

*Paper laid on
18th Dec / 2012
by Hon. R. O. O.*

REPUBLIC OF KENYA



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TENTH PARLIAMENT – FOURTH SESSION - 2012

A FACT FINDING REPORT OF THE
DEPARTMENTAL COMMITTEE ON ENERGY, COMMUNICATIONS AND INFORMATION
ON THE COAL MINING IN MUI BASIN, KITUI COUNTY

CLERK'S CHAMBERS,
PARLIAMENT BUILDINGS,

NAIROBI

MAY, 2012

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List of Abbreviations

AG	Attorney General
BSA	Benefit Sharing Agreement
CS (E) L	Coal Special (Exploration) License
EOI	Expression of Interest
ESIA	Environmental and Special Impact Assessment
EMCA	Environmental Management and Coordination
GDP	Gross Domestic Product
IA	Investment Agreement
IMC	Inter- Ministerial Committee
MCB	Mui Coal Basin
MOE	Ministry of Energy
MEMR	Ministry of Environment and Mineral Resources
NEMA	National Environment Management Authority
PV	Photo Voltaic
RAP	Resettlement Action Plan
RFP	Request for Proposals
SML	Special Mining Lease
USD	United States dollars

1.0 PREFACE

1.1 Committee Mandate

Mr. Speaker,

The Departmental Committee on Energy, Communications and Information was constituted at the commencement of the tenth Parliament and executes its mandate in accordance with the provisions of Standing Order 198 (3), which is:-

- a) to investigate, inquire into, and report on all matters relating to the mandate, management, activities, administration, operations and estimates of the assigned Ministries and Departments;
- b) to Study the programme and policy objectives on Ministries and Departments and the effectiveness of the implementation;
- c) to Study and review all legislation referred to it;
- d) to study, assess and analyze the relative success of the Ministries and Departments as measured by the results obtained as compared with their stated objectives;
- e) to investigate and enquire into all matters relating to the assigned Ministries and Departments as they may deem necessary, and as may be referred to them by the House or a Minister; and
- f) To make reports and recommendations to the House as often as possible, including recommendation of proposed legislation.

Mr. Speaker,

1.2 Committee Members

The Committee Comprises of the following Members of Parliament:-

The Hon. (Eng.) James Rege, M.P. ----- **Chairperson**

The Hon. Maina Kamau, M.P. ----- **Vice Chairperson**

The Hon. Aden Duale, M.P

The Hon. Joshua Kutuny, M.P

The Hon. Adan Keynan, M.P

The Hon. (Eng.) Nicholas Gumbo, M.P

The Hon. Edwin O. Yinda, M.P

The Hon. Emilio Kathuri, M.P

The Hon. Ekwere Ethuro, M.P

Hon. (Prof) Phillip Kaloki, M.P

Hon. Cyprian Omollo, M.P

Background of the Matter under Consideration

Speaker,

3.1 Introduction

The Departmental Committee on Energy, Communications and Information held meetings with the Ministry of Energy to ascertain due diligence on the concession of Mui Basin Coal Mining Project and undertook a study visit on a fact finding mission on the same project in Mui Basin, Kitui County on 26th to 28th March 2012.

The delegation which visited the Mui Basin comprised of the following: -

- i. Hon. Maina Kamau, M.P – Vice Chairman and leader of the Delegation
- ii. Hon. Emilio Kathuri, M.P – Member
- iii. Hon. Cyprian Omollo, MP – Member
- iv. Ms. Emmy Chepkwony – Clerk Assistant
- v. Mr. Jacob Ngwele – Clerk Assistant
- vi. Ms. Veronica Kibati – Delegation Researcher
- vii. Ms. Pauline Nyambura – Committee Secretariat

Others accompanying the delegation included the following:

- (i) Mr. John M. Omenge – Chief Geologist, Ministry of Energy
- (ii) Mr. Zablon A. Mabea, MBS – Commissioner of Lands
- (iii) Mr. Moses N. Masibo – Commissioner of Mines & Geology, Ministry of Environment and Mineral Resources

- (iv) Ms. Wilkister B. Magangi – Chief Compliance and Enforcement Officer, National Environment Management Authority
- (v) Mr. Joseph Mwaura Ndogo- Senior Superintending Geologist and Deputy Head of the Coal Division, MOE.

Further to that, between the 19th and 27th of May 2012 a delegation of the Departmental Committee on Energy, Communications and Information visited coal mining and processing operations of Fenxi Mining Industry Company Ltd., part of the JINGU GROUP, in China. Fenxi Mining Industry Company Ltd. (hereafter abbreviated as Fenxi Mining), is an organization that cooperates with the Government of Kenya towards the development of coal mining project in Kenya.

The objective of the visit was to appraise the Parliamentary Committee on the mode of operation of Fenxi Mining in China, in respect to coal industry and enable the Committee to:

- i. carryout discussions on the Mui Basin Project and evaluate the capacity of Fenxi Industry Mining Group to meet the conditions for award of Block C&D in an effort to seek assurance that the investor, Fenxi Mining, is committed to delivering best results in the mining of coal in Kenya.
- ii. be appraised on the Chinese approaches to extraction of coal, resettlement of the people, re-development of estates, compulsory acquisition of land, utilization of coal, environmental protection and occupation health and safety in coal mines;

The delegation comprised of the following: -

Hon. (Eng.) James Rege, M.P	– Chairman and leader of the Delegation
Hon. Aden Duale, MP	- Member
Hon. Joshua Kutuny, MP	- Member
Hon. Edwin Yinda, M.P	- Member
Ms. Emmy Chepkwony	– Delegation Secretary

Others accompanying the delegation included the following:

- (i) Ms. Gladys Karegi Kianji, OGW – Chairperson of the Geological Society of Kenya and Lecturer Department of Geology, University of Nairobi.

- (ii) Mr. Claire Florence Akinyi Oinolo, EBS- Provincial Commissioner, Eastern Province.
- (iii) Mr. Paul Gilbert Ngatia, MBS- Senior Deputy Secretary, Ministry of Energy.
- (iv) Dr. Peter Amenya Nyakundi, PhD- chief Superintending Geologist and Personal Assistant to the Permanent Secretary, MOE
- (v) Mr. Joseph Mwaura Ndogo- Senior Superintending Geologist and Deputy Head of the Coal Division, MOE.
- (vi) Mr. James Maina Gitonga – Superintending Geologist and Head, Exploration & Evaluation, Coal Division, MOE.

1.4 Committee findings and conclusions

From its inquiry the Committee made the following findings and observations:-

1. Following an assessment of the technical and financial bids submitted, of the two bids for Block C and Block D as presented to the Committee by the Ministry of Energy, the Committee established that it met the requirements of the Request for Proposals (RFP). The Committee established that the Concession of the Coal mining blocks had followed due process of law and hoped that Fenxi Mining will adhere to the requirements of the concession agreement.
2. There is need to fast track the concessioning of Coal Blocks A and B to ensure that all Mui Basin blocks are at the same level in infrastructural development.
3. There is also need to fast track, first, the gazettelement and, then later, concessioning to private sector firms of the 31 new coal blocks that MOE has delineated outside the Mui Basin so as to match the overwhelming interest shown by private companies for development of coal resources in the country.
4. The local community in Kitui County supports the concession as they envisage gains to be made to their benefit and they are involved in the process of the project, through formation of Liaison Committees for Blocks A and B combined as well as for Blocks C and D combined.
5. The local community proposed incorporation of integrated development to ensure that infrastructural development is included, Kaliku market was proposed as an ideal location for construction of a coal town.

6. Fenxi Mining Company has the financial support of the China Exim Bank and China African Development Bank; and being a member of the Jingu Group consortium it has sufficient capacity to extract coal and to facilitate an integrated development of coal industry in Mui Basin which will serve as a model for the rest of the country where coal has been identified. Its expansive network of technical and financial partners, combined with the experience gained in other similar ventures will enable Fenxi Mining to manage well the Mui Basin coal project in Kenya.
7. The Committee noted that the development of coal resource in the country was impressive and hoped that the Ministry will put in place a strong foundation for setting up a robust coal sub sector in Kenya. With the discovery of oil, Iron ore, coal and geothermal resources among others; Kenya looks forward to a right energy mix that will guarantee stable power supply and inspire industrial development.
8. The economic strength of China is attributed to its effective utilization of Coal resources. With the economically viable coal in Mui Basin a well established coal industry in Kenya is expected to emerge and yield similar results. This will address Kenya's problem of spending a large part of its foreign exchange earnings on importing crude oil and petroleum products used in power generation, industrial and other processes,
9. China has a well established legal and policy framework on land, extraction of natural resources, utilization of resources, environmental protection and occupational health and safety. Therefore for re-development of land in coal mining zones and resettlement of the people to succeed in Kenya, there is need to urgently review the legal and policy framework that governs the management of coal resources in the country.
10. China has a successful integrated approach to the development of coal industry and which has led to the emergence of strong cities in the country due to coal mining. It is urgent that Kenya formulates an integrated design of the coal mining project that covers industrial, resettlement and town plans before starting coal mining work in Mui.
11. The Mining and Minerals Bill which is expected to indicate how the benefits from natural resources ought to be shared among the various entities such as the

National Government, the County Governments and the local communities has not yet been enacted.

12. Mining activities in China, especially the mining of Coal, adhere to proper mine safety and health management systems with elaborate programmes on environmental protection and city Greenification, both for open pit and underground workings.
13. For underground room and pillar methods of coal mining, safety and stability of excavations factors should be considered during capital development and production. For open pit method, though considered the most preferred method because it allows a high rate of production while exposing personnel and equipment to less hazardous situations, a thorough environmental impact assessment should be done. Mitigation strategies to protect the environment should be adhered to as provided for under the concession agreement.
14. The mining and development of coal is likely to spur economic growth and industry development as power generated from Mui Basin and other locally derived coal would substitute the more expensive oil and supplement hydro generated electricity shortfalls whenever there is prolonged draught. Kenya currently imports iron ore, steel and related products as well as iron ore and steel manufactured goods, with the now locally available coal the country will be able to manufacture its own iron, steel, and their related products, thereby making savings on some of the money otherwise used for the imports.
15. Proper compensation models combined with wide stakeholder consultations are likely to provide support for the success of the mining project.
16. It was observed that water is critical to the coal mining and power generation processes. The proposal is to abstract water from the Tana River south of the location earmarked for construction of the High Ground Falls Dam and to transport water to the Mui Basin by pipeline over an estimated distance of some 80 Km. The piped water supply could be supplemented by water abstracted from locally constructed dams to harvest the huge amount of surface water that is received in the Mui Basin for a short period during the heavy rains. Improved water supply by piping and construction of dams will greatly benefit the local community.

1.5 Recommendation

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From the findings and observations of the inquiry on the coal development in Kitui County and its visit to China the Committee makes the following recommendations that:-

1. The Mining process of Blocks C and D should be fast tracked to enable the country invest in alternative sources of energy to supplement hydro power generation. Meanwhile the concessioning of Blocks A and B should also be fast tracked to ensure that all Mui Basin coal blocks are at the same level in infrastructural development. At the same time, gazettelement and thereafter concessioning of the 31 new coal blocks delineated by the MOE should also be fast tracked so as to provide more opportunities for more private sector participation in coal development in the country.
2. Resettlement model to be used should be selected by the locals after a thorough consultative process; stakeholder consultations should continue to be held during all phases of the concession and public hearings for the Strategic Environmental Assessment (SEA), Environmental and Social Impact Assessment (ESIA), and the Resettlement Action Plan (RAP) should be organized by the MOE in conjunction with relevant Government Ministries/Departments/Agencies and Fenxi Mining. Community mobilization and civic education should be enhanced.
3. Kenya should formulate an integrated design of the coal mining project that covers industrial, resettlement and town plans. Mining of Coal should be tailored to create a coal mining city that is well planned with elaborate housing.
4. The government should put in place proper operational structures and create comprehensive legal and policy and regulatory framework to support coal mining and mining of other natural resources. The framework shall guide plans on revenue sharing ratios, resettlement and compensation models.
5. As a result of interest in coal exploration services, several investment opportunities including coal sale to industrial utility and infrastructure associated with coal mining are likely to emerge with the coal fired power plants for electricity generation. It is recommended that power plants be developed in the vicinity of Mui Basin to utilize power production out of the coal mining project in Kitui County.

6. Mining of Coal in Kenya should adhere to proper mine safety and health management system with an elaborate programme on environmental protection and city Greenification system.
7. Fenxi Mining should conduct, first, an overarching SEA and then elaborate ESIA's for each of the two Coal Blocks prior to start of any field programme. The SEA and ESIA's should be supervised by the National environmental management authority (NEMA) for approval and award of Environmental Licences as required under the Environmental Management and Co- ordination Act (EMCA), 1999, and as provided for under the concession agreement. Proper environmental protection and Greenification programme be established in the mining environs.
8. Prior to the start of mining in each Coal Block, Fenxi Mining should conduct a Resettlement Action Plan (RAP) meeting relevant Kenyan law requirements and World Bank Standards and which is to be approved by the Government of Kenya.
9. As the coal concession proceeds, it is recommended that water for coal processing and power generation is abstracted from the Tana River south of the location earmarked for construction of the High Ground Falls Dam and be delivered to the Mui Basin by pipeline. It is also recommended that dams are locally constructed to harvest the huge amount of surface water that is received in the Mui Basin for a short period during the heavy rains to supplement the piped water supply from the Tana River. In addition, it is recommended that studies are carried out to predict the potential impacts on the scarce water resources of the Mui Basin by both the open pit and underground coal mining which will take place; and propose measures for mitigation of the impacts.
10. The Committee recommends that analysis of coal and soils and water samples from the basin for coal related pollutants, pollution vulnerability maps indicating the areas which are likely to be affected and the proposed mitigation measures must form part of what is to be covered by the SEA and ESIA's.

1.6 Acknowledgement

Mr. Speaker,

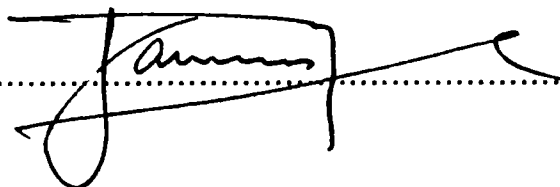
I wish to express my appreciation to Members of the Committee who sacrificed time from their families and constituents to undertake the fact finding study. The Committee is grateful to the Speaker for enabling the Committee to undertake its duty and to the office of the Clerk, for facilitating and providing technical support to enable the Committee discharge its mandate during the Committee sittings, field study visit to Mui Basin and during the visit to China.

Mr. Speaker,

On behalf of the Members of the Energy Communication and Information Committee, I wish to submit the Committee Report to the House, in accordance to Standing Order 195(c).

Thank you, Mr. Speaker, Sir.

Signed.....



THE HON. (ENG.) JAMES REGE, MP - CHAIRMAN

Date

Dec 11, 12

2.0 INTRODUCTION

2.1 Inquiry into the development of Coal mining in Mui Basin, Kitui County

Considering the strategic nature of the coal resource to Kenya in the creation of stable energy supply towards attainment of the vision 2030, the Committee resolved and dedicated part of its programme for the year 2012 to conduct and inspect the development of coal in Mui Basin, Kitui County.

2.2 Legal and regulatory framework governing coal exploration in Kenya

The Committee examined the policy and legal framework for coal exploration in Kenya and noted that the Constitution of Kenya under:

- Clause 61(2), classifies land in the country as public, community or private;
- Clause 62(1) (f), categorizes all minerals as defined by law (Coal is one such mineral as defined under the Mining Act, Cap 306, of the Laws of Kenya) as public land;
- Clause 62(3), provides that minerals shall vest in, and be held by, the National Government in trust for the people of Kenya;
- Clause 69(1) provides for equitable sharing of benefits accruing from exploitation of natural resources such as the coal found in the Mui Basin. Such benefits have the potential of catalyzing rapid socio-economical transformation of the Kitui Country;
- Clause 71(1), states that any transaction involving the grant of a right of concession by, or on behalf, of any person, including the National Government, to another person for the exploitation of any natural resources (coal is one such resource) of Kenya is subject of ratification by Parliament ;
- Clause 216(1) (a), provides that among the principal functions of the Commission on Revenue Allocation is to make recommendations concerning the basis for equitable sharing of revenue raised by the National Government (as would be the case of revenue to accrue from coal mining) between the National and County (in this case Kitui) Governments;
- The Committee also noted that as per requirement, the concession was approved by both the Treasury and Attorney General and observed its significant role in the concession process following its mandate to investigate, inquire into, and report on all matters

relating to the mandate, management, activities, administration, and operations of Energy; and,

- The Committee therefore resolved to hold meetings with the Ministry of Energy to inquire and report to the house on the Development of Coal in Mui Basin, Kitui County.

PART 1: MEETING WITH THE MINISTRY OF ENERGY

3.0 Meeting with the PS for Energy and the Ministry Officials in charge of the project

The Committee held meetings with the Permanent Secretary, Ministry of Energy and other Ministry officials in charge of the project on 17th April, 2012 and 29th November, 2012 to establish the following:

- a) The historical development on the Mui Basin Coal;
- b) To conduct due diligence on the concession process and examine the concession agreement and the conditions for the award of the Blocks;
- c) The estimation of the coal resource and its commercial viability;
- d) The nature of civic education carried out at the local level on the project;
- e) An appraisal on how the local community and the whole country will benefit from the venture;
- f) Solutions to the concerns raised on the environmental impact of the project;
- g) The proposed resettlement and compensation models;
- h) The progress report on the mining and Minerals Bill; and
- i) The progress so far on the development of coal resources in the country.

3.1 Historical Development of the Mui Basin Coal

- Kenya imports annually on average 150,000 tonnes of coal and coke at a cost of US \$ 13.6 million to meet domestic requirements. However, after years of exploration which began in 1999, the Government, through the Ministry of Energy (MOE), discovered commercial deposits in the Mui Basin, covering an area of approximately 500 Km², and situated some 180Km North East of Nairobi.
- To ease exploration logistics, the MOE subdivided the Mui Basin into four coal mining blocks, designated Block A - Zombe-Kabati (121.5km²), Block B - Mutito-Itiko (117.5km²), Block C -Kateiko-Yoonye (131.5km²) and Block D – Karunga-Isekele (120km²) (**Appendix 1**). Work ranging from surface geological mapping to appraisal drilling and a feasibility study (covering only Block C) has been done.

- To fast track exploration, development and production of the coal resource, the Government decided to Concession all four (4) Mui Basin Coal Blocks to suitable private sector companies through open international competitive bidding. The intention to enable a private concession over this asset was issued in the official gazette.
- The Government intends to participate in the investment through holding of part equity, or working interest, in the envisaged project. The Government may participate either directly, or through an appointee, through a Special Purpose Vehicle or in a Joint Venture with the Concessionaire.
- The Government has also formed an Inter- Ministerial Committee on Coal (IMC) to spearhead the process of the Concession. The Committee consists of relevant Government Ministries/Departments/ agencies namely, the MOE, Ministry of Environment and Mineral Resources (MEMR), Treasury, Ministry of Industrialization, Ministry of Lands, Attorney General and the National Environment Management Authority (NEMA).

3.2 The Concession Agreement and conditions for the award of the Blocks

- The expression of interest (EOI) for concession of all 4 Mui Basin Coal Blocks was advertised by the Ministry of Energy on 16th September, 2010 and closed on 16th of November, 2010. Altogether 16 firms made submissions (**Appendix 2**), out of which 11 firms were prequalified (**Appendix 3**) for the next stage that is Request for Proposal (RFP).
- The RFP document (**Appendix 4**) was issued to all the 11 pre- qualified firms on 23rd May, 2011. The firms were also invited to the Pre Proposal Conference and Field Trip to the Mui Basin held on 13th June, 2011 and 14th–15th June, 2011, respectively. 8 of the 11 pre- qualified companies attended the Conference namely, Continental Coal Ltd of South Africa; Abhijeet Natural Resources Group of India; Rift Valley Resources, Kenya; RSV Enco, South Africa; Fenxi Mining industry Company Ltd. of China; Tata Power of India; Vale SA of South Africa; and PLL Intex Joint Venture of Kenya. An Addendum to the RFP (**Appendix 5**) was issued for clarifications and changes agreed with the companies following the discussions.
- The Tender Closed on 13th July, 2011 at 10.00a.m. In total, 7 bids from 5 companies were received. The companies are Continental Coal Ltd (1 bid), Abhijeet Natural Resources Group (1 bid), Rift Valley Resources (1 bid), RSV Enco (2 bids), and Fenxi Mining Industry Company Ltd (2 bids).

- A Committee consisting of representatives from the Ministry of Energy, Ministry of Environment and Mineral Resources (Mines & Geological Department and National Environment Management Authority - NEMA) and Ministry of Industrialization evaluated the 7 technical Bids submitted as from 20th – 26th July, 2011. The results of the Technical Evaluation, of which the requirement was a Bid to attain a total minimum score of 70% in order to proceed to the Financials are (**Appendix 6**):

- 2 Bids submitted by RSV Enco and 1 Bid submitted by Abhijeet Natural Resources Group- eliminated at preliminary,
- Bid submitted by Continental Coal- 37.1 %
- Bid submitted by Continental Coal – 37.1%
- Bid submitted by Rift Valley Resources – 42.26%,
- 2 Bids submitted by Fenxi Mining for Blocks C and Block D – 83.66% and 80.000%, respectively.

The 2 Bids submitted by Fenxi Mining, therefore, proceed to financial evaluation.

- The Financial Bids were opened on 15th August, 2011 and evaluated on the same day by the same Committee that evaluated the Technical Bids. The results of the evaluation are that both the Financial Bids submitted by Fenxi Mining for Block C and D met the requirement of the RFP (**Appendix 7**).
- The negotiations between GoK and M/s Fenxi Mining Industry Co. Ltd are at advanced stage and to be finalized within two months and the concession documents initialled for further Government action.
- Fenxi Mining has engaged a negotiation team consisting of international law firm Linklaters and local firm Coulson Harney as legal advisors and international financial firm Deloit (Hong Kong) and local firm Deloit (Nairobi) as financial advisors.
- The Attorney General advised that Ministry of Energy hires, through his office, experienced external legal experts to work with his officers in the negotiations. The firm of Anjarwalla & Khanna Advocates has been procured for this purpose.
- **The Conditions for award of Block C (Table 2, Appendix 7)**
 - Concession Fees- US \$ 3 million
 - Statutory Payments:
 - Coal Special Exploration License Fees – US \$ 4 per sq.km.

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- ii. Environmental Impact License Fees- US \$ 11,110.
- iii. Special Mining Lease Fees- US \$ 21,000 per annum.
- c. Training Fund- US \$ 81, 269 per annum
- d. Gross Revenue Sharing with the Government – 23.6%
- e. Government participation – 11%

Conditions for award of Block D (table 3, Appendix 7)

- a. Concession Fees – US \$ 500,000
- b. Statutory Payments:
 - i. Coal Special Exploration License Fees – US \$ 4 per sq.km.
 - ii. Environmental Impact License Fees- US \$ 11,110.
 - iii. Special Mining Lease Fees- US \$ 21,000 per annum.
- c. Training Fund- US \$ 581, 269 per annum
- d. Gross Revenue Sharing with the Government – 22.1%
- e. Government participation –11%

3.3 The Estimation of the coal resource and its commercial viability

- Economically viable coal reserves have been established in Block C and the other blocks (A, B and D are expected to have good coal potential since they have similar geology to Block C.
- Coal and carbonaceous rich mudstone are the strata of greatest interest when considering Coal reserves in the Mui Basin. The MOE concentrated appraisal drilling in Block C (Yoonye - Kateiko), and feasibility study of the coal found in the block has been done. MOE also drilled few wells in each of Blocks D, B and A to demonstrate that the coal deposits found in Block C extends into these blocks.

Coal that had been intercepted by drilling in Block C is found in six (6) seams with Volume (M³) and Mass (Tonnes) as follows:

Seam 1 - 14, 279, 195M³ - 18, 277, 369 Tonnes
 Seam 2 - 56, 032, 440 M³ - 71, 721, 523 Tonnes
 Seam 3 - 32, 846, 220 M³ - 42, 043, 161 Tonnes
 Seam 4 - 108, 891, 815 M³ - 139, 381, 523 Tonnes
 Seam 5 - 42, 053, 774 M³ - 53, 828, 831 Tonnes
 Seam 6 - 99, 372, 179 M³ - 127, 196, 390 Tonnes
 Total – 452,448,797 Tonnes

It is therefore reasonable to conclude that the coal reserves in the Block C amount to at least 400,000,000 metric tonnes.

- Coal has been intercepted in some of the wells drilled in Block A, B and D. Exploratory wells drilled in the areas of Blocks B and D adjacent to Block C indicates that coal seams are continuous from Block C into the other two blocks. In addition, the geology of all the three blocks is similar to that of Block C. This is a positive indicator that coal seams found in Block C may extend into the other three blocks.
- Samples of Mui coal have been tested for calorific value, carbon content, ash content, moisture content, sulfur, iron, and volatile matter content. The laboratory results indicate that Mui coal ranks from peat through lignite and sub-bituminous to bituminous in grade. Lignite and sub-bituminous ranks are most abundant. The coal deposits occur with thick richly carbonaceous shale which can be exploited both as mineral and energy source inputs.
- A summary of the Coal analyses is as follow:
 - (a) Calorific values – range 12.6 – 29.3 MJ/Kg, averaging 18MJ/Kg
 - (b) Ash content – range 7% to 42%, average is 30%
 - (c) Volatiles – average 30%
 - (d) Sulfur – ranges 0.5% to 4%, average 2.4%.

3.4 The Civic Education carried out at the local level on the project

- Stakeholder consultations at the local level were carried out by the MOE during the time of coal exploration and later by the IMC during preparations for coal block concession. To move the consultations to higher level, a workshop for 300 delegates and leaders of Kitui County to discuss the coal concession was held at the Kenya School of Monetary Studies, Nairobi on 11th to 13th October, 2011. Report on Stakeholders Engagement is provided as **Appendix 8**.

3.5 Benefits of the Project to the local community and the whole country

- With availability of local coal, consumption of the commodity is likely to rise. This will boost Kenya's economy by addressing the energy needs for Kenya Vision 2030. The areas which could utilize Mui coal area as discussed below.
- **Electric Power Generation-** a major potential use of the Mui Basin coal is generation of electricity. The coal could be used as substitute for more expensive oil in generation of

electric power and also to supplement hydro generated electricity shortfalls whenever there is a prolonged drought. In this regard, 400 million tones of the coal resource so far identified in part of Block C alone can support a 3,600MW power generation for 30 years.

- **Other uses-** Mui coal could be used in production of coke for manufacture of iron and steel products, as a source of process heat for industrial and commercial boilers, for conversion to liquid fuels, as source of industrial filler in construction, gasification and domestic uses among others, Clean Coal Technologies capable of eliminating emission impurities will be the key to success.
- **Benefits to the Local people of Kitui-** the local community will benefit from employment, Corporate Social Responsibility projects, revenues from the coal mining and business spinoffs to result from the coal mining, power generation, industries built using the coal as well as other mineral inputs, and many other activities that will arise from multiplier effect.

3.6 The Proposed Resettlement and compensation models

- Concessionaire will develop a Resettlement Action Plan (RAP) and implement it after approval by the Government. The mode of compensation and resettlement would be in accordance to Kenya Law and World Bank standards and discussed with the local community who will indicate their preference(s). Normally options include compensation for land and developments in form of money, housing, land etc. The concessionaire will develop all social and other infrastructure to support the resettlement.

3.7 The Progress report on the Mining and Minerals Bill

- The Geology, Minerals and Mining Bill has been approved by Cabinet and forwarded to the Attorney General for fine tuning before being taken through the remaining other processes, including Constitution Implementation Committee and Parliament. The Bill proposed that mining projects must have 35% local (Kenya) ownership.

3.8 Solutions to the concerns raised on the Environmental Impact of the Project

- The Concessionaire will conduct, first, Strategic Environmental Assessment (SEA) covering all components of the project and thereafter Environmental and Social Impact Assessment (ESIA) on specific components of the project within the allocated Coal Block for approval by the National Environmental Management Authority (NEMA), and in line with the requirements of the Environmental Management and Coordination Act (EMCA), 199, prior to start of any Coal operations.

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3.9 The Progress so far on the development of coal resources in the country

- As earlier indicated negotiations of the Government with Fenxi Mining are at an advanced stage and to be finalized within two months and the concession document initialed for further action.
- In June 2012 the Ministry of Energy advertised Expression of Interest for Mui Basin Coal Blocks A and B which had not been awarded and the process for concession is currently ongoing.
- In recognition of the anticipated importance as well as reliability of coal fired power generation and the energy requirements to meet the Vision 2030 objectives, the MOE has embarked on an ambitious coal exploration programme to increase the installed capacity through introduction of coal fired power generation.
- For many years the occurrence of coal in Kenya was only expected to be found within the expansive Karoo formations constituting the Phanerozoic sedimentary sequence in Coastal region. However, the discovery of commercial coal deposits in the comparably small and inland Mui Basin has created much interest in areas of similar geological nature in the country.
- MOE has carried out studies and delineated 31 new coal blocks in various areas in the country (**Appendix 9 with a Map and coordinates** also attached).
- The Hon. Minister for Energy and Hon. Minister for Environment and Mineral Resources on 29th November, 2012 approved commencement of the process for gazetting the 31 new coal blocks to enable private sector participation in investments in these blocks.

Committee observations and Findings

- a) Following assessment of the technical and financial bids submitted, of the two bids for Block C and Block D as presented to the Committee by the Ministry of Energy, the committee established that it met the requirements of the RFP. The Committee observed that the Concession of the Coal mining blocks had followed due process of law and hoped that Fenxi Mining industry Company Ltd will adhere to the requirements of the concession agreement.

- b) The Committee noted that the development of coal resource in the country was impressive and hoped that the Ministry will put in place a strong foundation for setting up a robust coal sub sector in Kenya.
- c) With the discovery of oil, gas, coal and geothermal resources among others; Kenya looks forward to a strong energy mix that will guarantee stable power supply and inspire industrial development.

PART 2: FIELD VISIT TO THE COAL MINING BASIN IN KITUI COUNTY

3.0 Introduction

Following assessment of the technical and financial bids submitted, of the two bids for Block C and Block D met the requirements of the RFP as presented to the Committee during by the Ministry of Energy. The Departmental Committee on Energy, Communications and Information undertook a study visit on a fact finding mission on the same project in Mui Basin, Kitui County on 26th to 28th March 2012.

3.1 Courtesy call at the District Commissioner's Office, Mwingi Central

- The Committee paid a courtesy call to the District Commissioner (DC), Mwingi Central District who was represented by Ms. Sera Gichiamba, District Officer Central Division.
- The Committee informed the District Officer that the purpose of the Committee's visit was to tour the coal mining areas to appraise themselves on the progress so far and ascertain how the local community and the whole country will benefit from the venture.
- The District Officer (DO) welcomed the Committee to the District and informed the Committee that Mwingi Central District was carved out from the larger Mwingi District. The District has a population of about 110,000. She stated that the main economic activities in the district were farming and livestock keeping. The Committee heard that the locals were optimistic that the project would lead to development of the area and in turn benefit them.

3.2 Meeting at the Mwingi East District Commissioner's Office, Mathuki

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- The Committee met with the Liaison Committee members of Blocks C & D and observed that the Liaison Committee had qualified members and therefore the local community was well represented. The Parliamentary Committee informed the Liaison Committee of the purpose of the parliamentary Committee visit was to monitor the progress of the project and gain enough information which will be useful during scrutiny of the concessions and budgetary allocations.
- The Committee thanked the Liaison Committee members for attending the meeting and urged them to be fully involved in the process to ensure that the community benefits from the project.
- The representatives of the Ministry of Energy informed the Committee that enough civic education had been carried out for the locals and that the terms of reference of the Committee were to ensure that the locals were in charge of the process and to verify that they endorsed all project activities.

3.4 Meeting with the Mutitu District Commissioner at Zombe

- The District Commissioner welcomed the Parliamentary Committee members and informed them that the local community was looking forward to the success of the project. He stated that there had been increased land speculation due to the discovery of coal. He was however concerned that land adjudication was not complete and should be urgently completed.
- He informed the Committee that two Non-Governmental Organizations (NGOs) had visited the area to address the locals on their rights in the process. He was of the opinion that such kind of processes should be approved by the Ministry of Energy (MOE). He finally urged the Ministry officials to initiate the digging of boreholes as they dig the mining wells considering that water was scarce in the area.

3.5 Meeting with the local Committees at the Mutitu District Commissioner's Office, Zombe

During the deliberations with the local Committee, the Committee heard the following:-

- The locals expected the project to uplift the community considering it was an area with high poverty levels;

- Though they have accepted and appreciated the project, the Energy Committee should ensure that the locals are compensated and that the resources should be guarded against misuses;
- The resettlement of the displaced locals should be well managed to avoid internal displacement even after compensation. The resettlement notices should be released in good time for the locals to prepare themselves;
- The MOE should use local companies and employ local people to work in the project;
- The MOE should train locals to ensure they get the relevant expertise in mining as opposed to employing foreigners;
- The Coal Committee representing the Community should be involved in the process of drafting the mining Bill which will have an impact on how proceeds from the venture will be shared;
- A coal city should be built in Kaliku market;

The Ministry officials accompanying the Parliamentary Committee responded to some of the concerns and stated as follows:

- The project will incorporate integrated development to ensure that infrastructural development is included.
- The elections for the liaison Committee for Blocks B, A and D was democratic. However the concerns over the undemocratic election for the liaison Committee for Block C will require further consultations;
- Concessioning of A and B was being fast tracked to ensure that all blocks are at the same level in infrastructural development;
- Further civic education will be carried out up to the local level to ensure all the locals are brought on board and participation should be inclusive;
- A Strategic Environmental Assessment followed by Environmental and Social Impact Assessment should be carried out before the project begins as is the requirement;

- There were different types of resettlement models which will be selected by the locals after a consultative process.
- The draft Mining and Minerals Bill would clearly state how the resources ought to be shared among the various entities. The proposed Bill as at the time indicated that the Central Government would receive 80%, the County Governments would get 15% while the local community would get 5% of the share;
- Compensation of the locals who will be displaced will factor inflation and price escalation;
- Adjudication of the land would be fast tracked.

3.6 Meeting at the District Commissioner's Office, Kitui

- The District Commissioner welcomed the Parliamentary Committee members and informed them that the local community was looking forward to the success of the project. He stated that there had been increased land speculation due to the discovery of coal. He was however

Committee Observations and Findings

- 1) Overall, the findings are that the local community supports the concession as they envisage gains to be made to their benefit. However, the local community consistently raised key issues as follows:
 - ❖ That adequate measures are put in place to ensure clean and safe environment during concession;
 - ❖ That the process of moving out and resettling people to be displaced by the coal mining is handled with due care to alleviate undue suffering;
 - ❖ That the local community is adequately compensated for their land and developments;
 - ❖ That youth of the local community are given preference in employment;
 - ❖ That power generation plants and industries to utilize the coal are built in the vicinity of the Mui Basin; and,
 - ❖ That the local community gains from the revenues to accrue from the coal mining.

- 2) The Committee observed that for smooth implementation of the concession, stakeholder consultations should continue to be held during all phases of the concession, including during the public hearings for the Strategic Environmental Assessment (SEA), Environmental and Social Impact Assessments (ESIAs) and the Resettlement Action Plan (RAP).
- 3) There were pending policy and legal framework that needs redress to allow smooth exploration and mining of coal resources in Kenya.
- 4) Fenxi Mining would conduct an elaborate Resettlement Action Plan (RAP) meeting World Bank Standards and which is to be approved by the Government of Kenya.
- 5) Fenxi Mining should conduct an overarching Strategic Environmental Assessment (SEA) and project specific Environmental and Social Impact Assessments (ESIAs) should be carried out before the project begins as is the requirement;
- 6) The SEA and ESIAs should be supervised by the National environmental management authority (NEMA) for approval and award of Environmental Licences as required under the Environmental Management and Co-ordination Act (EMCA), 1999.
- 7) There was a high potential of coal in the Mui Basin which ought to be exploited.
- 8) Although Kenya has substantial iron ore deposits not far from the local mining site, which could be used in the making of iron and steel locally, the country currently imports iron ore, steel and related products as well as iron ore and steel manufactured goods. With the new local available coal, the country will be able to manufacture its own iron, steel and their related products, thereby making savings on some of the money otherwise used for the imports.
- 9) The coal project should incorporate integrated development to ensure that infrastructural development is included;
- 10) Concessioning of A and B should be fast tracked to ensure that all blocks are at the same level in infrastructural development;
- 11) An overarching Strategic Environmental Assessment and project specific Environmental and Social Impact Assessments should be carried out before the project begins as is the requirement;

- 12) There were different types of resettlement models which will be selected by the locals after a consultative process;
- 13) Adjudication of the land should be fast tracked; and
- 14) The Committee observed the need to conduct a study tour to China and Fenxi offices and the Mine and to hold meetings with the management of Fenxi Mining Company to ascertain the capacity of the Company for the approval of the concession agreement.

PART 3: STUDY VISIT TO CHINA

4.0 Introduction

Through the Ministry of Energy, Fenxi Industry Mining Group through its holding company, the Jingu Group invited the Departmental Committee on Energy, Communications and Information to the Company's coal mining and utilization operations in the China, between the 19th and 27th of May 2012. Fenxi Mining is the organization that cooperates with the Government of Kenya towards the development of coal mining project in Kenya.

- A. The objective of the visit was to inform the Parliamentary Committee on the mode of operation of Jingu Group in China, in respect to coal industry and to:**
- i. Carryout discussions on the Mui Basin Project and evaluate the Capacity of Fenxi Industry Mining Group to meet the conditions for award of Block C in an effort to seek assurance that the investor, Fenxi Mining, is committed to delivering best results in the mining of coal in Kenya.
 - ii. Educate the Parliamentary Committee on the Chinese approaches to extraction of coal, resettlement of the people, re-development of estates, compulsory acquisition of land, utilization of coal, environmental protection and occupation health and safety in coal mines;
 - iii. To understand the benefits of coal mining in spurring development of infrastructure, manufacturing industries and real estate.

These objectives were achieved through various meetings with the city administrators, the board of management of both Jingu Group and Fenxi Mining, China Exim Bank officials

and further by taking the delegation to various development sites and places of industry activities.

B. Places visited

- i. Fenxi Mining Industry Mining Group offices;
- ii. Xiangshuwan Estate, Wujin District, Changzhou;
- iii. The Lake City development; Wujin District;
- iv. A coal Mine in Ordos city, Inner Mongolia; Managed by the Wonderland Coal Mining Co.;
- v. A power Generation plant in Ordos City , Inner Mongolia;
- vi. The Mausoleum of Genghis Khan, the founding father of Mongolia, who lived between 1162 and 1227 AD, and created the largest kingdom covering a substantial portion of central Asia and China;
- vii. Baosteel Company, Shanghai, China;
- viii. Baosun New Energy Co., Ltd;
- ix. The Zenith Steel Group Co., Ltd- Changzhou City, Province of Jiangsu;
- x. The PowerSun New (CS) Co., Ltd - Changzhou City, Province of Jiangsu; and
- xi. The Eging Photovoltaic Technology Co., Ltd - Changzhou City, Province of Jiangsu

4.1 Meeting with the Management of Fenxi Mining Industry Company Ltd.

The Committee held meetings with the Management of Fenxi Mining Company, a member of the Jingu Group which specializes in Coal mining among other mineral mining activities.

- It was observed that power is key to any meaningful development. Ordos City was 10 years ago a backward bleak land whose Gross Domestic Product (GDP) was second last in China. Since the discovery of Coal and the support by Government through huge financial allocations, the City's GDP is currently among the top in China. The loans that were granted by the government to develop infrastructure such as roads and electricity transmission lines was easy to repay as the city's revenue was sufficient to repay the banks many times over.
- Since the creation of a grand master plan for the city's development the pace of economic development has been phenomenal. It has resulted to a well planned city with great roads, excellent greenification and landscaping.

- The Government of China takes a pro-business approach through its solid policy framework and by offering incentives to the investors from Europe, America and the entire globe. The investor friendly environment in China has resulted to massive investment in all sectors of the economy. It was recommended that Kenya take the same approach.
- Chinese re-development and resettlement demonstrated in the city of Changzhou, in Wujin, and in Inner Mongolia were the Committee learnt that in China coal compensation is not a one off payment .The Government of China is committed to creating towns and providing convenience to the residence through provision of infrastructure, water, employment opportunities and provision of technical education within proximity of the town to supply ready labour force for the mines.
- The Committee learnt that in China the Government opted to assess the nature of the land previously owned and with the creation of a town, two housing units were created for the residents one for residential and one for renting out to the immigrants working in the mines. This has served as a permanent source of income and ensured that the residents are not permanently displaced or taken far away from the resource and have sure source of income.
- The Committee learned that the share of revenue from the coal resources in China is shared at a 50%-50% ratio between the provincial government and the Central Government.
- Fenxi Mining is committed to honor the concession agreement and informed the Committee that it will conduct an overarching Strategic Environmental Assessment (SEA), followed by Environmental and Social Impact Assessments (ESIAs) for each of the two Coal Blocks prior to start of any field programme. Fenxi Mining further undertook to conduct a Resettlement Action Plan (RAP) in accordance to the Concession agreement.

Committee observations and remarks:

- Mining in Kenya will only be economically viable if mineral resources are extracted and the revenues and other benefits accruing ploughed back to country including local communities; and further observed that the coal resource should not be taken out of the Country but be utilized to generate electricity and other industrial utilities in Kenya;

- The social responsibility packages should include general employment of the people of Kenya;
- In view of the emergence of a beautiful city in Ordos following the mining of Coal, Kenya looks forward for the emergence of a twin City in Mui Basin in Kitui County;
- That a grand master plan of the city should be developed and the Government should guarantee loans for the development of the infrastructure in the area;
- The Committee observed that the Management of Fenxi Mining had expressed passion and determination in the generation of power in Kenya based on the recommendations that Kenya should explore broad power generation opportunities and their commitment to honor the concession agreement.

4.2 Meeting with the representatives of the China Exim Bank and the China African Development Bank.

- The Committee held a meeting with the members of the China Exim Bank and the China African development Bank.
- During its meeting the Committee was informed that Fenxi Mining Company had the support of the two banks. The Committee heard that the two were committed to supporting energy development both within and outside China and looking forward for greater partnership between the people of China and the people of Kenya.
- The Committee received assurance on the financial capacity of Fenxi Mining Company to handle the coal mining project in Mui Basin.
- During its meeting the role of energy in developed was emphasized and therefore the need for Kenya to invest in energy development.

4.3 Visit to a Coal Mine in Ordos's city, inner Mongolia; Managed by the the Wonderland Coal Mining Co. Ltd

- The Committee visited Fenxi Mining Offices and later toured the coal mines in Ordos City. The Committee was well received and was taken through the establishment and other projects by Fenxi Mining industry Group.

- The Committee was then taken through coal mines' safety and health management systems before the tour of the Mines. The coal mines' safety and health management system provides for; risk identification and assessment; hazard analysis; hazard management and control; reporting and recording relevant safety and health information and data.
- The Committee toured the mines and noted that there was a coal mines communication system and electrical installation.
- The Committee was then taken through a fire safety control system which provides for; fire prevention and control; an effective fire fighting capability; the safety of persons fighting fires and a risk assessment to identify all potential fire hazards at the mine.
- It was noted that the underground mine has principal hazard management plans that provide for emergency response; gas management; methane drainage; mine ventilation; spontaneous combustion and strata control.
- There is a GPS system that monitors human movement in the Mine, while the data management center keeps data essential for monitoring temperatures and oxygen, the technology used is locally manufactured in China.
- Multiple seam extracting technology is used in the mining of coal.
- Coal can be bought by anyone as there is a railway station nearby.
- That they practice green coal enterprises were there is maximization of water use through reuse.

Observations

- No major accidents had been report in the mines since its operations,
- The mines had proper Electrical equipment and installations,
- The mine had an excellent management of explosives and explosive – powered tools with clear standard operating procedures.
- The mine had a gas monitoring system which provides for continuous monitoring of the mine atmosphere to detect methane, carbon monoxide, carbon dioxide and oxygen, automatically detecting or calculating the values and trends of gas

concentrations, the ratio of carbon monoxide increase and oxygen deficiency. The recorded values and trends are displayed in the record at the surface of the mine easily accessed by coal mine workers; and in a way that is easily read by the workers and further be accessed and inspected.

- Coal Mining Safety and Health Regulations in China is given a lot of priority.
- The mine had a state of the art technology with almost zero emission and hoped that the same will be replicated in Kenya.

4.4 Meeting with Changzhou City Mayor

Wuying city is the economic model of china with emphasis on good education background and environmental control. In addition to its beauty, the city is rich in resources. The city has a development master plan with a successfully executed ten year plan and an excellent support chain to the industry and community.

4.5 Tour of BaoSteel Company in Shanghai, China

The Committee toured Baosteel Company and held a meeting with the top management of the Company and later toured the steel manufacturing plant.

The Committee learned that:-

- Shanghai Baosteel Group Corporation is a large iron and steel conglomerate set up on Nov. 17, 1998, with a registered capital of 45.8 billion Yuan. It possesses 22 wholly owned subsidiaries (including 9 overseas subsidiaries) and 14 holding companies (including 2 overseas subsidiaries) and 24 equity-sharing companies. Among the wholly owned subsidiaries and share holding companies, 11 are iron and steel companies, 2 financial companies, 8 trading companies.
- Baosteel is one of the most profitable steel enterprises in the world enjoying international competence, and its annual production capacity is about 20 million tons. Baosteel produces high demand products in the domestic and international market. On Dec. 6. 2004, Standard & Poor has raised the credit rating of Shanghai Baosteel Group Corporation from BBB to BBB+ with a "stable" outlook. Baosteel was ranked No. 372 on the list of 2003 Global 500 by "Fortune" magazine on July 2004, and became the first of its kind in the competitive industry and the manufacturing sector in China to enter the world's top 500 enterprises.

- Baosteel follows its "premium products" strategy and aims to become the prime research and development base for new processes, new technologies and new materials in China's iron and steel industry. Baosteel's premium products include automobile steel, oil and gas exploitation and transportation steel, stainless steel household electric appliance steel, transportation facilities steel, silicon steel, boiler and pressure vessel steel, food and beverage packing steel, metal production steel, special material steel, high-grade construction steel. Baosteel aim to become the prime research and development base for new processes, new technologies and new materials in China's iron and steel industry.
- Baosteel follows a strategy of "one main industry of exceptional quality with appropriate and relevant diversified trades". Besides its main steel business, Baosteel also engages in diversified industries such as trade, finance, engineering & equipment manufacturing, information, coal chemical industry, deep processing of steel products and recycling.
- Baosteel conducts internationalized operation. The global network, including 20 overseas and domestic trading companies, has taken shape. Baosteel cooperates and establishes joint ventures with international steel giants; it has made strategic alliances worldwide to achieve win-win result on the basis of mutual benefit.
- Baosteel has committed itself to clean production and paid great attention to environmental protection to make a green Baosteel. Baoshan Iron & Steel Co., Ltd. is the first enterprise among the domestic metallurgical circle to get the ISO14001 certificate. Its greenbelt covers 42.71% of total plant area, and its air quality in the plant area has reached the standard of a State-level scenic spot. The Company has been recognized as the first State-level industrial showplace in China.
- Baosteel has devoted itself to social charity causes such as the establishment of the Baosteel Arts Award and the Baosteel Education Fund. Many outstanding artists, teachers and students have received the awards. Baosteel has also donated nine million Yuan to the "Hope Project" to build up 25 Hope Primary Schools and a middle school. Baosteel grows together with society, and giving back to society is Baosteel's sustained pursuit.
- According to the company: "Baosteel is, first and foremost, people. Exacting is our spirit; study and innovation is our road; pursuit of the first class is our goal".

- Baosteel: is full of vigor and opportunity, and we look with confidence towards the future.

The committee was taken through the Steel manufacturing plant and learned several issues including:-

- (i) Local logistics transportation of coal to the rail by major coal producers
- (ii) Role of the rail sector in the transportation of coal
- (iii) Loading and unloading port capacity
- (iv) Inland water and trucking

4.6 Visit to Baosun New Energy Co.,Ltd

- The Committee visited Baosun New Energy Co., Ltd and heard that its key derivable includes: Power technology products for high – medium voltage applications, Transformers low losses, Switchgear, Motorized Breakers, Automation relays, Associated equipment, Power products services, Substations, Repair, spare parts, maintenance, remote monitoring, Feasibility and grid studies, Short-circuit calculation, selectivity and protection coordination, Transient system stability and dynamic behavior, Harmonic analysis, filtering and lining up systems settlement and ground simulation.
- The committee further learned of the control and supervisory system whose automation plays a key role in the operation, maintenance and optimization of solar plants, new functionalities oriented to the process optimization allow improving the economical performance of the plants. In Photo Voltaic (PV) plants the integration into the power electronics, the Committee heard that it is opening a new dimension in the optimized operation of these plants at the DCS level to control the following: Solar plant power electronics device controls, optimization-switching, neural networks - intelligent forecast and approximation and alarms and events handling.
- The Committee further learned that at the at local automation is performed; trackers, accurate solar tracking algorithm, one and two axis movement control implementation, power connection box, power connection box management and current per line current control to detect strings failures.

- The Committee was then taken through the feasibility and grid studies on, short-circuit calculation, selectivity and protection coordination, Load flow calculation, components design, Transient system stability and dynamic behavior and harmonic analysis, filtering and lining up systems settlement.

4.7 Tour of Zenith Steel Group Co., Ltd, Changzhou city, Province of Jiangsu

The Committee further visited Jingu Group Properties including Housing and Zenith Steel Group Corporation.

- Zenith steel plant is located within Changzhou city. It is part of the Jingu Group Properties. The plant is located in two areas the old plant and the new plant. The plant employs over 15,000 workers and has a gross income of 16 billion of which the profits are 3.3 billion. The plant employs three fold what it initialize used to employ. The plant consumes about 5400 tons of coal per Kwh. In terms of gas which is cheaper it consumes about 2 million dollars per day to produce 15 kw/h. It produces pig iron which uses low energy consumption. It produces 11 m tons of pig iron for more information see www.zt.net.cn
- The Committee toured the Zenith Steel Factory and later held a boardroom meeting with the Management of the Zenith Steel Group.
- The Committee was taken through the Steel manufacturing plant:-
 - ❖ Local logistics transportation of coal to the rail by major coal producers
 - ❖ Role of the rail sector in the transportation of coal
 - ❖ Loading and unloading port capacity
 - ❖ Inland water and trucking

- The Committee heard that Zenith Steel Group Co., Ltd was started in 2001 with a starting turnover of 1 Billion dollars and currently 18 billion dollars. It occupies 1000 Ha of land with its employees increasing from 5,000 to 150,000. The Company's production capacity has tripled to 12 million rolling steel a day. As a result of interest in coal, exploration services have emerged as an opportunity for investment in all over the world.
- The total assets by zenith steel are worth 8 billion dollars. It spends about 2.5 billion per kwh. The plant has about 4 million in foreign trade. It imports raw iron. It produces serious artifacts for steel engineering. In Kenya we have steel rolling mills and not steel production. The Committee expressed that Kenya would want to see more companies with capacity to manufacture steel such as Zenith Steel invest in Kenya and East Africa. The Company with capacity to manufacture steel (Zenith Steel) are expected to play a major role in the development of industries considered to be the main priorities for Vision 2030.

4.8 Tour of the POWERSUN new (CS) Co., Ltd– Changzhou City, Province of Jiangsu

- The Committee toured POWERSUN new (CS) Co., Ltd and held a meeting with the Company's management team.
- The committee heard that POWERSUN New (CS) Co., Ltd is a high –tech industrial enterprise, which is dedicated to the research, development, and production of “new energy source electric power intelligent allocation technology”. The company is registered and established in November, 2011. It is located in a state- level ecological demonstration area. It is a project of 200 million Yuan and registered capital of 50 Million Yuan. The Company has the independent patent of the core technologies and the major businesses of the company are research and development, integration and sale of the new energy resource electric power intelligent control system. The Company advocates clean electricity utilization and provision of the energy of the Sun.
- The Committee appreciated the user – side online multi electric power intelligent regulation and control system and noted that the photovoltaic multi- electric power system for power generation and supply is a new technology in the world.
- The Committee observed that the photovoltaic power can be used for elective power storage and supply, and can also be allocated a complementarily with the main

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supply, therefore the parallel operations of multi—electric power storage and supply, and sharing among systems has decreased the capital investment, Improved the resource use ratio, reduced the number of times of charging, discharging of the storage batteries and electric energy transformation and strengthen the total effect of the system.

- The advantages of BSIL solar energy electric power intelligent allocation system realizes the maximization of solar energy electric power self-use through intelligent management and allocation control. It optimizes the allocation of photovoltaic electricity and time- variable price automatically when it is loaded and used. It can save the cost of electricity and time- variable price automatically when it is loaded and used.
- The Committee appreciated the BSIL technology by Powersun Company and hoped that Kenya sitting along the Equator and Nairobi being the City in the Sun the technology will be useful in future.
- The Committee noted that there should be modalities for technology transfer and learning opportunities for Kenyan students in China.

4.9 Tour of the EGING Photovoltaic Technology—Changzhou City, Province Of Jiangsu

- The Committee toured EGing Photovoltaic Technology which has a world class photovoltaic facility for manufacturing and other activities. The Company is committed to building a greener future. It aims at building an environmentally friendly community for all people.
- The Committee heard that EGing has obtained product certifications and management system endorsement granted and approved by leading testing agencies including TUV Rheinland, Intertek among others.
- The Committee was further heard that the deliver high performance with stable efficiency for wide variety of applications ranging from roof systems of different sizes to large and utility scale solar farms was EGing specialty.

- The Committee further heard that as a photovoltaic product manufacturer, EGING provides high efficiency and stable performance photovoltaic modules for all types of photovoltaic projects including ground system

4.10 Tour of Fenxi Mining Industries Group Coal Mining and Processing Operations in Shanxi Province

- After visiting the Erdos coal mining and power generation, the Kenyan delegation felt that it was necessary to visit Fenxi Operations in its own province of Shanxi. The Committee was facilitated to visit Fenxi offices and at least one of the coal mines they operate in the province.
- The team chosen to visit the Fenxi Mining in Shanxi Province comprised Mr. J M Ndogo; Mr. J M Gitonga and Ms Gladys Kianji. The team was asked by the Parliamentary Committee on Energy and Communication to the company to compile a report on the tour.
- The team visited Fenxi Mining Industry Company Group offices in Ginzong City, mines as well as subsidiary companies. The team's report is included as **Appendix 10**.

Following the Committee tour of Fenxi Mining industry Group company offices and mine in Jiexin the Committee established the following:

- Fenxi's main company offices are located in Ginzong City in Shanxi Province. On arrival the delegation was received by the Mr Li Xianhua, a Board Director and a Deputy Secretary of the Standing Committee. He presented a brief on coal mining in Shanxi Province stating that Shanxi province is the largest coal producing province in China with over 80,000,000 million tons produced annually. Shanxi province has the richest coal of all kinds mainly the grade used for electric power generation.
- The Fenxi's coal mine visited in Shanxi Province is located at Jiexin area which is 40 minutes drive from the main offices in Ginzong City. Mr. Li is the head of the Fenxi Group at Ginzong offices. The group has many coal mines but the Jiexin mine is the newest.
- The Committee heard that Fenxi Mining Group is one of the largest coal mining Group and is associated with about 12 other companies. Fenxi Mining Group

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mines about 3 Million tons and has a turnover of about 20 billion (RMB). All the twelve companies generate over 60 million tons.

- The Fenxi Group produces more than 60M tons of coal per year. The Mine at Jiexin produces two (2) Million tons of good quality coal per year.
- The management of Fenxi town offices is headed Mr. Li while the coal mining team at Jiexin is headed by Mr. Li Xianhua. The team comprises office managers, Security enforcement team, Hospitality staff, workshop staff, loaders etc. The entire staff involved in the mining at the time of the visit was approximately 300 people. The mine operates in 3 shifts per day at 8hrs each.
- Apart from coal mining done by Fenxi Mining Group, Jingu Group consortium has other investments, such as Housing, manufacturing Steel, Cement and solar power plant among others. Fenxi's Mining Group is a member of the Jingu group consortium. On the other hand, Jingu Group alone has about 12 companies which make the company on its own a consortium with huge financial and technical capabilities.
- Fenxi's mining infrastructure include: Office Blocks, mining block with lift system entering vertically 600 to the mining face, elaborate conveyor system, staff quarters, good road network, car parking and adequate electricity supply.
- The equipment seen included:
 - a. Fleet of vehicles including heavy trucks
 - b. Computerized system for all operations in several control rooms; (Main Office' Mine office, and in coal processing section
 - c. Conveyor belts of about 800 metres
 - d. Loaders, Excavators and other heavy earth moving equipment
 - e. Mechanical workshop and heavy machinery
 - f. Assorted tools
 - g. Etc
- Fenxi Mining Company has an annual production of 60MT of coal which is all sold out. Zenith Steel and Bao Steel companies are among the companies associated with Fenxi Mining Group.
- Fenxi has extensive assets found at the town office and in the mines.

- All the coal mined is sold out for power generation to steel industries and for heating space.
- Value addition is done by the company through processes such as washing, grading of thermal and coking coal and mine residue is sold for cement manufacturing.
- The Committee confirmed Fenxi's commitment to health, safety and environmental protection in its mining activities and toured the expansive health protection within the office blocks demonstrated through established modern Hospital, good eating staff mess, excellent sanitary facilities, adequate water, dust protection, well maintained offices and first aid facilities.
- Food in the mess served to the workers during lunch Dinner and teas are supplied by the company.
- In Fenxi Mine, there are 3 shafts (1) Air circulation (2) people entry (3) conveying coal to the surface and Mining safety gear, well designed and adequate (helmet light, uniform etc.
- On Safety, KJ69 System to account for movement positioning of every person in the underground mine, an automatic alarm system and proper evacuation procedures have been put on place.
- Communication systems, data management system and production and mining advancement are continually monitored.
- **Environmental Issues**
 - i. Planting of trees in the area increasing vegetation cover by dispersing seeds using helicopters.
 - ii. Rehabilitation and restoration levelling and backfilling of the area.
 - iii. Stabilizing the unstable slopes to mitigate landside and erosion
 - iv. Solid waste management
 - v. Mine wastes used by cement manufacturers and in civil works construction
 - vi. Liquid waste, Water is recycled
 - vii. Dust control measures have been put in place

- Therefore, in mining and production of coal by Fenxi, Health, Safety and Environmental issues, are taken care of which can be summarized as follows;
 - (a) Fenxi mining employ best practices in groundwater protection
 - (b) Noise and particulates control
 - (c) Reclamation of mine areas
 - (d) Reforestation
 - (e) Waste management
 - (f) Handling of by products: the overburden analyzed for other minerals by products
 - (g) Staff health, good official(staff) food and
 - (h) Clean working environment
- With the foregoing, the delegation was satisfied that coal mining was being carried out in compliance with what Fenxi had submitted in the tender documents.
- Among other issues discussed during the visit were the need to develop capacity and improve facilities in equipment including linkages between industry and training especially bearing in mind that Kenya is mainly an agricultural country and very little exploration has been done. The company has very good safety procedures.

Observations

From its visit to China the Committee made the following findings and observations:-

- China is the largest consumer and producer of coal in the world. Its booming coal market derives the country's growth and produces 80% of its electric power. And because its coal demand continues to rise, China is now also a net importer of coal. Coal in China is a great force behind the country's economic growth and development. Other sources are hydro, wind, solar and nuclear.
- China has a proper legal and policy framework on energy production and development; it also has an excellent master plan on economic development and energy development is top on the country's agenda.
- China establishes its cities around a major natural resource such as coal or oil. The Cities therefore are economic power houses. They have elaborate city planning conceptualized to factor in socio-economic activities such as Education. The central

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- China has a proper legal and policy framework on energy production and development; it also has an excellent master plan on economic development and energy development is top on the country's agenda.
- China establishes its cities around a major natural resource such as coal or oil. The Cities therefore are economic power houses. They have elaborate city planning conceptualized to factor in socio-economic activities such as Education. The central government of China creates special economic zones in the area around the natural resource and formulates ingenious policies to facilitate the growth and development of the zone. In Ordos, for example, it is the central government of China that funds incentives to businesses by giving even up to 100% corporate tax holidays; supporting the local government to develop the requisite infrastructure for transport, water and power; and attracting business from other cities to move to the West Policy, thereby reaping great benefit from the coal industry in the long run.
- The local government of Ordos is responsible for development of all other infrastructure auxiliary to the efficient transportation and utilization of coal and the integrated development of the city of Ordos.
- In China, coal extraction is well synchronized with utilization. Coal from Ordos Mines is used to produce electricity at a power plant located about 50 kilometers from the mine. This plant produces about 50 MW of electric power which has tremendously spurred the city's industrial development.

- The mining and development of coal in Ordos has spurred economic growth by stimulating industry development; China has a strong energy Mix which has resulted to a strong energy production that supports industrial development and has attracted other manufacturing industries such as the steel manufacturing plants;
- An efficient rail and road transport system is a must for any successful coal mining industry. Coal transportation requires trains and many huge trucks. Toll stations to and from the mining zone are installed and operated to bring the revenue required for road maintenance. The availability of Coal in Ordos resulted to a city that is well planned with elaborate housing and excellent infrastructure;
- As for the sharing of revenue from royalties, the central government of China takes 25% leaving 75 % of the royalties to the local government of Ordos. Additionally, Pay As You Earn tax revenue is shared in the ration of 50:60 between the central government and the local government.
- Water plays a significant role in the Development of the Coal resources while land rehabilitation is an integral part of the coal industry; both the Government and the mining companies are involved in the rehabilitation of land in the coal mining area. China's land management system, Resettlement models, greenification programme especially in Ordos's city (the cold City of coal) is very impressive.
- Fenxi Mining Company has the financial support of the China Exim Bank and China African Development Bank; and being a member of the Jingu Group consortium it has sufficient capacity to extract coal and to facilitate an integrated development of coal industry in Mui which will serve as a model for the rest of the country where coal as been identified. Its expansive network of technical and financial partners, combined with the experience gained in other similar ventures will enable Fenxi mining Company to manage the Mui Basin coal project in Kenya.

5. OVERALL FINDINGS AND CONCLUSIONS

From its inquiry the Committee made the following findings and observations:-

1. Following an assessment of the technical and financial bids submitted, of the two bids for Block C and Block D as presented to the Committee by the Ministry of Energy, the Committee established that it met the requirements of the Request for Proposals (RFP). The Committee established that the Concession of the Coal mining

Departmental Committee on Energy, Communications and Information - Report of the Coal Development in Mui Basin, Kitui County

blocks had followed due process of law and hoped that Fenxi Mining Industry Company Ltd will adhere to the requirements of the concession agreement.

2. There is need to fast track the concessioning of blocks A and B to ensure that all blocks are at the same level in infrastructural development.
3. There is need to fast track the gazettment and concessioning of the 31 new coal blocks delineated by the Ministry of Energy so as to ensure that overwhelming private sector interest in coal development in the country is adequately met.
4. The local community in Kitui County supports the concession as they envisage gains to be made to their benefit and they are involved in the process of the project, through formation of Liaison Committees.
5. The local community proposed incorporation of integrated development to ensure that infrastructural development is included, Kaliku area was proposed as an ideal location for construction of a coal town.
6. Fenxi Mining Company has the financial support of the China Exim Development Bank and the support of the China African Development Bank; and being a member of the Jingu Group consortium it has sufficient capacity to extract coal and to facilitate an integrated development of coal industry in Mui Basin which will serve as a model for the rest of the country where coal has been identified. Its expansive network of technical and financial partners, combined with the experience gained in other similar ventures will enable Fenxi Mining Company to manage the Mui Basin coal project in Kenya.
7. The Committee noted that the development of coal resource in the country was impressive and hoped that the Ministry will put in place a strong foundation for setting up a robust coal sub sector in Kenya. With the discovery of oil, Iron ore, coal and geothermal resources among others; Kenya looks forward to a strong energy mix that will guarantee stable power supply and inspire industrial development.
8. The economic strength of China is attributed to its effective utilization of Coal resources, with the economically viable coal in Mui Basin a well established coal industry in Kenya is expected to yield similar results. These will address Kenya's problem of spending a large part of its foreign exchange earnings on importing crude oil and other energy resources.

9. China has a well established legal and policy framework on land, extraction of natural resources, utilization of resources, environmental protection and occupational health and safety. Therefore for re-development of land in coal mining zones and resettlement of the people to succeed in Kenya, there is need to urgently review the legal and policy framework that governs the management of coal resources in the country.
10. The Mining and Minerals Bill which is expected to indicate how the benefits from natural resources ought to be shared among the various entities such as the National Government, the County Governments and the local community has not yet been enacted.
11. Following China's successful integrated approach to the development of coal industry and the emergence of strong cities in China due to coal mining. It is urgent that Kenya formulates an integrated design of the coal mining project that covers industrial, resettlement and town plans before starting coal mining work in Mui.
12. Mining activities in China especially the mining of Coal adheres to proper mine's safety and health management system with an elaborate programme on environmental protection and city Greenification programmes.
13. For underground room and pillar methods of coal mining, safety and stability of excavations factors should be considered during capital development and production. For open pit method though considered the most preferred method because it allows a high rate of production while exposing personnel and equipment to less hazardous situations, a proper environmental impact assessment should be done. Mitigation strategies to protect the environment should be adhered to as provided for under the concession agreement.
14. The mining and development of coal is likely to spur economic growth and industry development as power generated from Mui Basin and other locally derived coal would substitute the more expensive oil and supplement hydro generated electricity shortfalls whenever there is prolonged draught; The country currently imports iron ore, steel and related products as well as iron ore and steel manufactured goods, with the now locally available coal the country will be able to manufacture its own iron, steel, and their related products, thereby making savings on some of the money otherwise used for the imports.

15. Proper compensation models combined with wide stakeholder consultations are likely to provide support for the success of the mining project.
16. It was further observed that water is critical to the coal mining and power generation processes.

1.5 RECOMMENDATION

From the findings and observations of the inquiry on the coal development in Mui County and its visit to China the Committee makes the following recommendations that:-

1. The Mining process of Blocks C and D should be fast tracked to enable the country invest in alternative sources of energy to supplement hydro power generation. Meanwhile the concessioning of Blocks A and B should also be fast tracked to ensure that all Mui Basin coal blocks are at the same level in infrastructural development. At the same time, gazettelement and thereafter concessioning of the 31 new coal blocks delineated by the MOE should also be fast tracked so as to provide more opportunities for more private sector participation in coal development in the country.
2. Resettlement model to be used should be selected by the locals after a thorough consultative process; stakeholder consultations should continue to be held during all phases of the concession and public hearings for the Strategic Environmental Assessment (SEA), Environmental and Social Impact Assessment (ESIA), and the Resettlement Action Plan (RAP) should be organized by the MOE in conjunction with relevant Government Ministries/Departments/Agencies and Fenxi Mining. Community mobilization and civic education should be enhanced.
3. Kenya should formulate an integrated design of the coal mining project that covers industrial, resettlement and town plans. Mining of Coal should be tailored to create a coal mining city that is well planned with elaborate housing.
4. The government should put in place proper operational structures and create comprehensive legal and policy and regulatory framework to support coal mining and mining of other natural resources. The framework shall guide plans on revenue sharing ratios, resettlement and compensation models..

5. Power plants be developed in Mui Basin to utilize power production out of the coal mining project in Kitui County.
6. Mining of Coal in Kenya should adhere to proper mine's safety and health management system with an elaborate programme on environmental protection and city Greenification system;
7. Fenxi Mining should conduct, first, an overarching SEA and then elaborate ESIA's for each of the two Coal Blocks prior to start of any field programme. The SEA and ESIA's should be supervised by the National Environmental Management Authority (NEMA) for approval and award of Environmental Licences as required under the Environmental Management and Co- ordination Act (EMCA), 1999, and as provided for under the concession agreement. Proper environmental protection and Greenification programme be established in the mining environs.
8. The Committee recommends that analysis of coal and soils and water samples from the basin for coal related pollutants, pollution vulnerability maps indicating the areas which are likely to be affected and the proposed mitigation measures must form part of what is to be covered by the SEA and ESIA's.
9. As the coal concession proceeds, it is recommended that water for coal processing and power generation is abstracted from the Tana River south of the location earmarked for construction of the High Ground Falls Dam and be delivered to the Mui Basin by pipeline. It is also recommended that dams are locally constructed to harvest the huge amount of surface water that is received in the Mui Basin for a short period during the heavy rains to supplement the piped water supply from the Tana River. In addition, it is recommended that studies are carried out to predict the potential impacts on the scarce water resources of the Mui Basin by both the open pit and underground coal mining which will take place; and propose measures for mitigation of the impacts.
10. Prior to the start of mining in each Coal Block, Fenxi Mining should conduct a Resettlement Action Plan (RAP) meeting relevant Kenyan law requirements and World Bank Standards and which is to be approved by the Government of Kenya.

MINUTES OF THE 10TH SITTING OF THE DEPARTMENTAL COMMITTEE ON ENERGY, COMMUNICATION AND INFORMATION ON THE TUESDAY, APRIL 17TH, 2012 AT THE COMMITTEE ROOM 5TH FLOOR, PARLIAMENT BUILDINGS AT 11.30 A.M.

Present

1. The Hon. (Eng.) James Rege, M.P - Chairman
2. The Hon. Maina Kamau, M.P - Vice Chairman
3. The Hon. Ekwee Ethuro, M.P
4. The Hon. Edwin O. Yinda, M.P
5. The Hon. Joshua Kutuny, M.P
6. The Hon. Cyprian Omollo, M.P
7. The Hon. Aden Duale, M.P

Absent with Apology

1. The Hon. Emilio Kathuri, M.P
2. The Hon. (Prof) Phillip Kaloki, M.P
3. The Hon. Aden Keynan M.P
4. The Hon. (Eng.) Nicolas Gumbo, M.P

IN ATTENDANCE:

NATIONAL ASSEMBLY

- | | |
|---------------------|--------------------|
| 1. Emmy Chepkwony | Clerk Assistant |
| 2. Veronicah Kibati | Research Assistant |

MIN. 51/2012:

PRELIMINARIES

The proceedings commenced with a word of prayer at 10:36am.

MIN. 52/2012:

ADOPTION OF THE AGENDA

The Committee adopted the agenda as follows;

1. Confirmation of previous minutes
2. **Meeting with the Ministry of Energy on the Development of Coal in Mui Basin Kitui County**
3. Any Other Business
4. Date of the next sitting

MIN. 53/2012:

MEETING WITH THE MINISTRY OF ENERGY ON THE DEVELOPMENT

OF COAL IN MUI BASIN KITUI COUNTY

The Committee informed the ministry of its resolution to inquire into the development of Coal mining in Mui Basin, Kitui County, considering the strategic nature of the coal resource to Kenya in the creation of stable energy supply towards attainment of the vision 2030, the Committee resolved and dedicated part of its programme for the year 2012 to conduct and inspect the development of coal in Mui Basin, Kitui County.

The Committee was appraised on the following issues

- a) The historical development on the Mui Basin Coal;
- b) the concession process and the conditions for the award of the Blocks;
- c) The estimation of the coal resource and its commercial viability;
- d) An appraisal on how the local community and the whole country will benefit from the venture;

a) Historical Development of the Mui Basin Coal

- Kenya imports annually on average 150,000 tonnes of coal and coke at a cost of US \$ 13.6 million to meet domestic requirements. However, after years of exploration which began in 1999, the Government, through the Ministry of Energy (MOE), discovered commercial deposits in the Mui Basin, covering an area of approximately 500 Km², and situated some 180Km North East of Nairobi.
- To ease exploration logistics, the MOE subdivided the Mui Basin into four coal mining blocks, designated Block A - Zombe-Kabati (121.5km²), Block B - Mutito-Itiko (117.5km²), Block C -Kateiko-Yoonye (131.5km²) and Block D – Karunga-Isekele (120km²).. Work ranging from surface geological mapping to appraisal drilling and a feasibility study (covering only Block C) has been done.
- To fast track exploration, development and production of the coal resource, the Government decided to Concession all four (4) Mui Basin Coal Blocks to suitable private sector companies through open international competitive bidding. The intention to enable a private concession over this asset was issued in the official gazette.
- The Government intends to participate in the investment through holding of part equity, or working interest, in the envisaged project. The Government may participate either directly, or through an appointee, through a Special Purpose Vehicle or in a Joint Venture with the Concessionaire.

- The Government has also formed an Inter- Ministerial Committee on Coal (IMC) to spearhead the process of the Concession. The Committee consists of relevant Government Ministries/Departments/ agencies namely, the MOE, Ministry of Environment and Mineral Resources (MEMR), Treasury, Ministry of Industrialization, Ministry of Lands, Attorney General and the National Environment Management Authority (NEMA).

Committee Resolution

- a) The committee resolved to visit Mui Basin, Kitui County to ascertain whether the community supports the project and listen to their concerns and to visit china to ascertain the technical and financial capacity of Fenxi mining Group to mine Coal in Kitui County.

MIN.54/2012 ADJOURNMENT

There being no other business and the time being fifteen minutes past five O'clock the meeting adjourned.

MIN.55/2012 DATE OF THE NEXT SITTING

The date and time for the next sitting was to be announced by way of notice.

SIGNED: 

Hon. Edwin Yinda, MP -AG. Chairperson

DATE: 13th Dec. 2012.

MINUTES OF THE 18TH SITTING OF THE DEPARTMENTAL COMMITTEE ON ENERGY, COMMUNICATIONS AND INFORMATION HELD ON JUNE 7TH 2012 AT PROTECTION HOUSE 11TH FLOOR, PARLIAMENT BUILDINGS AT 10.30 AM

Present

1. **Hon. Maina Kamau, M.P.** - Ag Chairman
2. Hon. Aden Duale, M.P.
3. Hon Edwin O. Yinda, M.P.
4. Hon. Adan Keynan, M.P.
5. Hon. Emilio Kathuri, M.P.
6. Hon. Joshua Kutuny, M.P.

Absent With Apology

1. **Hon. (Eng.) James Rege, M.P.** - Chairman
2. Hon. Cyprian Omollo, M.P.
3. Hon. (Eng.) Nicolas Gumbo, M.P.
4. Hon. Ekwee Ethuro, M.P.
5. The Hon. (Prof.) Philip Kaloki, M.P.

IN ATTENDANCE:

NATIONAL ASSEMBLY

- | | |
|-------------------|-----------------|
| 1. Emmy Chepkwony | Clerk Assistant |
| 2. Jacob Ngwele | Clerk Assistant |

MIN. 88/2012:

PRELIMINARIES

The proceedings commenced with a word of prayer at 10:36am.

MIN.89/2012: ADOPTION OF THE AGENDA

The Committee adopted the agenda as follows;

1. Confirmation of previous minutes
2. **Meeting with the Ministry of Energy on the Development of Coal in Mui Basin Kitui County**
3. Any Other Business
4. Date of the next sitting

MIN. 90/2012: MEETING WITH THE MINISTRY OF ENERGY ON THE DEVELOPMENT OF COAL IN MUI BASIN KITUI COUNTY

Following its visit to Mui Basin Kitui County, the Committee held a meeting with the Ministry of Energy to deliberate on the following issues:

- a) The nature of civic education carried out at the local level on the project;
- b) Solutions to the concerns raised on the environmental impact of the project;
- c) The proposed resettlement and compensation models;
- d) The progress report on the mining and Minerals Bill; and
- e) The progress so far on the development of coal resources in the country.

a) The Civic Education carried out at the local level on the project

- Stakeholder consultations at the local level were carried out by the MOE during the time of coal exploration and later by the IMC during preparations for coal block concession. To move the consultations to higher level, a workshop for 300 delegates and leaders of Kitui County to discuss the coal concession was held at the Kenya School of Monetary Studies, Nairobi on 11th to 13th October, 2011.

b) Benefits of the Project to the local community and the whole country

- With availability of local coal, consumption of the commodity is likely to rise. This will boost Kenya's economy by addressing the energy needs for Kenya Vision 2030. The areas which could utilize Mui coal area as discussed below.
- **Electric Power Generation-** a major potential use of the Mui Basin coal is generation of electricity. The coal could be used as substitute for more expensive oil in generation of electric power and also to supplement hydro generated electricity shortfalls whenever there is a prolonged drought. In this regard, 400 million tones of the coal resource so far identified in part of Block C alone can support a 3,600MW power generation for 30 years.
- **Other uses-** Mui coal could be used in production of coke for manufacture of iron and steel products, as a source of process heat for industrial and commercial boilers, for conversion to liquid fuels, as source of industrial filler in construction, gasification and domestic uses among others, Clean Coal Technologies capable of eliminating emission impurities will be the key to success.
- **Benefits to the Local people of Kitui-** the local community will benefit from employment, Corporate Social Responsibility projects, revenues from the coal mining and business spinoffs to result from the coal mining, power generation, and industries built using the coal as well as other mineral inputs, and many other activities that will arise from multiplier effect. The Proposed Resettlement and compensation models

- Concessionaire will develop a Resettlement Action Plan (RAP) and implement it after approval by the Government. The mode of compensation and resettlement would be in accordance to Kenya Law and World Bank standards and discussed with the local community who will indicate their preference(s). Normally options include compensation for land and developments in form of money, housing, land etc. The concessionaire will develop all social and other infrastructures to support the resettlement.

c. The Progress report on the Mining and Minerals Bill

- The Geology, Minerals and Mining Bill has been approved by Cabinet and forwarded to the Attorney General for fine tuning before being taken through the remaining other processes, including Constitution Implementation Committee and Parliament. The Bill proposed that mining projects must have 35% local (Kenya) ownership.

d. Solutions to the concerns raised on the Environmental Impact of the Project

- The Concessionaire will conduct, first, Strategic Environmental Assessment (SEA) covering all components of the project and thereafter Environmental and Social Impact Assessment (ESIA) on specific components of the project within the allocated Coal Block for approval by the National Environmental Management Authority (NEMA), and in line with the requirements of the Environmental Management and Coordination Act (EMCA), 199, prior to start of any Coal operations.

MIN.91/2012

ADJOURNMENT

There being no other business and the time being fifteen minutes past five O'clock the meeting adjourned.

MIN.92/2012

DATE OF THE NEXT SITTING

The date and time for the next sitting was to be announced by way of notice.

SIGNED: 

Hon. Edwin Yinda, MP -AG. Chairperson

DATE: 13th December, 2012

MINUTES OF THE 28TH SITTING OF THE DEPARTMENTAL COMMITTEE ON ENERGY, COMMUNICATIONS AND INFORMATION HELD ON NOVEMBER 29TH 2012 AT SMALL DINING ROOM, MAIN PARLIAMENT BUILDINGS AT 10.00 AM

PRESENT

1. Hon. (Eng.) James Rege, M.P. – Chairman
2. Hon. Maina Kamau, M.P.
3. Hon. Aden Duale, M.P.
4. Hon. Joshua Kutuny, M.P.
5. Hon. Edwin O. Yinda, M.P.
6. Hon. Cyprian Omollo, M.P.
7. Hon. Emillio Kathuri, M.P.
8. Hon. (Prof.) Phillip Kaloki, M.P.

ABSENT WITH APOLOGIES

1. Hon. Ekwee Ethuro, M.P.
2. Hon. Adan Keynan, M.P.
3. Hon. (Eng.) Nicholas Gumbo, M.P.

IN ATTENDANCE:

NATIONAL ASSEMBLY

1. Emmy Chepkwony Clerk Assistant

MIN. 147/2012:

PRELIMINARIES

The proceedings commenced with a word of prayer at 10:36am.

MIN. 148/2012:

ADOPTION OF THE AGENDA

The Committee adopted the agenda as follows;

1. Confirmation of previous minutes
2. **Deliberation on the Committee Findings and Adoption of the Report on the Development of Coal Mining Project in Mui Basin Kitui County.**
3. Any Other Business
4. Date of the next sitting

MIN.149/2012: DELIBERATION ON THE COMMITTEE FINDINGS AND ADOPTION OF THE REPORT ON THE DEVELOPMENT OF COAL MINING PROJECT IN MUI BASIN KITUI COUNTY.

The Committee received a report on the development so far on coal resources in the country and was informed as follows.

- As earlier indicated negotiations of the Government with Fenxi Mining are at an advanced stage and to be finalized within two months and the concession document initialed for further action.
- In June 2012 the Ministry of Energy advertised Expression of Interest for Mui Basin Coal Blocks A and B which had not been awarded and the process for concession is currently ongoing.
- In recognition of the anticipated importance as well as reliability of coal fired power generation and the energy requirements to meet the Vision 2030 objectives, the MOE has embarked on an ambitious coal exploration programme to increase the installed capacity through introduction of coal fired power generation.
- For many years the occurrence of coal in Kenya was only expected to be found within the expansive Karoo formations constituting the Phanerozoic sedimentary sequence in Coastal region. However, the discovery of commercial coal deposits in the comparably small and inland Mui Basin has created much interest in areas of similar geological nature in the country.
- MOE has carried out studies and delineated 31 new coal blocks in various areas in the country.
- The Hon. Minister for Energy and Hon. Minister for Environment and Mineral Resources on 29th November, 2012 approved commencement of the process for gazetting the 31 new coal blocks to enable private sector participation in investments in these blocks.

MIN.150/2012

A.O.B

The Committee resolved to hold its final sitting on the 11th December 2012 to deliberate and adopt its report on the development of coal in Mui Basin Kitui County.

MIN.151/2012

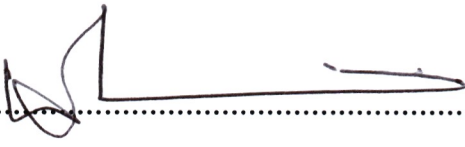
ADJOURNMENT

There being no other business and the time being thirty minutes past one O'clock the meeting adjourned.

MIN.152/2012

DATE OF THE NEXT SITTING

The date and time for the next sitting was to be announced by way of notice.

SIGNED: 

Hon. Edwin Yinda, MP -AG. Chairperson

DATE: 13th Dec. 2012.

MINUTES OF THE 29TH SITTING OF THE DEPARTMENTAL COMMITTEE ON ENERGY, COMMUNICATIONS AND INFORMATION HELD ON DECEMBER 11TH 2012 AT SMALL DINING ROOM, MAIN PARLIAMENT BUILDINGS AT 10.30 AM

PRESENT

1. **Hon. (Eng.) James Rege, M.P. – Chairman**
2. Hon. Maina Kamau, M.P.
3. Hon. Aden Duale, M.P.
4. Hon. Joshua Kutuny, M.P.
5. Hon. Edwin O. Yinda, M.P.
6. Hon. Cyprian Omollo, M.P.
7. Hon. Emilio Kathuri, M.P.
8. Hon. (Prof.) Phillip Kaloki, M.P.

ABSENT WITH APOLOGIES

1. Hon. Ekwee Ethuro, M.P.
2. Hon. Adan Keynan, M.P.
3. Hon. (Eng.) Nicholas Gumbo, M.P.

IN ATTENDANCE:

NATIONAL ASSEMBLY

1. Emmy Chepkwony Clerk Assistant

MIN. 153/2012:

PRELIMINARIES

The proceedings commenced with a word of prayer at 10:36am.

MIN. 154/2012: ADOPTION OF THE AGENDA

The Committee adopted the agenda as follows;

1. Confirmation of previous minutes
2. **Deliberation on the Committee Findings and Adoption of the Report on the Development of Coal Mining Project in Mui Basin Kitui County.**
3. Any Other Business
4. Date of the next sitting

MIN. 155/2012: Confirmation of the minutes of the previous sittings

Minutes of the following sittings were confirmed as true record of the proceedings and signed by the AG. Chairman:

- i. Minutes of the 10th sitting held on April 17th, 2012 were proposed by Hon, Maina Kamau, M.P and seconded by Hon. Cyprian Omolo, M.P
- ii. Minutes of the 18th sitting held on June 7th, 2012 were proposed by Hon, Aden Duale , M.P and seconded by Hon. Cyprian Omolo, M.P.
- iii. Minutes of the 28th sitting held on November 29th, 2012 were proposed by, Hon. Cyprian Omolo M.P and seconded by Hon, Aden Duale, M.P.
- iv. Minutes of the 29th sitting held on December 11th, 2012 were proposed by Hon, Aden Duale , M.P and seconded by Hon. (Eng) James Rege, M.P.

The Committee deliberated on its findings and adopted its report with the following recommendations.

1. The Mining process of Blocks C and D should be fast tracked to enable the country invest in alternative sources of energy to supplement hydro power generation. Meanwhile the concessioning of Blocks A and B should also be fast tracked to ensure that all Mui Basin coal blocks are at the same level in infrastructural development. At the same time, gazettelement and thereafter concessioning of the 31 new coal blocks delineated by the MOE should also be fast tracked so as to provide more opportunities for more private sector participation in coal development in the country.
2. Resettlement model to be used should be selected by the locals after a thorough consultative process; stakeholder consultations should continue to be held during all phases of the concession and public hearings for the Strategic Environmental Assessment (SEA), Environmental and Social Impact Assessment (ESIA), and the Resettlement Action Plan (RAP) should be organized by the MOE in conjunction with relevant Government Ministries/Departments/Agencies and Fenxi Mining. Community mobilization and civic education should be enhanced.
3. Kenya should formulate an integrated design of the coal mining project that covers industrial, resettlement and town plans. Mining of Coal should be tailored to create a coal mining city that is well planned with elaborate housing.
4. The government should put in place proper operational structures and create comprehensive legal and policy and regulatory framework to support coal mining and mining of other natural resources. The framework shall guide plans on revenue sharing ratios, resettlement and compensation models.

5. As a result of interest in coal exploration services, several investment opportunities including coal sale to industrial utility and infrastructure associated with coal mining are likely to emerge with the coal fired power plants for electricity generation. It is recommended that power plants be developed in the vicinity of Mui Basin to utilize power production out of the coal mining project in Kitui County.
6. Mining of Coal in Kenya should adhere to proper mine safety and health management system with an elaborate programme on environmental protection and city Greenification system.
7. Fenxi Mining should conduct, first, an overarching SEA and then elaborate ESIA's for each of the two Coal Blocks prior to start of any field programme. The SEA and ESIA's should be supervised by the National environmental management authority (NEMA) for approval and award of Environmental Licences as required under the Environmental Management and Co-ordination Act (EMCA), 1999, and as provided for under the concession agreement. Proper environmental protection and Greenification programme be established in the mining environs.
8. Prior to the start of mining in each Coal Block, Fenxi Mining should conduct a Resettlement Action Plan (RAP) meeting relevant Kenyan law requirements and World Bank Standards and which is to be approved by the Government of Kenya.
9. As the coal concession proceeds, it is recommended that water for coal processing and power generation is abstracted from the Tana River south of the location earmarked for construction of the High Ground Falls Dam and be delivered to the Mui Basin by pipeline. It is also recommended that dams are locally constructed to harvest the huge amount of surface water that is received in the Mui Basin for a short period during the heavy rains to supplement the piped water supply from the Tana River. In addition, it is recommended that studies are carried out to predict the potential impacts on the scarce water resources of the Mui Basin by both the open pit and underground coal mining which will take place; and propose measures for mitigation of the impacts.
10. The Committee recommends that analysis of coal and soils and water samples from the basin for coal related pollutants, pollution vulnerability maps

indicating the areas which are likely to be affected and the proposed mitigation measures must form part of what is to be covered by the SEA and ESIA's.

MIN.156/2012 **A.O.B**

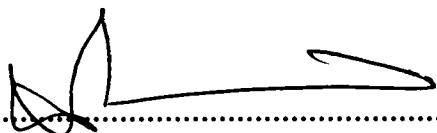
The Committee resolved that Hon. Edwin Yinda, M.P tables the report on the 13th December 2012.

MIN.157/2012 **ADJOURNMENT**

There being no other business and the time being thirty minutes past one O'clock the meeting adjourned.

MIN.158/2012 **DATE OF THE NEXT SITTING**

The date and time for the next sitting was to be announced by way of notice.

SIGNED: 

Hon. Edwin Yinda, MP -AG. Chairperson

DATE: *13th December, 2012.*