



REPUBLIC OF KENYA

SECTOR PLAN

FOR

OIL AND OTHER MINERALS 2013-2017

2013-2017

The Principal Secretary
Ministry of Mining



STATEMENT BY THE CABINET SECRETARY FOR MINISTRY OF DEVOLUTION AND PLANNING

FOREWARD

The oil/gas and other minerals resources sector has been given prominence in the Second Medium Term Plan (2013-2018) as key contributor to the envisaged and sustained Gross Domestic Product growth of ten (10) per cent per annum to the end of 2030. Their management and development, from exploration to distribution and use, which up to now has suffered serious underfunding among other issues is therefore crucial.

This sector plan outlines the key priority areas that need to be addressed in order to realize the potentials of the sector. Already successes are seen in the form of increase in the oil/gas sector. The number of active exploration licenses has been on the increase following the discovery of oil in the Turkana area and gas in Lamu County. In a similar breath, a lot of effort has been made by the Government to clean up operations in the other minerals sector to make it more transparent and attract more investment. Following this, the first batch of titanium ore from the Kwale sand deposits was exported in the month of February 2014. An agreement has also been reached with cement manufacturing companies and Fluorspar Company of Kenya (Ltd) on payment of royalties on use of limestone and fluorspar.

As the country embarks to reap benefits from its oil/gas and other minerals, this momentum needs to be sustained. Several policy and bills will be reviewed or be formulated to govern the sector. In addition, scientific work in the industry needs to be intensified to increase the database of knowledge about the country's natural wealth. Only in this way is the country going to achieve industrialization built upon utilization of its natural resources.

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It is our sincere conviction that together as a team we will remain focused in the implementation of this Sector Plan in order to realize the dream of Kenya becoming a globally competitive middle-income country through Vision 2030.

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ABBREVIATIONS & ACRONYMS

DRSRS	-	Department of Resource Surveys and Remote Sensing
DPs	-	Development Partners
GDP	-	Gross Domestic Product
GoK	-	Government of Kenya
ICT	-	Information and Communication Technology
IOCs	-	International Oil Companies
KETRACO-		Kenya Electricity Transmission Company
KPC	-	Kenya Pipeline Corporation
KPRL	-	Kenya Petroleum Refineries Ltd
KSh.	-	Kenya Shilling
LAPSSET -		Lamu Port & South Sudan-Ethiopia Transport
LPG	-	Liquefied Petroleum Gas
MoE&P	-	Ministry of Energy & Petroleum
MoM	-	Ministry of Mining
MTP	-	Medium Term Plan
MW	-	Megawatts
NAFFAC -		National Fossil Fuel Advisory Committee
NMC	-	National Mining Corporation
NOCK	-	National Oil Corporation Kenya
OEL	-	Oil Exploration License
REE	-	Rare Earth Elements
SAGAs	-	Semi-Autonomous Government Agencies

EXECUTIVE SUMMARY

The Second Medium Term Plan (2013-2017) of Vision 2030 was launched by H. E. The President on October 3, 2013. This paved way for the preparation of various sector plans to guide the implementation of MTP II. Ministries of Mining, and Energy & Petroleum were tasked to develop Oil and Other Mineral Resources Sector Plan. The Plan outlines the policies, strategies, programmes and flagship projects to be given priority over the Second MTP period.

The Oil and Other Mineral Resources Sector currently contributes to about one 1 per cent to Kenya's Gross Domestic Product and three 3 per cent total export earnings in terms of resource allocation and implementation. The sector has great potentials to help the country attain the 10 per cent growth target envisioned in the Vision 2030 that will make Kenya to be a globally competitive middle-income country by 2030. Due to this envisaged contribution of the sector in spurring economic growth and development through foreign exchange earning, creation of employment opportunities, industrial growth and infrastructural development, it has been identified as the 7th priority sector under the Economic Pillar of the Vision 2030.

The sector, however, faces a number of challenges and emerging issues including weak legal, regulatory and institutional framework, high expectations, huge capital outlays, inadequate budgetary allocations, understaffing, inadequate technical capacity, conflicts with community, and environmental degradation.

To address some of these challenges and emerging issues, the Ministry of Mining and Ministry of Energy & Petroleum are currently reviewing the outdated policies, bills and Acts to align them to the Constitution of Kenya and make them to conform to international best practices and standards. The two ministries have established directorates and are setting up new institutions and/or restructuring the existing ones with a view to improving their efficiency and capacity to coordinate, manage and govern the operations of stakeholders in the sector. Digitalization of operations such as licensing is on-going and this will improve integrity, transparency and accountability in the sector. In addition, other flagship projects outlined in Second MTP for implementation include developing infrastructure i.e. rail, port and pipeline; improving laboratory analysis of petroleum and other minerals; enhancing exploration and exploitation of oil/gas and other mineral resources; and improving geological and geophysical data among others.

The implementation of the Oil and Other Mineral Resources Sector Plan will be done by key stakeholders; Ministry of Mining and Ministry of Energy & Petroleum, Parastatals/SAGAs in the two ministries and private sector. These implementing agencies will develop annual work-plans, cost the activities and develop specific, measurable, achievable realistic and time-bound indicators that will be used to monitor and evaluate the implementation of the Plan. Monitoring and evaluation will be done in a participatory manner by M & E Committee, who will report on the achievement of the targets on quarterly basis. Annual reports will be published and shared among stakeholders.

1 INTRODUCTION

1.1 Background

Under Constitution, all natural resources (including those below the surface) belong to the National Government. In this context, the Government owns the resources in trust for the people of Kenya, bringing into focus some type of a principal-agent relationship. However, the same Constitution gives a significant number of responsibilities to the Government with regard to its duty to the citizenry. As such, the Government must remain accountable to its people regarding all its functions and operations and specifically with regard to management of natural resources for the benefit of the country. In development of mineral resources, this can be done by ensuring that the Government's dealings with explorers (and later developers) are in the interest of the state while attracting activity in the sector. In other words, the elements of the Productions Sharing Agreements must in no way compromise economic and constitutional goals while remaining attractive to investors.

Kenya is endowed with a variety of mineral resources including base metals (gold, silver, copper), dimension stones (granite, marble and limestone), industrial minerals (fluorspar, titanium and limestone), gemstones (ruby, sapphire, rhodolite) and chemical minerals (soda ash, carbon dioxide, salt and hydrocarbons), and recently, fossil fuels (coal, oil and gas). Minerals occur in a variety of locations in Kenya, and some of these areas have limited alternative sources of economic activity. Kenya is under-explored as far as petroleum and natural gas are concerned. There are positive indications of hydrocarbon potential in the form of oil seeps, gas and oil, but only relatively few exploration and development wells have been drilled.

The Oil and Other Mineral Resources sector has been identified as an additional priority sector under the Economic Pillar of Kenya Vision 2030. The sector currently contributes about one (1) per cent to Gross Domestic Product (GDP) and three (3) per cent total export earnings to the economy. Although this contribution is not significant, the potential for higher contribution exists following the recent discoveries of strategic minerals such as oil in Turkana County, Titanium and Rare Earth Elements (REE) in Kwale County, coal and gas in Kitui and Lamu Counties respectively. Once exploitation and exportation of the minerals begin, the contribution to GDP is expected to rise to three (3) per cent by 2017. It is expected that with more discoveries, development and management of oil, gas and other mineral resources, industrial growth can be realized.

The extractive industry will create employment opportunities to Kenyans thus alleviating unemployment and poverty. It will also spur economic growth and development in form of social amenities such as roads, railways, health facilities, electricity, water and schools among others.

It is against this background that this Sector Plan is developed by the Ministries of Energy and Petroleum and Mining. This follows the successful launch of the Second MTP on October 3, 2013. The Oil and Other Mineral Resources Sector Plan 2013 - 2017 outlines the policies, strategies, programmes and projects to be given priority in terms of resource allocation and implementation. It is expected that successful implementation of the programmes and projects outlined in this Plan will help the country attain the 10 per cent growth target envisioned in the Vision 2030 that will make Kenya to be a globally competitive middle-income country by 2030.

1.2 Organization of the Sector Plan

This Plan is organized in six (6) chapters. Chapter one provides introduction. Chapter Two highlights the situational analysis of the sector. Chapter Three outlines the challenges and emerging issues in the sector while Chapter Four presents the programmes and flagship projects. Chapter Five presents the policies, legal and institutional framework in which the sector operates. Chapter Six highlights monitoring and evaluation of implementation of this Plan.

2 SITUATION ANALYSIS

2. Introduction

The Government recognizes the importance of oil and other mineral resources sector in facilitating economic growth and development. As a result, oil and other mineral resources sector has been identified as a priority sector under the Economic Pillar of Kenya Vision 2030. This chapter presents the situation and stakeholder analyses for the sector.

2.2 Oil and Gas

Oil exploration in Kenya dates back to early 1950s when the first oil exploration license (OEL1) was granted to B.P. Shell Development Company to operate in the Lamu Embayment. A total of forty five (45) wells have been drilled to date with oil being discovered in seven (7) i.e. Ngamia 1 (Block 10BB), Twiga South 1 (Block 13T), Etuko 1 (Block 10BB), Agete 1 (Block 13T), Ekales 1 (Block 13T), Amosing 1 (Block 10BB) and Ewoi 1 (10BB) wells. Natural gas has been discovered in Mbawa 1 well offshore Block L8. Additional exploration and drilling by several companies operating in both onshore and offshore blocks is ongoing. Therefore, with efforts to drill more wells, discoveries are expected to be enhanced in the country's exploration blocks. The discoveries of oil in the Tertiary Rift Basin and gas in the Lamu Basin indicate the existence of commercial quantities of hydro-carbon potential thus Kenya becoming an oil and gas producing nation in future. Furthermore, oil developments in Uganda and South Sudan make Kenya a viable site for oil transportation and processing facilities.

As a result of oil and gas discoveries, there has been increased interest in upstream fossil fuel activities in the country. Currently, twenty one (21) International Oil Companies (IOCs) and National Oil Corporation Kenya (NOCK) are carrying out exploration activities in the forty one (41) licensed blocks. These companies are at different stages of exploration, some being in the preliminary stages of geological and geophysical data acquisition and others carrying out exploratory drilling. The presence of IOCs has ignited high interest in major service companies which are strategizing to seize the existing opportunities.

Services relating to petroleum exploration are mainly; seismic survey, well logging and testing, drilling, rig services and a wide range of other associated services. The provision of these services will help to accelerate exploration and ultimate discovery of additional oil and gas in the country.

2.3 Other Minerals

Kenya has a wide range of minerals such as soda ash, fluorspar, diatomite, gemstone, limestone, barite, gypsum, salt, dimension stones, silica sand, Kisii stone (soapstone), manganese, zinc, wollastonite, graphite, kaoline, copper, gold, lead, nickel, iron ore, carbon dioxide, chromite, pyrite, various clays, niobium and rare earth elements, pyroclore, titanium and coal. Coal exploration is ongoing in Kwale, Kilifi, Meru and Isiolo Counties. Thirty one (31) exploration blocks have been delineated awaiting gazettelement and concessioning. This will enable a widespread coal exploration programme in the county.

Mining is an extractive industry and is key to providing raw material for various uses including industrial development. Since independence (1963), this industry has experienced little growth. This has been contributed by inadequate budgetary allocation, inadequate regulatory framework, and large capital outlays required for exploration. As a result, the existing Mining Act is being revised to make it conform with modern international standard. Other relevant acts to support the sector also need to be formulated.

Currently, mining contribute about 0.8 percent to GDP. Going forward, the sector will aim to spur growth and development of the industry to reach a 10% annual growth in mining revenue from mineral royalties

and related taxes. To achieve this, the ministry will: fast-track enactment of a new Mining Policy and Bill; draft a new Explosives Policy and Bill; enhance mine and mineral audits; carry out statutory obligations under the Acts administered by the Ministry; upgrade mining cadastre to allow online transactional applications; improve openness and accountable management of revenues from minerals; intensify geological survey by carrying out a national airborne geophysical survey to map out where potential mineral deposits are located; follow up airborne survey with field mapping; intensify exploration of iron ore and coal; create a internationally accredited mineral certification laboratory; narrow the skill gap in mining sector so that the sector employs more Kenyans; build institutional capacity; and undertake reorganization including establishing coordination structures with County Governments. In addition, the ministry will endeavour to facilitate creation of mineral and metals commodity exchange, mineral audit agency and mineral value addition centers

2.4 The Role of Ministries of Energy & Petroleum and Mining

The mandate of the Ministry of Energy and Petroleum in regard to this sector plan is energy policy and development; energy regulation, security and conservation; fossil fuels exploration and development; oil and gas and minerals sector capacity development; and petroleum products, import/export/marketing policy management.

The mandate of Ministry of Mining in regard to this sector plan is mineral exploration and mining policy and management; inventory and mapping of mineral resources; mining and minerals development; policies on the management of quarrying and mining of rocks and industrial minerals; management of health and safety in mines; policy around extractive industry; maintenance of geological data and resources survey and remote sensing.

The two ministries will provide the overall leadership, oversight, guidance and policy direction in the implementation of the sub-sector plan. To this end, the ministries will ensure top management incorporate the projects in their performance contracts, annual work plans and set up committees to report on the attainment of the targets.

2.5 The Role of Parastatals /Semi Autonomous Government Agencies (SAGAs) in the sector

The NOCK undertakes oil and gas exploration and marketing and distribution of petroleum products. The Kenya Pipeline Corporation (KPC) manages the oil pipeline for transportation of oil products and Kenya Petroleum Refineries Limited (KPRL) refines imported crude oil for consumption for both local and regional markets. The sector will create a National Coal Corporation which will coordinate exploration and development of coal as an energy mineral. In addition, a National Mining Corporation (NMC) will be established to facilitate exploration, development and management of other mineral resources.

During the Plan period, these parastatals/SAGAs are key in the implementation, monitoring and evaluation of the plan and report on the progress made.

2.6 The Role of Private Sector

The private sector plays a pivotal role in economic development of this country through investment in economic activities and provision of social amenities. In the oil and other mineral resources sector, private sector is involved in exploration of oil/gas and minerals and mining. Private companies also invest in distribution and marketing of oil/gas and mineral resources. The two ministries will create an enabling environment for the private sector participation in the implementation of the plan, which includes monitoring and evaluation and reporting on progress made. The private sector will participate as independent investments and/or in Public Private Partnerships.

2.7 Stakeholders Analysis

The oil and other minerals sector has a number of stakeholders who participate in policy formulation, implementation of programmes and projects as well as monitoring the implementation of the programmes and projects in the sector. The stakeholders have varied expectations as summarized in Table 0-1.

Table 0-1 Stakeholder Analysis

Stakeholder	Stakeholder Expectations
Ministry of Energy and Petroleum Ministry of Mining	<ul style="list-style-type: none"> • Formulation and dissemination of policies, laws, regulations, procedures • Generation and accessibility of basic data and information on oil/gas and other mineral resources • Coordination of stakeholders in the oil/gas and other minerals sector • Marketing and promotion of the oil/gas and other minerals • Mobilization of resources • Capacity building
Other Government Institutions/ Line Ministries	<ul style="list-style-type: none"> • Timely and accurate information and reports • Revenue generation from mining of oil/gas and other minerals • Provision of data on natural resources/environment and geo-information services • Budgetary support and fiscal regime formulation (The National Treasury) • Strict adherence to laws, regulations and policies to minimize legal tussles (Attorney General office) • Efficient and timely provision of technical services • Collaboration and networking
Industry	<ul style="list-style-type: none"> • Affordable energy in the form of oil/gas and oil/gas products • Availability of minerals as raw materials for industries
Public/Citizens	<ul style="list-style-type: none"> • Availability of oil/gas products at affordable prices • Timely access to data and information • Equitable sharing of revenues from oil/gas and other minerals • Transparency and accountability • Efficient and prudent utilization of resources • Amicable conflict resolutions • Employment and wealth creation
Research and academic institutions	<ul style="list-style-type: none"> • Timely access to data and information • Knowledge management and sharing • Manpower development • Development of appropriate technologies • Collaboration in research and internship

Private companies/investors	<ul style="list-style-type: none"> • Timely and accurate information and reports sharing • Encouragement and promotion of viable Public Private Partnership • Investment in exploration and mining of oil/gas and other minerals • Efficient and timely provision of commercial technical services • Contract compliance • Private sector forum • Amicable conflict resolutions
Professional bodies including regional and international forums	<ul style="list-style-type: none"> • Subscriptions • Participation in the forums • Implementation of resolutions
Civil societies (NGOs, FBOs, CBOs etc)	<ul style="list-style-type: none"> • Timely and accurate information and reports sharing • Transparency, accountability, governance • Contract compliance • Collaboration
Development Partners and International Organizations	<ul style="list-style-type: none"> • Financial probity and technical support • Timely and accurate information and reports • Collaboration in the implementation of programmes • Transparency, accountability, governance • Contract compliance • Meeting international obligations
Parliament	<ul style="list-style-type: none"> • Timely information sharing • Appropriate legislation to govern the sector • Budgetary framework linked to performance • Transparency, accountability, governance
County governments	<ul style="list-style-type: none"> • Equitable sharing of resources • Information sharing • Amicable conflict resolution
Suppliers & Merchants	<ul style="list-style-type: none"> • Timely information sharing • Transparency in procurement of goods and services • Timely payment for goods and services
Media	<ul style="list-style-type: none"> • Reliable data and information
Staff (Internal customers)	<ul style="list-style-type: none"> • Training and development • Conducive working environment • Appropriate working tools • Welfare of staff • Better terms and conditions of service

2.8 Current Regulatory Framework

Currently the sector is being regulated through:

- Petroleum Exploration and Production Act Cap 308 and Energy Act;
- The Mining Act Cap 306;
- The Trading in Unwrought Precious Metal Cap 309;
- The Diamond Industry Protection Act Cap 310;

- The Gold Development Loans Act Cap 311 (moribund); and
- The Explosives Act Cap115.

These acts are inadequate to reflect modern best practices and hence require review. Other relevant regulatory instruments are the National Environment and Co-ordination Act (EMCA) and Income tax (Amendment) Act.

3 CHALLENGES AND EMERGING ISSUES

There are numerous challenges and emerging issues affecting realization of full potential in the Oil/Gas and Other Mineral Resources Sector. Outlined below are the major challenges and emerging issues:

3.1 Legal, Regulatory and Institutional reform

The policies, laws and institutions that presently govern the mineral sector in the country need significant reform if the sector is to grow sustainably and contribute to economic development and poverty reduction in the counties. The highest priority must be given to finalizing the Mining Bill (2013) and Energy Bill (2013). Kenya needs a shared vision of how development of oil/gas and minerals will take place at the counties, building on experiences from across the world.

The bills must define the role and mandate of the state and its public institutions in the sector, and make very clear what public institutions at the county level will exercise; what regulatory roles are and the relationships between them; how, if at all, decentralization might apply to governance of the mineral sector; specify the environmental obligations of operators consistent with internationally recognized safeguard standards; define arrangement governing provision for community development and benefits sharing, including roles to be played by different stakeholders; address the rights of vulnerable groups that might be impacted adversely by mineral sector development and measures for their protection.

3.2 Government Revenue Collection

The development of a productive and profitable mineral sector can provide a new source of government tax revenues that could be substantial relative to non-mineral revenue sources. It will be important to ensure that the government obtains a fair share of mineral rents but, in doing so, it must strike the right balance between inducing investment at the counties and generating tax revenue. This calls for a fiscal regime for the Oil/Gas and other Minerals sector that takes account of the uncertainty, risks and rewards inherent in Oil and other minerals operations and recognizes that the country, particularly in this early phase of oil and gas sector development, competes for investment with countries that may offer equal or better investment opportunities within the region.

It is well known that natural resource exploitation of oil and gas requires extensive investment before it becomes valuable and beneficial to the society. It requires investment in infrastructure, physical capital and knowledge. Thus, investing in knowledge is a legitimate component of a forward-looking economy that will be an ultimate objective of the government.

3.3 Politics, dispute management and environmental issues

Oil and gas development faces political and environmental issues. Political issues stem from the overlapping and disputed claims of economic sovereignty. Environmental issues pertain to the preservation of Fauna and Flora species unique to the areas where oil, gas or other minerals have been discovered, particularly Turkana and Kwale. The environmental impact of oil exploration is a dominant driver for most technology development in the industry today. Although much of this effort is focused on waste treatment and disposal, a significant amount of waste prevention will be crucial. Development of technologies to displace less material during mining will result in reduced environmental impact. A long-term vision for the industry would find constructive use for all material removed in the oil drilling area.

Kenya has a maritime boundary dispute with Somalia, in the Indian Ocean Waters. There is also gazetted oil and gas exploration blocks that are located in the disputed area offshore the Lamu basin, and resolution of the dispute will be required to avoid resource-fuelled disputes, which are even harder

to mediate than others. The disputed Ilemi triangle between South-Sudan and Kenya also lies in the Tertiary basin stretching over three exploration blocks in that region. Although it takes time to resolve sovereign boundary disputes, it is important that faster solutions are sought to foster confidence with international companies. There has not been disagreement between exploring companies in the country, but the scenario in other countries should be a strong lesson for us, in formulation laws that govern such partnerships.

3.4 Managing Expectations

Like most mineral resources, oil exploration and exploitation takes place in the location of the resource and, subsequently, transformations (physical and socio-economic) are bound to occur in the area of discovery as it accommodates this new activity. With such transformations, especially in remote areas where oil and other minerals are, sensitive issues will arise which, if not addressed beforehand, may cause unnecessary tension and civil strife in future. Specifically, different stakeholders have different expectations regarding the economy of the country and especially those in the location where the resource is located. Turkana County has the highest poverty level of about 94 per cent, and is the sixth least densely populated county in Kenya. The county is among the five least developed in terms of infrastructure and other supporting socio-economic facilities. The burning question in the mind of the locals is what the national government will do to ensure citizens (especially those domiciled next to resource sites) have correct information, capacity and expectations to avoid unwarranted anxiety and excitement.

Although development of the oil resource will take a few years to commence, there has not been any systematic attempt to establish opinions and expectations of the public, who will be largely affected by the projects. There exist a lot of expectations at different levels of society with respect to the resource, and there has not been any identification of these expectations and ways to manage them. This has the potential of breeding negative sentiments in future, if the unidentified expectations of different groups are not met, and are not managed early enough.

Imperatively, the government must take cognizance of the fact that , like any other non-renewable resource, Oil (in general hydrocarbons) could be compared to a capital asset granted to a country for a limited period of time , and it must, therefore be used for the greatest and sustainable benefit of a country. This brings into focus the relevant issue of the government's general objectives with respect to the hydrocarbon sector. The statement of such objectives by the government would help in drafting laws, regulations and setting up institutions geared towards achieving the stated objectives. Since exploration and development of oil resources are long-term activities, the state should have clear objectives of how to handle both stages before signing any contracts with investors. In most cases a government's objective regarding exploration and development of natural resources revolve around the issues of sovereignty, economic growth and environmental protection.

3.5 Transparency, Rents Transfer and Rent Seeking

Transparency is key to achieving public acceptance of a contract. It is a necessary condition to all civil society and the public to provide an informal mechanism of checks and balances, where formal mechanisms are not adequate. Transparency is the only way to dispel the constant concerns of greed and corruption often associated with mineral contracts, and it prevents government officials from agreeing to the terms that the citizenry may deem unacceptable and subject to constant criticism and attack. Public and private sectors have different interests, which overlap with social welfare. Political stability is fundamental to government, while the private sector is concerned with stable property rights. Thus, the government has two competing objectives that is to maintain stability and to promote

investment to achieve economic growth. Asset redistribution is central for stability in the counties as devolution takes root.

Experiences from other countries show that there is a significant disconnect between mining companies and the local governance structures in the areas in which they are located, resulting in distrust between the local communities and mining companies. The secrecy within which many mining agreements are drafted and signed, and the lack of involvement of the local citizens in decision-making and lack of information regarding the resources has been a major source of mistrust and disgruntlement in the mining sector. Thus, transparency and accountability are important issues for the industry. Transparency includes the disclosure of the terms of contracts and the payments due to both the locals and the state.

3.6 Devolution and Land Issues

The ongoing decentralization process that establishes a bottom-up development planning system is a potential avenue to catalyze development of the mineral sector in counties. However, it must overcome the reluctance of the central government to devolve responsibilities and budget to the county administrations, which stems from concerns over weak administrative capacity and lack of effective accountability at the counties.

Large-scale mining has a big appetite for land. The land currently used or will be used for mining was traditionally used for agriculture and pastoralism, both being major factors in sustaining local livelihoods, especially those of the Turkana people. Many of the people who are likely to be affected do not know their rights and the amount of compensation they ought to eventually receive a fact that the multinational companies may take advantage of. There is need to develop a clear mechanism of engagement by the mining companies and the local people with elaborate guidelines on land acquisition and compensation.

3.8 Resource Curse and Institutional Set-Up

Existing empirical evidence seems to demonstrate without exception that countries that have managed to circumvent the resource curse demonstrate superior organizational settings, with sound institutions or good leadership able to insulate windfalls from political interferences. Weak institutions may lead to wasteful spending or distorted allocations. It is widely recognized that the quality of political and economic institutions, such as the type of property rights arrangements and the quality of state bureaucracy, determines to a great deal whether natural resource rents will be managed to the benefit of the economy and society. This is clearly negatively evidenced by the disappointing case of Nigeria's Niger Delta. With natural resource wealth such as oil, there can be so much wealth floating around the government that it can be easier to engage in unproductive rent-seeking activities than in creating more wealth. This is the situation Kenya should avoid at all costs.

Lessons from around the world emphasize that oil and gas sector growth will need to be managed wisely to avoid mismanagement, inequitable sharing of benefits and disregard of the interests of the environment and communities. Economic policies and public financial management will have to be adapted to take into account the potential magnitude and volatility of mineral revenue flows and decide how revenues might be allocated. Reforms should take advantage of the county devolution process to catalyze sustainable development out of mineral sector growth in counties. However, this will require devolution of responsibilities and budget to the county administrations, coupled with improved administrative capacity and effective accountability.

3.9 Regional Implications

The discovery of oil and gas in Kenya has implications and presents new opportunities to chart a

sustainable growth and development path for Kenya. The first implication is that Kenya will now have renewed energy to push for the development of the facilities necessary to transport and export oil, and specifically to build a huge deep-water port on the resort island of Lamu and a pipeline across Northern Kenya to connect to the port. These projects are already underway for South Sudan to export its oil without having to go through Sudan. These projects will need to be fast-tracked. Kenya will also be hopeful its oil will give it greater influence in regional and international affairs.

For Kenya's neighbour, Ethiopia, the discovery of oil in Turkana is of particular interest. The East African Rift Basin, where the oil was found, is divided between Kenya and Ethiopia. If there is oil on the Kenyan side, then there is very good chance there is oil on the Ethiopian side too. We expect exploratory drilling in Ethiopia to gain momentum. If these explorations are successful, Kenya still stands to benefit as land-locked Ethiopia and South Sudan, may need to use Kenyan pipelines and ports to export their oil.

3.10 Other challenges in the sector

- Huge financial outlays for exploration and production of oil, gas and other mineral resources hence limited data;
- Inadequate funding of the sector Ministries. This constrains exploration and development of minerals;
- Limited attraction of capital for exploration and production activities. Before oil/gas and other mineral resources are discovered, the country is considered a frontier and high risk for investments;
- Human capacity constraints. There is shortage of specialized local manpower in the field of mining, petroleum geology, geo-physics and reservoir and production engineering;
- Inadequate specialized exploration and survey equipment;
- Inadequate infrastructure development of the requisite network of roads railways, ports, pipeline, and refining and distribution systems to support the mining and oil sector;
- High expectations from host community leading to conflicts;
- Low value addition for mineral resources hence low returns;
- Environmental and health concerns i.e. derelict land, pollution, use, exposure and disposal of toxic substances, and illegal use of explosives; and
- Volatility in international market prices for oil, gas and other minerals.

3.11 Way Forward

The recent discoveries of oil, gas and rare earth minerals suggest that these will be potentially important resources for the country going forward. How they contribute to the imperative of job creation and ensure inclusive and sustainable development will depend on how the country manages the oil and gas value chain. It must be recognized that oil and gas sectors, from examples in other jurisdictions in Africa, generally do not create jobs or allow for inclusive development. They will only do so if accompanied by a matrix of policies, programmes and projects that engender transparency and foster economic diversification. These must be supported by an effective, capable, well-capacitated state and human resource base at all levels of government.

There is need to develop a comprehensive Natural Resource Charter based on the Constitution and, leveraging on good practices globally, give it the force of law. It should be adopted by all the 47 county assemblies and endorsed by Parliament to guide the operations of the oil and gas sector as well as the rest of the extractive industries. This will help in ensuring that benefits and costs are shared throughout the whole country in an acceptable manner, and reduce the tensions and conflicts that have been the bane of such efforts globally.

While giving prominence to oil exploitation, the country should be cautious given that such resources bring risks in that too many people become locked in low-skill intensive natural-resource-based industries, and thus fail – through no fault of their own – to advance their own or their children's education and earning power. The oil sector directly generates very few jobs, the bulk of employment is consequently

from the non-oil economy and the non-oil tradable sector. Therefore, good economic policies will matter to transform rents into sustained growth and create value in the extractive value chain, hence job creation and durable poverty reduction especially in the counties where oil will be mined and given that poverty levels in the region are the highest. The capacity of policy formulation and execution in a coordinated way is thus fundamental. The country context and political economy matter a great deal, but should not be the main driving force behind windfall management, to avoid excessive rent-seeking activities, inefficiency and wasteful spending.

4 PROGRAMMES AND PROJECTS FOR 2013-2017

4.1 Introduction

The Second MTP has outlined various flagship projects to be implemented during the period. This chapter presents the strategic objectives, programmes and projects that the sector has prioritized for implementation. The implementation will include the requisite budgetary allocation, human capital, appropriate technology and defined timelines.

4.2. Strategic Objectives

The overall goal of oil/gas and other mineral resources sector is to sustain exploration, development and production of oil/gas and other minerals for the benefit and welfare of all Kenyans. The goal is to establish the commercial viability, develop the requisite infrastructure and production in the oil/gas and other minerals sector. This goal will contribute significantly to the ten (10) per cent annual growth targeted to make Kenya a globally competitive middle income economy by 2030. To achieve this goal, the sector players will focus on these key strategic objectives during the MTP II period:

4.2.1 Oil sub-sector

The Ministry of Energy and Petroleum will focus on the following strategic objectives to spur economic growth through:

- Petroleum exploration, development and production of oil/gas.
- Processing, distribution and marketing of oil/gas products; and
- Increase electric power generation.

4.2.2 Other Mineral Resources sub-sector

The Ministry of Mining will focus on the following strategic objectives to spur economic growth through the minerals and mining sector:

- Formulate and implement policies, laws and regulations governing the extractive industry, commercial explosives and geo-information services;
- Carry out geological surveys, mineral exploration and deposit evaluation for development, management and audit;
- Establish systems and structures for management of mine health, safety and environment;
- Undertake assessment, mapping and monitoring of land cover and land use for conservation, planning and decision making;
- Develop geospatial data infrastructure for effective collection, analysis and dissemination of mineral, environmental and natural resources information for planning and decision making;
- Promote capacity building to improve efficiency, proficiency and productivity in the mining sector and geo-information services; and
- Promote commercialization of the mining industry.

4.3 Flagship Projects

4.3.1 Oil sub-sector

The following are the flagship projects for the oil/gas sub-sector as outlined in the Second MTP:

- Restructure the institutions within the oil sub-sector i.e. restructure and enhance the National Oil Corporation of Kenya financial capacity to conduct upstream business;
- Sub-divide and create new petroleum exploration blocks based on technical data;
- Facilitate development of rail and road networks for exploitation of the coal deposits in Mui Basin and other parts of the country;
- Enhance primary data acquisition, analysis and interpretation in the open blocks so as to make them attractive to investors;
- Establish a national petroleum data centre;
- Enhance partnership in data exchange so as to reduce cost in exploration and access to new technology;
- Skills development and enhancement of local expertise in petroleum exploration and production through training, technical collaboration with exploration companies and universities;
- Develop Logistics and Supply Chain Management for the oil and gas;
- Effectively manage the environment and social economic issues;
- Develop the LAPSET corridor which includes construction of 1,400 km of crude oil pipeline from Lamu to Juba in South Sudan, an oil refinery in Lamu, modern oil terminal at Lamu Port, a second pipeline to transport refined oil products to Ethiopian market and construct a pipeline from Lamu to the existing Mombasa/Kampala pipeline;
- Develop a policy on management of commercial discoveries of petroleum resources;
- Revise the Energy Bill of 2012;
- Review and update the Petroleum (Exploration and Production) Act (Cap 308);
- Reconstitute the National Fossil Fuels Advisory Committee (NAFFAC);
- Acquire specialized survey and exploration equipment; and
- Enhance corporate governance in the government institutions charged with petroleum exploration and development.

4.3.2 Other Mineral Resources sub-sector

Over the Plan period, the Ministry of Mining will strive to implement the following flagship projects:

- Restructure the institutions within the other mineral resources sub-sector;
- Conduct a National Airborne Geo-physical Survey;
- Conduct mineral exploration and evaluation;
- Create a Special Mineral Processing Economic Zones;
- Establish an Internationally accredited Mineral Certification Laboratory;
- Establish a Mineral Audit Agency;
- Facilitate the establishment of Minerals and Metal Commodity Exchange;
- Establish a Geological Survey and Research Centre;
- Establish a Mineral Sovereign Fund;
- Establish a National Mining Corporation;
- Establish a National Seismological Network;
- Undertake geo-hazard mapping and monitoring;
- Enhance partnership in data exchange so as to reduce cost in exploration and access to new technology;
- Undertake commercial production of Kwale mineral sands project (titanium);
- Develop a single fiscal regime for mining;
- Develop a National Mining Policy, Legal, Regulatory and Institutional Framework;
- Participate in the Extractive Industry Transparency Initiative
- Facilitate establishment of a National Mining Institute
- Develop online mining cadastre system

5 SECTOR POLICIES, LEGAL AND INSTITUTIONAL FRAMEWORK

5.1 Introduction

For successful exploration, exploitation, development and management of oil/gas and other minerals, the Government ought to put in place sound policies, strong legal and functional institutional framework to coordinate sector players more effectively. This chapter presents the policies, legal and institutional framework needed to drive and govern this sector.

5.2 Reforms in the Legal Framework

The sector has been governed by several legal frameworks as described in chapter 2 (section 2.8). These legal provisions need to be reviewed to conform to the Kenya Constitution (2010) and international best practices.

The Ministry of Energy and Petroleum is currently reviewing the Energy Policy, Energy Act, Petroleum (Exploration and Production) Act Cap 308 to address the current constitution provisions and best international practice.

Similarly, the Ministry of Mining is developing Mining and Minerals Policy and Bill to repeal the Mining Act Cap 306; The Trading in Unwrought Precious Metal Cap 309; the Diamond Industry Protection Act Cap 310; The Gold Development Loans Act Cap 311 (moribund). In addition, the Ministry will develop Commercial Explosives Policy and review the Explosives Act Cap 115, Extractive Industry Governance Policy, and develop the Natural Resources Data and Information Policy and Bill.

5.3 Reforms in the Institutional Framework

It is noted that past institutional arrangements in oil/gas and other mineral resources sector are inadequately positioned to implement the necessary policies and regulations to facilitate the sector. It should be noted that effective institutional arrangements are pre-conditions for maximizing Kenya's benefits from oil/gas and other mineral resources.

5.3.1 Oil/gas sub-sector

The oil/gas sub-sector entails upstream, midstream and downstream activities. The institutional reforms include:

- National Oil Corporation - restructuring the institution to expand exploration programmes and enhance marketing capacity;
- Kenya Pipeline Company - restructuring the institution to enhance the capacity and extend the outreach. This is by building a new parallel line and replacing the old pipeline, extending the line to Kampala, and construction of a pipeline within the LAPSSET Project; and
- Construction of oil refinery in Lamu and upgrading of Kenya Petroleum Refinery in Mombasa.

5.3.2 Other Mineral Resources sub-sector

In the Other Mineral resources sub-sector, the following institutional reforms will be undertaken:

- Establish directorates in the Ministry of Mining to facilitate realization of the full potential of the mining sector;
- Minerals Resources Development Corporation;
- Coal Development Corporation: To undertake all coal related business including exploration, mining and consumption;
- Mineral Audit Agency: To establish the true value, quantity and quality of minerals;
- Metal and Mineral Commodity Exchange: To attract investment through trading of futures;

- Value Addition Centres: To process the raw minerals before they are sold/exported;
- Internationally Accredited Certification Laboratory: To confirm certain characteristics of a mineral in terms of identification, quality, quantity and value;
- National Mining Corporation: Mining Corporation which shall be the investment arm of the National Government in respect to minerals; and
- National Institute of Mining: To build human capacity in mining sector.

6 MONITORING AND EVALUATION AND REPORTING

6.1 Introduction

The implementation of this sector plan requires the participation and involvement of all stakeholders. It is expected that each stakeholder will carry out respective responsibilities and report on progress made on a timely basis. The stakeholders should be involved in participatory monitoring and evaluation of their programmes and projects. Each stakeholder will be expected to develop comprehensive annual work plans and cost the activities/strategies. It is also expected that stakeholders will report on attainment of the indicators geared towards achievement of the targets.

6.2 Monitoring and Evaluation and Reporting

Each ministry involved in oil/gas and other mineral resources sector will constitute M & E Committee to conduct continuous monitoring and periodic evaluation of the Plan. Top management will ensure projects in the plan are incorporated in their performance contracts, and annual work plans and report on the attainment of the targets. Reporting will be done quarterly by the committee and annual reports will be published.

ANNEX 1: IMPLEMENTATION MATRIX

Pro-gramme/ Project	Objectives	Expected Output/Out- come	Implement- ing Agency	Time Frame	Source of Funds	Total cost (KSh. Mil- lions)	Indicative Budget (KSh. Millions)					
							2013/14	2014/15	2015/16	2016/17	2017/18	
Goal	Establish the commercial viability, develop the requisite infrastructure and production in the oil, gas and other minerals sector											
Strategic objectives	Data collection, collation and analysis; enhance partnership in data exchange so as to reduce cost in exploration and access to new technology, skills development and enhancement of local expertise; commercial production of oil and mineral resources; development of the requisite infrastructure											
National airborne geophysical survey	To identify potential mineralized areas for ground follow-up	Potential mineralized areas mapped	MoM	2013 - 2017	GoK/DPs	27,000	7,000	5,000	5,000	5,000	5,000	5,000
Upgrade and annual maintenance of mining cadastral system	To implement allow online transactional application	Web portal for public access	MoM	2013 - 2017	GoK/DPs	55	30	5	5	5	5	5
Geological survey and research	To increase geological data acquisition	Geological mapping of the country	MoM	2013 - 2017	GoK/DPs	89	9	20	20	20	20	20
Mineral exploration and evaluation	To evaluate mineral deposits in the country	Resource evaluation reports	MoM	2013 - 2017	GoK/DPs	1,000	100	300	200	200	200	200
Mine health, safety and environment	To improve health and safety in mines and quarries	Reduced mine fatalities	MoM	2013 - 2017	GoK/DPs	82	2	20	20	20	20	20

Pro-gramme/ Project	Objectives	Expected Output/Outcome	Implementing Agency	Time Frame	Source of Funds	Total cost (KSh. Millions)	Indicative Budget (KSh. Millions)				
							2013/14	2014/15	2015/16	2016/17	2017/18
Geo-hazard mapping and monitoring	To reduce risk from geo-hazards and contribute to the national disaster platform	Reduced death and loss of property due to geo-hazards	MoM	2013 - 2017	GoK/DPs	50	10	10	10	10	10
Purchase of specialized tools and equipment	To facilitate effective geological and mineral data collection and interpretation	Equipment and tools purchased	MoM	2013 - 2017	GoK/DPs	2,420	400	550	520	500	500
Hosting of SEAMIC Governing Council	To host SEAMIC Governing Council	Agenda and programme of work	MoM	2014-2015	GoK/DPs	15	15	0	0	0	0
National geo-sciences data and information centre	To enhance access to and dissemination of geological data and information	Databases developed	MoM	2013 - 2017	GoK/DPs	120	20	30	30	20	20
Mineral audit agency	To value minerals for the purpose of taxation	Increased revenue to the country	MoM	2013 - 2017	GoK/DPs	750	150	150	150	150	150
Mineral certification laboratory	To establish an accredited mineral laboratory	Strengthened capacity for mineral analysis and identification Increased revenue	MoM	2013 - 2017	GoK/DPs	1,150	450	300	200	100	100

Pro-gramme/ Project	Objectives	Expected Output/Outcome	Implementing Agency	Time Frame	Source of Funds	Total cost (KSh. Millions)	Indicative Budget (KSh. Millions)				
							2013/14	2014/15	2015/16	2016/17	2017/18
Minerals and Metals Commodity Exchange Agency	To promote awareness on the potential and market of identified minerals	Regional hub created for trading in minerals and metals	MoM	2013 - 2017	GoK/DPs	250	50	50	50	50	50
Mineral Processing Economic Zones	To promote and develop skills and value addition	Processed raw minerals	MoM	2013 - 2017	GoK/DPs	1,750	400	400	400	300	300
Mineral Value Addition Centers	To promote value addition on minerals to maximize benefits.	Gold refinery and gemstone cutting center	MoM	2013-2017	GoK	1,000	200	200	200	200	200
National Mining Corporation	To serve as the investment arm of the National Government	National Government investing in prospecting and mining	MoM	2013 - 2017	GoK/DPs	1,150	400	300	250	100	100
Commercial Explosives Policy and Bill	To modernize the commercial explosive regulatory regime	Draft commercial explosives policy and bill	MoM	2013 - 2017	GoK/DPs	94	4	30	30	30	0
Minerals and Mining Policy and Bill	To modernize the Mineral and mining regulatory regime	Draft minerals and mining policy and bill	MoM	2013 - 2017	GoK/DPs	94	4	30	30	30	0

Pro-gramme/ Project	Objectives	Expected Output/Outcome	Implementing Agency	Time Frame	Source of Funds	Total cost (KSh. Millions)	Indicative Budget (KSh. Millions)				
							2013/14	2014/15	2015/16	2016/17	2017/18
Mineral Sovereign Fund	To support national savings from mineral revenues to ensure sustainable and stable income in future	An account in Central Bank	MoM	2013 - 2017	GoK/DPs	500	100	100	100	100	100
National seismological network	To monitor earthquakes	Six seismic stations established	MoM	2013 - 2017	GoK/DPs	500	100	100	100	100	100
National Institute of Mining	To build local capacity for mining and mineral industry	Well trained industry personnel	MoM	2013 - 2017	GoK/DPs	355	5	50	100	100	100
Natural Resource Data and Information Policy & Bill	To develop a policy that ensures sustainable management of natural resources	Policy document; a Natural Resource Data and Information Act	MoM / DRSSRS	2013-2017	GoK/DPs	75	50	10	15	-	-

Pro-gramme/ Project	Objectives	Expected Output/Out- come	Implement- ing Agency	Time Frame	Source of Funds	Total cost (KSh. Mil- lions)	Indicative Budget (KSh. Millions)				
							2013/14	2014/15	2015/16	2016/17	2017/18
Development of Natural Resources Geo-database and ICT infra- structure	a. To analyse, store, and dissemi- nate data and infor- mation for sustainable manage- ment of environ- ment and natural resources	Created databases on land use/land cover, status wildlife/livestock populations in the rangelands, and vegetation/ forest cover	MoM / DRSRS	2013- 2017	GOK/DPS	87	13	15	17	20	22
Aerial surveys for natural resource as- sessment and monitoring in the rangelands	b. To gener- ate data and in- formation on envi- ronmental attributes and status of wildlife/ livestock in the range- lands	Mapped spatial distribution of natural resources; Mapped wildlife dispersal areas, migratory routes/corridors	MoM / DRSRS	2013- 2017	GOK/DPS	262	40	42	50	60	70

Pro-gramme/ Project	Objectives	Expected Output/Outcome	Implementing Agency	Time Frame	Source of Funds	Total cost (KSh. Millions)	Indicative Budget (KSh. Millions)				
							2013/14	2014/15	2015/16	2016/17	2017/18
c. Effective management of the environment / Natural Resources and socio-economics	d. To study the impacts of mining activities on the environment and natural resources	e. Impacts in specific areas established and documented	f. MOM / DRSSRS	2013-2017	GOK/DPS	74	0	15	17	20	22
Surveys for land use/land cover assessment and mapping	g. To generate spatial data and information on land use/land cover and land degradation	Land use and land cover assessed and mapped	MOM / DRSSRS	2013-2017	GOK/DPS	147	24	26	30	33	34
Oil/Gas sub-sector											
Coal plant at Kilifi	To increase power capacity.	600MW	KenGen	2013-2017	2013-2017	GoK/DPS	20,400	20,400	20,400	20,400	20,400
Mombasa Coal plant –Mariakani line.	Evacuation of Mombasa coal plant	100km 400KV double circuit line	KETRACO	2014-2017	Funding not yet confirmed	5,040	0	500	2,520	2,020	0

Pro-gramme/ Project	Objectives	Expected Output/Outcome	Implementing Agency	Time Frame	Source of Funds	Total cost (KSh. Millions)	Indicative Budget (KSh. Millions)				
							2013/14	2014/15	2015/16	2016/17	2017/18
Development of the Mombasa Petroleum Trading Hub	To increase upstream petroleum services	Increased oil and gas exploration and exploitation	MoESP through NOCK.	2013-2017	PPP and GoK.	52,500	10,500	10,500	10,500	10,500	10,500
Construction of new Mombasa – Nairobi New Oil Pipeline	To improve supply reliability and safety	Modernized pipeline	KPC	2013 - 2016	KPC	30,000	10,000	8,686	0	0	0
Construction of a parallel Oil Pipeline from Sinendet to Kisumu	To improve supply reliability and Safety	Completed Pipeline	KPC	2013-2016	GoK	5,556	2,028	2,028	0	0	0
Nairobi LPG Storage, Bottling and Distribution Facilities	To promote usage of LPG.	Enhanced LPG accessibility and reduced cost	KPC	2013 - 2016	KPC and Private Investor.	1,500	500	500	0	0	0
Kenya – Uganda Oil Pipeline Project	To increase supply reliability and safety	Modernized pipeline	GoK	2013 - 2016	GoK/ Donor	30,000	10,000	10,000	0	0	0
Construction of additional storage tanks	To increase supply reliability and safety	Additional Tanks	KPC	2013 - 2017	GoK/ Donor	2,338	524	524	524	526	526

Pro-gramme/ Project	Objectives	Expected Output/Outcome	Implementing Agency	Time Frame	Source of Funds	Total cost (KSh. Millions)	Indicative Budget (KSh. Millions)				
							2013/14	2014/15	2015/16	2016/17	2017/18
Installation of a third pump in the Mombasa – Nairobi oil pipeline	To improve efficiency of the pipeline	Pumps installed	KPC	2013 - 2015	GoK	1,700	500	600	600	0	0
Expansion of truck loading facilities at Eldoret Depot	To improve efficiency at Eldoret Depot	Truck loading facilities expanded	KPC	2013-2014	GoK	351	351	0	0	0	0
Installation of integrated security system	To improve security within KPC facilities	Integrated Security System improved	KPC	2013-2014	GoK	368	368	0	0	0	0
Expansion of NOCK Market share	To expand retail network	20 additional retail stations opened per year NOCK's market share stand at 15% by 2018.	NOCK	2013 - 2017	GoK/ NOCK	5,250	1,050	1,050	1,050	1,050	1,050
Procurement of National Strategic Stocks of petroleum products	To stabilize oil industry	1.5 million barrels of bulk petroleum products procured	MoE&P / NOCK, KPC	2013 -2017	GoK.	14,000	2,800	2,800	2,800	2,800	2,800

Pro-gramme/ Project	Objectives	Expected Output/Outcome	Implementing Agency	Time Frame	Source of Funds	Total cost (KSh. Millions)	Indicative Budget (KSh. Millions)				
							2013/14	2014/15	2015/16	2016/17	2017/18
Oil Exploration and exploitation	To discover and exploit oil and gas reserves	Oil from explored wells exploited. 10 exploration wells drilled	MoE&P, IOCs	2013-2017	IOCs, MoE&P	255,000	51,000	51,000	51,000	51,000	51,000
Establishment of an Integrated Data Management System	To computerize existing manual systems in licensing of petroleum businesses, Management. Monitoring and implementation of petroleum Exploration Programmes, licensing of petroleum Retail Businesses, licensing of petroleum logistic facilities businesses & licensing of petroleum road transportation businesses	Integrated Data Management System developed	MoE&P	2013-2017	GoK						

Pro-gramme/ Project	Objectives	Expected Output/Outcome	Implementing Agency	Time Frame	Source of Funds	Total cost (KSh. Millions)	Indicative Budget (KSh. Millions)				
							2013/14	2014/15	2015/16	2016/17	2017/18
Establishment of a modern petroleum analytical Laboratory	To enhance analysis of all rock samples, cutting to ascertain the results of petroleum prospects	Petroleum analysis enhanced	MoE&P	2013-2017	GoK	500					
Development of 250MW Medium Speed Diesel electricity generation plants	To increase power generation from medium speed diesel electricity generation plants	87MW Thika power plant	MoE&P	2013-2017	GoK	631	87				
		80MW Kitengela Triumph power plant	MoE&P	2013-2017	GoK		80				
		83MW Athi River Gulf power plant	MoE&P	2013-2017	GoK		83				
Development of 1920MW electricity generation from Coal	To increase power generation from coal	960MW Lamu Coal Project	MoE&P	2013-2017	GoK			960			
		960MW Kitui Coal Project	MoE&P	2013-2017	GoK				960		
Development of 875MW electricity generation from Liquefied Natural Gas	To increase power generation from gas	875MW of in-stalled LNG/IPP	MoE&P	2013-2017	GoK			700	175		

Pro-gramme/ Project	Objectives	Expected Output/Out- come	Implement- ing Agency	Time Frame	Source of Funds	Total cost (KSh. Mil- lions)	Indicative Budget (KSh. Millions)				
							2013/14	2014/15	2015/16	2016/17	2017/18
Redevelopment of 175MW of existing Medium Speed Diesel to LGN power plants	To improve efficiency of Medium Speed Diesel to LGN Power Plant	175MW of LNG generation	MoE&P	2013-2017	Gok				175		
Concessioning of Blocks C & D in Mui Basin – Kitui County	To increase tonnage of coal	Concession contract	MoE&P	2013-2017	Gok						
Re-tendering for concessioning of Blocks A & B	To increase tonnage of coal	Concession Contract	MoE&P	2013-2017	Gok						
Tendering of 31 new blocks delineated outside the Mui Basin	To increase tonnage of coal	New exploration blocks tendered	MoE&P	2013-2017	Gok						
Development of infrastructure associated with coal mining in Mui Basin	To increase tonnage of coal	Infrastructure network developed	MoE&P	2013-2017	Gok						

Pro-gramme/ Project	Objectives	Expected Output/Outcome	Implementing Agency	Time Frame	Source of Funds	Total cost (KSh. Mil-ions)	Indicative Budget (KSh. Millions)					
							2013/14	2014/15	2015/16	2016/17	2017/18	
Revamp NOCK as a Government's agency in participation in Petroleum and Natural Gas Explorations	Enhance NOCK's capacity in exploration of oil/gas	3 blocks with commercial discoveries of oil and/or gas	MoE&P	2013-2017	GoK		491.9	119				
Construction of Geo-chemical and Petro-physical laboratory	To enhance chemical analysis of petroleum	1 Combined Laboratory (Geochemical & Petro-physical) developed	MoE&P	2013-2017	GoK	371	198	173				
Construction of a National Petroleum Data Centre	To improve data & information on petroleum	1 National Petroleum Data Centre developed	MoE&P	2013-2017	GoK	36.4	11.8	24.6				
Establishment of Petroleum and Natural Gas Drilling Services Unit	To enhance provision of drilling services for oil & gas	1 Drilling Service Unit developed	MoE&P	2013-2017	GoK							
Creation of new petroleum exploration blocks	to increase oil exploration	18 New petroleum exploration blocks created & gazetted	MoE&P	2013-2017	GoK	15	3	3	3	3		3

Pro-gramme/ Project	Objectives	Expected Output/Outcome	Implementing Agency	Time Frame	Source of Funds	Total cost (KSh. Millions)	Indicative Budget (KSh. Millions)				
							2013/14	2014/15	2015/16	2016/17	2017/18
Primary data acquisition in open blocks	To collect geological & geophysical data in open blocks	5 open petroleum blocks enhanced with new primary geological and geophysical data	MoE&P	2013-2017	GoK	5	1	1	1	1	1
Local Manpower Development in Fossil Fuel (Hydrocarbons) Resource Exploration, Development and Production	To improve technical skills & knowledge in fossil fuel	98 Officers trained in various skills related, but not limited, to hydrocarbon exploration, development production, civil engineering, auditing, taxation, petroleum law and petroleum market survey.	MoE&P	2013-2017	GoK/DPs	To be determined					
Construction of New Mombasa – Nairobi New Oil Pipeline	To improve transportation of oil	450km, 20" diameter new oil pipeline and associated infrastructure constructed	MoE&P	2013-2017	GoK/KPC	30,000	10,000	10,000			

Pro-gramme/ Project	Objectives	Expected Output/Outcome	Implementing Agency	Time Frame	Source of Funds	Total cost (KSh. Millions)	Indicative Budget (KSh. Millions)				
							2013/14	2014/15	2015/16	2016/17	2017/18
Development of Mombasa Petroleum Trading Hub	To improve storage of oil	8 Storage tanks of total capacity 800,000MT constructed to ease current storage shortage	MoE&P	2013-2017	GoK/KPC	52,500	10,500	10,500	10,500	10,500	10,500
Construction of a parallel Sindenet-Kisumu Oil Pipeline	To improve transportation of oil	120km, 14" new spur parallel oil pipeline constructed to cater for increased demand in Kisumu and beyond.	MoE&P	2013-2017	GoK/KPC	5,556	1,500	2,028	2,028		
Construction of Eldoret-Kampala Oil Pipeline	To improve transportation of oil	354km, 14" Oil Pipeline constructed to transport petroleum products to Uganda, Rwanda and Burundi.	MoE&P	2013-2017	GoK/KPC	30,000	10,000	10,000	10,000		

Pro-gramme/ Project	Objectives	Expected Output/Outcome	Implementing Agency	Time Frame	Source of Funds	Total cost (KSh. Millions)	Indicative Budget (KSh. Millions)				
							2013/14	2014/15	2015/16	2016/17	2017/18
Installation of a third pumping set at 8 pumping stations along Mombasa-Nairobi Oil pipeline	To improve availability of oil along Mombasa-Nairobi Oil pipeline	8 Pumping sets and all associated facilities installed (i.e., one pump each at Samburu, Maungu, Mananyi, Mtito-An-dei, Makindu, Sultan Hamud and Konza).	MoE&P	2013-2017	GoK/KPC	1,700	500	600	600		
Oil Exploration and exploitation.	To increase availability of oil/gas	10 production wells drilled and developed ready for oil exploitation	MoE&P	2013-2017	GoK/DPs	255,000	51,000	51,000	51,000	51,000	51,000
Construction of LPG Storage, Bottling and Distribution Facilities	To improve availability of gas	2,700 tonnes of LPG Storage facilities constructed at Nairobi (2,000), Nakuru (150), Eldoret (200), Kisumu (300) and Sagana (50)	MoE&P	2013-2017	GoK	1,500	500	500			
Construction of additional storage tanks at Nairobi Terminal	To improve distribution of oil/gas	44 Additional Storage Tanks constructed at Nairobi Terminal	MoE&P	2013-2017	GoK	2,338	240	524	524	524	526

Pro-gramme/ Project	Objectives	Expected Output/Outcome	Implementing Agency	Time Frame	Source of Funds	Total cost (KSh. Millions)	Indicative Budget (KSh. Millions)				
							2013/14	2014/15	2015/16	2016/17	2017/18
Expansion of truck loading facilities at Eldoret Depot	To improve efficiency at Eldoret Depot	5, Additional loading arms constructed at Eldoret Depot	MoE&P	2013	GoK	351					
Installation of integrated security systems in all KPC's depots	To enhance security in KPC depots	5 integrated security systems installed; one at each of the KPC's depots at Mombasa, Nairobi, Nakuru, Eldoret and Kisumu	MoE&P	2013	GoK	368					
Expansion of NOCK Market share	To increase oil/gas distribution	20 additional retail stations set up per year 15% market share by 2018	MoE&P	2013-2017	GoK	5,250	1,050	1,050	1,050	1,050	1,050
Procurement of National Strategic Petroleum products	Stabilized oil industry	1.5 million barrels of bulk petroleum products	GoK, NOCK, KPC	2013-2017	GoK	14,000	2,800	2,800	2,800	2,800	2,800

Pro-gramme/ Project	Objectives	Expected Output/Outcome	Implementing Agency	Time Frame	Source of Funds	Total cost (KSh. Millions)	Indicative Budget (KSh. Millions)				
							2013/14	2014/15	2015/16	2016/17	2017/18
LAPSSET Oil pipelines and Port facilities	To increase capacity	Crude oil and refined Oil pipeline, Oil Refinery, Lamu Oil Terminal and port facilities and Extension of the existing Mombasa-Nairobi pipeline to Lamu.	LAPSSET Authority/ MoTI/MOEP	2013-2017	GoK/ PPP	900,000	100,000	200,000	200,000	200,000	200,000
Construction of new Oil Storage Terminal at Konza City	To increase distribution of oil/gas	12 Oil Storage Tanks with total capacity of 150 million litres constructed	MoE&P	2013-2017	GoK						