



# STRATEGIC PLAN

## 2018/2019 – 2022/2023





**Rural Electrification & Renewable Energy Corporation**

# **STRATEGIC PLAN**

## **2018/2019 – 2022/2023**

# Contents

<b>Foreword</b>	vi
<b>Preface</b>	vii
<b>Acknowledgement</b>	viii
<b>Executive Summary</b>	ix
<b>Vision, Mission and Core Values</b>	xi
<b>Acronyms and Abbreviations</b>	xii
<b>Definitions</b>	xiv
<b>Board of Directors</b>	xvi
<b>Chapter One: Background</b>	17
1. 0: Introduction	18
1. 1: Overview of the Previous Strategic Plans	20
1. 2: Challenges	23
1. 3: Lessons Learnt	24
1. 4: Rationale for the Strategic Plan	24
1. 5: The Strategic Planning Process	24
<b>Chapter Two: Rural Electrification and Renewable Energy Development Agenda and Institutional Analysis</b>	25
2.0: Introduction	26
2.1: Sustainable Development Goals, Vision 2030, Big Four Initiatives, Sector Performance Standards and the REREC Agenda	26
2.2: Funding of Rural Electrification and Renewable Energy	27
2. 3: Operational Framework	28
<b>Chapter Three: Situational Analysis</b>	29
3. 0: Introduction	30
3. 1: Current Status of Electrification	30
3. 2: Stakeholders Analysis	31
3. 3: SWOT Analysis	41

<b>Chapter Four: Strategic Model</b>	45
4. 0: Introduction	46
4. 1: Vision, Mission, Value Statement and Core Values	46
4. 2: Strategic Objectives and Strategies	47
<b>Chapter Five: Implementation and Co-ordination Framework: Resource Mobilisation</b>	49
5. 0: Introduction	50
5. 1: Organisation Structure	50
5. 2: Financial Resources Mobilisation	59
5. 3: Risk Analysis	60
<b>Chapter Six: Monitoring, Evaluation, and Reporting</b>	67
6. 1: Introduction	68
6. 2: Monitoring, Evaluation, and Reporting Framework	68
6. 3: Strategy Implementation Methodology	69
6. 4: Monitoring Performance of the Strategic Plan	70
6. 5: Progress Reporting	71
6. 6: Performance Review	72
<b>Annex I: Strategic Plan Implementation Matrix</b>	73
Strategic Objective 1: To Develop and Promote Use of Renewable Energy	74
Strategic Objective 2: To Increase Electricity Connectivity	84
Strategic Objective 3: To Promote Research and Development in Renewable Energy	86
Strategic Objective 4: To Establish Strategic Collaborations with Stakeholders	89
Strategic Objective 5: To Build Human and Strengthen Institutional Capacity	92
Strategic Objective 6: To Achieve Financial Sustainability	99

# Foreword



This Strategic Plan covers the period 2018/2019 - 2022/23. It is the first plan to be prepared by the Rural Electrification and Renewable Energy Corporation (REREC), although two others had been developed under REREC's predecessor, the Rural Electrification Authority (REA), since inception in 2006. The plan comes when the energy sector in Kenya has undergone restructuring under the Energy Act (2019), which gives REREC a broader mandate on renewable energy development. Given REREC's mandate in rural electrification and renewable Energy, REREC is the single most important institution that can change rural economies in Kenya.

This Strategic Plan provides a roadmap towards achievement of REREC's strategic objectives over the next five years. The plan is a product of extensive consultation and comprehensive feedback from our internal and external stakeholders, who provided valuable suggestions and information that will contribute to the achievement of REREC's mandate. Further, the plan establishes the strategic framework for implementation of the Rural Electrification Programme and provides a monitoring and evaluation framework to achieve the strategic objectives. This plan will, therefore, ensure the achievement of REREC's Vision of having 'a green energy driven nation.' The plan will also advance the national vision and contribute towards global goals on energy and climate change.

I take this opportunity to appreciate the continued support of REREC's staff, the national government through the Ministry of Energy, our development partners, and Kenyans in general. You have all contributed towards the achievement of our mandate of having a green and prosperous nation – Kenya.

A handwritten signature in blue ink, appearing to read "Prof. Simon Gicharu, CBS".

**Prof. Simon Gicharu, CBS**  
**Chairman of the Board of Directors**

# Preface



This Strategic Plan provides a roadmap towards achievement of REREC's strategic objectives over the next five years, 2018/2019 to 2022/2023. Key indicators have been developed to measure inputs, processes, outputs, and outcomes of the Strategic Plan. Annual targets have been set and indicative budgets proposed for all activities for the entire plan period. Possible sources of funding have also been identified to drive the implementation of this plan. Furthermore, the plan establishes the strategic framework for implementation of the Rural Electrification Programme and renewable energy, besides providing a monitoring and evaluation framework to achieve the strategic objectives.

This plan will, therefore, ensure the achievement of REREC's Vision of having a green energy driven nation, and contribute to the achievement of Vision 2030 and Sustainable Development Goals on Energy and Climate Change.

All these shall be done by achieving critical strategic objectives, notably to:

- i) Develop and promote the use of renewable energy
- ii) Increase electricity connectivity
- iii) Promote research and development in renewable energy
- iv) Establish strategic collaborations with stakeholders
- v) Build human and strengthen institutional capacity
- vi) Achieve financial sustainability

A handwritten signature in blue ink, appearing to read "Peter Mbugua".

**CPA Peter Mbugua**  
**Chief Executive Officer**

# Acknowledgement

This preparation of the Strategic Plan has been made possible by Prof. Simon Gicharu, CBS, Chairman Board of Directors (REREC) and the entire Board who constantly provided professional guidance right from the start all through to its completion. Many thanks to them.

Special thanks to the CEO REREC, CPA Peter Mbugua who besides his able leadership through the process ensured that adequate resources both human and material were availed. For this, we are sincerely grateful.

The REREC Transition Team did a tremendous job in conceptualizing, formulating and piecing together the Strategic Plan into the vital document for corporate well-being. This was under the able, insightful and motivational leadership of the General Managers Dr. David Gitonga, HSC and Eng. Esther Ruto. The determination by the team to burn the midnight oil and demonstrating great team spirit in order to deliver the document in record time will never go unnoticed. May the Almighty God reward them for this unreserved contribution.

The rest of the entire REREC staff cannot go unnoticed. They dutifully ensured that the other operations and obligations of the organization in serving humanity went on undeterred while the Transition team worked away from office. It reminds us of the awesome beauty of team work and serving for the common good.

Much appreciation to the staff and management of Morendat Training and Conference Centre and Kenya Agricultural and Livestock Research organization in Naivasha for their hospitality. They provided excellent surroundings for the teams to work from. Their professional services could not go unnoticed.

And to the Almighty God from whom all blessing flow, we are forever grateful. All the work and coordination would not have been possible without His divine guidance and provision.

# Executive Summary

This Strategic Plan covers the period 2018/19 – 2022/23 and will provide the roadmap for REREC’s achievement of its goals and objectives over the Plan period. The Strategic Plan focuses on how to sustainably electrify all rural public facilities and households in Kenya, as envisaged in the Energy Act (2019) that renews focus on research, development, promotion, and use of renewable energy. Effectively, REREC’s mandate-points have increased from six to twenty.

Chapter One of the Strategic Plan captures an overview of the achievements made since the establishment of the Rural Electrification Programme (REP) in 1973, through to the establishment of the Rural Electrification Authority (REA) in 2006. The transition from REP to REA succeeded after the enactment of the Energy Act (2006) and became operational in 2007. This Strategic Plan also contains an overview of the milestones attained regarding the 1st Strategic Plan (2008/2009 – 2012/2013) that focused on electrification of public facilities such as health centres, secondary schools, and trading centres. From 2013 to 2016, the Authority focused on the electrification of public primary schools to support the Digital Literacy Programme (DLP). The 2nd Strategic Plan (2016/2017 – 2021/2022) operationalised the aspiration of the Energy Bill (2015) by particularly focusing on development of renewable energy sources in Kenya, led by REREC. This later changed with the enactment of the Energy Act (2019).

Chapter Two enumerates REREC’s agenda based on Vision 2030 and institutional analysis of REREC in implementing the current Strategic Plan. This will be achieved through sustainable economic and social development catalysed by increasing electricity connectivity, developing and promoting use of renewable energy, as well as promoting research and development in renewable energy. Since REA (now REREC) started its operations in the 2018/2019 Financial Year, it has spent KShs 115, 829 million on financing rural electrification. Of this amount, KShs 94,979.78 (82%) was obtained from internal sources while KShs 20,849.22 (18%) came from development partners including the World Bank, France, Spain, and China. This process has been fully supported by the Ministry of Energy that has been providing strategic direction and interdependency of related institutions in the sector. The Board of Directors has provided governance and policy direction for all functional areas to drive the key pillars of this Strategic Plan through an optimal organisation structure. The greatest investment of REREC has been in human resource development, especially in key areas such as renewable energy that will impact positively on the implementation of this Strategic Plan.

Chapter Three outlines the current status of electrification and stakeholder analysis. The chapter also reviews the key Strengths, Weaknesses, Opportunities and Threats (SWOT) of REREC. By May 2019, there were an estimated 89,334 public facilities in Kenya, out of which 63,435 (71%) were electrified while 25,899 (29%) were yet to be electrified. This Strategic Plan targets to electrify the remaining public facilities and households through grid extension and renewable energy options such as installation of solar PV / wind systems in the off-grid areas. The Plan recognises stakeholders, including county governments, leaders in various categories, government ministries, corporate institutions and other local and international partners who will contribute to the successful implementation of the key pillars. REREC will continue to leverage on the strengths and opportunities and prepare mitigation measures against the identified threats and weaknesses in order to achieve its objectives.

Chapter Four highlights the strategic focus of REREC in achieving universal access to electricity using grid, off grid and renewable energy solutions. To achieve the overall development objective, the Strategic Plan has formulated REREC's Mission and Vision that, respectively, resonate on improvement of quality of citizens' lives through provision of energy solutions. Thus, REREC's Mission is "To provide sustainable energy solutions for all through rural electrification and renewable energy for social economic transformation." The Vision is "A green energy driven nation", which is anticipated by Vision 2030.

This Strategic Plan envisages that REREC's Vision shall be achieved by targeting six key strategic objectives, thus to:

- i) Develop and promote the use of renewable energy
- ii) Increase electricity connectivity
- iii) Promote research and development in renewable energy
- iv) Establish strategic collaborations with stakeholders
- v) Build human and strengthen institutional capacity
- vi) Achieve financial sustainability

The Plan also provides various strategies to be implemented under each of the strategic objectives and have been outlined in the implementation matrix.

Chapter Five enumerates the resources required to implement the Strategic Plan over the five-year period, sources of funding, strategies for mobilisation of the funds, and associated risks. To effectively implement all the activities identified, KShs 159 billion is required over the five-year period. This translates to an average annual requirement of KShs 31.6 billion. REREC expects to mobilise these funds mainly from the national government through the exchequer. Other sources of funding include development partners, Public Private Partnerships (PPPs), counties, sale of bulk power, investments, and the communities. Over the next five years, REREC shall also seek additional financing to ensure successful implementation of its Strategic Plan. A comprehensive risk analysis under each of the strategic objectives shall be undertaken and reviewed considering factors such as human, financial, technical, political, natural, operational, and reputational influences.

Chapter Six details the tools that shall be used in tracking the implementation of the Strategic Plan. The implementation will be monitored as provided for by the guidelines of the National Integrated Monitoring and Evaluation System (NIMES). Further, a balanced scorecard approach will be used to monitor all the initiatives to achieve the priority areas of the six strategic pillars of the plan and the implementation matrix. The system shall be monitored through quarterly, half-yearly, and annual progress reports to the Management and Board. Based on the results of the monitoring, appropriate corrective actions will be undertaken to ensure that the Strategic Plan remains live and relevant to REREC's mandate.



### Vision

A green energy driven nation



### Mission

To provide sustainable energy solutions for all through rural electrification and renewable energy for social economic transformation



### Value Statement

“Green energy, better lives”

## Core Values



Customer focus



Teamwork



Fulfilment



Quality & Excellence



Integrity



Transparency & Accountability



Environmental Consciousness



Professionalism



Innovation

# Acronyms and Abbreviations

<b>BOARD</b>	–	Board of Directors
<b>CEO</b>	–	Chief Executive Officer
<b>CSP</b>	–	Concentrated Solar Power
<b>CSR</b>	–	Corporate Social Responsibility
<b>DLP</b>	–	Digital Literacy Programme
<b>EAPL</b>	–	East African Power and Lighting Company
<b>EAC</b>	–	East African Community
<b>EAT</b>	–	Earnings after Tax
<b>EPRA</b>	–	Energy & Petroleum Regulatory Authority
<b>ERS</b>	–	Economic Recovery Strategy
<b>ESIA</b>	–	Environmental and Social Impact Assessment
<b>GDC</b>	–	Geothermal Development Company
<b>GoK</b>	–	Government of Kenya
<b>HR</b>	–	Human Resource
<b>ICT</b>	–	Information Communication and Technology
<b>IPP</b>	–	Independent Power Producers
<b>ISO</b>	–	International Organization for Standardisation
<b>KPLC</b>	–	Kenya Power and Lighting Company Limited
<b>KEFRI</b>	–	Kenya Forestry Research Institute
<b>KENGEN</b>	–	Kenya Electricity Generating Company
<b>KETRACO</b>	–	Kenya Electricity Transmission Company Ltd
<b>KFS</b>	–	Kenya Forest Service
<b>Km</b>	–	Kilometre
<b>KPI</b>	–	Key Performance Indicator
<b>KShs</b>	–	Kenya Shillings
<b>KV</b>	–	Kilovolt

<b>LCPDP</b>	– Least Cost Power Development Plan
<b>MOU</b>	– Memorandum of Understanding
<b>MV</b>	– Medium Voltage
<b>MVA</b>	– Megavolt Amperes
<b>MW</b>	– Megawatt
<b>NDCs</b>	– Nationally Determined Contributions
<b>NEMA</b>	– National Environment Management Authority
<b>NIMES</b>	– National Integrated Monitoring and Evaluation System
<b>NuPEA</b>	– Nuclear Power Energy Agency
<b>O&amp;M</b>	– Operation and Maintenance
<b>PPP</b>	– Public Private Partnership
<b>PV</b>	– Photovoltaic
<b>QA&amp;RM</b>	– Quality Assurance and Risk Management
<b>RE</b>	– Rural Electrification
<b>REA</b>	– Rural Electrification Authority
<b>REMP</b>	– Rural Electrification Master Plan
<b>REP</b>	– Rural Electrification Programme
<b>REREC</b>	– Rural Electrification and Renewable Energy Corporation
<b>SAP</b>	– Systems and Application Programme
<b>SDGs</b>	– Sustainable Development Goals
<b>SLA</b>	– Service Level Agreement
<b>S&amp;P</b>	– Strategy and Planning
<b>SWOT</b>	– Strengths Weaknesses Opportunities and Threats
<b>TVET</b>	– Technical and Vocational Education and Training
<b>TXs</b>	– Transformers

# Definitions

- Agency** - Nuclear Power and Energy Agency, NuPEA
- Authority** - Rural Electrification Authority, the predecessor to REREC
- BIG 4** - The current Government of Kenya (GoK) agenda focusing on four main goals, namely, to develop manufacturing, provide food security, access to universal health care for all, and development of affordable housing for all Kenyans
- Board** - The REREC / REA Board of Directors



<b>Corporation</b>	- REREC, the successor to REA
<b>Management</b>	- The REA / REREC Executive Management
<b>MTP III</b>	- 3 <sup>rd</sup> Medium Term Plan of the Kenya Vision 2030
<b>Public Facilities</b>	- This is an undertaking financed by the government / community to benefit the larger public with no commercial gain. They include trading centres, secondary schools, health centres, prayer / worship centres, administrative offices, water points, among others.



# Board Of Directors



Maj. Gen (Rtd)  
Dr. Gordon O. Kihalangwa, CBS  
PS Energy



Dr. Julius Muia, EBS  
PS Treasury



Prof. Simon Gicharu, CBS  
Chairman, Board of Directors



CPA Peter Mbugua,  
Chief Executive Officer



Mr. Evans Mutari, MBS  
Alternate Director to Principal  
Secretary Ministry of Energy



Mr. Kimathi Mugambi, HSC  
Alternate Director to Principal  
Secretary National Treasury



Mr Alex Chesozi,  
Director



Eng. Benson K. Kariuki  
MIEK, MNQI, MAEE, CEM  
Director



Mrs. Beatrice C. Kemei  
Director



Hon. Nicholas N. Ngikor  
Director



Hon. George O. Ogalo  
Director



Mrs. Josephine W. Muritu  
Director



Mr. Ezekiel Weya  
Director



Hon. Bernard K. Bett  
Director



CS. Lucky Rono Limo  
Ag. Corporation Secretary



# Chapter 1

# Background

# Chapter One:

## Background

### 1.0: Introduction

The government established the Rural Electrification Programme in 1973 to subsidise electricity supply in rural areas. This was upon realisation that electricity is an important input to the socio-economic development of the country, and hence there was need to increase accessibility to all parts of the country to spur economic and social development.

In 1973, the government entered into an agreement with the then East African Power and Lighting Company (EAPL), now the Kenya Power and Lighting Company (KPLC). Under the agreement, KPLC was appointed as a contractor for planning, implementation, operation and maintenance (O&M) of rural electrification projects under the programme. The government, through the Ministry of Energy, took responsibility for sourcing of funds and coordinating implementation of the programme.

By 2002, the programme had achieved little coverage despite existing for close to thirty years. Only about 4% of the rural population in Kenya had electricity supply in their homes. Due to the low connectivity, the government through the Economic Recovery Strategy (ERS) of 2003 and Sessional Paper No. 4 of 2004, undertook to create a special purpose agency to enhance rural electrification in the country. Rural Electrification Authority (REA) was eventually created in 2006 through the Energy Act (2006) and became operational in 2007. The mandate of the REA was to accelerate rural electrification in Kenya. The functions of REA, as outlined in Section 67 of the Energy Act (2006), were as follows:

- Management of the Rural Electrification Programme Fund
- Development and updating of the Rural Electrification Programme Master Plan
- Implementing and sourcing of funds for the Rural Electrification Programme
- Promotion of use of renewable energy sources, including but not limited to small hydro, wind, solar, biomass, geothermal, hybrid systems and oil-fired components taking into account specific needs of certain areas including the potential for using electricity for irrigation and in support of off-farm income generating activities, and
- Management of the delineation, tendering, and award of contracts for licenses and permits for rural electrification.

In 2015, the Ministry of Energy and Petroleum prepared a new Energy Policy and Bill in compliance with the provisions of the Constitution of Kenya (2010). On 12<sup>th</sup> March 2019, H.E. President Uhuru Kenyatta assented to the Energy Bill (National Assembly Bill No. 50 of 2017), which became an Act of Parliament, thus the Energy Act (2019). Consequently, Rural Electrification and Renewable Energy Corporation (REREC) was established as the successor of the Rural Electrification Authority (REA). The Energy Act (2019) came into force on 28<sup>th</sup> March 2019.

Under the new dispensation, REREC has a broader mandate of spearheading Kenya's renewable energy drive and implementing rural electrification projects.

Under the Energy Act (2019), REREC is mandated to undertake the following functions:

- a). Oversee the implementation of the Rural Electrification Programme
- b). Manage the Rural Electrification Programme Fund established under Section 143
- c). Source additional funds for the Rural Electrification Programme and renewable energy
- d). Develop and update the rural electrification master plans in consultation with county governments
- e). Develop and update the Renewable Energy Master Plan, taking into account county-specific needs and the principle of equity in the development of renewable energy resources
- f). Support the establishment of energy centres in the counties
- g). Establish a framework for collaboration with county governments in the discharge of its mandate
- h). Undertake on-farm and on-station demonstration of wood-fuel species, seedling production and management
- i). Undertake feasibility studies and maintain data with a view to availing the same to developers of renewable energy resources
- j). Develop, promote, and manage in collaboration with other agencies, the use of renewable energy and technologies, including but not limited to biomass (biodiesel, bioethanol, charcoal, fuelwood, biogas) municipal waste, solar, wind, tidal waves, small hydropower and co-generation, but excluding geothermal
- k). Formulate, in conjunction with the Agency, a national strategy for coordinating research in renewable energy
- l). Undertake, in conjunction with the Agency, research, development and dissemination of appropriate renewable energy technologies
- m). Provide an enabling framework for the efficient and sustainable production, conversion, distribution, marketing and utilisation of biomass, solar, wind, small hydros, municipal waste
- n). Promote, in conjunction with the agency responsible for forests, the use of fast maturing trees for energy production including biofuels and the establishment of commercial woodlots including peri-urban plantations
- o). Promote, in collaboration with other agencies, the development of appropriate local capacity for the manufacture, installation, maintenance and operation of renewable technologies such as bio-digesters, solar systems, turbines and other renewable energy technologies
- p). Promote international co-operation programmes focusing on renewable energy sources
- q). Harness opportunities offered under clean development mechanism and other mechanisms including, carbon credit trading to promote the development and exploitation of renewable energy sources
- r). Promote the development of electricity generation through co-generation by sugar millers
- s). Provide technical and other capacity building support to county governments in the discharge of the function of electricity reticulation and energy regulation, and
- t). Undertake any other duty or perform such other function as may be necessary for the execution of its mandate under this Act.

## 1.1: Overview of the Previous Strategic Plans

Implementation of REA's 1st Strategic Plan (2008/2009 – 2012/2013) factored the government's 1<sup>st</sup> Medium Term Development Strategy of realising Vision 2030. This was instrumental in driving REA's vision and achievement of its mandate. The goal during this period was to connect the three main public facilities – secondary schools, trading, and health centres – to achieve a connectivity target of 22% in the rural areas by June 2013. This was achieved by December 2012 and was estimated at 26%. Further, during this period the Rural Electrification Master Plan was developed. In 2013, the government introduced the Digital Literacy Programme (DLP). The programme identified electrification of schools as an important prerequisite to its success. In June 2013, REA undertook to provide electricity to all public primary schools in financial years 2013/2014, 2014/2015, and 2015/2016. A total of 22, 384 public primary schools throughout the country have since been connected to the grid or solar PV for those far away from the national grid.

REA's 2nd Strategic Plan enhanced the focus on development of renewable energy sources in Kenya, in which the Authority was expected to take a leading role. Some of the projects implemented to promote the use of renewable energy during the Strategic Plan period (2016/2017 – 2020/2021) included the development of twenty-six solar mini-grids to electrify off-grid towns; construction of the grid that connected a 50MW solar power plant in Garissa, and establishment of partnerships in the implementation of renewable energy technologies, among others.

### Projects implemented over the previous two Strategic Plan periods

#### a). Solar-Mini Grid Projects

Twenty-six solar mini-grid projects were implemented to power towns in the off-grid counties of Wajir, Turkana, Marsabit, Mandera, and Garissa. All of these mini-grids have been commissioned<sup>1</sup>, and customers connected to power. Each solar mini-grid has a diesel generator backup and each station has the capacity to connect 150 customers (homesteads, schools, dispensaries, and shops).

Table 1.0: Status of Solar Mini-Grid Projects

County	Site	Constituency	Status
Marsabit	Ambalo	Moyale	Commissioned
	Illaut	Laisamis	Commissioned
	Balesa	North Horr	Commissioned
Turkana	Eliye (Ille) Springs	Turkana Central	Commissioned
	Lowering	Turkana North	Commissioned
	Letea	Turkana West	Commissioned
Garissa	Lopeduru	Turkana East	Commissioned
	Kangangipur	Turkana South	Commissioned
	Napelilim	Loima	Commissioned
Mandera	Sangailu	Ijara	Commissioned
	Liboi	Dadaab	Commissioned
	Eldera	Lagdera	Commissioned
Mandera	Garsweino	Fafi	Commissioned
	Kiliwehiri	Banissa	Commissioned
	Burduras	Mandera West	Commissioned

<sup>1</sup>Commissioned implies the plant is in use

	Gari	Lafey	Commissioned
	Shimbir Fatuma	Mandera South	Commissioned
	Ashabito	Mandera North	Commissioned
	Arabia	Mandera East	Commissioned
Wajir	Biyamadhow	Wajir South	Commissioned
	Gurar	Wajir North	Commissioned
	Hadado	Wajir West	Commissioned
	Sarif	Wajir South	Commissioned
	Basir	Eldas	Commissioned
	Riba	Wajir East	Commissioned
	Sarman	Tarbjaj	Commissioned

### b) The 50 MW Garissa Solar Power Plant

This is the largest solar power plant in East and Central Africa, and is a national initiative aimed at promoting the use of renewable energy. The project involved implementation of a 50MW solar power generation plant in Garissa for connection to the national grid. The project has been commissioned and is generating power to the national grid. Currently the plant is contributing 0.8% of energy mix in Kenya.

### c) The Turkwel-Lokichar Line

This project was implemented to extend grid supply to off-grid areas in northern Kenya. The project involved the construction of a 120KM of 66KV Turkwell-Lokichar line and installation of a 23MVA 66/33KV sub-station in Lokichar and 10MVA 66/33KV sub-station at Kalimungorok.

### d) Electrification of Public Primary Schools

The electrification of public primary schools was undertaken to support the government's initiative of the Digital Literacy Programme. A total of 22, 927 primary schools have since been electrified across the country. The project has been a key contributor to the universal access target and improvement of education standards.

### e) Lighting Up Informal Settlements

REA in partnership with other stakeholders was involved in upgrading of informal settlements across the country. The Authority was involved in the installation of high-mast flood lights to provide security lights in informal settlements. During the financial years 2014/2015 and 2015/2016, the Authority installed 104 high-mast floodlights in Kibera, Mathare, Korogocho, Ngomongo, and Mukuru kwa Njenga in Nairobi, as well as Kiandutu in Thika

### f) Hybrid Systems

Hybridising of four diesel power stations with solar was undertaken in Takaba, Eldas, Rhamu, and Laisamis to make them more sustainable by reducing the operational costs.

### g) Promotion and Development of other Renewable Energy Technologies

During the plan period, REA completed six pilot projects in wind, biogas, solar and mini-hydros summarised below in Table 1.1. The two mini-hydros are community-based projects where REA provided financial and technical support to enhance their operations.

**Table 1.1: Renewable Energy Pilot Projects**

Project		County	Technology / Resource
i.	North-Horr Boys Secondary School	Marsabit	Wind
ii.	St. Patterson Memorial Secondary School	Kajiado	Wind
iii.	Mangu High School	Kiambu	Biogas
iv.	Moi Girls Isinya Secondary School	Kajiado	Biogas
v.	Mutunguru Community Micro Hydropower Project	Meru	Mini-Hydro
vi.	Thiba Community Micro Hydropower Project	Kirinyaga	Mini-Hydro

*Source: REREC Data*

Furthermore, the Authority promoted renewable energy technologies during agricultural shows, trade fairs, and other forums.

#### **h) Solar PV Systems**

A total of sixty-four institutions (secondary schools and health facilities) were installed with solar systems in Marsabit, Samburu, Isiolo, Wajir, Mandera, Garissa, and Lamu counties.

#### **i) Isolated Diesel Stations**

Twenty isolated diesel generators were initiated by the Authority in various towns in the northern and coastal parts of the country, as shown in Table 1.2.

**Table 1.2: Implemented Isolated Diesel Stations**

	Town	County	Constituency
i.	Eldas	Wajir	Eldas
ii.	Takaba	Mandera	Mandera West
iii.	Laisamis	Marsabit	Laisamis
iv.	North Horr	Marsabit	North Horr
v.	Rhamu	Mandera	Mandera North
vi.	Lokichogio	Turkana	Turkana West
vii.	Lokitaung	Turkana	Turkana North
viii.	Lokori	Turkana	Turkana East
ix.	Faza Island	Lamu	Lamu East
x.	Hulugho	Garissa	Ijara
xi.	Kiunga	Lamu	Lamu East
xii.	Dadaab	Garissa	Dadaab
xiii.	Banissa	Mandera	Banissa
xiv.	Maikona	Marsabit	Maikona
xv.	Lokiriamma	Turkana	Loima
xvi.	Kamorliban	Mandera	Lafey
xvii.	Kotulo	Wajir	Tarabaj
xviii.	Kholondile	Wajir	Wajir North
xix.	Sololo	Marsabit	Sololo
xx.	Kakuma	Turkana	Turkana West

*Source: REREC Data*

### j) Electrification of Public Facilities

The government has set a target to increase connectivity and attain universal access to electricity by 2022. To achieve this, electrification of all public facilities and households located within a radius of 600 metres from an existing transformer were prioritised. Further, new transformer installations on existing grid networks for households' electricity connection were undertaken.

By June 2016, there were an estimated 88, 570 public facilities in the country, out of which 60, 247 (68%) were electrified while 28, 323 (32%) were un-electrified. An additional 1, 481 facilities were electrified from July 2016 to June 2018, of which 687 facilities were from the Rural Electrification Master Plan (REMP). The balance forms part of constituency transformer installation program. The master plan is the main point of reference in selection of projects for implementation of rural electrification in the country.

The un-electrified public facilities (27, 683 from REMP) will be the focus of REREC as per the National Electrification Strategic Objective to attain universal access by 2022. REREC will strategically work with stakeholders in prioritising projects to ensure ownership of projects by local communities, acquisition of wayleaves, and reduction of vandalism.

## 1.2: Challenges

The following challenges were encountered during the implementation of the previous strategic plans:

- i. Inadequate funding over the years leading to reduction of the planned scope.
- ii. Sparse population in the rural areas thereby increasing reticulation costs .
- iii. Harsh terrain and poor road network in some of the rural areas making it difficult to access the planned projects for implementation.
- iv. Vandalism of electricity infrastructure hence increasing the cost of implementation of the projects.
- v. Lack of adequate tools and equipment for use by staff in the field to implement electrification projects.
- vi. Delay in wayleaves acquisition affecting implementation of some of the projects.
- vii. Inadequate human resource capacity.
- viii. Delays in land acquisition for construction of power stations.
- ix. Multiple sources of primary schools data which was unreliable hence affecting the implementation of this project including delays on finalisation.
- x. Improper or lack of structures as some schools did not have permanent structures for power drop or wiring or to support solar power system.
- xi. Lack of expertise to undertake large-scale solar roll-out as it was the first time that REA was implementing solar installations in large scale.
- xii. Low levels of acceptance of solar installation which was necessary to support the implementation of the DLP in schools that are away from the grid.
- xiii. Resource constraints to address the need for regular maintenance of the solar systems in the schools.

## **1.3: Lessons Learnt**

Key lessons learnt during the Financial Year 2008-2019 include:

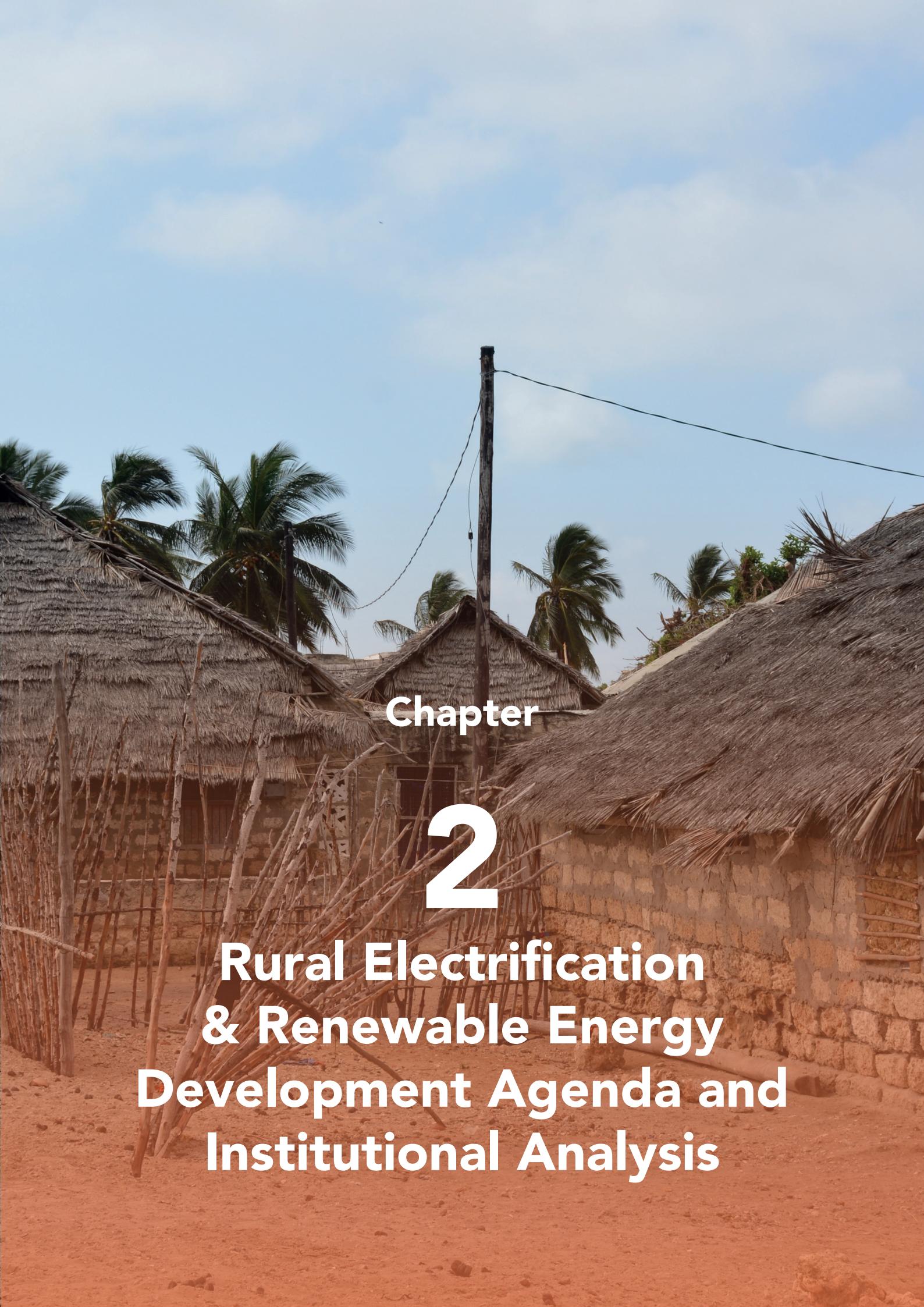
- i. Substantial and sustained government funding and political support is crucial to the success of rural electrification.
- ii. Enhanced support from development partners is necessary to supplement local funding.
- iii. Community participation and ownership is essential for implementation and sustainability of rural electrification projects. While rural electrification is considered a government driven agenda, involvement of the community in provision of wayleaves, land, utilising and protecting the infrastructure is important.
- iv. An enabling policy and regulatory framework is vital in achieving rural electrification objectives in line with changing political and social economic landscape to address various concerns like land use, bills payment, separation of roles and responsibilities.
- v. There has been a significant shift towards production of clean and green renewable energy; solar, wind, and biodiesel are some of the green energy sources being promoted globally.
- vi. Collaboration with stakeholders is important in enhancing rural electrification and increasing demand for electricity connectivity requires an innovative approach.
- vii. Procurement of specialised equipment from manufacturers to guarantee quality.
- viii. There is need to continuously sensitise stakeholders on the role of various players in the power supply chain.
- ix. Stakeholder participation in planning, implementation, and maintenance of energy infrastructure are critical contributors to success.

## **1.4: Rationale for the Strategic Plan**

Strategic management has supported organisations including government agencies in prioritising areas of growth and development. The need for a new strategic plan is informed by enactment of the Energy Act (2019) which established REREC as the successor to REA with a broader mandate. REREC has broadened its mandate from the previous six to twenty, hence the need to develop objectives, strategies, and activities to cover these areas.

## **1.5: The Strategic Planning Process**

This Strategic Plan was developed through a participatory and all-inclusive process led by REREC's Board of Directors and Management. It involved a series of workshops and consultative meetings with stakeholders to ensure that all critical issues were articulated towards achievement of the Corporation's mandates.



**Chapter**

**2**

**Rural Electrification  
& Renewable Energy  
Development Agenda and  
Institutional Analysis**

# **Chapter Two:**

## **Rural Electrification & Renewable Energy Development**

### **Agenda and Institutional Analysis**

## **2.0: Introduction**

The Rural Electrification and Renewable Energy Development Agenda aims to spur sustainable economic and social development by increasing electricity connectivity, developing and promoting the use of renewable energy and promoting research and development in renewable energy. Institutional analysis in this section considers the funding for rural electrification and renewable energy, operational framework and human resource development within the plan period.

## **2.1: Sustainable Development Goals, Vision 2030, Big Four Agenda, Sector Performance Standards and the REREC Agenda**

The development agenda aims to contribute towards achievements of Sustainable Development Goals (SDGs, specifically SDGs 7 and 13 on affordable and clean energy for all, and combatting effects of climate change, respectively). Kenya ratified the Paris Agreement on Climate Change (2015), which requires each country to make significant commitments to address climate change. Kenya has identified energy among other areas for Nationally Determined Contributions (NDCs).

The Kenya long-term social economic blueprint, Vision 2030, aims at transforming Kenya into a newly-industrialised, middle-income country providing a high quality of life to all its citizens in a clean and secure environment built on economic, social, and political pillars. The development of this strategic plan is built on the Third Medium Term Plan (MTP III) which is the road map towards the actualisation of the economic transformation hinged onto the economic pillar of Kenya Vision 2030, implemented over five-year medium-term rolling plans. The Third Medium Term Plan will guide the program prioritisation, resource allocation, and consensus building among stakeholders to ensure the achievement of the Vision 2030 targets.

The Big 4 Agenda is geared toward achievement of Vision 2030 and has four main goals. These are to: develop manufacturing, provide food security, access to universal health care for all and development of affordable housing for all Kenyans. Equally, in the Big 4 Agenda that stems from the vision, electricity plays a significant role in spurring national development. Further, an Energy Sector Policy Framework (Sessional Paper No. 4 of 2004 on Energy) is in place and is geared towards provision of cost effective, affordable and adequate quality energy services to the domestic economy on a sustainable basis.

Kenya has also implemented a National Energy Strategy (2018) that furthers the need to increase access to electricity in the country. The National Energy Act (2019) underpins the need for rural electrification and renewable energy by establishing REREC and providing funding mechanisms accordingly. REREC will continue to rely on Vision 2030, the Big 4, MTP III and other relevant policy and legal requirements in determining and delivering its agenda.

## 2.2: Funding of Rural Electrification and Renewable Energy

The REREC Programme has mainly been funded through the exchequer. From 1973 to 2018/19, about KShs 107, 008 million from the exchequer has been spent in financing rural electrification projects, as shown below in Table 2.1. The table shows that about KShs 87, 746.56 (82%) of this funding comes from internal sources, while KShs 19, 261.44 (18%) is from development partners such as multi-lateral agencies, bilateral partners, and non-state actors.

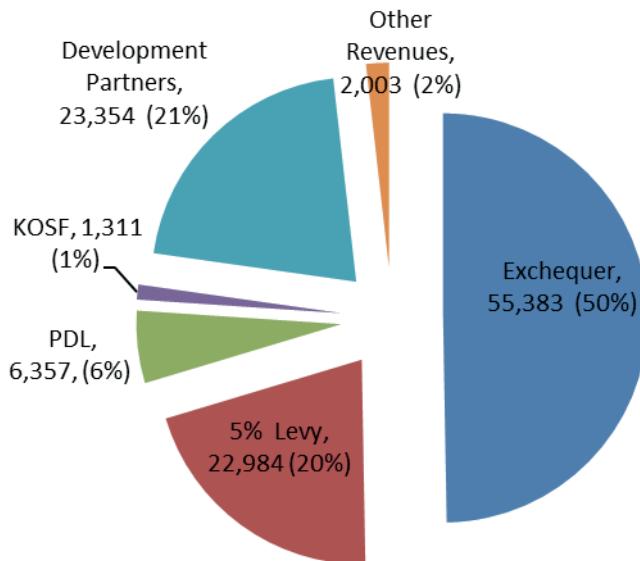
**Table 2.1: Financing of Rural Electrification 1973 – 2018/2019 Period**

Period	Internal Sources (KShs Million)	Development Partners	Total (KShs Million)
		(KShs Million)	
1973 - 2002/2003	4, 271	2, 994	7, 265
2003/04 - 18/2019	102,737	20, 186	122, 923
Total	107, 008	23, 180	130, 188
Percentage (%)	82%	18%	100%

**Source: REREC Data**

The main source of funds has been the exchequer and the 5% REP levy with a combined contribution of nearly 80%, as shown in Table 2.2 below:

**Fig 2.1: Rural Electrification Programme Funding for the 2008/2009 – 2018/2019 Period**



Source	Exchequer	5% Levy	PDL	KOSF	Development Partners	Other Revenues	Total
KShs. M.	55, 383	22, 984	6, 357	1, 311	23, 354	2, 003	111, 392

**Source: REREC Data**

REREC has also developed a participatory innovative approach in financing community projects through a cost-sharing arrangement with the constituency development fund, county governments, and other stakeholders. While REREC has faced a challenge of limited funding, sourcing of additional funds will be critical for the next few years to supplement traditional sources, and the increased mandate on renewable energy. To this end, REREC will partner with the private sector and other stakeholders under the Public Private Partnership Framework for implementation of its projects.

## **2.3: Operational Framework**

### **Sectoral Institutional Framework**

The Ministry of Energy (MoE) is in charge of policies to create an enabling environment for efficient operation and growth of the sector. It sets the strategic direction for the growth of the sector and provides a long-term vision for all sector players. The MoE is mandated to undertake the following functions:

- a). National Energy and Policy Management
- b). Hydro-Power Development
- c). Geothermal Exploration and Development
- d). Rural Electrification Programme
- e). Promotion of Renewable Energy
- f). Energy Regulation, Security, and Conservation

### **Agencies of the Ministry of Energy**

- a). Energy and Petroleum Regulatory Authority (EPRA)
- b). Energy Tribunal
- c). Geothermal Development Company (GDC)
- d). Kenya Electricity Generating Company (KenGen)
- e). Kenya Power and Lighting Company (KPLC)
- f). Kenya Electricity Transmission Company (KETRACO)
- g). Nuclear Power and Energy Agency (NuPEA)
- h). Rural Electrification and Renewable Energy Corporation (REREC)
- i). Independent Power Producers (IPPs)

A classroom scene showing several students sitting at wooden desks, writing in notebooks. A chalkboard in the background has the number '350' written on it. The room has a corrugated metal roof with exposed beams and fluorescent lighting.

# Chapter 3

# Situational Analysis

# Chapter Three:

## Situational Analysis

### 3.0: Introduction

The situational analysis covers status of electrification, stakeholder analysis and SWOT analysis.

### 3.1: Current Status of Electrification

By May 2019, there were about 89, 334 public facilities in the country, out of which 63, 435 (71%) were electrified, while 25, 899 (29%) remained un-electrified. This Strategic Plan targets to electrify the remaining public facilities and households.

**Table 3.1: Status of Electrification of Public Utilities in the Rural Areas**

No	Facility	Grid		Off-Grid		Total Electrified	Total Non-Electrified	Grand Total
		Electrified	Non-Electrified	Electrified	Non-Electrified			
1.	Administrative offices	2, 146	1, 250	98	443	2, 244	1, 693	3, 937
2.	Churches & Mosques	8, 467	8, 693	278	1, 023	8, 745	9, 716	18, 461
3.	Coffee factories / processing plants	443	164	10	46	453	210	663
4.	Health centres / dispensaries	4, 772	1, 021	331	407	5,103	1, 428	6, 531
5.	Markets / Trading centres & Beaches	9, 536	5, 095	220	611	9, 756	5, 706	15, 462
6.	Police posts	551	220	51	118	602	338	940
7.	Public primary schools	19, 435	189	4, 451	89	23, 886	278	24, 164
8.	Secondary schools / polytechnics / Institutions of higher learning	8, 460	1, 152	219	187	8, 679	1, 339	10, 018
9.	Tea buying centres	1, 805	955	1	20	1,806	975	2, 781
10.	Water projects / Boreholes	2, 073	3, 432	88	784	2, 161	4, 216	6, 377
<b>TOTAL</b>		<b>57, 688</b>	<b>22, 171</b>	<b>5, 747</b>	<b>3, 728</b>	<b>63, 435</b>	<b>25, 899</b>	<b>89, 334</b>
<b>Level of Electrification</b>						<b>71%</b>	<b>29%</b>	<b>100%</b>

**Source: REREC Data**

As indicated above in Table 3.1, the total un-electrified public facilities in the off-grid areas is 3, 728. Out of these, 611 are trading centres that REREC intends to electrify through establishment of about 150 mini-grids based on renewable sources. The remaining trading centres and other public facilities will be electrified through applicable grid and renewable solutions. Households within the vicinity of the mini-grids will also be connected. Within the grid network, the 22, 171 unconnected public facilities will be electrified through extension of the grid.

Based on the 2019 Population and Housing Census, there are about 12.2 million households in Kenya, out of which about 7.2 million are connected to electricity. It is expected that all the remaining households within the grid and off-grids areas will be connected during the plan period. Connection of the households far away from the national grid and mini-grids will be through renewable energy solutions.

## 3.2: Stakeholders Analysis

In its operations, REREC interacts with various stakeholders including the county governments, leaders in various categories, government ministries, corporates and other partners locally and internationally. Below is a stakeholders' analysis:

Stakeholder	Role of Stakeholder	Stakeholder Expectations of REREC	REREC Expectations of Stakeholder
1. Board of Directors	Provide leadership and strategic direction	Achievement of targets	Strategic leadership
2. Ministry of Energy	Provide policy direction and enabling environment for REREC's operations	Provision of electricity to customers in rural areas Promotion of development and use of renewable energy Timely submission of budget Timely implementation of projects	Provision of an enabling energy policy framework Support budget proposals and implementation of this Strategic Plan Timely submission of budgets to Treasury Source for additional funds
3. National Treasury	Disbursement of funds, negotiations and signing of funding agreements	Timely submission of budgets Efficient utilisation of allocated funds	Timely disbursement of funds Allocation of funds for projects implementation Provide efficient co-ordination and processing of development partners funds

## 3.2: Stakeholders Analysis Cont..

Stakeholder	Role of Stakeholder	Stakeholder Expectations of REREC	REREC Expectations of Stakeholder
4. County governments	<ul style="list-style-type: none"> <li>• Co-financing of projects</li> <li>• Identification of projects</li> <li>• Provision of land for projects development</li> <li>• Collaboration in project implementation</li> <li>• Provision and receiving of services.</li> </ul>	<ul style="list-style-type: none"> <li>Provision of technical support in project implementation</li> <li>of capacity building</li> </ul> <p>Development of rural electrification standards and specifications</p> <p>Facilitation in policy formulation and guidelines</p> <p>Support in the establishment of energy centres</p> <p>Collaborate in the development of county specific Rural Electrification Master Plan and Renewable Energy Master Plan</p>	<p>Collaborations with REREC</p> <p>Participation in planning and implementation of projects</p> <p>Financial contribution in rural electrification and renewable energy projects</p> <p>Facilitate provision of land for projects implementation</p> <p>Approve project plans and drawings</p> <p>Participate in the sensitisation of communities during project implementation</p>
5. Customers <sup>2</sup>	<ul style="list-style-type: none"> <li>• Receipt of services from REREC</li> <li>• Provision of security for REREC projects</li> </ul>	<p>Provision of quality service</p> <p>Clear connection guidelines</p>	<p>Timely payment of bills</p> <p>Ownership and security of infrastructure</p> <p>Optimal utilisation of electricity</p>
6. Public	Provision of wayleaves, land and security of power infrastructure, recipients of REREC services	Clear connection policy	
7. Parliament (National Assembly & Senate)	Legislation and budget allocation	<ul style="list-style-type: none"> <li>• Effective utilisation of allocated funds</li> <li>• Timely implementation of projects</li> </ul>	<p>Appropriation of adequate funds to REREC</p> <p>Passing relevant legislation to support REREC</p>
8. KPLC	<ul style="list-style-type: none"> <li>• 5% REP levy collection,</li> <li>• Purchase of bulk electricity</li> </ul>	<p>Compliance with appropriate standards</p> <p>Compliance with Service Level Agreement (SLA)</p>	<p>Compliance on timely remittance of 5% levy</p> <p>Compliance with Service Level Agreement (SLA)</p>

### 3.2: Stakeholders Analysis Cont..

Stakeholder	Role of Stakeholder	Stakeholder Expectations of REREC	REREC Expectations of Stakeholder
9. KENGEN / IPPS	Power generation	<ul style="list-style-type: none"> <li>• Collaboration in renewable energy generation projects such as wind and solar projects</li> <li>• Collaboration in planning for future electricity demand</li> </ul>	<ul style="list-style-type: none"> <li>• Continued generation of adequate electricity</li> <li>• Collaboration in renewable energy generation projects</li> </ul>
10. KETRACO	Power transmission	<ul style="list-style-type: none"> <li>• Extension of power distribution lines to all rural areas</li> <li>• Construct transmission lines from the Corporation's new generation plants to the nearest connection point to the grid</li> <li>• Collaboration in project implementation</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration in project planning</li> <li>• Extension of power transmission lines to all rural areas</li> </ul>
11. EPRA	Regulation of energy sector operations	Compliance with appropriate regulations in the energy sector	<ul style="list-style-type: none"> <li>• Set cost-effective tariffs for renewable energy generation</li> <li>• Collaboration in formulation of regulations for the energy sector</li> <li>• Timely submission license fees</li> <li>• Sharing information on the licensed contractors and technicians</li> </ul>
12. Geothermal Development Corporation (GDC)	Development of geothermal energy resources	Information sharing on renewable energy source development	Information sharing on geothermal energy development
13. • Kenya Association of Manufacturers (KAM) • Energy Efficiency and Conservation Agency	Champion energy efficiency and conservation efforts in Kenya	Extension of power supply to rural areas	<ul style="list-style-type: none"> <li>• Formulation of energy efficiency and conservation policies</li> <li>• Sensitisation on use of energy efficient technologies</li> </ul>
14. East African Centre for Renewable Energy and Energy Efficiency	Promote renewable energies and energy efficiency in the East African Community (EAC) region	Collaborate in promotion of renewable energy projects	Collaborate in promotion of renewable energy projects

## 3.2: Stakeholders Analysis Cont..

Stakeholder	Role of Stakeholder	Stakeholder Expectations of REREC	REREC Expectations of Stakeholder
15. National Oil Corporation	Stabilise the petroleum supply market	<ul style="list-style-type: none"> <li>• Extension and supply of power supply to all rural areas</li> <li>• Prompt payment for the products and services rendered</li> </ul>	<ul style="list-style-type: none"> <li>• Provision of cleaner petroleum products</li> <li>• Extend their national coverage</li> <li>• Extend efficient delivery of products and services</li> </ul>
16. Nuclear Power and Energy Agency (formerly KNEB)	Coordinate research in the energy sector	<ul style="list-style-type: none"> <li>• Collaboration in research and dissemination on energy matters</li> <li>• Extension and supply of electricity</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration in research and dissemination on renewable energy matters</li> <li>• Capacity building in renewable energy matters</li> </ul>
17. Kenya Pipeline Company (KPC)	Storage, transportation and handling of petroleum products in Kenya	<ul style="list-style-type: none"> <li>• Extension and supply of electricity to the rural areas</li> <li>• Adherence to the safety standards near KPC infrastructure</li> </ul>	Adequate supply of petroleum products to facilitate projects implementation
18. Government ministries / departments	Provide and receive services to and from REREC	Partnership in implementation of Corporation's mandate	Partnership in implementation of Corporation's mandate
19. Development partners	Financial and technical support	<ul style="list-style-type: none"> <li>• Proper utilisation of funds</li> <li>• Timely and efficient implementation of rural electrification projects</li> </ul>	Provide financial and technical support
20. Kenya Renewable Energy Association (KERA)	Facilitate growth of renewable energy business in the country	Promote the development and use of renewable energy	Collaborate in the development and use of renewable energy in the county
21. National Environment Management Authority (NEMA)	Implementation of all environmental policies	Compliance with all environmental laws and regulations	Issuance of EIA licenses for project implementation
22. Kenya Bureau of standards (KEBS)	Development and coordination of standards and quality control of products	<ul style="list-style-type: none"> <li>• Compliance with quality standards and regulations</li> <li>• Cooperation in standards development</li> </ul>	<ul style="list-style-type: none"> <li>Provision of relevant standards ISO certification</li> </ul>
23. Kenya National Bureau of Statistics (KNBS)	Principal agency of the government for collecting, analysing and disseminating statistical data in Kenya	Collaboration in data collection analyses and dissemination	<ul style="list-style-type: none"> <li>Material and product testing on request</li> <li>Collaboration in data collection analyses and dissemination</li> </ul>

### 3.2: Stakeholders Analysis Cont..

Stakeholder	Role of Stakeholder	Stakeholder Expectations of REREC	REREC Expectations of Stakeholder
24. Surveyors	<ul style="list-style-type: none"> <li>• Survey</li> <li>• Coordination of wayleaves acquisition</li> </ul>	<p>Timely processing of payments</p> <p>Clear terms of contracts preparation of contracts where necessary</p>	<p>Compliance with contract terms</p> <p>Possession of relevant equipment</p>
25. Works Contractors	Construction of projects	<p>Timely processing of contracts</p> <p>Timely resolution of queries</p> <p>Timely processing of payments</p> <p>Relevant licenses</p> <p>Equitable allocation of contracts</p> <p>Effective supervision of projects</p>	<p>Quality workmanship</p> <p>Timely implementation of projects</p> <p>Compliance with contract terms</p> <p>Possession of relevant equipment</p> <p>Financial capacity</p> <p>Conform to internal requirements</p>
26. Suppliers	Delivery of specified materials and services	<p>Timely drawing of contracts and processing of payments</p> <p>A system that is fair, equitable, transparent, competitive, and cost effective</p> <p>Sensitisation on internal requirements</p> <p>Timely inspection of materials</p>	<p>Timely provision of proper documentation</p> <p>Financial capacity</p> <p>Conform to internal requirements</p> <p>Support and participation in implementation of rural electrification and renewable energy projects</p>
27. Public	Provision of wayleaves, land and security of power infrastructure, recipients of REREC services	<p>Clear connection policy</p> <p>Fiduciary responsibility</p> <p>Corporate Social Responsibilities (CSR) activities</p>	<p>Partnership in financing rural electrification renewable energy projects</p> <p>Proper utilisation of the CSR benefits</p>
28. Media	Information propagation	Information sharing	<p>Ownership of projects</p> <p>Partnership on responsible media coverage</p>
29. Electro-mechanical technology manufacturers	Manufactures of various projects' materials and equipment	<p>Specifications on materials for manufacture</p> <p>Compliance with contract terms and conditions</p>	<p>Compliance with contract terms and conditions</p> <p>Timely delivery of materials</p>
		Timely payments	

## 3.2: Stakeholders Analysis Cont..

Stakeholder	Role of Stakeholder	Stakeholder Expectations of REREC	REREC Expectations of Stakeholder
30. Kenya Forest Service (KFS)	Enhance Development, Conservation and Management of Kenyan forest base	Collaboration on forestry issues	Collaboration on forestry issues
31. Tea Factories	Tea processing	Support development and use of renewable energy technologies	Collaborate with REREC on show casing renewable energy technologies in use
32. Kenya Civil Aviation Authority	Manage, regulate and operate civil aviation system	Collaboration on carbon offset reduction scheme in international Airlines (CORSIA)	Collaborate with REREC in CORSIA Authorisation of high-level installations
33. Kenya Airports Authority	Provide and manage airport services	Support development and use of renewable energy technologies	Collaboration on implementation of renewable energy projects
34. Airlines	Provide air transport services	Collaboration on carbon offset reduction scheme in international Airlines (CORSIA)	Collaborate with REREC in CORSIA
35. Cogeneration companies (Sugar Millers / Flower farms	Processing of sugarcane & Production of flowers	<ul style="list-style-type: none"> <li>• Linkages with investors in co-generation</li> <li>• Collaboration for co-generation and bioethanol production</li> <li>• Support development and use of renewable energy technologies</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration with REREC for Co-generation</li> <li>• Revenue from co-generation sources</li> </ul>
36. Water Service Providers /Water Resources Management Authority	Water supply / Develop Regulation for management and protection of water resource in the county	Collaboration on afforestation	Collaboration on afforestation Provision of water resource use permit
37. National Land Commission	Advice and manage land issues in the country	Adhere to the land acquisition process	Registration of land for implementation of projects
38. Kenya Private Sector Alliance (KEPSA)	To engage and influence public policy for an enabling business environment	Collaboration in implementation of projects	Strategic partnership in project implementation, development, promotion and use of renewable energy technologies
39. Universities / Technical Training Institutions /TVETs and other learning institutions	Facilitates enhancement of knowledge through education	Provision of electricity Collaboration on research, trainings, technology modelling and piloting	Ownership of projects Collaborate with REREC in research and development

### 3.2: Stakeholders Analysis Cont..

Stakeholder	Role of Stakeholder	Stakeholder Expectations of REREC	REREC Expectations of Stakeholder
40. Voluntary carbon markets	Trade in emission reduction	Registration and verification of emissions	Receiving carbon credits and finance
41. Embassies	Promote the interest of their countries in Kenya	Share information	Collaborate with REREC in capacity building programmes
42. United Nations (Funds, agencies and programmes)	Maintain international peace and security, develop friendly relations among nations and promote social progress, better living standards and human rights	Share information	Collaborate with REREC in capacity building programmes Collaborate with REREC in Projects Implementation and financing
43. Numerical Machining Complex (NMC)	Offer engineering services	Provision of specifications on materials and equipment for implementation of projects	Collaboration in manufacture of project materials and development of renewable energy technologies
44. Kenya Biogas Builders Association	Guide the development of biogas in Kenya	Collaboration on development of biogas guidelines	Collaboration on development of biogas guidelines
45. Health facilities	Provision of healthcare	Extension and supply of power Collaborate in implementation of renewable energy	Collaborate with REREC in implementation of renewable energy projects
46. Kenya Forestry Research Institute (KEFRI)	Undertake research in forestry and allied natural resources	Collaborate with the institute in forestry research and development fast maturing trees including biofuels for energy production	Collaboration with REREC in promotion of forestry products
47. Religious Organisations	Further religious interests	Adhere to the regulations on forest land	Provide wayleaves to facilitate project implementation
		Support development and use of renewable energy technologies	Collaborate with REREC in implementation of rural electrification and renewable energy projects
		Supply of electrical power	

## 3.2: Stakeholders Analysis Cont..

Stakeholder	Role of Stakeholder	Stakeholder Expectations of REREC	REREC Expectations of Stakeholder
48. REREC Staff	<ul style="list-style-type: none"> <li>Implementation of REREC mandate</li> <li>Provide services to customers</li> </ul>	<p>Fair remuneration</p> <p>Provision of conducive work environment</p> <p>Provision of adequate resources</p> <p>Adequate capacity building and career progression</p>	<p>Adherence to REREC's core values</p> <p>Innovativeness</p> <p>High integrity and commitment</p> <p>Diligent services</p>
49. Kenya Industrial Research and Development Institute	Undertake multidisciplinary research and development in industrial and allied technologies	Collaboration in research and development of technologies in RE	Collaboration in research and development of technologies in RE
50. State Department of Arid and Semi-Arid Development	Formulate and implement policies and strategies that fast-track development of ASAL areas	Collaboration in implementation of Rural Electrification and Renewable energy projects in off grid ASALS areas	Collaboration in implementation of Rural Electrification and Renewable energy projects in off grid ASALS areas
51. Department of Climate Change	Analyse the impact of climate change on social-economic development	Undertake projects that contribute towards Nationally determined contributions (NDCs) under the Paris Agreement	Provision of guidelines on climate change adaptation and resilience in energy sector
52. Hotel and hospitality industry	Provide hospitality services	Partnership / Collaboration in green energy projects	Revenues from carbon financing
Financial institutions	Offers financial services and banking facilities	Bankable renewable energy projects	Concessional financing
		Environmentally and socially acceptable projects within bank risk appetite	Collaboration in promoting Renewable energy projects
		Compliance with the agreements	Compliance with the agreements

## 3.2: Stakeholders Analysis Cont..

Stakeholder	Role of Stakeholder	Stakeholder Expectations of REREC	REREC Expectations of Stakeholder
53. Office of Auditor General	Government External Auditor	<ul style="list-style-type: none"> <li>Preparation and fair presentation of financial statements</li> <li>Maintenance of books of accounts and records</li> <li>Maintenance and effective internal controls</li> <li>Submit the financial statements as prescribed by law</li> </ul>	<ul style="list-style-type: none"> <li>Audit Opinion on the financial statement</li> <li>Assurance services on the internal controls</li> </ul>
54. Council of Governors	Promote cooperation and consultation between national and county governments	<ul style="list-style-type: none"> <li>Support the collaboration with county governments on rural electrification and renewable energy projects</li> <li>Involve counties in planning and implementation of projects</li> </ul>	<ul style="list-style-type: none"> <li>Support the collaboration with county governments</li> <li>Nominate board members</li> </ul>
55. Kenya Maritime Authority	Develop regulation for management and marine resources	Collaboration on tidal development	<ul style="list-style-type: none"> <li>Collaboration on tidal development</li> <li>Provision of permit for tidal development</li> </ul>
56. NG-CDF	<ul style="list-style-type: none"> <li>Co-financing of projects</li> <li>Identification of projects</li> <li>Collaboration in project implementation</li> </ul>	<ul style="list-style-type: none"> <li>Provision of technical support in project implementation</li> <li>Collaborate in the development of constituency specific rural electrification and renewable energy projects</li> </ul>	<ul style="list-style-type: none"> <li>Collaborations with REREC</li> <li>Participate in the sensitisation of communities during project implementation</li> <li>Financial contribution in rural electrification and renewable energy projects</li> </ul>
57. Professional Bodies		<ul style="list-style-type: none"> <li>Capacity building</li> </ul>	<ul style="list-style-type: none"> <li>Capacity building</li> <li>Provision of annual practicing licenses for the professional members</li> </ul>
58. Attorney General	Chief government legal advisor	<ul style="list-style-type: none"> <li>Compliance with law and regulations</li> <li>Concurrence before engaging legal counsel</li> </ul>	Concurrence on engaging legal counsel
59. Presidential Delivery Unit	Monitoring and evaluation of government projects	Provide project status reports	A robust system for monitoring and evaluation

## Political, Economic, Social, Technological, Environmental, and Legal (PESTEL) Analysis

Political	Implication
Devolved governance structure	Energy planning and electricity reticulation are now co-shared function between National and County Governments
Political Constraints	Realignment of planned projects
Government Reprioritization Agenda due to contingencies like COVID-19	Decreased resource allocation for the energy sector
Economic	Implication
Competing government initiatives	Reduced budget allocation to undertake projects
Positive GDP growth and population growth	Increased demand for energy
Competition from other sector players	Reduced scope and funding for projects for REREC
Fluctuations in exchange rates, rising interest rates and inflation rates	Increase in project costs
Implementation of government's Big 4 Agenda and Vision 2030 flagship projects	Reallocation of resources to the Big 4 Agenda and increased role of REREC as an enabler
High cost of land	Higher capital costs for planned projects
Social	Implication
Insecurity	Slow implementation of projects
Rising literacy levels	Shift in energy consumption from traditional to modern forms
Vandalism and theft of power infrastructure	Increased project costs
Community Demands and public participation Requirements	Disruptions and delays in project implementation
Technological	Implication
Nascent technologies especially in renewable energy	<ul style="list-style-type: none"> <li>• Obsolescence of existing technologies and equipment leading to loss of investments</li> <li>• Advances in technology will necessitate the re-training and retooling of personnel</li> </ul>
Advancement in technology	<ul style="list-style-type: none"> <li>• Enhanced service delivery due to process automation</li> <li>• Highly automated processes risk becoming targets for cyber-attacks</li> </ul>
Environmental	Implication
Local and International Environmental initiatives and conventions on climate change	<ul style="list-style-type: none"> <li>• Heightened opportunities for development of clean and green energy</li> <li>• Shift in energy consumption from traditional to modern forms</li> </ul>
Territorial, topographical and climatic challenges	Difficulty in implementing projects in inaccessible terrains / Increased costs of implementation of projects
Erratic weather conditions	Increasing intermittencies in energy generation

Legal	Implication
Energy Act 2019	Expanded mandate for the Corporation into rural electrification and renewable energy project and programmes
Other legislation (Public Procurement and Disposal Act, Public Finance Management Act, etc.)	Strict adherence to the provisions of this legislation in REREC operations

### 3.3: SWOT Analysis

The SWOT (Strengths, Weaknesses, Opportunities and Threats) analyses and evaluates the internal and external factors influencing REREC's operations in the execution of its Vision, Mission and mandate of enhancing rural electrification, promotion and use of renewable energy. REREC shall build on the strengths, mitigate on weaknesses, monitor threats and soar up on the opportunities during implementation of the plan.

#### Internal Factors

Strengths	Strategic Implications	Strategic Responses
1. Consistent funding from the National Government and rural electrification levy (5% levy)	Assurance of minimum level of funding for the programme	Increased implementation of projects and customer connections
2. Good working relationship between the Board, Management, and Staff	Agreed targets met for each year	Improved performance
3. Competent and experienced staff	Increased level of performance in projects implementation	Achievement of set objectives
4. Diverse skills mix of the Board composition	Strategic leadership	Increased efficiency and accountability
5. REA (now REREC) is ISO 9001: 2015 certified.	<ul style="list-style-type: none"> <li>• Positive image for the Corporation</li> <li>• Continual improvement of internal systems and structures</li> </ul>	Enhanced service delivery to customers
6. Existence of e-Procurement Automation of processes such as e-Procurement	Improved operation efficiency and transparency	Timely implementation of projects
7. Strong asset base	Strong effects on a going concern	Stability in execution of the mandate

## Internal Factors Cont...

Weaknesses	Strategic Implication	Strategic Response	
1. Low human capital	Reduced scope of work done	Recruitment of adequate and skilled manpower	
2. Weak institutional capacity	Reduced scope of work done Inefficiency in mandate execution	Staff development and capacity building for existing staff • Strengthen the institutional capacity • Enhance governance	
3. Low capacity to undertake and supervise research	• Few innovations • Low penetration levels of renewable energy technologies • Dissemination of substandard research outcomes	Capacity building in research and development	
4. Poor data management	Loss of confidentiality, integrity, availability of data	Data automation and update of the REMP	
5. Over reliance on Government funding	Reduced funding in case of budget shortfall	Diversification of sources of funding	
6. Operational inefficiencies	• Tied up capital in stocks, • Reduced storage space • Lack of full optimization of ICT Systems • Delayed project implementation • Low quality of key project materials like poles	<ul style="list-style-type: none"> <li>• Optimisation of ERP</li> <li>• Effective training staff on ERP</li> <li>• Opening of high capacity stores and acquisition of land to build own storage facilities</li> <li>• Upgrade of the ICT system to S/4HANNA</li> <li>• Prior planning to ensure acquisition of adequate materials for timely completion of projects</li> <li>• Streamlining labelling and storage of goods using ICT Systems and warehousing receipts</li> <li>• 100% Testing of all projects materials to ensure they meet specifications before issuance to contractors</li> </ul>	
7. Weak regional presence	Reduced operational efficiency in service delivery	Delay in projects implementation	
External Factors	Opportunities	Strategic Implications	Strategic Responses
1. Energy Act 2019	Enhanced renewable energy mandate of the Corporation	Implementation of the Act	
2. Global drive towards access to affordable, reliable, sustainable and modern energy (SDG 7 & 13)	• Availability of projects that can be implemented under Clean Development Mechanisms (CDM) and voluntary markets  • Increased proportion of green energy into the energy mix  • Increased awareness on renewable energy technologies	<ul style="list-style-type: none"> <li>• Diversified revenue sources for sustainability</li> <li>• Contribution to sustainable environment.</li> <li>• Increased reach and use of renewable energy in rural areas</li> </ul>	

## External Factors Cont...

Opportunities	Strategic Implications	Strategic Responses
3. Promotion of the use of renewable energy particularly for domestic use	More of grid power utilised for industrialisation	Efficient usage of the energy mix
4. Government support through on-lending	Financing of major projects is guaranteed	More projects implemented
5. Political goodwill	Support in projects implementation	More projects implemented
6. Growing economy	Higher disposable incomes for citizens	Increased demand for electricity
7. Goodwill from development partners	Increased support	More projects implemented
8. Emergence of smart technologies in the market	Informed on the security and reliability of the infrastructure	Reliable and efficient service provision
9. Advancing technologies in renewable energy	Sustainable energy sources	Green energy generated
10. Growing demand and Increased consumption of energy	<ul style="list-style-type: none"> <li>• Community support in project implementation</li> <li>• Increased revenue through the levy</li> </ul>	<ul style="list-style-type: none"> <li>• Increased connectivity</li> <li>• Increased funding for rural electrification programme</li> </ul>
11. Addition of power into the national grid mix	Improved power supply	Availability and stability of power
12. Collaboration with county governments	<ul style="list-style-type: none"> <li>• Efficient and effective planning of projects</li> <li>• Increased funding</li> </ul>	Implementation of more projects in rural areas
13. Improvement in and awareness of environmental regulations	More generation of energy from cleaner sources	Sustainable energy available in the economy
14. Existence of a PPP legal framework	Engagement of private sector made easier for implementation of the projects	More projects implemented
15. Goodwill from other stakeholders	Increased support	Better coordination in projects implementation
16. Potential for renewable energy development	More generation of energy from green sources	Sustainable energy available in the economy
17. Recognition of Energy as an enabler in realising Vision 2030 and the Big 4 Agenda	Increased funding for energy projects	More projects implemented
18. Existence of skilled service providers in the market	Wide range of service providers selection for implementation of projects	Efficient and timely implementation of projects
19. Need for technical and institutional capacity at the county level	Increased demand for REREC services at county level	Enhanced collaboration with counties
20. Regional stability provides opportunity for transfer of technology, import and export of electricity as well as cross border electrification	Increased opportunity for partnerships	Enhanced collaboration with other rural electrification agencies in the region

## External Factors Cont...

Threats	Strategic Implication	Strategic Response
1. Competition from other players in the sector such as independent power producers undertaking renewable energy projects also in REREC's mandate	Reduced scope of projects for REREC	Strategic planning and timely uptake of projects
2. Competing government initiatives	Diminishing budgetary allocation	Diversification of revenue sources for projects implementation
3. Insecurity – negative effects including terrorism, hostility arising from internal and cross border political instability	Delay in implementation of projects leading to low connectivity levels in affected areas	Involvement of communities and administrative / elected leaders in projects implementation
4. Increased political constraints	Funding constraints due to increased demand for rural electrification services	Enhanced partnerships with the public in rural electrification
5. Fluctuations on exchange rates and prices	Reduced materials procured in case of increase in exchange rate	Contracts to be denominated in financing currency
6. Scarcity of skilled human capital in renewable energy continues to adversely affect the energy sector	Reduced availability of skilled manpower	Establishment of partnerships with institutions of higher learning for capacity building
7. Delay in wayleaves and land acquisition.	Delay in implementation of projects	Enhanced participation and involvement of the stakeholders in rural electrification
8. Theft of materials in REREC Stores and vandalism of power infrastructure in the implementation sites	Increase in cost of projects implementation	<ul style="list-style-type: none"> <li>• Involvement of the communities in rural electrification to enhance ownership of projects and hence safeguard the infrastructure</li> <li>• Insurance of materials in store, on transit and during implementation</li> </ul>
9. Weak regulatory practices by the relevant agencies	Delay in completion of projects e.g. customer metering	Strengthen collaborations with other sector players
10. COVID -19 challenges on overall project implementation Efficiency	Decline in supply of the construction power line materials from outside the country	<ul style="list-style-type: none"> <li>• Engage local manufacturers to supply materials that can be manufactured locally</li> <li>• Review the inspection requirements so that inspection of materials from abroad can be done within the country</li> <li>• Extend current supply contracts at no cost</li> </ul>

REREC plans to take advantage of the strengths and opportunities and prepare mitigation measures against the threats and weaknesses in order to achieve its objectives.



A photograph of a rural power plant. In the foreground, several rows of solar panels are mounted on a metal frame. Behind them, a large industrial building with a green corrugated roof houses a diesel generator. A tall wooden utility pole stands behind the building, with multiple power lines extending from it. The sky is overcast with heavy clouds. Superimposed on the image is the title "Chapter 4 Strategic Model".

# Chapter 4

# Strategic Model

# Chapter Four: Strategic Model

## 4.0: Introduction

After review of the prevailing environment and with regard to the emerging opportunities<sup>3</sup> and challenges, REREC has formulated a Vision, Mission, and key strategic objectives to drive the agenda. The identified Vision, Mission, value statement and Core Values.

## 4.1: Vision, Mission, Value Statement and Core Values

The Vision, Mission, Value Statement and Core Values are the guiding principles that will inspire employees and provide direction towards our objectives. The Vision is a pre-requisite for effective strategic leadership. The Mission is the overriding factor that gives our identity and unique purpose. The Value Statement is a symbol of focus while the Core Values enable good decision making through a common guiding philosophy.



### Vision

A green energy driven nation



### Mission

To provide sustainable energy solutions for all through rural electrification and renewable energy for social economic transformation



### Value Statement

“Green energy, better lives”

### Core Values

- i) **Customer focus:** We will continuously endeavor to understand and take care of our customer's specified needs and expectations by providing services that effectively address them.
- ii) **Teamwork:** Our staff shall work together, communicate openly and respect each other
- iii) **Fulfilment:** We shall provide an enabling environment that fosters talent development and provides delight in work
- iv) **Quality & Excellence:** We shall set and achieve high standards in everything we do while ensuring safety first
- v) **Integrity:** The Corporation is committed to doing the right thing
- vi) **Transparency & Accountability:** The Corporation shall consistently disclose its actions and remain responsive
- vii) **Environmental-Consciousness:** We shall be conscious about environmental and social sustainability issues in our operations

<sup>3</sup> The need to increase electricity access and the share of renewable energy in the national energy mix

- viii) Professionalism:** We shall perform our duties in a professional manner and always seek to continuously improve as required by the respective professional standards
- ix) Innovation:** We shall adopt new ideas, more-effective devices or processes to attain better solutions that meet new requirements and unarticulated needs through more-effective products, processes, services, technologies, or business models that are readily available

## 4.2: Strategic Objectives and Strategies

The following six strategic objectives have been derived from the Mandate, Vision, Mission, and situational analysis:

- i) To develop and promote the use of renewable energy
- ii) To increase electricity connectivity
- iii) To promote research and development in renewable energy
- iv) To establish strategic collaboration with stakeholders
- v) To build human and strengthen institutional capacity
- vi) To achieve financial sustainability

The strategic objectives above will be addressed by implementing various specific strategies as summarised in the table below:

Strategic Objective	Strategies
1. To develop and promote use of renewable energy	<p>The core strategies include to:</p> <ul style="list-style-type: none"> <li>a) Develop and update the renewable energy master plan</li> <li>b) Promote international co-operation programmes focusing on renewable energy sources</li> <li>c) Support the establishment of energy centres in the counties</li> <li>d) Undertake on-farm and on station demonstration of wood-fuel species, seedling production and management</li> <li>e) Promote the use of fast maturing trees for energy production including biofuel</li> <li>f) Promote establishment of commercial woodlots and peri-urban plantations</li> <li>g) Adapt and adopt technology on utilisation of biomass, biodiesel, bioethanol, charcoal, fuelwood, solar, wind, tidal waves, small hydropower, biogas, co-generation and municipal waste</li> <li>h) Promote local capacity for the manufacture, installation, maintenance and operation of renewable technologies such as bio-digesters, solar systems, turbines and other renewable energy technologies</li> <li>i) Promote the development of electricity generation through co-generation by sugar millers</li> <li>j) Identify and develop capacity on renewable energy</li> <li>k) Establish renewable energy mini-grids in off grid areas</li> <li>l) Implement renewable energy systems for grid connection</li> <li>m) Implement stand-alone renewable energy systems for institutions</li> <li>n) Promote environmental conservation</li> </ul>

Strategic Objective	Strategies
2. To increase electricity connectivity	<ul style="list-style-type: none"> <li>a) Connect all public facilities and households within a radius of 600M of new transformers (TXs) by 2022</li> <li>b) Connect the remaining households by 2022</li> <li>c) Install solar home systems for households in areas far away from the grid</li> <li>d) Develop and update the rural electrification master plans in consultation with county governments</li> <li>e) Manage the Rural Electrification Programme Fund</li> </ul>
3. To promote research and development in renewable energy	<ul style="list-style-type: none"> <li>i) Foster collaboration with other research institutions</li> <li>ii) Undertake feasibility studies and maintain data with a view to availing the same to developers of renewable energy resources</li> <li>iii) Formulate, in conjunction with the Agency, a national strategy for coordinating research in renewable energy</li> <li>iv) Undertake, in conjunction with the Agency, research, development and dissemination of appropriate renewable energy technologies</li> </ul>
4. To establish strategic collaborations with stakeholders	<p>To achieve this, REREC plans to:</p> <ul style="list-style-type: none"> <li>i) Establish framework for collaboration with county governments in the discharge of its mandate</li> <li>ii) Establish framework for collaboration with other stakeholders save for counties and community</li> <li>iii) Establish partnerships with the community</li> <li>iv) Provide technical and other capacity building support to county governments in the discharge of the function of electricity reticulation and energy regulation</li> <li>v) Provide an enabling framework for the efficient and sustainable production, conversion, distribution, marketing and utilisation of biomass, solar, wind, small-hydros, municipal waste</li> </ul>
5. To build human and strengthen institutional capacity	<p>REREC shall achieve by:</p> <ul style="list-style-type: none"> <li>i) Determining human capacity requirements</li> <li>ii) Building board and staff capacity</li> <li>iii) Attracting and retaining qualified staff</li> <li>iv) Providing adequate and suitable work environment</li> <li>v) Developing systems and operations review guidelines</li> <li>vi) Enhancing effective corporate governance</li> <li>vii) Providing security to staff and assets and carry out investigations on all reported cases</li> <li>viii) Increasing automation</li> <li>ix) Upgrading business continuity and disaster recovery plan</li> <li>x) Promoting corporate research, monitoring and evaluation</li> <li>xi) Monitoring implementation of this Strategic Plan</li> <li>xii) Safeguarding the REREC's interests</li> <li>xiii) Enhancing operations and maintenance</li> </ul>
6. To achieve financial sustainability	<p>This will be enabled by:</p> <ul style="list-style-type: none"> <li>i) Sourcing additional funds for the REP and renewable energy</li> <li>ii) Ensuring effective collection of the 5% electricity levy</li> <li>iii) Optimising the materials stock levels in REREC stores</li> <li>iv) Improving operational efficiency</li> <li>v) Following up on the exchequer and development funds</li> <li>vi) Harnessing the opportunities offered under Clean Development Mechanism (CDM) and other approaches such as carbon credit trading</li> </ul>

A white Isuzu truck is shown from a side-front angle, positioned on a dirt road. A long, articulated crane arm is extended from the truck's bed, holding a large, light-colored concrete utility pole. The pole has some markings and a yellow stripe near its top. In the background, there are power lines, a rocky hillside, and some green vegetation under a blue sky with wispy clouds.

# Chapter

# 5

# Implementation & Co-ordination Framework: Resource Mobilisation

# **Chapter Five:**

## **Implementation & Co-ordination Framework:**

### **Resource Mobilisation**

#### **5.0: Introduction**

This chapter highlights the resources required for the implementation of the strategic plan over the five-year period, the analysis of the current organisation structure, and human resources capacity, sources of funding, strategies for mobilisation of the funds and risk analysis.

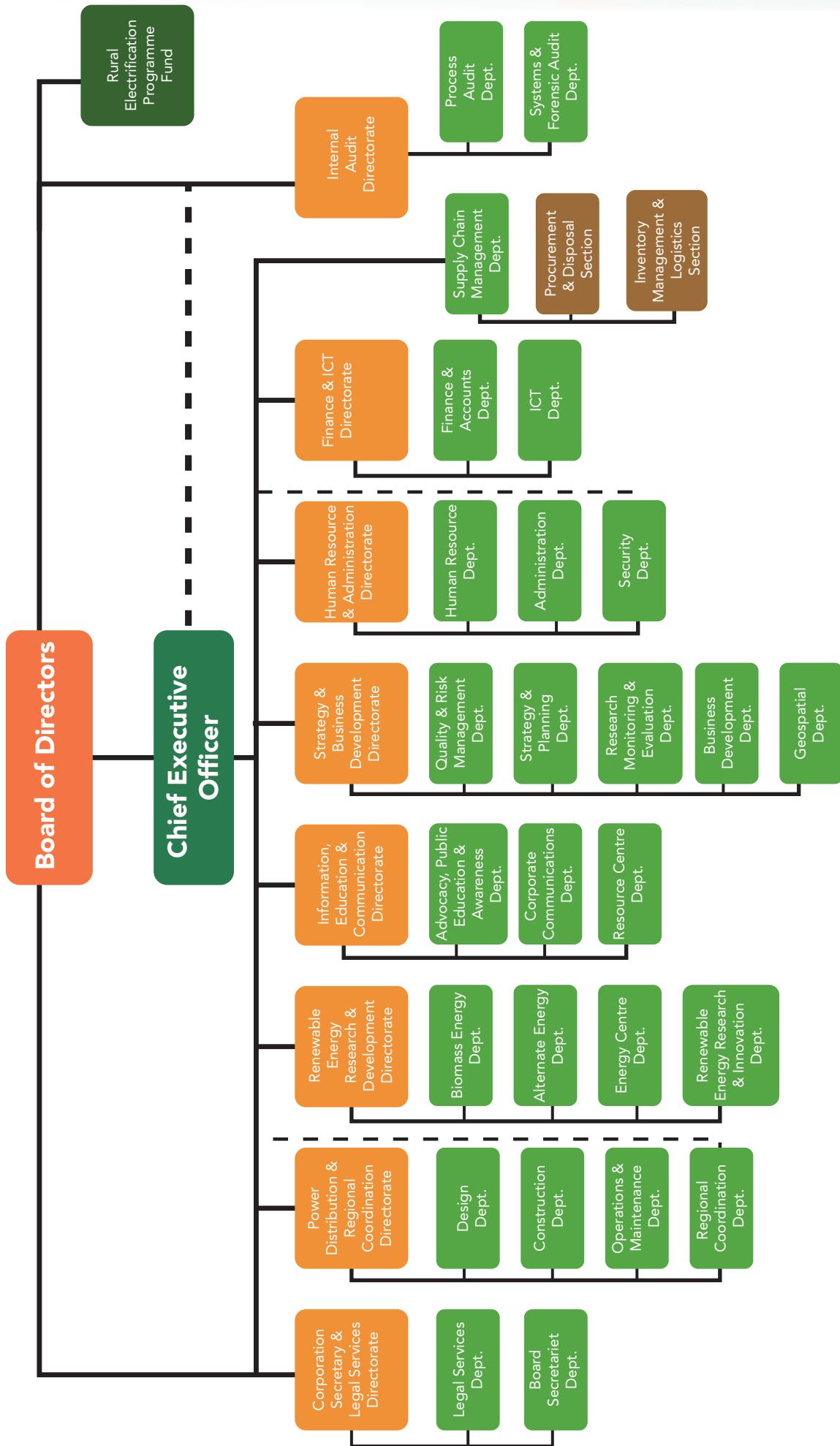
#### **5.1: Organisation Structure**

##### **REREC's Organisational Structure**

REREC comprises a board of directors, management and staff. The Board of Directors provides governance and strategic direction for the operations of REREC. The management is in charge of day-to-day operations of REREC and has developed various policies and guidelines in all its functional areas.

In order to improve service delivery in rural areas, REREC has established a number of county offices that work with the county governments while the national office provides policy guidelines, standards, and resources for implementation of rural electrification and renewable energy. These county offices are the link between the national office and the respective counties in undertaking rural electrification and renewable energy activities including preparation of county master plans, budgeting, project implementation, and monitoring. The organisational structure of the corporation and functions of the various organs are as follows:

## RERE's Organogram



## **Board of Directors**

Chapter One of the Mwongozo Code of governance for state corporation defines the role of the Board of Directors as to:

- i) Exercise their role collectively and not individually
- ii) Determine the organisation's Mission, Vision, purpose and Core Values
- iii) Set and oversee the overall strategy and approve significant policies of the organisation
- iv) Ensure that the strategy is aligned with the purpose of the organisation and the legitimate interests and expectations of its shareholders and other stakeholders
- v) Ensure that the strategy of the organisation is aligned to the long-term goals of the organisation on sustainability so as not to compromise the ability of future generations to meet their own needs
- vi) Approve the organisational structure
- vii) Approve the annual budget of the organisation
- viii) Monitor the organisation's performance and ensure sustainability
- ix) Enhance the corporate image of the organisation
- x) Ensure availability of adequate resources for the achievement of the organisation's objectives
- xi) Hire the CEO, on such terms and conditions of service as may be approved by the relevant government organ(s) and approve the appointment of senior management staff
- xii) Ensure effective communication with stakeholders

## **Office of the Chief Executive Officer**

- i) The accounting officer of the corporation
- ii) Be responsible for the day-to-day operations of the organisation
- iii) Provide leadership to senior management and staff
- iv) Prepare the annual budget and establish proper internal controls
- v) Be responsible for the execution and communication of the Board's strategies, decisions and policies
- vi) Develop and recommend to the Board the annual business plans for the organisation
- vii) Ensure that the organisation has an effective management structure including succession plans
- viii) Ensure that all board papers are accurately written, are relevant and availed to the Board members in time
- ix) Serve as the link between the board and the management
- x) Be responsible for the achievement of the objectives of the organisation
- xi) Put in place effective administrative structures, processes and systems
- xii) Provide regular, thorough and prompt communication to the Board on key technical, financial and administrative matters
- xiii) Be responsible for stakeholder management and the enhancement of the corporate image of the organisation

## Corporation Secretary and Legal Services Directorate

### Board Secretariat Functions

The department is responsible for the following functions:

- i) Provide legal counsel to both the board and management. This includes advising on new rules / laws / regulations that may affect the operations of the corporation
- ii) Provide secretarial services to the board of directors and board committees
- iii) Ensure proper communication and implement board resolutions by management
- iv) Keep the Board informed of all new developments
- v) Provide guidance to the board on their duties and responsibilities and on matters governance
- vi) Assist the Board in carrying out the following:
  - a) Board induction and training
  - b) Updating the board and committee charters
  - c) Preparation of board work plans
  - d) Board evaluation
  - e) Governance audits
  - f) Implementation of the code of conduct and ethics
- vii) Ensure the timely preparation and circulation of board and committee papers
- viii) Ensure the timely preparation and circulation of board and committee minutes
- ix) Be the custodian of the seal of the organisation and account to the board for its use
- x) Maintain and update the register of conflicts of interest
- xi) Ensure that all board members are aware of all relevant laws affecting the organisation
- xii) Facilitate effective communication between the organisation and the shareholders
- xiii) Ensure that annual returns are promptly filled with the relevant authorities
- xiv) Except in exceptional circumstances, ensure that board and committee papers are circulated in advance of any meeting

### Legal Services Functions

The department is responsible for the following functions:

- i) Ensure compliance in the implementation of the constitution and the Energy Act and other relevant laws
- ii) Manage litigation on behalf of the organisation including alternative dispute resolution
- iii) Negotiate, draft and review contracts, agreements and other legal instruments (for goods, services, construction and survey, construction, survey, cartography, procurement)
- iv) Ensure statutory compliance of the Constitution of Kenya (2010), Energy Act, State Corporation Act, NSSF, NHIF and all other laws that affect the mandate of the corporation

- v) Interface with all the departments within the corporation
- vi) Develop and negotiate partnership instruments between the corporation and other partners, e.g. county governments
- vii) Develop county engagement framework to ensure that the corporation decentralises its services to all the counties in accordance with the constitution
- viii) Ensure that the corporation's property, assets and materials are well insured including staff
- ix) Ensure that all security documents are well secured
- x) Identify insurance needs for the staff and assets of the corporation
- xi) Follow insurance claims
- xii) Review of insurance needs
- xiii) Conveyance
- xiv) Acquisition of wayleaves, and
- xv) Acquisition of licences

### **Power Distribution and Regional Co-ordination Directorate**

The directorate is responsible for the following functions:

- i) Oversee the design, construction, operation and management
- ii) Ensure efficient and effective organisational, direction, management and coordination of activities and programmes in the directorate
- iii) Ensure that the projects identified are designed and implemented on time in an efficient and effective manner and in accordance with the industry acceptable standards and as per the REREC's Strategic Plan
- iv) Provide efficient and timely technical advice on all technical matters
- v) Promote management and technological innovations to enhance the directorates efficiency
- vi) Establish operational linkages with other directorates of the corporation
- vii) Establish collaboration linkages with other relevant stakeholders in the energy sector

### **Renewable Energy Research and Development Directorate**

The functions of the directorate will entail:

- i) Design, develop and promote the use of biomass and alternative renewable energy resources
- ii) Undertake training and capacity building on renewable energy through energy centres
- iii) Develop strategies for the implementation of renewable energy systems
- iv) Provide technical advice on all renewable energy matters
- v) Conduct research and innovation in renewable energies technologies except geothermal, and
- vi) Establish linkages with other stakeholders on renewable energy technologies

## **Information, Education and Communication Directorate**

The functions of the directorate entail:

- i) Oversee the advocacy, public awareness, corporate communication, customer service, and resource centre functions in the corporation
- ii) Initiate the development of effective policies, strategies, controls and procedures for all matters relating to advocacy, public awareness, corporate communication and customer service functions of the corporation
- iii) Manage the corporate image and reputation of the corporation
- iv) Coordinate branding activities
- v) Coordinate media relations
- vi) Coordinate the corporation's public functions and events
- vii) Coordinate the management of the corporation's resource centre
- viii) Manage the implementation of the corporate social responsibility programmes
- ix) Formulate, review and ensure distribution of Information, Education, Communication (IEC) materials
- x) Promote national and international co-operation programmes focusing on renewable energy sources
- xi) Formulate and coordinate implementation of reputation risk management policies and strategies
- xii) Provide technical, strategic and policy advice on corporate communications customer service and advocacy matters
- xiii) Coordinate the development of the website content, and
- xiv) Coordinate the implementation of the corporation's customer service

## **Strategy and Business Development Directorate**

The Directorate will be responsible for the following functions:

- i) Coordinate the strategy and planning, business development, research monitoring and evaluation, as well as quality assurance departments
- ii) Coordinate the formulation of the corporate strategy, annual work plans, and monitor implementation
- iii) Coordinate the development and updating of rural electrification and renewable energy master plans
- iv) Coordinate corporate performance contract management
- v) Coordinate performance management systems that enable reporting and analysis of performance
- vi) Formulate and coordinate implementation of business development policy
- vii) Establish and maintain linkages with strategic partners
- viii) Coordinate resource mobilisation and absorption for the corporation
- ix) Carry out preparatory activities for implementation of the development partners projects
- x) Coordinate harnessing of opportunities under climate change and renewable energy development

- xi) Coordinate appraising of development proposals to the corporation
- xii) Promote international co-operation programmes focussing on renewable energy sources
- xiii) Formulate and coordinate implementation of risk management policy
- xiv) Coordinate risk management and reporting in the corporation
- xv) Coordinate total quality management, ISO certifications and assurance in the corporation
- xvi) Formulate and coordinate implementation of environment and social policy
- xvii) Ensure compliance with environment and social management of the project
- xviii) Formulate and coordinate implementation of corporate research policy
- xix) Carry out corporate research and disseminate findings
- xx) Formulate and coordinate implementation of monitoring and evaluation policy
- xxi) Undertake monitoring and evaluation programmes

### **Human Resource and Administration Directorate**

The directorate is responsible for the following key functions:

- i) Implement human resource and development policies, strategies and plans
- ii) Coordinate human resource training and development programmes
- iii) Implement the corporation's strategic objectives on human resources and development
- iv) Develop, review and coordinate implementation of performance management system
- v) Initiate the development and implement of compensation and benefits schemes
- vi) Implement human resource management rules and regulations and compliance with labour laws
- vii) Develop and maintain human resource management information system
- viii) Ensure compliance with human resource and administration statutory and regulatory requirements
- ix) Manage payroll
- x) Provide secretarial services to the committee responsible for human resource management
- xi) Promote cordial employee relations, values and work ethics in the corporation
- xii) Develop and manage staff welfare schemes such as group personal life and accident, medical, or insurance schemes
- xiii) Coordinate the day-to-day administrative activities of the corporation
- xiv) Establish and maintain a catalogue of all corporation's assets and properties
- xv) Prepare and implement a maintenance schedule of all assets in liaison with other departments and in consideration of the manufacturer's manual
- xvi) Manage, prepare schedule for assets (building, furniture, fittings, etc.)
- xvii) Identify unserviceable and obsolete assets for disposal

- xviii) Coordinate and oversee the implementation of the recommendation of work environment surveys so as to improve the work conditions of REREC
- xix) Fleet management
- xx) Management of office space
- xxi) Management of external administrative service providers
- xxii) Administratively coordinate implementation of government policies as released from time to time
- xxiii) Coordinate Administrative services in the regions
- xxiv) Formulate, interpret and implement security policies and any other procedures appertaining to security
- xxv) Conducting security risk assessment, advise the corporation and facilitate implementation of preventive measures
- xxvi) Investigation of security breach incidents to identify and mitigate root causes of actual and related incidents to eliminate chance of recurrence
- xxvii) Monitoring services offered by third party security service providers to ensure that their contribution delivers required security standards, and
- xxviii) Ensure that all cases affecting the corporations are promptly investigated, corrective measures taken and report made to police in cases of criminal matters for appropriate action

### **Finance and ICT Directorate**

The directorate is responsible for the following key functions:

- i) Formulate, implement and review policies on finance and ICT for the corporation
- ii) Design, implement and maintain systems which are geared towards effective performance management and enhanced productivity of the directorates of finance and ICT
- iii) Ensure proper financial management in the corporation, including budgeting and budgetary control, cash and treasury management, compilation of statutory financial reports and preparation of annual reports and financial statements
- iv) Oversee the preparation of corporation annual budget by consolidation of all departmental budgets as per government policy and presentation to the board for approval
- v) Develop and ensure effectiveness of performance of management systems within the directorates of finance and ICT
- vi) Promote technological innovations to enhance the corporation's efficiency
- vii) Implement strategies for Enterprise Resource Planning (ERP) system development, maintenance and administration
- viii) Liaise with other departments to ensure that financial and related regulations are complied with and where applicable give procedural guidance including dealing with any staff enquiries on any payment related matters, and
- ix) Develop and implement expenditure controls so as to ensure that financial expenditure is planned, controlled and properly authorised

## **Supply Chain Management Directorate**

The Directorate will be responsible for the following functions:

- i) Provide advisory / professional opinion on procurement matters to the accounting officer
- ii) To ensure compliance with the Public Procurement and Asset Disposal Act (2015)
- iii) Prepare and implement the corporation's annual procurement plan
- iv) Maintain and continually update the list of registered suppliers
- v) Prepare, publish and distribute procurement and disposal opportunities
- vi) Carry out the receiving, opening and evaluation of quotations, tenders, proposals and expressions of interest
- vii) Carry out procurement and disposal activities in accordance with the Public Procurement and Asset Disposal Act (2015), the corporation's procurement manual and policies
- viii) Review and maintain of all records of purchased goods, works and services, including costs, deliveries and inventories
- ix) Undertake market surveys
- x) Monitor contract management
- xi) Maintain optimal stock levels and carry out quarterly and annual stock take
- xii) Maintain a risk register for the supply chain management directorate
- xiii) Provide secretarial services to the procurement committees which may be constituted by the accounting officer, and
- xiv) Carry out any other functions and duties as are provided under the act or as assigned by the accounting officer

## **Internal Audit Directorate**

The Directorate is responsible for the following functions:

- i) Secretary to the Audit Committee of the Board
- ii) Formulate and coordinate the implementation of internal audit policies, strategies and plans
- iii) Compile and issue internal audit reports to the management and board as appropriate
- iv) Provide leadership in carrying out investigations and special audit assignments
- v) Set up and implement systems in accordance with auditing standards
- vi) Evaluate internal control framework for preventing and detecting irregularities
- vii) Review for correctness and accuracy of accounting reports
- viii) Assurance on risk control effectiveness, efficiency and adequacy and risk management processes
- ix) Execute and document the audit process on a variety of computing environments and computer applications

- x) Assist external auditors when called upon
- xi) Implement and close board audit committee's resolutions, and
- xii) Participate in meetings of stakeholders, management, and board as necessary

## **Human Resource Management and Development**

REREC has recognised that human resource is an important asset for success in its operations. Thus, REREC has over time ensured that staff development is implemented through capacity building. This has been through infusion of new skills and other integrated programmes aimed at improving service delivery. This has been done since the commencement of operations in 2008/2009 Financial Year with the initial staff capacity of seventy-nine staff across various departments. The staff capacity has since grown to its current level of 325, spread within the headquarters at Kawi Complex and seven regional offices. To implement this Strategic Plan and achieve the enhanced mandate of REREC, especially in promotion and development of renewable energy sources in the country, a human capacity gap analysis evaluation exercise will be undertaken to determine the optimum staffing levels required in all areas of operations.

## **5.2: Financial Resources Mobilisation**

The corporation, which is a state agency, receives government funds from exchequer allocation. Over the last eleven years, from financial years 2008/2009 to 2018/2019, REREC has received a total of about KShs 111 billion, mainly from the exchequer and development partners. In order to implement all the activities identified for the achievement of the strategic objectives, a total of KShs 159 billion is required. It is expected that the traditional sources of funding will continue in the next five years. Other sources of funding, including carbon financing under clean development mechanisms will be established to finance these objectives. At the same time, the corporation will explore additional sources to meet the required funding for this strategic plan as detailed in the implementation matrix.

**Table 5.1: Funding of the Strategic Objectives**

<b>Strategic Objective</b>		<b>Amount (KShs. Million)</b>
1.	Develop and promote the use of renewable energy	60, 002
2.	Increase electricity connectivity	91, 513
3.	Promote research and development in renewable energy	1, 387
4.	Establish strategic collaborations with stakeholders	1, 334
5.	Build human and strengthen institutional capacity	4, 665
6.	Achieve financial sustainability	98.5
<b>Total Funding Requirement</b>		<b>158, 999.5</b>

In the next five years, it is anticipated that concerted efforts will be made by all parties to ensure realisation of the funds required.

The corporation will, therefore, adopt the following strategies in resource mobilisation towards the implementation of the current Strategic Plan:

**Table 5.2: Sources of Funding**

Source of Funds	Strategy for Resource Mobilisation	Projected Funding (KShs Million)
National Government	<ul style="list-style-type: none"> <li>Lobby Treasury, MPs and relevant parliamentary committees to allocate more resources to rural electrification and renewable energy projects in various jurisdictions</li> <li>Streamline the 5% REP levy collection, collections from the Rural Electrification Programme Fund and revenues from Energy and Petroleum Regulatory Authority.</li> </ul>	50,500.00 30,500.00
	Sub-Total	81,000.00
County Governments	Lobby county governments to allocate part of the devolved funds to rural and renewable energy projects in various jurisdictions and establishment of energy centres.	2,550.00
	Sub-Total	2,550.00
Development Partners	Initiate strategic relationships with development partners in support of various initiatives in all areas of operations including benefits of carbon financing under clean development mechanisms.	14,000.00
	Sub-Total	14,000.00
Public Private Partnerships	<ul style="list-style-type: none"> <li>Identify and engage investors in supporting infrastructure development and other income generating activities</li> </ul>	24,379.50
	Sub-Total	24,379.50
Community (NG-CDF)	<ul style="list-style-type: none"> <li>Mobilise communities to partner in funding projects</li> </ul>	6,000.00
	Sub-Total	6,000.00
Investments	<ul style="list-style-type: none"> <li>Invest in short-term instruments approved by the government</li> </ul>	1,000.00
	Sub-Total	1,000.00
Customers	<ul style="list-style-type: none"> <li>Sales of bulk power</li> </ul>	26,950.00
Other sources		3,120.00
	<b>Grand Total</b>	<b>158,999.50</b>

### 5.3: Risk Analysis

This entails identifying and assessing factors that could undermine the implementation of the strategic plan under each of the six strategic objectives. These include human, financial, technical, political, natural, operational, and reputational factors.

Table 5.4 below shows the analysis of these threats and the subsequent mitigation measures:

**Table 5.4: Risk Analysis**

Strategic Objective	Risk	Rank (High, Medium, Low)	Mitigation Measures	Risk Owner
i. To develop and & promote the use of renewable energy	Low human capacity and relevant skills	High	<ul style="list-style-type: none"> <li>Recruitment of staff with relevant skills and competencies</li> <li>Training of staff on relevant skills</li> <li>Outsourcing of some of specialised skills</li> </ul>	HR / Directorate of Renewable Energy
	Inadequate funds for implementation of the activities	High	<ul style="list-style-type: none"> <li>The legal provision on 5 % levy</li> <li>Lobby the government for increased allocation</li> <li>Enhance community involvement so as to increase community contribution such as free wayleaves</li> <li>Partner with county governments for matching funds programme</li> <li>Establish a fundraising unit in the Corporation</li> <li>Conduct maintenance operations in house and sale of bulk power</li> <li>Diversification of sources of funds through investments</li> <li>Project sites auction options to be used for implementation of renewable energy projects</li> </ul>	CEO / Finance / Renewable Energy Directorate / alternative energy / business development
	Obsolete technologies due to rapid advancement in renewable energy technology	Medium	Benchmarking with best practices	Directorate of Renewable Energy
	Expensive renewable energy technologies	High	<ul style="list-style-type: none"> <li>Leverage on Government subsidies on renewable energy</li> <li>Leverage on utility scale implementation</li> <li>Result based financing in collaboration with development partners</li> </ul>	Directorate of Renewable Energy / Business development

**Table 5: Risk Analysis Cont...**

Strategic Objective	Risk	Rank	Mitigation Measures	Risk Owner
	Loss of Corporation's property through natural disasters	Medium	<ul style="list-style-type: none"> <li>Sequence project implementation such that much of the work is done during the period with less adverse weather conditions</li> <li>Insure materials and staff</li> <li>Ensure the contractors have insurance covers for materials and their staff</li> <li>Continuous sensitisation of contractors on safety measures during implementation</li> </ul>	Directorate of Renewable Energy / construction/ human resources /legal / security
Directorate of Renewable Energy	Inadequate funds for implementation of the activities	High	<ul style="list-style-type: none"> <li>The legal provision on 5 % levy</li> <li>Lobby the government for increased allocation</li> <li>Enhance community involvement so as to increase community contribution such as free wayleaves</li> <li>Partner with county governments for matching funds programme</li> <li>Establish a fundraising unit in the Corporation</li> <li>Carry out maintenance operations in-house and sale of bulk power</li> <li>Diversification of sources of funds through investments</li> </ul>	CEO / business development / finance / communications / strategy and planning
	Delayed exchequer release	High	Continued engagement with the national treasury and Ministry of Energy	CEO / finance
Political Interference		High	<ul style="list-style-type: none"> <li>Compliance with the relevant laws and regulations</li> <li>Develop and implement public participation policy</li> </ul>	
ii.	Directorate of Renewable Energy	High	<ul style="list-style-type: none"> <li>Increase community participation and ownership through public sensitisation</li> <li>Strengthen security system of installed infrastructure through remote monitoring</li> <li>Ensure technical designs that prohibit vandalism</li> <li>Automate stores operations</li> <li>Insure materials in stores and on transit</li> <li>Ensure the contractors have insurance covers for materials on site and in transit</li> </ul>	Communications / security / legal services / procurement
	Changes in government policy	Medium	<ul style="list-style-type: none"> <li>Ensure all activities are aligned to the government policy</li> <li>Ensure there is adequate flexibility in the strategic planning of the activities</li> </ul>	Strategy and planning / legal services

**Table 5. 4: Risk Analysis Cont...**

Strategic Objective	Risk	Rank	Mitigation Measures	Risk Owner
iii. To promote research and development in renewable energy	Inadequate capital		<ul style="list-style-type: none"> <li>Lobby the Government for funds allocation towards research</li> <li>Encourage partnerships with stakeholders</li> <li>Strength relationship with development partners for research support</li> <li>Collaboration with research firms and institutions</li> <li>Ring fence research funds in the Corporation's budget</li> </ul>	CEO / finance / Directorate of Renewable Energy / research / innovation
	Inadequate research results	Medium	<ul style="list-style-type: none"> <li>Close supervision of researchers</li> <li>Contracts with researchers with clear research objectives</li> <li>Ensure that the findings answer the research objectives</li> <li>Monitoring of the exercise</li> </ul>	Directorate of Renewable Energy
	Inaccurate reverse engineering of technological work / findings	Medium	<ul style="list-style-type: none"> <li>Further research on the technology before implementation</li> </ul>	Directorate of Renewable Energy / research development / resource centre
	Unworkable prototypes / models	Medium	<ul style="list-style-type: none"> <li>Invest in more research to establish what works</li> <li>Pilot a model before developing a prototype and subsequent commercialisation</li> </ul>	Directorate of Renewable Energy / research development
	Intellectual property risks	Medium	<ul style="list-style-type: none"> <li>Patenting of the intellectual property</li> <li>Protection of intellectual property by copy rights</li> </ul>	Legal services
	Costly models to implement	Medium	<ul style="list-style-type: none"> <li>Split the implementation in phases where possible</li> <li>Source for capital to implement the models</li> </ul>	Business development
iv.	To establish strategic collaborations with stakeholders	High	<ul style="list-style-type: none"> <li>Develop a stakeholder engagement framework</li> <li>Validation of framework collaboration by stakeholders</li> <li>Establish regional co-ordination mechanism</li> </ul>	CEO / Communications / Business development / Regional coordination / Power distribution / Renewable Energy Directorate

**Table 5. 4: Risk Analysis Cont...**

Strategic Objective	Risk	Rank	Mitigation Measures	Risk Owner
	Disputes	Medium	<ul style="list-style-type: none"> <li>Inclusion of alternate dispute resolution mechanism in the framework</li> <li>Engaging legal representative during contract engagements</li> <li>Ensure the principles of good faith is embedded in the framework</li> </ul>	Legal services
	Lack of commitment from the collaborating parties	High	<ul style="list-style-type: none"> <li>The framework to provide for reporting and accountability</li> <li>Engaging as per the terms of the collaboration framework</li> <li>Sensitisation of the stakeholders before and during the implementation of the framework</li> </ul>	Legal services / business development / regional coordination / power distribution / renewable energy directorate / communications
	Complexity in decision-making / Loss of autonomy	High	<ul style="list-style-type: none"> <li>The framework to give clear communication and accountability</li> <li>Implementation of the framework as per the terms</li> <li>Determining risks of the collaboration and providing controls in the framework</li> </ul>	Legal services / business development / regional coordination / construction
	Damage to the Corporation's name if collaboration is unsuccessful / negative reputation	Medium	<ul style="list-style-type: none"> <li>Robust communication Policy on damage control</li> <li>Clearly defined timeline-based targets to avoid the situation</li> <li>Prototyping before embarking on collaborations</li> <li>Intertwined interests to protect each party</li> <li>Provide an amicable exit clause in the collaboration framework</li> </ul>	Strategy and planning / legal services / business development / regional coordination / construction
v.	To build human and strengthen Institutional capacity	Inadequate staff capacity	<ul style="list-style-type: none"> <li>Undertake continuous job evaluation to establish optimal staff capacity</li> <li>Attracting, recruiting, relating, remunerating and retention of staff</li> <li>Undertake continuous need assessment and training of staff</li> <li>Encourage exchange programmes in research and other mandate areas</li> <li>Partner with training institutions for specialised training on necessary skills</li> </ul>	Human resource

**Table 5: Risk Analysis Cont...**

Strategic Objective	Risk	Rank	Mitigation Measures	Risk Owner	
	Staff turnover	High	<ul style="list-style-type: none"> <li>Bonding of staff after training</li> <li>Motivation of staff</li> <li>Job security</li> <li>Clear function of the job</li> <li>Clear career progression</li> <li>Engender the Corporation</li> </ul>	Human resource	
vi	To achieve financial sustainability	Failure to mobilise adequate funds	High	<ul style="list-style-type: none"> <li>Diversification of sources of funds</li> <li>Regular engagement with the national treasury and development partners</li> <li>Involvement of the relevant investors for implementation</li> </ul>	CEO / finance / business development / Directorate of Renewable Energy
	Conception of socially unacceptable projects	High	<ul style="list-style-type: none"> <li>Carry out Environmental and Social Impact Assessment</li> <li>Community participation on project planning</li> <li>Proper research and business case for the projects</li> <li>Benchmarking on similar projects</li> </ul>	Renewable Energy Directorate / business development / quality assurance	
	Low uptake of modelled technologies	High	<ul style="list-style-type: none"> <li>Ensure and develop bankable projects</li> <li>Conduct Environmental and Social Impact Assessment (ESIA)</li> <li>Develop framework for dissemination of models and improved / new technologies</li> </ul>	Directorate of Renewable Energy / quality assurance / advocacy / communication / business development	



Lokichar Sub-Station



The 50 MW Garissa Solar power Plant



# Chapter 6

## Monitoring, Evaluation & Reporting

# **Chapter Six:**

## **Monitoring, Evaluation, and Reporting**

### **6.1: Introduction**

Monitoring, Evaluation and Reporting (ME&R) is a key function in tracking the implementation of the Corporation's Strategic Plan for the financial years 2018/2019 – 2022/2023. This will provide the necessary feedback on the status of implementation of policies, projects and programmes to enable informed and optimal decision making. An effective ME&R system is hence critical to the successful implementation of this Strategic Plan.

### **6.2: Monitoring, Evaluation, and Reporting Framework**

A system that conforms to the guidelines provided by the National Integrated Monitoring and Evaluation System (NIMES) has been designed. REREC has identified six strategic objectives that will be pursued and monitored. Further, a balanced score card principle (financial, business process, planning and growth, as well as customer perspectives) will be used to monitor the implementation of all the initiatives put in place to achieve the priority areas in each of the four perspectives. In addition, the National Monitoring and Evaluation Policy will provide timely and regular information for evidence-based decision making geared towards achieving the Kenya Vision 2030 and the Sustainable Development Goals (SDGs).

Further, the process of monitoring and evaluation will assist the management assess the delivery and use of resources according to the details in the implementation plan, the achievement of the intended outputs on a timely, cost effective, and efficient manner. Continuous evaluation of the socio-economic impact of projects and programmes helps to avoid wastage of resources by guiding selection of the most optimal alternatives, achieve the intended outcomes and enhance the positive impact of the Strategic Plan. In determining the strategic objectives and targets, REREC has taken consideration of the following:

- i) National objectives to be achieved by the Corporation as outlined in the Vision 2030 and other national policy papers
- ii) The National Electrification Strategy of 2018
- iii) Delegated authority by national treasury (Emission Reduction and Purchase Agreement)
- iv) Thematic issues from the Big 4 Agenda
- v) Core mandates of the corporation under Energy Act (2019), and
- vi) Relevant strategies not implemented from the previous plan

To ensure effective coordination of the ME&R Framework within the corporation, a unit will be set up within the Directorate of Planning and Business Development. The unit will be responsible for:

- i) Ensuring preparation of annual work plans from the Strategic Plan for implementation and cascading to individual departments
- ii) Providing a framework, including standardised templates, for reporting on a quarterly, semi-annual and annual basis on implementation of the Strategic Plan

- iii) Generating, maintaining and reviewing a set of strategic objectives drawn from the ME&R framework of the Plan
- iv) Carrying out sensitisation to all staff in the Corporation on the contents of the Strategic Plan
- v) Co-ordinating meetings to review progress and resolve issues that may arise in the implementation
- vi) Provide relevant reports to ensure that the top management is fully updated on the Plan implementation status, and
- vii) Under the guidance of the Strategy and Planning Manager, prepare comprehensive quarterly status reports for presentation to the Board

**Table 6. 1: Key Performance Indicators (KPIs)**

Key Performance Indicators		Measure	Baseline	Target Number	Responsibility
i.	Renewable energy sources	No.			
ii.	Connections of public facilities	No.			
iii.	Connection to households	No.			
iv.	Research and development in renewable energy	No.			
v.	Strategic collaborations	No.			
vi.	Institutional capacity	%			
vii.	Financial sustainability	%			
viii.	Customer satisfaction	%			
ix.	Employee satisfaction	%			
x.	Automation of business processes	%			

Source: REREC Data

### **6.3: Strategy Implementation Methodology**

Successful implementation of this Strategic Plan will be achieved through collaborative efforts among departments and coordination of ME&R activities by the Manager of Strategy and Planning Department. Responsible departments will be accountable for the completion of stated tasks in the Strategic Plan. The managers of departments will ensure that strategies are being implemented, performance is being measured and progress reports are made and discussed in their respective departmental meetings and corrective actions undertaken where necessary.

#### **i) Cascading the Plan to all Staff**

The Strategic Plan must translate to work. The plan will, therefore, be cascaded downwards to the lowest levels using REREC's Performance Contracting Framework (PC). This will help each member of staff to understand and plan for their respective roles as building blocks to the implementation of the Strategic Plan.

#### **ii) Departmental and Individual Annual Work Plans**

Detailed work plans with clear performance indicators and responsibility for their achievement, will be developed taking into consideration the approved activities in the Strategic Plan. The Manager of Strategy and Planning Department will take responsibility to coordinate with other departments in case of joint activities. Key indicators that will inform management decision making will be identified and the frequency of reporting on these indicators determined. This will form the foundation of the ME&R system.

### iii) Preparation of the Resources Plan

Each and every activity will have resources earmarked in REREC's annual budget. Each department should include resource requirement in their Annual Work Plan. Material requirements will also be worked out every year and procurement will be done as per the procurement provisions / plan.

### iv) Data and Information Collection Procedures

Elaborate data and information collection templates and procedures will be developed to measure performance as per the indicators and report to management. The reports will describe actions taken by the departments toward achieving the specific strategies of the Strategic Plan and will include achievements, challenges and emerging issues, costs and recommendations.

### v) Review Meetings

- a) Monthly review meetings at the departmental and corporate level will be scheduled to ensure implementation is on track
- b) Quarterly review meetings at the departmental, corporate and board level will be scheduled to get and give feedback on the pertinent performance indicators
- c) Quarterly reports to the Strategy and Projects Implementation Committee (SPIC) of the Board on the implementation of the Strategic Plan
- d) Overall oversight of the Strategic Plan and its implementation is a critical role of the Board. Therefore, progress reporting will be an agenda item in quarterly board meetings
- e) A strategy implementation review meeting will be held annually

### vi) Linking the Strategic Plan to Performance Management

For the implementation of the Plan to be effective, it will be an integral part of the Corporation's performance management system and will be linked to staff appraisal and reward systems. The Corporation will monitor and evaluate its activities and performance in the process of reporting on its performance contract on quarterly and annual basis. The tracking of the Strategic Plan will be regularised to become part of this process.

## 6.4: Monitoring Performance of the Strategic Plan

The corporation will apply various tools and techniques to monitor status and performance of the strategic plan. The major techniques of monitoring and evaluation that shall be used include variance analysis, ratio analysis, and compliance with approved budgetary levels.

### i) Variance Analysis

The Corporation will compare the performance targets with the actual results and investigate the identified variance or variances. As a consequence of variance analysis and identification of causes, appropriate remedial actions will be taken.

## ii) Ratio Analysis

Ratio analysis is concerned with efficiency of related objectives. Pertinent ratios will be calculated quarterly, semi-annually and annually and the actual results compared with the target ratios. The differences between target and actual ratios will be identified and analysed, after which, remedial action will be taken.

## iii) Compliance with Budget

Actual results will continually be checked against planned results and variances investigated. If necessary, action plans will be changed to be in line with the budgeted results or the budget will be amended to take into account new developments that require action.

## 6.5: Progress Reporting

Information sharing and reporting will be critical in the implementation of this plan. It will also provide a mechanism for monitoring and evaluation. Reports on the implementation status of the plan will also be made available on quarterly and annual basis by management. Reporting the progress of implementation will be critical in adjusting strategic directions and measuring performance. In undertaking ME&R, data will be collected on the various output and outcome indicators which have been developed and included in this strategic plan. The Manager Strategy and Planning, will be required to submit progress reports to Management and the Board on the implementation of the strategic plan. Such reports shall include:

- a) Monthly status report to management
- b) Quarterly report to both management and the board
- c) Half-yearly report to the management and the board, and
- d) Annual report to the management and the board

Each of the performance reports will contain the following elements:

- a) Progress against the plan
- b) Performance against the budget for each respective strategy
- c) Causes of any delay in the implementation of actions under respective strategies
- d) Actions or resources required to remedy delays stated, if any; and
- e) Proposed revisions to the strategies

## 6.6: Performance Review

### i) Annual Review

The Strategic Plan is supposed to be a live document in line with environmental and macroeconomic factors, hence will be reviewed on an annual basis. At the end of each financial year, a report will be produced giving details on the implementation of the plan and circulated to the stakeholders. The focus will be on the key action plans achieved within the year.

### ii) Mid-Term Review

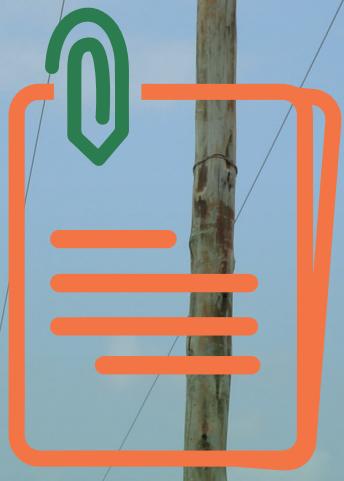
The mid-term review will be done after expiry of two and half years of the strategic planning period. The aim of this review is to determine and gauge the level of implementation of the first half of the life of the Strategic Plan.

### iii) End-Term Review

The main purpose of the final evaluation for this Strategic Plan, expected to be carried out at the end of June 2024, will be to address the following issues:

- i. **Social Economic Impact:** The extent to which the Strategic Plan impacts on the livelihoods of the people of Kenya
- ii. **Effectiveness:** The extent to which the implementation of activities met the stated strategies and objectives
  - (a) **Sustainability:** Assesses the sustainability of the achievements made
  - (b) **Challenges:** Document the challenges faced
  - (c) **Lessons Learnt:** Document lessons learnt from the strategic plan, and
  - (d) **Terms of Reference:** Prepare the ToRs for the new strategic plan





# Annex I

# Strategic Plan Implementation Matrix

## Annex I

### Strategic Plan Implementation Matrix

#### Strategic Objective 1: To Develop and Promote Use of Renewable Energy

Strategies	Activities	Key Performance Indicators	Outcome / Means of Verification	Assumptions	Responsible	Resources (KShs Million)	Implementation period / KShs		2018/2019	2019/2020	2020/2021	2021/2022	2022/2023
							Implementation period	KShs Million					
a) To develop and update the Renewable Energy Master Plan	Determine the scope of renewable energy	Scope determined	Proposal	Available capacity is adequate in renewable energy	Renewable energy	30	Implementation period	X	-	-	-	-	-
Develop county engagement policy/ framework undertaken collaboration forums with the county governments	Policy framework developed	Framework report	Capacity exists	Renewable energy	Counties willing to collaborate		Implementation period	X	-	-	-	-	-
Undertake baseline study on the renewable energy master plan	Baseline Survey undertaken	Report	Capacity exists	Renewable energy		50	Implementation period	X	X	X	X	X	X
Undertake Joint Mapping of the Renewable Energy Resources in the counties	Joint mapping undertaken	Report	Capacity exists	Renewable Energy		100	Implementation period	X	X	X	X	X	X
Develop and update the RE Master plan	Updated Master Plan	Master Plan Report	Available capacity is adequate	Renewable Energy		100	Implementation period	-	X	-	-	-	-

### Strategic Objective 1: To Develop and Promote Use of Renewable Energy Cont...

Strategies	Activities	Key Performance Indicators	Outcome / Means of Verification	Assumptions	Responsible	Resources (KShs Million)	Implementation period / KShs		2018/2019	2019/2020	2020/2021	2021/2022	2022/2023
							KShs Million	Implementation period					
b) To promote international corporation programmes focusing on renewable energy sources	Develop international cooperation framework in liaison with Ministry of Foreign Affairs	International co-operation framework developed	Capacity exists	Renewable Energy	4	Implementation period	X	-	-	-	-	-	-
	Identify key players, areas and programmes in international cooperation for renewable energy sources	Key players and programmes identified	Report	Players in Renewable Energy exist	Renewable Energy	3	Implementation period	X	-	-	-	-	-
	Execute identified programmes	Number of programmes successfully executed	Number of programmes / MoUs signed	Capacity exists	Renewable energy	25	Implementation period	X	X	X	X	X	X
c)	Develop a policy / framework for engagement with counties	Policy framework developed	Framework report	Capacity exists	Energy Centres Dept.	1	Implementation period	X	-	-	-	-	-
	Define the scope of the model energy centre	Scope determined	Report	Capacity exists	Energy Centres Dept.	10	Implementation period	X	X	-	-	-	-
	Engage the county governments on establishments of energy centres	Number of counties engaged	Meetings minutes / MoUs	Counties willing to collaborate	Energy Centres Dept.	10	Implementation period	X	X	X	X	X	X
	Support the establishment of the energy centres	Number of energy centres established	No. of potential sites in counties identified	Counties willing to collaborate	Energy Centres Dept.	40	Implementation period	X	X	X	X	X	X
	Advise counties on acquisition of land for energy centres	No. of MoUs signed with counties	MOUs	Willingness of counties to partner	Property Dept.	100	Implementation period	X	X	-	-	-	-
						KShs Million	10	10	5	5	5	5	-
						KShs Million	50	50					-

## Strategic Objective 1: To Develop and Promote Use of Renewable Energy Cont...

Strategies	Activities	Key Performance Indicators	Outcome / Means of Verification	Assumptions	Responsible	Resources (KShs Million)	Implementation period / KShs	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023
	Advise counties on establishment of energy centres	Number of energy centres established	Completion certificates / Take over certificates	Capacity exists	Energy Centres Dept.	200	Implementation period	X	X	X	X	X
	Develop a policy and framework on production and management of wood-fuel species, seedlings and other renewable energy technologies	Policy framework developed	Framework report	Capacity exists	Energy Centres Dept.	5	Implementation period	-	X	-	-	-
								KShs Million	-	5	-	-
d)	To undertake a baseline survey on wood-fuel species and seedlings	Baseline survey undertaken	Report	Capacity exists	Energy Centres Dept.	5	Implementation period	-	X	-	-	-
	Undertake seedling multiplication	Number of seedling multiplications undertaken	Number of nurseries established	Capacity exists	Energy Centres Dept.	10	Implementation period	-	X	X	X	X
	Undertake seedling multiplication	Number of seedling multiplications undertaken	Number of nurseries established	Capacity exists	Energy Centres Dept.	10	Implementation period	-	X	X	X	X
	Continuously undertake on farm demonstrations on wood-fuel species, seedling production and management;	Number of on farm demonstrations undertaken	Reports	Capacity exists	Energy Centres Dept.	20	Implementation period	-	X	X	X	X
e)	To promote the use of fast maturing trees for energy production including biofuels	Policy framework developed	Framework report	Capacity exists	Biomass Dept.	2.5	Implementation period	X	-	-	-	-
	Develop a framework for establishment of commercial woodlots including peri-urban plantations	Policy framework developed	Framework report	Capacity exists	Biomass Dept.	1	Implementation period	X	-	-	-	-
								KShs Million	1	-	-	-

### Strategic Objective 1: To Develop and Promote Use of Renewable Energy Cont...

Strategies	Activities	Key Performance Indicators	Outcome / Means of Verification	Assumptions	Responsible	Resources (KShs Million)	Implementation period / KShs		2018/2019		2019/2020		2020/2021		2021/2022		2022/2023	
							Implementation period		X		X		X		X		X	
							KShs Million	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
f)	Engagement with Kenya Forest Service (KFS) on establishments of woodlots	Number of engagements held	Minutes / MoU signed	Willingness of KFS to partner with REREC	Biomass Dept.	1	Implementation period											X
f)	Establish forward and backward linkages of small-scale farmers	Numbers of linkages established	Report	Willingness of farmers to collaborate	Biomass Dept.	1.5	Implementation period											X
f)	Identify key stakeholders in the use of renewable energy and technologies	Number of stakeholders identified	Report	Existence of stakeholders	Biomass Dept.	1.5	Implementation period											X
g)	Undertake research visits on the use of renewable energy and technologies	Number of research visits done	Industrial visits reports	Availability of potential users of these technologies locally and in the targeted countries	Renewable Energy Research Dept.	108	Implementation period											-
g)	Develop collaboration policy / framework with the stakeholders	Policy framework developed	Framework report	Capacity exists	Renewable Energy Research Dept.	5	Implementation period											-
g)	Develop guidelines on utilisation of renewable energy technologies	Number of guidelines developed	Reports on the guidelines	Capacity exists	Renewable Energy	5	Implementation period											-
g)	Review national standards on renewable energy technologies	Number of standards developed	Report	Capacity exists	Renewable Energy Research Dept.	2	Implementation period											-
g)	Disseminate the guidelines	Number guidelines disseminated	Report	Capacity exists	Resource centre	5	Implementation period											-
g)	Build local capacity in collaboration with other agencies for manufacture of renewable energy products	Number of collaborations established	Report	Willingness of players to collaborate	Alternative biomass energy	120	Implementation period											-
							KShs Million	-										X
							KShs Million	-										X
							KShs Million	24										24
							KShs Million	24										24

## Strategic Objective 1: To Develop and Promote Use of Renewable Energy Cont...

Strategies	Activities	Key Performance Indicators	Outcome / Means of Verification	Assumptions	Responsible	Resources (KShs Million)	Implementation period / KShs	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023
	Build capacity on all renewable energy technologies	Number of capacity areas developed	Report	Willingness of players to collaborate	HR / alternative biomass energy		Implementation period	X	X	X	X	X
Sensitise the public on the technologies	Number of sensitisation forums undertaken	Report on forums held	Capacity exists	Communi-cations	KShs Million	-	KShs Million	-	-	-	-	-
Identify and analyse the extent of use (mapping out) of various RE technologies	Number of RE technologies mapped	Report on RE technologies mapped	Capacity exists	Alternative biomass energy	60	Implementation period	X	X	X	X	X	X
Establish Potential sites for development and promotion of renewable energy technologies,	Number of potential sites identified	Report	Availability of suitable sites	Alternative biomass energy	5	Implementation period	X	X	X	X	X	X
To establish demonstration centres / Equipping of energy centres to support RE technologies	Number of demonstration centres established	Reports	Availability of funds	Energy centres	50	Implementation period	X	X	X	X	X	X
Carry out an impact assessment of the technologies adopted	Number of assessments done	Report	Capacity exists	Renewable Energy Research Dept.	30	Implementation period	X	X	X	X	X	X
Implement recommendations on the impact assessments	Number of recommendations implemented	Report	Availability of funds	Alternative biomass energy	5	Implementation period	-	X	-	-	-	-
Commercialise the technology on utilisation of biomass, biodiesel, bioethanol, charcoal, fuelwood, solar, wind, tidal waves, small hydropower, biogas, co-generation and municipal waste	Number of technologies commercialised	Funds mobilised	Acceptance by public	Alternative biomass energy	100	Implementation period	X	X	X	X	X	X
					KShs Million	20	KShs Million	20	20	20	20	20

## Strategic Objective 1: To Develop and Promote Use of Renewable Energy Cont...

Strategies	Activities	Key Performance Indicators	Outcome / Means of Verification	Assumptions	Responsible	Resources (KShs Million)	Implementation period / KShs	2018/ 2019	2019/ 2020	2020/ 2021	2021/ 2022	2022/ 2023
h) To Promote local capacity for the manufacture, installation, maintenance and operation of renewable technologies such as bi-digesters, solar systems, turbines and other renewable energy technologies;	Identify existing players in renewable energy technologies	Number of players identified	Report	Existence of players	Renewable Energy research innovation	KShs Million	Implementation period	X	X	-	-	-
	Conduct baseline survey on available local capacity for manufacture, installation, maintenance and operation of the listed RE technologies	Baseline survey undertaken	Report	Capacity exists	Renewable Energy Research Dept.	10	Implementation period	X	X	-	-	-
	Engage with the identified players in renewable energy technologies	Number of engagements held	Minutes / MoU signed	Availability of players	Renewable Energy	1	Implementation period	-	X	-	-	-
	Develop policy / framework on development of local capacity for manufacture, installation, maintenance and operation the renewable energy technologies	Policy framework developed	Framework report	Capacity exists	Renewable Energy	1	Implementation period	X	X	-	-	-
	Establish target groups for capacity development	Number of groups established	Report	Availability of target groups	Renewable Energy	KShs Million	Implementation period	X	X	-	-	-
	Develop training curriculum	Curriculum developed	Report	Identified training areas	Renewable Energy	1.5	Implementation period	-	X	-	-	-
	Implement the curriculum for the local capacity for the manufacture, installation, maintenance and operation of the renewable energy technologies	Number of trainings undertaken	Certificates	Capacity exists	Renewable Energy	50	Implementation period	KShs Million	-	1.5	-	-
						KShs Million		X	X	X	X	10
						KShs Million		10	10	10	10	10

## Strategic Objective 1: To Develop and Promote Use of Renewable Energy Cont...

Strategies	Activities	Key Performance Indicators	Outcome / Means of Verification	Assumptions	Responsible	Resources (KShs Million)	Implementation period / KShs	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023
i) To promote the development of electricity generation through co-generation by sugar millers	Identify operational sugar millers	Number of operational sugar millers identified	Report	Operational millers exist	Biomass Dept.		Implementation period	X	-	-	-	-
	Engage the identified stakeholders	Number of engagements held	Minutes / MoU signed	Availability of adequate land	Biomass Dept.	5.5	KShs Million	-	-	-	-	-
	Develop a policy / framework for promotion of development electricity generation through co-generation by sugar millers	Policy framework developed	Framework report	Capacity exists	Biomass Dept.	1	Implementation period	X	-	-	-	-
	Undertake Baseline survey for co-generation	Baseline Survey undertaken	Report	Capacity exists	Biomass Dept.	5	Implementation period	X	-	-	-	-
	Identify potential opportunities for co-generation	Number of potential opportunities identified	Report	Opportunities exist	Biomass Dept.	5	KShs Million	5	-	-	-	-
	Sensitise sugar millers on co-generation	Number of millers on co-generation	Report	Willingness of players to cogenenerate	Biomass Dept.	20	Implementation period	X	-	-	-	-
	Linking developers and sugar millers	Number of linkages created	Report	Willingness of players to collaborate	Business development		KShs Million	4	4	4	4	4
j) To identify and develop capacity on renewable energy	Determine optimum human capacity required for renewable energy	Number of staff determined	Report	Availability of capacity	HR		Implementation period	-	X	-	-	-
	Build internal capacity and provide necessary tools and equipment	Number of trainings undertaken, and tools and equipment provided	Report	Skills available in the market	HR	50	Implementation period	X	X	X	X	X

### Strategic Objective 1: To Develop and Promote Use of Renewable Energy Cont...

Strategies	Activities	Key Performance Indicators	Outcome / Means of Verification	Assumptions	Responsible	Resources (KShs Million)	Implementation period / KShs	2018/ 2019	2019/ 2020	2020/ 2021	2021/ 2022	2022/ 2023
	Create database on key players and stakeholders	Number of key players and stakeholders determined	Report generated for the database	Key players and stakeholders are identifiable	Alternative energy/ biomass		Implementation period	X	X	-	-	-
k)	To establish renewable energy mini-grids in off grid areas	Identify and prioritise potential sites for mini-grids	Reports	Availability of potential sites	Alternative energy		Implementation period	X	X	X	X	X
l)	To implement Renewable energy systems for grid connection	Acquire identified sites	Number of sites / parcels of land acquired	Leases / title deeds	Availability of land	Property Dept.	Implementation period	X	X	X	X	X
	Carry out feasibility studies	Number of feasibility studies carried out	Feasibility studies reports	Adequate capacity available	Renewable Energy Research Dept	150	Implementation period	X	X	X	X	X
	Install 150 (Range 40KW - 1,500KW producing about 45.5MW mini-grids systems to connect public facilities and households	Number of mini grids installed	Commissioning reports	Availability of funds	Alternative energy	9000	Implementation period	X	X	X	X	X
	Develop a monitoring and billing system for bulk supply	Billing system in place	Bills generated	Mini grids exist and operational	Alternative energy	5	Implementation period	X	-	-	-	-
	Develop, review and disseminate guidelines on investments in renewable energy generation systems	Number of review and dissemination of guidelines undertaken	Reports on review and dissemination of guidelines undertaken	Adequate capacity available	Alternative energy	5	Implementation period	X	X	-	-	-
						KShs Million	KShs Million	5	-	-	-	-
						KShs Million	KShs Million	2.5	2.5	-	-	-

## Strategic Objective 1: To Develop and Promote Use of Renewable Energy Cont...

Strategies	Activities	Key Performance Indicators	Outcome / Means of Verification	Assumptions	Responsible	Resources (KShs Million)	Implementation period / KShs	2018/ 2019	2019/ 2020	2020/ 2021	2021/ 2022	2022/ 2023
	Identify sites for large scale grid connected renewable energy systems	Number of sites identified	List of sites	Renewable Energy resources exist	Alternative energy	0.5	Implementation period	X	-	-	-	-
	Acquire identified sites / land	Number of sites/ parcels of land acquired	Leases/title deeds	Availability of land	Property Dept.	310	Implementation period	KShs Million	0.5	-	-	-
	Carry out feasibility studies for larger scale grid connected renewable energy systems	Number of feasibility studies carried out	Feasibility studies reports	Adequate capacity available	Renewable Energy Research Dept.	30	Implementation period	KShs Million	-	X	X	-
m)	To implement standalone renewable energy systems for institutions	Two large scale solar plants (PV or CSP or combination grid connected	Two large scale plants commissioned	Commissioning reports	Availability of funds	Alternative energy	20000	Implementation period	KShs Million	-	X	X
	Develop one (300MW) large scale solar / wind hybrid grid/connected renewable system in Meru County	300MW plant commissioned	Commissioning reports	Site identified and acquired	Alternative energy	25000	Implementation period	KShs Million	-	-	10000	5,000
	Identify and prioritise institutions for installation of standalone systems	Number of institutions identified and prioritised	List of institutions	Renewable Energy resources exist	Alternative Energy	5	Implementation period	KShs Million	-	X	X	-
	Carry out demand assessment and design of the system	Number of demand assessments and designs carried out	Reports	Internal capacity exists	Alternative energy	10	Implementation period	KShs Million	-	2	3	-
	Install and meter 200 Solar PVs for institutions	200 Number of solar PVs installed and metered	Commissioning reports	Funds available	Alternative energy	600	Implementation period	KShs Million	-	4	6	-
								KShs Million	-	150	150	150

## Strategic Objective 1: To Develop and Promote Use of Renewable Energy Cont...

Strategies	Activities	Key Performance Indicators	Outcome / Means of Verification	Assumptions	Responsible	Resources (KShs Million)	Implementation period / KShs	2018/ 2019	2019/ 2020	2020/ 2021	2021/ 2022	2022/ 2023
								2019/ 2020	2019/ 2020	2019/ 2020	2019/ 2020	2019/ 2020
	Install and meter 20 wind systems for institutions	20 Number of wind systems installed and metered	Commissioning reports	Funds available	Alternative Energy	125	Implementation period	-	X	X	X	X
	Develop and promote biogas and biomass systems for 20 institutions	20 installed with biogas and biomass systems	Commissioning reports	Readiness of institutions to take up technology	Biomass Energy	200	Implementation period	-	X	X	X	X
	Develop a monitoring and evaluation maintenance system for the metered solar, wind, biogas	Monitoring & Evaluation system in place	M & E Report	Meters are installed in all institutions	Alternative / biomass energy	125	Implementation period	-	X	X	X	X
	Maintenance of the 5,000 institutions renewable energy systems	5, 000 institutions are maintained	Maintenance reports	Funds available	Alternative energy	2500	Implementation Period	-	X	X	X	X
n)	To promote environmental conservation	Customise the national environmental policy	Environmental Policy customised	Existence of a national environmental policy	Energy Centres Dept.	1	Implementation period	X	X	X	X	X
	Sensitise stakeholders on environmental health & safety	Number of stakeholders sensitised	Sensitisation reports	Availability of capacity	Energy Centres Dept.	5	Implementation period	X	-	-	-	-
	Undertake ESIA for all new relevant projects	Number of ESIA undertaken	ESIA reports	QA & RM Available capacity	QA & RM	50	Implementation period	X	X	X	X	X
	Implement Environmental management standard	Number of standards implemented	Implementation report	Capacity exists	QA & RM	5	Implementation period	-	X	X	X	X
<b>Total Cost for the Strategic Objective (KShs Million)</b>						<b>60, 002.00</b>	<b>KShs Million</b>	<b>.60</b>	<b>15,828</b>	<b>25,616</b>	<b>7,857</b>	<b>.85</b>
									1.5	1.5	0.5	0.75
									.10	.60	.85	.85
												0.75

## Strategic Objective 2: To Increase Electricity Connectivity

Strategies	Activities	Key Performance Indicators	Outcome / Means of Verification	Assumptions	Responsible	Resources (KShs Million)	Implementation period / KShs	2018/ 2019	2019/ 2020	2020/ 2021	2021/ 2022	2022/ 2023
a) To connect all public facilities and households within a radius of 600M of new transformers (TX's)	Identify the projects for implementation (REMP)	List of projects	Report	The number of new public facilities is around 19,000	S & P	95	Implementation period	X	X	X	X	X
	Design approximately 19,000 identified projects	Number of public facilities designed	Report	Project designs / drawings	Design	3,420	Implementation period	KShs. Million	19	19	19	19
	Procurement of materials	Number / Value of materials procured	Delivery notes / Inspection Reports	Availability of suppliers	Procurement	47, 880	Implementation period	KShs. Million	684	684	684	684
	Implement the identified projects	Number of projects constructed	Commissioning reports	There will be timely delivery of materials	Construction	17, 100	Implementation period	KShs. Million	9576	9576	9576	9576
	Acquire Land for Rural Electrification projects	Number of land parcels acquired	Title deeds/ Lease Hold Titles	Availability of adequate land for purchase	Legal / Property Dept.	300	Implementation period	KShs. Million	3420	3420	3420	3420
	Identify the list of un-electrified households for implementation	List of households	Report	The number of new Households is around 112,500	S & P		Implementation period	KShs. Million	60	60	60	60
	Design projects to connect 112,500 households	Number of Households designed	Report	Project designs / drawings include households	Design	562.5	Implementation period	KShs. Million	112.5	112.5	112.5	112.5
	Procurement of materials	Number / Value of materials procured	Delivery notes /inspection reports	Availability of suppliers	Procurement	7, 875	Implementation period	KShs. Million	1575	1575	1575	1575
	Construct the identified projects to connect the households	Number of households constructs	Commissioning reports	There will be timely delivery of materials	Construction	2, 812.5	Implementation period	KShs. Million	562.5	562.5	562.5	562.5
	Implement planned renewable energy projects (mini-grids)	Number of mini-grids undertaken	Commissioning reports	Timely implementation of projects	Renewable Energy	9, 750	Implementation period	KShs. Million	X	X	X	X
c)								KShs. Million	1950	1950	1950	1950

## Strategic Objective 2: To Increase Electricity Connectivity Cont...

Strategies	Activities	Key Performance Indicators	Outcome / Means of Verification	Assumptions	Responsible	Resources (KShs Million)	Implementation period / KShs	2018/ 2019	2019/ 2020	2020/ 2021	2021/ 2022	2022/ 2023
	Carry out mapping of households far from the grid areas	Number of households mapped	Report on households mapped	Capacity exists	Renewable Energy	100	Implementation period	X	-	-	-	-
	Installation of 50,000 out of the 250,000 mapped solar home systems	Number of Home Systems installed	Commissioning reports	Capacity to install exists	Renewable Energy	1,500	Implementation period	X	X	X	X	-
d)	Develop county engagement policy / framework	Policy framework developed	Framework report	Capacity exists	S & P		Implementation period	X	-	-	-	-
	Undertake collaboration forums with the county governments	Number of forums held	MoUs / Minutes	Counties willing to collaborate	S & P	16	Implementation period	X	X	X	X	-
	Update the rural electrification Master Plan	Updated Master Plan	Master Plan report	Cooperation of county governments	S & /P	100	Implementation period	KShs. Million	10	1.5	1.5	1.5
	Validate the updated master plan	Validated Master Plan	Validation Report	Existence of electrified public facilities	S & P	2	Implementation period	KShs. Million	50	50	-	-
	Develop criteria for identifying and prioritising the projects	Criteria developed	Report on prioritised projects	Availability of priority projects	S & P		Implementation period	KShs. Million	2	-	-	-
e)	To Manage the Rural Electrification Programme Fund	Collection of the 5% REP levy and all other funds due to the Corporation	Amount of funds collected	Financial reports on Budget Variance	Finance	Regular remittance of funds by KPLC	Implementation period	KShs. Million	X	X	X	X
	Seek Board allocation	Board approval granted	Board minutes	Board meetings held	Finance		Implementation period	KShs. Million	-	-	-	-
	Commit budget	Commitment done on projects	Report on Approved projects	Allocation of funds done	Finance		Implementation period	KShs. Million	-	-	-	-
<b>Total Cost for the Strategic Objective (KShs. Million)</b>						<b>91,513.00</b>	<b>KShs Million</b>	<b>.00</b>	<b>.50</b>	<b>.50</b>	<b>.50</b>	<b>.50</b>

### Strategic Objective 3: To Promote Research and Development in Renewable Energy

Strategies	Activities	Key Performance Indicators	Outcome / Means of Verification	Assumptions	Responsible	Resources (KShs Million)	Implementation period / KShs.	2018/19	2019/20	2020/21	2021/22	2022/23
a)	To foster collaboration with other Research Institutions	Carry out a baseline to establish the existing research Institutions and their scope of activities.	Baseline study report	Existing institutions identified	Resources available	Renewable Energy Research Department	10		X	X	-	-
	Identify the areas of collaboration	Categories and areas identified	Collaboration areas report	Capacity available	Renewable Energy Research Department			Implementation period	5	5	-	-
	Identify the resources required for REREC to participate in each collaboration	Resources including budget	Budget report	Capacity available	Renewable Energy Research Dept.			Implementation period	-	X	-	-
	Develop a framework for strategic collaborations	Strategic framework for collaboration established	Framework document	Capacity available	Renewable Energy Research Dept.			Implementation period	KShs. Million	-	-	-
	To participate in selected collaborations	Areas of collaboration selected	List of participants, areas and resources for participation report	Resources available	Renewable Energy dept. / Renewable Energy Research Dept.	12		Implementation period	KShs. Million	-	-	-
b)	To undertake feasibility studies and maintain data with a view to availing the same to developers of renewable energy resources	Carry out feasibility studies, baseline studies, resource assessment and technology assessment on renewable energy resources & technologies	Studies reports	Adequate capacity available	Renewable Energy Research Dept.	773		Implementation period	KShs. Million	-	100	200
	Develop knowledge and data management policy & Framework	Knowledge and data management policy and framework developed	Data resources available	Resource Centre		1		Implementation period	KShs. Million	-	1	-
												240

### Strategic Objective 3: To Promote Research and Development in Renewable Energy Cont...

Strategies	Activities	Key Performance Indicators	Outcome / Means of Verification	Assumptions	Responsible	Resources (KShs Million)	Implementation period / KShs.	2018/19	2019/20	2020/21	2021/22	2022/23
	Establish a database on Renewable energy resources	Database on Renewable Energy resources established	Report on database	Capacity exists	Resource Centre	10	Implementation period KShs. Million	-	X	X	-	-
	Sharing the outcome of the study findings	Number of showcasing activities undertaken	Publicity Reports	Capacity exists	Communications Dept.	4	Implementation period KShs. Million	-	5	5	-	-
c)	To formulate, in conjunction with the Agency (NuPEA), a national strategy for coordinating research in renewable energy;	Engage with the relevant Stakeholders	Number of forums held	MoUs / Minutes	Counties willing to collaborate	Renewable Energy Research Dept.	Implementation period KShs. Million	-	X	X	X	X
	Develop Research policy / framework on renewable energy	Policy framework developed	Framework report	Capacity exists	Renewable Energy Research Dept.	2	Implementation period KShs. Million	-	X	-	-	-
	Develop a work plan to formulate a national research strategy	National Strategy Work plan developed	Work plan report	Capacity exists	Renewable Energy Research Dept.	-	Implementation period KShs. Million	-	2	-	-	-
	Develop a draft national research strategy	National Research Strategy developed	National Research Strategy Report	Capacity exists	Renewable Energy Research Dept.	4	Implementation period KShs. Million	-	X	X	-	-
	Maintain and make the research strategy available to the necessary stakeholders	National Research Strategy shared as appropriate	Sharing report	The stakeholders are known	Resource Centre	30	Implementation period KShs. Million	-	X	X	10	20

### Strategic Objective 3: To Promote Research and Development in Renewable Energy Cont...

Strategies	Activities	Key Performance Indicators	Outcome / Means of Verification	Assumptions	Responsible	Resources (KShs Million)	Implementation period / KShs.	2018/19	2019/20	2020/21	2021/22	2022/23
d) To undertake, in conjunction with the Agency (NuPEA), research, development and dissemination of appropriate renewable energy technologies	To undertake research on renewable energy technologies	Number of researches undertaken	Research reports	Capacity exists	Renewable Energy Research Dept.	100	Implementation period	-	X	X	X	X
	To develop the researched renewable energy technologies	Number of technologies developed	Report on technologies adopted	Funds available	Renewable Energy Research Dept.	220	Implementation period	KShs. Million	-	25	25	25
	To establish knowledge dissemination mechanisms of the developed technologies	Knowledge dissemination mechanisms of the developed technologies established	Report on knowledge dissemination mechanisms of the developed technologies	Capacity exists	Renewable Energy Research Dept.		Implementation period	KShs. Million	-	40	50	60
	Disseminate the researched technologies as per the established mechanisms	Number of researched technologies disseminated	Report on number researched technologies disseminated	Capacity exists	Resource Centre	16	Implementation period	KShs. Million	-	5	5	6
	Set up a national renewable energy research centre	National renewable energy research centre set up	Funds available	Renewable Energy Research Dept.		200	Implementation period	KShs. Million	-	X	X	-
<b>Total Cost for the Strategic Objective (KShs. Million)</b>						<b>1,387.0</b>	<b>KShs. Million</b>	<b>5.0</b>	<b>234.5</b>	<b>358.5</b>	<b>424.0</b>	<b>365.0</b>

## Strategic Objective 4: To Establish Strategic Collaborations with Stakeholders

Strategies	Activities	Key Performance Indicators	Outcome / Means of Verification	Assumptions	Responsible	Resources (KShs Million)	Implementation period / KShs	2018 /19	2019 /20	2020 /21	2021 /22	2022 /23
a) Establish framework for collaboration with county governments in the discharge of REREC's mandate	To establish the roles of the county government	The roles of the county governments established	Report on the roles of the county governments established	Knowledge of county roles exists	Legal	150	Implementation period	X	X	-	-	-
	Establish county offices and enhance staffing	Number of county offices established, and staff posted	Lease agreements / staff posting letters	Availability of space	Administration department	500	Implementation period	X	X	X	X	X
	To develop a collaboration framework with the county governments	Framework established	Framework report	Capacity exists	S & P	100	Implementation period	X	X	X	X	X
	Identify areas of strategic partnerships	Areas of strategic partnerships established	Report on partnership areas	Capacity exists	S & P		Implementation period	-	X	-	-	-
	Identify key stakeholders e.g. development partners, Professional bodies, Financial institutions, Research and learning institutions	Number of key stakeholders identified	Report on identified stakeholders	Capacity exists	S & P		Implementation period	KShs. Million	-	-	-	-
	Develop and roll out framework for engagement with stakeholders	Framework for engagement with stakeholder developed and rolled out	Framework for engagement with stakeholder in place	Capacity exists	Legal	2	Implementation period	KShs. Million	2	-	-	-
	Develop legal instruments for engagement	Number of Legal instruments developed	Legal instruments in place	Capacity exists	Legal		Implementation Period	KShs. Million	-	-	-	-
	Train staff on PPPs and regulations	Number of staff trained	Training Certificates	Trainings available	HR	50	Implementation period	KShs. Million	2	23	25	-
	Develop regulations to define the Partnerships	Number of regulations developed	Gazetted regulations	Engagement framework in place	Legal	5	Implementation period	KShs. Million	5	-	-	-

#### **Strategic Objective 4: To Establish Strategic Collaborations with Stakeholders Cont...**

Strategies	Activities	Key Performance Indicators	Outcome / Means of Verification	Assumptions	Responsible	Resources (KShs Million)	Implementation period / KShs	2018 /19	2019 /20	2020 /21	2021 /22	2022 /23
Develop a reporting and accountability framework	Framework developed	Framework in place	Capacity exists	Legal			Implementation period	X	-	-	-	-
Follow up and review the framework	Number of follow-ups and reviewed framework	Reports	Capacity exists	Legal			KShs. Million	-	-	-	-	-
Develop proposals	Number of Proposals developed	Proposals	Strategic Partners in place	S & P	2		Implementation period	X	-	-	-	-
Participate in trade fairs, forums and shows	Number of trade fairs and forums attended	Reports	Funds available	Communications	50		Implementation period	X	X	X	X	X
Organise stakeholder workshops and conferences	Number of workshops and conferences held	Reports	Funds available	Communications	25		Implementation period	X	X	X	X	X
Undertake entrepreneurship and innovation campaigns	Number of campaigns undertaken	Reports	Identified entrepreneurship opportunities	Communications	200		Implementation period	X	X	X	X	X
Partner with other institutions of Higher learning for establishment of Green Academy for capacity building in renewable energy	Green Energy Academy established	Agreements	Availability of willing institutions for the partnership	Alternative energy	5		Implementation period	X	X	X	X	X
Develop a social media communication strategy	Strategy developed	Report	Capacity exists	Communications	3		Implementation period	X	-	-	-	-
Sign up on social media sites	Number of social media sites signed up	Report	Capacity exists	Communications			KShs. Million	3	-	-	-	-
Undertake CSR Programmes	Number of CSR activities undertaken	Reports	CSR activities identified	Communications	25		Implementation period	X	X	X	X	X

#### **Strategic Objective 4: To Establish Strategic Collaborations with Stakeholders Cont...**

Strategies	Activities	Key Performance Indicators	Outcome / Means of Verification	Assumptions	Responsible	Resources (KShs Million)	Implementation period / KShs	2018 /19	2019 /20	2020 /21	2021 /22	2022 /23
c) To Establish partnerships with the community	Develop an engagement strategy for various stakeholders	Strategy developed	report	Capacity exists	Legal		Implementation period	X	-	-	-	-
	Implement community engagement Strategy	No. of community barazas held	Reports	Availability of goodwill from communities	Communications	100	Implementation period	X	X	X	X	X
d)	To provide technical and other capacity building support to County Governments in the discharge of the function of electricity reticulation and energy regulation;	Develop county specific frameworks to support counties in capacity building	Framework developed	Framework in place	Capacity exists	Legal	Implementation period	X	X	X	X	X
	Engage with the counties to determine their technical needs	No. of engagement meetings held	Reports	Availability of goodwill from counties	Construction	10	Implementation period	X	X	X	X	X
	Establish institutions to collaborate with for capacity building support e.g. TVETs, Universities etc.	No. of TVET institutions identified	Reports	Availability of goodwill from learning institutions	Communications	5	Implementation period	KShs. Million	50	50	-	-
	Enhance capacity based on county specific needs	Capacity building forums done	Reports	Availability of resources	HR		Implementation period	KShs. Million	-	-	-	-
e)	To provide an enabling framework for the efficient and sustainable production, conversion, distribution, marketing and utilisation of biomass, solar, wind, small hydros and municipal waste	Develop policy and framework for enabling efficient and sustainable production, conversion, distribution, marketing and utilisation of biomass, solar, wind, small hydros and municipal waste	Policy framework developed	Framework report	Capacity exists	Renewable Energy Research Dept.	Implementation period	X	-	-	-	-
	Operationalise the developed framework	Adoption of the framework	reports	Capacity exists	Renewable Energy Research Dept.	1	Implementation period	KShs. Million	1	-	-	-
<b>Total Cost for the Strategic Objective (KShs. Million)</b>						<b>1,334.0</b>	<b>KShs. Million</b>	<b>351.0</b>	<b>355.0</b>	<b>226.0</b>	<b>201.0</b>	<b>201.0</b>

## Strategic Objective 5: To Build Human and Strengthen Institutional Capacity

Strategies	Activities	Key Performance Indicators	Outcome / Means of Verification	Assumptions	Responsible	Resources (KShs Million)	Implementation period / KShs	2018 /19	2019 /20	2020 /21	2021 /22	2022 /23
a) To determine human capacity requirements	Identify Strategic capacity gaps	Number of gaps identified	Report	Structure exists	HR		Implementation period	X	X	X	X	X
	Identify institutions for capacity building	Number of institutions identified	Report	Availability of training institutions	HR		KShs. Million	-	-	-	-	-
	Carry out capacity building	Number of trainings undertaken	Report	Funds available	HR		KShs. Million	-	-	-	-	-
b) To build board and staff capacity	Determine the optimum staffing levels to actualise the strategic plan	Optimum Staffing determined	Job Evaluation Report	Capacity exists	HR	3	Implementation period	X	X	X	X	X
	Recruitment of qualified staff	Number of staff recruitment	Report / letter of appointment	Availability of skills in the market	HR	1	Implementation period	X	-	-	-	-
	Undertake staff training needs assessments	Training needs assessment undertaken	Training Needs Assessment Report	Availability of capacity to do assessment	HR	3	Implementation period	X	-	-	-	-
	Undertake staff training and benchmarking	Number of trainings and benchmarking undertaken	Report	Availability of funds	HR	300	Implementation period	X	X	X	X	X
	Review terms conditions of service biannually	Number of reviews undertaken	Board minutes	Board will review terms and conditions	HR	2	Implementation period	-	X	-	X	-
	Undertake board training needs assessment	Training Needs Assessment undertaken	Training Needs Assessment Report	Capacity exists	Board secretariat	0.5	Implementation period	X	-	-	X	-
	Undertake capacity building for board members	Number of trainings undertaken	Training reports	Capacity exists	Board secretariat	15	Implementation period	X	X	X	X	X
						KShs. Million	KShs. Million	0.5	-	-	-	-

### Strategic Objective 5: To Build Human and Strengthen Institutional Capacity Cont...

Strategies	Activities	Key Performance Indicators	Outcome / Means of Verification	Assumptions	Responsible	Resources (KShs Million)	Implementation period / KShs		2018 /19	2019 /20	2020 /21	2021 /22	2022 /23
							Implementation period	KShs. Million					
c) To attract and retain qualified staff	Undertake employee satisfaction survey	Number of employee satisfaction survey undertaken	Report	Competitive market	HR	3	Implementation period	X	X	X	X	X	X
	Implement survey recommendations	Number of survey recommendations implemented	Reports	Recommendations are implementable	HR	10	Implementation period	X	X	X	X	X	X
	Introduce internship programmes with other institutions	Number of staff seconded on internships	Nomination letters	Areas of collaboration identified	HR	50	Implementation period	X	X	X	X	X	X
	Develop career progression guidelines	Scheme of service developed	Scheme of service	Appraisals carried out	HR	10	Implementation period	-	X	-	X	-	-
	Outstanding staff recognition and award	Certificates / award offered	Reports		HR	10	Implementation period	-	5	-	5	-	-
d) To provide adequate and suitable work environment	Offer flexible time and schedule / overtime	Schedule in place	Report	Schedule acceptable	HR	25	Implementation period	X	X	X	X	X	X
	Undertake work environment survey	Number of surveys undertaken	Survey reports	Capacity exists	HR	2.5	Implementation period	X	X	X	X	X	X
	Implement survey recommendations	Number of recommendations implemented	Survey Reports	Funds available	HR	5	Implementation period	X	X	X	X	X	X
e) To develop systems and operational review guidelines	Review and update departmental operation manuals	No. of manuals reviewed and updated	Updated manuals	Departmental operations manual exists	QMR	5	Implementation period	X	X	-	-	-	-

## Strategic Objective 5: To Build Human and Strengthen Institutional Capacity Cont...

Strategies	Activities	Key Performance Indicators	Outcome / Means of Verification	Assumptions	Responsible	Resources (KShs Million)	Implementation period / KShs	2018 /19	2019 /20	2020 /21	2021 /22	2022 /23
f) To enhance effective corporate governance	Review risk management policy	Risk policy reviewed	Report	-	QMR	0.5	Implementation period	-	-	X	-	-
	Implement findings of the risk review	No. of findings implemented	Reports	-	QMR		KShs. Million	-	-	0.5	-	X
	Undertake board induction	No. of inductions undertaken	Reports	-	Board Sec-retariat	5	Implementation period	X	-	-	X	
	Train the board on corporate governance and integrity	No. of board members trained	Report	-	Board Sec-retariat	5	Implementation period	X	-	-	X	
	Develop corporate governance framework	Framework developed	Reports	-	Board Sec-retariat		KShs. Million	2.5	-	-	2.5	-
	Undertake corporate governance audit	No. of audits undertaken	Reports	-	Board Sec-retariat	2	Implementation period	X	-	-	X	-
	Implement the audit outcomes	No. of findings implemented	Reports	-	Board Sec-retariat		KShs. Million	-	-	-	-	-
	Train staff on corporate governance and integrity	Number of staff Trained	Reports	-	HR	10	Implementation period	X	X	X	X	
	Review and update corporate governance instruments	No of instruments reviewed and updated	Updated instruments	Governance instruments exist and have been implemented	Board Sec-retariat	2	KShs. Million	2	2	2	2	2

### Strategic Objective 5: To Build Human and Strengthen Institutional Capacity Cont...

Strategies	Activities	Key Performance Indicators	Outcome / Means of Verification	Assumptions	Responsible	Resources (KShs Million)	Implementation period / KShs	2018 /19	2019 /20	2020 /21	2021 /22	2022 /23
g)	To provide security to staff and assets and carry out investigations on all reported cases	Develop a security policy and manual	Security Policy and Manual developed	Capacity exists	Security		Implementation period	X	-	-	-	-
	Conduct security needs assessment conducted	A security needs assessment conducted	Report	Capacity exists	Security		KShs. Million	-	-	-	-	-
	Acquire security services and equipment	No. of contracts signed, and equipment acquired	Contracts / agreements & installation certificates	Funds available	Security	25	Implementation period	X	-	-	-	-
	Insure Directors, Staff and Assets	No. of directors, staff and assets insured	Contracts / agreements	Funds available	Legal	500	Implementation period	KShs. Million	25	-	-	-
	Carry out investigations	No. of investigations done	Investigation reports	Capacity exists	Security		Implementation period	X	X	X	X	X
	Implement the Occupational Safety and Health Management System	No. of OSHM clauses effected	Implementation Report	Funds available	Administration department	100	Implementation period	KShs. Million	100	100	100	100
h)	To increase automation	Determine the current automation levels	Percentage of automation level	Reports	Capacity exists	ICT	5	Implementation period	X	X	X	X
	Procure required software and hardware / personnel	No of software and hardware procured	Hardware and software certificates	Funds available	ICT	200	Implementation period	KShs. Million	1	1	1	1
	Upgrade Electronic document management system	upgraded electronic document management system	Report	Funds available	ICT	50	Implementation period	KShs. Million	40	40	40	40
	Set up optimal Electronic Procurement and Contracting System	Electronic Procurement and contracting system	License / certificate / report	Capacity exists	ICT	30	Implementation period	KShs. Million	30	-	-	-

## Strategic Objective 5: To Build Human and Strengthen Institutional Capacity Cont...

Strategies	Activities	Key Performance Indicators	Outcome / Means of Verification	Assumptions	Responsible	Resources (KShs Million)	Implementation period / KShs	2018 /19	2019 /20	2020 /21	2021 /22	2022 /23
	Install monitoring and evaluation software	Monitoring and evaluation software installed	Commissioning reports	Funds available	ICT	10	Implementation period	X	X	X	X	X
	Upgrade ICT security system	ICT Security system upgraded	Report	Funds available	ICT	10	Implementation period	X	X	X	X	X
	Set up SAP governance, risk and compliance system	SAP GRC set up	Completion certificates	Capacity exists	ICT	30	Implementation period	X	X	-	-	-
	Installing new SAP version software in operation	A new version installed	Completion certificates	Funds available	ICT	600	Implementation period	X	X	-	-	-
	Determine information sharing requirements	No. of information sharing requirements determined	Report	Capacity exists	ICT		Implementation period	X	-	-	-	-
	Acquire ICT infrastructure	ICT Infrastructure acquired	Investigation reports	Funds available	ICT	300	Implementation period	X	-	-	-	-
	Set up information access through mobile systems	Information access through mobile system set up	Installation certificate	Capacity exists	ICT	30	Implementation period	X	-	-	-	-
i)	To upgrade business continuity and disaster recovery Plan	Review existing business continuity and DR plan	DRS reviewed	Report	Capacity exists	ICT	25	Implementation period	X	X	X	X
j)	To promote corporate Research, Monitoring and Evaluation	Upgrade the business continuity and DR system	An upgraded DR	Completion certificates	Funds available	ICT	75	Implementation period	-	X	X	X
		No. of staff recruitment for Department	Operational Corporate, Research M & E Department	Funds available	HR		Implementation period	X	X	X	X	X

### Strategic Objective 5: To Build Human and Strengthen Institutional Capacity Cont...

Strategies	Activities	Key Performance Indicators	Outcome / Means of Verification	Assumptions	Responsible	Resources (KShs Million)	Implementation period / KShs	2018 /19	2019 /20	2020 /21	2021 /22	2022 /23
	Build capacity on Research monitoring and evaluation	No. of trainings undertaken	Report	Capacity exists	HR	8	Implementation period	x	X	X	-	-
	Collaborate with other institutions on Research, monitoring and evaluation	No. of collaboration agreements undertaken	Signed agreements	Capacity exists	Research, monitoring and evaluation	10	Implementation period	KShs. Million	3	3	2	-
	Develop an innovation, Research monitoring and evaluation policy	Policy developed	Report	Capacity exists	Research, monitoring and evaluation	2	Implementation period	KShs. Million	2	2	2	2
	Carry out research studies on impact of the Rural Electrification Programme in rural areas	No. of research studies undertaken	Research reports	Capacity exists	Research, monitoring and evaluation	50	Implementation period	KShs. Million	2	-	-	-
	Implement innovation, research monitoring and evaluation policy	No. of innovations	Reports	Capacity exists	Research, monitoring and evaluation	50	Implementation period	KShs. Million	10	10	10	10
k)	To monitor implementation of the Strategic Plan	Sensitise staff on the Strategic Plan	No. of staff sensitised	Report / attendance registers	S & P	3	Implementation period	KShs. Million	10	10	10	10
	Develop and install project management system	Project management software installed	Report	Capacity exists	Research, monitoring and evaluative / ICT	50	Implementation period	KShs. Million	3	-	-	-
	Training staff on project Management system	No. of staff trained	Report	Capacity exists	HR	20	Implementation period	KShs. Million	4	4	4	4
	Prepare annual Board, CEO & staff performance contract	Performance contracts prepared	Signed performance contracts	PC guidelines exist	S&P		Implementation period	KShs. Million	-	-	-	-

## Strategic Objective 5: To Build Human and Strengthen Institutional Capacity Cont...

Strategies	Activities	Key Performance Indicators	Outcome / Means of Verification	Assumptions	Responsible	Resources (KShs Million)	Implementation period / KShs	2018 /19	2019 /20	2020 /21	2021 /22	2022 /23
	Prepare CEO / departmental PC reports	Performance contracts prepared	Signed PC	Board PC signed	S & P		Implementation period	X	X	X	X	X
	Prepare quarterly Board / CEO performance contract reports	Quarterly board /CEO reports	Reports	Capacity exists	S & P		Implementation period	X	X	X	X	X
	Autonate PC process	An automated process in place	Reports	Funds available	S & P	10	Implementation period	-	X	X	X	X
	Undertake annual, mid-term and end term review of strategic plan	Reviewed the Strategic Plan	Report	Capacity exists	S & P	10	Implementation period	XShs. Million -	10	-	-	-
l)	To safeguard the Corporations interests	Sensitise staff to ensure that processes are followed	No of staff sensitisations done	Report / signed attendance registers	Capacity exists	Legal 42.5	Implementation period	XShs. Million -	-	X	-	X
	Acquisition of land and property	No. of parcels of land acquired	Title deeds and Lease holds	Funds available	Property Dept.	100	Implementation period	XShs. Million 40	1	0.5	0.5	0.5
	Representing the corporation on legal matters	No. of Court sessions held	Legal reports	Capacity exists	Legal		Implementation period	XShs. Million 20	20	20	20	20
m)	To enhance operations and maintenance	Develop operations and maintenance policy	Operations and maintenance policy	Capacity exists	Operations & maintenance		Implementation period	XShs. Million -	-	-	-	-
	Undertake operations and maintenance	No. of operations and maintenance done	Contacts / completion certificates	Funds available	Operations & maintenance	1750	Implementation period	XShs. Million -	-	-	-	-
<b>Total Cost for the Strategic Objective (KShs. Million)</b>						<b>4,665.0</b>	<b>KShs. Million .0</b>	<b>1,211</b>	<b>1,110</b>	<b>776</b>	<b>.8</b>	<b>.3</b>

## Strategic Objective 6: To Achieve Financial Sustainability

Strategies	Activities	Key Performance Indicators	Outcome / Means of Verification	Assumptions	Responsible	Resources (KShs Million)	Implementation period / KShs	2018 /19	2019 /20	2020 /21	2021 /22	2022 /23
a) To source additional funds for the Rural Electrification Programme and renewable energy	Determine revenue sources and income generating activities	No. of revenue Sources established	Report	Availability of sources and Partners	Business development /Advocacy public education and awareness	KShs. Million	Implementation period	X	-	-	-	-
	Prioritise revenue generating options	Number of revenue options adopted	Report	Capacity exists	Business development	KShs. Million	Implementation period	X	-	-	-	-
	Develop a framework for each source	Framework developed	Framework in place	Capacity exists	Business development	KShs. Million	Implementation period	-X	-	-	-	-
	Train staff in resource mobilisation and proposal writing	No. of Staff Trained	Report	Funds available	HR	KShs. Million	Implementation period	X	-	-	-	-
	Develop financing proposals (investor pack)	Investor pack	Proposals	Availability of goodwill from investors	Business development	KShs. Million	Implementation Period	X	-	-	-	-
	To develop and implement business sustainability models	Number of business sustainability models developed	Sustainability reports	Capacity exists	Business development	KShs. Million	Implementation period	-	X	X	X	X
	Prepare a follow-up programme	Follow-up programme	Report / work plan	Capacity exists	Business development	KShs. Million	Implementation period	X	X	X	X	X
	Implementation of identified projects	No. of projects implemented	project implementation reports	funds available	Construction / Renewable Energy Department	KShs. Million	Implementation period	X	X	X	X	X
	Follow up on the exchequer and development partners funds	Meetings held / No. of follow-up correspondences	Funds received	Capacity exists	Finance / business development	KShs. Million	Implementation period	X	-	-	-	-

## Strategic Objective 6: To Achieve Financial Sustainability Cont...

Strategies	Activities	Key Performance Indicators	Outcome / Means of Verification	Assumptions	Responsible	Resources (KShs Million)	Implementation period / KShs	2018 /19	2019 /20	2020 /21	2021 /22	2022 /23
b)	Hold investor conferences	No. of investor conferences held	Reports	Availability of goodwill from investors	Business development /communications	10	Implementation period KShs. Million	-	X	-	X	-
b)	To Ensure effective collection of the 5% electricity levy	Anchor disclosure requirement in SLA	Requirement anchored in SLA	KPLC concurrence	Legal		Implementation period KShs. Million	-	5	-	5	-
b)	Obtain KPLC sales and other relevant data	Data obtained	Reports	Availability of KPLC Billing Systems report	Finance		KShs. Million	-	-	-	-	-
b)	Undertake Audits on the 5% levy and project expected revenue	Audit exercise undertaken and amount of projected revenue determination	Reports	Availability of necessary documents	Internal audit		Implementation period KShs. Million	-	-	-	-	-
c)	Implement audit report and recommendations	Number of recommendations implemented	Reports	Audit undertaken	Finance		Implementation period KShs. Million	-	X	X	X	X
c)	To optimise the materials stock levels in RE-RREC stores	Identify and report stock build up	Stock level report	Capacity exists	Supply chain		Implementation period KShs. Million	-	X	X	X	X
d)	Monitor depletion of existing stock build up	Number, type and value of stock held in stores	Depletion stock level report	Capacity exists	Supply chain		Implementation period KShs. Million	-	X	X	X	X
d)	To improve operational efficiency	Undertake semiannual organisational business process audits	Business Process Audit report	Capacity exists	Process Audit Dept.	5	Implementation period KShs. Million	-	-	-	-	-
d)	Redesign systems and processes	Number of systems and processes redesigned	Report	Capacity exists	ICT RME	5	Implementation period KShs. Million	1	1	1	1	1

## Strategic Objective 6: To Achieve Financial Sustainability Cont...

Strategies	Activities	Key Performance Indicators	Outcome / Means of Verification	Assumptions	Responsible	Resources (KShs Million)	Implementation period / KShs	2018 /19	2019 /20	2020 /21	2021 /22	2022 /23
	Set performance targets and incorporate them in departmental performance contracts	Performance targets set	Signed Performance Contracts	Board Performance Contract exists	S & P		Implementation period KShs. Million	X	X	X	X	-
	Monitor implementation of the set targets	Number of targets monitored	M & E Report	Signed Departmental Performance Contracts exist	S & P		Implementation period KShs. Million	X	X	X	X	X
e)	To follow up on the exchequer and development funds	Establish a mechanism of follow up of exchequer and development partners funds to ensure timely disbursement	Follow-up programme established	Budget disbursement report	Capacity exists	Finance/ Business development	Implementation period KShs. Million	X	-	-	-	-
	Implement the follow up mechanism	Amount of disbursement received	Budget disbursement report	Capacity exists	Finance / Business development		Implementation period KShs. Million	X	X	X	X	X
f)	To harness the opportunities offered under Clean Development Mechanism (CDM) and other mechanisms including, but not limited to carbon credit trading	Identify the opportunities in CDM and climate change	Number of opportunities identified	Report	Capacity exists	Business development	Implementation period KShs. Million	X	-	-	-	-
	Develop policy and framework on climate change and clean development mechanism	Framework developed	Framework in place	Capacity exists	Business development	2	Implementation period KShs. Million	2	2	-	-	-
	Identify existing Carbon projects for consideration in voluntary markets	Number of projects identified	Report	Capacity exists	Business development	1	Implementation period KShs. Million	2	-	-	-	-

### Strategic Objective 6: To Achieve Financial Sustainability Cont...

Strategies	Activities	Key Performance Indicators	Outcome / Means of Verification	Assumptions	Responsible	Resources (KShs Million)	Implementation period / KShs	2018 /19	2019 /20	2020 /21	2021 /22	2022 /23
Register potential CDM projects and seek Board approval	Number of potential CDM projects identified	Report	Capacity exists	Business development	50	Implementation period KShs. Million	X	-	-	-	-	-
Build capacity on climate change	Number of climate change trainings undertaken	Report	Availability of training on climate change	HR / Business development	10	Implementation period KShs. Million	X	X	-	-	-	-
Identify projects to benefit from carbon trading	Number of projects identified	List of projects	Availability of projects	Business development	0.5	Implementation period KShs. Million	X	-	-	-	-	-
Develop project document	Number of project documents developed	Project Documents	Capacity exists	Business development	2	Implementation period KShs. Million	X	X	-	-	-	-
Prepare a follow up programme	Follow up programme prepared	Follow up programme	Capacity exists	Business development		Implementation period KShs. Million	-	X	X	X	X	-
Implement Follow up programme	Amount received from carbon credits	Carbon certificates	Capacity exists	Business development	2	Implementation period KShs. Million	-	0.5	0.5	0.5	0.5	0.5
Identify partners for co-generation other than sugar millers and build partnerships	Number of partners identified, and partnerships built	MoUs signed	Cogeneration partners exist	Business development		Implementation Period KShs. Million	X	X	X	X	X	-
Total Cost for the Strategic Objective (KShs. Million)						98.5	KShs. Million	64.7	17.7	3.7	8.7	3.7
Total Cost for the Strategic Plan (Ksh. Million)						158, 999.5	KShs. Million	22,914 .30	35,856 .05	45,242 .05	27,448 .80	27,448 .80





Head Office  
Rural Electrification & Renewable Energy Corporation,  
Kawi House, South C  
P. O. Box 34585 – 00100 Nairobi.  
Tel: 0709193000/3600



[www.rerec.co.ke](http://www.rerec.co.ke)



REREc Kenya



@RERECMashinani



rerec\_kenya