

# Vote: 017 Ministry of Energy and Mineral Development

## Vote Summary

### VI: 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:

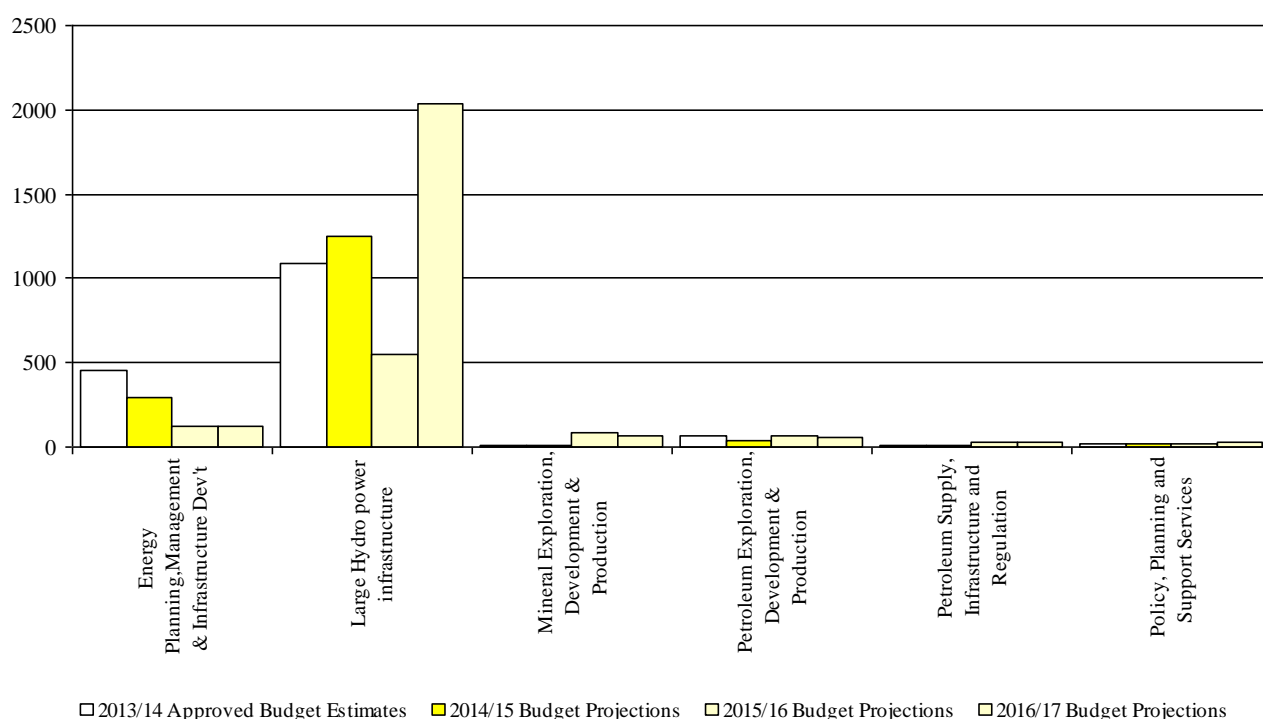
**Table V1.1: Overview of Vote Expenditures (US\$ Billion)**

		2012/13 Outturn	2013/14		MTEF Budget Projections		
			Approved Budget	Spent by End Dec	2014/15	2015/16	2016/17
<i>(i) Excluding Arrears, Taxes</i>							
Recurrent	Wage	2.525	2.698	1.402	2.698	2.698	3.444
	Non Wage	3.600	4.219	1.649	4.219	4.620	4.805
Development	GoU	110.588	1,276.648	108.224	1,263.465	805.656	2,301.350
	Ext. Fin	0.000	366.992	0.000	346.268	62.113	23.393
<b>GoU Total</b>		<b>116.714</b>	<b>1,283.565</b>	<b>111.275</b>	<b>1,270.383</b>	<b>812.974</b>	<b>2,309.599</b>
<b>total GoU + Ext Fin. (MTEF)</b>		<b>116.714</b>	<b>1,650.557</b>	<b>111.275</b>	<b>1,616.651</b>	<b>875.087</b>	<b>2,332.992</b>
<i>(ii) Arrears and Taxes</i>							
	Arrears	0.000	0.000	0.000	0.000	N/A	N/A
	Taxes	10.000	22.000	0.000	0.000	N/A	N/A
<b>Total Budget</b>		<b>126.714</b>	<b>1,672.557</b>	<b>111.275</b>	<b>1,616.651</b>	<b>N/A</b>	<b>N/A</b>

\*\* Non VAT taxes on capital expenditure

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 (US\$ Bn, Excluding Taxes, Arrears)**



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### (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 Excellence 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:
<i>Increased access to affordable modern sources of energy through enhanced generation capacity and distribution</i>	<i>Well managed and safeguarded mineral resources for production and exports</i>	<i>A well managed and safe guarded petroleum, Oil and gas resource chain for sustainable development</i>
<b>Vote Function: 03 01 Energy Planning, Management &amp; Infrastructure Dev't</b>		
<b>Outputs Contributing to Outcome 1:</b>	<b>Outputs Contributing to Outcome 2:</b>	<b>Outputs Contributing to Outcome 3:</b>
<i>Outputs Provided</i>	None	None
030102 Energy Efficiency Promotion		
030103 Renewable Energy Promotion		
030104 Increased Rural Electrification		
<i>Outputs Funded</i>		
030152 Thermal and Small Hydro Power Generation (UETCL)		
<b>Vote Function: 03 02 Large Hydro power infrastructure</b>		
<b>Outputs Contributing to Outcome 1:</b>	<b>Outputs Contributing to Outcome 2:</b>	<b>Outputs Contributing to Outcome 3:</b>
<i>Outputs Funded</i>	None	None

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Sector Outcome 1:	Sector Outcome 2:	Sector Outcome 3:
<i>Increased access to affordable modern sources of energy through enhanced generation capacity and distribution</i>	<i>Well managed and safeguarded mineral resources for production and exports</i>	<i>A well managed and safe guarded petroleum, Oil and gas resource chain for sustainable development</i>
030251 Increased power generation - Largescale Hydro-electric <i>Capital Purchases</i>		
030280 Large Hydro Power Infrastructure		
<b>Vote Function: 03 03 Petroleum Exploration, Development &amp; Production</b>		
<i>Outputs Contributing to Outcome 1:</i>	<i>Outputs Contributing to Outcome 2:</i>	<i>Outputs Contributing to Outcome 3:</i>
None	None	<i>Outputs Provided</i> 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 <i>Capital Purchases</i> 030380 Oil Refinery Construction
<b>Vote Function: 03 04 Petroleum Supply, Infrastructure and Regulation</b>		
<i>Outputs Contributing to Outcome 1:</i>	<i>Outputs Contributing to Outcome 2:</i>	<i>Outputs Contributing to Outcome 3:</i>
None	None	<i>Outputs Provided</i> 030402 Management and Monitoring of petroleum supply Industry 030405 Development of Petroleum Refinery and Processing 030406 Kenya - Uganda - Rwanda Oil pipelines
<b>Vote Function: 03 05 Mineral Exploration, Development &amp; Production</b>		
<i>Outputs Contributing to Outcome 1:</i>	<i>Outputs Contributing to Outcome 2:</i>	<i>Outputs Contributing to Outcome 3:</i>
None	<i>Outputs Provided</i> 030502 Institutional capacity for the mineral sector 030503 Mineral Exploration, development, production and value-addition promoted 030505 Licencing and inspection	None

## 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.*

### (i) Past and Future Planned Vote Outputs

*2012/13 Performance*

#### ENERGY PLANNING, MANAGEMENT & INFRASTRUCTURE DEVELOPMENT

Development of the Bujagali Hydropower Project: Construction of this project was completed and commissioned on the 8th October 2012. The plant is now generating up to a maximum of 263MW

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depending on the power demand.

Karuma Hydropower Project (600MW): The procurement process for the Engineering, Procurement and Construction (EPC) contractor for the Karuma Hydropower Project has been characterized by numerous injunctions and petitions from whistle blowers, 'concerned citizens' and bidders as well as investigations by CID and Inspector General of Government (IGG). A High Court ruling in favor of one of the bidders quashed the first Evaluation Report and ordered a Re-evaluation by an independent Evaluation Team. The Ministry of Energy and Mineral Development as the procuring entity abided by the decision of the High Court and conducted a Re-evaluation. The IGG halted the process to carry out investigations. The IGG submitted a Report of the findings to the entity in March 2013. The entity went ahead to consult the Attorney General on the Report.

In April 2013, the entity received a directive of Cabinet to cancel the current procurement process and instead go into a bilateral arrangement with the Government of the People's Republic of China to develop the project.

On 18th April 2013, the entity received an Interlocutory Order issued by the High Court at Nakawa, Application No.162 of 2013 in matter of Hon. Andrew Baryayanga Vs Attorney General. The entity sought a legal opinion from the Solicitor General on this matter on how to proceed. The Solicitor General responded on 23rd April 2013 advising the entity to go ahead and implement Cabinet directive. Consequently, on that day, 23rd April 2013 the Contracts Committee, under minute MIN.444/12-13/CC cancelled the procurement process. All bidders were notified of the cancellation of the process and requested to collect their unopened financial bids.

Government intends to construct the project using resources from the Energy Fund and a mixed credit comprised of concessional and commercial funding from the Chinese government. In that regard, the allocation for the Karuma hydropower project is premised on the fact that the expected funding from the Chinese government will not be fully on concession terms. The Chinese government will provide US\$500 million as concession funding and the balance will be on commercial basis. To moderate the cost of commercial financing, government will raise US\$700 million from the Energy Fund to co-finance the project which will be part of GoU equity on this project. The total project cost (the Hydropower plant, the Power Substations, and the Transmission lines) is estimated at US\$1.69 billion. The implementation of the Resettlement Action Plan for the power plant is near completion with about 80% of the affected persons paid and construction is expected to start before the end of calendar year 2013.

Isimba Hydropower Project (183MW): The feasibility studies for the Power Plant and Transmission line were finalized. The Project is intended to be developed with support of the Government of India. We expect to finalize financing and contracting agreements with the Government of India in the FY 2013/14 and commence construction work.

Ayago Hydropower Project (600MW): The Project will be developed by the Government as a Public Project. With the support of the Japanese Government, the prefeasibility studies were completed in 2011. Detailed feasibility studies are ongoing and will be completed in 2014. Under this arrangement construction would start in 2015.

Renewable Energy Projects: Two (2) small hydropower projects Kabalega power station (9MW) at Buseruka and Nyagak I (3.5MW) were completed and commissioned during the FY 2012/13. A number of other Mini-hydropower plants are now operational and these include: Ishasha 6.5 MW, Bugoye 13.0 MW, Mpanga 18.0 MW, Kasese Cobalt Limited 10 MW, Mobuku 15 MW, Kisizi 0.35 MW, Kagando 0.06 MW,

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Kuluva 0.12 MW. The current total installed capacity of renewable energy projects now stands at 89.03MW.

Studies have been completed on several small hydropower sites. These include: Nyagak III 4.5 MW, Nengo Bridge 6.8 MW, Rwimi 9.6 MW, Waki 4.8 MW, Lubila 5.4 MW, Siti 5 MW, Nyamwamba 14 MW and Kakaka 7.2 MW. Kikagati (16MW), Construction at these sites is to start in Fy 2013/14.

Other sites where feasibility studies are on-going include: Muzizi 40 MW, Nshungyezi 40 MW Achwa-Agago 88 MW, Kanyampara 7.2 MW Muyembe, 3.1 MW, Kyambura 8.3 MW and Nyamabuye 2.2 MW. Construction of the power plants at these sites is expected to start in FY 2014/2015.

Other Planned Power Generation Projects include: Katwe Geothermal, 150 MW, Kabale Peat 33 MW, Local oil/gas/HFO 50 MW in Kabaale Hoima district, Expansion of Kakira Cogeneration 20 MW, Kinyara Cogeneration 32 MW and Solar Thermal 50 MW.

#### Grid Expansion Programmes – Transmission Infrastructure

Bujagali Interconnection Project: Construction of the Bujagali Interconnection Project was completed and commissioned. The Project consists of a 220 kV transmission line from Bujagali to Kawanda (75km) and a 220/132 kV substation at Kawanda. The line transmits power from the Bujagali Hydropower Project to the national grid.

Transmission Lines under implementation are: Bujagali-Tororo (Uganda) 220 kV transmission (127.7km); Mbarara – Mirama Hill (Uganda) - Birembo (Rwanda) 220 kV transmission line (172km) and Mirama Hill substation; Mbarara – Nkenda 132kV Transmission Line (160km); Tororo – Opuyo –Lira 132kV transmission Line(260km); Kawanda – Masaka 220kV transmission line(142km); Nkenda – Fort Portal – Hoima 220kV lines (234km); Masaka – Mutukula (Uganda) – Mwanza (Tanzania) 220kV transmission line (85km); Mutundwe – Entebbe 132kV transmission line (35km); Mutundwe – Kabulasoke Restraining 132kV (84.5km); Tororo substation transformer 132/33kV, 32/40MVA; Kampala North substation transformer 132/33kV, 32/40MVA; Kahungye permanent substation 132/33kV, 2 x 20MVA.

Feasibility Studies are on-going for the following Transmission Lines: Isimba Interconnection project 132 kV; Opuyo-Moroto transmission line; Mirama Hill –Kabale 132kV; Hoima – Kafu 220kV line; Lira – Gulu – Nebbi – Arua 132kV line; Namanve – Namanve South 132kV and Namanve South 132/33kV substation; Nkenda – Mpondwe – Beni 220kV line; Ayago Interconnection project; Kinyara – Hoima 132kV; Kikagati – Mirama 132kV; and Mutundwe to Hoima 132kV.

#### Rural Electrification:

A number of district headquarters were recently connected to the main grid and these include: Nakapiripit, Amudat, Kaberamaido, Dokolo, Amolatar, Ntoroko, Alebtong, Moroto, and Napak, Kiruhura, Kyegegwa and Katakwi.

Implementation of Rural Electrification Schemes of over 3000km route length of Medium Voltage lines (33 or 11 kV) were under construction during this FY 2012/13 and these include: Soroti-Katakwi, Ayer-Kamudin, Ibanda-Kazo Ntenjeru, Ruhira Millenium village, Gulu-Acholibur and Tee-off to Paicho-Patiko-Paloro, Opeto-Achokora with Tee-off to Iceme-Otwal, Hoima-Nyantanzi-Kinyara (Masindi)-Waki-Buliisa - Tee-off to Kigorobya, Nkonge – Kashozi, Mubende-Kyenjojo, Rakai-Sembabule, Kabale-Kisoro, Gulu - Adjumani – Moyo, Rackokoko - Awere – Lalogi, Apala-Adwar-Kiiru with tee-off to Morulem, Kaddugala –

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Lwamanyonyi, and Katugo – Ngoma, Paidha – Zombo – Logiri – Vura, Nebbi – Pakwach with T-off to Angal and Panyimur, and Arua – Maracha – Koboko - Yumbe.

In that regard, the following district headquarters will be connected as a result of the above schemes: Adjumani, Moyo, Amuru, Nwoya, Koboko, Maracha, Zombo, Nsiika (Buhweju), Bukwa, Otuke, Namayingo and Buliisa.

Construction works for eight (8) projects is to be undertaken in the FY 2013/14. The projects include: Kapchorwa-Bukwo-Suam (Kapchorwa, Bukwo and Saum), Mayuge-Bwondha Landing Site (Mayuge), Kasambira-Bugulumbya-Bukuutu (Kamuli and Luuka), Mityana-Lusalira (Mityana), Lake Victoria free Trade Zone (Rakai and Masaka), Apac-Chegere-Alemi (Apac), Hoima-Nalweyo-Nkooko-Kakumiro (Hoima and Kibaale) and Kitgum-Namokora/Padipe (Kitgum). In addition, extension of the grid from Matanyi (Moroto) – Kaabong and Namukora – Kiringa – Kotido including the tourist lodges will be undertaken. Other grid extension projects will be under taken in the districts of Buikwe, Mukono, Apac, Dokolo and Lira.

Feasibility studies to connect Kalangala district to the main grid by submarine cable from Bukakata are on-going.

Energy efficiency Programmes: Government undertakes Energy Efficiency improvement programmes with a view of reducing energy wastage in public institutions. For the period under review, awareness campaigns have been undertaken to sensitize consumers on benefits of rational utilization of energy. Dissemination of improved cook stoves was done and over 45,000 stoves were disseminated in the districts of Arua, Bushenyi, Mukono, Kabale, Lyantonde and Rakai.

### PETROLEUM EXPLORATION, PRODUCTION & DEVELOPMENT

#### Legal Framework

-The Petroleum (Exploration, Development and Production) Act 2013 and the Petroleum (refining, gas conversion, transmission and midstream storage) Act 2013 were enacted by parliament and were subsequently assented to by the President and gazetted.

#### Promotion of the country's petroleum potential:

The country's petroleum potential continued to be promoted. In the period under review, the country's petroleum potential was presented at four international conferences and more companies continued to express interest in acquiring petroleum exploration acreage in the country. Forty (40) requests for exploration rights were received during 2012/2013.

Preparations for the East African Petroleum Conference and Exhibition which was held in February 2013 in Arusha, Tanzania were undertaken.

The ministry continued to undertake a bio-stratigraphy mapping of the Albertine graben, in order to develop a stratigraphic scheme for the Albertine Graben..

#### Licensing and Investment in the sector:

The new law which was passed at the beginning of 2013 provides for competitive licensing rounds in future. A multi-client seismic survey to enable better definition and understanding of the areas to be licensed will be undertaken from the areas with insufficient data coverage. Planning for this multi-client

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seismic survey commenced during 2012/13.

There are currently three (3) international oil companies that hold petroleum licenses in four discovery areas in the country. These companies are: Tullow Oil Uganda Limited, Total E&P Uganda Limited and CNOOC Uganda Limited. Each of these companies holds 33.33% in each of the four areas currently under licence. In addition, CNOOC (Uganda) Ltd. Holds a Production Sharing Licence for Kajubirizi (Kingfisher) oil field.

Dominion Petroleum Ltd. Which was licensed to operate in Exploration Area 4B (Southern Lakes Edward and George Basin) served government with a notice of surrender of its rights over the area. Government is reviewing this notice of surrender before relieving the company of its rights and obligations in that area. The Production Sharing Agreement with Dominion will expire on 27th July 2013.

The total cumulative investments in the oil and gas sector reached USD1.7 Billion at the end of the calendar year 2012 and investments in the sector are expected to reach USD2.5 Billion at the end of 2013.

Putting in place an appropriate and modern legal and regulatory framework:

Two bills to regulate the sector were passed by Parliament; these are (i) the Petroleum (Exploration, Development and Production) Bill, which was assented to by H.E. the President and now is the Petroleum (Exploration, Development and Production) (2013) Act and (ii) the Petroleum (Refining, Conversion, Transmission and Midstream Storage) Bill, which was passed by Parliament was awaiting assent.

Creation of New Institutions:

The process of forming new institutions for the sector as described in the new law has commenced. Structures for the new institutions, i.e. the Directorate of Petroleum in the Ministry responsible for oil and gas; Petroleum Authority of Uganda; and National Oil Company were prepared. In preparation for the new institutions, Transitional Units commenced in PEPD. These include Policy, Regulatory, Commercial and Infrastructure Units. An interim arrangement involving existing human resources within the PEPD has been put in place to manage the Units.

Monitoring of Oil Company activities:

A total of twenty (20) exploration and appraisal wells were drilled during the financial 2012/13 bringing the total number of wells drilled in the country to date to ninety two (92). Eight one (81) of these wells encountered oil and gas in the subsurface representing a drilling success rate of over 88%.

One oil discovery, the Lyec discovery was made during the year 2012/13 bringing the total number of petroleum discoveries in the country to twenty one (21). With the exception of the Turaco, Taitai and Karuka discoveries which were considered to be non-commercial, the licensed oil companies have and continue to take forward appraisal work on the other eighteen (18) discoveries.

Tullow oil completed appraisal of the Mputa and Nzizi discoveries in the Kaiso Tonya area in Exploration Area 2 and submitted an application for a production licence together with field development plans for both discoveries. CNOOC Uganda Limited has also submitted an application for a production licence and a field development plan for the Kingfisher discovery. Both applications are under review before approval and grant of production licences.

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The total petroleum resources in these discoveries are now estimated at 3.5 billion barrels of Oil in Place out of which between 1.2 and 1.7 billion barrels of oil equivalent are estimated to be recoverable.

In Exploration areas EA1 and EA1A, 60.1 line km of 2D engineering seismic data were acquired and acquisition of 3D seismic data commenced.

Commercialization of the discovered resources:

Government and the licensed Oil Companies are discussing a commercialization plan which will include the use of petroleum for power generation, supply of Crude Oil to a 60,000 barrel per day refinery to be developed in the country and export of crude oil through a pipeline or other viable options.

Refinery project:

Promotional materials for Refinery development were produced and availed to potential investors, those that have visited the Department plus those who are accessed at international conferences and other for a. Subsequently, the database of potential investors was updated.

Government plans to develop the refinery on a Public–Private Partnership (PPP) basis. Taylor-DeJongh was contracted as the Transaction Advisor (TA) to support Government in attracting a lead investor with technical and financial capacity to lead development of this refinery and to structure a refinery company to take forward the development.

The acquisition of land for the refinery development was ongoing and the Resettlement Action Plan (RAP) for the 29 sq.km of land required for this development in Kabaale Parish, Buseruka Sub-county, Hoima District was completed during October 2012. The Chief Government Valuer (CGV) approved the valuation of this land and the compensation and resettlement of the persons affected by this project will be undertaken during the financial year 2013/14.

Consultative workshops and sensitization meetings were conducted with leaders and other stakeholders including the Project Affected Persons (PAP) in Hoima district to ensure a harmonised execution of the land acquisition process.

An Environmental baseline study that will characterize the current environmental and social economic conditions in and around the area of the refinery development was being undertaken.

Studies for the development of pipelines and storage infrastructure to support the refinery development were completed during 2012/13. These include pipelines to transport crude oil from the oil fields to the refinery and pipelines to transport petroleum products from the refinery to the major petroleum product markets in the country.

Government is structuring the ownership of these pipelines and attendant storage facilities in preparation for their construction.

Phase – 2 of the construction of the data centre and office block

The second phase of the construction of laboratories, a petroleum data repository and offices for the Petroleum Authority and the Petroleum Directorate commenced during 2012/13. This phase of construction is expected to be completed by March 2014 paving way for the third and final phase of the construction to



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be undertaken during the financial year 2014/2015.

#### Capacity building:

Capacity building continued to be undertaken at both strategic and professional levels. Five members of staff commenced M.Sc. Studies Petroleum Geoscience, Petroleum Engineering, Economics, Structural geology, Refinery and Pipelines Design.

In addition to training Government personnel, Government is supporting the training of artisans and professionals in petroleum related fields at the Uganda Petroleum Institute Kigumba and Makerere University respectively. This is to support the oil and gas manpower requirements for the private sector in the country.

#### Implementation of the Local content strategy and plan:

The skills requirements study which will feed into the strategy and plan commenced.

#### Implementation of the Communication Strategy:

The Communication strategy for the oil and gas sector was formulated and its implementation commenced. Implementation of the strategy involves conducting radio talk shows especially in the Albertine Graben, TV talk shows in Kampala, participation in stakeholder workshops and preparations of articles for the media.

### **PETROLEUM SUPPLY, INFRASTRUCTURE & REGULATION**

Uganda currently imports all her 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%. 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.

At present there are 167 private oil-marketing companies established in Uganda involved in supply, transportation, distribution and marketing of Petroleum products.

#### Licensing:

In line with the Petroleum Supply (General) Regulations, 2009 which aims at streamlining the downstream petroleum sub-sector, the Ministry relicensed all industry players. A total of 167 companies were issued with petroleum operating licenses and forty seven (47) Petroleum Construction Permits.

#### Storage Facilities:

Government signed an agreement with Hared Petroleum Limited to refurbish stock and operate Jinja Storage Facilities. The refurbishment of the facility was completed and a bonded warehouse number WO334, was issued. Restocking is to be done within a period of ninety (90) days. The facility will be stocked with 12 million litres (8 million for AGO; 4 million for PMS) as a strategic reserve and 18 million litres (12 million for AGO; 6 million for PMS) as a trading stock.

#### Enforcement:

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Following completion of relicensing exercise, enforcement of the Petroleum Supply (General) Regulations, 2009 commenced and is ongoing. The areas in Central region are nearly completed and the exercise is to cover the entire country. In the enforcement, illegal facilities in the petroleum distribution and marketing industry are sealed.

### Kenya-Uganda Oil Pipeline Extension:

The Government of the Republic of Uganda and the Government of the Republic of Kenya are procuring a Private Investor for the pipeline to transport refined petroleum products between Eldoret-Kenya and Kampala-Uganda. The prequalified firms are working on their bids which are due for submission on 4th July 2013. Compensation and/or resettlement of project affected persons will therefore commence by the end of this calendar year.

### Promotion of Alternative Supply Route:

In the process of improving products supply, Cabinet approved at tax re-bate of shs.150 per litre on products through Tanzania. The incentive structure through a tax rebate system to encourage oil companies to use the southern route is yet to be operationalised.

## MINERAL EXPLORATION, DEVELOPMENT & PRODUCTION

The activities undertaken addressed six key output areas as follows: establishment of Uganda's mineral potential through geo-scientific data acquisition and management; mineral sector promotion, monitoring and inspections & NTR; monitoring of earthquakes and other geo-tectonic activities; geothermal energy exploration; airborne geophysical survey and geological mapping of Karamoja Region; and capacity building in the mineral sector.

### (i) Geosciences Data Acquisition

Since 2001, the Government of Uganda embarked on strengthening capacity of the mineral sector so as to address sectoral constraints and enable the sector to be attractive to investment. Focus was on the areas of geo-scientific surveys, human resources development, equipment and tools for acquisition and management of geo-scientific data, analytical laboratories, and environment management.

Acquisition, processing and interpretation of Airborne Geophysical Data covering 80% of the country has been achieved. In addition, adequate geological data and information on the country's mineral resources potential is available in both hard and soft copies. The remaining 20% of the country which was not mapped will be completed and Government is already undertaking sensitization and awareness campaigns in preparation of airborne geophysical surveys and geological mapping of Karamoja region.

A Mining Cadastre and Registry System (MC&RS) to enhance transparency in licensing was established. A web based portal on [www.flexicadastre.com/uganda](http://www.flexicadastre.com/uganda) to get access to mineral rights information on a GIS interface was also set up. A Modern Documentation System hosting a website [www.uganda-mining.go.ug](http://www.uganda-mining.go.ug) is in place; Geological Mineral Information System (GMIS) to host geological, environmental, seismological and laboratory data has been established.

### (ii) Mineral Exploration, Development and Production

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### (a) Mineral Exploration

Mineral exploration was undertaken in Karuma and geochemical, geophysical surveys show Nickel -Cobalt-Copper-Chromium, Platinum Group Minerals (PGM) and Gold rich anomaly and which is 2 km long and 250 metres wide.

The sixteen mineral targets identified during SMMRP have been packaged for detailed mineral exploration and development.

### (b) Mineral Development

Promotion of Iron and steel industry led to discoveries of new iron ore occurrences and deposits in southwest Uganda such as in Buhara, Muyebe and Nyamiringa in Kabale district; Nyamiyaga and Kazogo in Kisoro district; and at Kinamiro in Butogota, Kanungu district by exploration companies supported by the ministry staff. Significant production of iron ores by small scale miners were registered in 2012 and sold to Hima Cement and Steel Rolling Mills Ltd.

The Sukulu Phosphate Development awaits settlement of compensation of the households living in the mining area by the licensee (UGX 135 billion is required for Resettlement Action Plan (RAP) in the FY 2013/14). On the 7th May 2013, the licensee submitted an application for a mining lease which is being reviewed.

A due diligence on the technical and financial strength of companies that expressed interest in the redevelopment of Kilembe Mines was undertaken. Three companies submitted their proposal and evaluation to select the best company is on-going. The whole exercise is anticipated to be accomplished within the next three months including the signing of a contract.

### (c) Mineral Production

Mineral production in commodities limestone, pozzolana, gold, vermiculite, cobalt, wolfram, aggregates, kaolin, and iron ore generated UGX. 207.82 billion during the calendar year 2012 compared to UGX compared to UGX126.19 billion during the calendar year 2011.

### (d) Mineral Exports

Revenue worth UGX69.9 billion during the year 2012 was realized from mineral exports of cobalt, copper, gold, iron ore, manganese ore, quartz, silver, tin, tungsten and vermiculite; and a total of UGX 31.5 billion was realized as import fees for gold.

### (iii) Inspections and Licensing of mining activities

#### Grant of Mineral Rights

#### (a) Inspection

The Ministry continued to undertake monitoring and inspection of mining activities in the country. The focus has been on the following areas: Mukono (gold), Jinja (copper smelter), Tororo (limestone and phosphates), Busia (gold), Manafa (vermiculite), Moroto (marble), Dura (limestone), Hima (limestone), Kilembe (copper), Katwe (salt), Ruhizha (wolfram), Kirwa (wolfram) and Muhokya (lime) and Mubende

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gold (Kisita, Kamalenge).

#### (b) Licensing

A total of 867 licences and certificates were operational as at 30th June 2013, 2012. Out of these were: 203 Prospecting Licences (PL), 531 Exploration Licences (EL), 5 Retention Licences (RL) 38 Location Licences (LL), 29 Mining Leases, and 61 Mineral Dealers' Licences (MDL). However for the last six months 443 licenses were issued and 318 revoked during the FY 2012/13.

Airborne Geophysical Surveys and Geological Mapping of Karamoja Project undertook sensitization through consultative workshops which were attended by of Natural Resources Officers, Local Leaders and Members of Parliament. The sensitisation created awareness about the project and also established a security framework about exploration activities in Karamoja region.

The project has the following outcomes in Karamoja region:

- (a) Increased investment in the mineral sector in the region;
- (b) reduction in illegal mining and trade in Karamoja region; and
- (c) Improved livelihood of the people of the Karamoja region and the country in general.

The overall outcome of the project at the end will:

- (a) Diversify livelihood of the citizens from pastoralism to other activities such as agriculture, services and mining.
- (b) Infrastructure development of the Karamoja region.
- (c) Lead to increased collection of revenue for both local and central government which subsequently will contribute to social and economic transformation of the region.

#### (iv) Geothermal Energy Exploration

The Uganda Geothermal Development project undertook desk bound and field activities which included generation of geological, geochemical, geophysical data, monitoring, promotion of geothermal energy as well as licensing and regulation of geothermal exploration activities. Processing, analysis, and interpretation geological, geochemical and geophysical data covered areas of Kibiro, Panyimur, Katwe-Kikorongo and Buranga. The environmental baseline study for Kibiro was undertaken. Also institutional capacity building of staff in exploration techniques was undertaken.

#### (a) Panyimur

Geological, geophysical and geochemical mapping of Panyimur geothermal prospect discovered new surface manifestations with a low magnetic signature, an indication of existence of geothermal resources.

#### (b) Buranga-Ntoroko

Geological mapping, geophysical and geochemical surveys were undertaken in Ntoroko District. The field team discovered surface manifestations (travertines and cold springs) which mean the geothermal system here is larger than previously known and is likely to be connected to the Buranga Geothermal prospect, in Bundibugyo district.

#### © Kibiro

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Geological mapping of surface alteration at Kibiro using clay analysis and shows that Kibiro sub-surface temperature is above 200 degrees as indicated by mixed clay minerals. Kibiro is confirmed to a low magnetic signature at Kyakapalaga which is genetically related to geothermal system as evidenced by geothermal surface manifestations in the area. This also means Kibiro geothermal system is larger than previously known.

#### (d) Remote Sensing data

Processing of Digital Elevation Models (DEM) was undertaken for areas of Kibiro, Panyimur, Katwe and Buranga. The analysis of Aster image for the Rwenzori areas was undertaken and a map produced. These structures are important in geothermal studies as they are conduits for geothermal fluids. The sector will continue the surface and subsurface exploration studies of geothermal sites in order to establish conceptual models for drilling and development of geothermal resources for electricity generation.

#### (v) The Seismological Network & Infrastructure development

The Ministry upgraded the very small satellite aperture (VSAT) Global communication infrastructure (GCI) to improve seismic data transmission from Kyahi Earthquake Monitoring Station near Mbarara to Entebbe Data Centre. The seismic data acquisition system was installed and two (2) training workshops on seismic data acquisition analysis were conducted. Also, seismometers were tested and calibrated for field deployment and efforts were initiated to procure more equipment.

The fibre optical cable and accessories was installed to in order to avoid loss of seismic data packets from Vienna International Data Centre and this improved flow of seismic data. Cisco Switches were installed and tested. These are active and passive devices for effective seismic data transmission. Entebbe seismic station its Solar Power System was installed.

Upgrading of the earthquake monitoring network coverage with modern state of the art technologies for fast seismic data transmission and access for on spot earthquake information and dissemination to seismic data users in planning, construction and safety is being undertaken and also to construct an Earthquake Research Laboratory in Entebbe.

#### (vi) Laboratories

Refurbishment of buildings at the Geological Survey and Department was accomplished providing ample space for offices, laboratories, stores, museum, and Board rooms.

Newly acquired and installed equipment include: Atomic absorption Spectrophotometer (AAS) and X-Ray Fluoresce (XRF). Laboratory glassware and chemicals were also procured. The equipment are expected to support exploration activities as samples will no longer be sent to external laboratories, thus leading to reduction in turnaround time and costs incurred during exploration projects.

A number of equipment in the mineral dressing and analytical laboratories were also repaired and as a result it is now possible to conduct feasibility studies for the following: rotary sampling; closed circuit grinding tests; both bench top and pilot flotation test work; magnetic separation; and quick pulverization of friable material. Also a new smart ICT infrastructure in the GSMD Board rooms for public presentations was installed.

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(vii) Non-Tax Revenue (NTR)

The mineral sector has increased Non Tax Revenue (NTR) accruing largely from royalties and mineral license fees for instance UGX 9.102 billion generated in the FY 2011/2012. As at 30th June 2013 UGX 13.8 billion in form of NTR from the sector had been collected from royalties, mineral licence fees, and sale of publication and geophysical data.

*Preliminary 2013/14 Performance*

### BUDGET PERFORMANCE

During the FY2013/14, budget allocation to the sector increased by UGX168.723 billion to UGX 1,650.557 Billion. This increase was largely to take care of the development of Karuma Hydro power dam, refinery development, and the development of various transmission lines. A significant portion of the development budget is still being provided for to support capacity payments for thermal power generation. Compared to the FY2012/13, non-wage recurrent budget allocation to the sector has been reduced by UGX 355 million. The downward trend is observed since FY2010/11, when the non-wage recurrent budget was UGX6.169 billion. This further aggravates the challenges of implementing the development budget.

### POWER SECTOR

#### Power Generation

The total grid electricity supply increased by about 10.07% from 2589 GWh in December 2011 to 2849.8 GWh in December 2012. The increase is due to new plants commissioned which include Bujagali hydro power plant of capacity 250MW, Buseruka hydro power plant of capacity 9MW in Hoima district. The status of development of planned generation projects is provided below.

**Karuma Hydropower Project (600MW):** Government entered a bilateral arrangement with the Chinese government to expedite the construction of the project. A Contract has been executed with Sinohydro Corporation to construct both the power plant and transmission line. H.E. the President officiated the ground breaking on the 12th August 2013.

**Isimba Hydropower Project (183MW):** Following a bilateral arrangement with the Chinese Government, a Contract has been executed with China International Water and Electric Corporation (CWE) to construct the power plant and the associated transmission line. H.E. the President officiated at the ground breaking on the 5th October 2013.

**Ayago Hydropower Project (600MW):** A Memorandum of Understanding was signed with China Gezhouba Group Company Limited (CGGC). CGGC is to undertake the Financing, Engineering Procurement and Execution of the Ayago Hydro Power Project. The Ministry is in the process of procuring a Consultant to complete the feasibility studies.

**Small Hydropower and Cogeneration Projects:** Two (2) small hydropower projects Kabalega power station (9MW) at Buseruka and Nyagak I (3.5MW) were completed and commissioned during the FY 2012/13. The current total installed capacity of small hydro power and cogeneration projects now stands at 89.03MW. Feasibility studies have been completed on several small hydropower sites. These include: Nyagak III 4.5 MW, Nengo Bridge 6.8 MW, Rwimi 9.6 MW, Waki 4.8 MW, Lubila 5.4 MW, Siti 5 MW, Nyamwamba 14 MW and Kakaka 7.2 MW. Kikagati (16MW), Construction at these sites is to start during

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this FY 2013/14.

Other sites where feasibility studies are on-going include: Muzizi 44.7 MW, Nshungyezi 40 MW Achwa-Agago 88 MW, Kanyampara 7.2 MW Muyembe, 3.1 MW, Kyambura 8.3 MW and Nyamabuye 2.2 MW. Construction of the power plants at these sites is expected to start in FY 2014/2015.

Other Planned Power Generation Projects include: Katwe Geothermal, 150 MW, Kabale Peat 33 MW, Local oil/gas/HFO 50 MW in Kabaale Hoima district, Expansion of Kakira Cogeneration 20 MW, and Kinyara Cogeneration 32 MW.

### Grid Expansion Programmes – Transmission Infrastructure

In line with MEMD priority to increase transmission network coverage, a number of transmission line projects have been executed while others are planned or under implementation. The status of implementation of transmission line projects is summarized below.

**Bujagali Interconnection Project:** Construction of the Bujagali Interconnection Project was completed and commissioned. The Project consists of a 220 kV transmission line from Bujagali to Kawanda (75km) and a 220/132 kV substation at Kawanda. The line transmits power from the Bujagali Hydropower Project to the national grid.

**Transmission Lines Under Implementation:** The following transmission lines are under implementation: Bujagali – Tororo – Lessos 220kV line; Mbarara – Mirama – Birembo 220kV line; Kawanda – Masaka 220kV line; Nkenda – Fort Portal – Hoima 220kV line; Tororo – Opuyo – Lira 132kV line; Mbarara – Nkenda 132kV line; Bujagali switchyard update; and Nkenda-Fort Portal-Hoima 220kV, 260km; Karuma interconnection line; Isimba Interconnection line.

**Transmission Lines for which financing for construction is being sourced:** Government is now sourcing financing for construction of the following transmission lines: Opuyo-Moroto transmission line; and Namanve South.

**Procurement of Supervision Consultant is on-going for the following transmission lines:** Mutundwe-Entebbe 132kV, 35km; and Industrial Parks (Luzira, Mukono, Iganga).

**Feasibility studies are ongoing for the following transmission lines:** Mirama –Kabale 132kV line and electricity services affordability study in Uganda; Hoima – Kinyara -Kafu 220kV line; Nkenda – Mpondwe – Beni 220kV line, 70km; Ayago Interconnection project; Masaka-Mbarara 220kV, 135km

**Procurement of consultant for feasibility study:** Lira – Gulu – Nebbi – Arua 132kV line; Namanve – Namanve South 132kV and Namanve South 132/33kV substation

**The following transmission lines are at the Resettlement Action Plan (RAP) Implementation phase:** Isimba Interconnection; Opuyo –Moroto 132kV, 160km line; Karuma Interconnection

**Sourcing for financing is ongoing for the following Substations:** Nkenda substation, Lira substation, Kawanda substation upgrade and new substation at Mbale; Mutundwe and Lugogo substations.

### Rural Electrification

During the period under review, seven more district headquarters were electrified, these are: Kyankwanzi, Amuria, Katakwi, Moroto, Napak, Kiruhura, Kyegegwa. Nine (9) districts where construction works is ongoing are: Amuru, Buliisa, Otuke, Adjumani, Moyo, Nwoya, Koboko, Maracha, and Zombo. By the end of last financial year, 99 out of 112 district headquarters were electrified. National Grid Electrification Rate stood at 14.88 % in 2012 up from 12% in 2011.

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Rural Electrification Schemes (33/11 kV) commissioned during this FY 2012/13, these are: Katakwi-Moroto with t-offs to Matany and Lorengedwat; Rwashamaire-Nyamitooma-Karuruma; Ibanda-Kazo - Rushere and Kyabirukwa-Nyarukika; Soroti -Katakwi-Amuria; Ayer-Kamdini-Bobi – Minakulu. Mubende-Kyegegwa - Kyenjojo; Kyalumba, Karambi, Ibanda – Bugoye, Ibanda – Nyakalingijo (Kasese District).

A total of 4,636 solar PV systems installed in household, health centres, schools and water pumping stations. Other grid extension projects will be under taken in the districts of Buikwe, Mukono, Apac, Dokolo and Lira. Feasibility studies to connect Kalangala district to the main grid by submarine cable from Bukakata are on-going.

## PETROLEUM EXPLORATION, DEVELOPMENT AND PRODUCTION

### Legal Framework

- The Petroleum (refining, gas conversion, transmission and midstream storage) Act 2013 which was enacted by parliament was assented to by the President and subsequently gazetted in July 2013;
- Following the putting in place of the Petroleum (refining, gas conversion, transmission and midstream storage ) Act 2013 and the Petroleum (Exploration, Development and Production) Act 2013, development of New Regulations and Guidelines for the upstream and midstream activities has progressed;
- Monitoring and Evaluation (M&E) strategy for the National Oil and Gas Policy (NOGP) was finalized.

Promotion of the country's petroleum potential:

The international oil industry continued to show significant interest in participating in the country's emerging oil and gas sector. During the year, expressions of interest to participate in different aspects of Uganda's oil and gas sector were received from over fifty (50) companies.

The department continued to participate in a number of international conferences that have been held within and outside Uganda.

### Resource assessment - Stratigraphy

The Stratigraphic Commission continued with analysis and interpretation of data to develop a coherent stratigraphic framework for the Albertine Graben. Upon completion of final documents on the Semliki and Kaiso-Tonya areas, the commission embarked on the Butiaba - Wanseko document together with the remaining areas; the Rhino camp and Lakes Edward & George basins. Palynological samples from various wells were prepared by Tanzania Petroleum Development Corporation (TPDC) and are now being analysed to aid completion of the stratigraphy project.

### Licensing and Investment in the sector:

The Petroleum (Exploration, Development and Production) Act 2013, provides for competitive licensing rounds in future. A multi-client seismic survey to enable better definition and understanding of the areas to be licensed will be undertaken for areas with insufficient data coverage. Planning for this multi-client seismic survey commenced during 2012/13 is still ongoing.

There are four (4) Active Production Sharing Agreements (PSAs) in the Albertine Graben and the licenses are held by three Operators namely, Tullow, Total and China National Offshore Oil Corporation (CNOOC) each with 33.333% equity in the four licenses. The Exploration License for Dominion Petroleum Uganda



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Limited, over EA 4B (Lakes Edward and George Basin) expired in July 2013.

The total cumulative investments in the oil and gas sector reached USD1.8 Billion at the end of the calendar year 2012 and investments in the sector are expected to reach USD 2.5 Billion by the end of 2013.

#### Creation of New Institutions:

The process of forming new institutions for the sector as described in the new law progressed. Structures for the new institutions, i.e. the Directorate of Petroleum in the Ministry of Energy and Mineral Development responsible for oil and gas; Petroleum Authority of Uganda; and National Oil Company were developed. In preparation for the new institutions, Transitional Units were created in the Department of Petroleum Exploration and Production (PEPD) and have since commenced operations. These include Policy, Regulatory, Commercial and Infrastructure Units. An interim arrangement involving existing human resources within the PEPD has been put in place to manage the Units.

#### Monitoring of Oil Company activities:

A total of 112 exploration and appraisal wells have been drilled by December 2013. Of these, 99 wells have encountered oil and gas in the subsurface representing a drilling success rate of over 88%.

Twenty one (21) discoveries have been made to date with the total petroleum resources now estimated at 3.5 billion barrels of Oil in Place out of which between 1.2 and 1.7 billion barrels of oil equivalent are estimated to be recoverable.

Appraisal for nine (9) of the fields is nearly complete and applications for production licenses over these fields along with their field development plans have been submitted to Government and are under review. Appraisal is still ongoing for the other six (6) of the discoveries which is aimed at improving the understanding of the volumes of oil and gas in the respective discoveries and also aid field development planning with appropriate methods of recovery for the reservoirs. The remaining fields including Taitai and Karuka were considered non-commercial and were returned to Government. In September 2013 a production license for Kingfisher field was awarded to CNOOC.

#### Commercialization of the discovered resources

Government and the licensed Oil Companies are finalizing discussions on the commercialization plan for the discovered oil resources which will include the use of petroleum for power generation, supply of Crude Oil to a 60,000 barrel per day refinery to be developed in the country and export of crude oil through a pipeline or other viable options.

#### Refinery project:

Promotional materials for refinery development were printed and distributed to potential investors within and outside the country, including those that visited the Department plus those accessed at international conferences and other for a. Subsequently, the database of potential investors was updated.

Government plans to develop the refinery on a Public–Private Partnership (PPP) basis. Taylor-DeJongh was contracted in financial year 2012/2013 as the Transaction Advisor (TA) to support Government in attracting a lead investor with technical and financial capacity to lead the development of this refinery and to structure a refinery company to take forward the development. Among the other roles of the TA is to

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assist Government in sourcing for financing for the refinery. In this respect, the TA has promoted the refinery project to a number of potential funders. The TA prepared Request for Qualification (RFQ) for the lead investor which was advertised in the local and international media in October 2013. The submitted RFQs were evaluated between the 11th and 15th November 2013 and this is to be followed by the issuing of the Request for Proposals (RFP) by the end of December 2013.

Implementation of the Resettlement Action Plan (RAP) for land acquisition on refinery development commenced in July 2013 and this is expected to last 8 months. Consultative workshops and sensitization meetings were conducted with leaders and other stakeholders including the Project Affected Persons (PAP) in Hoima district to ensure a harmonized execution of the land acquisition process. The Environmental baseline study that will characterize the current environmental and social economic conditions in and around the area of the refinery development was concluded.

Phase – 2 of the construction of the data center and office block

The second phase of the construction of the laboratories, a petroleum data repository and offices for the Petroleum Authority and the Petroleum Directorate commenced during 2012/13. This phase of construction has progressed and is expected to be completed by March 2014 paving way for the third and final phase of the construction to be undertaken during the financial year 2014/2015.

Capacity building:

Capacity building continued to be undertaken at both strategic and professional levels. Seven (7) members of staff commenced M.Sc. Studies Petroleum Geoscience, Petroleum Engineering, Economics, Structural geology, Refinery and Pipelines Design.

In addition to training Government personnel, Government has continued to support the training of artisans and professionals in petroleum related fields at the Uganda Petroleum Institute Kigumba and Makerere University respectively. This is to support the oil and gas manpower requirements for the private sector in the country.

Implementation of the Local content policy and plan:

The process of developing Policy framework for enhancing national participation in oil and gas sector has progressed. In this regard the second draft of the National Content Policy was submitted and reviewed by Government.

The skills requirements study which will feed into the strategy and plan has commenced.

Implementation of the Communication Strategy:

The Communication strategy for the oil and gas sector was formulated and its implementation has been ongoing since 2011. Implementation of the strategy involves conducting radio talk shows especially in the Albertine Graben, TV talk shows in Kampala, participation in stakeholder workshops and preparations of articles for the media.

The Ministry continued to implement the Communication Strategy for the Oil and Gas sector as follows:-

- The Ministry held fourteen (14) radio talk shows; seven in the Albertine Graben; three in Northern

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Uganda; and four in Kampala/Central region.

- Held nine stakeholder workshops in the Albertine Graben;
- Newspaper inserts on progress of the implementation of the National Oil and Gas Policy, were prepared and circulated in four national/local newspapers;
- Participated in the two cross-border dialogues organised by International Alert in Arua and Hoima;
- Maintained and updated the PEPD website ([www.petroleum.go.ug](http://www.petroleum.go.ug)), which was visited by an average of 2247 people per month.

## PETROLEUM SUPPLY, INFRASTRUCTURE AND REGULATION

### Petroleum Imports

Uganda is currently importing all her petroleum products. It imports about 98% of the products through Kenya and 2% through Tanzania. The average annual growth of petroleum consumption stands at about 7%. Monthly consumption of petroleum products is 125 million litres which translates to an annual figure of 1,500,000,000 litres. On a monthly basis, the country spends about US\$ 108 million to import petroleum products or US\$1.296 billion per annum.

At present there are 167 oil-marketing companies established in Uganda involved in supply, transportation, distribution and marketing of Petroleum products.

A total of 1.227 billion litres of petroleum products were imported. Of these, 41.1%, 6.1% and 52.8% were Petrol, Kerosene and Diesel products. Overall volumes of white petroleum product imports dropped by 5.8% from the 1.303 billion litres imported in 2011 to 1.227 billion litres imported in 2012.

### Petroleum Sales

Sales of Petroleum products in 2012 totaled to 1.41 billion cubic meters. Gas Oil, Premium and Aviation Fuels dominated these Sales with 632.1 million cubic meters, 491.1 million cubic meters and 135.8 million cubic meters respectively. Volumes of all petroleum products sold increased by 13.9% in 2012.

### Import Bill and Government Revenue

Government Revenue worth UGX 787 billion was collected in 2012. The monthly import bill stood at UGX 2,530 billion.

### Market Shares of Oil Companies

Total and Shell continued to dominate the market with Shell occupying 27% while Total occupied 25% of the entire market. Gapco, Nile, Petrocity, Petro (U), Hared, Kobil and others occupied the remaining 48%.

### Storage Facilities

The refurbishment of the Jinja storage facility has been completed. The bonded warehouse number WO334 has been issued and its restocking has commenced. The facility will be stocked with 12 million litres (8 million for diesel; 4 million for petrol) as a strategic reserve and 18 million litres (12 million for diesel; 6 million for petrol) as a trading stock.

### Enforcement

Following completion of relicensing exercise, enforcement of the Petroleum Supply (General) Regulations,

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2009 commenced and is ongoing. The areas in Central region are nearly completed and the exercise is planned to cover the entire country. In the enforcement, illegal facilities in the petroleum distribution and marketing industry are closed.

#### Kenya-Uganda Oil Pipeline Extension

The Government of the Republic of Uganda and the Government of the Republic of Kenya are procuring a Private Investor for the pipeline to transport refined petroleum products between Eldoret-Kenya and Kampala-Uganda. Evaluation of the bids was completed in August 2013 and currently negotiations are in progress with the best evaluated firm. Compensation and/or resettlement of project affected persons will commence after a developer is selected.

#### Kampala – Kigali Oil Pipeline Extension

Following the June 2013 meeting of the three Heads of State of the Republic of Kenya, Republic of Uganda and Republic of Rwanda, the three governments executed a Memorandum of Understanding in August 2013 for cooperation in the development of Eldoret-Kampala-Kigali Refined Petroleum Products Pipeline. In this regard, a Request for proposals for the Feasibility of the Kampala-Kigali segment was sent to shortlisted firms in the first week of October 2013.

### **MINERAL EXPLORATION, DEVELOPMENT AND PRODUCTION**

#### Geosciences Data Acquisition

Acquisition, processing and interpretation of Airborne Geophysical Data covering 80% of the country has been achieved. In addition, adequate geological data and information on the country's mineral resources potential is available in both hard and soft copies. The remaining 20% of the country which was not mapped will be completed and Government is already undertaking sensitization and awareness campaigns in preparation of airborne geophysical surveys and geological mapping of Karamoja region.

A Mining Cadastre and Registry System (MC&RS) to enhance transparency in licensing was established. A web based portal on [www.flexicadastre.com/uganda](http://www.flexicadastre.com/uganda) to get access to mineral rights information on a GIS interface was also set up. A Modern Documentation System hosting a website [www.uganda-mining.go.ug](http://www.uganda-mining.go.ug) is in place; Geological Mineral Information System (GMIS) to host geological, environmental, seismological and laboratory data has been established.

#### Mineral Exploration

Mineral exploration was undertaken in Karuma and geochemical, geophysical surveys show Nickel -Cobalt-Copper-Chromium, Platinum Group Minerals (PGM) and Gold rich anomaly, and which is 2 km long and 250 metres wide.

The sixteen mineral targets identified during Sustainable Management of Mineral Resources Programme have been packaged for detailed mineral exploration and development.

#### Mineral Development

Promotion of Iron and steel industry led to discoveries of new iron ore occurrences and deposits in southwest Uganda such as in Buhara, Muyebe and Nyamiringa in Kabale district; Nyamiyaga and Kazogo

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in Kisoro district; and at Kinamiro in Butogota, Kanungu district by exploration companies supported by the ministry staff. Significant production of iron ores by small scale miners were registered in 2012 and sold to Hima Cement and Steel Rolling Mills Ltd.

The Sukulu Phosphate Development: A Memorandum of Understanding was signed with Guangzhou Dong Song Energy Group Co. Ltd to implement the project.

Compensation of the households living in the mining area by the licensee is on-going.

A due diligence on the technical and financial strength of companies that expressed interest in the redevelopment of Kilembe Mines was undertaken. Three companies submitted their proposal and evaluation to select the best company was undertaken.

### Mineral Production, Imports and Exports

Mineral commodities: limestone, pozzolana, gold, vermiculite, cobalt, wolfram, aggregates, kaolin, and iron ore worth UGX 207,819,297,000 (Uganda Shillings Two Hundred Seven Billion, Eight Hundred and Nineteen Million, Two Hundred and Ninety Seven Thousand) were produced in the country.

Mineral commodities: cobalt, copper, gold, manganese ore, quartz, silver, tin, tungsten and vermiculite worth UGX. 69.9 billion were exported while gold worth UGX 31.5 billion was imported.

Plans to implement the Regional Certification Mechanism (RCM) of International Conference of the Great Lakes Region (ICGLR) commenced with policy, legal and regulatory framework review. This will minimize conflicts in the marketing of minerals from the region

### Inspection

The Ministry continued to undertake monitoring and inspection of mining activities in the country. The focus has been on the following areas: Mukono (gold), Jinja (copper smelter), Tororo (limestone and phosphates), Busia (gold), Manafa (vermiculite), Moroto (marble), Dura (limestone), Hima (limestone), Kilembe (copper), Katwe (salt), Ruhizha (wolfram), Kirwa (wolfram) and Muhokya (lime) and Mubende gold (Kisita, Kamalenge).

### Licensing

A total of 867 licences and certificates were operational as at 30th June 2013, 2012. Out of these were: 203 Prospecting Licences (PL), 531 Exploration Licences (EL), 5 Retention Licences (RL) 38 Location Licences (LL), 29 Mining Leases, and 61 Mineral Dealers' Licences (MDL). However for the last six months 443 licenses were issued and 318 revoked during the FY 2012/13.

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The overall outcome of the project at the end will: Diversify livelihood of the citizens from pastoralism to other activities such as agriculture, services and mining; Infrastructure development of the Karamoja region; and Lead to increased collection of revenue for both local and central government which subsequently will contribute to social and economic transformation of the region

#### Geothermal Energy Exploration

Processing, analysis, and interpretation of geological, geochemical and geophysical data were undertaken, covering areas of Kibiro, Panyimur, Katwe-Kikorongo and Buranga.

Panyimur: Geological, geophysical and geochemical surveys of Panyimur geothermal prospect discovered new surface manifestations with a low magnetic signature, an indication that geothermal resources are wide spread.

Buranga – Ntoroko: Geological mapping, geophysical and geochemical surveys were undertaken in Ntoroko District and additional surface manifestations (travertines and cold springs) were discovered which suggests that the geothermal system is larger than previously known and is likely to be connected to the Buranga Geothermal prospect, in Bundibugyo District.

Kibiro: Geological mapping of surface alteration was undertaken at Kibiro using clay analysis, which suggests that Kibiro sub-surface temperature is above 200 0C. Airborne geophysical surveys indicated a low magnetic signature at Kyakapalaga.

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#### THE CHALLENGES IN THE ENERGY AND MINERAL DEVELOPMENT SECTOR

##### Land Acquisition:

To acquire land for infrastructure (pipelines, refinery, power generation, transmission lines and rural electrification projects); petroleum and mineral exploration and development takes a very long time and land is very costly. This delays project development and results into high investment costs.

##### 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. The actual energy losses performance as of June 2013 was 24.9% against a target of 23.0% for the FY2013/14. The Electricity Regulatory Authority has set a target of 14.7% by 2018.

##### 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 public 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.

#### CONCLUDING REMARKS

The Ministry, in line with its mandate, will continue to vigorously implement the plan for meeting the electricity supply needs of the country; monitor the oil and gas activities including the drilling operations and refining. The ministry will also ensure competition and security in the supply of petroleum products. In addition, the Ministry will continue to encourage firms that intend to carry out mineral exploration all over

# Vote: 017 Ministry of Energy and Mineral Development

## Vote Summary

the country with the view of enhancing mineral production and value addition.

**Table V2.1: Past and 2014/15 Key Vote Outputs\***

<i>Vote, Vote Function Key Output</i>	<b>Approved Budget and Planned outputs</b>	<b>2013/14 Spending and Outputs Achieved by End Dec</b>	<b>2014/15 Proposed Budget and Planned Outputs</b>
<b>Vote: 017 Ministry of Energy and Mineral Development</b>			
<i>Vote Function: 0301 Energy Planning, Management &amp; Infrastructure Dev't</i>			
<b>Output: 030102</b>	<b>Energy Efficiency Promotion</b>		
<i>Description of Outputs:</i>	Disseminated 50,000 improved household stoves	Currently the estimated total numbers of improved charcoal stoves in use stand at 46,000	Disseminated 48,000 improved household stoves
<i>Performance Indicators:</i>			
No. of improved stoves disseminated to households	50000	125	48,000
Percentage of Energy Losses in the distribution network	23	25	20
Percentage of Audited Institutions implementing Energy efficiency recommendations	100	100	100
<i>Output Cost: US\$ Bn:</i>	3.473	<i>US\$ Bn:</i> 0.314	<i>US\$ Bn:</i> 14.722
<i>Output Cost Excl. Ext Fin. US\$ Bn:</i>	1.573	<i>US\$ Bn:</i> 0.314	<i>US\$ Bn:</i> 2.237
<b>Output: 030103</b>	<b>Renewable Energy Promotion</b>		
<i>Description of Outputs:</i>	Nyagak III Construction to be undertaken.  Muzizi feasibility study to be completed.  Nyamwamba: IA and PPA construction to commence  Solar PV Systems in 7,000 household installed Solar Energy Packages in 160 Health Centers. 15 Water pump	-Feasibility studies have been completed on Nyagak III. - Muzizi feasibility studies are on-going. -Feasibility studies have been completed for Nyamwamba.	Nyagak III Construction to be undertaken.  Muzizi IA and PPA.  Nyamwamba: construction to commence
<i>Performance Indicators:</i>			
Status of development of Kikagate hydropower plant			6. Construction
Number of Solar systems installed	7000	1000	7,500
No. of Renewable Energy projects under development	4	4	4
Status of development of Maziba hydropower plant			Procurement process for the contractor after channeling of the additional financing to UEDCL the implementing Agency is done.
<i>Output Cost: US\$ Bn:</i>	2.565	<i>US\$ Bn:</i> 0.388	<i>US\$ Bn:</i> 7.582
<i>Output Cost Excl. Ext Fin. US\$ Bn:</i>	1.905	<i>US\$ Bn:</i> 0.388	<i>US\$ Bn:</i> 2.347
<b>Output: 030104</b>	<b>Increased Rural Electrification</b>		
<i>Description of Outputs:</i>	Continued to implement Rural Electrification schemes to extend power to district headquarters and rural growth	Done under Vote 123	Construct 720km of 132kV and 419km of 220kV transmission line;



# Vote: 017 Ministry of Energy and Mineral Development

## Vote Summary

<i>Vote, Vote Function Key Output</i>	<b>Approved Budget and Planned outputs</b>	<b>2013/14 Spending and Outputs Achieved by End Dec</b>	<b>2014/15 Proposed Budget and Planned Outputs</b>
	centres.		Connect at least 5 district headquarters to the national grid
<i>Performance Indicators:</i>			
Number of District Headquarters electrified	10	0	5
Distance in KM of Rural Electrification schemes covered with Government support	1200	0	1,200
<i>Output Cost: US\$ Bn:</i>	2.990	<i>US\$ Bn:</i> 0.111	<i>US\$ Bn:</i> 3.442
<i>Output Cost Excl. Ext Fin. US\$ Bn:</i>	1.030	<i>US\$ Bn:</i> 0.111	<i>US\$ Bn:</i> 0.822
<b>Output: 030152</b>	<b>Thermal and Small Hydro Power Generation (UETCL)</b>		
<i>Description of Outputs:</i>	Works have been delayed due to protracted discussions with investors	NA	To continue with the discussions with investors
<i>Output Cost: US\$ Bn:</i>	68.000	<i>US\$ Bn:</i> 15.705	<i>US\$ Bn:</i> 92.090
<b>Vote Function Cost</b>	<b>US\$ Bn: 469.195</b>	<b>US\$ Bn: 42.425</b>	<b>US\$ Bn: 293.582</b>
<b>VF Cost Excl. Ext Fin.</b>	<b>US\$ Bn 117.867</b>	<b>US\$ Bn 42.425</b>	<b>US\$ Bn 102.867</b>
<b>Vote Function: 0302 Large Hydro power infrastructure</b>			
<b>Output: 030280</b>	<b>Large Hydro Power Infrastructure</b>		
<i>Description of Outputs:</i>	Construction of Karuma Hydropower Plant starts.	A Contract has been executed with Sinohydro Corporation to construct both the power plant and transmission line.  H.E. the President officiated the ground breaking on the 12th August 2013.	Construction of Karuma Hydropower Plant progresses at 10% of works.
<i>Performance Indicators:</i>			
Percentage of land freed up for contractors		20	80
Percentage of land claimant paid under Resettlement Action Plan (RAP)	20	20	90
<i>Output Cost: US\$ Bn:</i>	1,091.900	<i>US\$ Bn:</i> 32.338	<i>US\$ Bn:</i> 1,096.900
<b>Vote Function Cost</b>	<b>US\$ Bn: 1,098.245</b>	<b>US\$ Bn: 32.341</b>	<b>US\$ Bn: 1,250.063</b>
<b>VF Cost Excl. Ext Fin.</b>	<b>US\$ Bn 1,096.900</b>	<b>US\$ Bn 32.341</b>	<b>US\$ Bn 1,096.900</b>
<b>Vote Function: 0303 Petroleum Exploration, Development &amp; Production</b>			
<b>Output: 030303</b>	<b>Capacity Building for the oil &amp; gas sector</b>		
<i>Description of Outputs:</i>	Train eight (8) members of staff in Petroleum Geoscience, Engineering and Refinery Design.  Increase national participation from the current approx 10% to 20%	Five (5) staff members commenced their Masters in Petroleum Geosciences, Law, Economics and Environment.  Two (2) members continued their Masters in Petroleum Law and Policy, and Environmental Management, respectively.	Train eight (6) members of staff in Petroleum Geoscience, Engineering and Refinery Design. Also 20 staff fully complete their courses  PAU, NATOIL and PD in place  Increase national participation from the current approx 10% to 20%
<i>Performance Indicators:</i>			
Number of Officials who successfully complete	100	7	20

# Vote: 017 Ministry of Energy and Mineral Development

## Vote Summary

<i>Vote, Vote Function Key Output</i>	<b>Approved Budget and Planned outputs</b>	<b>2013/14 Spending and Outputs Achieved by End Dec</b>	<b>2014/15 Proposed Budget and Planned Outputs</b>
professional training in Oil and Gas			
Number of Government Officials enrolled for professional training in Oil and gas discipline	8	5	6
The petroleum institutions established (Petroleum Directorate, the Petroleum Authority and the National Oil Company)			Three institutions PAU, NATOIL and PD established
<i>Output Cost: US\$ Bn:</i>	8.682	<i>US\$ Bn:</i> 1.178	<i>US\$ Bn:</i> 1.165
<i>Output Cost Excl. Ext Fin. US\$ Bn:</i>	3.781	<i>US\$ Bn:</i> 1.178	<i>US\$ Bn:</i> 1.165
<b>Output: 030304</b>	<b>Monitoring Upstream petroleum activities</b>		
<i>Description of Outputs:</i>	Monitor drilling of 30 wells in three (3) EAs in the Albertine Graben .	Monitoring of the drilling activities in EA1, EA1A and EA2 was done	Continue to Monitor drilling of 30 wells in three (3) Eas in the Albertine Graben .
	Monitor testing of at least 10 wells in the Graben.		Monitor testing of at least 10 wells in the Graben.
	Monitor of ten (10) campaigns of seismic and other Geological and Geophysical (G&G) activities.		
<i>Performance Indicators:</i>			
Number of line (km) of seismic data acquired.	800	114	800
Number of wells drilled	30	6	30
% of compliance on recommended follow up actions	100	100	100
<i>Output Cost: US\$ Bn:</i>	1.978	<i>US\$ Bn:</i> 0.405	<i>US\$ Bn:</i> 0.196
<i>Output Cost Excl. Ext Fin. US\$ Bn:</i>	1.628	<i>US\$ Bn:</i> 0.405	<i>US\$ Bn:</i> 0.196
<b>Output: 030305</b>	<b>Develop and implement a communication strategy for oil &amp; gas in the country</b>		
<i>Description of Outputs:</i>	Public awareness in the oil and gas sector undertaken.	-The Ministry held fourteen (14) radio talk shows; seven in the Albertine Graben; three in Northern Uganda; and four in Kampala/Central region.	Public awareness in the oil and gas sector undertaken.
	Involvement of the public and other stakeholders in the oil and gas activities achieved.	-Held nine stakeholder workshops in the Albertine Graben;	□ Involvement of the public and other stakeholders in the oil and gas activities achieved.
	Departmental website maintained.	-Newspaper inserts on progress of the implementation of the National Oil and Gas Policy, were prepared and circulated in four national/local newspapers;	Departmental website maintained.
		-Participated in the two cross-border dialogues organised by International Alert in Arua and Hoima;	
		-Maintained and updated the PEPD website	

# Vote: 017 Ministry of Energy and Mineral Development

## Vote Summary

<i>Vote, Vote Function Key Output</i>	<b>Approved Budget and Planned outputs</b>	<b>2013/14 Spending and Outputs Achieved by End Dec</b>	<b>2014/15 Proposed Budget and Planned Outputs</b>
		(www.petroleum.go.ug), which was visited by an average of 2247 people per month.	
<i>Performance Indicators:</i>			
Numbr of stakeholder communities consulted and sensitized	20	5	20
<i>Output Cost: US\$ Bn:</i>	1.472	<i>US\$ Bn:</i> 0.260	<i>US\$ Bn:</i> 0.045
<i>Output Cost Excl. Ext Fin. US\$ Bn:</i>	1.008	<i>US\$ Bn:</i> 0.260	<i>US\$ Bn:</i> 0.045
<b>Output: 030380</b>	<b>Oil Refinery Construction</b>		
<i>Description of Outputs:</i>	Land for the refinery and supporting infrastructure acquired.	- Works commenced on compensation and resettlement process, expected to last 8 months.	Finalise acquisition of Land for the refinery and supporting infrastructure
	Continued implementation of Logistics study recommendations.	- Disclosure of amounts to be paid has been done	Continued implementation of Logistics study recommendations.
	Transaction Advisor's assigned duties for Refinery development undertaken.		Transaction Advisor's assigned duties for Refinery development undertaken.
	Pre - Front End Engineering Design (FEED) for refinery development completed.		Pre - Front End Engineering Design (FEED) for refinery development completed.
<i>Performance Indicators:</i>			
Number of people resettled under RAP implementation to free the 29 sq.km land for the oil refinery	4. RAP Implementation	0	4. RAP Implementation
Way-leaves for the pipelines to and from the Refinery acquired			4. RAP Implementation
Logistics study report for the Oil Refinery finalized and submitted			70
Lead investor for the Refinery Development procured			6. Front End Engineering Designs ( FEED)
<i>Output Cost: US\$ Bn:</i>	39.085	<i>US\$ Bn:</i> 7.354	<i>US\$ Bn:</i> 32.278
<i>Output Cost Excl. Ext Fin. US\$ Bn:</i>	32.696	<i>US\$ Bn:</i> 7.354	<i>US\$ Bn:</i> 29.888
<b>Vote Function Cost</b>	<b>US\$ Bn: 70.733</b>	<b>US\$ Bn: 25.332</b>	<b>US\$ Bn: 38.622</b>
<b>VF Cost Excl. Ext Fin.</b>	<b>US\$ Bn 56.414</b>	<b>US\$ Bn 25.332</b>	<b>US\$ Bn 36.232</b>
<b>Vote Function: 0304 Petroleum Supply, Infrastructure and Regulation</b>			
<b>Output: 030402</b>	<b>Management and Monitoring of petroleum supply industry</b>		
<i>Description of Outputs:</i>	Petroleum supply market operations monitored for compliance to Petroleum Supply Act, 2003. Petroleum standards enforced; Compliance with applications for new licenses evaluated	Petroleum supply market operations were monitored for compliance to Petroleum Supply Act, 2003. Petroleum standards enforced; Compliance with applications for new licenses evaluated	Petroleum supply market operations monitored for compliance to Petroleum Supply Act, 2003. Petroleum standards enforced; Compliance with applications for new licenses evaluated

# Vote: 017 Ministry of Energy and Mineral Development

## Vote Summary

<i>Vote, Vote Function Key Output</i>	<b>Approved Budget and Planned outputs</b>	<b>2013/14 Spending and Outputs Achieved by End Dec</b>	<b>2014/15 Proposed Budget and Planned Outputs</b>
Number of petroleum facilities monitored		20	350
Number of days of stock levels for white products at petroleum facilities	0.07	0.07	10
% of the facilities confirming to the Petroleum facilities standards monitored conforming to standards	15	5	80
<i>Output Cost: US\$ Bn:</i>	0.362	<i>US\$ Bn:</i> 0.096	<i>US\$ Bn:</i> 0.316
<b>Output: 030405</b>	<b>Development of Petroleum Refinery and Processing</b>		
<i>Description of Outputs:</i>	N/A		Refinery activities transferred to the Refinery project
<i>Output Cost: US\$ Bn:</i>	0.012	<i>US\$ Bn:</i> 0.003	<i>US\$ Bn:</i> 0.000
<b>Output: 030406</b>	<b>Kenya - Uganda - Rwanda Oil pipelines</b>		
<i>Description of Outputs:</i>	Supervise wayleaves acquisition and compensation of Project Affected Persons	Rescheduled for Q3	Continue to Supervise wayleaves acquisition and compensation of Project Affected Persons by the selected Investor
<i>Output Cost: US\$ Bn:</i>	0.057	<i>US\$ Bn:</i> 0.016	<i>US\$ Bn:</i> 0.053
<b>Vote Function Cost</b>	<b><i>US\$ Bn:</i> 6.245</b>	<b><i>US\$ Bn:</i> 1.116</b>	<b><i>US\$ Bn:</i> 6.245</b>
<b>Vote Function: 0305 Mineral Exploration, Development &amp; Production</b>			
<b>Output: 030502</b>	<b>Institutional capacity for the mineral sector</b>		
<i>Description of Outputs:</i>	Undertake regular mineral market research on mineral prices.	Two (2) workshops to review legal framework and improve mining laws in the subsector.	Number of Staff trained (short term). Number of Staff trained (long term). Number of lab equipment installed. Number of research papers, maps workshops, conferences, and minerals discovered
	Two (2) workshops to review legal framework and improve mining laws in the subsector.	Initiated procurement for Mineral analysis laboratory infrastructure at Geological Survey and Mines Department.	
	Train Two (2) members of staff in legal and management best practices		
	Six (6) members of staff participate in sector investment promotion.		
	Continue to improve mineral analysis laboratory infrastructure at Geological Survey and Mines Department.		
<i>Performance Indicators:</i>			
Number of Government Officials/staff enrolled for training in geosciences fields	40	4	50
Number of equipment, chemicals, and standards purchased for analytical		0	10

# Vote: 017 Ministry of Energy and Mineral Development

## Vote Summary

<i>Vote, Vote Function Key Output</i>	<b>Approved Budget and Planned outputs</b>	<b>2013/14 Spending and Outputs Achieved by End Dec</b>	<b>2014/15 Proposed Budget and Planned Outputs</b>
laboratories			
Number of mineral artisans and small scale miners trained	600	85	700
	<i>Output Cost: US\$ Bn:</i> 0.352	<i>US\$ Bn:</i> 0.098	<i>US\$ Bn:</i> 0.352
<b>Output: 030503</b>	<b>Mineral Exploration, development, production and value-addition promoted</b>		
<i>Description of Outputs:</i>	Muko iron ore is being mined to feed domestic iron and steel industry.	Detailed Geological and Geochemical Surveys of Sheets 63/3 (Busesa) and 62/2 (Namwendwa):	Number of new mineral investment projects initiated (5 Mining Leases issued). Number of mineral targets mapped (10 mineral commodities per year). 4 topographical map sheets
	Sukulu need Ug.shs135bn for RAP of 2, 500 families.	- Two hundred and ten (210) geological observation points for each sheet (Figure 1 and 2);	
	Detailed Geological, geophysical, geochemical surveys of key strategic minerals relevant for domestic industrialization.	- Fifty (50) rock samples to be collected per sheet for petrographic and microscopic study;	
	Enabling agriculture productivity and mapping of Iganga, Kitaka-Buhweju, Masindi- Karuma, Naigobya, Mayuge Iron Ore, Kafunjo-Ntugamo, Kaiso-Bukusu a follow up of 16 mineral targets.	- One hundred (100) stream sediment samples;	
	Promotion of Karamoja Airborne surveys. And Geothermal development, upgrading installation of earthquake monitoring network.	- Detailed soil geochemistry on grid of 100 m x 50 m over an area of 800 m by 250 m with prominent structures and lineaments that would result in 75 geochemical sampling points per sheet.	
	Promote agro-geology as Corporate Social Responsibility (CSR) to Agriculture sector. Map geosites as CSR to Tourism sector.		
<i>Performance Indicators:</i>			
Number of geological maps produced and disseminated	250	1	300
Exploration and mining on Muko Iron ore resources and deposits in South West Uganda Monitored			65
Development of Sukulu phosphates project			30
	<i>Output Cost: US\$ Bn:</i> 1.521	<i>US\$ Bn:</i> 0.257	<i>US\$ Bn:</i> 1.617
<b>Output: 030505</b>	<b>Licencing and inspection</b>		
<i>Description of Outputs:</i>	Undertake administrative reviews of all mineral rights (licenses).	Inspections and monitoring were undertaken in Districts of Mukono (gold), Jinja (copper smelter), Tororo, Busia (gold),	120 mineral rights granted. 12 site inspections

# Vote: 017 Ministry of Energy and Mineral Development

## Vote Summary

<i>Vote, Vote Function Key Output</i>	<b>Approved Budget and Planned outputs</b>	<b>2013/14 Spending and Outputs Achieved by End Dec</b>	<b>2014/15 Proposed Budget and Planned Outputs</b>
	Monitor exploration and mining operations. Twelve (12) inspections to mining areas (3 inspections per quarter)	Manafwa (vermiculite), Moroto (marble), Kamwenge (limestone), Kasese (limestone, copper, lime and salt), Kabale (wolfram), Mubende (gold).	
	Mineral exploration and mining areas monitored	A total of 839 licenses and certificates were operational as at 30th June 2013. Out of these, were: 203 Prospecting Licenses (PL), 493 Exploration Licenses (EL), 4 Retention Licenses (RL), 39 Location Licenses (LL), 29 Mining Leases, and 71 Mineral Dealers' Licenses (MDL). Of the 839 licenses, 579 licenses were granted during the FY 2012/13.	
	500 mineral rights issued and NTR of at least Ug.sh 5.0 bn collected.		
<i>Performance Indicators:</i>			
Number of mining site inspection and monitoring conducted	12	3	12
Number of mineral licenses granted	500	79	120
% of mining companies complying with mining regulations		50	90
<i>Output Cost: UShs Bn:</i>	<i>0.240</i>	<i>UShs Bn: 0.069</i>	<i>UShs Bn: 0.240</i>
<b>Vote Function Cost</b>	<b>UShs Bn: 8.038</b>	<b>UShs Bn: 1.852</b>	<b>UShs Bn: 8.038</b>
<b>Vote Function: 0349 Policy, Planning and Support Services</b>			
<b>Vote Function Cost</b>	<b>UShs Bn: 20.100</b>	<b>UShs Bn: 8.210</b>	<b>UShs Bn: 20.100</b>
<b>Cost of Vote Services:</b>	<b>UShs Bn: 1,650.557</b>	<b>UShs Bn: 111.275</b>	<b>UShs Bn: 1,616.651</b>
<i>Vote Cost Excl. Ext Fin.</i>	<i>UShs Bn 1,305.565</i>	<i>UShs Bn 111.275</i>	<i>UShs Bn 1,270.383</i>

\* Excluding Taxes and Arrears

### 2014/15 Planned Outputs

#### ENERGY PLANNING, MANAGEMENT & INFRASTRUCTURE DEV'T:

##### Electricity Generation

##### (a).....Large Hydro Power Project

- (i) Construction of Karuma Hydro Power Project (600MW)
- (ii) Commence construction of Isimba Hydro Power Project (183MW)
- (iii) Complete feasibility study of Ayago Hydro power Project (600MW)
- (iv) Commence with the construction of Nyagak III (4.5MW) and Muzizi (44.7MW) with co-funding from the German Government through KfW
- (v) Commence Generation of about 125 MW of electricity from different renewable energy sources under GET FiT Programme

# Vote: 017 Ministry of Energy and Mineral Development

## Vote Summary

- (vi) Complete the RAP Implementation for Isimba HPP & Associated T-Line.
- (vii) Complete the RAP Implementation for Karuma HPP and Associated T-Line.

### (b).....Small Power Project

- (i) RAP Implementation for Muzizi HPP commenced.
- (ii) Financial closure attained for the construction of Muzizi HPP
- (iii) Commence the Construction of at least Five Small Hydropower plants under GETFiT (Nyamwamba-9.2MW, Siti 1 – 5MW, Waki – 5MW, Rwimi – 5.4MW, Kikagati 16MW and Nengo Bridge-7.5MW)
- (iv) Commence the construction of Nyagak III.
- (v) Capitalise UECCC credit support Instruments in support of private sector renewable energy project development.

### Transmission Infrastructure

- (i) Construction of the following 220kV and 132kV projects:  
-220kV Projects: Bujagali – Tororo – Lessos, Mbarara – Mirama – Birembo, Kawanda – Masaka, Nkenda – Fort Portal – Hoima and Bujagali switchyard upgrade to 220kV  
-132kV projects: Tororo – Opuyo – Lira 132kV line, Mbarara – Nkenda 132kV line, Mutundwe – Kabulasoke 132kV restringing and Namanve South, Luzira, Mukono and Iganga industrial park substations
- (ii) Procurement of EPC contractors for the following projects: Isimba Interconnection, Karuma Interconnection, Ayago Interconnection, Mutundwe Entebbe 132kV line, reinforcement of Lugogo and Mutundwe substations and Upgrade Queensway substation.
- (iii) Conclusion of feasibility study of the following projects: Hoima – Kafu 220kV line, Nkenda – Mpondwe – Beni 220kV line, Ayago Interconnection project and Opuyo-Moroto 132kV Line.
- (iv)  Commencement of feasibility study, EIA&RAP study of the following projects: Lira – Gulu – Nebbi – Arua 132kV line, Kikagati – Mirama-Nsongezi 132kV line, Masaka-Mbarara 220kV line, Lira-Gulu-Agago 132kV line, Bulambuli (Atari)-Mbale Industrial parks 132kV line, Mutundwe-Entebbe 132kV Line and Masaka-Mwanza 220kV Line

### Energy Management Planned Activities

- (i) Conduct Energy Week 2014
- (ii) Develop and produce energy awareness materials
- (iii) Commence implementation voluntary Energy Efficiency Standards and Label to promote efficient electrical appliances on Ugandan market
- (iv) Train at least 30 energy auditors and energy managers

### Atomic Energy Council

- (i) The Inventorisation project (continuation of FY2013/14) for all radiation sources country wide.
- (ii) Construction of a waste storage facility at Mpoma project
- (iii) The EPRP project
- (iv) Setting up of a dosimetry Laboratory Project
- (v) Inspection of all upcountry facilities

# Vote: 017 Ministry of Energy and Mineral Development

## Vote Summary

### Biogas promotion

- (i) Draft standards developed for biogas by end of FY;
- (ii) Continue to support the development of a 10 kW plant by APAC Energy Limited
- (iii) Identify other potential IPPs to develop biogas for power generation
- (iv) Technical support to Uganda National Biogas Program
- (v) Partner with KCCA and other actors to manage waste for energy production
- (vi) Promote biolatrane technology in schools
- (vii) Support the establishment of large scale biogas systems for electricity generation

### Gasification promotion

- (i) Promote household gasifier stoves
- (ii) Scale up the operations of recently refurbished Nyabyeya gasifiers
- (iii) Relocate and rehabilitate Buddo gasifier
- (iv) Rehabilitate Kyambogo gasifier system
- (v) Support the installation of small scale gasifier units at community and institutional level for electricity generation

### Biofuels promotion

- (i) Draft bio-fuels bill presented to parliament
- (ii) Provide technical support to the Energy Multi-function platforms.
- (iii) Promote growing of energy crops for biofuels production

### Improved cook stove promotion

- (i) Partner with key actors (WWF, EEP, BEETA) to promote BETs
- (ii) Backstop EEP initiatives in promotion of BETs
- (iii) Promote UNACC activities and initiatives

### Briquetting technology promotion

- (i) Promote small scale briquetting enterprises
- (ii) Support the establishment of large scale briquetting enterprises

### Atomic Energy Council

- (i) Registration of sources of ionising radiation in Uganda.
- (ii) Search and Secure Radioactive Sources.
- (iii) Continue Inspection of facilities and sources therein.
- (iv) Conclude the Enforcement Policy for regulations.
- (v) Continue the Licensing of facilities of radiation sources.
- (vi) Continue the Monitoring of occupationally exposed workers.
- (vii) Development of five Year strategic plan.
- (viii) Development of Safety Standards & Guidelines
- (ix) Sensitize the public about radioactive sources.



# Vote: 017 Ministry of Energy and Mineral Development

## Vote Summary

### Nuclear Energy Unit

- (i) Finalise the development of Nuclear Energy Policy for Uganda.
- (ii) Finalise the development of the Nuclear Power roadmap.
- (iii) Continue coordination of technical cooperation programme.

### PETROLEUM EXPLORATION, DEVELOPMENT & PRODUCTION

#### (a) Legal and Regulatory Framework

- i. Following the putting in place of the Petroleum (Exploration, Development and Production) Act 2013 and the Petroleum (refining, gas conversion, transmission and midstream storage) Act 2013, new Regulations and Guidelines for the upstream and midstream activities will be concluded;
- ii. Standards and Codes of both upstream and midstream activities to be developed
- iii. Model Production Sharing Agreement (PSA) is to be reviewed and updated;
- iv. Monitoring and Evaluation (M&E) strategy for the National Oil and Gas Policy (NOGP) implementation will commence.

#### (b) Promotion of the Country's petroleum potential and Licensing

- i. Promotion of the country's petroleum potential both within and outside the country to be continued;
- ii. A petroleum licensing round and acquire geological, geophysical and geochemical data in the unlicensed basins and new areas prepared;
- iii. Non-exclusive seismic surveys, to acquire more geophysical data in old and new areas, in preparations for a licensing round held;
- iv. Resource assessment and laboratory analyses on the collected data and package them for promotional purposes conducted.

#### © Capacity Building

- i. Human resource development for the oil and gas sector through formal and informal training to be continued;
- ii. Seven (7) members of staff training in Petroleum Geoscience, Engineering and Refinery Design at postgraduate level;
- iii. Continue supporting Government petroleum training institutions, Uganda Petroleum Institute Kigumba (UPIK) and the Petroleum Degree (B.Sc. And M.Sc.) courses at Makerere University;
- iv. Implement the National content policy for the oil and gas sector;
- v. The new institutions, i.e. the Petroleum Directorate, the Petroleum Authority and National Oil Company to be put in place.

#### (d) Monitor the exploration for oil and gas activities by oil companies

- i. Monitoring of appraisal 3D seismic survey and drilling of appraisal wells in EA1 and E1A, accompanying well tests, plus other field operations continued;
- ii. Evaluate applications for production licenses and accompanying Field Development plans and Petroleum Reservoir Reports for fields whose appraisal is complete;
- iii. Monitor the sale of Extended Well Test Crude oil.

#### (e) Construction of the data centre and office block

- i. Complete Phase –2 of the construction of a data centre and office block;
- ii. Commence construction of phase 3 of the data centre and office block;
- iii. Maintenance of existing building and related infrastructure undertaken

#### (f) Complete putting in place and commence implementation of the Local content strategy and plan.

- i. The National Content Policy formulated.
- ii. Local content policy and plan implementation commenced;

#### (g) Continue implementation of the Communication Strategy

- i. Dissemination of information on oil and gas continued;

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ii. Stakeholder sensitization on the ongoing oil and gas activities in the country continued;

iii. Media reporting on oil and gas sector improved.

(h) Continue participating in Regional initiatives.

i. Regional conferences organized and/or attended.

ii. Eight regional meetings on oil and gas developments attended.

#### MIDSTREAM

(a) Investment Priorities and core projects

i. Compensation and resettlement of refinery project affected persons completed thus land for refinery development acquired;

ii. Special purpose vehicle for refinery development formed;

iii. A National transportation and storage Strategy and Plan for oil and gas developed;

iv. Detailed route survey for pipeline from the fields to the refinery and from the refinery to Buloba terminal undertaken;

v. RAP for pipeline from the fields to the refinery and from the refinery to Buloba terminal undertaken;

vi. Environmental Baseline Study for pipelines undertaken;

vii. Mater plan and detailed engineering design study for aerodrome development concluded;

viii. Logistics assessment study undertaken.

(b) Financing Strategy (Both Public and Private)

The refinery project will be developed on a Private-Public Partnership (PPP) basis through a joint venture company. The proposed shareholding is 60% (sixty) private and 40% (forty) public and a debt to equity ratio of about 70:30. The total project investment is estimated to be about USD 4bn.

It is also proposed that the East African Community Partner States participate with 10% out of the 40% of the public shares. Consultations with the Partner States are ongoing to determine the best arrangement for participation.

#### PETROLEUM SUPPLY, INFRASTRUCTURE & REGULATION

(i) Investment Priorities and core projects

Three projects will be core in FY 2014/15. These are:-

(a) Kenya-Uganda Refined Petroleum Products Pipeline

(b) Uganda-Rwanda Refined Petroleum Products Pipeline

(c) Development and stocking of Nakasongola fuel reserve

(ii) Kenya-Uganda Refined Petroleum Products Pipeline

During the FY 2014/15 this project will be at developmental stage with private operator having secured an EPC contractor. Implementation of the Resettlement Action Plan will be carried out during this period spearheaded by the two Governments in their respective territories

(iii) Uganda-Rwanda Refined Petroleum Products Pipeline

The feasibility study for this planned pipeline will be accomplished. The Private Operator will be selected under a Public Private Partnership arrangement during the FY 2014/15. The route in which the proposed pipeline is to transect will be selected.

(iv) Development and stocking of Nakasongola fuel reserve

Development of Nakasongola will be undertaken upon completion and recommendations of the technical studies. Stocking will commence once the facility is ready to receive the petroleum products.

(v) Role of Private Sector, Civil Society and Development Partners

The three projects enlisted above are on a Public Private Partnership arrangement private sector is involved,

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civil society and development partners prospective firms will be sourced among these stakeholders.

### MINERAL EXPLORATION, DEVELOPMENT & PRODUCTION

- (i) Uranium Exploration: Carry out Uranium exploration on topographic map sheets 66/1 (Mobuku), 66/2 (Kahungye) and 39/2 (Pakanyi).
- (ii) Geosites and Geoparks: Map geosites and geoparks and recommend for gazetting by the line ministry.
- (iii) National Seismological Network: Refurbish earthquake research facility and extension of the network coverage to prone zones in Uganda.
- (iv) Mining Environmental Laboratory: Establish and equip a mining environmental laboratory for analyzing environmental samples.
- (v) Uganda Mining Legislation: Review the mining legislation and gazette the Earth Scientist
- (vi) Exploration of Rare Earth Element (REE): Follow up on the REE exploration with the view to support the high technology industry development in Uganda.
- (vii) Geodata backup and recovery program: Install sustainable data backup and offsite recovery infrastructure.
- (viii) Publication of the new geology and minerals map of Uganda: Publish new geological data obtained during the SMMRP project to support research and investment in the mineral sector.
- (ix) Karamoja Project:
  - Carry out airborne geophysical surveys of Karamoja region
  - Continue geological mapping, geochemical and geophysical surveys and mineral resources assessment of Karamoja to completion
  - 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
  - Carry out inspections and monitoring of mining operations in Karamoja Region
  - Equip the regional office and installation of a mineral mini laboratory in Karamoja
- (x) Geothermal project: To continue geothermal explorations in Kibiro, Katwe, Buranga, Panyimur and other geothermal areas.

### POLICY, PLANNING AND SUPPORT SERVICES:

- (i) Develop a strategy to reduce the high labour turn over.
- (ii) Operationalize the newly developed communication strategy and strengthen the communication function.
- (iii) Finalize the development of a consolidated five year strategic Investment Plan, Monitoring and Evaluation Framework.
- (iv) Renovate and manage Amber house and start the development of the adjacent plot.
- (v) Support the operations of the new institutions (National Oil Company and Petroleum Authority) created by the new legislation and new staff structure.
- (vi) Strengthen the public relations office to link with the focal point persons at the local governments.
- (vii) Planning, Budgeting and Monitoring undertaken
- (viii) Financial Management undertaken.
- (ix) Procurement and Maintenance of Assets and Stores

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

Vote Function Key Output	2012/13	2013/14		MTEF Projections
		Approved	Outturn by	

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Indicators and Costs:	Outturn	Plan	End Dec	2014/15	2015/16	2016/17
<b>Vote: 017 Ministry of Energy and Mineral Development</b>						
<b>Vote Function:0301 Energy Planning,Management &amp; Infrastructure Dev't</b>						
Percentage of Audited Institutions implementing Energy efficiency recommendations		100	100	100	100	100
Percentage of Energy Losses in the distribution network		23	25	20	18	15
No. of improved stoves disseminated to households		50000	125	48,000	48,000	48,000
No. of Renewable Energy projects under development		4	4	4	6	6
Number of Solar systems installed		7000	1000	7,500	8,000	8,500
Status of development of Kikagate hydropower plant				6. Construction	6. Construction	7. Commissioning
Status of development of Maziba hydropower plant				Procurement process for the contractor after channeling of the additional financing to UEDCL the implementing Agency is done.		
Distance in KM of Rural Electrification schemes covered with Government support		1200	0	1,200	1,300	1,500
Number of District Headquarters electrified		10	0	5	3	2
<b>Vote Function Cost (US\$ bn)</b>	<i>N/A</i>	<b>454.195</b>	<b>42.425</b>	<b>293.582</b>	<b>125.987</b>	<b>118.867</b>
<i>VF Cost Excl. Ext Fin.</i>	<i>93.687</i>	<i>102.867</i>	<i>42.425</i>	<i>102.867</i>	<i>N/A</i>	<i>N/A</i>
<b>Vote Function:0302 Large Hydro power infrastructure</b>						
Status of Ayago power project				3. RAP studies	4. RAP implementation	5. Selection of contractor
Status of Isimba power project				6. Construction	6. Construction	6. Construction
Status of Karuma power project				6. Construction	6. Construction	6. Construction
Percentage of land claimant paid under Resettlement Action Plan (RAP)		20	20	90	100	100
Percentage of land freed up for contractors			20	80	100	100
<b>Vote Function Cost (US\$ bn)</b>	<i>N/A</i>	<b>1,093.245</b>	<b>32.341</b>	<b>1,250.063</b>	<b>553.800</b>	<b>2,039.419</b>
<i>VF Cost Excl. Ext Fin.</i>	<i>0.500</i>	<i>1,091.9</i>	<i>32.341</i>	<i>1,096.900</i>	<i>N/A</i>	<i>N/A</i>
<b>Vote Function:0303 Petroleum Exploration, Development &amp; Production</b>						
Number of Government Officials enrolled for professional training in Oil and gas discipline		8	5	6	8	8
Number of Officials who successfully complete professional		100	7	20	25	30

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Vote Function Key Output Indicators and Costs:	2012/13 Outturn	2013/14 Approved Plan	Outturn by End Dec	MTEF Projections		
				2014/15	2015/16	2016/17
training in Oil and Gas						
The petroleum institutions established (Petroleum Directorate, the Petroleum Authority and the National Oil Company)				Three institutions PAU, NATOIL and PD established		
Number of wells drilled		30	6	30	40	30
% of compliance on recommended follow up actions		100	100	100	100	100
Number of line (km) of seismic data acquired.		800	114	800	600	600
Numbr of stakeholder cmmunities consulted and sensitized		20	5	20	30	50
Lead investor for the Refinery Development procured				6. Front End Enginering Designs ( FEED)	7. Engineering Procurement and Construction	
Logistics study report for the Oil Refinery finalized and submitted				70	100	
Number of people resettled under RAP implementation to free the 29 sq.km land for the oil refinery		4. RAP Implementation	0	4. RAP Implementation		
Way-leaves for the pipelines to and from the Refinery acquired				4. RAP Implementation		
<b>Vote Function Cost (US\$ bn)</b>	<i>N/A</i>	<b>68.733</b>	<b>25.332</b>	<b>38.622</b>	<b>65.144</b>	<b>55.005</b>
<i>VF Cost Excl. Ext Fin.</i>	<i>22.034</i>	<i>54.414</i>	<i>25.332</i>	<i>36.232</i>	<i>N/A</i>	<i>N/A</i>
<b>Vote Function:0304 Petroleum Supply, Infrastructure and Regulation</b>						
% of the facilities conforming to the Petroleum facilities standards monitored conforming to standards		15	5	80	90	100
Number of days of stock levels for white products at petroleum facilities		0.07	0.07	10	15	20
Number of petroleum facilities monitored			20	350	400	500
<b>Vote Function Cost (US\$ bn)</b>	<b>1.057</b>	<b>6.245</b>	<b>1.116</b>	<b>6.245</b>	<b>28.245</b>	<b>25.630</b>
<b>Vote Function:0305 Mineral Exploration, Development &amp; Production</b>						
Number of mineral artisans and small scale miners trained		600	85	700	750	800
Number of equipment, chemicals, and standards purchased for analytical laboratories			0	10	15	20
Number of Government Officials/staff enrolled for training in geosciences fields		40	4	50	30	35
Development of Sukulu phosphates project				30	40	
Exploration and mining on Muko Iron ore resources and deposits in South West Uganda Monitored				65		
Number of geological maps		250	1	300	350	400

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Vote Function Key Output Indicators and Costs:	2012/13 Outturn	2013/14 Approved Plan	Outturn by End Dec	MTEF Projections		
				2014/15	2015/16	2016/17
produced and disseminated						
Number of mineral licenses granted		500	79	120	120	120
Number of mining site inspection and monitoring conducted		12	3	12	12	12
% of mining companies complying with mining regulations			50	90	100	100
<b>Vote Function Cost (US\$ bn)</b>	<b>1.922</b>	<b>8.038</b>	<b>1.852</b>	<b>8.038</b>	<b>80.643</b>	<b>67.447</b>
<b>Vote Function:0349 Policy, Planning and Support Services</b>						
<b>Vote Function Cost (US\$ bn)</b>	<b>7.513</b>	<b>20.100</b>	<b>8.210</b>	<b>20.100</b>	<b>21.268</b>	<b>26.623</b>
<b>Cost of Vote Services (US\$ Bn)</b>	<b>N/A</b>	<b>1,650.557</b>	<b>111.275</b>	<b>1,616.651</b>	<b>875.087</b>	<b>2,332.992</b>
<i>Vote Cost Excl. Ext Fin</i>	<i>126.714</i>	<i>1,283.565</i>	<i>111.275</i>	<i>1,270.383</i>	<i>N/A</i>	<i>N/A</i>

### Medium Term Plans

#### 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:

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- (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 gazettement of geosites and geoparks.
- (vii) Put in place an earthquake administration policy, expand the network of operation centres, design an earthquake disaster management plan, and equipping 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

### (ii) Efficiency of Vote Budget Allocations

To improve the performance of vote budget allocations and achieve value for money in the oil and gas sector a monitoring and evaluation framework has been formulated and efforts have been made to improve the procurement plans.

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

Billion Uganda Shillings	(i) Allocation (Shs Bn)				(ii) % Vote Budget			
	2013/14	2014/15	2015/16	2016/17	2013/14	2014/15	2015/16	2016/17
Key Sector	1,222.7	<b>1,251.0</b>	183.4	161.7	74.1%	<b>77.4%</b>	57.1%	55.1%
Service Delivery	91.7	<b>121.8</b>	148.2	136.4	5.6%	<b>7.5%</b>	46.1%	46.4%

### MINERAL SECTOR BUDGET OBJECTIVES

Mineral sector work plans are to derive economic gains for the mineral resources to benefit society and Ugandans over the short term, midterm and long term with environmental sustainability. Environmental sustainability means extracting minerals without destroying the environment i.e. vegetation cover, water, flora and fauna. The work plans are to enable utilization of the mineral resources to overcome abject poverty and also create horizontal and vertical linkages in the other sectors of the economy. The work plans are integrated in local, national regional mechanisms to harness the mineral resources without causing conflicts by avoiding the so called natural 'resources curse' and also learning from outcomes of success stories in mining driven economies and also from those economies that do not have a comparative advantage over mineral resources but have heavily invested in research and development through highly trained human resource and skilling its population in adding value from the little mineral wealth and imports of strategic minerals make high value for money products to global market.

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

Unit Cost Description	Actual 2012/13	Planned 2013/14	Actual by Sept	Proposed 2014/15	Costing Assumptions and Reasons for any Changes and Variations from Plan
<i>Vote Function:0301 Energy Planning,Management &amp; Infrastructure Dev't</i>					
Cost per Mega Watt hour (MWh) of thermal generated electricity					The cost represents the energy price per MW generated at Aggreko Mutundwe Plant priced at USD 160.78 per MWh, calculated at a base price of 1US = 1980UShs (Feb 2009 prices)

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Unit Cost Description	Actual 2012/13	Planned 2013/14	Actual by Sept	Proposed 2014/15	Costing Assumptions and Reasons for any Changes and Variations from Plan
Cost per kilo Watt hour (kWh) sold by the system operator UETCL to the energy distributors					The cost represents the peak hour cost of electricity transmitted by UETCL
Cost per kilo Watt hour (kWh) of electricity consumed by households					Approved retail tariffs by the Electricity Regulatory Authority
<i>Vote Function:0302 Large Hydro power infrastructure</i>					
Cost per Mega Watt of electricity produced per hour by a large hydro power station					Approved energy tariff for the power generated at the Nalubaale - Kiira operated by a concessionaire
<i>Vote Function:0303 Petroleum Exploration, Development &amp; Production</i>					
Number of line km of seismic data acquired in the Albertine Graben.					Costs incurred vary from licenced companies and the areas of operation. GoU only facilitates staff to carry out monitoring.
Drilling of one well		0			Costs incurred vary from licenced companies and the areas of operation. GoU only facilitates staff to carry out monitoring.
<i>Vote Function:0304 Petroleum Supply, Infrastructure and Regulation</i>					
Cost of monitoring a petroleum facility					
<i>Vote Function:0305 Mineral Exploration, Development &amp; Production</i>					
Mineral analysis per sample in international laboratory for 51 elements	91,000	91,000	91,000	91,000	Mineral analysis per sample in international laboratory for fifty (51) elements. This is only the laboratory expense excluding freight or transportation and data interpretation
Cost per line kilometre of airborne geophysical data		17,500	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 2014/15, Karuma Hydro Power Project has a budgetary allocation of Ush. 1,043.6 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**

Billion Uganda Shillings	(i) Allocation (Shs Bn)				(ii) % Vote Budget			
	2013/14	2014/15	2015/16	2016/17	2013/14	2014/15	2015/16	2016/17
Consumption Expenditure(Outputs Provided)	46.3	52.6	129.2	117.2	2.8%	3.3%	40.2%	39.9%
Grants and Subsidies (Outputs Funded)	73.4	93.5	45.3	48.1	4.4%	5.8%	14.1%	16.4%
Investment (Capital Purchases)	1,530.9	1,470.5	146.7	128.3	92.7%	91.0%	45.7%	43.7%



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Grand Total	1,650.6	1,616.7	321.3	293.6	100.0%	100.0%	100.0%	100.0%
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For the FY 2014/15, the major capital purchases are geared 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. Downstream 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 Resettlement Action Plan for the refinery land 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.

**Table V2.6: Major Capital Investments**

Project, Programme Vote Function Output <i>US\$ Thousand</i>	2013/14		2014/15
	Approved Budget, Planned Outputs (Quantity and Location)	Actual Expenditure and Outputs by September (Quantity and Location)	Proposed Budget, Planned Outputs (Quantity and Location)
<b>Project 1223 Institutional Support to Ministry of Energy and Mineral Development</b>			
<b>034972 Government Buildings and Administrative Infrastructure</b>	<ul style="list-style-type: none"> <li>- Retooling of Offices at Amber house</li> <li>- Complete redesign and implementation Voice and data infrastructure</li> <li>- Secure laboratory infrastructure at GSMD</li> </ul>	<ul style="list-style-type: none"> <li>- Furniture, computers, printers procured for offices</li> <li>- Redesign was completed, cabling near completion.</li> </ul>	<ul style="list-style-type: none"> <li>- Comprehensively renovate and manage Amber House and commence development process of the adjacent plot</li> <li>- Retool Offices at Amber house</li> <li>- Complete Phase II of the redesign and implementation Voice and data infrastructure</li> </ul>
<b>Total</b>	<b>3,725,965</b>	<b>11,950</b>	<b>4,725,965</b>
<i>GoU Development</i>	<i>3,725,965</i>	<i>11,950</i>	<i>4,725,965</i>
<i>External Financing</i>	<i>0</i>	<i>0</i>	<i>0</i>
<b>034976 Purchase of Office and ICT Equipment, including Software</b>	<ul style="list-style-type: none"> <li>Output-Data Recovery Plan developed</li> <li>ICT and Resource Centre equiped</li> <li>Procure and maintain internet server system</li> <li>Internet services maintained</li> <li>Probox interchange system</li> </ul>	<ul style="list-style-type: none"> <li>- Procurement for consultancy services for the output data recovery plan initiated. Documentation is waiting for approval.</li> <li>- Computer Server machine was procured.</li> <li>- Anti virus software was procured and installed.</li> <li>- Internet services were maintained.</li> <li>- Probox interchange system was maintained. It is being considered for elimination.</li> </ul>	<ul style="list-style-type: none"> <li>- Complete the development of a disaster recovery solution for the Ministry</li> <li>- Resource Centre equipped</li> <li>- Internet services procured and maintained</li> <li>- Continue with the procurement of Computer peripherals/ hardware and softwares/ licencing</li> <li>- Computer equipment serviced</li> </ul>
<b>Total</b>	<b>1,900,000</b>	<b>163</b>	<b>1,900,000</b>
<i>GoU Development</i>	<i>1,900,000</i>	<i>163</i>	<i>1,900,000</i>
<i>External Financing</i>	<i>0</i>	<i>0</i>	<i>0</i>

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Project, Programme Vote Function Output <i>US\$ Thousand</i>	2013/14		2014/15
	Approved Budget, Planned Outputs (Quantity and Location)	Actual Expenditure and Outputs by September (Quantity and Location)	Proposed Budget, Planned Outputs (Quantity and Location)
<b>034977 Purchase of Specialised Machinery &amp; Equipment</b>	Equipping and retooling of the Mineral laboratory	- Procurement process for mineral laboratory equipment is ongoing.  - Fencing of GSMD facilities was on-going by close of quarter 1	Implement phase II of Equipping and retooling the GSMD Mineral Laboratory Infrastructure
<b>Total</b>	<b>600,000</b>	33,328	<b>600,000</b>
<i>GoU Development</i>	<i>600,000</i>	<i>33,328</i>	<i>600,000</i>
<i>External Financing</i>	<i>0</i>	<i>0</i>	<i>0</i>
<b>034979 Acquisition of Other Capital Assets</b>	- Continue with Feasibility Studies for Rwimi/Nyamba Hydro Power Plant  - Complete the development of the Energy and Mineral Investor Master Plan	Procurement of a Consultant for the Feasibility Studies for Rwimi/Nyamba Hydro Power Plant was near completion. Financial bids were opened and the best evaluated bidder was due to be announced.	Complete the Feasibility Studies for Rwimi/Nyamba Hydro Power Plant
<b>Total</b>	<b>3,840,415</b>	1,268,319	<b>1,840,415</b>
<i>GoU Development</i>	<i>3,840,415</i>	<i>1,268,319</i>	<i>1,840,415</i>
<i>External Financing</i>	<i>0</i>	<i>0</i>	<i>0</i>
<b>Project 1199 Uganda Geothermal Resources Development</b>			
<b>030577 Purchase of Specialised Machinery &amp; Equipment</b>	Deep subsurface geothermal exploration equipment and laboratory procured.	Initiated procurement of geothermal exploration equipment (MT)	Continue the procurement of Deep subsurface geothermal exploration equipment and laboratory consumables
<b>Total</b>	<b>2,180,000</b>	18,343	<b>2,180,000</b>
<i>GoU Development</i>	<i>2,180,000</i>	<i>18,343</i>	<i>2,180,000</i>
<i>External Financing</i>	<i>0</i>	<i>0</i>	<i>0</i>
<b>Project 1200 Airborne Geophysical Survey and Geological Mapping of Karamoja</b>			
<b>030572 Government Buildings and Administrative Infrastructure</b>	Karamoja regional training centre and offices constructed.	Initiated procurement of a contractor construct Karamoja Regional Office and training centre for mineral development.  Initiated procurement of project computers and printers.  Initiated the purchase of cartridges and procurement of maintenance services  Initiated the purchase of anti-virus, upgrade and back-up systems.  Initiated the procurement of active fault mapping equipment and landslide investigations.  Produced regional earthquake bulletins with difficulties of funding.  Disseminated seismic data to data users in infrastructure	Construct and equip a regional minerals office for Karamoja region; set up a training centre for ASM in Moroto

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Project, Programme	2013/14		2014/15
Vote Function Output <i>US\$ Thousands</i>	Approved Budget, Planned Outputs (Quantity and Location)	Actual Expenditure and Outputs by September (Quantity and Location)	Proposed Budget, Planned Outputs (Quantity and Location)
		planning, construction of Karuam Hydro Power dam and other small hydro power stations.	
		Initiated Procure furniture and computers.	
<b>Total</b>	<b>800,000</b>	<i>0</i>	<b>800,000</b>
<i>GoU Development</i>	<i>800,000</i>	<i>0</i>	<i>800,000</i>
<i>External Financing</i>	<i>0</i>	<i>0</i>	<i>0</i>
<b>030577 Purchase of Specialised Machinery &amp; Equipment</b>	Engineering geology investigations conducted and geo-hazards monitored, active fault mapped	No funds were released for this activity  Disseminated seismic data to data users in infrastructure planning, construction of Karuam Hydro Power dam and other small hydro power stations.	Procurement and installation of Specialised equipment.
<b>Total</b>	<b>950,000</b>	<i>12,028</i>	<b>950,000</b>
<i>GoU Development</i>	<i>950,000</i>	<i>12,028</i>	<i>950,000</i>
<i>External Financing</i>	<i>0</i>	<i>0</i>	<i>0</i>
<b>Project 1258 Downstream Petroleum Infrastructure</b>			
<b>030471 Acquisition of Land by Government</b>	<ul style="list-style-type: none"> <li>•Updated RAP the Kenya-Uganda oil pipe line in place</li> <li>- Private Operator selected</li> <li>-Project Agreements and documents updated</li> <li>-Wayleave acquired and handled over to the private investor or development</li> </ul>	<ul style="list-style-type: none"> <li>- 2 JCC meetings held</li> <li>- Project Documents developed</li> <li>- Selection process of a Private Operator is near conclusion.</li> </ul>	<ul style="list-style-type: none"> <li>- Project documents drafting finalized for Kenya-Uganda.</li> <li>- Drafting of Project Agreements for Kenya-Uganda finalized.</li> <li>- EIA for Kenya-Uganda project finalized.</li> <li>- Resettlement Action Plan (RAP) updated (Kenya-Uganda)</li> <li>- RAP implementation for Kenya-Uganda commenced</li> <li>- Pipeline construction for Kenya-Uganda commenced</li> <li>- Feasibility study for Uganda-Rwanda pipeline project completed</li> <li>- Pipe line routing for Uganda-Rwanda undertaken</li> <li>- Private investor for Uganda-Rwanda Pipeline selected</li> <li>- RAP for Uganda-Rwanda development commenced</li> </ul>
<b>Total</b>	<b>1,900,000</b>	<i>186,243</i>	<b>1,900,000</b>
<i>GoU Development</i>	<i>1,900,000</i>	<i>186,243</i>	<i>1,900,000</i>

# Vote: 017 Ministry of Energy and Mineral Development

## Vote Summary

Project, Programme Vote Function Output <i>US\$ Thousands</i>	2013/14		2014/15
	Approved Budget, Planned Outputs (Quantity and Location)	Actual Expenditure and Outputs by September (Quantity and Location)	Proposed Budget, Planned Outputs (Quantity and Location)
<i>External Financing</i>	0	0	0
<b>030476 Purchase of Office and ICT Equipment, including Software</b>	<ul style="list-style-type: none"> <li>- NPIS developed and operational</li> <li>- 5 staff attain specialized training in usage of NPIS</li> <li>- Necessary hardware procured</li> <li>- 5 year subscription to PLATTS done</li> <li>- Office equipment and furniture procured</li> </ul>	<ul style="list-style-type: none"> <li>- TOR for development of NPIS developed</li> <li>- Office Equipment procured</li> </ul>	<ul style="list-style-type: none"> <li>- Development of NPIS completed</li> <li>- 5 staff attain specialized training in operating and management of NPIS</li> <li>- Necessary hardware procured</li> <li>- five year subscription to PLATTS done</li> </ul>
<b>Total</b>	<b>700,000</b>	0	<b>700,000</b>
<i>GoU Development</i>	<i>700,000</i>	0	<i>700,000</i>
<i>External Financing</i>	<i>0</i>	<i>0</i>	<i>0</i>
<b>030477 Purchase of Specialised Machinery &amp; Equipment</b>	<ul style="list-style-type: none"> <li>- Codes of practice for downstream petroleum sub-sector in place</li> <li>- Organizing 5 regional work shop each financial year to sensitize the population on petroleum products handling</li> <li>- Codes of practice enforced</li> <li>- HSE for downstream petroleum sub-sector in place</li> </ul>	<ul style="list-style-type: none"> <li>- TOR for development of codes of practise developed</li> </ul>	<ul style="list-style-type: none"> <li>- Downstream petroleum policy in place</li> <li>- Road map for revising the regulatory framework for downstream petroleum in place</li> <li>- Supervision of the HSE consultant continues</li> <li>- 20 standards developed</li> <li>- 5 stakeholders consultative meetings held</li> <li>- 5 regional workshops for sensitization on the developed standards held</li> <li>- HSE training manual in place</li> <li>- HSE protective gears for PSD staff procured</li> </ul>
<b>Total</b>	<b>1,120,000</b>	41,550	<b>720,000</b>
<i>GoU Development</i>	<i>1,120,000</i>	<i>41,550</i>	<i>720,000</i>
<i>External Financing</i>	<i>0</i>	<i>0</i>	<i>0</i>
<b>030479 Acquisition of Other Capital Assets</b>	<ul style="list-style-type: none"> <li>- JST stocked with products and operational</li> <li>- Independent certifier procured and report in place</li> <li>- Feasibility study for Nakasongola fuel depot in place</li> <li>- Private investor for Nakasongola in place</li> <li>- JST private operator supervised</li> </ul>	<ul style="list-style-type: none"> <li>- JST operational and stocked with petroleum products</li> <li>- TOR for feasibility study for Nakasongola in place</li> </ul>	<ul style="list-style-type: none"> <li>- Studies and designs for Nakasongola Strategic Reserves completed</li> <li>- Nakasongola Strategic Reserves development commenced</li> <li>- Feasibility study of Kampala common user terminal commenced</li> </ul>
<b>Total</b>	<b>1,280,000</b>	0	<b>1,680,000</b>
<i>GoU Development</i>	<i>1,280,000</i>	0	<i>1,680,000</i>
<i>External Financing</i>	<i>0</i>	<i>0</i>	<i>0</i>
<b>Project 1184 Construction of Oil Refinery</b>			

# Vote: 017 Ministry of Energy and Mineral Development

## Vote Summary

Project, Programme Vote Function Output <i>US\$ Thousands</i>	2013/14		2014/15
	Approved Budget, Planned Outputs (Quantity and Location)	Actual Expenditure and Outputs by September (Quantity and Location)	Proposed Budget, Planned Outputs (Quantity and Location)
<b>030371 Acquisition of Land by Government</b>			<p>Detailed route survey for crude oil pipeline from the fields to the refinery and products pipeline from the refinery to Buloba terminal concluded</p> <p>Resettlement Action Plan (RAP) study crude oil from the field to the refinery and products pipeline from the refinery to Buloba terminal undertaken</p> <p>Environmental Baseline Study for pipelines undertaken</p>
<b>Total</b>	<b>0</b>	<b>0</b>	<b>2,929,000</b>
<i>GoU Development</i>	<i>0</i>	<i>0</i>	<i>2,929,000</i>
<i>External Financing</i>	<i>0</i>	<i>0</i>	<i>0</i>
<b>030380 Oil Refinery Construction</b>	<ul style="list-style-type: none"> <li>- Land for the refinery and supporting infrastructure acquired;</li> <li>- Continued implementation and completion of Logistics study</li> <li>- Transaction Advisory services for Refinery development undertaken;</li> <li>- Pre - Front End Engineering Design (FEED) for refinery development completed.</li> <li>- Aviation studies for aerodrome development undertaken</li> <li>- Crude oil pipeline to the refinery and storage facilities study recommendations implemented;</li> <li>- Pre-FEED for refinery products' pipeline from Hoima to Buloba terminal conducted.</li> </ul>	<ul style="list-style-type: none"> <li>- Compensation and resettlement process implementation commenced with;</li> <li>- Disclosure of compensation amounts to bona fide project affected persons.</li> <li>- Training of project affected persons in financial management.</li> <li>- Sensitization meetings held with locals in the refinery area in July 2013.</li> <li>- Two meetings held with Civil Society Organisations.</li> <li>- Terms of reference for the procurement of a Consultant for the Master plan and detailed engineering study developed and finalized.</li> <li>- A Request for Expression of Interest for the procurement of a consultant developed and is ready for issuing in Q2 - 2013/14.</li> <li>- One consultative meeting held with Ministry of Works and Transport and Civil Aviation Authority in July 2013.</li> <li>- The Consultant developed a fully flexible financial model, submitted draft commercial and corporate project structures and</li> </ul>	<p>Acquisition of land for the refinery development concluded.</p> <p>Master plan and detailed engineering design study for the aerodrome development concluded</p> <p>Coordination of the activities of the Transaction Advisor</p> <p>Logistics Assessment study undertaken</p>

# Vote: 017 Ministry of Energy and Mineral Development

## Vote Summary

Project, Programme Vote Function Output <i>US\$ Thousands</i>	2013/14		2014/15
	Approved Budget, Planned Outputs (Quantity and Location)	Actual Expenditure and Outputs by September (Quantity and Location)	Proposed Budget, Planned Outputs (Quantity and Location)
		<p>a pricing and sales strategy for crude oil and refined products. These were reviewed and comments generated and incorporated.</p> <p>- A waiver from PPDA for the procurement of a lead investor using procedures based on the Public Private Partnership (PPP) policy and Bill obtained paving way for the preparations for the procurement process to start.</p> <p>- The TA carried out equity and debt sounding with a number of potential financiers and investors, respectively.</p> <p>- The Transaction Advisor also prepared a Request for Qualification for the lead investor/developer. This was reviewed and finalized ready for issuing.</p> <p>- One meeting of the steering Committee on refinery development held on 14th August 2013.</p> <p>- A meeting held with the TA in July to review the request for a waiver from PPDA and the draft RFQ.</p>	
<b>Total</b>	<b>39,085,400</b>	<b>7,354,182</b>	<b>32,277,680</b>
<i>GoU Development</i>	<i>32,695,500</i>	<i>7,354,182</i>	<i>29,887,780</i>
<i>External Financing</i>	<i>6,389,900</i>	<i>0</i>	<i>2,389,900</i>
<b>Project 1183 Karuma Hydroelectricity Power Project</b>			
<b>030280 Large Hydro Power Infrastructure</b>	<p>-EPC Contract Signed and Contractor for Karuma Hydropower Project on Site.</p> <p>-Five (5) Sensitisation Workshops for Karuma HP Project affected people and local community held.</p> <p>-100% of Project Affected Persons for Karuma HPP Compensated/Resettled.</p> <p>-100% Land Freed Up for Contractors.</p> <p>-RAP implementing Agency for Evacuation Lines in place.</p>	<p>Government entered a bilateral arrangement with the Chinese government to expedite the construction of the project.</p> <p>A Contract has been executed with Sinohydro Corporation to construct both the power plant and transmission line. H.E. the President officiated the ground breaking on the 12th August 2013.</p>	<p>-EPC Contract Signed and Contractor for Karuma Hydropower Project on Site.</p> <p>-Five (5) Sensitisation Workshops for Karuma HP Project affected people and local community held.</p> <p>-100% of Project Affected Persons for Karuma HPP Compensated/Resettled.</p> <p>-100% Land Freed Up for Contractors.</p> <p>-RAP implementing Agency for Evacuation Lines in place.</p>

# Vote: 017 Ministry of Energy and Mineral Development

## Vote Summary

Project, Programme Vote Function Output <i>US\$ Thousand</i>	2013/14 Approved Budget, Planned Outputs (Quantity and Location)	Actual Expenditure and Outputs by September (Quantity and Location)	2014/15 Proposed Budget, Planned Outputs (Quantity and Location)
	-100% of the Project Affected Persons for Karuma HPP Power Evacuation Lines Compensated/ Resettled.		-100% of the Project Affected Persons for Karuma HPP Power Evacuation Lines Compensated/ Resettled.
	-Construction of Karuma HPP Commences. 20% of the Works Covered.		-Construction of Karuma HPP Commences. 20% of the Works Covered.
	- Preparatory survey for Ayago		- Preparatory survey for Ayago
<b>Total</b>	<b>1,096,900,000</b>	32,338,000	<b>1,096,900,000</b>
<i>GoU Development</i>	<i>1,096,900,000</i>	32,338,000	<i>1,096,900,000</i>
<i>External Financing</i>	<i>0</i>	<i>0</i>	<i>0</i>
<b>Project 1256 Ayago Interconnection Project</b>			
<b>030271 Acquisition of Land by Government</b>	Detailed Feasibility Studies and Engineering Plans	-A memorandum of understanding was signed with China Gezhouba Group Company Limited (CGGC).  -CGGC is to undertake the Financing, Engineering Procurement and Execution of the Ayago Hydro Power Project.  -Feasibility study on going by JICA. Status 50%  Disbursements: Nil	- Detailed Feasibility Studies and Engineering Plans
<b>Total</b>	<b>1,344,800</b>	0	<b>153,163,239</b>
<i>GoU Development</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>External Financing</i>	<i>1,344,800</i>	<i>0</i>	<i>153,163,239</i>
<b>Project 1023 Promotion of Renewable Energy &amp; Energy Efficiency</b>			
<b>030177 Purchase of Specialised Machinery &amp; Equipment</b>			- Ten (10) small wind energy systems procured
<b>Total</b>	<b>0</b>	0	<b>5,136,059</b>
<i>GoU Development</i>	<i>0</i>	<i>0</i>	<i>192,689</i>
<i>External Financing</i>	<i>0</i>	<i>0</i>	<i>4,943,370</i>
<b>Project 1025 Karuma Interconnection Project</b>			
<b>030171 Acquisition of Land by Government</b>			- RAP Implementation
<b>Total</b>	<b>0</b>	0	<b>1,500,000</b>
<i>GoU Development</i>	<i>0</i>	<i>0</i>	<i>1,500,000</i>
<i>External Financing</i>	<i>0</i>	<i>0</i>	<i>0</i>
<b>Project 1026 Mputa Interconnection Project</b>			
<b>030171 Acquisition of Land by Government</b>			- RAP Implementation
<b>Total</b>	<b>0</b>	0	<b>1,500,000</b>
<i>GoU Development</i>	<i>0</i>	<i>0</i>	<i>1,500,000</i>

# Vote: 017 Ministry of Energy and Mineral Development

## Vote Summary

Project, Programme Vote Function Output <i>US\$ Thousand</i>	2013/14		2014/15
	Approved Budget, Planned Outputs (Quantity and Location)	Actual Expenditure and Outputs by September (Quantity and Location)	Proposed Budget, Planned Outputs (Quantity and Location)
<i>External Financing</i>	0	0	0
<b>030179 Acquisition of Other Capital Assets</b>	- Construction of Nkenda- Hoima 220kV transmission line and associated substations.  - RAP Implementation	Monitored activities	- Construction of Nkenda- Hoima 220kV transmission line and associated substations.
<b>Total</b>	<b>9,556,800</b>	<i>166,667</i>	<b>8,056,800</b>
<i>GoU Development</i>	<i>1,500,000</i>	<i>166,667</i>	0
<i>External Financing</i>	<i>8,056,800</i>	0	<i>8,056,800</i>
<b>Project 1137 Mbarara-Nkenda/Tororo-Lira Transmission Lines</b>			
<b>030171 Acquisition of Land by Government</b>			- RAP implementation
<b>Total</b>	<b>0</b>	0	<b>5,000,000</b>
<i>GoU Development</i>	0	0	<i>5,000,000</i>
<i>External Financing</i>	0	0	0
<b>030179 Acquisition of Other Capital Assets</b>	- Construction of Mbarara- Nkenda & Tororo-Lira transmission lines and associated substations  -RAP implemnetation	- Geotechnical soil investigations completed for Opuyo substation  - Route alignment was completed  - Detailed survey completed , 234 km of which 234 km profile was submitted and 195 km was approved.  - DTA60 and DAT tower testing conducted between 13th - 15thJuly & 19th - 21st July in India.  - Tower Material Test for DS1 along with Stub material for DTA & DTA 60 was conducted between 17th & 18th July in India  - Insulator Unit test and string test performed from 10th - 23rd July 2013 in China  - DCPT completed for 295 tower spots of which 113 has been approved  - Geotechnical soil investigations completed for Fort Portal Substation, Mbarara North substation and Nkenda Substation  - Route Alignment Survey - AP7 to AP 54 , 157.4km approved. Remaining section AP1 to AP7 - 1km, not completed (Substation	- Construction of Mbarara- Nkenda (Lot 2)&Tororo-Lira (Lot 1) transmission lines and associated substations



# Vote: 017 Ministry of Energy and Mineral Development

## Vote Summary

Project, Programme	2013/14		2014/15
Vote Function Output <i>US\$ Thousand</i>	Approved Budget, Planned Outputs (Quantity and Location)	Actual Expenditure and Outputs by September (Quantity and Location)	Proposed Budget, Planned Outputs (Quantity and Location)
		orientation near Mbarara North).  - Detailed survey for 148 km completed and 108 km Profile approved  - DCPT completed for 165 Tower spots and 51 approved.  - Design calculation for DTA, DTA60 & DTA90 approved  - Earthworks and preliminary works at Nkenda and Mbarara North substation sites completed  - Electricity services affordability study presented and reviewed	
<b>Total</b>	<b>110,694,300</b>	<b>1,011,872</b>	<b>34,400,000</b>
<i>GoU Development</i>	<i>5,400,000</i>	<i>1,011,872</i>	<i>400,000</i>
<i>External Financing</i>	<i>105,294,300</i>	<i>0</i>	<i>34,000,000</i>
<b>Project 1140 NELSAP</b>			
<b>030171 Acquisition of Land by Government</b>			-RAP implementation
<b>Total</b>	<b>0</b>	<b>0</b>	<b>3,200,000</b>
<i>GoU Development</i>	<i>0</i>	<i>0</i>	<i>3,200,000</i>
<i>External Financing</i>	<i>0</i>	<i>0</i>	<i>0</i>
<b>030179 Acquisition of Other Capital Assets</b>	-RAP implementation  - Construction works of Bujagali-Tororo-Lessos and Mbarara-Mirama- transmission lines	-The Euro and USD portion of Advance Payment was paid to the Contractor. The UGX amount is yet to be paid.  -Line route alignment for Lot A & B is complete and Survey is 64% for Lot A, and 4% for Lot B.  -Lot C contractor received Mbarara and Bujagali Sites.  -Procurement of contractors for construction of resettlement houses for Project Affected Persons is ongoing.  -RAP Implementation for the project is on-going; overall clearance is at 60% for Mbarara - Mirama line and 70% for Bujagali - Tororo line.	- Construction works of Bujagali-Tororo-Lessos and Mbarara-Mirama- transmission lines Lot A: Uganda-Kenya; Lot B: Uganda-Rwanda and Lot C: Substations
<b>Total</b>	<b>152,894,200</b>	<b>586,967</b>	<b>60,375,406</b>
<i>GoU Development</i>	<i>3,200,000</i>	<i>586,967</i>	<i>0</i>
<i>External Financing</i>	<i>149,694,200</i>	<i>0</i>	<i>60,375,406</i>

# Vote: 017 Ministry of Energy and Mineral Development

## Vote Summary

Project, Programme Vote Function Output <i>US\$ Thousands</i>	2013/14		2014/15
	Approved Budget, Planned Outputs (Quantity and Location)	Actual Expenditure and Outputs by September (Quantity and Location)	Proposed Budget, Planned Outputs (Quantity and Location)
<b>Project 1144 Hoima - Kafu interconnection</b>			
<b>030171 Acquisition of Land by Government</b>			- Procurement of RAP implementation consultant.  - Commencement of the RAP Implementation
<b>Total</b>	<b>0</b>	<b>0</b>	<b>3,000,000</b>
<i>GoU Development</i>	<i>0</i>	<i>0</i>	<i>3,000,000</i>
<i>External Financing</i>	<i>0</i>	<i>0</i>	<i>0</i>
<b>030179 Acquisition of Other Capital Assets</b>	-Feasibility study for Hoima-Kafu feasibility study concluded - Supervision Consultant  - RAP Implementation	-Feasibility study on-going; 50% completed.  -ESIA & RAP Studies on-going; 80% completed.  -Disbursements: Nil	- Procurement of Supervision Consultant  - Procurement of EPC Contractor
<b>Total</b>	<b>3,839,600</b>	<b>1,000,000</b>	<b>839,600</b>
<i>GoU Development</i>	<i>3,000,000</i>	<i>1,000,000</i>	<i>0</i>
<i>External Financing</i>	<i>839,600</i>	<i>0</i>	<i>839,600</i>
<b>Project 1198 Modern Energy from Biomass for Rural Development</b>			
<b>030177 Purchase of Specialised Machinery &amp; Equipment</b>	-Purchase of a briquetting unit to enhance briquette production in private sector  - Purchase of the spares for the relocated Budo gasifier  -Purchase of four 10kw gasifiers for use and demonstration of technology for schools	Process has been initiated.	Purchase of a biogas unit for electricity generation  Purchase of spares for Kyambogo gasifier  Purchase of spares for Nyabyeya gasifier maintenance  Purchase of 4 hand held Global Positioning Units (GPS)
<b>Total</b>	<b>1,471,000</b>	<b>0</b>	<b>1,200,000</b>
<i>GoU Development</i>	<i>1,471,000</i>	<i>0</i>	<i>1,200,000</i>
<i>External Financing</i>	<i>0</i>	<i>0</i>	<i>0</i>
<b>Project 1212 Electricity Sector Development Project</b>			
<b>030171 Acquisition of Land by Government</b>			- RAP for Kawanda-Masaka T-line implemented to 75%
<b>Total</b>	<b>0</b>	<b>0</b>	<b>2,169,553</b>
<i>GoU Development</i>	<i>0</i>	<i>0</i>	<i>2,169,553</i>
<i>External Financing</i>	<i>0</i>	<i>0</i>	<i>0</i>
<b>030179 Acquisition of Other Capital Assets</b>	- Construction of new Kawanda-Masaka transmission line and related upgrades to substations.  - Power Sector Information Center in place  - Compensation for land for the Kawanda-Masaka transmission line (RAP implementation)	Of 2171 project Affected Persons, 723 have been compensated.  Re-evaluation of EOI was done. The evaluation report was submitted to the world bank on 13th September 2013 Procurement of EPC Contractor ongoing; the pre-bid meeting	- Establishment of the Power Sector Information Centre commenced  - Construction of new Kawanda-Masaka transmission line and related upgrades to substations.

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## Vote Summary

Project, Programme	2013/14		2014/15
Vote Function Output <i>US\$ Thousands</i>	Approved Budget, Planned Outputs (Quantity and Location)	Actual Expenditure and Outputs by September (Quantity and Location)	Proposed Budget, Planned Outputs (Quantity and Location)
	-Procurement of supervision Consultant for Kawanda-Masaka transmission lines	was held on 6th August 2013.site visits concluded and the deadline for submission is 4th October 2013	
	-Procurement of EPC Contractor for Kawanda –Masaka transmission project	Procurement of Consultant for Lira-Gulu-Nebbi feasibility study on-going with negotiations concluded and the draft contract has been submitted to the World Bank for review.	
	-Procurement of Consultant for feasibility study Lira –Gulu-Nebbi –Arua transmission line project		
<b>Total</b>	<b>42,588,941</b>	<b>544,449</b>	<b>31,335,388</b>
<i>GoU Development</i>	<i>10,593,553</i>	<i>544,449</i>	<i>0</i>
<i>External Financing</i>	<i>31,995,388</i>	<i>0</i>	<i>31,335,388</i>
<b>Project 1221 Opuyo Moroto Interconnection Project Op</b>			
<b>030179 Acquisition of Other Capital Assets</b>	- Feasibility study concluded - RAP implementation - Supervision Consultant and EPC Contractor procured	-Held project kick off meeting for concluding and update of the feasibility, ESIA and RAP study on 25th September 2013 -Feasibility study 90% complete -ESIA and RAP Study 50% complete -Disbursement Nil	•Procurement of RAP implementation consultant •Procurement of Supervision Consultant •Procurement of EPC Contractor •RAP Implementation
<b>Total</b>	<b>1,000,000</b>	<b>333,333</b>	<b>1,000,000</b>
<i>GoU Development</i>	<i>1,000,000</i>	<i>333,333</i>	<i>1,000,000</i>
<i>External Financing</i>	<i>0</i>	<i>0</i>	<i>0</i>
<b>Project 1222 Electrification of Industrial Parks Project</b>			
<b>030171 Acquisition of Land by Government</b>			RAP Implementation
<b>Total</b>	<b>0</b>	<b>0</b>	<b>2,040,000</b>
<i>GoU Development</i>	<i>0</i>	<i>0</i>	<i>2,040,000</i>
<i>External Financing</i>	<i>0</i>	<i>0</i>	<i>0</i>
<b>030179 Acquisition of Other Capital Assets</b>	- Feasibility study and supervision of works for Namanve Industrial Park 132/33kV Substation and Transmission Line Project, EIA and RAP study. - RAP Implementation for Mbale Industrial Park	Namanve: Feasibility study, ESIA & RAP Studies on-going; 90% completed. -Mukono, Iganga and Luzira: Preliminary line route survey and site location for substations completed. -Namanve, Mukono, Iganga and Luzira: Sourcing for financing for construction on-going 70% complete. -Mukono, Iganga and Luzira: Procurement of the ESIA & RAP Studies & RAP	- Construction of Namanve South, Luzira, Mukono and Iganga Industrial Park Substations and Associated transmission lines

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## Vote Summary

Project, Programme Vote Function Output <i>US\$ Thousand</i>	2013/14		2014/15
	Approved Budget, Planned Outputs (Quantity and Location)	Actual Expenditure and Outputs by September (Quantity and Location)	Proposed Budget, Planned Outputs (Quantity and Location)
		Implementation consultant on –going; 80% completed.  Disbursements: USD 347,737.16 has been spent towards the study	
<b>Total</b>	<b>3,040,000</b>	<b>557,619</b>	<b>1,000,000</b>
<i>GoU Development</i>	<i>3,040,000</i>	<i>557,619</i>	<i>1,000,000</i>
<i>External Financing</i>	<i>0</i>	<i>0</i>	<i>0</i>
<b>Project 1257 Mirama-Kikagati-Nshungyenzi Transmission Line</b>			
<b>030179 Acquisition of Other Capital Assets</b>	Feasibility Studies and Detailed Engineering Designs		- Completion of Feasibility study.  - Complete ESIA / RAP study.
<b>Total</b>	<b>0</b>	<b>0</b>	<b>2,284,600</b>
<i>GoU Development</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>External Financing</i>	<i>0</i>	<i>0</i>	<i>2,284,600</i>
<b>Project 1259 Kampala-Entebbe Expansion Project</b>			
<b>030179 Acquisition of Other Capital Assets</b>			- Detailed design and tender document preparation  - Procurement of EPC contractor  - Commencement of Construction Works
<b>Total</b>	<b>0</b>	<b>0</b>	<b>1,500,000</b>
<i>GoU Development</i>	<i>0</i>	<i>0</i>	<i>1,500,000</i>
<i>External Financing</i>	<i>0</i>	<i>0</i>	<i>0</i>

### (iv) Vote Actions to improve Priority Sector Outcomes

A number of action plans have been planned in order to improve vote performance

- Continue implementing plans to increase power generation capacity and associated transmission infrastructure;
- Continue increasing access to modern energy services
- Development of Kenya - Uganda, and Kampala - Kigali oil products pipeline
- A number of action plans have been planned in order to improve vote performance within the oil and gas sector. These include:
  - Continue implementation of the new petroleum laws that govern the activities of the oil and gas sector
  - Develop regulations for the upstream and midstream activities
  - Support and spearhead the restructuring and creation of new institutions provided for by the new laws
  - Develop standards and codes for the upstream and midstream activities
  - Formulation of the monitoring and evaluation framework
  - Implementation Communication strategy
  - Development and Implementation of the National Content Policy and Plan
  - Effective management of the oil and gas sector
  - Promote the investment opportunities in the country's oil and gas sector within and outside the country

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- Engage in training of staff at various levels in order to enable availability of the necessary manpower and increase efficiency in performance
- Support and spearhead the restructuring and creation of new institutions provided for by the new laws
- Develop standards and codes for the upstream and midstream activities
- Formulation of the monitoring and evaluation framework
- Implementation Communication strategy
- Development of the National Content Policy and Plan
- Effective management of the oil and gas management
- Promote the investment opportunities to potential investors within and outside the country
- Engage in training of staff at various levels in order to increase efficiency in performance

**Table V2.7: Priority Vote Actions to Improve Sector Performance**

2013/14 Planned Actions:	2013/14 Actions by Sept:	2014/15 Planned Actions:	MT Strategy:
<b>Sector Outcome 0:</b>			
Vote Function: 03 49 Policy, Planning and Support Services			
<i>VF Performance Issue: - Access to adequate financial resources Monitoring and Evaluation of the sub-sectors</i>			
Develop capacity to monitor and evaluate the sector.	Monitoring and Evaluation framework is being developed	Present a funding proposal to the MoFPED	Develop capacity to monitor and evaluate the sector.
<b>Sector Outcome 1: Increased access to affordable modern sources of energy through enhanced generation capacity and distribution</b>			
Vote Function: 03 01 Energy Planning, Management & Infrastructure Dev't			
<i>VF Performance Issue: - High cost of electricity generation</i>			
Commence the development of Karuma and Isimba hydro power projects	Ground breaking to pave way for construction of Karuma HPP was done.	Increase generation mix to include various options	Develop more cheaper sources of power and increase their mix in power generation
<i>VF Performance Issue: - Poor transmission and distribution network resulting into energy losses.</i>			
Continue the refurbishment of the transmission and distribution infrastructure (i.e line, transformer and substation upgrade)	Refurbishment on-going	Continue the refurbishment of the transmission and distribution infrastructure (i.e line, transformer and substation upgrade)	Refurbishment of the transmission and distribution infrastructure (i.e line, transformer and substation upgrade)
<b>Sector Outcome 2: Well managed and safeguarded mineral resources for production and exports</b>			
Vote Function: 03 05 Mineral Exploration, Development & Production			
<i>VF Performance Issue: - Complicated procedures for access of land for the development of mining infrastructure</i>			
A formal request is to be submitted to MoFPED in regard to the RAP Sukulu Phosphates project amounting to UGX135bn.	A new developer has been identified	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.	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).
<i>VF Performance Issue: - Limited access to adequate resources for inspection and monitoring of exploration and mining operations</i>			
Requested MoFPED for AIA to support the Mineral Sub-sector recurrent budget from NTR to meet the funding gap in mineral exploration, mine inspections and monitoring.	Cabinet approved allocation of UGX 1bn for inspection	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	(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 Appropriation in Aid (AIA)

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2013/14 Planned Actions:	2013/14 Actions by Sept:	2014/15 Planned Actions:	MT Strategy:
		NDP and Vision 40.	and increase more NTR from mining.
<b>Sector Outcome 3: A well managed and safe guarded petroleum, Oil and gas resource chain for sustainable development</b>			
Vote Function: 03 03 Petroleum Exploration, Development & Production			
<i>VF Performance Issue: - Insufficient capacity to efficiently manage the country's oil and gas potential</i>			
Train five (5) members of staff at Postgraduate Level in Petroleum related studies.	Staff training is on-going	Continue with capacity building programs	Continued strengthening of the institutional capacity
Continue the implementation of local content strategy and plan.			
In-house training and field excursions, including Stratigraphic scheme.			
<i>VF Performance Issue: - The Enactment of the Oil and Gas Resource Management Law.</i>			
New Regulations and guidelines for the upstream activities developed;	Drafting of Regulations and Guidelines in progress	Implement the newly approved legislation	Continue the implementation of the oil and gas policy and legislations.
Model PSA reviewed and updated			
Monitoring and Evaluation (M & E) strategy for the National Oil and Gas Policy (NOGP) formulated.			

## V3 Proposed Budget Allocations for 2014/15 and the Medium Term

This section sets out the proposed vote budget allocations for 2014/15 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\***

	2012/13 Outturn	2013/14		MTEF Budget Projections		
		Appr. Budget	Spent by End Sept	2014/15	2015/16	2016/17
<b>Vote: 017 Ministry of Energy and Mineral Development</b>						
0301 Energy Planning, Management & Infrastructure Dev't	93.687	454.195	22.411	293.582	125.987	118.867
0302 Large Hydro power infrastructure	0.500	1,093.245	32.338	1,250.063	553.800	2,039.419
0303 Petroleum Exploration, Development & Production	22.034	68.733	11.092	38.622	65.144	55.005
0304 Petroleum Supply, Infrastructure and Regulation	1.057	6.245	0.531	6.245	28.245	25.630
0305 Mineral Exploration, Development & Production	1.922	8.038	0.850	8.038	80.643	67.447
0349 Policy, Planning and Support Services	7.513	20.100	3.681	20.100	21.268	26.623
<b>Total for Vote:</b>	<b>126.714</b>	<b>1,650.557</b>	<b>70.903</b>	<b>1,616.651</b>	<b>875.087</b>	<b>2,332.992</b>

### (i) The Total Budget over the Medium Term

The Total budget allocation over the medium term is UGX539Billion, of which 2.698billion is wage recurrent, 4.219billion is non wage recurrent, GoU development is 184.748billion and 347.358billion is Donor Development.

### (ii) The major expenditure allocations in the Vote for 2014/15

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For the FY 2013/14, Karuma Hydro Power Project has a budgetary allocation of Ush. 1,043.6 bn; while Ush. 35.0 bn is earmarked for the acquisition of land for construction of the oil refinery and there is need for more funding to facilitate pipeline development activities. Construction and Resettlement Action Plan for the Transmission Lines will also be funded.

### (iii) The major planned changes in resource allocations within the Vote for 2014/15

Budgetary allocation to the sector has reduced by 1.093.6 trillion. This was the amount which was provided for the karuma power project during the previous FY2013/14.

**Table V3.2: Key Changes in Vote Resource Allocation**

Changes in Budget Allocations and Outputs from 2013/14 Planned Levels:				Justification for proposed Changes in Expenditure and Outputs
2014/15	2015/16	2016/17		
<i>Vote Function: 0301 Energy Planning, Management &amp; Infrastructure Dev't</i>				
<b>Output: 0301 01 Energy Policy/Plans Dissemination, Regulation and Monitoring</b>				
US\$ Bn: 3.770	US\$ Bn: 3.971	US\$ Bn: 3.971		Development of a number of power generation projects will commence. These are: Karuma, Isimba, Ayago, and other small power projects. Supervision services will be procured to ensure quality assurance.
Supervision of Karuma, Isimba, Ayago, and other small power projects				
<b>Output: 0301 02 Energy Efficiency Promotion</b>				
US\$ Bn: 11.249	US\$ Bn: 1.527	US\$ Bn: 1.527		Promotion of Renewable Energy technologies, and step up energy audits to conserve power and also address the problem of power losses
Promotion of Renewable Energy technologies, and step up energy audits to conserve power and also address the problem of power losses	Promotion of Renewable Energy technologies, and step up energy audits to conserve power and also address the problem of power losses			
<b>Output: 0301 03 Renewable Energy Promotion</b>				
US\$ Bn: 5.017	US\$ Bn: 8.435	US\$ Bn: 8.435		Six new small hydro power projects will come on board under the GETFiT program. These will need to be supported.
Six new small hydro power projects will come on board under the GETFiT program. These will need to be supported.				
<b>Output: 0301 52 Thermal and Small Hydro Power Generation (UETCL)</b>				
US\$ Bn: 24.090	US\$ Bn: -28.000	US\$ Bn: -28.000		The resources are geared towards the generation of 50MW of thermal power.
Cost requirements for the development and consumption needs for power generated by thermal capacity.				
<b>Output: 0301 53 Cross Sector Transfers for ERT (Other Components)</b>				
US\$ Bn: -1.971	US\$ Bn: -0.306	US\$ Bn: 2.694		Development partners' allocation to the sector in that Financial Year is reduced
Development partners' allocation to the sector in that Financial Year is reduced				
<b>Output: 0301 71 Acquisition of Land by Government</b>				
US\$ Bn: 14.625	US\$ Bn: -4.285	US\$ Bn: -4.285		RAP implementation for the transmission infrastructure
These resources are to support RAP for transmission lines				
<b>Output: 0301 76 Purchase of Office and ICT Equipment, including Software</b>				
US\$ Bn: -21.589	US\$ Bn: -21.460	US\$ Bn: -21.460		The cost of this output was met during the previous budget period
The cost of this output was				

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Changes in Budget Allocations and Outputs from 2013/14 Planned Levels:			Justification for proposed Changes in Expenditure and Outputs
2014/15	2015/16	2016/17	
met during the previous budget period			
<b>Output: 0301 77 Purchase of Specialised Machinery &amp; Equipment</b>			
US\$ Bn: 4.865	US\$ Bn: -0.446	US\$ Bn: -0.446	The equipment is needed for setting up demonstration on modern energy technologies in biomass and energy efficiency
The equipment is needed for setting up demonstration on modern energy technologies in biomass and energy efficiency			
<b>Output: 0301 79 Acquisition of Other Capital Assets</b>			
US\$ Bn: -200.912	US\$ Bn: -290.725	US\$ Bn: -300.844	A larger part of this requirement was met in the previous budget period.
A larger part of this requirement was met in the previous budget period.			
<i>Vote Function: 0371 Large Hydro power infrastructure</i>			
<b>Output: 0302 71 Acquisition of Land by Government</b>			
US\$ Bn: 151.818	US\$ Bn: -1.345	US\$ Bn: -1.345	Land for power generation sites
Land for power generation sites			
<b>Output: 0302 80 Large Hydro Power Infrastructure</b>			
US\$ Bn: 5.000	US\$ Bn: -1,091.900	US\$ Bn: -1,091.900	It is expected that the financing of Karuma HPP is under the bilateral arrangement and GoU will meet the 15% while the China EXIM Bank will meet the 85%
This amount was originally intended for the development of Karuma HPP.			
<i>Vote Function: 0301 Petroleum Exploration, Development &amp; Production</i>			
<b>Output: 0303 01 Promotion of the country's petroleum potential and licensing</b>			
US\$ Bn: -1.708	US\$ Bn: 0.000	US\$ Bn: 0.000	
<b>Output: 0303 02 Initiate and formulate petroleum policy and legislation</b>			
US\$ Bn: -2.265	US\$ Bn: 0.000	US\$ Bn: 0.000	<p>-The Petroleum (refining, gas conversion, transmission and midstream storage) Act 2013 which was enacted by parliament was assented to by the President and subsequently gazetted in July 2013;</p> <p>-Following the putting in place of the Petroleum (refining, gas conversion, transmission and midstream storage) Act 2013 and the Petroleum (Exploration, Development and Production) Act 2013, development of New Regulations and Guidelines for the upstream and midstream activities has progressed;</p> <p>-Monitoring and Evaluation (M&amp;E) strategy for the National Oil and Gas Policy (NOGP) was finalized.</p>
The Oil and Gas Legislation was finalised			
<b>Output: 0303 03 Capacity Building for the oil &amp; gas sector</b>			
US\$ Bn: -7.517	US\$ Bn: 0.000	US\$ Bn: 0.000	Training fee from the oil companies will fill the gap
Training fee from the oil companies will fill the gap			
<b>Output: 0303 04 Monitoring Upstream petroleum activities</b>			



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Changes in Budget Allocations and Outputs from 2013/14 Planned Levels:			Justification for proposed Changes in Expenditure and Outputs	
2014/15	2015/16	2016/17		
US\$ Bn:	-1.782	US\$ Bn: 0.000	US\$ Bn: 0.000	
<b>Output:</b>	<b>0303 05 Develop and implement a communication strategy for oil &amp; gas in the country</b>			
US\$ Bn:	-1.427	US\$ Bn: 0.000	US\$ Bn: 0.000	Resources have been moved to other implementation areas intended for the refinery RAP and FEED study
The resources have been reduced due to the scale down of activities as reflected in the implementation of the communication strategy				
<b>Output:</b>	<b>0303 51 Transfer for Petroleum Refining (Midstream Unit)</b>			
US\$ Bn:	-2.000	US\$ Bn: 0.000	US\$ Bn: 0.000	Midstream activities will now be attained under the new institutions to be established
Activities will now be attained under the new institutions to be established				
<b>Output:</b>	<b>0303 71 Acquisition of Land by Government</b>			
US\$ Bn:	2.929	US\$ Bn: 0.000	US\$ Bn: 0.000	Additional land for aerodrome and attendant infrastructure like pipelines and storage facilities
Additional land for aerodrome and attendant infrastructure like pipelines and storage facilities				
<b>Output:</b>	<b>0303 72 Government Buildings and Administrative Infrastructure</b>			
US\$ Bn:	-6.900	US\$ Bn: 0.000	US\$ Bn: 0.000	Finalisation of the laboratory and office building
Finalisation of the laboratory and office building				
<b>Output:</b>	<b>0303 76 Purchase of Office and ICT Equipment, including Software</b>			
US\$ Bn:	-1.421	US\$ Bn: 0.000	US\$ Bn: 0.000	
<b>Output:</b>	<b>0303 80 Oil Refinery Construction</b>			
US\$ Bn:	-6.808	US\$ Bn: -3.908	US\$ Bn: -13.728	Part of the RAP for refinery infrastructure will have been compensated
Part of the RAP for refinery infrastructure will have been compensated				
<i>Vote Function: 0372 Policy, Planning and Support Services</i>				
<b>Output:</b>	<b>0349 72 Government Buildings and Administrative Infrastructure</b>			
US\$ Bn:	1.000	US\$ Bn: 7.660	US\$ Bn: 12.729	This will support the Management of Amber house that has been passed on to the MEMD
This will support the Management of Amber house that has been passed on to the MEMD				
<b>Output:</b>	<b>0349 79 Acquisition of Other Capital Assets</b>			
US\$ Bn:	-2.000	US\$ Bn: -2.780	US\$ Bn: -2.780	Part of the structured cabling infrastructure has been accomplished
Part of the structured cabling infrastructure has been accomplished				

## V4: Vote Challenges for 2014/15 and the Medium Term

This section sets out the major challenges the vote faces in 2014/15 and the medium term which the vote has been unable to address in its spending plans.

In the oil and gas sector, given the increased level of activities and progress made towards refinery development, preparations for licensing and award of Kingfisher Production license, there is need for more

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funding as follows:-

- Planning and implementation of the first licensing round – Ush 2 bn
- Monitoring the development activities of the Kingfisher Production License – 1 bn
- Completion of land acquisition for the refinery development – 8 bn
- Government contribution on equity towards Front End Engineering Design (FEED) – 10 bn
- Support the pipeline development activities. – 2bn
- Support towards the operationalization of the new petroleum institutions – 9 bn.
- TOTAL----- 32 bn

In the Mineral Development Sector, additional resources are essential priority areas to enhanced generation of Non-tax revenue. Additional funds are for specific programmes in line with NDP 2010/11-14/15 that need funding: Airborne 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).

### 1. Establish the Mineral Wealth of Uganda

The mapping of the country is at 80% and there is need to complete the remaining 20%. The geology of the country is good with mineral varieties that need to be quantified in monetary terms and mines. The quantification of mineral reserves and mapping of base metals, special metals precious metals carbonates, carbonates pegmatite minerals and industrial minerals are incomplete.

### 2. Mineral Resources value addition

The country lacks mineral analysis laboratory infrastructure for value addition. The mineral value addition chain has stages that would create employment from support staff through semi-skilled to highly skilled professionals. The country would gain greater economic benefit from analysis and assessment of the mineral content, pricing and revenue collection.

### 3. Earthquake disaster management infrastructure

Uganda is an earthquake prone country aligned between the East African Rift System was by the frequency of occurrences is over 100 earthquakes per year. The rate of urbanization and construction of high rise building is growing without testing compliance of buildings and infrastructure models to withstand simulations similar characteristic earthquakes. Earthquake research facility for infrastructure testing would generate revenue to government by testing models developed by private sector in addition to booting insurance companies in earthquake risks. The earthquake data is useful in mapping prone zones for land use, development projects and settlements.

### 4. Mainstream Artisanal and Small Scale Miners

Artisanal and small scale mining activities are becoming environmental disaster. For instance the artisanal limestone makers can cause great loss of forest cover as a source of energy. The use of mercury in gold mining may contaminate the fresh water sources and the source of the livelihood hence long-term ill-health in mining communities. Some mining methods such as open cast mining without ensuring corporate environmental social responsibility for restoration of the land cover may too grossly destroy land vegetation cover. The national action is therefore to strengthen regulatory legal framework for environmental sustainability and formalization of ASM into mainstream of the economy.

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### 5. Develop Geothermal Energy Resources

Uganda is endowed with geothermal resources located in over 20 geothermal centres in the country with surface temperature indicators subsurface heat sources which have to be mapped to establish geothermal reservoirs for drilling to generate electricity from steam.

### 6. Skilling and Tooling Human Resource

Uganda lacks adequate skilled manpower in various transform the country from the current state to highly industrialized nation driven by research and development. For instance the advancement of geothermal energy, mineral value chain to hi-tech would require establishment of advanced research institutions, restructuring and training of the young population in various specialized field

### 7. Develop Mining Regional Infrastructure

Mining activities require regular inspections and monitoring in the mining districts where the mineral resources are found and dug out. The country lacks the regional infrastructures to enable the government adequately monitor and improve revenue collection from mining activities and address illegal mining activities in remote areas.

### 8. Establish mineral data management infrastructure

The country lacks data recovery master plan in case of any disaster. The mineral data management infrastructure is meant to put up mechanisms and systems to ensure the mineral wealth data and information is safe and available at all times for sustainable planning and development.

**Table V4.1: Additional Output Funding Requests**

Additional Requirements for Funding and Outputs in 2014/15:	Justification of Requirement for Additional Outputs and Funding
<i>Vote Function:0371 Energy Planning,Management &amp; Infrastructure Dev't</i>	
<b>Output: 0301 71 Acquisition of Land by Government</b>	
<i>US\$ Bn:</i> Funding for: transmission and distribution infrastructure; Capitalisation of UECCC	<i>There is need to fund transmission and distribution infrastructure to evacuate power from the various power plants being developed and distribute to the users</i>
<i>Vote Function:0379 Petroleum Exploration, Development &amp; Production</i>	
<b>Output: 0303 79 Acquisition of Other Capital Assets</b>	
<i>US\$ Bn:</i> 0.900 Need to replace aging vehicle fleet for field activities. Four (4) vehicles to be purchased	<i>This output will support the development of the refinery and attendant infrastructure like pipelines and storage facilities.</i>
<i>Vote Function:0304 Petroleum Supply, Infrastructure and Regulation</i>	
<b>Output: 0304 04 Operational Standards and laboratory testing of petroleum products</b>	
<i>US\$ Bn:</i> 2.200 Newly recruited need specialized training in downstream related field to handle the activities of the sector effectively.	<i>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.</i>
<i>Vote Function:0305 Mineral Exploration, Development &amp; Production</i>	
<b>Output: 0305 05 Licencing and inspection</b>	
<i>US\$ Bn:</i> 6.000 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	<i>Additional resources are essential to enhanced generation of Non-tax revenue. Additional funds are for specific programmes in line with NDP 2010/11-14/15 that need funding: Airborne Geophysical Surveys of Karamoja (46bn), Geothermal Resources Development</i>

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Additional Requirements for Funding and Outputs in 2014/15:	Justification of Requirement for Additional Outputs and Funding
<p>driver and industrialisation in line with NDP and Vision 40.</p> <p><i>Vote Function: 0306 Policy, Planning and Support Services</i></p>	<p>(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).</p>
<p><b>Output: 0349 06 Management of Policy Issues, Public Relation, ICT and Electricity disputes resolved</b></p> <p><i>US\$ Bn: 22.600</i></p> <p>Management of Amber house that has been passed on to the MEMD, there is need to renovate and develop the adjacent plot</p>	<p>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</p>

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

The ministry's budget responds to gender mainstreaming on two principles, namely gender equity consideration and effectiveness of the budget in responding to gender mainstreaming.

-Equity: The electrification programs have been planned to ensure regional balance, access to social infrastructure (schools, hospitals), rural growth centres, and support to agricultural areas.

In the mineral sector the policy that prohibited women from participating in mining of certain minerals has since been reversed.

On training, the budget ensures that there is no discrimination on the selection of persons to train.

-Effectiveness: The budget puts in place a number of measures to ease power connectivity. These measures target consumers who have hitherto failed to acquire a no-pole service over a long period of time and these include:

- Provision of subsidies to communities adjacent to the grid but have failed to raise the necessary connection costs.
- Introduction and promotion of simplified and cheaper premise wiring practices (Ready Boards)
- ERT Phase II is providing subsidies and promoting loans to Solar PV customers. This is intended to benefit those individuals located far from the established load centres of the grid network

#### (ii) HIV/AIDS

The sector support the mainstreaming of HIV/AIDS issues and also implements the Ministry HIV/AIDS workplace policy. This policy promotes a healthy and caring environment, Information Education and Communication (IEC), Peer education, promotion of the ABC strategy and recommendation of staff living with HIV/AIDS to have access to ARVs.

#### (iii) Environment

The sector supports and works with the relevant authorities on environmental issues such as NEMA so that we are compliant with the Environmental Impact Assessments (EIA).

Almost 90% of the country's primary energy is derived from fuel wood. This fuel wood is consumed in industries, SMEs and households. This high dependency on fuel wood is responsible for the rapid

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### **Vote Summary**

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depletion of forests.

Whereas MEMD continues to disseminate technologies that use very little firewood, the mandate to replenish forests and all vegetation cover is with other sectors (Ministry of Environment and Ministry of Agriculture). Close collaboration is therefore important to reduce the rate of vegetation cover degradation.

Petroleum Exploration activities are also carried out in the conserved areas of western rift valley and thus require EIA approval. Mining areas also require EIA clearance which the ministry strongly considers critical.

#### **(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:

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.