of ERA's Current Challenges was made. The Strategic Planning process involved participation by all the Board Members, the Top Management Team and Staff. Each participant was asked to list all the issues that they considered as the major challenges or bottlenecks to ERA's Future Success and Sustainability.

Challenges faced by ERA

Table 16 presents some of the challenges facing ERA as identified by Staff.

Table 16: Challenges faced by ERA

| No. | Challenge | Industry Segment | Industry Structure | Channel Customers | End Customers | Current Capabilities | Our Costs | Our Competition | Impact Rank |
|-----|--|------------------|--------------------|-------------------|---------------|----------------------|-----------|-----------------|-------------|
| 1 | Political Interference | | √ | | | | | | |
| 2 | The continuing monopoly of Umeme Limited over the Main Grid with the current Concession Terms. | | √ | | | | | | |
| 3 | Emerging Technologies such as Nuclear Power whose use is presided over at Policy Level. | | √ | | | | | | |
| 4 | The public is increasingly becoming aware of their rights, actively participating in the affairs of this nation, and demanding for what they believe to be rightfully theirs. | | | | √ | | | | |
| 5 | Change of Leadership with the expected appointment of a New Chairman and One (1) Board Member at the Authority. | | √ | | | | | | |
| 6 | Staff Turnover | | | | | √ | | | |
| 7 | The Electricity Distribution Segment could be dominated by players who do not have the interests of Consumers at heart. | √ | | | | | | | |
| 8 | Increased Electricity Generation without corresponding increment in the uptake of Power. | | | | | √ | | | |
| 9 | The threat of Deemed Energy continues to exert more pressure on the Tariffs. | | | | | | √ | | |
| 10 | The threat of Mergers of Government Agencies. | | √ | | | | | | |
| 11 | Activism by some stakeholder Groups and the General Public could affect the implementation of planned projects. | | | √ | | | | | |
| 12 | Introduction of New and Complex Technologies for Power Generation, e.g. Nuclear. ERA will have to watch as an "Observer" while the Ministry of Energy takes the lead on Nuclear Power issues. This could reduce ERA's muscle and clout as a Regulator. | | √ | | | | | | |



| | | | | | | | |
|----|---|--|---|---|---|---|--|
| 13 | Limited planning for disasters and pandemics that could destabilize the Electricity Supply Industry. | | | | ✓ | | |
| 14 | Limited Skills set to deliver the mandate of the Authority. | | | | ✓ | | |
| 15 | Regulatory Capture - this can affect the legitimacy of the Regulator, which is not easy to rebuild. | | ✓ | | | | |
| 16 | Low Demand for Electricity; the Tariff may become too high to unsustainable levels that may affect the ESI. | | | ✓ | | | |
| 17 | Limited Investment in the ESI. Low Investment in the Transmission and Distribution segments may contain Access, Demand, and Power Evacuation. | | ✓ | | | | |
| 18 | Low Electricity Access; Access is one of the avenues of Electricity Demand Growth and Low Access will not grow Demand, which will affect Tariff Levels. | | | | ✓ | | |
| 19 | Low Quality of Supply; this can affect the Productivity And Consumption of Energy. | | ✓ | | | | |
| 20 | Pending Amendment of the Electricity Act; Amendments impact on all functions of ERA. | | ✓ | | | | |
| 21 | Nuclear Energy has the potential to change the entire ESI mix yet a different Regulator controls it. | | ✓ | | | | |
| 22 | Government involvement in Power Distribution - the much-needed Government intervention in Investment has created some implementation challenges. | | ✓ | | | | |
| 23 | The shock on functioning Organizational Culture brought by New Staff at Senior Level. | | | | ✓ | | |
| 24 | Under-budgeting affects the Authority's overall achievement of Goals. | | | | ✓ | | |
| 25 | Change in the Regulatory Landscape, for example, New Concessions coming up. | | ✓ | | | | |
| 26 | Macro-Economic uncertainties such as Exchange Rate Fluctuation and Inflation. | | | | ✓ | | |
| 27 | Legal suits with Licensees whose concessions are coming to an end. | | | | ✓ | | |
| 28 | Dilapidated Infrastructure | | | | ✓ | | |
| 29 | Low Capacity Utilization | | | ✓ | | | |
| 30 | Power Theft | | | ✓ | | | |
| 31 | Automation, for example, the Regulatory Information Management System. | | | | ✓ | | |
| 32 | The Electricity Connections Policy, aimed at increasing Access to Electricity in the Country, may pose resource constraints on the different Licensees. | | ✓ | | | | |
| 33 | Budget overruns when Costs grow at a higher rate than Revenue. | | | | | ✓ | |



| | | | | | | | | | |
|----|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| 34 | Climate Change and its impact on the Industry Operations. | | | | | | | | |
| 35 | Non-Compliance with Environmental Laws by Licensees. | | | ✓ | | | | | |
| 36 | Sector Players such as the Rural Electrification Agency that is not regulated. | | ✓ | | | | | | |
| 37 | The threat of Environmental Pollution from Inadequate Management of Hazardous Materials. | | | | | ✓ | | | |
| 38 | High Tariffs | ✓ | | | | | | | |
| 39 | Unreliable Supply of Electricity | ✓ | | | | | | | |
| 40 | Net metering. Currently, ERA does not have a Framework and Regulation for Net Metering. This will/may distort the current market setup; will have an impact on the Energy Sales and Revenue Requirement for the Sub-Sector. | | | | | ✓ | | | |
| 41 | Alternative Sources of Energy – Home Solar Systems. With a decline in Prices of Solar PhotoVoltaic panels, there is a growing trend for the installation of PhotoVoltaic Solar systems in homes, which are already supplied by the Grid. This may have an impact on Demand Growth, and Energy Sales, with corresponding impact on the Revenue Requirement of the Sub-Sector. | | ✓ | | | | | | |
| 42 | Electricity Market Setup - the recommendations of the Diagnostic Study conducted by the World Bank proposed to have one Distribution Company for the entire Country. This could have implications on the Electricity Market Setup of Uganda and specifically on the most Fundamental Element of Regulation, which is Competition in the Sub-Sector. | | ✓ | | | | | | |
| 43 | The proposed merger of Energy Sector institutions - Independence may be lost, the existence of ERA will be at risk. | | ✓ | | | | | | |
| 44 | High Investment requirements for the Distribution and Transmission Segments. | | | | | | ✓ | | |
| | Total Number per Issue | 03 | 20 | 02 | 04 | 13 | 03 | 00 | |

ERA's Opportunities to Optimize

Table 17 presents some of the Major Opportunities for ERA to prepare for and tap into. However, to fully tap into the opportunities, ERA must first attend to all strategic impediments to Growth and Sustainability.

Table 17: ERA Opportunities

| No. | Opportunity | Developers Partners | GOU / M&ED | Global Energy Sector | Licenses | Public | Local Partners and Affiliate Groups |
|-----|---|------------------------|------------|-------------------------|----------|--------|---|
| 1 | The proposed Amendment of the Electricity Act will empower ERA to enforce Compliance with the License Terms and Conditions, Regulations, and relevant Laws through Imposing Penalties and Sanctions. | | | | ✓ | ✓ | ✓ |
| 2 | The opening up of the Transmission Segment for participation by the Private Players as a measure for fast-tracking the development of the segment. | ✓ | | | ✓ | | |
| 3 | Increasing adoption of Solar Home Systems by Consumers; once the regulation of the Solar Home Systems is incorporated into the Amended Electricity Act, ERA could see Growth in its Revenue as well as the number of "Licensees", implying need for the development of the relevant Standards and Regulations and provision for Staffing. | | | | ✓ | | |
| 4 | Oil Development and Oil Revenues are needed to fund Transmission Lines and Large Hydropower Projects. -Crude oil is needed to fuel Thermal Power Plants to diversify the Energy Mix. -Align Growth in Generation Capacity to progress of Oil Development. | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5 | Investments in the Transmission and Distribution Systems for expansion and rehabilitation. | | | | | ✓ | |
| 6 | Presence of Development Partners who are willing to work with ERA. | | | ✓ | | ✓ | |
| 7 | The Electricity Connections Policy will increase Access to Electricity in Uganda. | | | | | ✓ | |
| 8 | Off-Grid Systems will have a high impact on the Target for Access to Electricity. Regulations for Licensing and operation of Off-Grid systems have to be urgently developed. | | | | | ✓ | |
| 9 | Partnership with key Regulators, for example, in Norway to harness knowledge and best practice. | ✓ | | | | ✓ | |

ERA's Most Pressing Strategic Issue was defined thus:



Figure 5: Most Pressing Strategic Issue

The Authority then framed Two (2) Choices to deliver Strategic Success by Optimizing the identified opportunities during the Strategic Plan Implementation period and beyond – either to focus on the Supply side or address the constraints in the Demand side, with the respective Strategic Possibilities that would increase success during the implementation period to FY 2024/25.

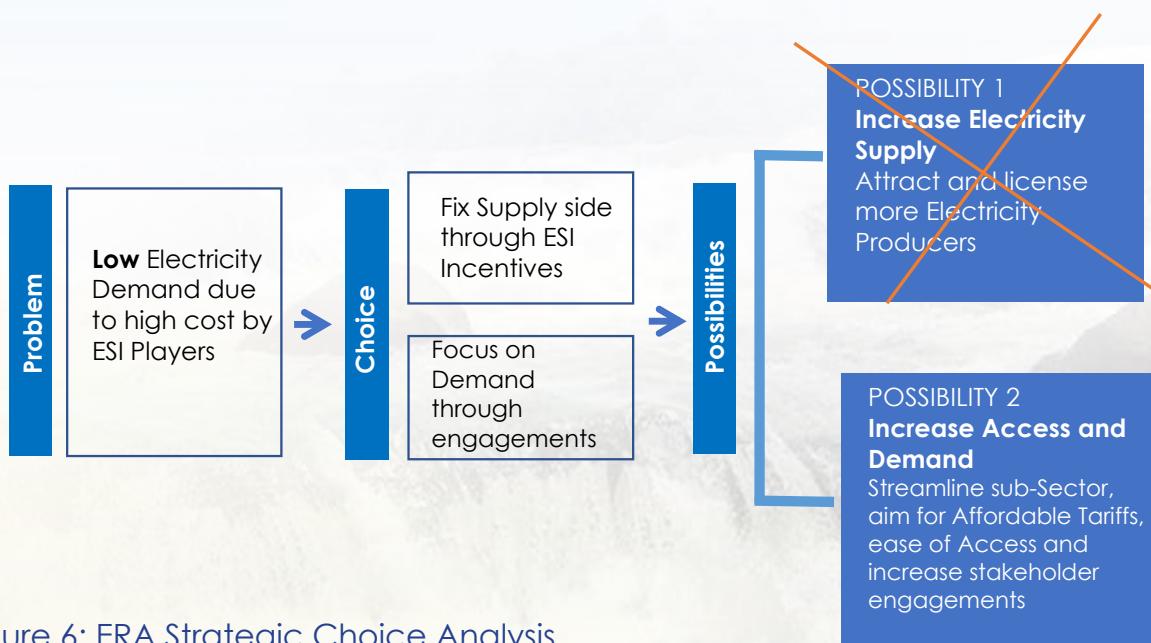
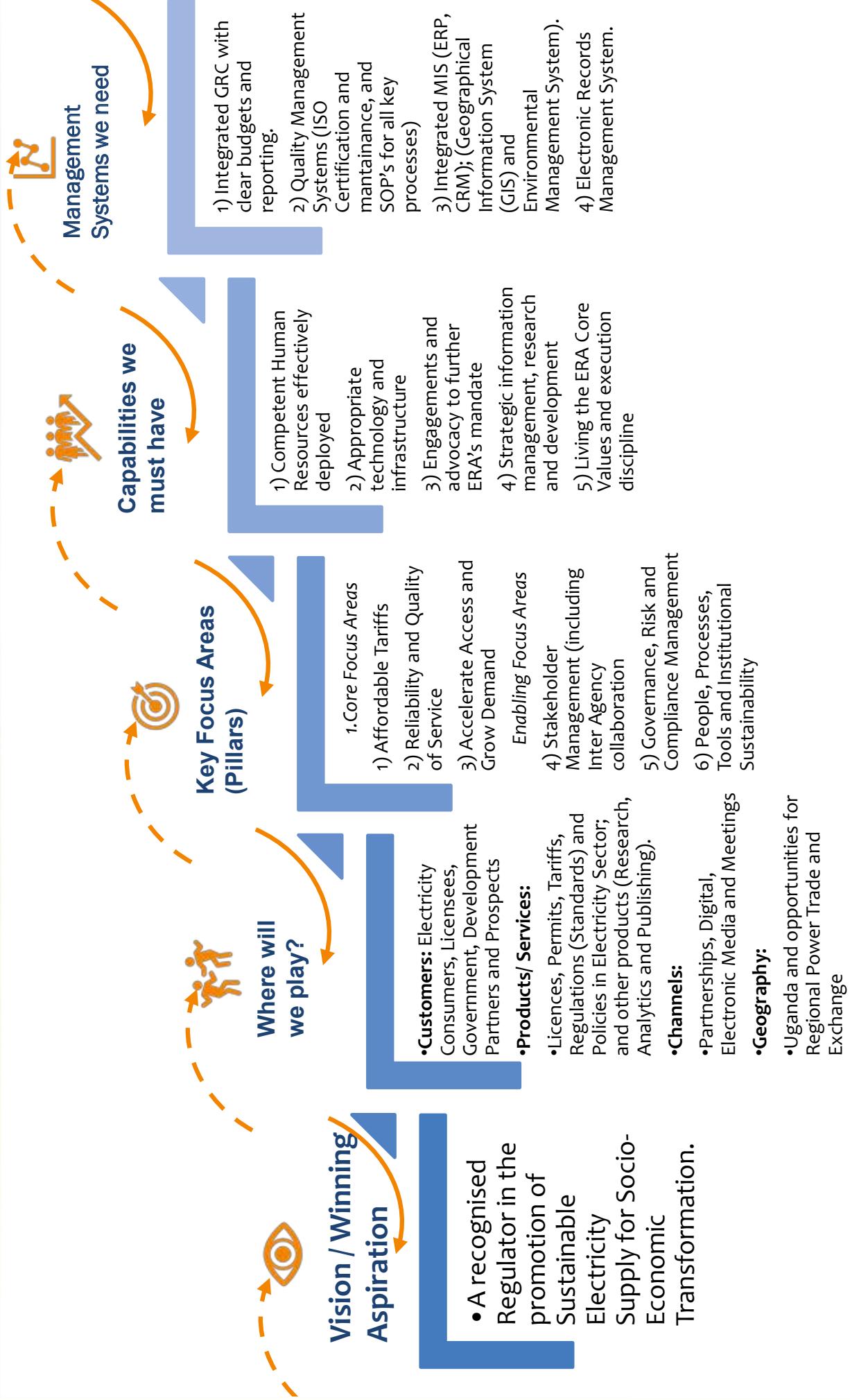


Figure 6: ERA Strategic Choice Analysis

Each of the above Strategic Possibilities was analysed. The Authority evaluated the current Strategy, which was found to be adequate, with the New Realities and Developments in the Energy Sector, as well as the anticipated Global Economic Slowdown due to the #Covid-19 Pandemic. ERA believes that despite the disruptions caused by Covid-19, there will be a persistent Demand for Affordable, Clean Energy in the Electricity Industry.

**Table 18: Current Strategy Summary**

| Our Winning Aspiration | A Recognized Regulator in the promotion of Sustainable Electricity Supply for Socio-Economic Transformation by 2025. |
|---------------------------|--|
| Our Current Playing Field | <ul style="list-style-type: none">Customers: Electricity Consumers, Licensees, Government, Development Partners and Prospects.Products/Services: Licences, Permits, Tariffs, Regulations (Standards) and Policies in the Electricity Industry; and other products (Research, Analytics and Publishing).Channels: Partnerships, Digital, Electronic Media and Meetings. <ul style="list-style-type: none">Geography: Uganda and Opportunities for Regional Power Trade and Exchange. |
| Our Focus Areas | <ul style="list-style-type: none">Key Focus Areas (1) Affordable Tariffs (2) Reliability and Quality of Service (3) Accelerate Access and Grow DemandEnabling Focus Areas (4) Stakeholder Management and Inter-Agency Collaboration (5) Strong Governance, Risk and Compliance Management (6) People, Processes, Tools and Institutional Sustainability |
| Our Capabilities | <ul style="list-style-type: none">(1) Competent Human Resources effectively deployed;(2) Appropriate Technology and Infrastructure;(3) Engagement and Advocacy for enabling Laws and Regulations and Regulatory Independence;(4) Strategic Information Management, Research, and Development; and,(5) Living the ERA Core Values and execution discipline. |
| Our Management Systems | <ul style="list-style-type: none">(1) Integrated Governance, Risk and Compliance (GRC) with clear budgets and reporting;(2) Quality Management Systems (ISO Certification and Maintenance, and Standard Operating Procedures for all key processes);(3) Integrated MIS (ERP, CRM); (Geographical Information System (GIS) and Environmental Management System); and,(4) Electronic Records Management System. |



Appendix III: ALIGNING CURRENT STRUCTURE TO THE STRATEGIC PILLARS

An analysis of the current structure was made and aligned to the Strategic Pillars.

Table 19: Current Structure to New Strategy Mapping

| Job Title | 1. Affordable Tariffs | 2) Reliability and Quality of Service | 3. Accelerate Access and Grow Demand | 4) Stakeholder Management | 5) Strong Governance, Risk and Compliance Management | 6. People, Processes, and Tools for Institutional Sustainability |
|--|-----------------------|---------------------------------------|--------------------------------------|---------------------------|--|--|
| Chief Executive Officer | √ | √ | √ | √ | √ | √ |
| Director Technical Regulation | | √ | √ | | | |
| Director Economic Regulation | √ | | | | | |
| Director Legal and Authority Affairs | | | | | √ | |
| Director Financial Services | | | | | | √ |
| Director Corporate and Consumer Affairs | | | | | √ | |

| | |
|-----------------------|--|
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