

---

# **Sector:** Energy and Mineral Development

---

## **Foreword**

---

This Budget Framework Paper (BFP) covers Vote 017: Ministry of Energy and Mineral development and Vote 123: Rural Electrification Agency. It provides a review of sector performance for the FY2015/16 and the first half of the FY 2016/17. Planned out and the expected key outcomes for the FY2017/18 are presented. Budget allocations for the medium term have been provided based on the sector priorities.

The indicative budget ceilings for the Ministry of Energy and Mineral Development have been rationalized in line with the sector priorities and national priorities as communicated in the Budget Call Circular and in the Presidential Directives. The ceilings for Vote 017 for the FY 2017/18 are as follows: Wage Recurrent is UGX 4.06 Bn; Non-Wage Recurrent is UGX 3.03 Bn; GoU Development is UGX 389.93 Bn and the Development Partner contribution is UGX 2,128 Bn.

Under Vote 123 the ceiling is UGX 480.51 Bn of which UGX 56.98 Bn is for GoU Domestic Development and UGX 423.53 Bn is from external financing.

---

## Sector: Energy and Mineral Development

### Abbreviations and Acronyms

AEC	Atomic Energy Council
AfDB	African Development Bank
ASM	Artisanal and Small Scale Miners
BFP	Budget Framework Paper
BOOT	Build Own Operate and Transfer
Bopd	Barrels of Oil Per Day
CDAP	Community Development Action Plan
CGGC	M/S China Gezhouba Group of Companies
DFI	Development Finance Institutions
DGSM	Directorate of Geological Survey and Mines
EA	Exploration Area
EAC	East African Community
EAPC	East African Petroleum Conference
EDT	Electricity Disputes Tribunal
EECB	Energy Efficiency and Conservation Bill
EIPL	Energy Infratec Pvt
EM&HM	Electro mechanical and Hydro Mechanical
EPC	Engineering Procurement and Construction
ERA	Electricity Regulatory Authority
ESIA	Environment and Social Impact Assessment
FEED	Front End Engineering Design
FMO	Netherlands Development Finance Company
G&G	Geological and Geophysical
GOU	Government of Uganda
HRT	Head Race Tunnel
HSE	Health Safety and Environment
IAEA	International Atomic Energy Agency
IDB	Islamic Development Bank

## Sector: Energy and Mineral Development

IPP	Independent Power Producer
JST	Jinja Storage Tanks
KFDA	Kingfisher Development Area
KNNN&KW	Kaiso-Tonya, Kigogole, Nsoga, Ngege, Ngara and Kasamene, Wahrindi
kV	Kilo Volts
KWR	Karuma Wildlife Reserve
MEMD	Ministry of Energy and Mineral Development
MOU	Memorandum of Understanding
MPSA	Model Production Sharing Agreement
MW	Mega Watts
NEMA	National Environment Management Authority
NEU	Nuclear Energy Unit
ERD	Energy Resources Directorate
NTR	Non Tax Revenue
PAPs	Project Affected Persons
POL	Petroleum Operating License
PPA	Power Purchase Agreement
RAP	Resettlement Action Plan
REA	Rural Electrification Agency
SEAMIC	Southern and Eastern Africa Mineral Centre
TBT	Tail Bench Tunnel
TPC	Technical Petroleum Committee
TRT	Tail Race Tunnel
UECCC	Uganda Energy Credit Capitalisation Company
UEDCL	Uganda Electricity Distribution Company Limited
UEGCL	Uganda Electricity Generation Company Limited
UETCL	Uganda Electricity Transmission Company Limited
AFD	French Development agency
GETFiT	Global Energy Feed in Tariff
MV	Medium Voltage
LV	Low Voltage

---

**Sector:** Energy and Mineral Development

UWA	Uganda Wild Life Authority
UNBS	Uganda National Bureau of Standards
SMEs	Small and Medium Scale Enterprises

---

## Sector: Energy and Mineral Development

### S1: Sector Overview

This section provides an overview of Sector Expenditures and sets out the Sector's contribution to the NDP, its policy objectives, and key performance issues.

#### (i) Snapshot of Sector Performance and Plans\*

##### S1.1 Overview of Sector Expenditure (Ushs Billion)

(Ush. Billions)	FY2015/16 Outturn	FY2016/17		MTEF Budget Projections				
		Approved Budget	Spent by End Q1	FY2017/18	FY2018/19	FY2019/20	FY2020/21	FY2021/22
Recurrent Wage	4.766	4.063	0.809	4.063	4.266	4.479	4.703	4.938
Non Wage	4.760	3.326	0.441	2.253	2.479	2.727	3.136	3.606
Devt. GoU	405.766	446.901	166.154	443.785	510.353	612.423	734.908	1,469.816
Ext. Fin.	37.346	1,922.944	404.310	2,549.545	2,018.595	1,587.062	1,486.449	1,486.449
<b>GoU Total</b>	<b>415.292</b>	<b>454.290</b>	<b>167.405</b>	<b>450.101</b>	<b>517.097</b>	<b>619.629</b>	<b>742.747</b>	<b>1,478.360</b>
<b>Total GoU+Ext Fin (MTEF)</b>	<b>452.638</b>	<b>2,377.233</b>	<b>571.714</b>	<b>2,999.646</b>	<b>2,535.692</b>	<b>2,206.692</b>	<b>2,229.196</b>	<b>2,964.809</b>
<i>A.I.A Total</i>	31.430	40.800	11.349	42.840	44.982	47.124	49.266	51.408
<b>Grand Total</b>	<b>484.068</b>	<b>2,418.033</b>	<b>583.063</b>	<b>3,042.486</b>	<b>2,580.674</b>	<b>2,253.816</b>	<b>2,278.462</b>	<b>3,016.217</b>

#### (ii) Sector Contributions to the National Development Plan

The Vision 2040 and NDP II observes that for Uganda to achieve the desired socio-economic transformation, the energy sector needs to provide at least 41,738 Mega Watts of energy by year 2040. Access to the national grid will have to increase to 80 percent. The sector is responding by developing its hydro power and also complementing with other renewable forms of energy including; wind, solar and bio-gas.

On mineral development, the sector is undertaking ground geological and geochemical follow-ups to ascertain the mineral potential and value. Efforts are being made to complete the airborne geophysical survey, geological mapping and geochemical sampling of the remaining 20% of the country.

In the petroleum subsector, efforts are being put to achieve production, refining and export of oil resources for socio economic development by 2020.

#### (iii) Medium Term Sector Policy Objectives

---

## Sector: Energy and Mineral Development

---

In order to contribute effectively to the national objectives as enshrined in the National Development Plan, the sector strategic objectives and policy goals are:

- i) To meet the energy needs of Uganda's population for social and economic development in an environmentally sustainable manner.
- ii) To use the county's oil and gas resources to contribute to early achievement of poverty eradication and create lasting value to society.
- iii) To develop the mineral sector for it to contribute significantly to sustainable national economic and social growth.

---

### *S2: Sector Performance and Plans to Improve Sector Outcomes*

---

#### Summary of Sector Performance by Sector Outcome

##### **Outcome 033330: Increased access to affordable modern sources of energy through enhanced generation capacity and distribution**

**a) Current Generation:** (Number of MW of electricity added to the National Grid). The available generation capacity has increased from **359 MW** in 2010 to **892.7 MW** in 2016. The following interventions are notable:-

In 2011, two mini-hydro projects (Eco Power Ishasha and Africa EMS Mpanga) with a combined capacity of 24.5 MW were commissioned; In 2012, Bujagali Energy Limited (250 MW), Nyagak Hydropower plant (3.5 MW) and Kabalega Power plant (9 MW) were commissioned; and, in 2013, an additional 20 MW were added to the National Grid from the expansion of the bagasse cogeneration power plant at Kakira Sugar Ltd and commissioning of 11.9MW cogeneration plant in 2015 located in Kaliro District by Sugar and Allied Industries Ltd. In 2015, a 1.6MW solar-diesel hybrid off-grid system was commissioned on Bugala Island in Kalangala District by Kalangala Infrastructure Services.

**b) Loss Reduction:** Distribution System losses have reduced from a peak of around 38% to the current level of around 19.1% as of 2016.

**c) National Electrification Coverage:** (Percentage of the population Electricity). Overall national electrification rate now stands at 20.5% and grid coverage is at 15.7%. 109 of 112 (97.3%) district headquarters are now connected the National electricity grid. Sub-county Headquarters: Out of 1,368 sub-counties, 734 are connected to the national grid representing coverage of 54%. Annual average load growth is 8-10%.

The existing transmission network is now comprised of 1562.1 km of 132kV lines, 35.2 km of 66 kV lines and 18 primary substations. A double circuit 132 kV interconnection with Kenya and a cross-border 132 kV transmission line to Tanzania are now in place.

##### **Outcome 034669: Sustainable management of mineral resources for development**

---

---

## **Sector:** Energy and Mineral Development

---

### **Mineral production and revenue**

Beginning from the FY2012/13 – FY2015/16, cumulative monetary value from mineral production rose from UGX 795,371,710,109/=. In the same period, the Non Tax Revenue (NTR) collected from licensing fees and royalties was Uganda Shillings 34,211,273,804. The annual value of mineral production declined from UGX203 billion in FY2012/13 to UGX 102 billion in FY2015/6. This figure is however expected to be higher in the current financial year. The Non tax revenue over the same period has however grown from UGX5.6 billion in FY2011/12 to UGX8.8billion in 2015/16.

### **Mineral Licenses and Mines Development**

Updated the mineral information system and mapped new mineral targets have caused the number of mineral licences to increase from One hundred fifty seven (157) in 2002 to over Eight hundred (800) mineral licences in categories of Exploration, to mines development (Mining leases) as of April 2016. This is an increase from about 20 percent in 2002 to now 80.4 percent. The cumulative Non Tax Revenue (NTR) collected from licensing fees and royalties was Uganda Shillings 34,211,273,804. The Non tax revenue over the same period has grown from UGX5.6 billion in FY2011/12 to UGX8.8billion in 2015/16.

**Outcome 035369: Sustainable management of country's oil and gas resources**

### **Change in the level of Investment in the Oil and Gas Sector**

Investment in the Oil and gas sector has sharply increased after first commercial discovery. Cumulative investment in the sector increased from US \$ 106 million in 2006 to US \$ 2.954 billion in 2015 and is projected to reach US \$ 3.144 billion in 2016. The investment is mainly in the acquisition of seismic data and drilling of exploration and appraisal wells. This investment has been important in progressing the country's oil and gas sector. The investment is expected to increase significantly during field development and production including development of a refinery and attendant pipelines.

### **Number of Ugandans directly employed by the oil and Gas Sector**

From the year 2010, Ugandans directly employed in the oil and gas sector has progressively grown from 175 to 2,252 presently. This number excludes government employees who are 160. This number is expected to grow tremendously once oil production commences.

**Outcome 035469: Adequate and standard quality stock of petroleum products on the market**

---

## Sector: Energy and Mineral Development

The compliancy level has been maintained at around 99% with the stations that fail being published in the print media.

Importation and consumption of Petroleum Products continues to grow with the latest October 2016 consumption at 155,483,671 litres broken into the following products; Petrol: 73,757,841 litres, Jet A-1: 7,915,401 litres; Kerosene: 4,212,121 litres, Diesel: 69,598,308 litres.

Under a (PPP) arrangement, the 30 million litre Jinja Storage facility is operational although the operator (Hared Petroleum) has been experiencing restocking challenges in fulfilling the contractual obligations of stocking up to 60% of the reserves. We have commenced procurement of the 40% strategic stocks for the same facility.

**Table S2.1: Sector Outcome Indicators**

Sector Outcome Indicators	2016/17 Target	2017/18 Target	Medium Term target
<b>1-Increased access to affordable modern sources of energy through enhanced generation capacity and distribution</b>			
Percentage of total households using modern energy		22%	23%
Percentage of energy system losses		17%	16%
Number of units of installed capacity added to generation		1100	1800
<b>2-Legal and institutional framework strengthened</b>			
Proportion of MEMD approved structure filled		90%	100%
<b>3-Sustainable management of mineral resources for development</b>			
Change in value of mineral production (UGX billion)		900	1000
Change in value of mineral rights (UGX Billion)		14	18
Number of Ugandans gainfully employed in the mineral sector		6000	10000
<b>4-Sustainable management of country's oil and gas resources</b>			
Number of Ugandans directly employed by the oil and gas sector		3500	5000
Change in proven recoverable oil reserves (Million Burrels of Oil)		7500	8000
<b>5-Adequate and standard quality stock of petroleum products on the market</b>			
Security of stock levels (reserves) of petroleum products held in the country		10	12
Rate of fuel marker failure of petroleum stocks		0.5%	0%
Sector Regulatory Framework timely reviewed		Completed review of mineral policy and legislation, and Electricity Act	Appropriate regulations for the new laws



## Sector: Energy and Mineral Development

**Table S2.2 Performance Information by Vote by Programme Contributing to Sector Outcome**

Energy and Mineral Development			
<b>Vote 017 - Ministry of Energy and Mineral Development</b>			
<b>Accounting Officer:</b> Prisca Boonabantu			
<b>Programme</b> 01 Energy Planning, Management & Infrastructure Dev't			
<b>Objective</b>			
<b>Responsible Officer</b>			
Programme Performance Indicators (Output)	2017/18 Target	2018/19 Target	2019/20 Target
<b>Sector Outcome: Increased access to affordable modern sources of energy through enhanced generation capacity and distribution</b>			
Percentage of Audited firms implementing Energy efficiency measures	100%	100%	100%
Number of prepaid meters installed	320000	300000	300000
Number of sites demonstrating use of improved energy technologies	5	10	20
Stage of development of Nyagak III HPP	commence construction	progress at 40%	progress at 80%
Stage of development of Nyamwamba HPP	construction on going at 50%	progress at 80%	commissioning
Stage of development of Rwimi HPP	Construction works at 40%	progress at 70%	progress at 90%
Stage of development of Siti 1 HPP	construction works at 60%	progeess at 80%	commissioning
Stage of development of Siti 2 HPP	commence construction	progress of works at 30%	progress of works at 60%
Stage of development of Waki HPP	commence construction	progress of works at 30%	progress of works at 60%
Number of District Headquarters electrified	3	3	1
Number of line KM of LV (11KV) constructed	1500	2000	2500
Number of line KM of MV (33KV) constructed	2500	3000	3500
Number of Solar systems installed	10000	12000	15000

## Sector: Energy and Mineral Development

<b>Programme</b>	02 Large Hydro power infrastructure		
<b>Objective</b>	Ensure adequate generation capacity for economic development		
<b>Responsible Officer</b>	James Baanabe Isingoma		
<b>Programme Performance Indicators (Output)</b>	<b>2017/18 Target</b>	<b>2018/19 Target</b>	<b>2019/20 Target</b>
<b>Sector Outcome: Increased access to affordable modern sources of energy through enhanced generation capacity and distribution</b>			
Status of Ayago power project	Financial closure	commence construction	Construction works at 30%
Status of Isimba power project	Construction works at 90%	Plant Commissioned	Defects Liability
Status of Karuma power project	Onstruction works at 80%	Plant tested and commissioning	Defects Liability
Percentage of land freed up for Isimba Transmission Line	75%	85%	100%
Percentage of land freed up for Karuma Transmission Line	80%	90%	100%
<b>Programme</b>	03 Petroleum Exploration, Development, Production, Value Addition and Distribution and Petroleum Products		
<b>Objective</b>	Ensure efficiency and effectiveness in the management of Uganda's oil and gas resource potential, value addition and distribution of petroleum products for economic development		
<b>Responsible Officer</b>	Robert Kasande		
<b>Programme Performance Indicators (Output)</b>	<b>2017/18 Target</b>	<b>2018/19 Target</b>	<b>2019/20 Target</b>
<b>Sector Outcome: Sustainable management of country's oil and gas resources</b>			
Number of staff enrolled for professional training in Oil and gas discipline	8	8	10
Stage of formation new petroleum institution, National Oil Company	100%	100%	100%
Stage of formation new petroleum institution, Petroleum Authority	100%	100%	100%
Stage of formation new petroleum institution, Petroleum Directorate	100%	100%	100%
Number f field development plans approved for issuance of Production License	4	4	6
Level of compliance by exploration companies with petroleum operations guidelines	100%	100%	100%
Number of line Km of seismic data acquired.	400	400	400
Number of newspaper advertorials made and published	4	4	6
Number of Radio talk shows held	12	12	15
Stage of identifying Lead Investor	Conclude getting investor	Pre-FEED and construction	Complete construction and First Oil
Stage of Land Acquisition	100%	100%	100%

## Sector: Energy and Mineral Development

<b>Programme</b>	04 Petroleum Supply, Infrastructure and Regulation		
<b>Objective</b>	Ensure reliable, cost effective and safe supply of petroleum products to the local market.		
<b>Responsible Officer</b>	Rev. Justaf Frank Tukwasibwe		
<b>Programme Performance Indicators (Output)</b>	<b>2017/18 Target</b>	<b>2018/19 Target</b>	<b>2019/20 Target</b>
<b>Sector Outcome: Adequate and standard quality stock of petroleum products on the market</b>			
% of the facilities confirming to the Petroleum facilities standards	100%	100%	100%
<b>Programme</b>	05 Mineral Exploration, Development & Value Addition		
<b>Objective</b>	To establish, promote and regulate the development of mineral and geothermal resources for sustainable development		
<b>Responsible Officer</b>	EDWARDS KATTO		
<b>Programme Performance Indicators (Output)</b>	<b>2017/18 Target</b>	<b>2018/19 Target</b>	<b>2019/20 Target</b>
<b>Sector Outcome: Sustainable management of mineral resources for development</b>			
% of earthquake monitoring stations installed against NDP target of 40 stations	40%	50%	60%
Draft mineral laboratory services policy developed	Laboratory services policy	Implementation	iImplementation
Number of Mineral Artisans and small scale miners (ASM) trained in Mining Districts	601	806	1009
Number of Mineral analysis techniques developed to ISO standards	4	6	8
Number of staff enrolled for training in Mineral sub-sector	6	8	10
Number of mineralized areas discovered	4	5	6
Number of potential Uranium resources targets discovered	3	4	5
Total Value of Mineral Exports as per permits issued (UGX)- Bn	240	350	540
Total Value of Mineral Production (UGX)- Bn	540	790	1250
Number of mining site inspections conducted	36	48	52
% of mining companies complying with mining regulations	100%	100%	100%
Amount of NTR collected (USHs bn)	12	14	24
Number of flagships projects monitored	4	6	8
Number of Mineral rights (licences) operational	782	829	1010

## Sector: Energy and Mineral Development

<b>Programme</b>	49 Policy, Planning and Support Services		
<b>Objective</b>	The main objective is to guide the Policy formulation, implementation and as well as being responsible for the procurements, Planning, Budgeting and Policy Analysis and also the Finance and Administrative functions.		
<b>Responsible Officer</b>	Prisca Boonabantu		
<b>Programme Performance Indicators (Output)</b>	<b>2017/18 Target</b>	<b>2018/19 Target</b>	<b>2019/20 Target</b>
N / A			
<b>Vote 123 - Rural Electrification Agency (REA)</b>			
<b>Accounting Officer:</b>	Godfrey R. Turyahikayo		
<b>Programme</b>	51 Rural Electrification		
<b>Objective</b>	To achieve universal access by 2040		
<b>Responsible Officer</b>	Godfrey R. Turyahikayo		
<b>Programme Performance Indicators (Output)</b>	<b>2017/18 Target</b>	<b>2018/19 Target</b>	<b>2019/20 Target</b>
<b>Sector Outcome: Increased access to affordable modern sources of energy through enhanced generation capacity and distribution</b>			
Number of line Kms of Low Voltage (240v) constructed	2100	1000	1200
Number of line Kms of Medium Voltage (33Kv or 11Kv) constructed	3200	1200	1500

### Sector Investment Plans

During the FY 2017/18, the Sector will continue to focus major capital Investments towards the construction of Large Hydropower infrastructure (Karuma, Isimba Hydro Power Projects); construction of transmission lines and the associated Way leaves; Resettlement Action Plan and capacity payments towards thermal power generation.

The sector will also focus on the implementation of the refinery development activities including the development of the oil pipelines, aerodrome, and the implementation of the oil and gas policy.

In the mineral sector, government will implement the Mineral Certification Mechanism, Expand the Seismological Network, Construct one Mineral Beneficiation Center and continue mapping and exploration of the mineral wealth potential of the country.

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

**Table S2.3: Allocations by Class of Output Over the Medium Term**

<i>Billion Uganda Shillings</i>	<i>(i) Allocation</i>				<i>(ii) % Sector Budget</i>			
	2016/17	2017/18	2018/19	2019/20	2016/17	2017/18	2018/19	2019/20
<b>Consumption Expenditure (Outputs Provided)</b>	180.953	89.623	76.172	0.000	100.0%	7.4%	3.0%	0.0%

## Sector: Energy and Mineral Development

Grants and Subsidies (Outputs Funded)	0.000	138.952	135.441	165.500	0.0%	11.5%	5.3%	7.7%
Investment (Capital Purchases)	0.000	981.233	2,341.844	1,981.921	0.0%	81.1%	91.7%	92.3%
<b>Total</b>	<b>180.953</b>	<b>1,209.808</b>	<b>2,553.457</b>	<b>2,147.421</b>				

### S3: Proposed Budget Allocations For FY 2017/18 And the Medium Term Projections

Table S3.1: Past Expenditure Outturns and Medium Term Projections by Programme\*

Billion Uganda shillings	FY 2015/16	FY 2016/17		Medium Term Projections				
	Outturn	Approved Budget	Actual Releases by end Q1	2017-18	2018-19	2019-20	2020-21	2021-22
<b>Vote :017 Ministry of Energy and Mineral Development</b>								
Programme: 01 Energy Planning, Management & Infrastructure Dev't	129.441	481.777	173.343	421.271	375.126	415.067	219.987	217.117
Programme: 02 Large Hydro power infrastructure	155.963	1,402.025	333.156	1,859.572	1,314.092	789.252	1,252.762	1,896.311
Programme: 03 Petroleum Exploration, Development, Production, Value Addition and Distribution and Petroleum Products	45.190	173.713	5.157	192.019	221.913	360.613	355.660	355.931
Programme: 04 Petroleum Supply, Infrastructure and Regulation	9.194	13.457	1.010	0.000	0.000	0.000	0.000	0.000
Programme: 05 Mineral Exploration, Development & Value Addition	8.184	13.414	1.548	24.629	24.740	24.860	24.908	24.820
Programme: 49 Policy, Planning and Support Services	20.499	23.683	5.446	21.648	20.082	20.319	20.553	20.953
<b>Total for the Vote</b>	<b>368.471</b>	<b>2,108.069</b>	<b>519.659</b>	<b>2,519.140</b>	<b>1,955.953</b>	<b>1,610.111</b>	<b>1,873.871</b>	<b>2,515.132</b>
<b>Vote :123 Rural Electrification Agency (REA)</b>								
Programme: 51 Rural Electrification	84.166	269.164	52.055	480.507	579.739	596.581	355.325	449.677
<b>Total for the Vote</b>	<b>84.166</b>	<b>269.164</b>	<b>52.055</b>	<b>480.507</b>	<b>579.739</b>	<b>596.581</b>	<b>355.325</b>	<b>449.677</b>
<b>Total for the Sector</b>	<b>452.638</b>	<b>2,377.233</b>	<b>571.714</b>	<b>2,999.646</b>	<b>2,535.692</b>	<b>2,206.692</b>	<b>2,229.196</b>	<b>2,964.809</b>

## Sector: Energy and Mineral Development

**Table S3.2: Major Changes in Sector Resource Allocation**

Major changes in resource allocation over and above the previous financial year		Justification for proposed Changes in Expenditure and Outputs
<b>Vote: 017 Ministry of Energy and Mineral Development</b>		
<i>Programme : 01 Energy Planning, Management &amp; Infrastructure Dev't</i>		
Output: 01 Energy Policy/Plans Dissemination, Regulation and Monitoring		
<i>Change in Allocation (US\$ Bn) :</i>	<b>10.141</b>	Increased consultations and meetings on energy policy and reviews of legislation and power sector reforms
Output: 02 Energy Efficiency Promotion		
<i>Change in Allocation (US\$ Bn) :</i>	<b>4.528</b>	Promotion to popularise the use of energy efficient options
Output: 03 Renewable Energy Promotion		
<i>Change in Allocation (US\$ Bn) :</i>	<b>3.871</b>	Increased use of means such as solar, biogas systems, briquettees, improved stoves and small mini hydro dams .
Output: 04 Increased Rural Electrification		
<i>Change in Allocation (US\$ Bn) :</i>	<b>(3.618)</b>	Reduced since much of the resources are handled by REA
Output: 05 Atomic Energy Promotion and Coordination		
<i>Change in Allocation (US\$ Bn) :</i>	<b>0.260</b>	The Nuclear road map now embarks on physical siting of the possible nuclear plant site, hence for resources
Output: 51 Membership to IAEA		
<i>Change in Allocation (US\$ Bn) :</i>	<b>0.080</b>	Need to fulfill this International Obligation
Output: 52 Thermal and Small Hydro Power Generation (UETCL)		
<i>Change in Allocation (US\$ Bn) :</i>	<b>(23.640)</b>	Limited resource envelope hence a reduction for capacity power payments
Output: 53 Cross Sector Transfers for ERT (Other Components)		
<i>Change in Allocation (US\$ Bn) :</i>	<b>2.500</b>	Funding boosted to promote renewable energy through the UECC
Output: 71 Acquisition of Land by Government		
<i>Change in Allocation (US\$ Bn) :</i>	<b>(99.468)</b>	Limited resources envelope
Output: 72 Government Buildings and Administrative Infrastructure		
<i>Change in Allocation (US\$ Bn) :</i>	<b>0.308</b>	Need for refurbishment of the structures
Output: 75 Purchase of Motor Vehicles and Other Transport Equipment		
<i>Change in Allocation (US\$ Bn) :</i>	<b>0.250</b>	More field supervision requirements
Output: 76 Purchase of Office and ICT Equipment, including Software		
<i>Change in Allocation (US\$ Bn) :</i>	<b>(0.558)</b>	Many office ICT items now in place
Output: 77 Purchase of Specialised Machinery & Equipment		
<i>Change in Allocation (US\$ Bn) :</i>	<b>(6.657)</b>	Limited resources

## Sector: Energy and Mineral Development

Output: 79 Acquisition of Other Capital Assets		
Change in Allocation (US\$ Bn) :	<b>51.823</b>	Includes assets in the power generation component
<i>Programme : 02 Large Hydro power infrastructure</i>		
Output: 51 Increased power generation - Largescale Hydro-electric		
Change in Allocation (US\$ Bn) :	<b>9.703</b>	Increased monitoring and supervision
Output: 71 Acquisition of Land by Government		
Change in Allocation (US\$ Bn) :	<b>(2.600)</b>	Land RAP implementaion for Karuma and Isimba reducing
Output: 80 Large Hydro Power Infrastructure		
Change in Allocation (US\$ Bn) :	<b>(847.757)</b>	Completion of the Karuma dam construction
<i>Programme : 03 Petroleum Exploration, Development, Production, Value Addition and Distribution and Petrolleum Products</i>		
Output: 01 Promotion of the country's petroleum potential and licensing		
Change in Allocation (US\$ Bn) :	<b>(119.543)</b>	Big reduction due to an error in refinery donor figures
Output: 03 Capacity Building for the oil & gas sector		
Change in Allocation (US\$ Bn) :	<b>8.254</b>	We need more man power for involvement in the production phases
Output: 04 Monitoring Upstream petroleum activities		
Change in Allocation (US\$ Bn) :	<b>0.060</b>	Monitoring of the production phases
Output: 05 Develop and implement a communication strategy for oil & gas in the country		
Change in Allocation (US\$ Bn) :	<b>(0.285)</b>	Now its at implementation since development was completed
Output: 06 Participate in Regional Initiatives		
Change in Allocation (US\$ Bn) :	<b>(0.920)</b>	Limited resource envelope
Output: 07 Petroleum Policy Development, Regulation and Monitoring		
Change in Allocation (US\$ Bn) :	<b>0.706</b>	Petroleum supply policy formulation facilitated
Output: 08 Management and Monitoring of petroleum supply Industry		
Change in Allocation (US\$ Bn) :	<b>0.057</b>	Enforcement enhanced
Output: 09 Maintainance of National Petroleum Information System		
Change in Allocation (US\$ Bn) :	<b>0.014</b>	Monotoring NPIS ugrade for timely results
Output: 10 Operational Standards and laboratory testing of petroleum products		
Change in Allocation (US\$ Bn) :	<b>0.039</b>	Monitoring of Laboratory operations
Output: 12 Kenya - Uganda - Rwanda Oil pipelines		
Change in Allocation (US\$ Bn) :	<b>0.001</b>	Monitoring RAP review
Output: 51 Transfer for Petroleum Refining (Midstream Unit)		
Change in Allocation (US\$ Bn) :	<b>2.550</b>	New institutions now in place (PAU and UNOC)
Output: 71 Acquisition of Land by Government		

## Sector: Energy and Mineral Development

<i>Change in Allocation (US\$ Bn) :</i>	<b>114.247</b>	Refinery land and other related corridors os pipelines
Output: 72 Government Buildings and Administrative Infrastructure		
<i>Change in Allocation (US\$ Bn) :</i>	<b>4.550</b>	Data centre completed
Output: 76 Purchase of Office and ICT Equipment, including Software		
<i>Change in Allocation (US\$ Bn) :</i>	<b>0.436</b>	More ICT equipment and software required as the oil and gas industry grows
Output: 77 Purchase of Specialised Machinery & Equipment		
<i>Change in Allocation (US\$ Bn) :</i>	<b>0.780</b>	More equipment required as the oil and gas industry grows
Output: 78 Purchase of Office and Residential Furniture and Fittings		
<i>Change in Allocation (US\$ Bn) :</i>	<b>(0.195)</b>	Most offices now equipped
Output: 79 Acquisition of Other Capital Assets		
<i>Change in Allocation (US\$ Bn) :</i>	<b>4.801</b>	Nakasongola storage Tanks refurbishment and related activities
Output: 80 Oil Refinery Construction		
<i>Change in Allocation (US\$ Bn) :</i>	<b>4.580</b>	Upscale monitoring and supervision
<i>Programme : 04 Petroleum Supply, Infrastructure and Regulation</i>		
Output: 02 Management and Monitoring of petroleum supply Industry		
<i>Change in Allocation (US\$ Bn) :</i>	<b>(0.029)</b>	Limited resource envelope
Output: 03 Maintenance of National Petroleum Information System		
<i>Change in Allocation (US\$ Bn) :</i>	<b>(0.044)</b>	All the required data has been migrated to the NPSI
Output: 04 Operational Standards and laboratory testing of petroleum products		
<i>Change in Allocation (US\$ Bn) :</i>	<b>(0.020)</b>	Most the Laboratory equipment was procured and installed
Output: 06 Kenya - Uganda - Rwanda Oil pipelines		
<i>Change in Allocation (US\$ Bn) :</i>	<b>(0.044)</b>	Activities are being reviewed to assess the viability
Output: 71 Acquisition of Land by Government		
<i>Change in Allocation (US\$ Bn) :</i>	<b>1.215</b>	RAP implementation on the Kampala Kigali and study of barges on Lake Victoria and to commence development of Buloba
Output: 76 Purchase of Office and ICT Equipment, including Software		
<i>Change in Allocation (US\$ Bn) :</i>	<b>0.475</b>	Upgrading of the softwares and equipment
Output: 79 Acquisition of Other Capital Assets		
<i>Change in Allocation (US\$ Bn) :</i>	<b>(1.510)</b>	Nakasongola fuel reserves
<i>Programme : 05 Mineral Exploration, Development &amp; Value Addition</i>		
Output: 02 Institutional capacity for the mineral sector		



## Sector: Energy and Mineral Development

<i>Change in Allocation (US\$ Bn) :</i>	<b>2.731</b>	In the plan the budget is rationalized to critical path priorities and inputs to enable corrective measures in policy, technical capacity, institutional weaknesses, historical distortions in sector to increase mineral revenue collection by strengthening m
Output: 03 Mineral Exploration, development, production and value-addition promoted		
<i>Change in Allocation (US\$ Bn) :</i>	<b>2.581</b>	In the plan the budget is rationalized to critical path priorities and inputs to enable corrective measures in policy, technical capacity, institutional weaknesses, historical distortions in sector to increase mineral revenue collection by strengthening m
Output: 05 Licencing and inspection		
<i>Change in Allocation (US\$ Bn) :</i>	<b>2.954</b>	In the plan the budget is rationalized to critical path priorities and inputs to enable corrective measures in policy, technical capacity, institutional weaknesses, historical distortions in sector to increase mineral revenue collection by strengthening m
Output: 71 Acquisition of Land by Government		
<i>Change in Allocation (US\$ Bn) :</i>	<b>0.083</b>	In the plan the budget is rationalized to critical path priorities and inputs to enable corrective measures in policy, technical capacity, institutional weaknesses, historical distortions in sector to increase mineral revenue collection by strengthening m
Output: 74 Major Bridges		
<i>Change in Allocation (US\$ Bn) :</i>	<b>(0.050)</b>	Budget rationalized to critical path priorities and inputs to enable mineral revenue collection by strengthening monitoring and inspections of mining operations
Output: 75 Purchase of Motor Vehicles and Other Transport Equipment		
<i>Change in Allocation (US\$ Bn) :</i>	<b>0.462</b>	In the plan the budget is rationalized to critical path priorities and inputs to enable corrective measures in policy, technical capacity, institutional weaknesses, historical distortions in sector to increase mineral revenue collection by strengthening m
Output: 76 Purchase of Office and ICT Equipment, including Software		
<i>Change in Allocation (US\$ Bn) :</i>	<b>0.451</b>	In the plan the budget is rationalized to critical path priorities and inputs to enable corrective measures in policy, technical capacity, institutional weaknesses, historical distortions in sector to increase mineral revenue collection by strengthening m
Output: 77 Purchase of Specialised Machinery & Equipment		
<i>Change in Allocation (US\$ Bn) :</i>	<b>3.649</b>	In the plan the budget is rationalized to critical path priorities and inputs to enable corrective measures in policy, technical capacity, institutional weaknesses, historical distortions in sector to increase mineral revenue collection by strengthening m
Output: 78 Purchase of Office and Residential Furniture and Fittings		

## Sector: Energy and Mineral Development

Change in Allocation (US\$ Bn) :	(0.060)	Budget is rationalized to critical path priorities and inputs to enable mineral revenue collection by strengthening monitoring and inspections of mining operations
Output: 79 Acquisition of Other Capital Assets		
Change in Allocation (US\$ Bn) :	(0.190)	Budget is rationalized to critical path priorities and inputs to enable mineral revenue collection by strengthening monitoring and inspections of mining operations.
Programme : 49 Policy, Planning and Support Services		
Output: 01 Planning, Budgeting and monitoring		
Change in Allocation (US\$ Bn) :	(0.661)	Limited resource envelope
Output: 02 Finance Management and Procurement		
Change in Allocation (US\$ Bn) :	0.042	Increased vigilance on handling of resources
Output: 03 Procurement & maintainance of assets and stores		
Change in Allocation (US\$ Bn) :	0.060	Increased activity in the sector in terms of procurement
Output: 04 Statistical Coordination and Management		
Change in Allocation (US\$ Bn) :	(0.194)	Much of the data had been collected
Output: 05 Management of Human Resource		
Change in Allocation (US\$ Bn) :	0.990	More gratuity and pensions to be paid to retiring staff
Output: 06 Management of Policy Issues, Public Relation, ICT and Electricity disputes resolved		
Change in Allocation (US\$ Bn) :	(2.929)	Limited resources to support all agencies such as EDT,UECCC, UEDCL and AEC
Output: 72 Government Buildings and Administrative Infrastructure		
Change in Allocation (US\$ Bn) :	2.434	Proposed Amber House redevelopment.
Output: 77 Purchase of Specialised Machinery & Equipment		
Change in Allocation (US\$ Bn) :	0.300	The resource is meant for the purchase of 5 motor vehicles for 3 Ministers , US/AO and SPPAD
Output: 78 Purchase of Office and Residential Furniture and Fittings		
Change in Allocation (US\$ Bn) :	(0.200)	About half of the offices have been fitted with new furniture
Output: 79 Acquisition of Other Capital Assets		
Change in Allocation (US\$ Bn) :	(0.700)	Most certificates of the feasibility studies for Nyamba B paid.hence reduction for monitoring only.
<b>Vote: 123 Rural Electrification Agency (REA)</b>		
Programme : 51 Rural Electrification		
Output: 80 Construction of Rural Electrification Schemes (On-grid)		
Change in Allocation (US\$ Bn) :	211.342	There was an increase in the resources allocated to the vote for the FY 2017/18

### S4 :Unfunded Outputs for 2017/18 and the Medium Term

## Sector: Energy and Mineral Development

**Table S4.1: Additional Output Funding Requests**

Additional requirements for funding and outputs in 2017-2018	Justification of requirement for additional outputs and funding
<i>Vote: 017 Ministry of Energy and Mineral Development</i>	
<i>Programme : 01 Energy Planning, Management &amp; Infrastructure Dev't</i>	
<b>Output: 71 Acquisition of Land by Government</b>	
<i>Funding requirement US\$ Bn : 430.000</i>	This contributes to the NDP objectives on page 182 to have increased energy generation , access and reliability for economic and social development
<i>Programme : 03 Petroleum Exploration, Development, Production, Value Addition and Distribution and Petroleum Products</i>	
<b>Output: 01 Promotion of the country's petroleum potential and licensing</b>	
<i>Funding requirement US\$ Bn : 420.000</i>	This contributes to NDP objectives on page 166-7 for operations of PAU, UNOC, Equity and RAP for pipeline land
<i>Programme : 05 Mineral Exploration, Development &amp; Value Addition</i>	
<b>Output: 03 Mineral Exploration, development, production and value-addition promoted</b>	
<i>Funding requirement US\$ Bn : 53.000</i>	This contributes to the NDP objectives on pages 163-4 to complete the whole country airborne geophysical surveys and set up a modern laboratory in uganda
<i>Programme : 49 Policy, Planning and Support Services</i>	
<b>Output: 72 Government Buildings and Administrative Infrastructure</b>	
<i>Funding requirement US\$ Bn : 19.000</i>	To have a conducive environment for the ministry and agencies to be able to deliver the mandate
<i>Vote: 123 Rural Electrification Agency (REA)</i>	
<i>Programme : 51 Rural Electrification</i>	
<b>Output: 80 Construction of Rural Electrification Schemes (On-grid)</b>	
<i>Funding requirement US\$ Bn : 66.830</i>	Counterpart funds for top up of project costs, payment of 18% VAT and compensations for the new projects amounting UGX 48.45 billions.  Compensations for the old projects as at 30th/06/2016 amounting to UGX 18.38.