# IN THE FIRST MEETING OF THE FIRST SESSION OF THE EIGHTH PARLIAMENT OF THE FOURTH REPUBLIC OF GHANA



# REPORT OF THE SELECT COMMITTEE ON MINES AND ENERGY ON THE 2021 DRAFT ANNUAL BUDGET ESTIMATES OF THE MINISTRY OF ENERGY

23<sup>RD</sup> MARCH, 2021



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## 1.0 INTRODUCTION

The Budget Statement and Economic Policy of the Government of Ghana for the financial year ending 31<sup>st</sup> December, 2021 was presented to Parliament, by the Hon. Minister for Parliamentary Affairs and Majority Leader in Parliament, Mr. Osei Kyei-Mensah-Bonsu, on behalf of the His Excellency the President, on Friday, 12<sup>th</sup> March, 2021 in accordance with Article 179 and 180 of the 1992 Constitution.

Pursuant to Orders 140(4) and 188 of the Standing Orders of Parliament, the Rt. Hon Speaker referred the Budget Estimates of the Ministry of Energy to the Select Committee on Mines and Energy for consideration and report to the House.

## 1.1 <u>DELIBERATIONS</u>

The Committee met on Friday, 19<sup>th</sup> March 2021 and examined the Estimates of the Ministry. Present at the meeting were the Hon. Minister for Energy, Dr. Mathew Opoku Prempeh, Heads of Agencies under the Ministry and technical Officers from the Ministries of Energy and Finance. The Committee is grateful for their inputs and clarifications.

## 1.2 <u>REFERENCE DOCUMENTS</u>

In considering the Estimates, the Committee made reference to the under-listed documents:

- The 1992 Constitution;
- ii. The Standing Orders of Parliament;
- iii. The Renewable Energy Act, 2011 (Act 832);
- iv. The Energy Commission Act, 1997 (Act 541);
- v. The Petroleum Commission Act, 2011 (Act 821);

- vi. Public Utilities Regulatory Commission Act, 1997 (Act 538);
- vii. The Budget Statement and Economic Policy of the Government of the Republic of Ghana for the 2020 Financial Year;
- viii. The Ministry of Energy Medium Term Expenditure Framework for 2020 -2023;
- ix. The 2021 Expenditure in Advance of Appropriation; and
- x. The Ministry of Energy Medium Term Expenditure Framework for 2021 -2024

#### 2.0 AGENCIES UNDER THE MINISTRY

The Ministry of Energy comprises the Headquarters and the under-listed Agencies:

#### 2.1 Power Sub-Sector

- Energy Commission;
- Volta River Authority;
- Bui Power Authority;
- Ghana Grid Company;
- Electricity Company of Ghana;
- Northern Electricity Distribution Company; and
- Volta Aluminium Company.

#### 2.2 Petroleum Sub-Sector

- National Petroleum Authority;
- Petroleum Commission;
- Ghana National Petroleum Corporation;
- Ghana National Gas Company;
- Bulk Oil Storage and Transportation Company;
- Tema Oil Refinery;
- Ghana Cylinder Manufacturing Company; and
- Ghana Oil Company Limited (listed on GSE)

# 3.0 <u>VISION AND MISSION OF THE MINISTRY</u>

- 3.1 The vision of the Ministry is to develop an energy economy with reliable supply of high quality energy services for the Ghanaian economy and for export.
- 3.2 The Mission of the Ministry is to ensure reliable and competitively-priced energy for the Ghanaian economy and for export, in an environmentally-friendly manner.

# 4.0 POLICY/STRATEGIC OBJECTIVES OF THE MINISTRY

The Ministry has adopted the following policy objectives to be achieved within the short to medium term:

#### 4.1 Power Sub-Sector

- i. Ensure availability of clean, affordable and accessible energy;
- ii. Ensure efficient transmission and distribution system;
- Ensure efficient utilization of energy;
- iv. Enhance capacity for policy formulation and coordination; and
- v. Improve financial capacity and sustainability of utility companies.

## 4.2 Petroleum Sub-Sector

- Promote petroleum exploration;
- Promote development and use of indigenous capabilities for exploitation of petroleum resources;
- iii. Leverage oil and gas industry as a catalyst for national economic development;
- iv. Minimize potential environmental impacts of oil and gas industry;
- v. Reduce greenhouse gas emissions; and
- vi. Make Ghana the petroleum hub for West African sub-region

#### 5.0 2020 PERFORMANCE OF THE MINISTRY

#### **5.1** Power Sub-Sector

#### 5.1.1 Generation and Transmission

The Ministry achieved the following under its power generation programmes during the year under review:

- i. Completed 98% of the 200MW Amandi Power Project which is currently at the last phase of commissioning.
- ii. Completed the phase 1A of the 400MW Early Power Project (147MW) which is currently undergoing commissioning.
- iii. Concluded Renegotiations of CENIT Energy Limited Power Purchasing Agreement (PPA). Renegotiation of AKSA Energy Company (GH) Limited PPA is also near completion and discussion for Karpower also commenced.
- iv. Enforced interventions, such as the placement of moratorium on the signing of new PPAs, Gas Sales Agreement, Put-Call Option Agreements ("PCOAs") and any long-term take-or-pay contracts.
- v. Commenced preparatory works for the construction of 60MW hydro-power and 50MW Solar power at Pwalugu Multipurpose Dam Project.
- vi. Commenced discussions for the repowering of the 132MW Takoradi 3 Power Plant (T3 Plant)

## **5.1.2 Transmission System Improvement**

During the year under review, GRIDCo continued with the Transmission System Reinforcement Project to improve operational reliability, security and control among others. Key among these expansion projects were:

- Completion of Lot 2 (Kintampo-Tamale), Lot 3 (Tamale-Bolgatanga) of the 330kV Kumasi-Bolgatanga Transmission Line and 98% of work on Lot 1 (Kumasi-Kintampo) Transmission Line Project
- ii. Achieved 53% completion rate for the 161kV Volta-Achimota-Mallam Transmission Line Upgrade Project and 31% completion rate for Volta-Achimota Achimota-Mallam transmission line.

iii. Achieved 90% completion of the remedial works on the Aboadze – Prestea 330kV Transmission Line and 92% completion rate for the construction works on the A4BSP (Pokuase Bulk Supply Point)

# **5.1.3 National Electricity Access Rate**

The Ministry connected 388 out of 560 communities targeted to the national grid under the Rural Electrification Programme. This increased the National Electricity Access rate marginally from 84.98% in 2019 to 85.17% in 2020.

# **5.1.4 Renewable Energy Programme**

The Ministry achieved the following as part of its programmes to increase renewable energy sources in the energy mix of the country:

- i. Added 32.5MW of renewable energy to the grid to increase penetration by 4.7%;
- ii. Completed and commissioned the 6.5 Mega Watts peak (MWp) Lawra component of the 9.8MWp Lawra/Kaleo Solar Project;
- iii. Commissioned a total of 26MW out of the 50MW Solar project undertaken by Bui Power Authority
- iv. Completed 60% of installation works on 912kW solar project at the Jubilee House;
- v. Completed and commissioned the first ever 45KW mini-hydro power plant at Alavanyo;
- vi. Distributed 43,400 units of solar lanterns to poor off-grid rural households to replace the use of kerosene lanterns in non-electrified communities;
- vii. Distributed 54,000 improved charcoal stoves under the climate change mitigation programme across the country;
- viii. Completed feasibility study for the installation of 55 minigrids in off-grid communities;
- ix. Facilitated the enactment of the Renewable Energy (Amendment) Bill, 2020 and Bui Power Authority (Amendment) Bill, 2020; and
- x. Completed the planning phase (phase 1) of addressing the 19 infrastructure issues recommended by the International Atomic Energy Agency (IAEA).

#### **5.1.5 Regional Capitals Street Lighting**

The Ministry installed a total of 6000 and 4,500 150W streetlights in selected streets in Accra and Kumasi respectfully. It further installed 350 out of 700 streetlights fixtures on the Tema-Motorway.

#### 5.2 Petroleum Sub-Sector

#### **5.2.1 Upstream Activities**

The Ministry recorded the following achievements under the petroleum sector programmes:

#### (a) The Jubilee Field

- i. Total crude oil from the Jubilee Field was 30.43 million barrels (MMBBLS); averaging 83,127.16 barrels of oil per day (bopd).
- ii. Gas production was 64,426.21 million standard cubic feet (MMscf) with a total of 26,414.88 million standard cubic feet (MMscf).

#### (b) Tweneboa-Enyenra-Ntomme (TEN) Field

- i. Total crude oil produced was 17.81 million barrels (MMBBLS); averaging 48,640.81 barrels of oil per day (bopd).
- ii. A total gas production of 5,544.74MMscf was exported for power generation.

### (C) Sankofa Gye Nyame Field

- i. Total crude oil production was 18.70 million barrels (MMBBLS); averaging 51,092.16 barrels of oil per day (bopd) as of December 31, 2020.
- ii. A total of 70,355.70 million standard cubic feet (MMscf) non- associated gas was produced out of which 56,570.99 million standard cubic feet (MMscf) was delivered for power generation.

#### 5.2.4 Petroleum Downstream

The following interventions were undertaken in the downstream sub-sector during 2020 fiscal year:

- i. Distributed 1,500 LPG cookstoves under the Rural LPG Promotion Programme.
- ii. Launched the pilot phase 1 of the Cylinder Recirculation Model (CRM) implementation in the Kwaebibirim, Denkyembuor and Obuasi Municipal.

iii. Facilitated the enactment of the Petroleum Hub Corporation Act by Parliament on 23<sup>rd</sup> October, 2020.

# 6.0 FINANCIAL PERFORMANCE FOR 2020

A total of Six Hundred and Eighty-Five Million, Seven Hundred and Sixty-Six Thousand, Three Hundred and Twenty-Seven Ghana Cedis (GH¢685,766,327.00) was approved for the implementation of the programmes and activities of Ministry for the 2020 Financial Year. As at the end of the year, a total amount of Seven Billion, One Hundred and Three Million, Two Hundred and Nineteen Thousand, One Hundred and Five Ghana Cedis, Fifty-One Pesewas (GH¢7,103,219,105.51), representing over-expenditure of GH¢5,731,686,451.51. The details are presented in the table below:

**Table 1. 2020 Financial Performance of the Ministry** 

source	Approved Budget	Amount Released	Actual Expenditure	Maria	Percent
compensation			Expenditure	Variance	released
(GoG)	4,233,929.00	3,962,975.77	3,962,975.77	270.052.00	
Goods and Services	, ,,===================================	3,302,373.77	3,302,373.77	270,953.23	93.6
(GoG)	2,881,583.00	2,881,583.00	2,881,583.00	-	
CAPEX			2,001,303.00	-	100.0
GoG	100,000,000.00	99,026,865.02	99,026,865.02	973,134.98	00.0
ABFA	60,000,000.00	54,995,751.00	54,995,751.00	5,004,249.00	99.0 91.7
DP Funds	441,031,150.00	55,131,665.77	55,131,665.77	385,899,484.23	42.5
Retained IGF		·	, , , , , , , , , , , , , , , , , , , ,	363,633,464.23	12.5
Ministry of Energy		432,180.00	432,180.00	. 422 400 00	
Energy Commission	77,619,665.00	30,053,449.00	28789381.26	432,180.00	
ESLA		783,792,907.28	783544321.1	47,566,216.00 - 783,792,907.28	38.7
Other Sources		6,072,941,728.67	6,072,941,728.67	- 5,387,175,401.67	
TOTALS	685,766,327.00	7,103,219,105.51	7,101,706,451.59	- 5 721 606 454 54	

Source: 2021 Programme Based Budget Estimates of the Ministry of Energy, page 5

#### 7.0 **OUTLOOK FOR 2021**

#### 7.1 Power Generation and Transmission

In 2021, the Ministry plans to undertake the following projects to improve its power generation and transmission sub-sector:

- i. Complete phase 1B of the Early Power Project to bring the installed capacity to 202MW;
- ii. Continue the ongoing PPA Renegotiations;
- iii. Continue works on the Pwalugu Multipurpose Dam;
- iv. Repair / Replacement of T3 Gas Turbines;
- v. Complete Lot1 (Kumasi-Kintampo component) of the Kumasi-Bolgatanga Transmission Line Project;
- vi. Continue the upgrade of 161kV Volta-Achimota-Mallam Transmission Line
- vii. Complete the 330kV A4BSP (Pokuase Bulk Supply Point);
- viii. Commence feasibility Studies for the 330kV Accra Kumasi Transmission Line Project;
- ix. Construct a new substation at Dunkwa-on-Offin,
- x. Reconstruct the over-aged 161kV transmission lines from Aboadze through Dunkwa to Asawinso; and
- xi. Reconstruct the existing 330kV and 161kV Aboadze Switchyards.

## **7.2** Power Distribution System Improvement

Under power distribution programmes, the Ministry plans to connect 766 towns to the national grid and continue on-going rural electrification projects under the Self-Help Electrification Projects (SHEP)-4 and SHEP-5 across the country.

## 7.3 Energy Conservation and Cost Recovery Programme

As part of the Ministry's effort at conserving energy, a total number of 5 million LED bulbs (6W, 9W and 13W) will be distributed to MMDAs.

### 7.4 Street lighting Project

The Ministry plans to install street lights on an estimated minimum of 300 km stretch of roads and streets in some selected Metropolitan, Municipalities and District across the country.

## 7.5 Renewable Energy Development

The following renewable initiatives projects will be pursued:

- i. Addition of 38MW of renewable energy to the national grid to increase renewable energy penetration by 7%;
- ii. Completion and integration of the remaining 13 MWp of the 19.8MWp Lawra/Kaleo Solar Project of VRA into the national grid;
- iii. Completion of the remaining 24MWp of the 50MWp Solar project and a 1.0MWp floating solar Plant of Bui Power Authority (BPA) by the third quarter of 2021;
- iv. Complete installation of 912kWp solar project at the Jubilee House by the end of the third quarter in 2021;
- v. Commence procurement for the supply and installation of 55 minigrids;
- vi. Distribution of 36,600 solar lanterns in stock;
- vii. Distribution of 446,000 Improved Charcoal Stoves under the climate change mitigation programme across the country; and
- viii. The implementation of activities earmarked for phase 2 of the Ghana Nuclear Power Programme will commence which includes identification of a strategic vendor country and a preferred plant site among the four candidate sites as well as human resource capacity building.

## 7.6 Petroleum Sector Development

The Ministry plans to undertake the following projects in 2021 under Petroleum subsector:

 Facilitate the negotiation of Petroleum Agreements, monitor activities on the Jubilee, TEN and SGN fields and coordinate the submission of the Pecan Plan of Development and Operation for approval;

- ii. Continue to monitor the Voltaian Basin Project which aims to acquire and process 750 km<sup>2</sup> of 3D Seismic Data and engineering studies towards drilling of a well in 2022;
- iii. Achieve an estimated total production of 57.3 million barrels of oil and 93.07 billion standard cubic feet of export gas at a daily average of 156,986 barrels of oil and 254,986.30 million standard cubic feet of gas respectively from the three (3) producing fields;
- iv. Procure an estimated number of 45,000 branded cylinders for the pilot implementation of the Cylinder Recirculation Model in three other selected regions; and
- v. Operationalized the Petroleum Hub Development Corporation.

## 8.0 BUDGETARY ALLOCATION FOR THE 2021 FISCAL YEAR

An amount of **Eight Hundred and Fifty-Four Million, Sixty-Two Thousand, Seven Hundred and Six Ghana Cedis (GH¢854,062,706.0)** has been allocated to the Ministry of Energy for the implementation of its programmes and activities for the 2021 Financial Year. The breakdown of the allocation is provided in Table 2 and 3 below:

**Table 2: Budgetary Allocation by Economic Classifications for 2021** 

SOURCE	BUDGET (GH¢)		
COMPENSATION			
(GoG)	4,410,616.00		
GOOD AND SERVICES			
(GoG)	6,268,048.00		
CAPEX			
GoG	87,673,868.00		
ABFA	8,000,000.00		
RETAINED IGF (ENERGY COMMISSION)			
COMPENSATION	18,245,781.00		
GOOD AND SERVICES	40,159,978.00		
CAPEX	9,851,573.00		
DP FUNDS	- //0.00		
DP FUNDS	679,443,841.00		
TOTAL	854,053,705		

Source: 2021 Budget Statement

Table 3: Budgetary Allocation by Programmes for 2021

	Source of Funding					
Programmes Management	GOG(GH¢)	IGF(GH¢)	Other Sources	Donors(GH¢)	Total(GH¢)	Percent Allocation (%)
and						
Administration	48,855,389.0	18,254,781.0	-	_	67,110,170.0	7.9
Power Generation, Transmission and Distribution (Power					, , , , , , , , , , , , , , , , , , , ,	,,,,
Management)	39,983,447.0	-	8,000,000.0	642 600 200 0	120 20 10	
Petroleum Development	927,144.0	- 10 /	-	642,600,308.0	690,583,755.0 927,144.0	0.1
Renewable Energy Development	8,586,553.0	12,724,785.0		36,843,533.0	E9 1E4 971 A	
Energy Sector Regulation	-	37,286,766.0	-	- -	58,154,871.0 37,286,766.0	6.8
GRAND TOTAL	98,352,533.0	68,266,332.0		679,443,841.0	854,062,706.0	100.0

Source: Programme Based Budget Estimates of the Ministry for 2021, page 1

#### 9.0 OBSERVATIONS

The following observations were made by the Committee:

# 9.1 Over Dependency on Donor Funds for Capital Project

The Committee observed that out of the total budget of GH &685,766,327.00 approved for the Ministry in 2020 financial, a substantial amount of GH &441.03million representing 64.3% was expected to be sourced from Development Partners (DP). At the end of the fiscal year under review, only GH &55.13million, representing 12.5% of the total amount had been released by the Development Partners.

It was further noted that Energy Commission received only GH $\ddagger$ 30.05million out of its approved budget of GH $\ddagger$ 77.619million, representing 38.7% of the approved budget.

The Committee was informed that the inadequacy of the funds released prevented the Ministry in undertaking most of its planned capital projects, particularly in the area of power generation, transmission and distribution, culminating to low performance in increasing national electricity access rate by only 0.19%.

The Committee urges the Ministry to collaborate with the Ministry of Finance to identify sustainable sources of funding for capital projects as well as ensure that funds meant for capital projects are release timeously.

## 9.2 Implementation of Street lighting Project

The Committee noted that during the year under review, the Ministry rehabilitated and replaced ten thousand five hundred (10,500) no. 150Watts High Pressure Sodium (HPS) street lights in selected streets in Accra and Kumasi to improve visibility, boost economic activities and check the menace of arm robbery at night. The Committee was however, displeased with the yearly replacement of some street lights in some parts of the cities, especially those on the Tema Motorway of which 350 out of the 700 street lights fixtures were installed in the year 2020. The Ministry attributed the situation to theft and lack of maintenance.

The Committee urges the Ministry to expedite action on the transfer of the ownership of the streets lights to Ministry of Local Government and Rural Development for provision of optimum security and management.

#### 9.3 National Electricity Access Rate

Again, the Committee noted with concern the apparent slow pace of expanding electricity connectivity throughout the country. For instance, it was noted that 388 communities out of the total target of 560 were connected in 2020 resulting in a marginal increase from 84.98% in 2019 to 85.17% in 2020.

The Ministry ascribed its inability to complete most of the work programmes to inadequate funding and the impact of the COVID-19 on project schedules during the year, and pledged to accelerate the progress in order to realize the President's vision of achieving 100% access rate by the end of his four year mandate.

# 9.4 Addressing the Impact of Capacity Charges by Independent Power Producers

The Committee was informed that the financial obligations of the State to the independent power producers arising out of capacity charges negotiated under the Power Purchase Agreements (PPA) were impacting on the finances of the country, cost of power generation and sustainability of the operations of the independent power producers. To this end, Government is renegotiating with some PPAs including CENIT, AKSA, Karpower and Amandi. The Ministry was hopeful that successful renegotiation of the terms of the PPAs including capacity charges, refinancing of the project and fuel supply arrangements will significantly address the capacity charges. The Committee therefore, urges the Ministry to be tactful in its negotiation so that the State does not incur unnecessary judgment debts.

### 9.5 Relocation of Ameri Power Plant

The Committee noted that the Build, Own, Operate and Transfer (BOOT) Agreement between the Government of Ghana and Ameri Energy expired on January, 2021, paving way for the transfer of the power plant to the Government of Ghana in line with the terms of the Agreement. The Ministry indicated that reconciliation of the outstanding debt has been completed and about 90 percent of the Government's financial obligations under the Agreement have been settled by the Ministry of Finance. An Independent Engineer has also been hired to conduct an audit on the power plant after which the remaining 10% financial obligation will be settled in order for the country to assume full ownership. The relocation of the power plant to Kumasi to stabilise the national grid will, therefore, kick-off immediately after the conclusion of the audit process. The Committee urges the Ministry to ensure that the audit process is extensive and cover tax obligations of the company so that Ghana is not short-changed.

# 9.6 Implementation of Policy on Cylinder Recirculation Model

The Committee expressed concern about the inability of the Ministry to conclude the pilot phase of the Cylinder Re-circulation Model (CRM) following the adoption of the policy in 2017.

The Ministry attributed the delay to the restrictions imposed by COVID-19 pandemic which affected their project schedules for the second pilot phase in other regions of the country. They indicated to the Committee that results from the Phase 1 Pilot were positive and assured the Committee of expediting actions to complete the rest of the pilot projects in order to roll it out nationwide. As part of the scaling up plans, the Ministry is collaborating with the Ghana Cylinder Manufacturing Company Ltd to expand the company's capacity to manufacture more quality LPG cylinders.

## 9.7 Status of Aker Energy Project

The Committee was informed that Aker Energy had postponed the development of the Deepwater Pecan Oilfield, located Offshore Ghana in April, 2020 following the outbreak of COVID-19 pandemic and subsequent fall in oil prices. As result of the pandemic, Aker Energy has terminated its agreement with Yinson for the provision of a purpose-built Floating Production Storage and Offloading (FPSO) vessel to be connected to a subsea production system at 2,400 meters below sea level.

The Ministry further informed the Committee that with current vaccination programmes and recent improvement in the oil market price, the company had given indication of reviving its work programmes. The Ministry is also constituting a technical team to work with Aker Energy to come out with a new plan of development for the field considering the fact that many of the assumptions underpinning the existing plan of development has been altered by the impact of the pandemic.

# 9.9 Expenditure out of appropriation to the Ministry

The Committee noted that a substantial amount of GH¢6,857,166,815.95 comprising retained IGF of GH¢432,180.00, ESLA release of GH¢783,792,907.28 and other sources of GH¢6,072,941,728.67 was expended out of the 2020 budgetary allocation to the Ministry.

The Ministry explained that the said expenditure was in respect of payment of power sector debt obligations which are paid by the Ministry of Finance upon request by the Ministry of Energy.

The Committee is of the view that the Ministry of Energy is aware of these debt obligations and could therefore make provisions for them in its annual budgetary allocations. Accordingly, the Committee recommends to the Ministry of Finance to create a line item in the Ministry of Energy annual budgets to take care of such financial obligations.

# 10.0 CONCLUSION AND RECOMMENDATION

The Committee, having thoroughly examined the budget estimates of the Ministry of Energy for the 2020 fiscal year, is of the view that the policies and programmes outlined for the year would go a long way to support the achievement of the Sector goal of providing secure, safe and reliable supply of energy to promote economic growth of the country.

The Committee accordingly recommends to the House to adopt its Report and approve the amount of **Eight Hundred and Fifty-Four Million**, **Sixty-Two Thousand**, **Seven Hundred and Six Ghana Cedis (GH¢854,062,706.0)** for the services of the Ministry of Energy for the year ending 31<sup>st</sup> December 2021.

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Respectfully submitted.

ION. SAMUEL 🎢 TA AKYEA (MP)

HAIRMAN COMMITTEE ON MINES AND ENERGY)

JOANA A. S. ADJEI (MRS)

(CLERK TO THE COMMITTEE)

23RD March, 2021