



Republic of Zambia

MINISTRY OF ENERGY



**STRATEGIC PLAN
2018 - 2021**



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ABBREVIATIONS

7NDP	Seventh National Development Plan
BSC	Balanced Score Card
IA	Institutional Capacity Assessment
MDD	Management Development Division
MoE	Ministry of Energy
OD	Organizational Development
PESTEL	Political, Economic, Social, Technological, Ecological Environment, Legal
PSRP	Public Service Reform Programme
REFIT	Renewable Energy Feed-in-Tariff
SWOT	Strengths, Weaknesses, Opportunities, Threats

FOREWORD

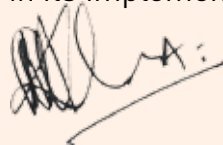
The Ministry of Energy (MoE) is charged with the responsibility of developing and managing the energy sector. Energy is a critical enabler to national economic development. The sector's contribution to poverty reduction and wealth creation in the country as outlined in the Seventh National Development Plan (7NDP) cannot be over emphasized.

The Ministry has developed a Strategy for the period 2018 – 2021, considering the dynamics and changes that have occurred in the sector over the recent past. The changes experienced include policy, economic, legal and climatic changes.

The focus of the energy sector during the Strategy period will be to enhance expansion of electricity generation, transmission and distribution capacity, enhance cost-effectiveness and efficiency in the fuel supply through private sector participation, ensure cost reflective pricing of energy and scale up access to electricity and petroleum products in rural areas.

The Ministry will continue to facilitate the development and deployment of renewable energy while pursuing implementation of cost reflective tariffs. This will ensure the diversification of the energy mix to support the energy requirements of emerging investments in the country aimed at promoting sustainable development. Further, the Ministry will focus on increasing private sector participation in the electricity sub-sector as well as in the procurement and financing of finished petroleum products in the country to enhance efficiency in the sector. In addition, the Ministry will promote gender mainstreaming in the energy sector aimed at increasing access to modern energy and reduce poverty among vulnerable groups especially women and children.

I am confident that the implementation of the interventions outlined in this Strategy will culminate into: increased investments in the energy sector; provision of adequate and reliable supply of energy; and increased electrification rates. Ultimately, this will propel economic growth and job creation. I urge all stakeholders to embrace and take ownership of this Strategy and actively participate in its implementation.



Hon. Matthew Nkhuwa, MP
Minister
MINISTRY OF ENERGY

ACKNOWLEDGEMENT

The Ministry of Energy Strategy 2018-2021 has been developed with the involvement and participation of several stakeholders. Accordingly, appreciation is extended to Management Development Division (MDD), Cabinet Office and all the stakeholders who took part in the Strategy formulation process. Furthermore, the participation of all institutions and individuals who contributed to the development of this Strategy is also acknowledged.

I wish to thank Management and Staff in the Ministry who in many and varied ways contributed to the formulation and successful launch of this Strategy. I am optimistic that the implementation of this Strategy will enhance the sector's contribution to the implementation of the Seventh National Development Plan.



Brig. Gen. Emeldah Chola (Rtd)
Permanent Secretary
MINISTRY OF ENERGY

EXECUTIVE SUMMARY

This Strategy outlines the focus of the Ministry during the period 2018-2021, which will be to: enhance the expansion of electricity generation, transmission and distribution capacity; enhance cost-effectiveness and efficiency in the fuel supply through private sector participation; ensure cost reflective pricing of energy; and scale up access to electricity and petroleum products in rural areas.

The Strategy critically analyses the internal and external environment in which the Ministry operates. The Strategy outlines the strategic operational framework within which all strategic decisions and programming relating to the execution of its mandate shall be operationalized. The vision for the Ministry is to be **“A Smart and Value-Centred Ministry of Energy”**. The Ministry has further developed two strategic themes and their corresponding strategic results to adequately address the identified strategic issues and realise its vision. The Two strategic themes and the corresponding strategic results are: **“Sustainable Energy for Improved Energy Production and Distribution”**; and **“Service Excellence for Quality Service Delivery”**. The mission during the strategic period will be to **“Ensure Increased Access to Sustainable Energy”**.

Pursuant to the mission and in line with National Values and Principles, the Ministry will uphold the following core values; **Innovativeness, Integrity, Professionalism, Team work** and **Accountability**.

The Ministry will, therefore, execute the following eight (8) strategic objectives to effectively implement the Strategy: Enhance production and distribution of electricity; Enhance supply of petroleum products; Enhance promotion of renewable and alternative energy Improve energy sector management; Enhance Human Resources Capacity; Enhance Operational Systems; Enhance resource mobilization and management; and Improve Institutional infrastructure.

1.0. INTRODUCTION

1.1 Background

The Ministry of Energy (MoE) was established in 2016 following the Republican President's directive to re-align the Ministry from the then Ministry of Energy and Water Development (MEWD).

Prior to the re-alignments, the Ministry of Energy and Water Development was part of the Ministry of Mines, Energy and Water Development (MMEWD) which was established in 2012 following the Patriotic Front (PF) Party forming Government in 2011. In 2015, MMEWD was re-aligned to the Ministry of Energy and Water Development and Ministry of Mines and Minerals Development (MMMD).

According to Government Gazette Notice No. 836 of 2016 the portfolio functions of the MoE are as follows:

- Development of renewable energy sources;
- Electricity;
- Energy policy;
- Nuclear energy policy;
- Oil pipeline and refineries;
- Petroleum; and
- Petroleum storage and pricing.

1.1.1 Operational Structure

The functions of the Ministry are executed through Five (05) Departments and a project unit as outlined below:

- Department of Energy;
- Department of Petroleum;
- Department of Planning and Information;
- Department of Human Resources and Administration;
- Department of Finance; and
- Office for Promoting Private Power Investment (Project Unit).

1.1.2 Operational structure and coverage

The Headquarters for the Ministry of Energy is in Lusaka. However, plans are underway to establish and operationalize provincial offices in all the 10 provinces. (refer to Appendix I: Organisation Structure)

1.1.3 Strategic Operational Linkages

In executing its mandate, the Ministry of Energy supervises the following statutory bodies and parastatals:

- Rural Electrification Authority;
- Energy Regulation Board;
- Zambezi River Authority;
- INDENI Petroleum Refinery Company Ltd;
- TAZAMA Pipelines Ltd; and
- ZESCO Ltd.

Further, the Ministry collaborates with the following institutions among others:

- Key line Ministries;
- Energy utilities;
- Other Statutory bodies (WARMA, ZEMA, ZWMA, ZABS etc.);
- Industrial Development Cooperation;
- Private institutions involved in development of energy resources;
- Industry Associations and Professional bodies;
- Research institutions;
- Public Private Partnership Unit;
- Development Partners;
- NGOs; and
- Civil Society.

1.2 Rationale

The development of the Strategy was necessitated by expiry of the 2014-2016 Strategic Plan and the approval of the Seventh National Development Plan (7NDP). The 7NDP required that the Ministry reposition itself in order to effectively implement the development outcomes on energy. Therefore, the Strategy provides an operational framework to effectively execute its mandate of developing and managing energy for economic growth and sustainable development.

2.0. METHODOLOGY

The Strategy was developed using an integrated Institutional Capability Assessment (IA)/ Organization Development (OD) – Balanced Scorecard (BSC) strategic planning approach with technical support from the Management Development Division (MDD), Cabinet Office. A Core Team representing all the Departments was appointed with clear Terms of Reference to spearhead the process. The process involved two main stages, namely; Institutional Assessment and Organisational Development.

The Institutional Assessment involved internal and external analysis of the Institution regarding its performance against the 2014-2016 Strategic Plan. The internal capability analysis was conducted using the Problem and Objective Tree models, Lewin's Simple Change Management, SWOT and McKinsey 7-S Model in terms of structure, systems, staff, skills, shared values, style of leadership and management, and strategy. The PESTEL Analysis was conducted to highlight major developments with implications in the execution of the MoE's Mandate.

The Organization Development involved determining the strategic direction for MoE in the next three and half years based on the information gathered from the internal and external analysis. Further, documents such as the 7NDP and various institutional policies were reviewed to ascertain the "best fit" for MoE's strategic direction. In addition, national policies and legal frameworks which have implications on its operations were also reviewed.

The Strategy was later validated by various stakeholders to build consensus and secure the much-needed support for successful implementation. Finally, it was approved by the Permanent Secretary for implementation.

3.0. ENVIRONMENTAL ANALYSIS

The analysis of the environment in which MoE operated during the 2014-2016 Plan period was conducted from two broad perspectives, the internal and external environment. Based on the internal and external analysis, strategic/key issues with critical impact on the Institution's operations were identified and their optimization or mitigation measures developed for successful implementation of the Strategy.

Internal environment analysis focused on MoE's capabilities, revealing strengths, weaknesses, opportunities, and threats, with their associated optimization and/or mitigating measures. From the analyses, key issues, which if not addressed, could lead to the Institution failing to effectively execute its mandate were identified.

Under the external environment, the analysis focused on major political/policy, economic, social, technological, environmental and legal (PESTEL) developments that impacted the performance of MoE, highlighting opportunities and/or threats and the associated optimization/mitigating measures.

Over and above the analysis of the internal and external environments, MoE's clients and stakeholders were analyzed, highlighting their needs and interests/concerns.

3.1. External Environment

During the period under review, there were several major developments that had a bearing on the performance of the Ministry and its future outlook. The major developments in the external environment and their implications on MoE are as follows:

3.1.1. Political/Policy

3.1.1.1. Realignment of the Ministry

Following the realignment of the Ministry in 2016 from MEWD, it became necessary to reorganize the Ministry to enhance efficiency in its operations. The realignment of the Ministry has streamlined operations and enhanced efficiency in the Ministry and the entire Energy Sector following the introduction of new units and departments. The Ministry will, therefore review the structure in order to institutionalise the new Units and Departments.

3.1.1.2. Reversal of Electricity Tariff increments in 2015

The electricity sub-sector has been grappling with low investments in the sector due to non-cost reflective tariffs. As a way of encouraging investments into the sector, the Ministry embarked on a tariff migration path to ensure the price of electricity was cost reflective. In December 2015, an upward tariff adjustment was approved, however, the tariffs were reversed to cushion domestic consumer.

In view of this, the Ministry will continue implementing a gradual tariff migration plan to be informed by the Cost of Service Study.

3.1.1.3. Adoption of the Renewable Energy Feed-in-Tariff (REFiT) Strategy

In 2017, Cabinet adopted the REFiT Strategy which was aimed at harnessing the renewable energy sub-sector potential to drive economic growth through the promotion of small and

medium sized renewable energy projects of up to 20MW. This enhanced efficiency in the Energy Sector and was a step towards cost reflectivity. The Ministry will, therefore, implement the recommendations in the Cost of Service Study Report, in line with the Energy Policy, and fully implement the new structure of the realigned Ministry.

3.1.2. Economic

3.1.2.1. Fluctuations in the Exchange and Inflation rates

The energy sector transactions are largely dependent on foreign currency, predominantly the United States Dollar. The Petroleum and electricity sub sectors are largely influenced by the fluctuations in the exchange rates and inflation. During the SNDP to the RSNDP period, GDP growth reduced from 7.6 percent in 2012 to 2.9 percent in 2015. Annual inflation within the same period increased from 7.7 percent to 14.3 percent largely on account of significant depreciation of the Kwacha by over 72 percent in the last quarter of 2015. Fluctuations in the Exchange and Inflation rates meant that Government had to spend more on the importation of petroleum products and servicing the loans for electricity generation projects since the depreciation of the kwacha meant a higher bill. The Ministry will, therefore, adjust fuel prices according to market forces and fully implement the fuel marking programme.

3.1.2.2. Removal of fuel subsidies

In 2014, Government made a policy decision to remove fuel subsidies and migrate to cost reflective pricing. This decision implied that periodic price adjustments needed to be made to ensure that consumers pay cost reflective prices as this in turn promoted the sustainable supply of petroleum products in the country. The removal of fuel subsidies freed-up resources tied to clearing the fuel importation bill.

3.1.3. Technological

During the period under review, Smart Zambia Institute (SZI) was established to coordinate and harmonize implementation of electronic government services and processes to improve service delivery across all Government Ministries, Provinces and Spending Agencies (MPSA). This enhanced internet accessibility, cyber security, data integrity and information sharing among key stakeholders. However, the inadequacy of the ICT infrastructure in the Ministry was still a challenge. Therefore, there is need to strengthen ICT infrastructure, facilities and staff capacity to maximize the use of ICT in promoting efficiency and cost effectiveness in service delivery.

3.1.4. Environmental

Electricity supply industry generation capacity is largely driven from hydropower which accounts for more than 80% of the total national installed capacity. In 2015, the country experienced a power deficit due to the below-normal rainfall experienced during the 2014/2015 rain season. As a measure to mitigate the power deficit, Government engaged in the importation of emergency power as an immediate measure. In the medium to long term, the Ministry will diversify the energy mix by investing in renewable and alternative energy.

3.1.5. Legal

3.1.5.1. Statutory Instrument No. 74, Control of Goods, 2016

The Minister of Commerce Trade and Industry issued Statutory Instrument No. 74 of 2016 on the Ban of Incandescent bulbs. SI No. 74 which became effective in January 2017 prohibits local manufacturing, importation and sale of incandescent energy inefficient lighting devices. This contributed to a saving of about 200MW of power which is equivalent to a virtual power plant equivalent to 200MW. The Ministry will continue the promotion of efficient use of electricity.

3.1.5.2. Issuance of Statutory Instrument No. 69, the Energy Regulation (Petroleum Marking and Monitoring) Regulations, 2017

The Minister of Energy issued Statutory Instrument No. 69 of 2017 on Petroleum Marking and Monitoring in order to curb fuel adulteration with domestic kerosene and other low grade fuels as well as dumping of tax-free transit or export fuels on the Zambian market. The Ministry will continue the implementation of Fuel Marking Programme.

3.2. Internal Environment

3.2.1. Institutional Performance

During the period 2012 – 2016, the overall performance for the Ministry was not satisfactory mainly as a result of the reduction in the Ministerial budget by over 90% which greatly affected programme implementation. Further, there was increased attrition due to the realignments of the Ministry.

3.2.2. Sector Performance and Future Outlook

3.2.2.1. Sector Analysis

Zambia's energy resources include; hydro, solar, wind, geothermal, biomass, coal and uranium. The nation is still dependent on hydro power for electricity generation. While the country is self-sufficient in all other energy resources it wholly imports petroleum.

The country's economy has been growing at an average of 5% per annum over the past 10 years and demand for energy has also been rising. The demand for energy has been growing mainly due to the increased economic activity in the country especially in the mining, agriculture and manufacturing sectors.

The electricity generated in Zambia is transmitted through a network of power infrastructure comprising transmission lines, distribution lines and substations at voltages of 330kV, 220kV, 132kV, 88kV, 66kV, 33kV, 11kV and 0.4kV. The current transmission installed capacity is about 5800 MVA while the current generation capacity stands at about 2880MW.

The demand for renewable energies has also seen significant growth in the recent years as a result of the low power generation mainly due to the below-normal rainfall experienced during the 2014/2015 rain season.

The contribution of renewable energy sources to the national electricity installed capacity

is still very negligible. It is however envisaged that during the period 2018-2021, significant additions to the grid amounting to about 300MW from solar may come on stream resulting from Government's plan to diversify generation capacity to mitigate the vulnerability of hydro power generation to climate change.

In the petroleum sub-sector, the Ministry is implementing the Uniform Petroleum Pricing (UPP) programme which is aimed at ensuring that the fuel prices across the country are uniform. In order to ascertain that the UPP is adequately implemented throughout the country, the Ministry has embarked on a programme to construct filling stations in rural areas. The first phase of the programme was to construct two (2) filling stations in Mporokoso and Luwingu which are expected to be commissioned by the end of 2018.

Further, the Ministry is implementing the programme for the construction of fuel depots in all the Provincial Centres of the country. The first phase of the programme involved the construction of fuel depots in Lusaka, Solwezi, Mongu and Mpika while the second phase of the programme involves the construction of fuel depots in Mansa, Chipata, Kabwe and Choma.

The Government has faced several challenges in issuing Letters of Credit to finance the importation of petroleum feedstock and finished products. In this regard, the Ministry started using the Open Account system in 2016 which does not require issuance of Letters of Credit. All suppliers are currently on open account system. This has helped reduce the dependence on the treasury as the suppliers are financing the supply of finished product and commingled feedstock.

In 2016, Government pronounced the policy direction of disengaging from financing the procurement of finished petroleum products to private sector financing. The new policy on private sector participation in the procurement and financing of finished products is intended to improve efficiency.

3.2.2.2. Future Outlook

The installed electricity generation capacity needs to be increased by at least 1,000 MW, with a view of matching the economic growth of the Nation by 2021. The aspiration to achieve double digit economic growth will entail significant increase in the power generation capacity. The generation capacity will require significant diversification through the development of renewable and alternative energy resources by ensuring at least 10% of the new capacity is from these resources.

Zambia is surrounded by eight neighbouring Countries. This strategic position creates an opportunity for Zambia to be a hub for electricity export. Regional power supply has improved with excess power now being generated, but inadequate transmission infrastructure and lack of funds are causing electricity deficits in some countries. Therefore, expansion of the transmission infrastructure is critical to facilitate interconnections, export of electricity and security of supply. There is need to focus on the improvement of electricity reliability by rehabilitating and expanding the distribution network infrastructure.

Under the Rural Electrification Programme, government's focus is to expand the national grid, development of renewable energy and mini grids in rural areas to enhance the reliability, sustainability and security of supply for electricity. This is expected to increase electrification

rates from 4.4% to 8% in the rural areas thereby improving business and investment in line with the 7NDP.

Governments focus for petroleum is to maintain an average stock cover days of petroleum stocks at 30days. During the period 2018-2021, the petroleum sub-sector is expected to experience significant developments in the following:

- Implementation of the Fuel Marking Programme: The Programme is aimed at combating fuel adulteration with Domestic Kerosene and other low-grade fuels as well as dumping of tax – free transit or export fuels on the Zambian market.
- Participation of the private sector in the procurement of fuel: In November 2016, the Government through the Minister of Finance announced a policy direction that would allow private sector participation in the procurement and financing of national fuel requirements. The new policy direction is intended to improve efficiency in the procurement of fuel.
- Review of the Petroleum Act: Government will repeal and replace the Petroleum Act No. 8 of 1995 with the Petroleum Management Act in order to strengthen management of importation, refining, storage, transportation, and sale of petroleum products in and within Zambia. In addition, the Petroleum Management Act will also provide a framework for the implementation of the new policy direction where Government plans to disengage from the procurement of finished petroleum products and allow for private sector participation.
- Construction of petroleum storage depots: The Ministry will continue implementing the programme for the construction of fuel depots in all the Provincial Centres of the country. Depots are earmarked for construction in Mansa, Chipata, Kabwe and Choma.
- Construction of filling stations in rural areas

The Ministry will continue implementing programmes aimed at enhancing the reliability and sustainability of supply of petroleum products and distribution within the country through projects such as construction of fuel filling stations in rural areas so as to ensure full implementation of the Uniform Pump Pricing (UPP) mechanism programme.

3.2.3. Capability Assessment

The Institutional capability assessment conducted for MoE provided for an in-depth analysis of the Institution's status internally and externally. The Internal analysis was conducted in terms of the Strategy, Structure, Systems, Staff, Skills, Shared Values and Style of Leadership to establish the gaps and provide for appropriate interventions as input in the preparation for the 2018 – 2021 Strategy. Based on the assessment, it was established that the Institution had challenges in all the seven areas that needed to be addressed to excel. The challenges included among others:

- Inadequate structure to facilitate the implementation of the mandate;
- Inadequate and inappropriate systems;
- The Ministry does not have shared values among the employees; and
- The Management or Leadership style in the Ministry of energy is not well defined.

3.3. Clients Analysis

The Ministry has identified the following major clients in the implementation of its Strategy:

a) General Public

The General Public will require the MoE to provide them with the following:

- Adequate and reliable electricity;
- Reliable supply of quality Petroleum products;
- Alternative sources of clean energy;
- Technical advice; and
- Policy guidance.

b) Government Ministries/Institutions

Government Ministries/Institutions will require the MoE to provide them with the following:

- Data and information on energy;
- Technical advice;
- Adequate and reliable electricity;
- Reliable supply of quality Petroleum products; and
- Alternative sources of clean energy.

c) Private Sector

- Adequate and reliable electricity;
- Reliable supply of Petroleum products;
- Alternative sources of clean energy;
- Incentives for energy development; and
- Information on energy resource availability and investment criteria.

d) Learning Institutions

- Data and information on energy;
- Technical advice; and
- Adequate and reliable electricity.

3.4. Stakeholder Analysis

The Ministry has identified the following major stakeholders in the implementation of its Strategy:

i. General Public

- General awareness in the developments in the energy sector.

ii. Government Ministries/Institutions

- Collaboration in the ratification and domestication of international protocols, treaties and agreements on energy;

- Collaboration in the development of fiscal and non-fiscal incentives for the energy sector;
 - Collaboration in the development of Energy Sector Plans and Programmes; and
 - Collaboration in the development and operationalization of M&E Systems and Reporting mechanisms.
- iii. **Industry Associations and NGOs**
- Availability of responsive policies, legislation, strategies, guidelines and incentives on Energy.
- iv. **Development partners**
- Conducive energy sector policies and legislation;
 - Collaboration in the development and implementation of energy sector plans and programmes
 - Collaboration in the implementation of international protocols, treaties and agreements on energy;
 - Collaboration in the development and implementation of fiscal and non-fiscal incentives for the energy sector;
 - Collaboration in the development and operationalization of M&E Systems and Reporting mechanisms.
- v. **Parastatals and statutory bodies**
- Facilitating an enabling policy, fiscal and regulatory framework in the energy sector.
- vi. **Academic and research institutions**
- Collaboration in areas of research and development in the energy sector.
- vii. **Media**
- Cooperation in area of media coverage and dissemination of information on energy.
- viii. **Financial Institutions**
- Collaboration in areas of financial support for energy programmes.

3.5 Internal and external environmental analysis

In order to understand the internal and external environment in which the ministry has been operating, the SWOT was conducted. The Ministry's analysis revealed strengths and opportunities that needs to be taken advantage of in order to eliminate weaknesses and threats for the effective and efficient implementation of the strategy.

(A) Strengths**(i) Visionary and Supportive Leadership and Management**

The Ministry has a visionary and supportive leadership and management required to provide guidance during the development and implementation of the Strategic Plan. Leadership and management will continue to provide the necessary guidance in the implementation of the Strategic Plan.

(ii) Policy, Legal and Regulatory Framework

The Ministry of Energy has policy and legal framework which has provided direction in the execution of its mandate outlined in the Government Gazette Notice Number 836 Of 2016. In order to strengthen its legal and policy framework and ensure effective and efficient coordination of service delivery, the Ministry will expedite the review of the National Energy Policy of 2008 and all pieces of legislation as well as the development of various regulations in the Energy Sector.

(iii) Organisational Structure

The Ministry has a functional approved organisational structure which enables it to execute its mandate effectively. The Department of Energy is the largest of all and has structures at provincial level. The Ministry will use the approved organisational structure to seek for treasury authority for the operationalisation of the provincial offices.

(iv) Qualified and Competent Staff

The Ministry has a pool of qualified, competent and hardworking staff to provide the required services in the implementation of Energy programmes. The Ministry will develop comprehensive annual work plans for staff to undertake various activities in the successful implementation of the strategic plan.

(v) Renewable Energy Section

The Ministry has a functional Renewable Energy Section under the Department of Energy with qualified staff.

As a way of enhancing and promoting the utilization of renewable energy sources and technologies, there will be need to review the Ministry of Energy structure to enable the upgrading of the section to a functional Department.

(vi) Information, Communication and Technology Infrastructure

The Ministry has adequate ICT infrastructure to enhance efficiency and effectiveness in service provision. To improve its service delivery the Ministry will utilise the existing ICT infrastructure to develop automated systems. Further, the Ministry will continuously update its ICT infrastructure in order to keep up with current technological developments.

(B) Weaknesses**(I) Inadequate and Erratic Financial Resources**

Inadequate and erratic funding has been affecting the successful implementation of programs and projects in the Ministry. The Ministry will prioritise available resources for the implementation of key programmes and projects in the Strategic Plan. Further, the Ministry will continue to timely engage the Ministry of Finance for financial resources.

(II) Lack of an Implementation Plan

The previous Strategic Plan which expired in 2016 was not fully implemented due to lack of an Implementation Plan. In order to fully implement the 2018 – 2021 Strategic Plan, the Ministry will develop a comprehensive Implementation Plan that will enhance coordination in programme implementation. Further, the Ministry will also develop a Communication Strategy for the dissemination of the Strategic Plan.

(III) Lack of Automated and Integrated Information Systems

Information Systems in the Ministry relating to Information Management, Records Management, Procurement Management, Fleet Management and Human Resources Management are manual leading to inefficiencies in service delivery. In order to mitigate this situation, the Ministry will prioritize the development of automated integrated information systems.

(IV) Non- Target Specific skills development

Despite, having adequate qualified, competent and hardworking staff, some members of staff have inadequate skills relating to Project and investment Appraisal, Management Systems Development, Managerial and Leadership, Negotiation, Statistical data analysis and Energy Demand Projections. This is mainly due to non- target specific skills development in line with the Training Needs Assessment Report. It is therefore, necessary for the Ministry to implement recommendations from the Training Needs Assessment Report.

(C) Opportunities

(I) Availability of Cooperating Partners

There are many cooperating partners and stakeholders that are supporting and/or willing to support programmes and projects in the Energy Sector. This presents an opportunity to improve service delivery for development outcomes. In this regard, the Ministry will continue engaging Cooperating Partners and stakeholders for possible collaboration as well as technical and financial support.

(III) Availability of tailor-made training programmes

There are number of Public and Private institutions that are providing tailor made training programmes in different fields. In this regard, the Ministry will engage training institutions for tailor-made specialized training programmes.

(V) Availability of the code of Ethics for Public Service

The Ministry will be guided by Five (5) core values in its operations and the members of staff will be expected to exhibit the values in their behaviour and conduct in line with the Code of Ethics for the Public Service.

(D)Threats

(I)Non- issuance of Treasury Authority

The Ministry has inadequate staffing levels due to inadequate funding to operationalise all position in the approved structure. To mitigate this challenge the Ministry will engage the Ministry of Finance for Treasury Authority to operationalise all positions in the approved structure.

4.0 STRATEGIC DIRECTION

Based on the internal and external analyses, MoE has set forth a strategic operational framework within which all strategic decisions and programming relating to the execution of its mandate shall be operationalized. The strategic framework includes the following key features:

3.5. Vision Statement

MoE shall in the next four years work towards becoming:

“A Smart and Value-Centred Ministry of Energy”

This entails that the Ministry aspires to be dynamic, resourceful, efficient and effective in the development and management of energy resources while maintaining national values and principles to enhance economic growth for sustainable development.

3.6. Mission Statement

The Mission statement for the period 2018 – 2021 is “To ensure increased access to sustainable energy.”

The Ministry will endeavour to ensure that the Zambian people have access to energy at the least possible cost. The Ministry will also ensure that there are sufficient energy supplies at an effective cost and that energy is used efficiently by the citizens. Further, energy shall be produced with minimal negative effects on the environment.

3.7. Core Values

In line with the National Values and Principles as well as pursuant to its mission, MOE shall be guided by Five (5) Core Values in its operations and the members of staff will be expected to exhibit the values in their behaviour and conduct.

The core values are:

- i. **Innovativeness:** We promote and embrace creativity in the energy sector to foster industrialization. We endeavour to achieve this milestone by focusing on research and development in modern technologies that respond to the challenges in the energy sector.
- ii. **Integrity:** We are composed of individuals that conduct themselves in a manner that is transparent, sincere, trustworthy and consistent whilst implementing the mandate of the Ministry.
- iii. **Professionalism:** We embrace excellence and proficiency in the performance of the Ministry’s functions while demonstrating; competence, ethical standards, reliability and positive attitude.
- iv. **Team work:** We promote an environment where collaborative efforts are upheld to achieve a common goal of developing the energy sector.
- v. **Accountability:** We are responsible for energy sector’s policies, decisions and actions.

3.8. Strategic Themes and Strategic Results

The Strategy has two strategic themes and their corresponding strategic results to adequately address the identified strategic issues and realize the vision. These themes will guide MoE in decision making and programming to excel in the execution of its mandate.

The two strategic themes and the corresponding strategic results are: Sustainable Energy for improved energy production and distribution; and Service Excellence for Quality Service Delivery.

3.8.1. Sustainable Energy

To ensure sustainable energy, the Ministry shall harness the available energy resources which shall be produced using various technologies, supplied and utilized at the least social, economic and environmental cost.

3.8.2. Service Excellence

To ensure service excellence, the Ministry will consistently meet and manage stakeholder expectations through enhanced human resource capability.

3.9. Strategic Objectives

To accomplish its Vision, Mission and Strategic Results, MoE will in the period 2018-2021 pursue the following Eight (8) strategic objectives with associated intended results, measures, targets and strategies (initiatives):

3.9.1. Strategic Objective 1: Enhance production and distribution of electricity

To enhance the generation, transmission and distribution of electricity to meet the demand which is growing yearly at a rate in excess of 3%, the Ministry will encourage the development of different resources for power generation. Further, the Ministry will promote the establishment of an open and non-discriminatory transmission access regime in the electricity sub-sector and implement a cost-reflective tariff regime.

3.9.2. Strategic Objective 2: Enhance supply of petroleum products

The Ministry intends to put in place an efficient mechanism for the procurement of petroleum strategic stocks. In addition, efficient fuel delivery systems will be strengthened through programmes such as the construction of a finished product pipeline, to meet the domestic demand for petroleum products. This will also be enhanced by promoting the setting up of petroleum businesses in rural areas through public-private partnerships. Storage infrastructure for reserves will also be constructed and rehabilitated.

3.9.3. Strategic Objective 3: Enhance promotion of renewable and alternative energy

The Ministry will aim to diversify the power generation sources to include renewable energy such as solar, geothermal, wind, waste to energy and mini-hydro's. Therefore, renewable energy resource mapping and promoting development and use of renewable energy technology systems including implementing a feed-in-tariff system which is attractive for private investments into renewable energy generation will be undertaken. Additionally, alternative energy sources will also be exploited in the generation of electricity. Diversification will in turn ensure security of supply of power.

Further, renewable and alternative energy sources will be exploited for domestic cooking to replace charcoal and firewood. Renewable sources such as gel fuel, biogas and biomass pellets are potential fuel for cooking while alternatives such as Liquefied Petroleum Gas (LPG) and coal briquettes will also be promoted to avoid overdependence on charcoal and firewood for cooking.

3.9.4. Strategic Objective 4: Improve energy sector management

The Ministry intends to increase compliance to the set operating standards by strengthening institutional and management capacity. The Ministry will create an enabling environment to ensure increased investments through the development and enhancement of sector legislation, guidelines and regulatory frameworks.

3.9.5. Strategic Objective 5: Enhance Human Resources Capacity

The Ministry will enhance human resource capacity through training and development, strengthening and operationalizing the performance management system and enforcement of the code of ethics.

3.9.6. Strategic Objective 6: Enhance Operational Systems

The Ministry will develop administrative systems such as the Service Delivery Charter for improved performance as well as automate and integrate management systems.

3.9.7. Strategic Objective 7: Enhance resources mobilization and management

The Ministry commits to improve the financial management in order to execute its mandate. To achieve this, the Ministry will strengthen internal management controls as well as develop and implement a resource mobilization strategy.

3.9.8. Strategic Objective 8: Improve Institutional infrastructure

The Ministry will construct four fuel depots as well as operationalize 10 provincial offices across the country. Institutional infrastructure will improve and provide efficient fuel delivery systems in the country as well as meet the domestic demand for petroleum products.

Table 1 below provides a log frame, detailing the Strategic Themes, Strategic Results, Strategic Objectives, Intended Results, Units of Measurement, Key Performance Indicators and Strategies:

TABLE 1: STRATEGIC THEMES, STRATEGIC RESULTS, STRATEGIC OBJECTIVES, INTENDED RESULTS, UNIT OF MEASUREMENTS, KEY PERFORMANCE INDICATORS AND STRATEGIES (INITIATIVES)

STRATEGIC THEME: Sustainable Energy			
STRATEGIC RESULT: Improved energy production and distribution			
STRATEGIC OBJECTIVE 1: Enhance production and distribution of electricity			
Intended Results	Units of Measure	Key Performance Indicators	Strategies
Increased access to electricity	% of households	80% of urban households with access to electricity by December, 2021	Expansion of generation, transmission and distribution
	% of households	8% of rural households with access to electricity by December 2021	Scale-up the rural electrification programme
Increased security of supply	<ul style="list-style-type: none"> Megawatts 	<ul style="list-style-type: none"> 1000 Mega Watts added to the national installed generation capacity by December 2021 	Development of new electricity generation projects
	<ul style="list-style-type: none"> Mega Volt Ampere 	<ul style="list-style-type: none"> 960 Mega Volt Ampere added to the national electricity transmission capacity by December 2021 	Development of new electricity transmission projects
	<ul style="list-style-type: none"> Mega Volt Ampere 	<ul style="list-style-type: none"> 1100 Mega Volt Ampere added to the national electricity distribution capacity by December 2021 	Development of new electricity distribution projects
STRATEGIC OBJECTIVE 2: Enhance supply of petroleum products			
Intended Results	Units of Measure	Key Performance Indicators	Strategies
Consistent supply of petroleum	# of pipelines	One pipeline rehabilitated by December 2021	Rehabilitation of the TAZAMA pipeline from Dar -es Salaam to Ndola.
	Metric tons	350,000 Metric Tons added to the TAZAMA/INDENI system capacity by December 2021	<ul style="list-style-type: none"> Upgrading the existing TAZAMA Pipeline. Recapitalization and modernization of INDENI Refinery

	% share of bio-fuel in petroleum products	5% of diesel replaced by bio- diesel 10% of petrol replaced by ethanol	Upgrading of petroleum infrastructure for bio-fuel blending
Increased access to petroleum products in rural areas.	# of fuel filling stations	Four (4) fuel filling stations constructed by Government in rural areas by December 2021.	<ul style="list-style-type: none"> Construct and operationalize fuel filling stations in rural areas
STRATEGIC OBJECTIVE 3: Enhance promotion of renewable and alternative energy			
Intended Results	Units of Measure	Key Performance Indicators	Strategies
Increased renewable energy contribution to the national installed electricity generation capacity	% of renewable energy	5% of renewable energy in the total national installed electricity generation capacity attained by December 2021.	<ul style="list-style-type: none"> Implementation of the Global Energy Transfer Feed-In Tariff (GET-FIT) programme Implementation of the Scaling-up Solar Initiative
Increased usage of alternative energy.	% of alternative energy	10% use of alternative energy for cooking attained by December 2021.	<ul style="list-style-type: none"> Promotion of alternative energy for cooking such as LPG, Briquettes, Gel Fuel, Kerosene and Pellets.
Reduced usage of charcoal and firewood.	% of households	40% of households using firewood for cooking by December 2021.	<ul style="list-style-type: none"> Promotion of alternative energy for cooking such as LPG, Briquettes, Gel Fuel, Kerosene and Pellets. Scaling-up rural electrification programme Develop wood fuel regulatory framework
	% of households	25% of households using charcoal for cooking by December 2021.	

STRATEGIC OBJECTIVE 4: Improve energy sector management			
Intended Results	Units of Measure	Key Performance Indicators	Strategies
Increased private sector participation in the electricity sub-sector.	# of operators	Six (6) new operators in the electricity sub-sector by December 2021.	<ul style="list-style-type: none"> • Develop an Integrated Energy Resource Map • Develop and implement a framework for private sector participation in power generation • Develop and implement standardized Implementation Agreements and Power Purchase Agreement • Review and strengthen policy and legal framework on energy
Increased compliance.	% Compliance – Energy Infrastructure	<ul style="list-style-type: none"> • 93% compliance to technical standards by petroleum infrastructure attained by 2021. • 93% compliance to technical standards by electricity infrastructure attained by 2021. 	<ul style="list-style-type: none"> • Develop and implement KPIs for non-state-owned enterprises • Implementation and enforcement of infrastructure technical standards
	National Compliance Rate – Energy Quality	<ul style="list-style-type: none"> • 95% compliance to petroleum quality standards attained by 2021 • 73% compliance to power quality standards attained by 2021 	<ul style="list-style-type: none"> • Implement the fuel marking programme • Implement power quality monitoring guidelines

STRATEGIC THEME: Service Excellence			
STRATEGIC RESULT: Quality Service Delivery			
STRATEGIC OBJECTIVE 5: Enhance Human Resources Capacity			
Intended Results	Units of Measure	Key Performance Indicators	Strategies
Improved performance	% Performance	90% of staff appraised performing on target annually.	<ul style="list-style-type: none"> Strengthen performance management systems Review Organizational structure Develop and implement a Comprehensive Continuing Professional Development Programme
Increased staff satisfaction levels	% Satisfaction	100 % staff satisfaction attained annually.	<ul style="list-style-type: none"> Develop and implement a recruitment and staff retention programme Strengthen and operationalize the performance management system Strengthen enforcement of Code of ethics Establish office accommodation
STRATEGIC OBJECTIVE 6: Enhance Operational Systems			
Intended Results	Units of Measure	Key Performance Indicators	Strategies
Increased efficiency	% services offered	80% services offered according to the service charter annually.	<ul style="list-style-type: none"> Develop and implement a Client Service Delivery Charter Develop, automate and integrate management systems

STRATEGIC OBJECTIVE 7: Enhance resources mobilization and management			
Intended Results	Units of Measure	Key Performance Indicators	Strategies
Increased financial resources	<ul style="list-style-type: none"> % increase in allocation % increase of financial resources from grants. 	<ul style="list-style-type: none"> 25% increase in allocation annually. 25% increase of financial resources from grants by 2021. 	Develop and implement a resource mobilization strategy
Improved financial accountability	<ul style="list-style-type: none"> # of audit queries % compliance 	<ul style="list-style-type: none"> Zero audit queries annually. 100% compliance to Ministerial Annual Budget and Workplans. 	Strengthen and implement financial controls
STRATEGIC OBJECTIVE 8: Improve Institutional infrastructure			
Intended Results	Units of Measure	Key Performance Indicators	Strategies
Increased national fuel storage capacity	# of depots	Four (4) fuel storage depots constructed by December 2021	<ul style="list-style-type: none"> Construct and operationalize provincial storage depots
Increased service coverage	# of provincial offices.	10 provincial offices opened by 2021.	<ul style="list-style-type: none"> Operationalize the existing organization structure

5.0 ENABLING FACTORS

The successful implementation of this Strategy is centered on the following pre-conditions and assumptions:

5.1 Pre-conditions

Pre-conditions are key enabling factors to the successful implementation of the Strategy that are within the control of the Ministry. The following are the pre-conditions:

- 1.1.1 Supportive leadership and management;
- 1.1.2 Collective ownership of the Strategy by staff, management and leadership;
- 1.1.3 Committed, qualified and skilled staff;
- 1.1.4 Availability of a comprehensive implementation plan;
- 1.1.5 Conducive work environment;
- 1.1.6 Availability of effective financial control mechanisms;
- 1.1.7 Availability of adequate modern equipment;
- 1.1.8 Availability of automated and integrated management systems: and
- 1.1.9 Implementation of reforms in the Energy Sector.

1.1. Assumptions

These are critical enabling factors for successful implementation of the Strategy that are outside the control of the Ministry. The following are the assumptions:

- 1.1.1 Stakeholder buy-in and support;
- 1.1.2 Enabling policy and legal framework environment;
- 1.1.3 Continued stakeholder support and co-operation;
- 1.1.4 Adequate and timely funding towards programme implementation; and
- 1.1.5 Stability in the Exchange and inflation rates.

1.0. IMPLEMENTATION PLAN

The operationalization of the Strategy, will be achieved through a four year implementation plan divided into; annual, departmental and individual work plans costed accordingly with realistic targets and schedules of activities linked to the annual budget.

2.0. MONITORING AND EVALUATION

The Monitoring and Evaluation (M&E) of the implementation of the Strategy is vital for ascertaining its impact. The Ministry will therefore, strengthen M&E mechanisms to effectively and efficiently track progress and evaluate its performance against set targets. Further, a Mid-Term Review (MTR) of the Strategy will be conducted in June, 2019 to assess progress made towards the achievement of the set intended results, strategic objectives, strategic results and the appropriateness of the overall strategic direction. It shall therefore be designed to inform the remaining period of the strategy and recommend adjustments where need be. A terminal evaluation will then be conducted in December, 2021 to determine the full extent of implementation of the Strategy and the overall impact as well as, inform the preparation of the 2022 -2026 Strategy.

The M&E of the Strategy will be conducted at Institutional, Departmental and Individual Levels. Regarding Institutional and Departmental levels, the M&E of the implementation plan will be conducted quarterly and annually. Further, Institutional M&E will be carried out by external evaluators through a client survey and stakeholder analysis to establish their perception of the level and quality of service delivery at the end of the Strategy period. At individual level, a Performance Appraisal System will be used to monitor and evaluate the performance of staff annually.

APPENDICES

Appendix i: Organization Structure

