Vote Summary

V1: Vote Overview

This section sets out the Vote Mission, Strategic Objectives, and provides a description of the vote's services (i) Snapshot of Medium Term Budget Allocations

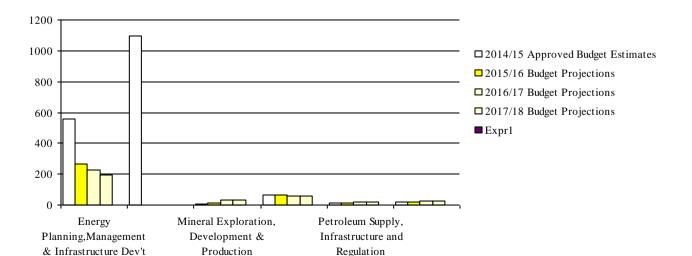
Table V1 below summarises the Medium Term Budget allocations for the Vote:

Table V1.1: Overview of Vote Expenditures (UShs Billion)

		2012/14	2014	/15 ,	MTEF I	Budget Proje	ctions
(i) Excluding	Arrears, Taxes	2013/14 Outturn	Approved Budget	Spent by End Sept	2015/16	2016/17	2017/18
	Wage	2.577	4.063	0.688	4.063	4.837	4.837
Recurrent	Non Wage	3.720	4.244	0.860	4.244	5.093	5.094
Danilanna	GoU	189.764	1,291.104	327.519	194.204	233.045	233.068
Development	nt Ext.Fin	0.000	468.599	0.000	179.030	116.446	88.166
	GoU Total	174.588	1,299.411	329.066	202.511	242.975	242.999
Total GoU+D	Oonor (MTEF)	174.588	1,768.010	329.066	381.541	359.421	331.165
(ii) Arrears	Arrears	0.000	0.200	0.016	0.000	N/A	N/A
and Taxes	Taxes**	21.472	0.000	0.000	0.000	N/A	N/A
	Total Budget	196.060	1,768.210	329.082	381.541	N/A	N/A
(iii) Non Tax	Revenue	0.000	7.700	0.000	0.000	0.000	0.000
	Grand Total	196.060	1,775.910	329.082	381.541	N/A	N/A
Excluding	Taxes, Arrears	174.588	1,775.710	329.066	381.541	359.421	331.165

^{*} Donor expenditure data unavailable

The chart below shows total funding allocations to the Vote by Vote Function over the medium term: Chart V1.1: Medium Term Budget Projections by Vote Function (UShs Bn, Excluding Taxes, Arrears



^{**} Non VAT taxes on capital expenditure

Vote Summary

(ii) Vote Mission Statement

The Vote's Mission Statement is:

MANDATE

The Mandate of the Ministry is to "Establish, Promote the Development, Strategically Manage and Safeguard the Rational and Sustainable Exploitation and Utilisation of Energy and Mineral Resources for Social and Economic Development".

VISION

"A Model of Execellence in Sustainable Management and Utilisation of Energy and Mineral Resources".

MISSION

"To ensure reliable, adequate and sustainable exploitation, management and utilisation of energy and mineral resources".

ROLES AND FUNCTIONS

- (i) Provide policy guidance in the development and exploitation of the Energy, Mineral, Oil and Gas resources.
- (ii) Create an enabling environment in order to attract investment in the development, provision and utilisation of energy and mineral resources.
- (iii) Acquire process and interpret technical data in order to establish the energy and mineral resource potential of the country.
- (iv) Inspect, regulate, monitor and evaluate activities of private companies in energy and mineral sectors so that the resources are developed, exploited and used on a rational and sustainable basis.

(iii) Vote Outputs which Contribute to Priority Sector Outcomes

The table below sets out the vote functions and outputs delivered by the vote which the sector considers as contributing most to priority sector outcomes.

Table V1.2: Sector Outcomes, Vote Functions and Key Outputs

Sector Outcome 1:	Sector Outcome 2:	Sector Outcome 3:
Increased access to affordable and efficient sources of energy	Sustainable management of mineral resources for development	Sustainable management of the country's Oil and Gas resources
Vote Function: 03 01 Energy Planning	,Management & Infrastructure Dev't	
Outputs Contributing to Outcome 1:	Outputs Contributing to Outcome 2:	Outputs Contributing to Outcome 3:
Outputs Provided	None	None
030102 Energy Efficiency Promotion		
030103 Renewable Energy Promotion		
030104 Increased Rural Electrification		
Outputs Funded		
030152 Thermal and Small Hydro Power Generation (UETCL)		
Vote Function: 03 02 Large Hydro por	wer infrastructure	
Outputs Contributing to Outcome 1:	Outputs Contributing to Outcome 2:	Outputs Contributing to Outcome 3:

Vote Summary		
Sector Outcome 1:	Sector Outcome 2:	Sector Outcome 3:
Increased access to affordable and efficient sources of energy	Sustainable management of mineral resources for development	Sustainable management of the country's Oil and Gas resources
Outputs Funded	None	None
030251 Increased power generation - Largescale Hydro-electric		
Capital Purchases		
030280 Large Hydro Power Infrastructu	re	
Vote Function: 03 03 Petroleum Ex	ploration, Development & Production	
Outputs Contributing to Outcome 1:	Outputs Contributing to Outcome 2:	Outputs Contributing to Outcome 3:
None	None	Outputs Provided
		030303 Capacity Building for the oil & gas sector
		030304 Monitoring Upstream petroleum activities
		030305 Develop and implement a communication strategy for oil & gas in the country
		Capital Purchases
		030380 Oil Refinery Construction
Vote Function: 03 04 Petroleum Su	pply, Infrastructure and Regulation	
Outputs Contributing to Outcome 1:	Outputs Contributing to Outcome 2:	Outputs Contributing to Outcome 3:
None	None	Outputs Provided
		030402 Management and Monitoring of petroleum supply Industry
		030405 Development of Petroleum Refinery and Processing
		030406 Kenya - Uganda - Rwanda Oil pipelines
Vote Function: 03 05 Mineral Expl	oration, Development & Production	
Outputs Contributing to Outcome 1:	Outputs Contributing to Outcome 2:	Outputs Contributing to Outcome 3:
None	Outputs Provided	None
	030502 Institutional capacity for the	

V2: Past Vote Performance and Medium Term Plans

This section describes past and future vote performance, in terms of key vote outputs and plans to address sector policy implementation issues.

development, production and value-addition promoted 030505 Licencing and inspection

mineral sector 030503 Mineral Exploration,

(i) Past and Future Planned Vote Outputs

2013/14 Performance

ENERGY PLANNING, MANAGEMENT & INFRASTRURE DEVELOPMENT

Progress in increasing Electricity Generation Capacity

Vote Summary

Development of Karuma Hydropower Project (600MW): Government signed the Engineering Procurement Construction + Financing (EPC+F) contract and Memorandum of Understanding (MOU) for the construction of the Power Plant and Associated Transmission Lines with Sinohydro Corporation of China on the 6th August, 2013 and the project is financed by China Exim Bank and the Government of Uganda's Energy Fund. The ground-breaking ceremony was officiated by H.E. the President on the 12th August, 2013. Work at the site has been taken up at several fronts in the last six months. The contractor submitted detailed design drawings for review by the Government's Engineer. Access roads to the Dam Area and power intake area were being constructed. By close of the FY2013/14, construction of access tunnel to the power house site was ongoing as well as excavation on the right bank of the river for the diversion channel. Acquisition of the project land through compensation of the project affected people was being finalized and the duration of the construction period was estimated at 60 months. Karuma project land was gazetted on 23rd May 2014.

Isimba Hydropower Project (183 MW): The Government signed Engineering, Procurement, Construction + Financing (EPC+F) contract and Memorandum of Understanding (MOU) with the China International Water and Electric Corporation (CWE) for the construction of the Isimba hydropower project and the Isimba – Bujagali 132kV interconnection line on the 6th September, 2013 and the project is funded by China Exim Bank and the Government of Uganda. H.E the President officiated at the groundbreaking ceremony held on the 6th October 2013. Addendum 1 was signed on 10th April 2014 mainly addressing the issue of effectiveness of the contract which was established on 6th September 2013. Addendum 2 was signed on 20th May 2014 mainly addressing the issue of advance payment to the EPC Contractor. The contract for the Supervision Consultant was signed on May 7th 2014. The Supervision Consultant is Energy Infratech PVT from New Delhi India.

After the ground breaking ceremony on the 5th of October 2013, the Contractor embarked on various preconstruction works utilizing their own resources. Among other things the contractor completed were:

- (i) Site topographic survey, and Geological Mapping, for both the plant and the line, has carried out seismic safety assessment and soil resistivity tests.
- (ii) Basic design of the whole project involving modifying and optimizing the consultants' original design in the Feasibility Study in line with the above complementary geological and surveying investigation results . The Design was under evaluation and optimization by the Contractor's experts and was expected to be submitted by Mid-July 2014.
- (iii) Bujagali Isimba 132kV transmission line route mapping and basic designs were submitted and were under review.
- (iv) Design of Employer & Contractor's camp was reviewed and approved
- (v) Construction of a 33kv power line along Busana Road from Kayunga town to the Isimba Hydropower Project Site
- (vi) The contractor signed a contract with MTN Uganda to provide the project with all telecommunication needs and reliable network coverage and with Total Uganda Limited to supply the Project sites with Fuel. Both Contracts were signed in March 2014
- (vii) CWE procured a shipment of goods including equipment and materials for the construction of the workers camps and these arrived on site.

Vote Summary

The Contract for the Implementation of the Resettlement Action Plan was signed on 9th May 2014 with Kagga and Partners LimitedRAP implementation is going on with progress as follows: -

Dam site area

- Disclosure at 90%
- Payments at 72%

Reservoir Area

Disclosure at 75%

The Contractor commenced clearing of the area where land acquisition was complete in preparation for the construction of the camps, fuel station and telecommunication infrastructure among other.

Ayago Hydropower Project (600MW): Government signed a Memorandum of Understanding (MoU) with China Gezhouba Group Company Limited (CGGC) for the construction of the power plant and associated Interconnection transmission line on EPC+ Financing Basis. CGGC was also to complete the detailed Feasibility Study that JICA study team partly conducted.

Progress

- A draft detailed feasibility report was submitted for review. Comments were generated and submitted to CGGC.
- Six firms were shortlisted to provide consultancy services for the construction supervision of the project. Shortlisted firms were issued Request for Proposals and the closing date for proposal submission was slated for 14th July 2014.
- EPC contract was expected to be signed in the 1st Quarter of the FY 2014/15.

Small Hydropower Projects: To further increase power generation capacity, government promoted the development of small hydros as follows:-

- (i) Detailed feasibility studies for a number of small hydro sites totaling to over 80 MW were completed and were due for implementation. These included: Kikagati (16 MW), Mitano (2.9 MW), Lubilia (5.4 MW), Nyagak III (4.5 MW); Siti (21.5 MW), Waki (5.4 MW), Rwimi (10.54MW) Ndugutu (0.5 MW), Nkusi (4.8MW) Nyamwamba (9.2 MW), Nengo Bridge (6.5 MW), Esia (0.11 MW) and Muzizi (44.5 MW Peak Power).
- (ii) Feasibility studies for other sites were in their final stages of completion included: Nsongezi (38 MW), Ntono (2.5 MW), Sindoro (5.6MW) Achwa-Agago (88 MW), Kakaka (7.2 MW), Muvumbe (4.5MW) Muyembe (3.2 MW) and Kyambura (8.3 MW).

Under the Global Energy Transfer Feed in Tariff (GET FiT) Program twelve (12) projects, representing 103MW were approved. The approved projects were: Nyamwamba (9.2 MW), Rwimi (5.5 MW), PH Industrial Farm's (1 MW) biomass gasified maize farm waste, Sugar Allied Industries Limited Cogeneration (6,9 MW) biomass (bagasse from sugar production) plant in Kaliro district, Kikigati (16 MW), Kakira Cogeneration (20 MW) biomass using bagasse from sugar production, Nengo Bridge (6.7 MW), Muvumbe (6.5 MW), Lubilia (5.4 MW), Waki (4.8 MW), Siti I (6.1 MW) and Siti II (15 MW).

Vote Summary

The GET FiT program targets a total capacity of 170 MW within a period of 3 to 5 years which includes 20 MW of solar fed into the main grid. This program is supported by grants from development partners notably Norway, UK, EU Commission and Germany. The World Bank will provide a Partial Risk Guarantee (PRG) mechanism to secure against political and commercial risks.

Other energy sources of power generation: under this category, the power generation sources being developed included: Geothermal (200 MW), Modern Biomass (150MW), Solar Thermal (200 MW), Solar PV (50 MW), Oil & Gas and Heavy Fuel Oil (100MW).

Promotion and Development of Nuclear Energy: A strategy to develop the Nuclear Power Roadmap was prepared. The Strategy identifies major nuclear power infrastructure and proposes pre-feasibility studies to be untaken to provide recommendations on how the infrastructures issues will be addressed in the short, medium and long term. The set of these recommendations constitute the Nuclear Power Roadmap for Uganda. A Cabinet Memorandum on Nuclear Power Roadmap Development Strategy 2014 – 2016 was submitted to seek cabinet support and concurrence.

Grid Expansion Programmes – Transmission Infrastructure

By the end of the financial year 2013/14; transmission infrastructure comprised of 150 km of 220kV lines, 1441.7 Km of 132kV and 35.2 Km of 66kV transmission lines. The 82.5 km of 132kV Mutundwe - Kabulasoke line was successfully re-conductored and refurbished to improve reliability of supply to districts of South Western Uganda. The number of substations was 16.

Solar based Rural Electrification for Social Services

Government is also increasing investments, mainly in solar-based electricity, to enable the delivery of social services especially where the national grid has not reached. Solar-based electricity is used to support health services through lighting, microscopy and other diagnostic services and the cold chain (storage of immunization doses). It is also applied in pumping for rural water schemes and in schools, providing lighting and power for science laboratories

Health Centres: In the course of the financial year, Government has provided solar energy packages to 130 Health Centres (HCs) in eight (8) districts: twelve (12) HCs in Amolatar, thirty (30) HCs in Pader and Agago, nine (9) HCs in Buliisa, twenty nine (29) HCs in Gulu, twenty two (22) HCs in Moyo and twenty eight (28) HCs in Soroti and Serere districts.

By the end of this year, an additional 180 HCs will be provided with solar energy packages in nine (9) districts: Bukwo, Sironko, Mbale, Mayuge, Katakwi, Amuria, Masindi, Bududa and Bundibugyo.

Water Supply Schemes: Government has completed the installation of 20 solar-based water-pumping schemes in fourteen (14) districts. The completed schemes are: Anaka, Purongo and Alero in Nwoya district, Itula, Obongi and Lefori in Moyo district, Adwari, Okwang and Orumo in Otuke district, Kaabong and Karenga in Kaabong district, Palenga in Gulu district, Erussi in Nebbi district, Kati in Arua district, Midigo in Yumbe ditrict, Koboko in Koboko district, Usuk in Katakwi district, Mucwini in Kitgum district and Alebtong in Alebtong district.

Schools: During the Financial Year Government completed the installation of solar energy packages in 287 Post-Primary Schools in 51 districts. Solar packages were provided in 14 schools in Lira district, 9 schools each in Kitgum, Mayuge, Kyenjonjo and Kayunga districts, eight (8) schools each in Rakai, Soroti, Gulu,

Vote Summary

Bundibugyo and Nebbi districts, seven (7) schools each in Kiboga, Amuria, Busia, Amuru, Pader and Kamwenge districts, six (6) schools each in Nakasongola, Bugiri, Kiruhura, Isingiro, Ibanda and Kabale districts, five (5) schools each in Masaka, Mbarara, Lwengo, Katakwi, Kisoro, Buikwe, Iganga, Koboko and Moyo districts, 4 schools each in Kalangala, Masindi, Bukedea, Ntungamo, Sironko, Bukwo, Kanungu, Kabarole, Adjumani and Yumbe districts, 3 schools each in Agago, Nakaseke, Kapchorwa, Moroto, Nakapiripirit and Maracha-Terego and 2 schools in Kween.

PETROLEUM SUB-SECTOR

Government efforts to promote the establishment of the country's petroleum resource base so as to achieve sustainable exploitation included: building the national expertise in the field of petroleum exploration, development and production; attraction of oil companies to invest in exploration and production as well as commercialization plans of the oil and gas resources. The key highlights of the achievements included:

(i) Policy, Legal and Institutional Framework

The Petroleum (Exploration, Development and Production) Act, 2013 and the Petroleum (Refining, Conversion, Storage and Transportation) Act, 2013 were enacted in April and July 2013 respectively. In order to operationalize the new legislations, formulation of new sets of Petroleum Regulations commenced.

The process of putting in place new institutions namely the National Oil Company (NOC) and Petroleum Authority of Uganda (PAU) after the enactment of the new legislations commenced. Specifically the process of identifying the Board members was initiated and these Institutions are expected to be operational during 2014/15.

The development of the National Content Policy, Strategy and Plan progressed on with the holding of stakeholder consultation engagements. The Policy goal is to ensure that exploitation of petroleum resources creates lasting values to the economy and people of Uganda, through maximizing the share of local labour, local businesses, and local goods and services; and transfer of technology and know-how to deepen the capabilities and competiveness of Ugandan individuals and businesses

(ii) Licensing Status and Investment Promotion

In the FY 2013/14, there were still three (3) international oil companies operating as Joint Venture (JV) and holding there (3) exploration licenses and one (1) production license within the Albertine Graben. These companies are: - Tullow Uganda Operations (PTY) Ltd., Total E&P Uganda Ltd. And CNOOC Uganda Ltd. Who hold a 33.33% joint venture in Discovery Areas or oil fields of Exploration Area (EA) 1 and 1A (Paraa – Wanseko – Pakwach Basin), EA 2 (Northern Lake Albert Basin), and Kingfisher Discovery Area.

In preparation for the first opening bidding licensing round scheduled for 2015 the following were undertaken: (a) Building of the stratigraphic structure of the Albertine Graben; (b) reviewing of the model contracts for acquisition, processing and marketing of data and licensing; and © putting up the regulations for sale of petroleum data.

(iii) Status of Exploration and Development

A total of twenty two (22) wells were drilled during 2013/14 bringing the cumulative number to one hundred and sixteen (116) drilled in the country of which thirty six (36) exploration wells while eighty (80) were appraisal wells.

Vote Summary

Appraisal of eight (8) fields namely: Kasamene, Warindi, Kigogole, Ngege, Ngara, Nsoga, Mputa, Nzizi, were completed, and applications for production licenses submitted to government. These applications are still under review by government. Appraisal of the remaining 7 (Jobi-East, Jobi-Rii, Mpyo, Gunya, Ngiri, Lyec, Waraga) discoveries is still on going and should be completed by end of 2014.

The JV partners commenced the development of Kingfisher field with the acquisition of additional 2D Seismic data, preparations for drilling development wells, basic civil works and procurement of a subcontractor to construct a road through the escarpment to Buhuka.

All the exploration, appraisal and development activities during the FY 2013/14 were effectively monitored. Production licences for the fields whose appraisal was completed were expected to be granted during the 1st half of 2015 and their development was planned to commence during the 2nd half of 2015. These fields include Ngiri, Kasamene-Wairindi, Kigogole, Nsoga, Ngege, Ngara, Mputa and Nzizi. Production licences for the fields whose appraisal was ongoing were planned to be granted before end of 2015 and their development was planned to commence during the 1st half of 2016. These fields include Jobi, Rii, Mpyo, Gunya, Jobi-East, Lyec and Waraga.

Mid-Stream

(i) Commercialization Strategies

In February 2014, Government and the oil companies entered into a memorandum of understanding on how to commercialize the country's oil and gas resources. The high level commercialization plan contained in this MOU includes i) the use of petroleum for power generation; ii) development of a 60,000barrels per day refinery in two phases; and iii) development of a crude oil export pipeline. A detailed implementation plan for this commercialization plan is currently being developed. In the short term and prior to the refinery coming on stream, crude oil/gas to power generation capacity is being promoted. First oil is expected during the Financial Year 2017/18.

(ii) Refinery Development Project

Government plans to develop the refinery on a Public–Private Partnership (PPP) basis through a joint venture company with shareholding of 40% (forty percent) by the public sector and 60% (sixty percent) by the private sector. In 2013/14, Government commenced the procurement of a Lead Investor for the oil refinery. Six (6) firms were considered and shortlisted, these include: China Petroleum Pipeline Bureau led consortium – China; Marubeni Corporation – Japan; Petrofac led consortium – UAE; RT Global resources led Consortium – Russia; SK Energy led Consortium – Korea; and Vitol SA (Swiss) led consortium with Samsung Engineering (Korea).

Several evaluation studies regarding refinery development were undertaken to enable Government make the right decisions. The studies undertaken included an Environmental Baseline Study that was concluded in December 2013. This study characterizes the current environmental and social conditions in and around the refinery land and it will provide a benchmark for comparing the state of the environment when the operations commence to decommissioning.

The process of acquiring land for refinery development that commenced in July 2013 progressed on with the implementation of the Resettlement Action Plan (RAP) for the 29 sq.km of land proposed for the refinery in Kabaale Parish, Buseruka Sub-county, Hoima District by compensating the affected

Vote Summary

persons/families to a tune of about 50% of the PAPs.

PETROLEUM SUPPLY AND DISTRIBUTION

Uganda is currently a net importer of petroleum products. It imports about 95% of the products through Kenya and 5% through Tanzania. The average annual growth of petroleum consumption stands at about 7%, which is attributed to an average economic growth of about 6 percent. Monthly consumption of petroleum products is 125 million litres which translates to an annual figure of 1,500,000 cubic metres and on a monthly basis, the country spends about US\$ 156 million to import petroleum products.

By close of the FY2013/14, there were 167 private oil-marketing companies established in Uganda involved in supply, transportation, distribution and marketing of Petroleum products.

(i) Strategic Fuel Reserves

Government through the Public Private Partnership (PPP) arrangement with Hared Petroleum Ltd refurbished the 30 million litre Jinja storage facility and restocking is on-going. At present there are 167 private oil-marketing companies established in Uganda involved in supply, transportation, distribution and marketing of Petroleum products.

(ii) Eldoret-Kampala-Kigali Refined Petroleum Products Pipeline

The private investor demanded excessive guarantees like capacity payments if the refinery in Uganda negatively impacts on the importation of petroleum products. Consequently, the project is being structured as a public project and financing is being sought.

A Contract for carrying out a feasibility study for the Kampala-Kigali pipeline segment was signed between M/S PENSPEN Ltd and the Governments on 8th January 2014. The feasibility study will take six (6) months to complete.

THE MINERAL SECTOR

(i) Uganda's Mineral Resources

Uganda is endowed with a variety of Mineral Resources namely: metallic mineral resources like Copper, Cobalt, Tungsten, Beryllium, Bismuth, Columbite-Tantalite, Gold, Tin, Iron Ores, Platinum Group of Metals, Uranium and Rare Earth Metals. The Industrial minerals include:- Marble /limestone, Phosphate (Apatite and francolite), Vermiculite, Kaolin, Bentonite, Diatomite, Gypsum, Glass sands, Salts, Feldspar, Quartz, Pozzolana, Dimension Stones and Gemstones.

A rising out of the airborne geological surveys carried out, government was able to focus investors in the mineral sector to target and quantify commercial mineral deposits. In this regard, four (4) mineral commodities, namely iron ore, gold, vermiculite and limestone were explored in sufficient detail and as a result, a significant increase in the mineral resources base in the country was realised.

In addition to the previously known iron ore deposits of muko (30-50 million tonnes), Bukusa (23 million tonnes), and Sukulu (45 million tonnes), new ore reserves discovered at Buhara (48 million tonnes) and Nangara (8 million tonnes) in Kabale, Kazogo in Kisoro and Rugando, Butogota in Kanungu (55 million tonnes), totaled to 116 million tonnes of iron ore and had an estimated gross value of US\$ 15.6 billion. A

Vote Summary

total of 7.8 million ounces of gold were proven as follows: at Tiira in Busia (500,000 ounces), Kamalenge in Mubende (5 million ounces), Mashonga in Bushenyi (I million ounces), Kampano in Ibanda (500 ounces) and at Alupe in Busia (800,000 ounces) have a gross value of US\$ 10.9 billion. Vermiculite reserves have increased from 5 million tonnes to 54.9 million tonnes at Namekhara in Manafa district and the reserves had an estimated gross value of US\$ 11.5 billion. The limestone/marble reserves in the country increased from the known 30 million tonnes in Hima, Dura Muhokya and Tororo to over 300 million tonnes after quantifying reserves in Karamoja.

The privatization of Kilembe Mines Limited under Public Private Partnership (PPP) was undertaken. M/S Tibet Hima Auto Limited (THAL) of the Peoples' Republic of China and Government of Uganda signed a concession agreement on 6th September, 2013 for 25 years to develop the copper and cobalt resources at Kilembe Mines. THAL also acquired license and rights to Mobuku-I facility from the Electricity Regulatory Authority.

Other Mineral deposits and targets identified: These include the 3 billion aluminous clay reserves at Mukutu, Buwaya in Mayuge district which contain Alumina and Rare Earths Elements; the new various mineral targets (plantinum group of elements, iron ore, base metals and rare earths) in the country; over thirty (30) Uranium targets of which ten (10) targets are of high priority; and bentonitic clays in Kaiso-Tonya area of Hoima.

(ii) New Geological Maps produced

Eight (8) geological maps at a scale of 1:50000 were produced, namely: Rom, Sidok, Longori, Kacheri, Alerek, Kailong, Waiwer and Nyakwae all in Karamoja Region. The maps are available at the Department of Geological Survey and Mines Department, Entebbe.

POLICY AND ADMINISTRATIVE SERVICES

Energy and Mineral Development Sector Strategic Investment Plan (SIP), and a Monitoring and Evaluation (M&E) Framework: By the close of the FY2013/14 a final SIP, M&E Framework and Operationalization Plan was completed. This output was achieved.

Sector Strategic Plan for Statistics (SSPS): The SSPS for 2014/15 – 2017/18 was approved by Uganda Bureau of Statistics (UBOS) and implementation commenced with the drafting of Data Collection Tools.

Retooling of Offices at Amber house: The project facilitated the procurement of office furniture and fixtures for various MEMD's Finance and Administration offices in Amber house. In addition, fittings, filing cabinets and equipment were procured for the MEMD records centre in Amber house.

Office Improvement: Remedial renovation of the Amber house basement to repair the leaking roofs and sewage system, and offices was undertaken. Furnishing of offices used by MEMD, and installation of air conditioning systems was also undertaken. Full renovation, however, is planned to be undertaken once a consultant's report on renovation is submitted.

Voice and data infrastructure: Phase I of the redesign voice and data infrastructure (Structured Cabling) was completed. Testing of the installations was successful. Commissioning awaits the completion of Phase II, whose procurement has been concluded. Phase I involved redesign and structured cabling of the data infrastructure. Phase II will involve installation of a centralized power supply system due to be installed during Q1 of FY2014/15.

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Specialized Machinery & Equipment: Fencing of GSMD premises was concluded. Fencing of the seismology stations at Nakawuka and Mubende was completed. The contract for procurement of the laboratory equipment under phase I was concluded and deliveries of the equipment will be completed during FY2014/15.

Feasibility Studies for Nyamba B Hydro Power Plant: Contract was cleared by Solicitor General and has been signed. Inception Report was presented and approved.

Preliminary 2014/15 Performance

ENERGY SUPPLY

Uganda's electricity generation mix is predominantly hydro power (80%) with thermal plants dispatching on a standby basis. Five projects are currently under implementation and can be classified into Large Hydro power projects and small Hydro power projects, two of which are at construction phase, two at Contractor and supervision Consultant procurement and financial closure stage and one at Feasibility completion and tender document stage.

(i)DEVELOPMENT OF LARGE HYDRO POWER PROJECTS

(a)Karuma hydropower project (600MW)

Construction work for Karuma hydropower project is on-going. The following has been achieved so far:

The Contractor Sino Hydro Constraction Ltd. Updated the feasibility study which had been undertaken by government as a requirement to secure financing from China EXIM bank. The work executed by Sino Hydro included: Detailed geotechnical survey (drilling of several holes at the dam site, and analysis of geo samples to determine the strengths of material); Detailed topographic surveys; and Hydrological analysis of the river.

Contractor submitted detailed design drawings for review by the Government's Engineer and these have been approved. The construction of access roads of 15.6km to the Dam Area and power intake area has been completed. The construction of camps is ongoing, and about 80% construction has been completed. The construction of auxiliary work such as: explosive magazine, aggregate system, concrete batching plant, Sinohydro office, weighbridge room, temporary warehouse, temporary repair plant, 7 water wells, material warehouse, repair plant, the drinking water system has been completed and the construction of the clinic, site laboratory and M&E warehouse are at about 80%.

The construction of the dam is on-going. Progress includes construction of the: Main Access Tunnel (MAT) is at chainage MAT 0+670, of 1317m in total; Escape Ventilation Tunnel (EVT) at chainage EVT 0+570.0, of 1020m in total; Surge chamber tunnel is at chainage K0+050.0, of 334m in total; Intake, 40000m2 ground surface clearing and leveling have been completed; Diversion channel, 81000m3 open excavations in soil and rock has been completed; 560m2 support on the slope has been finished. And the construction of sub-cofferdam has been completed; Excavation of chainage S8K0+126.0, of 1149m of Adit-8 has been achieved; Excavation of chainage S9K0-002.5 of Adit-9 has been achieved, of the 720m in total and the under bench of chainage S9K0-012.5; Open excavation of 2300m3 of Adit-10 and 1600m2 support on the slope of Adit-10 have been completed. The construction of open arch has started; Open excavations of 72300m3 of Tail race Tunnel (TRT) outfall has been completed; Excavation on the right bank of the river

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for the diversion channel has also started.

The following estimated percentages of compensation have been paid in each village. Karuma, 90% PAPs have been paid. Awoo, 10% of PAPs have been paid and 60% in Nora village have been paid.

(b)Isimba hydro power project (183 MW)

The Contractor embarked on various pre-construction works utilizing their own resources. Among other things, the contractor has completed the following:

Site topographic survey, and Geological Mapping, for both the plant and the line, seismic safety assessment and soil resistivity tests. Basic design of the whole project involving modifying and optimizing the consultants' original design in the Feasibility Study in line with the above complementary geological and surveying investigation results. The basic design was submitted in July and reviewed and approved with comments in August 2014.

The design of Bujagali-Isimba 132kV interconnection transmission line has been submitted and are under review. Design of Employer & Contractor's camp, was reviewed and approved. Construction has commenced. Procurement agreement of Hydro Mechanical equipment Contract was signed in May 2014 and turbine manufacture will proceed after model test approvals. Geological investigation and Mapping work including dam site, borrow area, transmission line and quarry has been carried out and has been fully completed. Power line of an overhead 33KV along Busaana Road from Kayunga town to the Isimba Hydropower Project Site was completed and commissioned in July 2014.

The Contractor has completed reconstruction and leveling of the main road to the dam site as well as clearing and leveling of dam site. Construction of the water supply system is at 40%, Power systems is at 70%, and construction of the mechanic yard is also on-going. Construction of the roads, aggregate processing system and civil works of the crushing system are on-going.

Construction of the cofferdam has commenced and one dyke upstream of the river has been closed. Also, 92% of the construction works on the Employer & Contractor's camp is accomplished. The Contract for the Implementation of the Resettlement Action Plan was signed on 9th May 2014 with Kagga and Partners Limited. RAP implementation is going on with progress as follows: Dam site area: Disclosure at 90% and Payments at 72%; Reservoir Area: Disclosure at 75%

(c)Ayago hydro power project (680MW)

The 3nd Draft Feasibility Study was submitted for review in September 2014. The Government team reviewed the report and made recommendations. Six firms were shortlisted to provide consultancy services for the construction supervision of the project. Proposals were received on 5th August 2014 and evaluation is ongoing.

The project is however facing the following challenges

- -Much disposal locations in view of project location within the park
- -Material requirement and quarry locations for their supply
- -Management of park fees for both the consultant and contractor

(ii) DEVELOPMENT OF RENEWABLE ENERGY POWER PROJECTS

Vote Summary

(a) Muzizi Hydro Power (44.7MW)

RAP implementation for Muzizi has commenced. Project is to be co-financed by KfW (40m euros on loan and 4m euros on grant) and AfD (45m euros on loan). Appraisal mission was carried out from 22nd - 30th July 2014.

Procurement of the consultant is ongoing. Shortlisting has been concluded and Request for Proposals (RFP) expected to be out by end December 2014. Procurement of the EPC contractor will commence after one financial closure is attained. This is estimated to be attained this Financial Year FY 2014/15.

(b) Nyagak III HPP (5.5MW)

Bids for the private partner were received and evaluations was concluded in December 2014. Hydromax Uganda Limited emerged the best bidder. The developer is partenering with UEGCL to develop the Nyagak III HPP. Negotiations with UETCL on the PPA and with Ministry of Energy and Mineral Development on the Implementation Agreement have started. Construction expected to commence in the first quarter of FY15/16.

(c) Renewable Energy Projects being developed by the Private Sector:

Licenced Projects include: Achwa HPP 83 MW, Siti 2 HPP 16.5 MW, Siti 1 HPP 5.0 MW, Kakaka HPP 5.0 MW, Waki Hydro Power Plant 4.8 MW, , Kikagati HPP Project 16 MW, Lubilia 5.4 MW, Nyakizumba Hydro Power Plant 5.4 MW, Muduuma Biomass Plant 32 MW, Sekanyonyi Biomass & Solar Plant 11 MW, Biomass Gasification Power Project 1 MW in Gulu District, Rwimi Hydro Power Project 5.5 MW, Nyamwamba Hydro Power 9.2 MW. Construction to commence once negotiations on the PPA with UETCL and IA with government is concluded.

Project at Feasibility Study Stage: Sindoro HPP 5.6 MW, Bukwa HPP 9 MW, 10 MW Solar – PV Power Project, Cresta Mini Hydro Power 2 MW, Sironko HPP 7 MW, Nyamabuye HPP 2.2 MW, PV-Solar Power Project in Mayuge District 15 MW, 50 MW PV-Solar in Soroti District, 4 MW Off-grid Solar PV Project, Kabale Peat Power Project 30 MW, Keere Small HPP 6.3 MW, Mahoma HPP 3.0, 21-23 MW Bagase Co-Generation Plant at Mayuge Sugar Industries Ltd, Solar Power Park in Gomba District 20 MW, Wind Power Project In Tororo District 20 MW, Mayembe – Sirimityo HPP 3.1 MW, Nyabuhuka-Mujunju HPP 3.2 MW, Ngoromwo HPP 8 MW.

(d) Thermal Projects:

Licensed projects include:

- 1.6MW Solar Diesel Hybrid Power Project in Kalangala. Construction is ongoing and commissioning expected in 2015.
- 50 MW crude Oil plant by Albatros in Hoima district. Negotiations on the PPA and IA were concluded. Construction expected to start in the financial year 2015/16.

Projects at Feasibility Study Stage include: 52 MW Natural Gas Power Project by Lake Albert Infrastructure Services Limited. Once studies are completed negotiations with UETCL on the PPA and IA with Ministry of Energy and Mineral Development will commence.

Vote Summary

(e) Global Energy Transfer Feed in Tariff (GETFiT) Program

A standard Power Purchase Agreement and an Implementation Agreements were developed to reduce time spent on negotiations. These were approved by the Solicitor General. Negotiations on specific Implementation Agreements (IA) and Power Purchase Agreements (PPA) for the GETFiT projects are still ongoing. The IA and PPA for Nengo Bridge have been signed.

Under Solar PV component, the Electricity Regulatory Authority (ERA) initiated the reverse tender process in December 2013 by contracting AGUT Energy Advisory Services, an international consultant to implement the tender process for development of an initial 20MWp capacity to the grid. ERA received 24 expressions of interests from potential developers of solar plants of capacity of 5MWp each.

Preliminary evaluations were carried out and 11 applicants were considered successful for the technical and financial capacity. Out of the 11 applicants, 9 were prequalified for the Request for Proposal (RFP) phase.

After a competitive bidding process, the projects proposed by the Ugandan-Italian consortium - Simba Telecom Ltd./ Building Energy SpA and the consortium of Access / TSK Electronica (United Arab Emirates/Spain) have been selected to benefit from the GET FiT Solar Facility, a dedicated support scheme for solar PV development. The two consortia will now each build, own and operate grid-connected solar projects of 2x5 MW in Tororo and Soroti Districts respectively. With additional funding from the European Union, the programme is targeting to bring on stream up to 50MW of solar photovoltaic (PV).

(iii) PROMOTION OF RENEWABLE ENERGY SYSTEMS

(a) Investigation of the wind Energy Resource for Uganda

Measurement of wind energy resource in the Karamoja Region

The procurement of wind measuring equipment is being finalized. Two sites have been selected and Memorandum of Understanding for the land has been signed between the districts of Kotido and Napak, and the Ministry of Energy and Mineral development. Installation of the equipment is ongoing.

The Ministry has also installed seven (7) pilot small wind turbines for electricity generation in areas around Lake Victoria and Karamoja region to test the performance.

Wind Mills for Water Pumping: The Ministry is also investigating the wind mill for water pumping in Karamoja and it is currently working with Kotido Diocese to troubleshoot the windmill for water pumping at Kotido Diocese. The Ministry of water and Environment has also installed 10 new windmills for water pumping in Karamoja region.

(b)Rehabilitation of Solar water heating systems at Mbale Referral Hospital

The Ministry identified three large Nonfunctional solar water heating systems at Mbale hospital. The Ministry helped the hospital to repair two solar water heating system at the Laundry block which is now supplying 1000 litres of hot water for patients and other system on the theatre was also repaired.

(iv)TRANSMISSION INFRASTRUCTURE

The Uganda Electricity Transmission Company Limited (UETCL) holds the role of system operator, bulk

Vote Summary

power purchase and sale under the licenses given to it by the Regulator. Construction works are ongoing on the following projects: Bujagali Switchyard upgrade to 220kV; Mbarara-Nkenda 132kV, 160km transmission line; Tororo-Opuyo-Lira 132kV, 260km transmission line; Bujagali-Tororo-Lessos (Ugnada part) 220kV, 127km transmission line; Mbarara-Mirama-Birembo (Uganda part) 220kV, 66km transmission line; Kawanda-Masaka 220kV, 137km transmission line; Procurement of EPC contractor for Nkenda-Hoima, 220kV, 226km transmission line. Various ongoing studies including; Mutundwe-Entebbe ESIA/RAP study, Masaka-Mbarara feasibility study, Opuyo –Moroto completion of RAP study, Lira-Gulu-Nebbi-Arua feasibility study.

Progress is as follows: -

(a) Bujagali-Tororo-Lessos 220kV, 127km line:

EPC (Engineering Procurement and Construction) contract awarded to Jyoti Ltd and Isolux. Supervision Consultancy works ongoing and the Contract was awarded to AECOM. Progress on construction works is as follows: Route alignment and survey, 100% (128km of 128km); Tower design and tests 100% (5 of 5no tower types); Foundation design 80% (4 of 5no types); Foundation works 54% (216 of estimated 399no); Supply of tower stubs and parts 89%; Tower Erection 45% (179 of estimated 399no).

Progress on RAP Implementation is as follows: the total number of the Project affected Persons (PAPs) is 3,188 households. Out of the total PAPs, disclosure has been made to 2,881 (90%) of the PAPs and agreements have been made with 2,810 (88%) of the PAPs. Payments/Clearances have been made to 2,588 (81%) of the PAPs, while 71 (2%) of the PAPs still have disputes. The line is planned to be commissioned in 2015.

(b) Mbarara – Mirama – Birembo 220kV, 66km line

EPC (Engineering Procurement and Construction) contract awarded to Jyoti Ltd and Isolux Ingeniere. Supervision Consultancy works ongoing and the contract was awarded to AECOM. Progress on construction works is as follows: Route alignment and survey, 96% (63 of 66km); Tower design and tests 100% (5 of 5no tower types); Foundation design 80% (4 of 5no types); Foundation works 34% (88 of estimated 200no); Supply of tower stubs and parts 49%; Tower Erection 4% (8 of estimated 200no).

Progress on RAP Implementation is as follows: the total number of the Project affected Persons (PAPs) is 1,445households. Out of the total PAPs, disclosure has been made to 1,377 (95%) of the PAPs and agreements have been made with 1,224 (85%) of the PAPs. Payments/Clearances have been made to 1,154 (80%) of the PAPs, while 153 (11%) of the PAPs still have disputes. This line is planned to be commissioned in 2015

© Tororo – Opuyo – Lira 132kV, 260km line

EPC (Engineering Procurement and Construction) contract was awarded to Kalupataru Ltd. Supervision Consultancy works are ongoing. Contract was awarded to Hifab Oy and Sunshine Projects.

Progress on construction works is as follows: Foundation works are on-going; 409 out of an estimated 740 tower foundations (55.2%) are complete for lot 1 (Tororo- Lira Transmission line) and 267 towers have been erected.

Vote Summary

Progress on RAP Implementation is as follows: the total number of the Project affected Persons (PAPs) is 4,674 households. Out of the total PAPs, disclosure has been made to 4,455 (95%) of the PAPs and agreements have been made with 3,912 (84%) of the PAPs. Payments/Clearances have been made to 3,633 (78%) of the PAPs, while 543 (12%) of the PAPs still have disputes. This line is planned to be commissioned in 2015

(d) Mbarara – Nkenda 132kV, 160km line

EPC (Engineering Procurement and Construction) contract awarded to Kalpatru Ltd and Techno Electric and Engineering Co. Ltd. A total of 130 out of an estimated 321 tower foundations are complete for Lot 2 (Mbarara – Nkenda Transmission Line) and 105 towers have been erected. 89 of 131 monopole foundations have been completed and 62 monopoles have been erected. Supervision Consultancy works ongoing. Contract awarded to Hifab Oy and Sunshine Projects and construction works in progress.

Progress on RAP Implementation is as follows: the total number of the Project affected Persons (PAPs) is 1,643 households. Out of the total PAPs, disclosure has been made to 1,585 (96%) of the PAPs and agreements have been made with 1,454 (88%) of the PAPs. Payments/Clearances have been made to 1,250 (76%) of the PAPs, while 131 (8%) of the PAPs still have disputes. This line is planned to be commissioned in 2015.

€ Bujagali switchyard upgrade to 220kV

EPC (Engineering Procurement and Construction) contract awarded to NCC Ltd.\ Handover is expected by March 2015. Construction works is in progress and Supervision Consultancy works are also ongoing. The Contract was awarded to AECOM. This project is planned to be commissioned in 2015.

The process of developing of the following projects has commenced:

(a) Kawanda – Masaka 220kV, 137km

EPC (Engineering Procurement and Construction) contract awarded to KEC Ltd for transmission line component and Shandong Ltd for substations component. Surveys are ongoing before construction commences in February 2015. Supervision Consultancy work is ongoing. The Contract was awarded to Intec Gopa.

RAP Implementation ongoing and progress is as follows: of the 2,171 Project Affected Persons (PAPs) disclosure has been made to 1,816 (84%) PAPs, agreements have been signed with 1,695 (78%) PAPs and payments made to 1,384 (64%) of the PAPs. A total of 121 (6%) PAPs are having disputes and these are being resolved. This line is planned to be commissioned 2016.

(b) Nkenda – Fort Portal – Hoima 220kV, 226km line

Procurement of supervision consultant concluded. Contract awarded to Ficthner Gmbh. Procurement of EPC contractor ongoing and the process in advanced stages. Construction of Resettlement houses is progressing well. Over 65% achieved (62 houses have been handed over to beneficiaries). A new contractor has been engaged to complete the works, and works are set to begin in quarter 4 of 2014.

Progress on RAP Implementation is as follows: of the 1,855 Project Affected Persons (PAPs) disclosure has been made to 1,842 (99%) PAPs, agreements have been signed with 1,605 (86%) PAPs and payments made

Vote Summary

to 1,509 (81%) of the PAPs. A total of 237 (13%) PAPs are having disputes and these are being resolved. Completion of disclosure is being hindered largely revaluation cases, which are being handled between the RAP implementation consultant and the Chief Government Valuer (CGV).

Acquisition of substation sites is in progress. Progress is currently hindered due to some PAPs' rejection of compensation packages. Rejected packages have been re-valued by the RAP implementation consultant and submitted to the CGV. This line is planned to be commissioned 2016.

© Isimba- Bujagali Interconnection project 132kV, 41km line

Feasibility study was concluded and a Supervision Consultant is on board. The Supervision Contract awarded to Energy Infratech PVT Ltd. RAP Implementation will soon commence and is being handled by Kagga. Government signed a commercial contract for EPC Construction with China International Water and Electric Corporation (CWE) and Pre-construction activities works ongoing. This line is planned to be commissioned in 2016.

(d) Karuma Interconnection project:

This comprises of: Karuma-Kawanda 400kV, 248.2km; Karuma –Olwiyo 400kV, 54.25km; Karuma-Lira 132kV, 75.5km and associated substations. The Feasibility study was concluded in 2011. Procurement of supervision Consultant is ongoing. Bid closing date was June 20, 2014.

RAP Implementation ongoing and progress is as follows: of the 3,822 Project Affected Persons (PAPs) disclosure has been made to 2,160 (57%) PAPs, agreements have been signed with 2,072 (54%) PAPs and payments made to 592 (15%) of the PAPs. A total of 88 (2%) PAPs are having disputes and these are being resolved.

A commercial contract for EPC Construction was signed with Sino Hydro and Pre-construction activities works are ongoing. The project is planned to be commissioned in 2017

€ Mutundwe- Entebbe 132kV, 35km line

Supervision Consultancy works (design) are ongoing. The Contract was awarded to Intec Gopa. Procurement of EPC Contractors commenced and the RAP/ESIA studies were completed and reports submitted to NEMA and CGV for approval. T The project is planned to be commissioned in 2016.

- (f) Upgrade of Lugogo, Mutundwe and Queensway substations: Government is currently sourcing financing from AfDB and JICA for the development of this project. Preparatory survey ongoing by Yachiyo Engineering Co. Ltd.
- (g) Kabulasoke-Kiboga-Hoima 132kV, 187km: Procurement of consultant for technical Assessment, detailed design, ESIA and RAP and Supervision EPC works ongoing. Restringing of Mutundwe Kabulasoke 132kV line was completed in February 2014.
- (h) Hoima –Kinyara- Kafu 220kV, 92km line: Feasibility study for this project is being concluded. A draft feasibility study report and draft tender documents have been submitted. The ESIA/RAP study concluded
- (i) Nkenda Mpondwe Beni 220kV, 72.5km line: Feasibility study for this project was concluded.

Vote Summary

Government is now sourcing for financing for construction through regional umbrellas –NELSAP, EAC, EAPP.

- (j) Ayago Interconnection project: China Ghezhouba Group of Companies (CGGC) is undertaking the feasibility study. GoU signed MoU with China Ghezhouba Group of Companies (CGGC) Contractor for implementation of both the Hydro Power Project and Interconnection Project.
- (k) Opuyo-Moroto 132kV, 160km Line: Conclusion of ESIA/RAP study by PB Power and Sunshine Projects. General Procurement Notice for Supervision Consultancy and EPC works has been published. EPC works will be financed by Islamic Development Bank (IsDB). This project is planned to be commissioned in 2017.

RAP Implementation is ongoing and progress is as follows: of the 1,053Project Affected Persons (PAPs) disclosure has been made to 236 (22%) PAPs, agreements have been signed with 191 (18%) PAPs and arrangements are being made to commence payments for the cases where agreements have been reached. A total of 45 (4%) PAPs are having disputes and these are being resolved.

(1) Mirama-Kabale 132kV, 85.3km line: Feasibility study was completed and awaits parliamentary approval. Feasibility studies have also been completed for the following projects: Kikagati – Mirama-Nsongezi 132kV, 38km line; Lira – Gulu – Nebbi – Arua 132kV, 350km line; Masaka-Mbarara 220kV, 135km line; Masaka-Mwanza 220kV, 82km Line; Kawanda – Kasana 132kV, 50km line.

Lira-Gulu-Agago 132kV, 175km line: Procurement of consultant for technical Assessment, detailed design, ESIA and RAP and Supervision EPC works ongoing

For the Bulambuli (Atari)-Mbale Industrial parks 132kV, 60km line; government is Sourcing Financing for feasibility study from KfW. Sourcing financing is also ongoing for Feasibility studies for the following transmission projects: Nalubaale – Lugazi 132kV, 35.2km line; Olwiyo- Nimule-Juba 400kV, 190km line; and Mutundwe-Kabulasoke-Nkenda 220kV, 300km line. Financing for Nkenda and Kawanda substations is being sourced from World Bank.

(v)PREPAYMENT METERING

Over 52,000 customers were on prepayment metering by end of December 2013. By the end of August 2014, over 66,000 prepayment meters had been installed for customers.

(vi)NUCLEAR POWER GENERATION AND INVESTMENT PLAN 2015-2040

Government procured the services of AF-Consult Switzerland Limited to conduct a study on integrating nuclear power in the generation capacity plan for period 2015-2040. The study is expected to be completed by February 2015. This study will translate into a series of carefully cost-planned and actionable nuclear power projects over a period of up to 25 years and is set to achieve the following long term objectives and corresponding measurable and time-bound targets: the specific infrastructure outputs; estimated investment requirements; an assessment of policy and institutional reforms in the energy sector that will also be needed to reach the objectives; as well as proposed actions and options to remedy any shortcomings.

The specific objectives of the consultancy assignment are to develop a demand forecast for 2015 - 2040; a Generation Capacity Plan; and a Nuclear Power Generation Investment and Financing Plan.

Vote Summary

(vii)COORDINATION OF IAEA TECHNICAL COOPERATION PROGRAMME

Government continues to implement the Country Programme Framework (CPF) 2014 – 2018, the mutual agreement between Government of Uganda and the International Atomic Energy Agency on the peaceful application of nuclear energy. The CPF outlines government priority for atomic energy technical cooperation programmes in Food and Agriculture, Human Health, Energy and Water sectors.

(a) Preparation of New Project Concepts for Technical Cooperation 2016 -2017

Five (5) new project concepts submitted to IAEA were approved to proceed to Project design phase. These include; Nuclear Energy for Comprehensive Cancer Service; Support to national animal production and productivity through establishment of regional animal health centres and improving disease control at the National Animal Disease Diagnostics and Epidemiology Centre; Enhancing National Residue Monitoring of Veterinary Drugs and Related Chemical/Natural Food Contaminants in Uganda; Consolidation of Regulatory Control and Management of Radiation Sources; and Integrated Soil Fertility Management for Improved Crop production and Food Security.

(b) Building Capacity for Energy Planning

A National Training Course on Model for Analysis of Energy Demand (MAED) was conducted in Kampala in August 2014. Technical staff from MEMD, UEGCL, UETCL, UEDCL and NEMA, participated in the training. The training involved one week on-line study followed by another week of face-to-face lectures conducted by IAEA experts. The training built national capacity for energy demand analysis.

(viii)ENERGY MANAGEMENT PROGRAMS

The Ministry continued to implement Energy Efficiency programs with the objective of ensuring efficient utilization of energy resources in all sectors. The activities conducted were in line with creating awareness, training and other energy efficiency related projects in industry, commercial buildings, SMEs and Government institutions. The following sections present the highlights of the activities conducted.

(a)Energy Week 2014

The Energy Week 2014 was held from 8th to 13th September 2014. Key activities included Energy Exhibition held at Forest Mall Lugogo parking lot, Sustainable Energy Forum focusing on the Sustainable Energy For All Initiative (SE4ALL), Launch of the Energy Stove logo for clean cooking, Print and Electronic awareness campaigns, radio and television talk shows, Road march from Amber house to the Exhibition grounds at Lugogo, Family day special targeting young children.

(b)Energy Exhibition

The 10th Energy Week exhibition was held at Forest Mall parking lot Lugogo Kampala from 8th to 13th September 2014. This year's exhibition had the following key objectives;

- Provision of a platform for Companies, Institutions and Agencies in the Energy sector to promote their activities, products and services.
- Creation of awareness on the benefits associated with the use of energy efficient and renewable energy and other sustainable energy resources like LPG technologies, hence making it easier for them to make informed decisions while purchasing equipment.

Vote Summary

- Support the private sector in promoting and marketing energy efficient and renewable energy technologies
- A total of 74 private companies and institutions took part in this year's exhibition.
- (ix) BIOMASS RESOURCE MANAGEMENT

Biomass Development

(a) Launch of the UNDP/ GEF/ GoU Sustainable Charcoal Production Project 2014- 2019

The project titled: "Addressing Barriers to Improved Charcoal Processing Technologies and Sustainable Land Management through an Integrated Approach" was launched in Nakaseke district on 1st October, 2014. The project seeks to solve barriers such as: inefficient charcoal production practices, lack of sustainable supplies of woody biomass and inadequate, often conflicting, policy statements on charcoal demand and supply. The project also seeks to multiple environmental benefits by addressing the twin challenges of unsustainable utilization of fuel wood (including charcoal) and poor land management practices common in Uganda's woodland through technology transfer, enhancement of the national policy framework on charcoal and the promotion of Sustainable Land Management (SLM) and Sustainable Forest Management (SFM) practices.

(b) Development of a NAMA on Promotion of the use of efficient institutional stoves in Secondary Schools

This Nationally Appropriate Mitigation Action intends to reduce emissions through the promotion of the use of improved energy efficient cook stoves in 1000 secondary schools in Uganda. Greenhouse gas (GHG) emissions will be reduced because the efficient cookstoves require less wood fuel (up to 50%) to generate the same amount of energy required for cooking as ordinary three stone cookstoves. The total amount of emissions to be reduced is equivalent to 177,660 tonnes a year. This NAMA also seeks to create investment in the Biomass Sector.

(v) Development of the National Biomass Energy Strategy for Uganda

The Ministry in partnership with UNDP developed the National Biomass Energy Strategy (BEST) for 2014-2024. The Strategy seeks to establish a framework for sustainable management and utilization of biomass resources to meet Uganda's energy needs which are mainly dominated by Biomass. The final draft was validated and officially launched in November 2014.

- (d) Improved Cook stoves
- First draft for Improved Cook stoves standards developed in collaboration with UNBS and ISO
- Capacity building for artisans in improved cook stoves construction and quality management

PETROLEUM SUB-SECTOR

UPSTREAM PETROLEUM SECTOR

The following are key achievements so far made in the current financial year 2014/15:

(i) Promotion of country's petroleum potential and licensing

Vote Summary

- Basin analysis for Semliki Basin and Southern Lake Albert Basin was undertaken.
- A consultant for the country's first competitive licensing round was procured and the consultant commenced work.
- Bid tender documents of the first competitive licensing round were developed.
- A data room consultant who will package the data for the 6 blocks to be opened for licensing, was procured.
- Licensing strategy and plan for the 1stlicensing round presented to Cabinet committee on oil and gas.
- Economic evaluation and rankings of blocks in available acreage for 1st licensing round commenced under consultancy M/S IPAN.
- Eight (8) officers attended Global African Investment Summit, UK.
- Six (6) officers attended Society of Petroleum Engineers (SPE) Africa Health, Safety, Security, Environment and Social Responsibility conference.

(ii) Regulatory framework

- Completed model contractual agreements for seismic acquisition, processing, marketing and sale of data.
- Draft regulations reviewed by technical teams and consultants, Technical Working Group reviewing responses and making proposals to make final draft.
- Review of model Production Sharing Agreement (PSA) commenced and ongoing.
- Procurement of a consultant to implement the M and E still under review by the Contracts Committee.
- Continued to review of final draft of the National Content Policy, Strategy. The review is expected to be concluded this financial year 2014./15.
- Facilitated printing of the popular version of the National Oil and Gas Policy.

(iii) Development of national expertise in oil and gas

- Nine staff (9) continued to undertake undergraduate training in the country.
- Eight (8) staff commenced Master's degree programs in petroleum Geosciences, Economics and Law, at Universities abroad.
- One officer attended the National Oil Companies Summit in UK.
- Supported training of 21 Government officials in Change Management.
- Supported training of 31 Government officials in Petroleum Revenue Management.
- Supported training of 21 Government officials in Arbitration in the Oil and Gas industry.
- (iv) Monitoring licensee field operations, costs and review of applications for production licenses
- River Nile-crossing geophysical survey completed in EA1 (Paraa- Pakwach area); two well sites (Jobi-East 4 and Rii-2) restored in EA-1.
- Compensation payments for affected crops during 3-D seismic survey in EA1 were made.
- Completed survey and valuation exercise for land utilized for access roads and drilling of wells in EA-2.
- Reviewed the revised Field Development Plan (FDP) for Kasamene-Wahrindi (KW), Kigogole-Nsoga-Ngara-Ngege (KNNN) in EA-2 and comments were communicated to the company.
- Made compensation payments for affected crops during 3-D seismic survey in EA-1.

(v) Communication Strategy

- Held radio programmes in Central Region on six radio stations to discuss National Participation in oil

Vote Summary

and gas sector;

- Held three engagements with Civil Society Organizations.
- Responded to ten media inquiries.
- Organized and held one breakfast meeting for editors and one workshop for reporters.
- Facilitated training for 12 journalists and 15 editors organized by ACME.
- Procured firm to produce documentary on oil and gas.
- Procured a consultant to re-design the website and create an intranet.

(vi) Regional Initiatives

- Participated in two (2) meetings on Tripartite Agreements/MOU in Kenya.
- Hosted 3rd Steering Committee meeting on the 7th EAPCE conference in Hoima town including a preparatory field excursion in the Albertine Graben.
- Participated in the 4th Steering Committee meeting on the 7th EAPCE conference held in Kigali, Rwanda.
- (vii) Establishment of new Institutions i.e. PAU, NATOIL and Petroleum Directorate.
- The Board of the National Oil Company was nominated and approved by Parliament while that of the Petroleum Authority is being considered.
- The review of posts in the structure for the Directorate of Petroleum was undertaken under the Ministry restructuring exercise.

(viii) Government buildings

- Supervised Phase-2 construction of the National Data Repository and Office building at Entebbe. Phase-2 is expected to be completed by December 2014 and Phase-3 is to commence thereafter.
- Procured consultancy services to re-design and supervise 3rd phase construction including the access road.

MIDSTREAM PETROLEUM

(i) Commercialization Plan

Government's plan is to develop a 60,000 barrels of oil per day (bopd) refinery that will later be expanded to 120,000 bopd and then 180,000 bopd depending on discovery of more resources and market availability. The strategy is to develop the 60,000 bopd refinery in a modular manner starting with 30,000 bopd. This will mitigate implementation risks and ensure early energy security. The first phase of 30,000 bbl/day of the refinery will be in place in 2017/2018.

(ii) Land Acquisition for Refinery Development

Out of 2615 property owners who opted for cash compensation, 1945 have so far been paid as at end of December 2014 making about 74.38%. This leaves a balance of 670 to be compensated however out of the 1945, 364 property owners were paid during this financial year.

Out of the remaining 670 property owners, a total of 42 property owners raised a dispute contesting the rates, however continuous engagements are ongoing to have these disputes resolved. In the same way, the process of paying the remaining 628 property owners is ongoing and expected to be completed by June 2015.

Vote Summary

A total of 533.59 acres of land was purchased to relocate and resettle the 93 Property Owners that opted for resettlement.

As part of the Resettlement Action Plan under the livelihood restoration programme, a follow up visit was conducted to a group of property owners who were compensated. The visit established that some of the property owners had settled and integrated in the new communities by constructing permanent residential and commercial buildings. More follow up visits are to be undertaken.

(iii) Selection of lead investor

On identifying the lead investor for the refinery, the process has progressed with two preferred bidders selected namely, SK Group - led Consortium (Republic of South Korea) and RT Global Resources - led Consortium (Federation of Russia). Parrarel initial negotiations with the two preferred bidders held in August and September 2014. Draft key project agreeements were reviewed and completed. A Request For Final Offers was issued on 27th October, 2014 and submission deadline is 19th January 2015.

(iv) Pipeline development

Draft final report for the National Strategy and plan for petroleum Transportation and storage submitted. Evolutions for the consultancy services for the Environmental Baseline Survey and detailed routing for the Infrastructure Corridor from Hoima to Kampala ongoing. Evaluations for the consultancy services for the Resettlement Action Plan and its implementation ongoing. Feasibility study and preliminary engineering design for intergrated export pipeline ongoing.

(v) Development of an Airport in Kabaale, Hoima

Government is planning for the development of an airport in Kabaale to ease transportation of equipment and labourers to the refinery site during construction and operation stages. The planning for the airport is being done in consultation with Civil Aviation Authority (CAA), Ministry of Works and Transport (MoWT) and Ministry of Finance, Planning and Economic Development (MoFPED).

International Civil Aviation Organisation (ICAO) from Canada worked with the Government to identify a consultant who will develop a Master Plan Study and detailed Engineering Design for the airport. Terms of Reference for the assignment developed and evaluations and negotiations planned.

DOWNSTREAM PETROLEUM SUBSECTOR

(i) Fuel Marking Program

During the reporting period, the Ministry, together with Uganda National Bureau of Standards (UNBS) carried out sampling and analysis of fuel at retail stations for presence or dilution of the marker in the fuel. Through this process, it was possible to detect and check adulteration and untaxed products. Because of this intervention, adulteration now stands at 3% as compared to 29% in March 2010.

(ii) Petroleum Testing Laboratory

During the period under review, petroleum products were analysed for conformity to quality specifications and standards. The central petroleum laboratory at Nakawa supported this operation. The petroleum

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products were analysed for colour/appearance, density, viscosity, distillation characteristics, insoluble matter and water contamination. A total of 3620 samples were analysed out of which 421 were non-complaint. The non-complaint fuel was upgraded to the right specification and quality.

(iii) Petroleum Standards Development

In the reporting period, five draft standards on engine oil were produced and one workshop conducted to present the above draft standards for stakeholder's discussion and input. As part of petroleum standards development, one East African Community (EAC) petroleum standards editing workshop was facilitated in Kampala and two product standards specifications were reviewed by the EAC Member States. Discussion for four liquefied petroleum gas (LPG) draft standards at technical committee level were also facilitated and final draft standards produced for a stakeholder review and approval by the UNBS Council.

(iv) Storage Facilities

Demand for petroleum products in the country has grown tremendously and storage facilities have not correspondingly changed which translates into difficulties of enforcing the 10 day stock requirement for every operator. As a result of the need to bridge the storage gap, during the reporting period, a Private Partner to operate Jinja Storage Facilities under Private Public Partnership had concluded refurbishment and started restocking. The facility has been certified and was commissioned in November 2014. A consultant was engaged to redesign the upgrade of the 40 million litre Nakasongola tank site and an inception report was submitted.

(v) Enforcement to compliancy with Petroleum Supply legislations

Enforcement operations were carried out in Kampala and sixty (60) outlets without operating Licenses were closed. One operator (Fuelex) who damaged the seals that had been used to close the outlets is due for prosecution.

(vi) Monitoring and Inspection of Facilities

Monitoring and inspection was carried out covering the whole country and a total of 400 retail outlets located in Western, Northern, Eastern and Central Uganda and appropriate recommendations were forwarded for action by the Enforcement teams.

(vii) Eldoret-Kampala-Kigali Refined Petroleum Products Pipeline

PENSPEN completed the Feasibility Study for Kampala-Kigali Pipeline in time. Eight (8) firms / consortia were shortlisted from the expression of interest to develop the Eldoret-Kampala-Kigali Refined Petroleum Products Pipeline on Engineering, Procurement and Construction (EPC) arrangement. Issuance of the request for proposals (RFP) document to the prequalified firms/consortia is in abeyance pending confirmation of availability of funds from the Ministries responsible for Finance.

MINERAL SUB-SECTOR

The Mineral Sub-Sector continued to attract private investment in mineral resources exploration and development through the provision of geo-scientific information on minerals, and management of equitable and secure titles systems for the mining industry as well as regulating the mining activities.

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(i) GEOLOGICAL SURVEYS

Mineral Exploration

The following are key achievements so far made in the current financial year 2014/15:

(a) Geological, geochemical and geophysical mapping of key strategic minerals.

Iron Ore Discoveries

Follow-up of airborne surveys with ground geological and geochemical mapping resulted into new discoveries of iron ore deposits in Buhara, Muyebe and Nyamiringa in Kabale District, Nyamiyaga and Kazogo in Kisoro District, and Kinamiro in Butogota-Kanungu District. Over 200 Mt of iron ores are now proven to exist in the region. Further exploration is required to evaluate the potential of the whole area.

Nickel (Ni)-Platnum Group Elements (PGE)

Ground magnetic and Transient Electromagnetic (TEM) surveys were undertaken in Karuma, Kiryandongo District by Pearl Mining (U) Limited on the mineral targets interpreted from airborne geophysical survey data. Preliminary field data interpretations reveal massive magnetic conductors which could probably host nickel, gold and other base metals.

Nickel-Copper-Lead (Ni-Cu-Pb)

The Nickel-Copper-Lead mineralization has been discovered by geological studies in Kitgum. M/S Sipa (U) Limited obtained exploration license to undertake further geological studies.

(b)Geological, Geochemical and Geophysical surveys of Karamoja Region.

Geological mapping have been completed in two map sheets namely; Panyangara and Muruariam in Kotido District. Geochemical sampling continued in Abim District.

Airborne Geophysical Surveys of Karamoja: USD. 15 Million is required to finance the Airborne Geophysical Surveys of Karamoja. Request for financing has been tabled to the Ministry of Finance and Economic Planning for consideration.

Government of Uganda continued to sensitize stakeholders in the Karamoja region about the planned airborne geophysical surveys of Karamoja mineral resources of Karamoja; and Mining Policy and Legislation;

Other out puts delivered are:

- Institutional capacity development (Nine (9) staff are undergoing training in various certificate and diploma courses); Three group internal trainings on laboratory techniques, geological data management and exploration have been undertaken.
- Promotion of investment in the mineral resources of Karamoja during Mining Indaba in Cape Town, South Africa and in-country;

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- Two (2) inspections of mining operations; and
- Training of 100 ASM to improve livelihood, health and safety of the citizens involved in mining for social and economic transformation in Abim and Moroto Districts.

(ii) GSMD LABORATORIES

During the period under review, the following were accomplished

- Installed five (5) fume hoods and four (4) scrubbers in the Assay and Geochemical/Environmental laboratories as one of the measures to improve the safety of the laboratory staff. The activity was undertaken by the contractor, Palin Corporation (U) Ltd., who worked with staff of the laboratories.
- Installed a jaw crusher and rolls crusher in the Mineral Dressing Laboratory. This has improved sample preparation and analytical capacity of GSMD laboratories.
- Pulverized pozzolanic samples for use in a road test project in the Civil Engineering Department of Makerere University, Kampala.
- Conducted free swell, filtrate loss, moisture content, and particle size distribution tests on three (3) bentonite samples.
- Offered services of sample preparation to the department, exploration and mining companies by preparing seven hundred seventy eight (778) rock, soil and stream sediment samples.
- Analyzed four hundred ninety one (491) rock, soil and stream sediment samples in the Assay laboratories for various elements.
- Undertook three (3) pre-shipment verification (pre-export permit award) and sampling exercises of cassiterite concentrate for export by First Mining Company Limited in Kikagati in Ntungamo District and one of wolfram concentrate for export by Rusla Mining and Minerals Limited at SPEDAG, in Nakawa, Kampala.
- Trained twenty three (23) students on industrial training from various tertiary institutions in mineral sampling, analysis and processing techniques.

(iii)GEO-INFORMATION AND DATA MANAGEMENT

Geoscience information/data plays a vital role in all aspects of planning and management, including environmental management, natural resources exploration and exploitation and research. The acquisition, processing and dissemination of this information is a key activity for the Department of Geological Survey and Mines. DGSM has adopted online and digital information systems to improve on its information management and dissemination mechanism, to facilitate easy access to geoscience information/data and increase promotion in the mineral sector. The following were accomplished:

(a) Geoscience data and Information acquired, processed and databases updated.

The following databases and catalogues were updated:

- The Mineral occurrences, mineral concessions and geothermal licenses databases were updated.
- Economic mineral databases, reference file records, half degree sheets, authors' and bibliographic catalogs were updated.
- Digital metadata for documents and records was captured onto the following online information systems; LIBERO, Unpublished Document Information Systems (UDIS) and Electronic Records Management System (ERMS).

(b)Geoinformation disseminated and Mineral Sector Promoted.

- Over 100 users visited DGSM at Entebbe and available information was given to them.

Vote Summary

- Information/data was disseminated on DGSM website www.uganda-mining.go.ug. A total of 16,302 visits were made to the website.
- 30 downloadable Technical reports and metadata for 79 publications were uploaded on http://www.uganda-mining.go.ug/webudis and http://www.uganda-mining.go.ug/weblibero.
- GIS maps and mining cadaster tenement map were disseminated on http://www.ugandamining.go.ug:81/UgandaGMIS and http://www.flexicadastre.com/uganda .
- 716 copies of publications including; the Mineral Policy, Mining Regulations, Mining Act and hand book to improve small scale miners, opportunities for mining investment in Uganda, mineral resources of Uganda, scope of investment in mineral development in Uganda, DGSM brochures on Geology, mineral and geothermal potential were disseminated to visitors and during the sensitization and consultative workshops in Karamoja and Kampala.
- © Administration, training and Information Infrastructure Capacity building
- Fifty (50) desk top computers, 20 laptops, 5 iPads, 50 UPS, 10 web Cams, 1 Network printer, I network storage device,5 PBX cards, 10 external/internal hard disks, 5 RAM chips,20 flash disks and 2 desktop printers were procured.
- Six (6) staff were trained in the following courses; Information Technology, geoinformation storage, information systems management ,data dissemination, Library and Information science, Geographic Information Science and Human Resources management and Administration.
- (d) Upgrading of the earthquake monitoring infrastructure

Monitoring of earthquakes and other geotectonic activities continued at Kilembe, Hoima and Kyahi station near Mbarara. The Ministry upgraded the Very Small Satellite Aperture (VSAT) Global communication infrastructure (GCI) so as to improve seismic data transmission from Kyahi Earth Earthquake monitoring station near Mbarara to Entebbe National Data Center. The fiber optical cables and accessories were installed in order to avoid loss of seismic data packets from Vienna International Data Center. This subsequently improved the flow of seismic data.

- (iv) MINES
- (a) Development Projects

Kilembe Mines

The developer continued to carry out further feasibility studies and established the reserves of 4.527 Million tonnes with a grade of 1.598 blister copper. The procurement of machinery to refurbish the mine commenced expected to arrive by February 2015. Production is expected to commence during 2015. The interventions to stop flooding of the Mine have been implemented. Further underground geological studies are on-going.

Sukulu Phosphates

The Sukulu Phosphate development is on-going. A Mineral Development Agreement between the Government and the Developer has been signed in December, 2014. The Sukulu Phosphate Comprehensive Industrial Development Project is planned to commence production in December, 2016. The company has already undertaken a feasibility study for production of 300,000 t/year of superphosphate, 400,000 t/year of sulphuric acid and generation of power of 12 MW. In the second phase gypsum and rare earth elements will

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be produced.

(b) Licensing

A total of 852 licenses and certificates were operational as at 30th September 2014. Out of these, were: 164 Prospecting Licenses (PL), 554 Exploration Licenses (EL), 3 Retention Licenses (RL), 40 Location Licenses (LL), 33 Mining Leases, and 58 Mineral Dealers' Licenses (MDL). Of the 852 licenses, 433 licenses were granted during the FY 2013/14.

© Mineral Production

The general trend in reduction of imports & exports, production and non-tax revenue collected can be attributed to the following factors; (1) Current ban on exportation of raw materials, (2) Delay in implementation of mineral certification especially for 3T minerals and gold and (3) General increase of mineral royalties for minerals.

(d) Inspections and Monitoring

A total of twenty five (25) inspections were undertaken on Health and safety issues in Buhweju (1), Abim(3), Amudat(1), Busia, (3), Kaabong(2), Manafwa(3), Moroto(3), Nakapiripirit(3), Napak(3), and Tororo(3).

€ Mineral rights review and policy

Three (3) consultative workshops on the review of the Mining legislation were undertaken and the drafting of the mining legislation amendment was initiated. Administrative reviews of mineral rights were also undertaken.

The mineral sub-sector reviewed one hundred and two (102) applications for grant of Exploration License and thirty nine (39) Exploration Licenses for renewal. Seventy Four (74) Mineral rights holders were put on notice for non-compliance.

Out of the Seventy Four (74) licensees put on notice, fourteen (14) did not respond and licenses expired without renewal. One hundred eighty seven (187) licenses expired without renewal during 2013 due to history of non-performance.

(f) Non-Tax Revenue

Assessed and collected Non-Tax Revenue (NTR) to the tune of UGX. 4.434 billion, in the FY 2014

(g) Extension services to mining operations

A profiling exercise of selected mining and quarrying operations (Sikander Meghani, Jan Mangal (U) Ltd and Dao Africa Ltd in Moroto, and artisanal operations in Rupa Sub-county in Moroto District and Panyangara and Rengen sub-counties in Kotido District) for purposes of developing strategies for value addition in Karamoja Region was undertaken . Sensitization of 100 artisanal miners on occupational health and safety, and best practices in mining and processing of gold was also undertaken.

(v) GEOTHERMAL RESOURCES SURVEYS

Vote Summary

(a) Policy formulation and regulation

A paper on Geothermal Industry Development Framework was prepared. This paper identified the key issues and specific local challenges facing the geothermal sector in Uganda and recommended policy actions and mechanism to encourage the development of a viable geothermal energy industry in this country.

As part of policy formulation, stakeholder's analysis and key issues identification has been undertaken. We are now developing an issues paper which will be disseminated to stakeholders during stakeholders' engagement.

The ministry has submitted an application for technical support to Climate Technology and Network (CTCN) to assist in developing geothermal energy policy framework.

(b) Geothermal Exploration

Data Acquisition: Detailed exploration including surface mapping, geochemical survey, geophysical (gravity and magnetics) have been undertaken in Kibiro (Hoima), Panyimur (Nebbi), Katwe (Kasese) and Buranga (Bundibugyo). This data has been supplemented with airborne magnetic data, airborne radiometric data, seismic data, gravity data, magnetic data and down hole temperature measurements shared with PEPD. Results so far obtained revealed a fracture controlled reservoirs at Buranga, Kibiro and Panyimur. Volcanic hosted system is presumed at Katwe but again controlled by faults and fractures. These data will be supplemented by deep sub-surface mapping using MT/TEM equipment to locate drill targets.

Environment base line surveys: Environmental baseline surveys have been undertaken in Kibiro, Panyimur, Buranga and Katwe. These studies document the current physical, social and economic state of the environment prior to development.

Regional Mapping: A nationwide mapping and inventory of all known geothermal resources in Uganda was undertaken with technical assistance from Japan International Cooperation Agency (JICA). JICA also supported us with remote sensing data (Aster, Landsat ETM, and SRTM-DEM) of the investigated areas. A comprehensive inventory of national geothermal resources is being prepared. Fort Portal volcanic field has indicated surface indicators of geothermal activity and studies have begun to assess the geothermal potential of this field. This work expanded the number and extent of known geothermal resource areas in Uganda.

Data base Management: A geothermal data base was established to enable the easy location, sharing and reuse of geothermal data and to reduce redundancy of the data. This is has been routinely up-dated and maintained. The Department is also working with Africa Rift Geothermal Facility (ARGeo) to maintain a regional database "ARGeo Geothermal Inventory Database (AGID)". The Department was facilitated with a computer by ARGeo.

Memorandum of Understanding (MoU): A memorandum of understanding was signed between Government of Kenya and Uganda for the former to technically assist Uganda to expedite the development of its geothermal resources. Terms of Reference were drafted, a costed work plan was prepared and a visit by Uganda technocrats and decision makers was made to Geothermal Development Company of Kenya's facilities. GDC technical staff are arriving on 4th January 2015 to kick start implementation of the MoU.

© Health and Safety

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Field staffs have been supplied with appropriate health and safety equipment to provide protection of the health and safety of employees and other persons. These included raincoats, gumboots, safety shoes, goggles, first aid kits, reflective jackets, and whistles. Health and safety guidelines for geothermal exploration were given out to field teams as well as First Aid Manual 2013.

(d) Licensing and Inspection

Currently, there are nine private companies licensed to undertake geothermal exploration activities. These include; Ascot Associates (U) Ltd, Clean Source Energy Partners Ltd, Cozumel Limited, Gids Consult Ltd, AAE Systems Inc. FCN Technologies, Moberge Finance Limited, Pawakom International Limited and Spencon Services Limited. Most of these companies lack sufficient technical, financial and operational resources to undertake geothermal exploration.

€ Purchase of Specialized Equipment

The following equipment have been procured; CG5 Gravity Meter, geological hammers, lenses, compass, magnetic susceptibility meter, weather station, microscope, binoculars, GPS, multi-parameter meter, Niton Analyzer, Digital thermometers, DGPS, portable gas analyzer, mercury meter, micro-pipette, micro-burete, digital mapping system, mechanical auger, field books, first aid kits, clear safety goggles, pens, safety polo, mapping coats, rock bags, geological software, field laptops, digital camera, analytical balance, office furniture, computers, printers.

POLICY AND ADMINISTRATIVE SERVICES

Sector Strategic Plan for Statistics (SSPS): First draft of Data Collection Tools for the energy and mineral development was developed and discussed with key stakeholders.

Voice and data infrastructure: Phase II of the redesign voice and data infrastructure (Structured Cabling) was completed. Phase II involved installation of a centralized power supply system.

Specialized Machinery & Equipment: The procurement of the laboratory equipment under phase I was concluded and deliveries of the equipment commenced and will be fully installed during Quarter 3 of the FY2014/15.

Feasibility Studies for Nyamba B Hydro Power Plant: The study continued and is expected to be completed by end of FY2014/15.

CHALLENGES IN THE ENERGY AND MINERAL SECTOR

Land Acquisition: To acquire land for infrastructure; and mineral development, petroleum and mineral exploration takes a very long time and land is very costly. That delays project development and results into high investment costs.

High Employee Turnover: Low pay for professional has affected the energy and mineral sector. Better pay for Scientists in the sector so as to attract a strong pool of talented people including skilled and technical personnel in the energy and mining disciplines is a requisite.

Taxation incentives: The taxation regime has been identified as a disincentive to long term investment

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projects in refinery and pipeline development. This is an aspect that has to be addressed in order to encourage investment in the above projects.

High power system losses at both technical and commercial levels: High energy losses reduce the revenues required to provide affordable power. The technical losses are being addressed through rehabilitation and refurbishment of the distribution line network.

Management of expectations created by the discovery of petroleum: The people of Uganda in general, and in the areas where the discoveries have been made in particular, expect quick revenues, jobs and businesses, among other things. There are also anxieties about the possible negative aspects of developing the oil resources like environment degradation and how the revenues will be managed. To mitigate this challenge, government has intensified the sharing of information on the realistic development programme of the sector.

Table V2.1: Past and 2015/16 Key Vote Outputs*

Vote, Vote Function Key Output	Approved Bu Planned outp	dget and	4/15 Spending and Achieved by E		2015/16 Proposed Budget and Planned Outputs	
Vote: 017 Ministry of Energ						
Vote Function: 0301 Energy	Planning,Man	agement & Infra	structure Dev't			
Output: 030102 E	Energy Efficien	cy Promotion				
Description of Outputs:			The cummulative produced at the		Disseminate improve household stoves	d
Performance Indicators:						
Number of sites demonstrating use of improved energy technologies	10 s		10		10	
Number of prepaid meters installed	100,000		30,039		175,000	
Percentage oAudited firms implementing Energy efficiency measures	100		100		100	
Output Cost.	UShs Bn:	4.637	UShs Bn:	0.218	UShs Bn:	1.30
Output Cost Excl. Ext Fin.	UShs Bn:	1.151	UShs Bn:	0.218	UShs Bn:	1.30
Output: 030103 F	Renewable Ene	rgy Promotion				
Description of Outputs:	Nyagak III Construction to be undertaken. Muzizi IA and PPA. Nyamwamba: construction to commence		Nyagak III Construction is under procurement. Muzizi PPA concluded. Nyamwamba: construction yet to commence		Nyagak III HPP land to be undertaken.	acquisition
	Rwimi: Feasib	ility completed	Rwimi: Feasibi	lity completed		
Performance Indicators:						
Stage of development of Waki HPP					EPC Contractor on si	te
Stage of development of Siti 2 HPP					EPC Contractor on si	te
Stage of development of Siti 1 HPP					EPC Contractor on si	te
Stage of development of Rwimi HPP					Feasibility study com	pleted
Stage of development of Nyamwamba HPP					EPC Contractor on si	te

Vote, Vote Function Key Output	Approved Bu Planned outp		/15 Spending and Achieved by l		2015/16 Proposed Budget Planned Outputs	and
Stage of development of Nyagak III HPP					EPC Contractor o	n site
Output Cos		4.282	UShs Bn:	0.355	UShs Bn:	2.297
Output Cost Excl. Ext Fir		2.047	UShs Bn:	0.355	UShs Bn:	2.297
-		l Electrification				_
Description of Outputs:	419km of 220 line; Connect at lea	km of 132kV and kV transmission st 5 district o the national grid	that is to say that and BADEA/S •2850km are uthat is to say E	inder procurement ERT iii, OFID i	Connect district h	eadquarters to
Performance Indicators:	•					
Number of Solar systems installed	14,000		2,500		20,000	
Number of line KM of MV (33KV) constructed	3,262		2,850		3,500	
Number of line KM of LV (11KV) constructed	2,954		1,520		3,000	
Number of District Headquaters electrified	6		5		8	
Output Cos		5.579	UShs Bn:	0.383	UShs Bn:	5.152
Output Cost Excl. Ext Fir		2.959	UShs Bn:	0.383	UShs Bn:	1.872
-		mall Hydro Powei				
Description of Outputs:	Description of Outputs: To continue with the discussions with investors		Continued with the discussions with investors in the Hydro power to minimise on the subsidies paid by Government per Quarter		To continue with discussions with i	
Output Cos	t: UShs Bn:	81.504	UShs Bn:	45.256	UShs Bn:	81.50
Output Cost Excl. Ext Fir	ı. UShs Bn:	69.024	UShs Bn:	45.256	UShs Bn:	69.02
Vote Function Cost	UShs Bn:	566.165	UShs Bn:		UShs Bn:	267.260
VF Cost Excl. Ext Fin.	UShs Bn		UShs Bn	50.267	UShs Bn	98.960
Vote Function: 0302 Large						
Output: 030280 Description of Outputs:	Construction	Plant progresses at	Construction of	Plant progresses at	Progress with the of Karuma Hydro	
Performance Indicators: Percentage of land freed up for Karuma Transmission Line	20		5		25	
Percentage of land freed up for Isimba Transmission Lin	20 ne		5		25	
Output Cos	t: UShs Bn:	1,096.000	UShs Bn:	244.280	UShs Bn:	0.400
Vote Function Cost	UShs Bn:	1,096.900	UShs Bn:	<u>2</u> 44.574	UShs Bn:	0.900
Vote Function: 0303 Petrole		n, Development &	Production			
Output: 030303	Capacity Build	ing for the oil & g	as sector			
Description of Outputs:	Train eight (6) in Petroleum (6) Engineering a Design. Also 2	nd Refinery	9 members of undergoing tra Petroleum Geo Engineering a	aining in oscience,	Train six (6) mem Petroleum Geosci Engineering and I Design. Also 8 sta	ence, Refinery

Vote, Vote Function Key Output	Approved Budget Planned outputs	2014 and	/15 Spending and Achieved by I		2015/16 Proposed Budget and Planned Outputs	
	complete their cour PAU, NATOIL an Increase national p from the current ap 20%	d PD in place articipation		the Petroleum Iganda is in place	complete their courses PAU, NATOIL and Petrol Directorate in place; Increase national participat from the current approx 10 20%	tion
Performance Indicators:						
Number of staff enrolled for professional training in Oil and gas discipline	8		9		6	
Stage of formation new petroleum institution, Petroleum Directorate					90%	
Stage of formation new petroleum institution, Petroleum Authority					80%	
Stage of formation new petroleum institution, National Oil Company					80%	
Output Cost	: UShs Bn:	5.385	UShs Bn:	1.280	UShs Bn:	9.820
Output: 030304	Monitoring Upstrea	m petroleum	activities			
Description of Outputs:	Continue to Monito 30 wells in three (3 Albertine Graben .		Five samples from Kingfisher field analysed and interpreted from PEPD laboratories.		Three Field Development Plans (FDPs) approved and corresponding Production Licenses (PLs) issued; Costs	
	Monitor testing of wells in the Graber		Basin analysis and Kanywata		database fully populated; continue monitoring Development activities in Kingfisher Development A (KFDA), including 3D development seismic surve	
Performance Indicators: Number of line Km of seismic data acquired.	800		0		400	
Number f field development plans approved for issuance of Production License	5		2		3	
Level of compliance by exploration companies with petroleum operations guidelines	100		100		100	
Output Cost	: UShs Bn:	2.116	UShs Bn:	0.404	UShs Bn:	5.239
Output: 030305	Develop and implen	ent a commu	nication strate	gy for oil & gas in	1 the country	
Description of Outputs:	Public awareness in the oil and gas sector undertaken. Involvement of the public and		Public awareness in the oil and gas sector undertaken. Involved the public and other		Public awareness in the oil gas sector undertaken.	and
					Involvement of the public other stakeholders in the oigas activities achieved.	
					Departmental website maintained.	
Performance Indicators:						

			2017/16
Vote, Vote Function	Approved Budget and	4/15 Spending and Outputs	2015/16 Proposed Budget and
Key Output	Planned outputs	Achieved by End Sept	Planned Outputs
Number of Radio talk shows held	25	6	12
Number of newspaper advertorials made and published	5	4	5
Output Cost.	: UShs Bn: 0.141	UShs Bn: 0.029	UShs Bn: 0.300
-	Dil Refinery Construction	0.02)	0.300
Description of Outputs:	Finalise acquisition of Land for the refinery and supporting infrastructure	households were compensated.	Finalise resettlement of the Project affected persons who opted for resettlement
	Continued implementation of Logistics study recommendations.	Therefore a total number of 1836 out of 2615 Property Owners who opted for cash compensation, which is about 70.21%, have been compensated	Plan for development of supporting infrastructure including pipelines, airport, refinery industrial park etc.
	Transaction Advisor's assigned duties for Refinery developmen undertaken.	t	Formation of the Special Purpose Vehicle and undertake
	Pre - Front End Engineering Design (FEED) for refinery development completed.		Pre-FID activities for refinery development Develop master plan for the
			Airport at Kabaale
D. C. L. II.			Develop a master plan for Kabaale Indutrial park
Performance Indicators: Stage of Land Acquistion			Houses, schools and other social infrastructure constructed for the projet affected persons who opted for resettlement.
Stage of identifying Lead Investor			Lead Investor selected and working with the Government to form a special purpose vehicle and commence the pre-FID activities for refinery development.
Output Cost.	: UShs Bn: 29.880	UShs Bn: 22.393	UShs Bn: 27.880
Vote Function Cost			7 UShs Bn: 65.743
VF Cost Excl. Ext Fin.			7 <u>UShs Bn 55.013</u>
	um Supply, Infrastructure and I	<u> </u>	
_	Management and Monitoring o		
Description of Outputs:	Act, 2003. Petroleum standards enforced; Compliance with	•	Petroleum supply market operations monitored for compliance to Petroleum Supply Act, 2003. Petroleum standards enforced; Compliance with
	applications for new licenses evalauted	- Enforcement of the Petroleum Supply Act 2003 and facilities standards in Kampala and Western Uganda done. 6 stations closed	applications for new licenses evalauted

Vote, Vote Function Key Output	Approved Budget Planned outputs	2014 and	1/15 Spending and O Achieved by End		2015/16 Proposed Budget and Planned Outputs	
			- One Petroleum supply coordination	on meetings		
			-One field inspect monitoring in Eas Eastern Kampala			
			- Enforcement of Supply Act 2003 standards in Kamp	and facilities		
Performance Indicators:						
% of the facilities confirming to the Petroleum facilities standards	60		80		75	
Output Cost.	UShs Bn:	0.231	UShs Bn:	0.053	UShs Bn:	0.23
Output: 030406 F	Kenya - Uganda - R	wanda Oil p	ipelines			
Description of Outputs:	Continue to Superv wayleaves acquisitic compensation of Pr Affected Persons by Investor	on and oject	Commenced on primplement RAP for and compensation Affected Persons	or acquisition	Continue to Supervise wayleaves acquisition and compensation of Project Affected Persons	l
Output Cost.	· UShs Bn:	0.045	UShs Bn:	0.011	UShs Bn:	0.043
Vote Function Cost	UShs Bn:	14.057	UShs Bn:	1.217	7 UShs Bn:	14.057
Vote Function: 0305 Minera	l Exploration, Devel	opment & Pi	oduction			
Output: 030502	nstitutional capacit	y for the min	neral sector			
Description of Outputs:	Number of Staff tra term). Number of S (long term). Number equipment installed research papers, ma workshops, confere minerals discovered	taff trained or of lab l. Number of ps nces, and	20 Staff trained (s Staff trained (long		Number of Staff trained (sterm). Number of Staff tra (long term). Number of lal equipment installed. Num research papers, maps workshops, conferences, a minerals discovered	nined b ober of
Performance Indicators:						
Number of staff enrolled for training in Mineral sub-sector	4		4		4	
Number of Mineral analysis techniques developed to ISO standards	2		1		2	
Number of Mineral Artisans and small scale miners (ASM) trained in Mining Districts	570		200		300	
% of earthquake monitoring	25		20		35	
stations installed against NDP target of 40 stations					Draft before Cabinet for	
NDP target of 40 stations Draft mineral laboratory						
NDP target of 40 stations	· UShs Bn:	0.352	UShs Bn:	0.074	approval UShs Bn:	0.362

Vote Summary

		2014	1/15		2015/1	
Vote, Vote Function Key Output	Approved Budget and Planned outputs		Spending and Outputs Achieved by End Sept		Proposed Budget and Planned Outputs	
Description of Outputs:	Number of new min investiment project Mining Leases issu of mineral targets m mineral commoditi 4 topographocal ma	s initiated (5 ed). Number napped (10 es per year).	Isued 58 new lic mineral investin projects. 2 topographocal Kacheri and Lor	nent I map sheets of	Number of new investiment pro Number of mine mapped. topogr sheets	jects initiated. eral targets
Performance Indicators: Total Value of Mineral	300		18		400	
Production (UGX)- Bn Total Value of Mineral Exports as per permits issued (UGX)- Bn	159		2.7		200	
Number of potential Uranium resources targets discovered	2		2		2	
Number of mineralized areas discovered	3		3		3	
Output Cost.	UShs Bn:	1.617	UShs Bn:	0.374	UShs Bn:	2.917
Output: 030505	icencing and inspe	ction				
Description of Outputs:	120 mineral rights granted. inspections	12 site	58 mineral right site inspections	ts granted and 4 done	mineral rights granted. inspections	Site
Performance Indicators:	•				•	
Number of Mineral rights (licences) operational	506		825		600	
Number of flagships projects monitered	2		2		2	
Amount of NTR collected (USHs bn)	8		1.167		9	
Number of mining site inspectiog conducted	15		4		24	
% of mining companies complying with mining regulations	100		75		100	
Output Cost.	UShs Bn:	0.280	UShs Bn:	0.064	UShs Bn:	0.280
Vote Function Cost	UShs Bn:		UShs Bn:	1.819	UShs Bn:	11.684
Vote Function: 0349 Policy,						
Vote Function Cost	UShs Bn:	22.092	UShs Bn:	5.023	BUShs Bn:	21.892
Cost of Vote Services:	UShs Bn:	1,775.710	UShs Bn:	329.066	UShs Bn:	381.541
Vote Cost Excl. Ext Fin.	UShs Bn	1,307.31	l UShs Bn	329.066	o <mark>UShs Bn</mark>	202.511

^{*} Excluding Taxes and Arrears

2015/16 Planned Outputs

ENERGY PLANNING, MANAGEMENT & INFRASTRUCTURE DEV'T:

POWER GENERATION

(i) Large Hydropower Projects

Vote Summary

- Monitoring the construction of Karuma HPP; target 50% of construction by 2016.
- Monitoring the construction of Isimba HPP; target 80% of construction by 2016.
- Conclude the financial closure and commence construction of Ayago HPP
- Commence construction of Nyagak III and Muzizi
- Ensure compliance to ESIAs for all the HPPs
- (ii) Renewable Energy Development
- Monitoring construction of 5 projects under GET Fit programme.
- Five (5) Renewable energy Projects to start construction
- Options for addressing limitations in energy sector response to potential climate change impacts identified

TRANSMISSION LINE PROJECTS

- (i) Complete construction of the 6 projects;
- Bujagali Switchyard upgrade to 220kV
- Bujagali Tororo Lessos, 127km, 220kV line
- Mbarara Mirama Birembo, 66km, 220kV line
- Tororo Opuyo Lira, 260km, 132kV line
- Mbarara Nkenda, 160km, 132kV line
- Kawanda Masaka, 137km, 220kV line
- (ii) Sign contracts and commence construction of the following 8 projects:
- Nkenda Fort Portal Hoima, 226km, 220kV line
- Namanve South, Luzira, Mukono and Iganga industrial park substations
- Opuyo Moroto, 160km, 132kV line
- Mutundwe- Entebbe . 25km.132kV line
- Mirama-Kabale, 85.3km, 132kV line
- Upgrade of Queensway substation to 132/33kV
- Isimba Interconnection Project, 41km, 132kV
- Karuma Interconnection project (Karuma-Kawanda 400kV, 248.2km; Karuma –Olwiyo 400kV,

54.25km; Karuma-Lira 132kV, 75.5km)

- (iii) Conclusion of feasibility study, ESIA and RAP of the following 5 projects:
- Lira-Gulu-Nebbi-Arua, 350km, 132kV line
- Kikagati Mirama-Nsongezi, 38km, 132kV line
- Kabulasoke Kiboga Hoima, 205km, 132kV Line
- Lira Gulu Agago, 140km, 132kV Line
- Bulambuli (Atari)-Mbale, Industrial parks 60km, 132kV line

ATOMIC ENERGY REGULATION

- -Procurement of consultant to develop a Master Plan for Mpoma Land.
- -Equipping the Radiation Protection Laboratory in Entebbe/Amber House.
- -Set up an interim storage facility/bunker for orphan and illicit sources
- -Operationalize the National Radiological Emergency Preparedness and Response Committee (NREPRC).
- -Searching and Securing of orphan and illicit sources in Northern Uganda.

Vote Summary

- -Procurement of a consultant for the acquisition of Radiation Portal Monitors (RPMs) for nuclear safety and security at border entry points and in-land ports.
- -Development of Uganda Network for Online Education in Nuclear Science and Technology (UGA-NEST)
- -Development of IT infrastructure
- -Strengthening of the collaborations amongst East African Regulatory Bodies' towards nuclear security
- -Continue updating the inventories of radiation sources, conducting inspections, issuing authorizations and radiation monitoring programs

NUCLEAR ENERGY UNIT

- -Carry out further evaluation of the potential areas to come up with 10 candidate sites for nuclear power plants
- -Conclude the study on integrating Nuclear Power in the national generation plan 2015-40.
- -Procurement of a Consultant to prepare an issues paper on the development of nuclear energy policy for Uganda.
- -Conduct a study to determine the appropriate reactor technologies to be deployed in the country.
- -Conduct a study on the human resource needs for nuclear power development in Uganda
- -Conduct a study on the regulatory requirements for a nuclear power plant and come up with mechanism of strengthening the existing infrastructure.
- -Continue with the nuclear fuel cycle assessment and identify the appropriate nuclear fuel options for Uganda
- -Continue with the development of a National Radioactive Waste Management Strategy
- -Develop and disseminate awareness materials to the key stakeholders and Conduct awareness campaigns on nuclear power to the general public.
- -Continue to monitor IAEA activities in the sectors of health, Agriculture, Water and energy.

ENERGY MANAGEMENT

- -Conduct the Energy Week 2015
- -Comprehensive energy audits conducted in 10 high energy consuming facilities.
- -Energy Management Training of at least 30 Energy Managers and Auditors.
- -Develop a standardized approach that will enable periodic monitoring of energy audits and their implementation
- -Implementation of the Minimum Energy Performance Standards and labeling programme in collaboration with UNBS continued
- -Energy Efficiency and Conservation Bill sent to Parliament

UGANDA ENERGY CREDIT CAPITALIZATION COMPANY

- -Solar refinance: UECCC will continue to support Solar Equipment acquisition through additional refinance facilities of US\$1,000,000 through Participation Finance Institutions (PFIs)
- -Technical Assistance: Building Capacity of Independent Power producers and Financial Institutions through the organisation of Skills transfer events and Experience sharing business clinics
- -Solar Loan Product: Development of an adaptable Solar Loan product for adoption by six (6) Participating Financial Institutions at an estimated cost of US\$130,000
- -Connection Refinance facility; UECCC will monitor implementation of the connection refinance facility with WENRECo and CRDB.
- -Transaction Advisory Services; Offer transaction advisory services to independent power producers through the KfW support.

Vote Summary

- -ORIO Project; UECCC will work with Royal Haskoning to prepare the feasibility studies for the 10 mini hydro power plant sites.
- -Program of Activities; UECCC will continue to train Project developers on how to access Carbon Credit sales and/or revenue.
- -Address the issue of interest rates on solar loans.

SUSTAINABLE ENERGY FOR ALL (SE4ALL) INITIATIVE

- -Development and validation of the SE4ALL Investment Prospectus
- -Design and develop SE4ALL database and create the Energy Information Centre
- -Review and update the energy policy framework
- -Develop the SE4ALL communication strategy

ELECTRICITY DISPUTES TRIBUNAL

- -Receiving and processing new complaints,
- -Finalizing hearing of existing complaints,
- -Four (4) Public awareness campaigns,
- -Complaints gathering from the districts,
- -Training and capacity building for the members and staff,
- -Two (2) Stakeholder dialogues
- -One Study visit to similar organizations
- -Retooling,
- -Finalization of the human resource manual

PROMOTION OF RENEWABLE ENERGY SYSTEMS - WIND & SOLAR

- -Complete the installation and commissioning of two wind measuring equipment, collect, analyse and disseminate wind speed data.
- -Monitor the performance of the seven (7) installed demonstration small wind turbines for electricity generation.
- -Develop a strategy for sustainable uses of solar energy systems.
- -Liaise with UECCC to bring down the interest rate for solar energy financing.
- -Capacity building in wind technology and large solar electricity systems

BIOMASS RESOURCE MANAGEMENT

(i)Biogas

- -Draft Biogas Standards formulated
- -40 House hold biogas systems
- -Build 20 biolatrines
- -Study to establish potential for electricity generation from biogas

(ii)Institutional stoves

- -African Clean Cooking Solutions (ACCES) Implemented
- -Private Companies capacity built
- -Draft Stoves Standards developed

Vote Summary

(iii)Improved household stoves

- -ACCESS project promoted
- -Household stoves demonstrations (marketing, fuels, usage)
- -Stakeholder workshop on stoves and fuels
- -Draft standard on stoves developed
- -Collaborate with Clean start partners for financing of SMEs
- -Household gasifier stoves promoted

(iv) Institutional matters

- -Inter-ministerial committee on biomass strengthened
- -Concept paper for the proposed Biomass Energy Resources Authority formulated
- -Technical backstopping to LG on biomass energy mainstreaming in LG activities and budgets
- -Technical backstopping to UNACC
- -Publicize Biomass Energy Strategy

(v)Improved charcoal production

- -Large scale charcoal producers mobilized
- -Baseline study on charcoal done
- -100 Cassamance kilns disseminated
- -50 retorts disseminated
- Sensitization and public awareness campaigns on the use of stoves at household level are conducted

(vi)Briquetting technology

- -Train 20 briquette producers for better quality
- -4 small scale briquetting units for demonstration
- -1 large scale briquetting unit for demonstration

(vii)Interlocking soil stabilization block making

- -20 mason trained in ISSB construction
- -2 ISSB technology units procured for demonstration

(viii)Biofuels production and promotion

- -Biofuels legislation in place
- -Regulations formulated

PETROLEUM EXPLORATION, DEVELOPMENT & PRODUCTION

(i)Upstream

- -Continue promotion of the country's petroleum potential and issue at least two exploration licenses and three production licenses.
- -Contractor procured and 60% of Phase-3 construction completed of the petroleum data repository, data and

Vote Summary

offices at Entebbe.

- -Continue the implementation of the oil and gas communication strategy.
- -Complete the review and put in place a robust regulatory framework for the sector (Regulations, guidelines and model PSA)
- -Continue National Content development and capacity building.
- -Implement the skills requirements strategy recommendations.
- -Implement the National Content Policy and Plan for National Content.
- Climate change issues integrated in the oil and gas exploration and extraction to mitigate GHG emissions
- -Put in place the skills/ talent and Suppliers' database.
- -Monitor, supervise and evaluate the sub sector.
- -Facilitate the new institutions (PAU and NOC) to achieve their objectives.
- -Continue participation in regional initiatives.

(ii)Midstream

- -Formulate the Special Purpose Vehicle for the refinery development.
- -Undertake Pre-FID activities for refinery development.
- -All property owners from the refinery land fully compensated and resettled.
- -Undertake capacity building for three officers at Master's level.
- -Continue the development of standards and regulations for midstream facilities and operations.
- -Formulate a strategy and plan for petrochemical and other energy based industries.
- -Undertake an environmental baseline study and detailed route survey for the multi-products pipeline from the refinery to Buloba terminal.
- -Undertake the RAP study and its implementation for the Multi-products pipeline from the refinery to the Buloba terminal.
- -Develop and execute an Inter-governmental agreement for the crude export pipeline.
- -Develop a Master Plan for the Airport at Kabaale, Hoima district.
- -Develop a Master plan for the Kabaale Industrial Park (Refinery Complex Area)
- -Develop an implementation Plan for the National strategy and plan for petroleum transportation and storage facilities.
- -Strengthening of regional cooperation in development of midstream infrastructure achieved

PETROLEUM SUPPLY, INFRASTRUCTURE & REGULATION

- -Completion of implementation of RAP for Malaba-Kampala petroleum products pipeline.
- -Complete 20% of construction works for Eldoret-Kampala petroleum products pipeline.
- -Complete the RAP study for Kampala-Kigali petroleum products pipeline.
- -Fully stock the Jinja storage tanks and put in place a Mini-petroleum laboratory.
- -EPC contractor in place for the construction of Nakasongola Fuel reserves.
- -National Petroleum Information system rolled out to stakeholders.
- -Continue with institutional capacity building.

MINERAL EXPLORATION. DEVELOPMENT & PRODUCTION

(i) Mineral Exploration

- -Uranium Exploration; Carry out geological, geochemical and geophysical surveys of Uranium anomalies on Sheet 15 (Kitgum East) and Kitgum Sheets 13 & 14 (Kitgum West).
- -National Seismological Network; Refurbish existing earthquake research facilities and extend the network

Vote Summary

coverage to all seismic prone zones in Uganda.

- -Mining Environmental Laboratory; Establish and equip mining environmental laboratory for analyzing environmental samples. Also make arrangements to establish one environmental laboratory for minerals and oil/gas sectors and create regional labs.
- -Uganda Mining Legislation; Conclude the review of the mining legislation and gazette the code of ethics for Earth Scientists.
- -Fast tracking formulation of the Geothermal policy and legislation.
- -Exploration of Kimberlites; Follow up on airborne geophysical anomalies around Kidera (Southeast Uganda) which are suspected to be Kimberlites with the view to characterize them.
- -Geodata backup and recovery program; Install sustainable data backup and offsite recovery infrastructure and continue dissemination of geological and mineral information to all stakeholders particularly to land owners where mineral discoveries are made.
- -Iron ore Exploration; Carry out additional iron ore exploration in the Kigezi region that comprises the districts of Kisoro, Kabale, Rukungiri and Kanungu.
- -Small Scale Mining and Value Addition; Strengthen national capacity to improve small scale mining and value addition in the mineral sector.
- -Regional mineral certification; Fast track the implementation of regional mineral certification and development of the Uganda certificate of origin under International Conference of the Great Lakes Region (ICGLR) guidelines.
- Ensure compliance of Mining activities with environmental standards and requirements

(ii) Karamoja Project

- -Carry out airborne geophysical surveys of Karamoja region.
- -Continue geological mapping, geochemical and commence geophysical surveys and mineral resources assessment of Karamoja.
- -Select mineral targets for ground follow up.
- -Interpret and harmonize geophysical data and maps with the rest of Uganda.
- -Update mineral resources map of Karamoja.
- -Strengthen inspections and monitoring of mining operations in Karamoja Region.
- -Complete construction and equip the regional office and installation of a mini mineral laboratory and training centre in Karamoja.

(iii) Geothermal Project

- -Continue geothermal explorations in Kibiro, Katwe, Buranga, Panyimur and other geothermal areas. The outstanding activities are:
- -Undertake geological, geochemical and geophysical surveys in these geothermal areas to delineate geothermal anomalies of these sites.
- -Procurement of a Magnetotelluric equipment (MT) that is recommended to image the deep sub-surface in order to delineate the geothermal reservoirs.
- -Integrate geological, geochemical and geophysical data to construct a conceptual model and locate sites for exploratory drilling.

POLICY, PLANNING AND SUPPORT SERVICES:

- -Amber House and the Adjacent Plot: Complete Renovation studies on Amber House and commence the development of the adjacent plot.
- -Communication Strategy: Utilize existing manpower i.e. Community Development Officers at the districts

Vote Summary

to address the communication gaps between the ministry and the local governments.

- -Institutionalize Regional offices especially in the Petroleum and Mining Areas. (Staff, facilitation etc.)
- -Production of Bi-Annual Publication detailing the ministry's achievements and outputs and continue routine radio talk shows and newspaper pull outs for the ministry's activities.
- -Upload and update all Ministry Public Publications and Activities on the Ministry Website to keep the flow of information constant and lively.
- -Operationalize the newly developed five year Strategic Investment Plan and Monitoring and Evaluation Frame work
- -Records Retention and disposal schedules and Records Management Policy for the Ministry approved.
- Support the operations of the new institutions (National Oil Company and Petroleum Authority) created by the new legislation and new staff structure.
- Planning, Budgeting and Monitoring undertaken
- Financial Management undertaken.
- Procurement and Maintenance of Assets and Stores
- Management of Human Resources.

Table V2.2: Past and Medum Term Key Vote Output Indicators*

		2014	/15	MTEF P		
Vote Function Key Output Indicators and Costs:	2013/14 Outturn	Approved Plan	Outturn by End Sept	2015/16	2016/17	2017/18
Vote: 017 Ministry of Energy and M	ineral Develo	pment	•			
Vote Function:0301 Energy Planning,	Management	& Infrastructu	ıre Dev't			
Percentage oAudited firms implementing Energy efficiency measures		100	100	100	100	100
Number of prepaid meters installed		100,000	30,039	175,000	200,000	200,000
Number of sites demonstrating use of improved energy technologies		10	10	10	50	50
Stage of development of Nyagak III				EPC		
HPP				Contractor on		
				site		
Stage of development of				EPC		
Nyamwamba HPP				Contractor on		
				site		
Stage of development of Rwimi HPP				Feasibility		
				study		
				completed		
Stage of development of Siti 1 HPP				EPC		
				Contractor on		
				site		
Stage of development of Siti 2 HPP				EPC		
				Contractor on		
				site		
Stage of development of Waki HPP				EPC Contractor on		
				site		
Number of District Headquaters electrified		6	5 5	8		
Number of line KM of LV (11KV) constructed		2,954	1,520	3,000	3,000	
Number of line KM of MV (33KV) constructed		3,262	2,850	3,500	3,500	
Number of Solar systems installed		14,000	2,500	20,000	20,000	
Vote Function Cost (UShs bn)	N/A	566.165	50.267	267.266	224.746	197.196

Vota Function Key Output		2014/15		MTEF Pro	jections	
Vote Function Key Output Indicators and Costs:	2013/14	D1	turn by	2015/16	2016/17	2017/18
VF Cost Excl. Ext Fin.	Outturn 81.500	110.566	End Sept 50.267	98.966	N/A	N/A
Vote Function:0302 Large Hydro powe			30.207	70.700	14/21	14/11
Status of Ayago power project	y			EPC		
3 6 1 1 3				Contractor		
Status of Isimba power project				Works in		
G CTZ				progress		
Status of Karuma power project				Works in progress		
Percentage of land freed up for		20	5	25		
Isimba Transmission Line						
Percentage of land freed up for Karuma Transmission Line		20	5	25		
Vote Function Cost (UShs bn)	37.403	1,096.900	244.574	0.900	0.900	0.900
Vote Function:0303 Petroleum Explore	ation, Developn					
Number of staff enrolled for		8	9	6	6	
professional training in Oil and gas discipline						
Stage of formation new petroleum institution, National Oil Company				80%		
Stage of formation new petroleum				80%		
institution, Petroleum Authority						
Stage of formation new petroleum institution, Petroleum Directorate				90%		
Number f field development plans approved for issuance of Production License		5	2	3	4	
Level of compliance by exploration companies with petroleum operations guidelines		100	100	100	100	
Number of line Km of seismic data acquired.		800	0	400	400	
Number of newspaper advertorials		5	4	5	5	
made and published		3	' <mark></mark>	3	3	
Number of Radio talk shows held		25	6	12	12	
Stage of identifying Lead Investor			I	Lead Investor		
				selected and working with		
				the		
				Government		
				to form a		
				special		
				purpose vehicle and		
			C	ommence the		
				pre-FID		
				activities for		
				refinery		
Stage of Land Acquistion				development. Houses,		
Stage of Land Acquistion				schools and		
				other social		
			i i	infrastructure		

Vote Summary

-		2014/	15	MTEF P	rojections	
Vote Function Key Output Indicators and Costs:	2013/14 Outturn	Approved Plan	Outturn by End Sept	2015/16	2016/17	2017/18
				for the projet affected persons who opted for resettlement.		
Vote Function Cost (UShs bn)	N/A	68.013	26.167	65.743	56.185	55.455
VF Cost Excl. Ext Fin.	44.926	55.013	26.167	55.013	N/A	N/A
Vote Function:0304 Petroleum Supply	, Infrastructure					
% of the facilities confirming to the Petroleum facilities standards		60	80	75	100	
Vote Function Cost (UShs bn)	4.798	14.057	1.217	<i>14.057</i>	21.607	21.607
Vote Function:0305 Mineral Explorate	ion, Developme	nt & Product	ion			
% of earthquake monitoring stations installed against NDP target of 40 stations		25	20	35	50_	
Draft mineral laboratory services policy develped				Draft before Cabinet for approval		
Number of Mineral Artisans and small scale miners (ASM) trained in Mining Districts		570	200	300	300	
Number of Mineral analysis techniques developed to ISO standards		2	1	2	2	
Number of staff enrolled for training in Mineral sub-sector		4	4	4	4_	
Number of mineralized areas discovered		3	3	3	3	
Number of potential Uranium resources targets discovered		2	2	2	2	
Total Value of Mineral Exports as per permits issued (UGX)- Bn		159	2.7	200	210	
Total Value of Mineral Production (UGX)- Bn		300	18	400	400	
Number of mining site inspectiog conducted		15	4	24	24	
% of mining companies complying with mining regulations		100	75 <mark>.</mark>	100	100	
Amount of NTR collected (USHs bn)		8	1.167	9	10	
Number of flagships projects monitered		2	2	2	2	
Number of Mineral rights (licences) operational		506	825	600	650	
Vote Function Cost (UShs bn)	7.045	8.684	1.819	11.684	29.215	29.215
Vote Function:0349 Policy, Planning of	and Support Se	rvices				
Vote Function Cost (UShs bn)	20.389	21.892	5.023	21.892	26.768	26.792
Cost of Vote Services (UShs Bn) Vote Cost Excl. Ext Fin	N/A 196.060	1,775.710 <i>1,307.111</i>		381.541 202.511	359.421 N/A	331.165 N/A

Medium Term Plans

Vote Summary

ENERGY PLANNING, MANAGEMENT & INFRASTRUCTURE DEVELOPMENT:

- (i) Construction of Karuma Hydropower Project (600 MW) continued.
- (ii) Construction of Isimba hydro power project (188MW) completed.
- (iii) Commence the construction of Ayago (600MW) Hydropower Project.

PETROLEUM EXPLORATION, DEVELOPMENT AND PRODUCTION

The sector will continue to implement the oil and gas policy over the medium term, through undertaking the following:-

- (i) Promote the Country's petroleum potential and undertake a licensing round for the unlicensed acreage in the country;
- (ii) Develop and commission a 60,000bopd refinery in the country;
- (iii) Develop transport and storage infrastructure for petroleum and petroleum products in the country;
- (iv) Facilitate the development of infrastructure for the export of crude oil;
- (v) Coordinate the implementation of the oil and gas regulations in the sector;
- (vi) Build capacity of the Oil and Gas sector in the country;
- (vii) Monitor and regulate the upstream petroleum activities;
- (viii) Continue the implementation a communication strategy for the Oil and Gas sector in the country;
- (ix) Participate in Regional initiatives related to the oil and gas sector.

PETROLEUM SUPPLY, INFRASTRUCTURE AND REGULATION

- (i) Development and stocking fuel strategic reserves.
- (ii) Management and Monitoring of petroleum supply and marketing industry
- (iii) Maintenance of National Petroleum Information System
- (iv) Operational Standards and laboratory testing of petroleum products
- (v) Development of an Emergency Petroleum Supply Plan
- (vi) Develop the Kenya Uganda; Kampala Kigali oil products pipeline

MINERAL EXPLORATION, DEVELOPMENT & PRODUCTION:

- (i) Provide basic geo-scientific information for the development of the mineral sector.
- (ii) Promote optimal use of minerals and mineral trade for social improvement of the people.
- (iii) Provide technical services in the field of geosciences.
- (iv) Ensure best mining practices and accountability.
- (v) Promote mineral value addition and trade to increase revenues.
- (vi) Promote the gazetting of geosites and geoparks.
- (vii) Put in place an earthquake adminstration policy, expand the network of operation centres, design an earthquake disaster management plan, and equiping the research laboratories
- (viii) Institutional Capacity for the Mineral sector.

POLICY, PLANNING AND SUPPORT SERVICES:

- (i) Planning, Budgeting and Monitoring undertaken
- (ii) Financial Management and Procurement undertaken
- (iii) Procurement and maintenance of Assets and Stores
- (iv) Management of Human Resources

Vote Summary

(ii) Efficiency of Vote Budget Allocations

To ensure efficiency of Vote Budget allocations, and ensure that value for money is realised, budget allocation has focused on areas that contribute to sector proirities. Specifically, outputs geared towards capital purchases for power generation transmission, access, mineral value addition and security of supply of petroleum products have been targeted. These outputs are considered to have high results impacts.

Table V2.3: Allocations to Key Sector and Service Delivery Outputs over the Medium Term

	(i) Allocat	ion (Shs B	n)		(ii) % Vote	Budget		
Billion Uganda Shillings	2014/15	2015/16	2016/17	2017/18	2014/15	2015/16	2016/17	2017/18
Key Sector	1,232.0	137.7	125.0	85.6	69.4%	36.1%	34.8%	25.8%
Service Delivery	106.2	109.4	98.1	29.2	6.0%	28.7%	27.3%	8.8%

Cost assumption have been benchmarked on prevailing market rates and industry best practices.

Table V2.4: Key Unit Costs of Services Provided and Services Funded (Shs '000)

Unit Cost Description	Actual 2013/14	Planned 2014/15	Actual by Sept	Proposed 2015/16	Costing Assumptions and Reasons for any Changes and Variations from Plan		
Vote Function:0301 Energy I Cost per Mega Watt hour (MWh) of thermal generated electricity	Planning,Mana	gement & Inj	frastructure De 813,817	v't 813,817	The cost represents the energy price per MW generated.		
Cost per kilo Watt hour (kWh) sold by the system operator UETCL to the energy distributors	348		348	348	The cost represents the peak hour cost of electricity transmitted by UETCL		
1	385		385	385	Approved retail tariffs by the Electricity Regulatory Authority		
Vote Function:0302 Large H Cost per Mega Watt of electricity produced per hour by a large hydro power station	ydro power inf	rastructure	38,746	38,746	Approved energy tariff for the power generated at the Nalubaale - Kiira operated by a concessionaire		
Vote Function:0303 Petroleu Number of line km of seismic data acquired in the Albertine Graben.	m Exploration,	. Developmer	at & Production		Costs incurred vary from licenced companies and the areas of operation. GoU only facilitates staff to carry out monitoring.		
Drilling of one well					Costs incurred vary from licenced companies and the areas of operation. GoU only facilitates staff to carry out monitoring.		
Vote Function:0304 Petroleum Supply, Infrastructure and Regulation Cost of monitoring a petroleum facility							
Vote Function:0305 Mineral Mineral analysis per sample in international laboratory for 51 elements	Exploration, E 91,000	Development o 91,000	& Production		Mineral analysis per sample in international laboratory for fifity (51) elements. This is only the laboratory expense excluding freigh or transportation and data interpretation		

Vote Summary

Unit Cost Description	Actual 2013/14	Planned 2014/15	Actual by Sept	Proposed 2015/16	Costing Assumptions and Reasons for any Changes and Variations from Plan
Cost per line kilometre of aeroborne geophysical data	39,000	39,000		39,000	Resources Project 2004 - 2011 of USD 5.005 million for 632,681 line kilometres covered; averaged USD 7.911 per line kilometre. Global Inflation and change in technology

(iii) Vote Investment Plans

For the FY 2015/16, development of power infrastructure Project has a budgetary allocation of Ush. 101 Bn; while 35.0 Bn is earmarked for the acquisition of land for construction of the oil refinery. Construction and Resettlement Action Plan for the Transmission Lines will also be funded.

Table V2.5: Allocations to Capital Investment over the Medium Term

	(i) Allocation (Shs Bn)			(ii) % Vote Budget				
Billion Uganda Shillings	2014/15	2015/16	2016/17	2017/18	2014/15	2015/16	2016/17	2017/18
Consumption Expendture(Outputs Provided)	52.5	56.2	78.9	29.2	3.0%	14.7%	22.0%	8.8%
Grants and Subsidies (Outputs Funded)	115.5	114.3	48.1		6.5%	30.0%	13.4%	
Investment (Capital Purchases)	1,607.7	211.0	232.4	302.0	90.5%	55.3%	64.7%	91.2%
Grand Total	1,775.7	381.5	359.4	331.2	100.0%	100.0%	100.0%	100.0%

As a medium term strategy, during the FY 2015/16, the Sector will continue to focus major capital purchases towards investments in the construction of Large Hydropower infrastructure (Karuma, Isimba Hydro Power Projects); construction of transmission lines and the associated Way leaves; Resettlement Action Plan (RAP) and capacity payments towards thermal power generation. Downstrem activities will largely focus on the development of the Kenya - Uganda; Kampala - Kigali oil products pipeline.

In the oil and gas sub-sector, focus will be towards the implementation of the refinery development activities including the development of the oil pipelines and aerodrone, and the implementation of the oil and gas policy.

In the mineral sector, government will continue with the ground geophysical mapping of Karamoja and the geothermal exploration. In addition, focus will also be on the development of earthquake research facility and laboratory infrastructure.

To support the general administrative function, the sector has also committed resources towards the renovation Amber house and the development of the adjascent plot.

Table V2.6: Major Capital Investments

Project, Programme	2014/15		2015/16
Vote Function Output UShs Thousand	11 0 /		Proposed Budget, Planned Outputs (Quantity and Location)
Project 1223 Institutional Sup	port to Ministry of Energy and Min	eral Development	
034972 Government Buildings and Administrative Infrastructure	- Comprehensively renovate and manage Amber House and commence development process of the adjacent plot	TOR for the Procurement of a consultancy services to provide bills of quantities and overall plan to renovate Amber house were done;	Designs and BOQs for Remodelling of Amber House and development of the adjacent plot in place.
		Consulatnt and the Ministry of	Procurement of a contractor for the Remodelling of Amber

Project	t, Programme	2014/15		2015/16
Vote Function Output UShs Thousand		Approved Budget, Planned Outputs (Quantity and Location)	Actual Expenditure and Outputs by September (Quantity and Location)	Proposed Budget, Planned Outputs (Quantity and Location)
			Works to reproduce drawings plans and designs for the Amber house and Adjascent plot.	House and development of the adjacent initiated.
			Commenced on the procurement of a consultant to redesign the EDT offices and tribunal hall in the Former centenary bank	
			Remedial renovation works done on 15 offices and taoilet systems	
	Total	3,025,965	755,934	2,425,965
	GoU Development	3,025,965	755,934	2,425,965
	External Financing	0	0	0
	Purchase of Office and ICT Equipment, including Software	- Complete the development of a disaster recovery solution for the Ministry	- Completed civil works of the room to accommodate a power back up recovery solution for	- A disaster recovery solution for the Ministry developed
		- Complete Phase II of the redesign and implementation of Voice and data infrastructure	the MEMD - Completed intallation of power back up system under phase II	- Commence procurement of collaboration softwares under structured cabling Phase III
		- Resource Centre equipped	of the structured cable program	- Resource Centre equipped
		- Internet services (WiFi) procured and maintained	- Internet services procured and maintained	- Internet services (WiFi) procured and maintained
		- Procure a consultancy to develop an information system for the Ministry	 Procured Computer peripherals/ hardware and unti virus sofwares/ licencing 	- Computer peripherals/ hardware and sofwares/ licencing procured
		- Computer peripherals/ hardware and sofwares/	- Computer equipment serviced	- ICT user trainings and sensitization held
		licencing procured - Computer equipment serviced		- Cloud computing and cyber security implemented
	Total	1,000,000	172,747	1,000,000
	GoU Development External Financing	1,000,000 0	172,747 0	1,000,000 0
	Purchase of Specialised Machinery &	Implement phase II of Equipping and retooling the GSMD Mineral Laboratory	Procured equipment to Implement phase II of Equipping and retooling the GSMD Minarel Laboratory	Strengthen the capacity of DGSM to establish modern laboratory
	Equipment	Infrastructure	GSMD Mineral Laboratory Infrastructure. Equioment sue to be delivered	Purchase of vehicles for political leadership
	Total	1,000,000	249,948	1,000,000
	GoU Development External Financing	1,000,000 0	249,948 0	1,000,000 0
	Acquisition of Other Capital Assets	Complete the Feasibility Studies for Rwimi/Nyamba Hydro Power Plant	Contiued with the Feasibility Studies for Rwimi/Nyamba Hydro Power Plants. Inception Report submitted and discussed.	- Continue with the completion the Feasibility Studies for Rwimi/Nyamba Hydro Power Plant

Vote Summar	J	2014/15		2015/16
Project, Programme		2014/15		2015/16
Vote Function Output UShs Tho	ousand	Approved Budget, Planned Outputs (Quantity and Location)	Actual Expenditure and Outputs by September (Quantity and Location)	Proposed Budget, Planned Outputs (Quantity and Location
			Comments have been given to the consultant	- Muziz Hydro Power project EIA Certificate Fee
				 Nyagak III Hydro Power Project Land Acquisition
	Total	1,440,415	349,355	2,040,415
GoU Develo	opment	1,440,415	349,355	2,040,413
External Fin	ancing	0	0	
Project 1199 Uganda (Geothern	nal Resources Development		
030577 Purchase of Specialised Machinery & Equipment		Continue the procurement of Deep subsurface geothermal exploration equipment and laboratory consumables	•Ms Labx Scientific Systems supplied items which included water proof field books, geology field book covers, water proof pens, marker pens, pencils, aluminum clip boards, Geo Belt pack, Gfeller leather field case, Geo Rock bag, high visibility safety polo, water proof back packs, multi-purpose mapping coats, comprehensive first aid kits, sack-bag, safety goggles. Others included geological software, digital camera, and field tough books.	Continue the procurement of Deep subsurface geothermal exploration equipment and laboratory consumables
	Total	2,180,000	544,695	680,000
GoU Develo	opment	2,180,000	544,695	680,000
External Fin	ancing	0	0	
Project 1200 Airborne	Geophy	sical Survey and Geological Mappi	ng of Karamoja	
030572 Government Buildings and Administrative Infrastructure		Construct and equip a regional minerals office for Karamoja region; set up a training centre for ASM in Moroto	12.Land measuring 4 acres on Matheniko County Block 1 plot 100 near the Catholic Mission in Moroto Municipality was acquired for the construction of Karamoja Regional Office Block. Civil Engineers from the MoW&T visited the site for inspections to advice on the architectural designs and bill of quantities (BoQs) during July 2014.	Construct and equip a regional minerals office for Karamoja region; set up a training centre for Local Leaders and ASM in Moroto Town Design of the earthquake research facility
	Total	800,000	150,383	3,200,000
	-	800,000	150,383	3,200,000
GoU Develo		0	0	
GoU Develo External Fin	ancing			
External Fin	tor ther			Purchase five (5) field vehicles
External Fin 30575 Purchase of Mo Vehicles and Ot	tor her pment	n	n	.,
External Fin 30575 Purchase of Mo Vehicles and Ot	tor ther pment	0	<i>0</i>	Purchase five (5) field vehicles 500,000

Project, Programme	2014/15		2015/16
Vote Function Output UShs Thousand	Approved Budget, Planned Outputs (Quantity and Location)	Actual Expenditure and Outputs by September	Proposed Budget, Planned Outputs (Quantity and Location)
30577 Purchase of Specialised Machinery & Equipment	Procurement and installation of Specialised equipment.	(Quantity and Location) Initiated the Procurement petrophysics equipment that is expected to be concluded in the Q2	Procurement and installation of Specialised equipment.
Tota	al 950,000	224,781	750,000
GoU Developmen	· ·	224,781	750,000
External Financin	g 0	0	0
Project 1258 Downstream Pe	etroleum Infrastructure		
30471 Acquisition of Land by Government	- Project documents drafting finalized for Kenya-Uganda.	- 6 JCC meetings held - 4 tripartite meetings attended	Eldoret-Kampala petroleum products pipelines constructed
	 Drafting of Project Agreements for Kenya-Uganda finalized. 	 Drafting of Project Agreements for Kenya-Uganda on-going. 	Kampal-Kigali products Pipeline constructed
	- EIA for Kenya-Uganda project finalized.	- Procurement of Resettlement Action Plan (RAP) consultant	
	- Resettlement Action Plan (RAP) updated (Malaba- Kampala-Uganda)	in progress. Evaluation of RFP is on-going	
	- RAP implementation for Malaba-Kampala commenced	- EPC for Eldoret -Kampala Expression of Interest evaluated	
	- EPC tendering documments finalised	 Feasibility study for Uganda- Rwanda pipeline project completed 	
	 Feasibility study for Uganda- Rwanda pipeline project completed 	- Sensitization of Project affected persons	
	- Pipe line routing for Uganda- Rwanda undertaken		
	- RAP for Uganda-Rwanda development commenced		
Tota	9,400,000	234,922	5,700,000
GoU Developmen	9,400,000	234,922	5,700,000
External Financin	g 0	0	0
30476 Purchase of Office and ICT Equipment,	-Development of NPIS completed	- Supervision and monitoring of the development of NPIS	NPIS Upgraded
including Software	- 5 staff attain specialized training in operating and	- Subscription of PLATTS for International prices on going	Subscrption to PIS agencies maintained
	management of NPIS - Necessary hardware procured	- First version of NPIS submitted to the Department for	NPIS maintained
	- Five year subscription to PLATTS done	trial - Quarterly report on refined products prices in the country in place	
		 Three officers commenced Msc. Studies Necessary hardware procured 	

Project, Programme		2014/15		2015/16
Vote Fu	unction Output UShs Thousand	Approved Budget, Planned Outputs (Quantity and Location)	Actual Expenditure and Outputs by September (Quantity and Location)	Proposed Budget, Planned Outputs (Quantity and Location)
	Total GoU Development	,	which include server 172,894 172,894	700,000 700,000
	External Financing	0	0	0
	Purchase of Specialised Machinery & Equipment	- Downstream petroleum policy in place - Road map for revising the regulatory framework for downstream petroleum in place - Supervision of the HSE consultant continues - 20 standards developed - 5 stakeholders consultative meetings on Downstream Policy held - 5 regional workshops for sensitization on the developed standards held - HSE training manual in place - HSE protective gears for PSD staff procured	 Specifications for laboratory equipment at JST developed. Procurement commenced and is in process. Design for fencing off JST developed. Procurement process in progress Specification for the protective gear developed. Procurement process in progress Procurement of HSE training manuals is in progress Consultant procured to develop Codes of practise has submitted an interim. 	Downstream petroleum policy put in Place Technical regulations(standards and codes of practice) reviewed and implemented.
	Total	720,000	182,121	1,400,000
	GoU Development		182,121	1,400,000
030479	External Financing Acquisition of Other Capital Assets	- Studies and designs for Nakasongola Strategic Reserves completed - Nakasongola Strategic Reserves development commenced - Feasibility study of Kampala common user terminal commenced	- Interim report for feasibility study of Nakasongola Storage Tanks submitted by the consultant. - Supervision of feasibility study for Nakasongola storage tanks done. Reports available. - 3 staff commenced master's program abroad	Nakasongola strategic reserves facility completed and operational Jinja storage tanks restocked and operations monitored Plans for Buloba Multi User Product terminal produced
	Total	1,680,000	344,561	4,700,000
	GoU Development External Financing		344,561 0	4,700,000 0
Project	t 1142 Management of	the Oil and Gas Sector in Uganda		
	Government Buildings and Administrative Infrastructure	Construction of Phase-3 of the new Data Centre; Maintenance of existing buildings and related infrastructure undertaken; Establishment and Rent for field based offices.	Supervision of Phase-2 of the new Data Centre continued; Partial payment for Phase-2 construction done; Procured consultancy services to re-design and supervise 3rd phase construction including	Construction of Phase-3 of the new Data Centre, Core Store, Labs and Office Building at Entebbe commenced; Maintenance of existing buildings and related infrastructure undertaken;
		Capea Offices.	access road;	Rent for buildings for the new Institutions (Petroleum

Project	t, Programme	2014/15		2015/16		
Vote Fu	UShs Thousand	Approved Budget, Planned Outputs (Quantity and Location)	Actual Expenditure and Outputs by September (Quantity and Location)	Proposed Budget, Planned Outputs (Quantity and Location)		
				Authority and National Oil Company), paid.		
	Total	7,939,440	375,742	5,000,000		
	GoU Development	7,939,440	375,742	5,000,000		
	External Financing	0	0	0		
Project	t 1184 Construction of (Oil Refinery				
	Acquisition of Land by Government	Detailed route survey for products pipeline from the refinery to Buloba terminal concluded	Procurement of a Consultant to develop a strategy and plan for petroleum transportation and storage was done.	Implementation Plan for the National Strategy and Plan for Petroleum Transportation and Storage facilities developed		
		Resettlement Action Plan (RAP) study crude oil from the field to the refinery and products pipeline from the refinery to Buloba terminal undertaken Environmental Baseline Study for pipelines undertaken	Review and completion of final draft document in progress. Produced interim report for the study. Discussions to develop a detailed pipelines corridor and route with partner states Kenya and Rwanda on going in consultation with the oil companies Officers had three meetings in Nairobi for bid opening and evaluation, selection and negotiations with the consultant to undertake the feasibilty study and design of the Hoima-Lockichar-lamu pipeline.	Undertake and Environmental baseline study and detailed route survey for the Multi-products pipeline from the refinery to Buloba terminal. Undertake the RAP study and its implementation for the Multi-products pipeline from the refinery to the Buloba Terminal Develop and execute an intergovernmental agreement for the crude export pipeline		
	Total	2,929,000	252,648	2,929,000		
	GoU Development	2,929,000	252,648	2,929,000		
	External Financing	0	0	0		
	Oil Refinery Construction	Acquisition of land for the refinery development concluded.	In this quarter an additional 255 households were compensated.	Special Purpose Vehicle (SPV) for the refinery development formulated		
		Master plan and detailed engineering design study for the aerodrome development concluded	Therefore a total number of 1836 out of 2615 Property Owners who opted for cash compensation, which is about	Undertake Pre-FID activities for refinery development		
		Coordination of the activities of the Transaction Advisor	70.21%, have been compensated.	All property owners from the refinery land full compensated and resettled		
			Physical planning of the land and construction of the houses and social infrastructure is to commence.	A Master Plan for the Airport at Kabaale, Hoima district developed		
			A total of 533. 59 acres of land has been purchased for relocation of the 93 Property Owners that opted for	Develop a Master plan for the Kabaale Industrial Park, Refinery Complex Area		
			resettlement.	A strategy and plan for petrochemicals and other energy		
			Continuous sensitisation of the remaining project affected	based industries formulated		

Vote Summary Project, Programme 2014/15 2015/16 Vote Function Output Approved Budget, Planned **Actual Expenditure and Outputs** Proposed Budget, Planned **Outputs (Quantity and Location)** by September **Outputs (Quantity and Location)** UShs Thousand (Quantity and Location) ensure a smooth transition for them. It is expected that Cash compensation will be concluded by the end of 2014. The Ministry of Energy and Mineral Devt, in conjunction with Civil Aviation Authority, procured a consultant to develop a detailed Master plan for the airport in Kabaale ,Hoima District. The process of getting the lead investor continued with Parrarel initial negotiations were held with the two preferred bidders on 27th to 29th August 2014 with Sk Group and 1st to 3rd September 2014 with RT Global Resources Review of the draft key project agreeements was done The two preffered bidders will be issued a Request For Best and Final Offers by mid-October, 2014 and given one month to submit their Best Final Offers for the project by mid- November 2014 22,393,333 Total 29,880,220 27,880,220 GoU Development 29,880,220 22,393,333 27,880,220 **External Financing** 0 Project 1023 Promotion of Renewable Energy & Energy Efficiency 030177 Purchase of Specifications, ToR developed - Ten (10) small wind energy -Five (5) hybrid small wind Specialised systems procured and Detailed designs. energy/ solar photovoltaic Machinery & systems procured, installed and -Two wind measuring Equipment commissioned. equipment procured -Two (2) solar water heating - Computers for wind data systems for; Refurbishment in Mbale and another procured for procured lira hospital. -Fifteen (15) Institutional energy saving stoves procured and installed. - Two wind measuring equipment procured Total 22,568,859 8,800 15,142,689 GoU Development 1,292,689 8,800 292,689

Project, Programme	2014/15		2015/16
Vote Function Output	Approved Budget, Planned	Actual Expenditure and Outputs	Proposed Budget, Planned
UShs Thousand	Outputs (Quantity and Location)	by September (Quantity and Location)	Outputs (Quantity and Location)
External Financing	21,276,170	0	14,850,000
Project 1026 Mputa Intercon	nection Project		
30179 Acquisition of Other Capital Assets	- Construction of Nkenda- Hoima 220kV transmission line and associated substations.	1.Approval of transmission line tender documents and issuance to shortlisted bidders.	- Construction of Nkenda- Hoima 220kV transmission line and associated substations.
		2.The substation tender documents were approved by the UETCL contracts committee on 19th September 2014. The financier's no-objection was still pending at the end of the quarter. The delay in issuance was due to the financier's requirement that the documents are reviewed by the supervision consultant before their no-objection. 3.Compensation of Project Affected Persons (PAPs) is 81% complete.	- RAP Implementation
Total	91,854,068	375,000	21,854,000
GoU Development	1,500,000	375,000	1,500,000
External Financing	90,354,068	0	20,354,000
Project 1137 Mbarara-Nkenda	a/Tororo-LiraTransmission Lines		
030179 Acquisition of Other Capital Assets	- Construction of Mbarara- Nkenda (Lot 2)&Tororo-Lira (Lot 1) transmission lines and associated substations	Lot 1 (Tororo – Lira Transmission line) progress: •Total Tower foundation completed – 409 out of 740 (55.2%) •Total Tower Erection completed - 267 out of 740 (36%) •15 MVar Shunt Reactor received atOpuyo substation Lot 2 (Mbarara – Nkenda Transmission line & Associated substations) progress: •Total Tower foundation Completed – 130 out of 321 tower locations •Total Tower Erection Completed – 105 out of 321 towers •Monopole foundation completed – 89 out of 131 locations •Monopoles erected – 62 out of 131 locations Fort Portal substation •Civil Foundation works (Total 109 foundations) for all outdoor equipment have been completed.	-Construction of Mbarara-Nkenda (Lot 2)&Tororo-Lira (Lot 1) transmission lines and associated substations -RAP implementation

Project, Programme	2014/15	2015/16		
Vote Function Output UShs Thousand	Approved Budget, Planned Outputs (Quantity and Location)	Actual Expenditure and Outputs by September (Quantity and Location)	Proposed Budget, Planned Outputs (Quantity and Location	
		Control Room Building is complete. Plinth beam setting is under progress •Excavation of Cable trench is 90 % completed.		
		Mbarara substation •Civil Foundation works (Total 32 foundations) of all outdoor equipment have been completed.		
		Nkenda substation •Equipment and tower foundations on going		
Total	107,468,621	461,541	37,468,62	
GoU Development	3,518,621	461,541	3,518,62	
External Financing	103,950,000	0	33,950,00	
Project 1140 NELSAP				
30179 Acquisition of Other Capital Assets	- Construction works of Bujagali-Tororo-Lessos and Mbarara-Mirama- transmission lines Lot A: Uganda-Kenya; Lot B: Uganda-Rwanda and Lot C: Substations	- The current disbursement level stands at 22% for ADF and 26% for JICA. - Foundation works ongoing for Bugali- Lessos line (lot A) and 123 out of an estimated 399no; foundations are complete. - Line route alignment for Mbarara- Mirama line (lot B) is complete and the survey is 94% complete. - Foundation works commenced for Mbarara- Mirama line (lot B) and 13 out of an estimated 184no; foundations are complete. - Site clearance and levelling near completion for Tororo and new Mbarara substations. -Procurement of contractors for construction of resettlement houses for Project Affected Persons is ongoing.	- Construction works of Bujagali-Tororo-Lessos and Mbarara-Mirama- transmission lines Lot A: Uganda-Kenya; Lo B: Uganda-Rwanda and Lot C: Substations -RAP implementation	
		- RAP Implementation progress is at 77%.		
Total	62,107,253	1,159,313	23,537,98	
GoU Development External Financing	4,637,253 57,470,000	1,159,313 0	2,637,25. 20,900,73	
	,			

Project, Program		2014/15		2015/16		
Vote Function Output UShs Thousand		Approved Budget, Planned	Actual Expenditure and Outputs			
		Outputs (Quantity and Location)	by September (Quantity and Location)			
030179 Acquisiti Capital A		- Supervision Consultant	Feasibility Study completed.	-Procurement of EPC Contractor		
		- EPC Contractor	-Draft EPC Tender documents being reviewed -ESIA & RAP Studies 100% completed -ESIA & RAP Studies submitted to NEMA and CGV for approval	-EPC works -RAP Implementation		
	Total	4,670,000	750,000	4,670,000		
Gol	U Development	3,000,000	750,000	3,000,000		
Exter	nal Financing	1,670,000	0	1,670,000		
Project 1198 M	odern Energy	from Biomass for Rural Developme	nt			
030177 Purchase Specialis Machine Equipme	ed ry &	Purchase of a biogas unit for electricity generation Purchase of spares for Nyabyeya	- ToRs for a Contractor to construct the biogas system for electricity generation developed. Procurement process initiated.	Bio gas unit for electricity generation Large scale briquetting unit		
		gasifier maintenance Purchase of 4 hand held Global Positioning Units (GPS)	Repairs were done on the water tanks and a mini waste water treatment plant set up.	2 Interlocking Stablization making machines Missing parts of Apac Biogas		
		Purchase materials to support completion of 10kw Apac biogas unit Purchase of 4 gasifier units for	- Electromechanical repairs on the 82.5kW unit were carried out. Report in place Additional repairs on the two units of the 150kW Nyabyeya gasification	unit Missing parts of Kyambogo gasifier unit		
		gasification technology demonstration Implementation plan of gasification technology Engineering designs (biogas	system carried out. More test runs to be carried out.	1 Biofuels unit for demonstration		
	7 0. 4. 1	system for electricity	275 420	4420.000		
~ -	Total	2,300,000	275,429	2,130,000		
	I Development nal Financing	2,300,000 0	275,429 0	2,130,000		
			U	-		
Project 1212 El 030179 Acquisiti Capital A	ion of Other	- Establishment of the Power Sector Information Centre commenced - Construction of new Kawanda- Masaka transmission line and related upgrades to substations.	Of the total 2171 Project Affected Persons, 1344 have been compensated.1780 Paps have been disclosed too, 1649 agreements, 131 disputes and 381 outstanding disclosures. Supervision consultant was	-Construction of new Kawanda- Masaka transmission line and related upgrades to substations. Establishment of Power Sector Information Center in place and staff recruited to run.		
			procured. He completed phase 1 report and the design review report was submitted to the World Bank for Review.	 Feasibility study for feasibility study Lira –Gulu- Nebbi –Arua transmission line. 		
			Advance payment was made to the EPC Contactors on 22nd July 2014.Kick off meetings for			

Vote Summary				
Project, Programme	2014/15	2015/16		
Vote Function Output UShs Thousand	Approved Budget, Planned Outputs (Quantity and Location)	Actual Expenditure and Outputs by September (Quantity and Location)	Proposed Budget, Planned Outputs (Quantity and Location	
		Lot 2 and 3 were held on August 12th and 13th 2014. Lot 1 were held on 14th August 2014.		
		The consultant submitted a draft inception report on 29th July 2014.and the final inception report on 2nd September 2014.		
Total	131,137,253	141,916	32,037,000	
GoU Development		141,916	2,037,000	
External Financing	128,100,000	0	30,000,000	
Project 1221 Opuyo Moroto I Op	nterconnection Project			
30179 Acquisition of Other Capital Assets	•Procurement of RAP implementation consultant	Shortlist for works supervision consultants approved	Procurement of Supervision Consultant	
	•Procurement of Supervision Consultant	RFP issued to shortlisted firms	Procurement of EPC Contractor	
	•Procurement of EPC Contractor			
	•RIAP Implementation			
Total	3,690,000	0	3,690,000	
GoU Development	1,000,000	0	1,000,000	
External Financing	2,690,000	0	2,690,000	
Project 1222 Electrification of	f Industrial Parks Project			
30171 Acquisition of Land by Government	RAP Implementation	Namanve: Feasibility study, ESIA & RAP Studies completed. -Namanve, Mukono, Iganga and Luzira: Sourcing for financing for construction on-going; 80% completed	-Construction of Namanve South, Luzira, Mukono and Iganga Industrial Park Substations and Associated transmission lines	
		- Mukono, Iganga and Luzira: Procurement of the ESIA & RAP Studies & RAP Implementation consultant completed.	-RAP Implementation	
		- Mukono, Iganga and Luzira: Procurement of supervision of works consultant completed.		
		Disbursements: USD 347,737.16 has been spent towards the study		
Total	640,000	0	1,040,000	
GoU Development	640,000	0	1,040,000	
External Financing	0	0		

Project 1257 Mirama-Kikagati-Nshungyenzi Transmission Line

Project, Programme	2014/15		2015/16
Vote Function Output	Approved Budget, Planned	Actual Expenditure and Outputs	Proposed Budget, Planned
UShs Thousand	Outputs (Quantity and Location)	by September (Quantity and Location)	Outputs (Quantity and Location
30179 Acquisition of Other Capital Assets	- Completion of Feasibility study.	1.Under the Procurement of the feasibility study consultant:	-Completion of Feasibility study
	•		-Complete ESIA / RAP study.
	- Complete ESIA / RAP study.	-Financial evaluation was concluded and approvals grantedPre-award negotiations were	-RAP implementation
		2.Procurement of the ESIA/RAP/RAP Implementation Consultant -Technical evaluation report was approved by Contracts committee on April 09, 2014.	
		Approval of the Financier is pending.	
Total	2,284,600	0	2,285,00
GoU Development	0	0	
External Financing	2,284,600	0	2,285,00
Project 1259 Kampala-Entebb 030171 Acquisition of Land	e Expansion Project - RAP Implementation	ESIA/RAP/RAP Implementation	-Construction Works
by Government	- KAI Implementation	services:	-construction works
		-The consultant concluded ESIA study and submitted the Final ESIA report. NEMA approval is pending	-RAP Implementation
		-The Consultant concluded RAP field activities.	
		Design, tender document preparation, project	
		management and supervision of works services:	
		-Evaluation process of shortlisting bidders was carried out pending conclusion with the	
		Supervision Consultant and required approvals.	
		-Design process ongoing, the Consultant submitted draft overhead line design report,	
		substation design report and draft soil investigation reports	
	= 00.000	0	4.020.00
Total	500,000	0	4,920,00
Total <i>GoU Development</i>	500,000 500,000	0	4,920,00 2,000,00

(iv) Vote Actions to improve Priority Sector Outomes

In order to improve Vote performance, the sector has put in place a number of measures. These include the development of the Client Charter, Sector Strategic Investment Plan, Monitoring and Evaluation

Vote Summary

Framework and associated Operationalisation Plan. These instruments provide the basis for resource allocation and performance evaluation. In addition, through the Sector working Group, jointly agreed actions are isentified and implemented.

Regarding policy and legislation, the sector has undergone a restructuring axcersise to address issues of implementation. Subsequently functions that have not been provided or have been indequately provided will now be provided. Policy reviews are on going and it is hopped that a new mining Policy and Legislation will be put in place in the FY2015/16 and will address current licensing and inspection challenges.

2014/15 Planned Actions:	2014/15 Actions by Sept:	2015/16 Planned Actions:	MT Strategy:
Sector Outcome 0:			
Vote Function: 03 49 Policy, Pl	lanning and Support Services		
VF Performance Issue: - Acc	ress to adequate financial resourc	es Monitoring and Evaluation of	the sub-sectors
Present a funding proposal to the MoFPED	Development plan has been made	Develop capacity to monitor and evaluate the sector.	Develop capacity to monitor and evaluate the sector.
Sector Outcome 1: Increased a	access to affordable and efficient	sources of energy	
Vote Function: 03 01 Energy P	lanning,Management & Infrastruc	ture Dev't	
VF Performance Issue: - Hig	h cost of electricity generation		
Increaase generation mix to include variuos options	ERA has licenced some developers of renewable sources of energy to Increaase the generation mix	Develop more cheaper sources of power and increase their mix in power generation	Develop more cheaper source of power and increase their mix in power generation
VF Performance Issue: - Poo	or transmission and distribution n	etwork resulting into energy losse	es.
Continue the refurblishment of the transmission and distribution infrastructure (i.e line, transformer and substaion upgrade)	Continued with the construction and the refurblishment of the transmission and distribution infrastructure	Refurblishment of the transmission and distribution infrastructure (i.e line, transformer and substaion upgrade)	Refurblishment of the transmission and distribution infrastructure (i.e line, transformer and substation upgrade)
10	e management of mineral resour	10	upgrude)
	Exploration, Development & Prod	<u> </u>	
	nplicated procedures for access o		ing infrastructure
Request for increase of funding from 0.465bn to 6.42 bn (recurrent) and development budget from 6.8bn to 108.72 bn to enable the sector takeover its primary role of growth driver and industrialisation in line wth NDP and Vision 40.	Request for increase of additional funding by MEMD to MoFPED was done	Sensitisation of local communities and land owners on the benefits of the intended projects. Attracted private investors to take over the development of Mineral resources in Sukulu (phosphates) and Kilembe (copper).	Sensitisation of local communities and land owners on the benefits of the intended projects. Attracted private investors to take over the development of Mineral resources in Sukulu (phosphates) and Kilembe (copper).
	nited access to adequate resources ations	for inspection and monitoring of	f exploration and mining
Request for increase of funding from 0.465bn to 6.42 bn (recurrent) and development budget from 6.8bn to 108.72 bn to enable the sector takeover its primary role of growth driver and industrialisation in line with NDP and Vision 40.	Request for increase of recurrent additional funding by MEMD to MoFPED was done	(a) Ten (10) development projects packaged. MoFPED to borrow for the funding gap of 115.14 bn for priority projects in the Mineral Sector. (b) To allow the use of NTR at Source to cater for Appripriation in Aid (AIA) and increase more NTR from mining.	(a) Ten (10) development projects packaged. MoFPED to borrow for the funding gap of 115.14 bn for priority projects in the Mineral Sector (b) To allow the use of NTR a Source to cater for Appripriation in Aid (AIA) and increase more NTR from mining.

Vote Summary

2014/15 Planned Action	s: 2014/15 Actions by Sept:	2015/16 Planned Actions:	MT Strategy:				
Sector Outcome 3: Susta	Sector Outcome 3: Sustainable management of the country's Oil and Gas resources						
Vote Function: 03 03 Pet	roleum Exploration, Development & Pr	roduction					
VF Performance Issue:	- Insufficient capacity to efficiently ma	anage the country's oil and gas po	otential				
Continue with cpapcity	Continue with cpapcity Continued with capacity		Continued strengthening of the				
biulding programs	building programs of variou	institutional capacity	institutional capacity				
	staff and programs						
VF Performance Issue:	- The Enactment of the Oil and Gas Re	esource Management Law.					
Implement the newly	Continued with the	Continue the implementation	Continue the implementation				
approved legislation	preparation of the new	of the oil and gas policy and	of the oil and gas policy and				
	regulations to operationalise	legislations.	legislations.				

V3 Proposed Budget Allocations for 2015/16 and the Medium Term

This section sets out the proposed vote budget allocations for 2015/16 and the medium term, including major areas of expenditures and any notable changes in allocations.

Table V3.1: Past Outturns and Medium Term Projections by Vote Function*

Tuble veill tube educating una mediam Term T	i ojections by vote i unetion						
		20	2014/15		MTEF Budget Projections		
	2013/14 Outturn	Appr. Budget	Spent by End Sept	2015/16	2016/17	2017/18	
Vote: 017 Ministry of Energy and Mineral Development		•					
0301 Energy Planning, Management & Infrastructure Dev't	81.500	566.165	50.267	267.266	224.746	197.196	
0302 Large Hydro power infrastructure	37.403	1,096.900	244.574	0.900	0.900	0.900	
0303 Petroleum Exploration, Development & Production	44.926	68.013	26.167	65.743	56.185	55.455	
0304 Petroleum Supply, Infrastructure and Regulation	4.798	14.057	1.217	14.057	21.607	21.607	
0305 Mineral Exploration, Development & Production	7.045	8.684	1.819	11.684	29.215	29.215	
0349 Policy, Planning and Support Services	20.389	21.892	5.023	21.892	26.768	26.792	
Total for Vote:	196.060	1,775.710	329.066	381.541	359.421	331.165	

(i) The Total Budget over the Medium Term

(ii) The major expenditure allocations in the Vote for 2015/16

For the FY 2015/16, Hydro Power Projects have the largest budgetary allocation of Ush. 101 bn; while the development of petroleum infrastructre takes Ush. 66.0 bn, largely for the oil refinery activities, pipeline development activities and petroleum data centre. Mineral development activities have a budget allocation of Ush. 9 bn. The Vote also support the Atomic Energy Council, Uganda Energy Credit Capitalisation Company, and the Electricity Disputes Tribumal. In addition, it is also planned that the development of Amber house and adjacent plot will be funded.

(iii) The major planned changes in resource allocations within the Vote for 2015/16

The major planned change in resource allocation has been attributed to the removal from the Vote Ceiling the reousrces intended for the development of Karuma and other large hydropower infrstaructure. This will have a reduction of Ush. 1,096.6 bn.

Table V3.2: Key Changes in Vote Resource Allocation

Changes in Budget	Allocations and Outputs from	Justification for proposed Changes in					
20:	15/16	2016/17	2017/18	Expenditure and Outputs			
Vote Function:0301	Vote Function:0301 Energy Planning, Management & Infrastructure Dev't						
Output: 0301 01 Energy Policy/Plans Dissemination, Regulation and Monitoring							

Changes in Budget Allocation 2015/16	ons and Outputs from	2014/1 2016/		17/18	Justification for proposed Changes in Expenditure and Outputs
UShs Bn: -1.219	UShs Bn:	3.862	UShs Bn:	-3.762	Feasibility Studies for Ayago
Feasibility Studies for	Finalise Consultancy				Hydropower Project completed.
Ayago Hydropower Project	assignments in the foll	owing			
completed.	areas:				
	- Peri-Urban Electrific	ation			
	- Street and Market Lig	ahtina			
	at Masaka Municipalit				
	at Wasaka Wamerpant	<i>y</i> .			
	- Development of a Po	wer			
	Sector Information Cer				
Output: 0301 02 Energy	Efficiency Promotion				
UShs Bn: -3.336	UShs Bn:	0.363	UShs Bn:	-4.637	The outputs are expected to be
The CFL test bench and	The provision is for				delievered during the Fy2014/15
other outputs will be	maintenace of the CFL	test			
delivered during the	bench and address the				
FY2014/15	capacity issues that are	still			
0.4.4	a challenge				
	able Energy Promotion	ć = 10	Trat D	4.000	
	UShs Bn:		UShs Bn:	-4.282	Much of the cost of achieving this output
Much of the cost of	New renewable project				shall have been met in the FY2014/15.
achieving this output shall have been met in the	outpus shall be packag during the the FY2016				
FY2014/15. New project	during the the F 1 2010	/1/			
outputs shall come on board					
during the the FY2016/17					
	Sector Transfers for ER	Γ (Othe	er Components)		
			UShs Bn:	-31.764	The main source of this funding is from
The main source of this	The main source of thi	S	The main source of		development partners largely supporting
funding is from	funding is from		funding is from		rural electrification programs, which is
development partners	development partners		development partne		being provided under Vote 123
largely supporting rural	largely supporting rura		largely supporting r		
electrification programs,	electrification program		electrification progr		
which is being provided	which is being provide		which is being prov	rided	
under Vote 123	under Vote 123		under Vote 123		
	ition of Land by Govern		IIClass D	1 202	Township in the Control of the Contr
	UShs Bn:	-1.303	USns Bn:		Transmission infrastructure projects are
The additional resources shall be used for the					a key input in access to power, which feeds directly into value addition that the
acquisiton of wayleaves for					NDP is targeting
the various transmission					11.21 13 141 801118
projects that are at various					
stages of development					
stages of development					
	ase of Specialised Machin	iery &	Equipment		
Output: 0301 77 Purcha			Equipment UShs Bn:	-24.869	Reduced support from development
Output: 0301 77 Purcha UShs Bn: -7.446 Much of the purchases has	UShs Bn: Much of the purchases	23.844		-24.869	Reduced support from development partners
Output: 0301 77 Purcha UShs Bn: -7.446 Much of the purchases has been supported by the	UShs Bn: Much of the purchases been supported by the	23.844 has		-24.869	11 0
Output: 0301 77 Purcha UShs Bn: -7.446 Much of the purchases has been supported by the development partnesr. For	UShs Bn: Much of the purchases been supported by the development partnesr.	23.844 has		-24.869	11 0
Output: 0301 77 Purcha UShs Bn: -7.446 Much of the purchases has been supported by the development partnesr. For the medium term, the	UShs Bn: Much of the purchases been supported by the development partnesr. the medium term, the	23.844 has For		-24.869	
Output: 0301 77 Purcha UShs Bn: -7.446 Much of the purchases has been supported by the development partnesr. For the medium term, the projection of this support is	UShs Bn: Much of the purchases been supported by the development partnesr. the medium term, the projection of this supp	23.844 has For		-24.869	
Output: 0301 77 Purcha UShs Bn: -7.446 Much of the purchases has been supported by the development partnesr. For the medium term, the projection of this support is reducing.	UShs Bn: Much of the purchases been supported by the development partnesr. the medium term, the projection of this suppreducing.	23.844 s has For ort is		-24.869	
Output: 0301 77 Purcha UShs Bn: -7.446 Much of the purchases has been supported by the development partnesr. For the medium term, the projection of this support is reducing. Output: 0301 79 Acquis	UShs Bn: Much of the purchases been supported by the development partnesr. the medium term, the projection of this suppreducing.	23.844 shas For ort is	UShs Bn:		partners
Output: 0301 77 Purcha UShs Bn: -7.446 Much of the purchases has been supported by the development partnesr. For the medium term, the projection of this support is reducing. Output: 0301 79 Acquis	UShs Bn: Much of the purchases been supported by the development partnesr. the medium term, the projection of this suppreducing.	23.844 s has For ort is ssets 60.878			11 0

Changes in Budget Allocation 2015/16	ons and Outputs from 2014/ 2016/		els: 2017/18	Justification for proposed Changes in Expenditure and Outputs
development partners	development partners			
Vote Function:0380 Large H				
UShs Bn: -1,095.600		IIShe Rn	-1 005 100	The resources were intended to build the
The resources earlier provided for the development of large hydropower infrastructure,	The resources earlier provided for the development of large hydropower infrastructure,	The resources e provided for the development of hydropower inf	arlier e large rastructure,	Energy Fund. Non provision of these resources implies that the objectives for which the Energy Investment Fund was put in place are being jeopadised. This
	beginning with Karuma and Isimba HPPs. The funding for Karuma and Isimba have been obtained through credit from China EXIM Bank		The funding I Isimba have hrough credit	will certainly have a negative consequence of the financial sustainability of the power sector
	m Exploration, Development			
	and formulate petroleum polic			
To support achievement of	UShs Bn: 1.417 To support achievement of local production	UShs Bn:	-1.011	To support achievement of oil production in Uganda
	ty Building for the oil & gas se	rtor		
UShs Bn: 4.435 This will support the	UShs Bn: 3.297 To support achievement of	UShs Bn:	-5.385	To support achievement of oil production in Uganda
capacity for new phases in oil and gas development	local production			
	oring Upstream petroleum activ	ities		
		UShs Bn:	-2 116	Supports the attainment of local
These resources will be utilised to Purchase Que\$tor	Subscription will have been	OSIIS DIL.	2.110	production and value addition on oil production in Uganda
software and subscribe for data and maintenance for three years; one (1) benchmarking seminar/workshop to a developed NDR				
Output: 0303 51 Transf	er for Petroleum Refining (Mid	stream Unit)		
UShs Bn: 5.680 These resources are	UShs Bn: 0.000	UShs Bn:	-2.000	Supports the attainment of maximum benefits from the local oil resources
provided to support the operationalisation of the new institutions				
Output: 0303 72 Govern	nment Buildings and Administr	ative Infrastructi	ıre	
UShs Bn: -2.939 Much of the works on the new building for the data centre and office space will have been done	UShs Bn: -1.039 Much of the works on the new building for the data centre and office space will have been done	UShs Bn:	-7.939	Much of the works on the new building for the data centre and office space will have been done
Output: 0303 77 Purcha	se of Specialised Machinery &	Equipment		
UShs Bn: -11.910	UShs Bn: -11.324 Much of the machinery shall	UShs Bn:	chinery shall	Much of the machinery shall have been purchased during the FY2014/15
	finery Construction			
			f attendant	Land aqusition will be largely complete in FY2014/15.
		D. Wata Orr		

Vote Summary Changes in Budget Allocations and Outputs from 2014/15 Planned Levels: Justification for proposed Changes in 2017/18 **Expenditure and Outputs** FY2014/15. Resources development and refinery provided for will support development of attendant studies for pipeline insfrastructure development and construction of resettlement housing units Vote Function:0371 Petroleum Supply, Infrastructure and Regulation 0304 71 Acquisition of Land by Government Output: -3.700 UShs Bn: -9.400 Much of the project affected persons will UShs Bn: 1.333 UShs Bn: Much of the project affected Land for oil product have been handled during the FY2014/15. persons will have been transportation and storage handled during the infrastructure FY2014/15. Resources remaining will be for finalisation of land acquisition and associated studies Output: 0304 79 Acquisition of Other Capital Assets UShs Bn: 3.020 UShs Bn: 7.380 UShs Bn: 19.927 To ensure security of supply of Need to restock national Need to restock national Ensure security of supply of petroleum products fuel reserves to ensure fuel reserves to ensure petroleum products security of supply of security of supply of petroleum products and petroleum products complete the studies on the development of Nakasongola fuel reserves Vote Function:0303 Mineral Exploration, Development & Production 0305 03 Mineral Exploration, development, production and value-addition promoted UShs Bn: 1.300 UShs Bn: 27.597 UShs Bn: 27.597 To acquire accurate and reliable Resources have been information on mineral resources in provided for mineral data Uganda. acquisition and management Output: 0305 72 Government Buildings and Administrative Infrastructure UShs Bn: 2.530 UShs Bn: -0.830 The research facility is necessary to -0.830 UShs Bn: Resources have been ensure structures developed are resistant to seismic shocks provided for to develop earthquake research facility Output: 0305 77 Purchase of Specialised Machinery & Equipment *UShs Bn:* -1.700 *UShs Bn:* -3.130 Procurement concluded for mineral -3.130 UShs Bn: Procurement concluded for exploration equipment and laboratory mineral exploration consumables equipment and laboratory

V4: Vote Challenges for 2015/16 and the Medium Term

This section sets out the major challenges the vote faces in 2015/16 and the medium term which the vote has been unable to address in its spending plans.

CHALLENGES IN THE ENERGY AND MINERAL SECTOR

consumables

Land Acquisition: To acquire land for infrastructure; and mineral development, petroleum and mineral exploration takes a very long time and land is very costly. That delays project development and results into high investment costs.

Vote Summary

High power system losses at both technical and commercial levels: High energy losses reduce the revenues required to provide affordable power. The technical losses are being addressed through rehabilitation and refurbishment of the distribution line network.

Low access to modern energy forms especially among rural households: Expanding electricity coverage to realize the required transformation in rural areas of Uganda in reasonable time poses unique challenges. First, rural areas are characterized by low population densities due to dispersed settlements. Second, a significant number of households are poor and find it difficult to connect and pay for electricity services. Therefore, despite the heavy investment in the construction of the rural electrification infrastructure which is capital intensive, the connection rates have remained very low.

Management of expectations created by the discovery of petroleum: The people of Uganda in general, and in the areas where the discoveries have been made in particular, expect quick revenues, jobs and businesses, among other things. There are also anxieties about the possible negative aspects of developing the oil resources like environment degradation and how the revenues will be managed. To mitigate this challenge, government has intensified the sharing of information on the realistic development programme of the sector.

UNFUNDED PRIORITIES

MIRAMA-KABALE 132kV Transmission Line and Associated Substations Ush. 18bn UETCL PROJECTS TAXES Ush. 60bn Airborne Geophysical – Karamoja US\$20 Million

Pipeline Project (Eldoret – Kampala) Ush.32bn

PETROLEUM EXPLRORATION AND PRODUCTION DEPARTMENT

- 1. Operationalisation of the new institutions (PAU, NOC, Directorate): 42 billions
- 2. Monitoring Upstream Petroleum activities: 4.3 billion
- 3.Equity contribution by Government of Uganda for refinery development USD \$ 500M (1.396 trillion)
- 4. Facilitate pipeline related activities (specifically studies i.e. environmental survey & detailed routing and RAP Study consultancy fees and related administrative expenses)UGX 12.1 billion
- 5.Implementation of the RAP for the Infrastructure corridor(Est. UGX 200 billion however 50% of funds required in Q3 & Q4 of FY 2015/16)-this is subject to the findings of the RAP studyUGX 100 billion

Table V4.1: Additional Output Funding Requests

Additional Requirements for Funding and Justification of Requirement for **Outputs in 2015/16:** Additional Outputs and Funding

Vote Function:0372 Energy Planning, Management & Infrastructure Dev't

0301 72 Government Buildings and Administrative Infrastructure Output:

Resources are required to support the development of power transmission infrastructre in terms of wayleaves acquisition, construction of the transmission lines and capacity building

There is need to fund transmission and distribution infrastructure to evacuate power from the various power plants being developed and distribute to the users

Vote Function:0372 Large Hydro power infrastructure

UShs Bn:

Output: 0302 72 Government Buildings and Administrative Infrastructure

UShs Bn:

Development of Large hydropower generation and transmission infrastructure

There is need to provide financing to support the objective for which the Energy Investment Fund was established

Vote Function:0304 Petroleum Exploration, Development & Production

0303 04 Monitoring Upstream petroleum activities Output:

UShs Bn: 58.234

This output will suppoprt the development of the refinery and attendant infrastructure like pipelines and storage facilities. Development of Refinery Infrastructure and associated

Vote Summary

Additional Requirements for Funding and Outputs in 2015/16:

Justification of Requirement for Additional Outputs and Funding

Vote Function:0304 Petroleum Supply, Infrastructure and Regulation

Output: 0304 04 Operational Standards and laboratory testing of petroleum products

UShs Bn: 42.000

The is need to complete the aquisiton of wayleaves for the oil products transport pipeline and storage infrastucture; and also provide for restocking of the storage facilities

This activity is in line Objective 7 and 8 of NDP under Oil and Gas sector. Newly recruited need specialized training in downstream related field to handle the activities of the sector effectively.

Vote Function:0305 Mineral Exploration, Development & Production

Output: 0305 05 Licencing and inspection

UShs Bn: 147.740

Resources will be required for the development of earthquake research facility, development of geothermal resources and geological data acquisition for the remaining 20% of the country (Karamoja region). In addition, resources are need to support monitoring and inspection of mineral activities

Additional resources are essential to enhanced generation of Nontax revenue. Additional funds are for specific programmes in line with NDP that need funding: Airbone Geophysical Surveys of Karamoja (46bn), Geothermal Resources Development (5.1bn), Uranium Exploration (14.12bn), Rare Earth Elements/minerals 13.18bn), Laboratories Infrastructure Enhancement (11.3bn, Mining Law Reform (1.9), Mineral Data Backup Infrastructure (3.1bn), National Seismological Network (13.4) and Geoparks and Geosites projects (0.62 bn).

Vote Function:0306 Policy, Planning and Support Services

Output: 0349 06 Management of Policy Issues, Public Relation, ICT and Electricity disputes resolved

UShs Bn: 23.000

Resources required to redevelop Amber house and the adjuscent plot

The MEMD is required to respond to the emerging challenges of managing an oil and gas industry by instituting the appropriate institutional capacity, in the form of a new Directorate for Petroleum, Petroleum Authority, National Oil Company, human capital (retention and motivation), capital stock items, and associated superstructures. In addition, Management of Amber house that has been passed on to the MEMD

This section discusses how the vote's plans will address and respond to the cross-cutting policy, issues of gender and equity; HIV/AIDS; and the Environment, and other budgetary issues such as Arrears and NTR..

(i) Cross-cutting Policy Issues

(i) Gender and Equity

Objective: Formulation of the Energy and Mineral Development Gender Policy

Issue of Concern:

Developing the Ministry Gender Policy

Proposed Intervensions

- Constitute a working committee / departmental gender focal persons to draft Terms of Reference for the consultant
- Stakeholder consultations undertaken

Budget Allocations UGX billion 20000000

Performance Indicators

Ministry of Energy and Mineral Development Gender Policy in place

Objective: Strengthen Gender Mainstreaming in the Energy and Mineral Development Sector

Issue of Concern:

Gender mainstreaming in Policy formulation, Planning, Budgeting and Human

Vote Summary

Resource Management

Proposed Intervensions

Continuous sensitization of staff on Gender mainstreaming. In addition, a Gender committee has been set up and already the inintial training on gender mainstreaming has been undertaken

Budget Allocations UGX billion 20000000

Performance Indicators

- Percentage of staff members sensitized on Gender Issues
- Gender committee members trained on gender mainstreaming approaches

(ii) HIV/AIDS

(iii) Environment

Objective: To guide the implementation and development of resettlement actions plans in line with the countries and legislation and international best practices

Issue of Concern: No particular guidelines to guide the development and implementation of resettlement actions plans in the energy sector and yet each energy subsector is unique

Proposed Intervensions

•Development of Policy and Guidelines for development and implementation of resettlement Action Plans (RAP)

Budget Allocations UGX billion

Performance Indicators
•Policy and Guidelines for development and implementation of resettlement Action Plans (RAP) developed

Objective: Streamline the collection and management of environment data and information for decision making

Issue of Concern: • Dack of Environment data to aid decision on environment aspects, • No formal data collection tools and software for collecting and analysis of the environment data, • No system in place to enable international accreditation

Proposed Intervensions

•Certification of the Ministry to an international Environment management system (ISO 14000)

Budget Allocations UGX billion

Performance Indicators Certification of the Ministry to an environment management system (ISO 14000).

Objective: To improve environmental compliance of energy infrastructure/ projects/facilities to the environmental laws, regulations and standards

Issue of Concern: None compliance of the developers of energy infrastructure projects to approval conditions in the EIA, Establishment of energy infrastructure without carrying out EIA, Pollution of environment, Development of a Strategic plan for HSE Issues.

Vote Summary

Proposed Intervensions

- •Carry out sensitization of the various stakeholders on the relevant legislation and standards and enforce existing standards.
- Wisit the sites and review the environment Impact Assessments and Environment Audits developed by the developers of the various energy projects.
- •Carry out enforcement environment Audits to ensure compliance of various infrastructure/projects/facilities to environment legislation and standards.
- •Carry out and implement strategic environment assessments (SEA) for Plans, Policies and programmes to enable identification of environmental, social and economic impacts of the Plans, Policies and programmes at strategic level.
- •Planting of trees to combat the effects of climate change.
- •Training of staff on climate change adaptation.

Budget Allocations UGX billion

Performance Indicators

- •% of infrastructure/ projects/facilities that comply with environmental laws, regulations and standards(EIA certificate conditions)
- •Strategic environment Assessments (SEA) Guidelines for the Energy sector developed.
- •Implementation of the recommendations in the Strategic Environment Assessment for the Oil and Gas Sector in the Albertine Garben.
- •Monitoring of noise, air, water and soil quality in all the energy infrastructure/ projects/facilities.
- •Purchase of equipment to measure noise, Air, water and soil pollution.
- •Number of trees implemented in the various energy project sites.
- •Number of staff trained on climate change adaptation

(ii) Payment Arrears

The table below shows all the payment arrears outstanding for the Vote:

To date no arrears have yet been verified by Audit

(ii) Non Tax Revenue Collections

The table below shows Non-Tax Revenues that will be collected under the Vote:

Source of NTR	UShs Bn	2013/15 Actual	2014/15 Budget	2014/15 Actual by Sept	2015/16 Projected
Windfall Gains		0.000	7.700		0.000
	Total:	0.000	7.700		0.000

Non Tax Revenue (NTR) accrue largely from royalties, mineral license fees and sale of publications. During FY2011/12 UGX 9.102 billion was raised as NTR compared to UGX13.788 billion as at the end of May 2013. This is projected at UGX 15 billion when the June 2013 returns have been filed.