



ENERGY COMMISSION

**ANNUAL REPORT AND AUDITED FINANCIAL
STATEMENTS FOR 2019**

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FOREWORD

The Energy Commission began the 3rd decade of its institutional life with great hope and confidence about its role in national development.

The Commission completed and submitted the Energy Demand Projection for the Economy of Ghana Report of the Strategic National Energy Plan (2020 – 2030) to the Ministry of Energy for onward submission to Cabinet. The Report took into consideration some government policies under implementation, such as the Coordinated Programme for Economic and Social Development Polices (CPESP), (2017-2024); the Planting for Food and Jobs, as well as the key energy sector goal of achieving universal access to electricity by 2020. It therefore focused on the strategies for developing off-grid renewable energy generation to supply electricity to remote and isolated communities.

In furtherance of the implementation of the Local Content and Local Participation Regulations, 2017 (L.I. 2354), the Ministry of Energy on 2nd May, 2019 inaugurated the Electricity Supply Industry (ESI), Local Content and Local Participation Committee to oversee the development and growth of local content and local participation in the ESI and ensure the implementation of the provisions of these regulations, among others.

The establishment of the Local Content and Local Participation Committee and the Electricity Market Oversight Panel (EMOP) within the Energy Commission was a mark of the growing importance of the EC in the national economy and a clear recognition of the technical competence, efficiency and integrity of its staff.

The Energy Commission and the Agence Française De Développement (AFD) on Thursday, 20 June, 2019, signed a Technical Assistance Facility (TAF) to support local banks and other key stakeholders towards the development of Energy Efficiency (EE) and Renewable Energy (RE) projects under the Sustainable Use of Natural Resources and Energy Finance programme (SUNREF) in Ghana. This programme emanated from the recommendations of a feasibility study financed by AFD, which highlighted, among others, the urgent need for investments in RE & EE sector in Ghana.

The 2019 RE Fair was another huge success, this time introducing the Senior High School Renewable Energy Challenge, a competition aimed at exciting a passion for solving renewable energy, energy efficiency and climate change challenges in students through research and innovation.

The Energy Commission, for the very first time, introduced the District Energy Profile Report which provides information on Ghana's energy resources in the various districts in Ghana as well as their current and projected level of utilization. This was to support the government's 1D1F Programme and make information available to investors.

The Energy Commission (EC) had a change of Executive Leadership. Dr. Alfred Ofori Ahenkorah, the Executive Secretary, ended his post-retirement contract with the EC and it pleased the President to appoint Ing. Oscar Amonoo-Neizer from the Public Utilities Regulatory Authority (PURC), and a one-time Director of the EC, to replace him.

The Commission looks forward to continued technical efficiency, dedication and greater achievements under his leadership.

The Commission is grateful to its stakeholders for their support and anticipates greater collaboration with them in the coming year.

SIGNED
PROF. GEORGE PANYIN HAGAN
BOARD CHAIRMAN



THE COMMISSION

Introduction

The Energy Commission Act, 1997 (Act 541) mandates the Commission to regulate, manage and coordinate the efficient development and utilization of energy resources in Ghana. It also provides for the granting of licenses for the transmission, wholesale supply, distribution and sale of electricity and natural gas. With the coming into force of the Renewable Energy Act, 2011 (Act 823), the Energy Commission received the extended responsibility of harnessing the available renewable energy resources in the country and promoting the deployment of renewable energy technologies to enhance energy supply in Ghana. The Commission's Act 541 was also amended by the passage of the Energy Commission (Amendment) Act, 2016 (Act 933) to provide for local content and local participation in the electricity supply industry (ESI) and for related matters. In December 2017, the operationalising legislative instrument for Act 933, the Energy Commission (Local Content and Local Participation) (Electricity Supply Industry) Regulations, 2017 (L.I. 2354) entered into force. The objective of the regulations among other things is to achieve a minimum of 51% equity participation and 60% local content in wholesale supply and distribution in the ESI in Ghana and also to develop capacity in the industry for the manufacture of electrical equipment, electrical appliances and renewable energy equipment.

Governing Board

The Governing Board of the Energy Commission consists of seven members appointed by the President of Ghana acting in consultation with the Council of State of the Republic. In making the appointments, the President takes into consideration the knowledge, expertise and experience of the persons so appointed and in particular, their knowledge in matters relevant to the functions of the Commission.

The Executive Secretary is responsible for the day-to-day administration of the Energy Commission and is required to ensure the implementation of the decisions of the Board.

Ing. Oscar Amonoo-Neizer was appointed Acting Executive Secretary, replacing Dr. Alfred Ofosu Ahenkorah the former Executive Secretary of the Commission.

PROFILES OF MEMBERS OF THE BOARD OF THE ENERGY COMMISSION IN 2019



**Professor George Panyin Hagan
Chairman**



**Kpembewura Babine Ndefoso (IV)
Member**



**Dr. Isaac Frimpong Mensa-Bonsu
Member**



**Moses Aristophanes Kwame
Gyasi, Member**



**Hon. Nana Akua Owusu Afriyieh
Member**



**Alhaji Jabaru Abukari
Member**



**Dr. Alfred Kwabena Ofosu Ahenkorah
Member/Executive Secretary**



**Ing. Oscar Amonoo Neizer
Incoming Executive Secretary**

Object and Functions

The Commission is required by law to regulate, manage the utilization of energy resources, and provide the legal, regulatory and supervisory framework for all energy service providers in the country. Specifically, the Commission is to grant licenses for the wholesale supply, transmission, distribution and sale of electricity and natural gas, and for the promotion of renewable energy technologies and services.

The critical statutory mandates of the Energy Commission include the following:

- (a) To recommend national policies for the development and utilization of indigenous energy resources;
- (b) To advise the Minister on national policies for the efficient, economical, and safe supply of electricity, natural gas, and petroleum products having due regard to the national economy;
- (c) To prepare, review and update periodically indicative national plans to ensure that all reasonable demands for energy are met;
- (d) To secure a comprehensive data base for national decision making on the extent of development and utilization of energy resources available to the nation;
- (e) To receive and assess applications, and grant licenses under Act 541 to public utilities for the wholesale supply, transmission, distribution and sale of electricity and natural gas;
- (f) To establish and enforce, in consultation with the Public Utilities Regulatory Commission, standards of performance for public utilities engaged in the, wholesale supply, transmission, distribution and sale of electricity and natural gas;
- (g) To promote and ensure uniform rules of practice for the wholesale supply, transmission, distribution and sale of electricity and natural gas;
- (h) To pursue and ensure strict compliance with Act 541 and regulations made under it; and
- (i) To perform any other function assigned to it under the Act or any other enactment.

Under the Renewable Energy Act, 2011 (Act 832) the Energy Commission is to:

- (a) advise the Minister on renewable energy matters;
- (b) create a platform for collaboration between the government and the private sector

Under the Renewable Energy Act, 2011 (Act 832) the Energy Commission is to:

- (a) advise the Minister on renewable energy matters;
- (b) create a platform for collaboration between the government and the private sector and civil society for the promotion of energy sources;
- (c) recommend and advise relevant stakeholders on the educational curriculum on the efficient use of renewable energy sources and to evolve programmes for its mainstreaming in educational institutions;
- (d) recommend for exemptions from customs, levies and other duties, equipment and machinery necessary for the development, production and utilization of renewable energy resources;
- (e) in consultation with the Public Utilities Regulatory Commission recommend financial incentives necessary for the development, production and utilization of renewable energy sources;
- (f) promote the local manufacture of components to facilitate the rapid growth of renewable energy resource;
- (g) Promote plans for training and supporting local experts in the field of renewable energy;
- (h) promote the benefits of renewable energy to facilitate its utilization;
- (i) in consultation with relevant stakeholders set targets for the development and utilization of renewable energy resources; and
- (j) implement the provisions of the Act.

Section 2 of the Energy Commission (Amendment) Act, 2016 (Act 933) mandates the Commission to promote local content and local participation in the supply, transmission, distribution and sale of electricity and natural gas and the provision of allied services to support national development.

STRUCTURE

The Commission is organised under the following seven (7) Directorates:

Technical Regulations Directorate

The Technical Regulation Directorate is responsible for matters relating to the supply, transmission and distribution of electricity and natural gas. This includes licensing of service providers, elaboration of regulations, codes of practice, guidelines and procedures for electricity and natural gas supply and distribution. The Directorate is also responsible for the regulation and licensing of all midstream and downstream

operations of natural gas such as gas processing, LNG re-gasification, natural gas imports, gas pipeline transportation and gas distribution and consumption.

Inspection and Enforcement Directorate

The Directorate's function/role was to perform Inspections/ Compliance monitoring and enforcement of regulations in respect of the following licensed facilities

A. Electricity service providers

- I. Power Generating Plants
- II. Transmission Utility (GridCo)
- III. Distribution and Sales Companies [ECG, NEDCo, EPC]

B. Natural Gas Service Providers

- I. Wholesale Supplier (Processing Plant)
 - II. Transmission Utility
 - III. Distribution and Sales Company
- C. Renewable Energy Operators

Renewable Energy, Energy Efficiency and Climate Change Directorate

The Renewable Energy, Energy Efficiency and Climate Change Directorate comprises the following:

- (a) Renewable Energy Division
- (b) Energy Efficiency and Climate Change Division

Energy Efficiency and Climate Change Division

The Energy Efficiency and Climate Change Division is responsible for matters relating to the promotion of efficient use of energy and Climate Change Mitigation and adaptation in Ghana as mandated by the Energy Commission Act, 1997 (Act 541).

Strategic Planning and Policy Directorate

The responsibilities of the Strategic Planning and Policy Directorate (SPPD) are to:

- (a) prepare indicative energy plans;
- (b) recommend policies to ensure all demands for energy are met in an efficient and sustainable manner;
- (c) formulate national policies for the development and utilization of indigenous energy resources;
- (d) review energy policies and prepare Energy Policy Briefs;
- (e) prepare Annual and Medium-term Energy Outlooks and Annual National Energy Statistics for Ghana; and

- (f) manage the National Energy Data Processing and Information Centre (NEDPIC) at the Commission.

Social, Environmental Impact & Technology Assessment Directorate

The Social, Environmental Impact and Technology Assessment (SEITA) Directorate is to:

- (a) conduct environmental impact assessments of all national energy plans, programmes and projects;
- (b) prepare and monitor guidelines to ensure that environmental and social issues are incorporated into the development and implementation of energy projects;
- (c) conduct and report on the assessment of energy technologies and making recommendations regarding their use in Ghana; and
- (d) prepare environmental and technology policy review papers for the Commission.

Finance, Human Resource and Administration Directorate

The Directorate is made up of the following:

- (a) Human Resource and Administration Division;
- (b) Finance Division; and
- (c) Public Affairs Unit

The Directorate is responsible for ensuring that the Commission maintains the needed financial and human resource capacity required to effectively and efficiently execute the mandate of the Commission.

The specific tasks of this Directorate include the following:

- (a) develop and implement systems and procedures for the efficient and effective delivery of general administrative services of the Commission;
- (b) develop a human resource plan to provide the requisite skill levels to meet the Energy Commission's mission and objectives;
- (c) develop and implement staff performance appraisal and incentive systems;
- (d) develop financial policies and procedures for planning and controlling the financial transactions of the Commission in line with prevailing financial and accounting policies;

- (e) coordinate and prepare annual budget of the Commission;
- (f) consolidate and incorporate the Commission's need for equipment and materials into an overall plan and ensure prompt release of funds to meet all approved purchases;
- (g) oversee the preparation of the Commission's financial encumbrances, impact account vouchers, capital expenditure ledgers, balancing of vote service ledgers and local purchase orders (LPOs); and
- (h) ensure that the Energy Commission is constantly in touch with the public by maintaining healthy relations with the Ghanaian media and other energy sector stakeholders.

Other Units

The Commission has other special units, which are:

- (a) Legal Unit;
- (b) Internal Audit Unit;
- (c) Procurement Unit; and
- (d) EMOP Secretariat.

a) Legal Unit

The Legal Unit is required to:

- i. make appropriate legal recommendations relating to the efficiency and effectiveness of established regulatory frameworks and strategies;
- ii. serve as the Board Secretariat and in that regard, advise Members of the Board on all legal matters;
- iii. represent the Commission on all legal matters;
- iv. maintain an accurate Register of licenses; and
- v. follow up on inspection reports and where necessary take appropriate legal action against defaulting service providers.

b) Internal Audit Unit

The Internal Audit Unit reviews governance, assesses risks and controls of all technical operations, administration and financial activities necessary to achieve the functions and objectives of the Commission. It also provides assurance and services designed to add value and improve the operations of the Commission.



c) Procurement Unit

The objective of this Unit is to procure all goods, works and services in accordance with the Public Procurement Act, 2003 (Act 663) as amended by the Public Procurement Act 2016, (Act 914) and other international procurement procedures. As provided under section 15 sub section 8 of the Act.

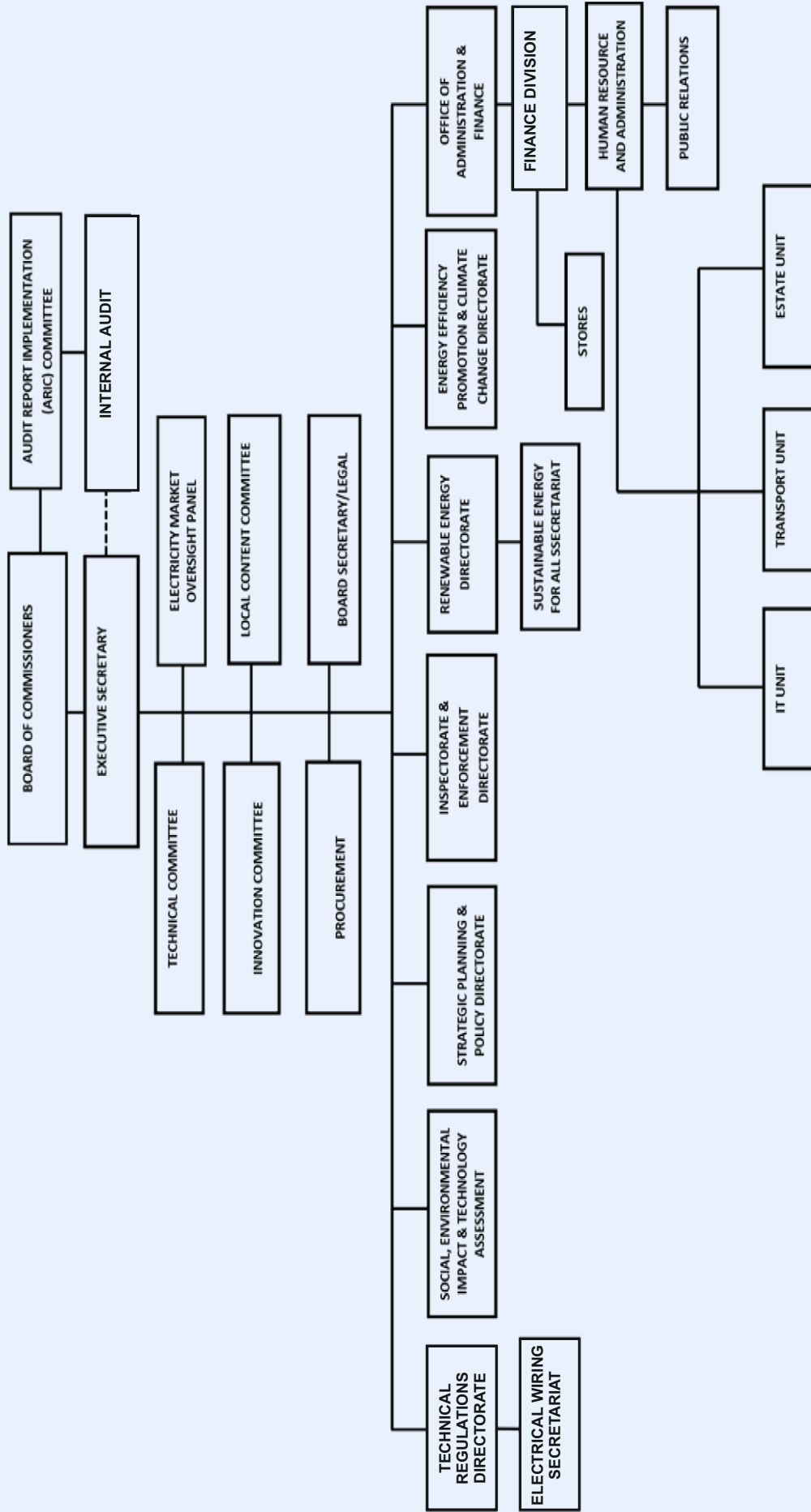
The Unit is therefore required to coordinate all the Commission's procurement activities into yearly Procurement Plans for budget estimates and to ensure that all procurements are conducted in accordance with the law whilst ensuring value for money.

d) Electricity Market Oversight Panel (EMOP) Secretariat

The EMOP Secretariat is the administrative office of the Electricity Market Oversight Panel and implements the decisions taken by the Panel. Regulation 16 of the Electricity Regulations, 2008 (L.I. 1937) mandates the Energy Commission to establish the EMOP to supervise the operation and administration of the Wholesale Electricity Market (WEM) and to carry out its functions independent of the Transmission Utility (GRIDCo). The EMOP Secretariat was therefore established to coordinate the following functions of the Panel:

- (a) monitor the general performance of the market administration functions of the Transmission Utility;
- (b) ensure the smooth operation of the Wholesale Electricity Market;
- (c) review the operations of the Wholesale Electricity Market and studies related to the development of the market,
- (d) review procedures, manuals and electricity market rules for the operation of the Wholesale Electricity Market,
- (e) monitor pre-dispatch schedules,
- (f) resolve disputes referred to it by market participants in respect of transactions in the Wholesale Electricity Market,
- (g) ensure the effective and consistent application by the Transmission Utility of the rules and standards of the Wholesale Electricity Market,
- (h) ensure the long-term optimization of hydro-electricity supply sources in the country,
- (i) make appropriate recommendations to the Commission in respect of the Panel's functions, and
- (j) perform any other function conferred on it by the Commission.

Organogram of the Energy Commission





Our Mission

The Mission of the Energy Commission is to regulate and manage the development and utilization of energy resources in Ghana to ensure the provision of affordable energy supplies in a reliable, efficient and secure manner in order to promote the social and economic well-being of the people of Ghana, and to enhance environmental quality and public safety.

Our Vision

The Energy Commission's vision is to become a leading energy planning and regulatory institution reputed for excellence, innovation and transparency in Africa and beyond.



PROJECT ACTIVITIES AND ACHIEVEMENTS

1.0 TECHNICAL REGULATION

1.1 Licensing and Implementation of Projects to Promote Electricity and Natural Gas Industries

The Commission has responsibility for matters relating to the regulation of the Electricity and Natural Gas supply industries in Ghana, as part of the regulatory functions of the Commission mandated by the Energy Commission' Act, 1997 (Act 541).

To facilitate the implementation of the Wholesale Electricity Market, Commission is responsible for issuance of licences and enforcement of conditions to the licences issued to eligible persons who apply to carry out businesses in the Electricity and Natural Gas industries. Such applications are effectively being reviewed and assessed by the Commission to ensure compliance with licence requirements enshrined in the Licence and Permit Application Manual. Permits are also granted to eligible Bulk Customers to operate in the deregulated Wholesale Electricity and Natural Gas Markets.

The following licences and permits were granted in 2019 to facilitate the implementation of the Wholesale Electricity and Natural Gas Supply Industries:

1. Two (2) gas pipeline Siting Permits
2. Two (2) Siting permits for the construction of Power Plant
3. One (1) Construction permit for the construction of a Gas Pipeline
4. Ten (10) new Bulk Customer Permits
5. Thirteen (13) renewed electricity Bulk Customer Permits

1.2 Review and update of National Electricity Grid Code to include Renewable Energy Sub- Codes

The National Electricity Grid Code (Grid Code) was developed, published and issued by the Energy Commission based on the provisions of sections 24, 27 and 28 of the Energy Commission Act, 1997 (Act 541). The purpose of the Grid Code is to ensure that the National Interconnected Transmission System (NITS) provides fair, transparent, non-discriminatory, safe, reliable, secure and cost-efficient delivery of electrical energy. The Grid Code establishes the requirements, procedures, practices and standards that govern the development, operation, maintenance and the use of high voltage transmission system in Ghana.

The Grid Code describes the responsibilities and obligations associated with all the functions involved in the supply, transmission and delivery of bulk electric power and energy over NITS, including the functions of the Electricity Transmission Utility (ETU), an NITS Asset Owner, a Wholesale Supplier, a Distribution Company and a Bulk Customer.

With the increasing development of the wholesale electricity market in Ghana coupled with the fast pace of development of Renewable Energy Sources into Ghana's energy mix, it is important to ensure that the NITS provides fair, transparent, non-discriminatory, safe, reliable, secure and cost effective delivery of electricity in Ghana.

The Commission and Ghana Grid Company (GRIDCo) reviewed and updated the 2009 edition of the National Electricity Grid Code to incorporate the Renewable Energy Sub-sector in order to reflect the current trends in the operations NITS.

Four (4) Review Sections were conducted in collaboration with GRIDCo to update the Grid Code.

1.3 Revision of Electricity Supply and Distribution (Technical and Operational) Rules, L.I. 1816 and Electricity Supply and Distribution (Standards of Performance) L.I. 1935

In pursuance of section 27 and 28 of the Energy Commission Act, 1997 (Act 541), the Commission caused to be enacted the Electricity Supply and Distribution (Standards of Performance) Regulations, 2008, (L.I. 1935) in Consultation with the Public Utilities Regulatory Commission and Electricity Supply and Distribution (Technical and Operational) Rules, 2005 (L.I.1816) respectively.

L.I. 1935 provides for performance benchmarks for Electricity supply and distribution, in conformity with the provisions of L.I.1816 in terms of application for new service, reliability of electricity supply, system voltage, and the meter and Miscellaneous provisions.

Revision of the LIs is to enable the parliament of Ghana to amend portions of these rules and regulations to meet current reforms in the electricity distribution sector in Ghana.

An In-house Review of the LIs was completed after receipt of comments from stakeholders.

1.4 Review and update of Electricity Metering and Vending Code

Electricity or energy meters measure and display power consumption in residential, industrial, and commercial dwellings, as well as sub-stations in the electric grid. The design of these meters is evolving rapidly, and different solutions and architecture are required to ensure consumer bills are accurate.

Generally, distribution utilities are not always on the lookout for customers' best interest. As long as their bills are paid, they are not necessarily interested where the money is coming from. With ever increasing rate in electricity tariff, customers should be able to see exactly what their electricity costs are. It is worth noting that defective meters can adversely affect the distribution utility by contributing to its commercial losses.

The energy meters therefore play a key role in the distribution network where they act to ensure that energy supplied is properly measured and billed. Energy meters and their installation should be carried out in accordance with relevant regulations. All materials,

accessories and equipment used in a metering installation should conform to prescribed minimum standards.

The Energy Commission as a Technical Regulator has the single responsibility of ensuring all energy meters installed in the country register the correct quantity of electricity consumed. This will ensure that consumers pay for the amount of energy they actually use and also facilitate fair trade and competition.

The Energy Commission initiated the development of a Metering Code to ensure energy meters installed by distribution licensees measure accurately and ensure that energy supplied to consumers for the purpose of billing as per applicable tariff within the distribution network is safe, reliable and secured. The revised code will also enable the vending of electricity throughout Ghana irrespective of the make or type of meter used.

As at December, 2019 the Draft Electrical Distribution Metering and Vending Code had been reviewed and circulated to stakeholders for comments.

1.5 Development of Regulations for Electrical Wiring Cables and Accessories

The Electrical Wiring Regulations was passed into law by the Parliament of Ghana on Friday 12th 2012. The key objectives of the Regulations are to guide professionals who engage in internal electrical wiring and installation works in the performance of their duties and to ensure safety of lives and property.

The need for these regulations arise from complaints received by the Commission from the general public regarding electrical wiring materials on sale in the country that do not meet Ghanaian standards, and which in some cases expose the public to fire and electrocution hazards. These complaints arose in the course of the implementation of the Wiring Regulations. Certified electricians also complained that these substandard materials are normally cheaper than the prescribed ones, and as such they are priced out of business when they quote based on quality materials.

The objective for development of these regulations is to ensure that only safe electrical wiring cables and accessories, which meet the standards set by the Ghana Standards Authority (GSA), are available for sale in the country. The key electrical accessories of concern include plugs, sockets, switches, fans and fan regulators, lamp holders, extension boards, relays, residual current devices and circuit breakers, among others.

The Draft Electrical Wiring Cables and Accessories Regulations were developed and submitted to the Ministry of Energy for review and onwards submission to the Attorney General's office for Parliamentary enactment.

1.6 Coordinating the Development and Implementation of Control of Major Accident Hazards (COMAH) Regulations

Natural gas is a very safe and economic fuel option for use in power generation and industry. It however has the unfortunate potential of causing major accidents that may lead to significant loss of life and extensive damage to property. As Ghana develops its natural gas industry, the

potential for occurrence of such major accident increases significantly, and as such this potential must be addressed to ensure that it is mitigated appropriately.

In accordance with Article 15(2)(a) of the Energy Commission Act, 1997 (Act 541) and in line with International best practice, the Energy Commission is developing requirements for all licensed entities whose operations or sites contain hazards that could lead to the occurrence of major accidents. The regulations will require the entities to take action to prevent the occurrence of any accident as well as to mitigate any consequences thereof.

The Commission completed the development of a draft Expression of interest (EOI) to procure a consultant for the development of COMAH and has submitted the EOI to the World Bank for further action.

1.7 Development of Tender Document for Gas Distribution in Tema

Most of the Ghanaian industries currently rely on residual fuel oil (RFO), Liquefied Petroleum Gas (LPG), gasoline and other products to meet their energy needs. Natural gas is expected to provide a more competitive alternative, with cleaner burning properties, in the industrial sector.

The proposed secondary gas network is expected to facilitate the distribution of gas to primarily power and non-power generating customers in Tema franchise zone. Due to the low level of gas consumption at these franchise zones, the Commission is intended to issue distribution licence to one company in each of the franchise zone through a competitive tendering process to distribute natural gas.

The project is aimed at developing a comprehensive tender document for the award of a gas distribution franchise zone to companies that would express interest in the distribution of gas within the franchise zone.

The Commission has completed the development of a draft Expression of Interest (EOI) to procure the services of a consultant.

In addition, the Gas Distribution Tender Committee was constituted to review the draft EOI with representatives from Energy Commission, Ministry of Energy, Ghana National Gas Company Limited, Public Utilities Regulatory Commission, Ghana National Petroleum Corporation and Public Procurement Authority.

The World Bank is expected to support the process by procuring a consultant who will facilitate the process of appointing the concessionaire.

1.8 Inspection & Enforcement of Regulations in the Electricity Supply, Transmission and Distribution Sectors

The Energy Commission is mandated to enforce rules, regulations and codes relating to the supply of electricity and natural gas in Ghana to ensure, safe, economic and efficient supply and delivery of natural gas and electricity.

Enforcement actions in the year under review were designed to address non-compliance, written directives/warnings issued depending on the seriousness of the utilities' non-compliance. In most cases the Commission ensured that the defaulted Licensees had taken corrective actions to prevent the re-occurrence of the fault conditions.

The objective of this enforcement activity is to ensure that the Licensees' activities are compliant with the licensing conditions, best practices and applicable regulations.

In the year under review, the Commission performed regulatory compliance audits of the eight (8) operational regions of ECG.

The Commission also sampled and visited some operational districts of ECG for verification of compliance from earlier inspections carried out.

The Commission conducted meter accuracy checks, transformer load monitoring and voltage quality monitoring at secondary substations using power Quality Analysers at Tamale, Sunyani and Bolgatanga operational areas of NEDCO as part of the compliance audit.

Load readings of distribution transformers in the above mentioned areas at time of system peak were checked using a clamp ammeter. The results of all the transformer load monitoring conducted reflected the true transformer loading and could be used for transformer load management.

The operational efficiency of the distribution system in all the regions inspected was enhanced by the balancing of distribution transformers and ensuring vegetation control at substations.

The efficiency of distribution line which is defined as the ratio of the power at the receiving end to the power at the sending end of the feeder could be enhanced by balancing the load in the feeder pillars and ensuring vegetation control along the distribution lines. This will help maintain network stability under dynamic contingencies.

The Commission made recommendations to the utilities for substations to be given identifiable and uniform nomenclature and the single line diagrams updated.

The Commission undertook compliance audit of Aksa, Asogli, Genser, TAPCo, Karpowership, Ameri and TICO/TAQA thermal power plants in other to ensure that operators adhere to laid down procedures, standards and license conditions.

The Commission recommended that challenges posed by ageing assets should be addressed in an organized and timely manner to minimize potential future crises. A comprehensive audit should be conducted on aged thermal power plants in Ghana to determine the efficiency of the power plant and check areas for improvement.

The Commission undertook regulatory compliance visits to GRIDCo's substations in the Greater Accra, Ashanti, and Central Regions. The construction of a 41 km 161/ 34.5 KV substation and a 161 KV transmission line from Sunyani to Berekum was inspected.

As part of reactive inspections, the Commission inspected a malicious attack on a Volta-Achimota pylon which collapsed into the Volta Smelter 2 transmission line in Tema. Inspections were conducted into the frequent power outages in Kasoa North and South operational districts.

The Commission conducted investigations into reports of unsafe working conditions at Restart Company Limited in Tema, resulting in the electrocution of a factory worker.

Inspection was conducted to investigate the construction of a dedicated 33kv electricity line across the Volta River at Ada-Foah in the Greater Accra region by DJS Engineering Limited. The Commission issued an order to suspend construction to DJS Engineering Limited due to wilful violation of the prescribed regulations and other relevant statutes in the country.

Customer complaints in relation to faulty meters and frequent power outages were investigated. Some of these complaints were from Regimanuel Grey Estates, Teshie and Airport Hills.



Fig 1: Meter accuracy test by EC and ECG staff in the Ashanti SBU



Fig 2: 11KV Distribution System line patrol (Achimota District)



Fig 3: Inspection of Circuit Breakers in a Primary Substation



Fig 4: Inspection of Wholesale Suppliers (Powerhouse 3 at Aksa)

1.9 Inspection & Enforcement of Regulations in the Natural Gas Sector

The Commission is mandated by law to monitor the performance of natural gas processing facilities and ensure adequate and secure supply of natural gas as fuel for power generation and other industrial use in Ghana. Currently about 80% of Ghana's thermal generation capacity, consisting of combined-cycle and simple cycle gas turbines can operate on both natural gas and Light Crude Oil. Demand for gas in the power sector is set to expand rapidly as new thermal generation capacity is built to meet growing demand. In addition, combustion of natural gas in the power plants environmentally friendly and some projects have commenced to ensure reliable supply of natural gas.

Inspection visits were undertaken at the following project sites to ensure compliance with licence conditions:

1. Genser' 77Km 12" Prestea - Tarkwa - pipeline construction sites in the Western Region.
2. The proposed site for the relocation of the Karpowership. This site was inspected before the ship was moved from Tema to Takoradi to operate fully on natural gas (TTIP).

1.10 Certification of Electrical Wiring Professionals and Solar Infrastructure Installers

The Electrical Wiring Regulations, 2011 (L.I. 2008) was passed by the Parliament of Ghana into law and came into force in Feb 2012 to ensure the safety of persons, livestock and other property from hazards that arise from the presence, distribution and use of electrical energy. These hazards can arise from poor workmanship in electrical wiring, use of sub-standard and inappropriate wiring materials. The Energy Commission executes this mandate in collaboration with various stakeholders in the electrical wiring industry especially educational and training institutions. The Commission therefore responsible for the following:

- I. Certify all electrical wiring practitioners;
- II. Keep and maintain a Register of all electrical wiring Contractors;
- III. Monitor and enforce the regulations.

A total of **2,640** candidates undertook the certification examinations in 2019. **1,962** candidates (see Table 1 below) were successful and have been provided with Certification Packages to aid in their electrical wiring practice.

An online registration platform for Industrial and Inspector categories for certification examination was developed.

Three (3) trainings sessions on various electrical wiring training modules including Electrical Wiring design and installation, inspection and testing and how to use Installation Completion Certificates was conducted for certified practitioners nationwide;

There were engagements with officials of Ghana National Fire Service, Ghana Police Service and the National Insurance Commission to solicit their involvement in the implementation of the Electrical Wiring Regulations.

CERTIFIED ELECTRICAL WIRING PRACTITIONER STATISTICS FOR 2019

MAYJUNE 2019

CLASS	REGISTERED CANDIDATES	CERTIFIED CANDIDATES	% PASS	CUMMULATIVE CERTIFIED NUMBER
DOMESTIC	1019	868	85.18	5539
COMMERCIAL	383	267	69.96	2849
INDUSTRIAL	59	29	49.14	450
INSPECTORS	31	15	48.39	142
TOTAL	1492	1179	79.02	8980
DISQUALIFIED	18			
DOMESTIC	15			
COMMERCIAL	3			

NOVDEC 2019

CLASS	REGISTERED CANDIDATES	CERTIFIED CANDIDATES	% PASS	CUMMULATIVE CERTIFIED NUMBER
DOMESTIC	751	525	69.91	6064
COMMERCIAL	332	235	70.78	3084
INDUSTRIAL	31	17	54.84	467
INSPECTORS	34	12	35.29	154
TOTAL	1148	789	68.73	9769
DISQUALIFIED	14			
DOMESTIC	13			
COMMERCIAL	1			

Table 1: Statistics on CEWPs certified in 2019

There were also engagements with Self Help Electrification Programme (SHEP) Consultants to sensitize them on the implementation of L.I.2008;

The Commission held meetings with Local Cable Manufacturers and relevant stakeholders on the implementation of the regulation in relation to the New wiring Colour Code;

The Commission was also engaged District Managers, District Engineers, District Technical and Commercial Officers of the Power Distribution Services(PDS) and also the Area Managers of the Northern Electricity Distribution Company (NEDCo) across the country to sensitize them on emerging challenges and how their cooperation could be sought to address them;

Monitoring exercises were undertaken in the following PDS/NEDCo District Operational areas: Koforidua, Kibi, Effiduase, Sunyani, Asamankese, Mampong, Denyame, Ejisu, Kwabre, Tarkwa, Takoradi, Sefwi Wiawso, Sefwi Juaboso Mpraeso, Begoro Tumu, Nandom, Lawra, Nadowli, Zebilla, Bawku, Bongo, Bimbila, Sawla, Damongo, Wulensi, Atebubu, Bole;

The Commission developed a draft framework for the registration of electrical contractors which was reviewed by stakeholders. The Guidelines for the certification of electrical wiring professionals was reviewed and subjected to stakeholder engagement.



Fig 5: Electrical Wiring Examinations - Practicals



Fig 6: 11KV Distribution System line patrol (Achimota District

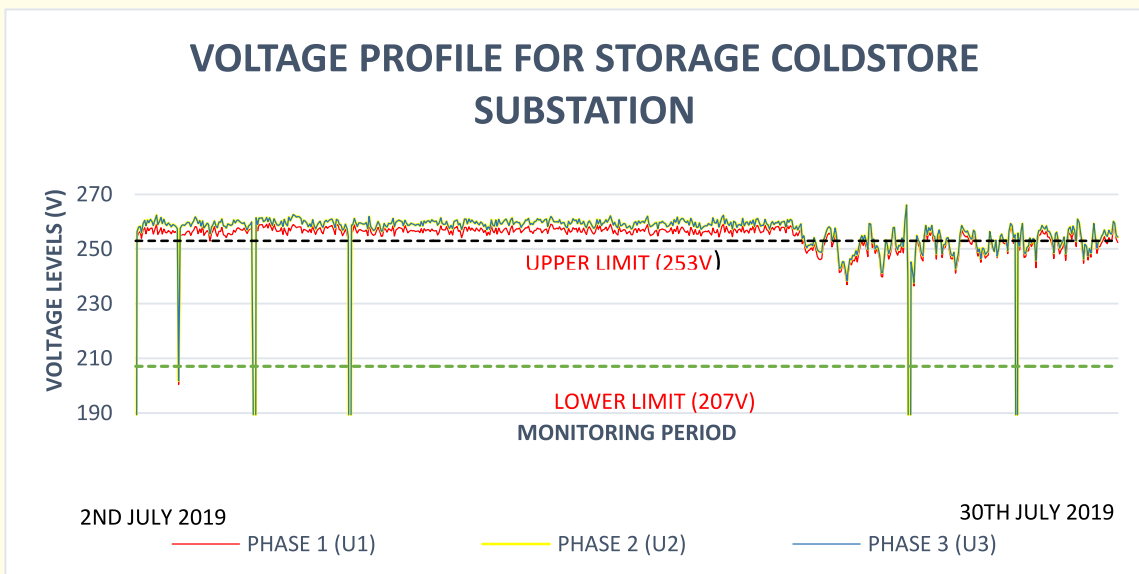


Fig. 7: A graph showing voltage profile from 2nd July, to 30th July, 2019 located at Storage cold store secondary substation in Ashanti Region

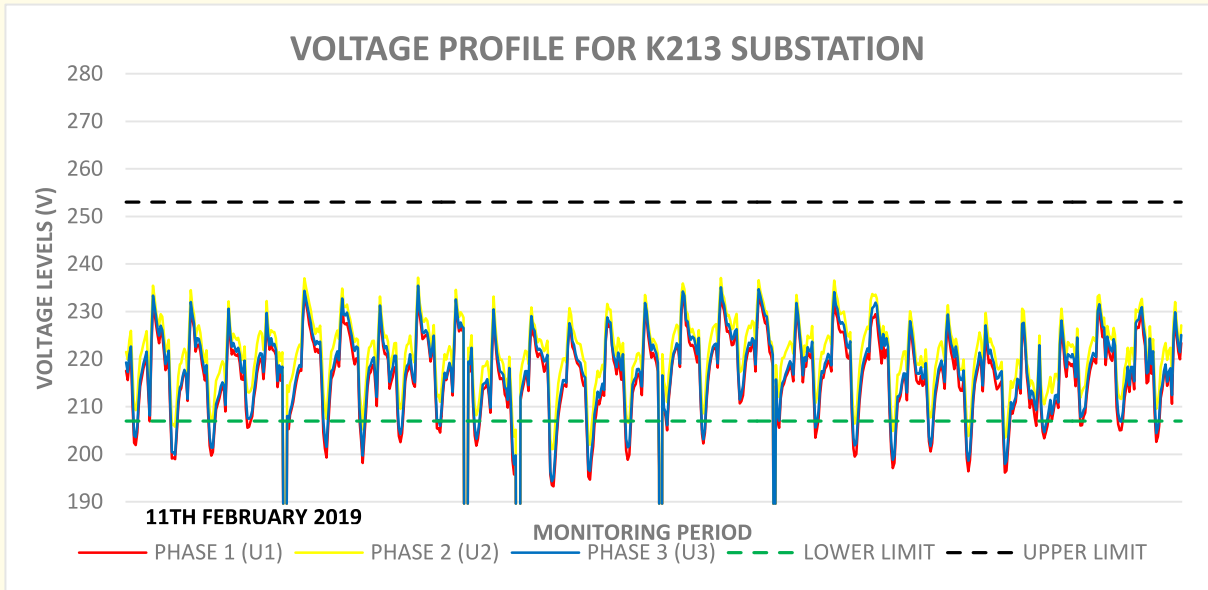


Fig. 8: A graph showing Voltage profile from 11th February to 11th March, 2019 at K213 secondary substation located at Kibi - Eastern region

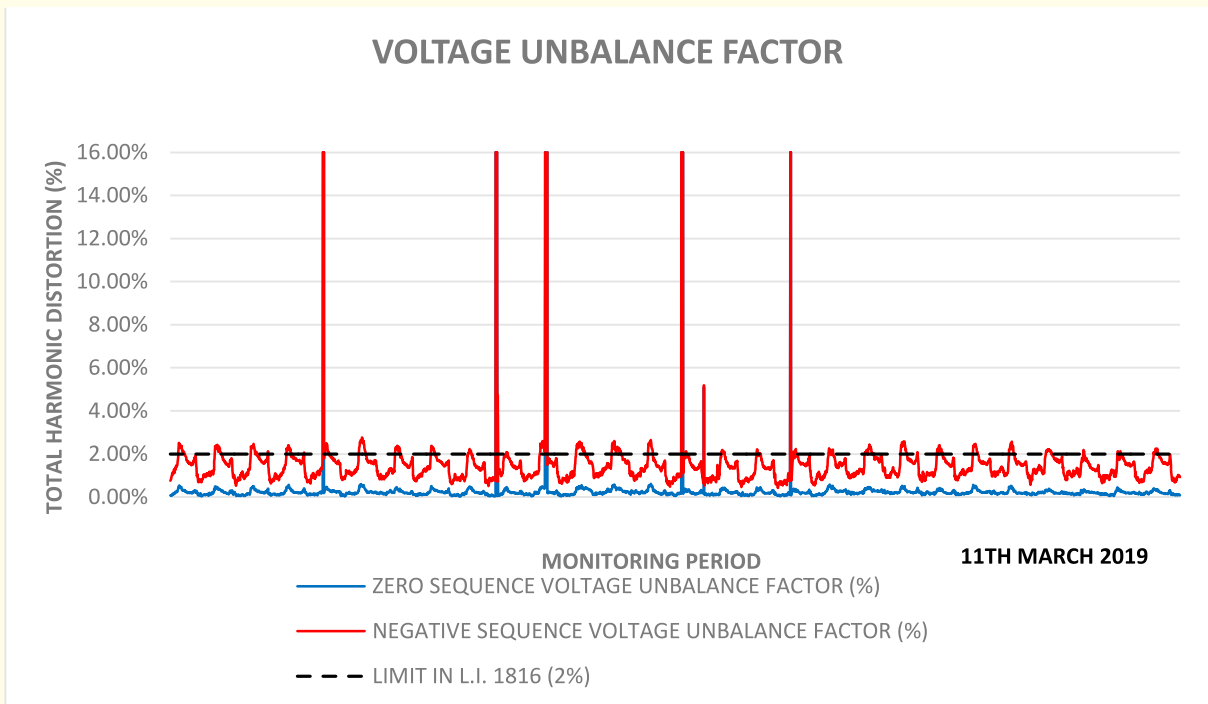


Fig. 9: A graph showing the voltage unbalance factors recorded from 29th January to 26th February, 2019 at FD43 substation in Eastern region



1.11 Implementation of Local Content and Local Participation Regulations

Governments over the years have heralded local inclusiveness in the electricity supply industry in Ghana. This is to be done through increased participation by equity in investments and also local content by procurement of labour and materials from the local market.

In November 2017, a Local Content and Local Participation Regulations LI 2354 was enacted by Parliament to facilitate the local inclusion of businesses in the electricity supply industry.

The purpose of the Regulation is to provide an enabling environment to ensure the maximum use of financial capital, expertise, goods and services locally, create employment for Ghanaians, businesses in the electricity supply industry; and retain the benefits in the Republic. It is also to:

- Promote development initiatives for local stakeholders;
- develop and promote local content and local participation in the electricity supply industry through education, skills and expertise development;
- transfer of technology and know-how and an active research and development portfolio;
- promote local capacity in the manufacture of electrical equipment, electrical appliances and renewable energy equipment; and
- increase competitiveness among local manufacturers of electrical equipment, electrical appliances and renewable energy equipment.

The regulation is a deliberate effort by Government to ensure that Ghanaian citizens, Ghanaian companies and indigenous Ghanaian companies play an active role in the electricity supply industry.

The Regulations are expected to apply to persons who engage in activities in the electricity supply industry. The Energy Commission Act 1997, (Act 541) was amended in 2016 by the Energy Commission (Amendment) Act, 2016 (Act 933) to incorporate provisions on Local Content and Local Participation in relation to the energy supply industry. Section 2 of the Energy Commission Act as amended provides as follows:

“promote local content and local participation in the supply, transmission, distribution and sale of electricity and natural gas and the provision of allied services to support national development”

Section 56 of the Act as amended also provides that the Minister of Energy on the advice of the Board of the Commission may by legislative instrument make Regulations for the promotion of local content and local participation to support national development.

The Local Content and Local Participation Regulations defines "local content" as the percentage of utilization of Ghanaian human and material resources, services and businesses in monetary terms for the systematic development of national capacity and capability for the enhancement of the Ghanaian economy while "local participation" means the percentage of local equity ownership in the electricity supply industry;

The Commission caused for the inauguration of the Electricity Supply Industry, Local Content and Local Participation Committee by the Deputy Minister for Energy on 2nd May, 2019. The object of the Committee is to oversee the development and measurable growth of local content and local

participation in the Electricity Supply Industry and to ensure the implementation of the provisions of these regulations amongst others.

Figs. 10 & 11: Pictures from the Inauguration of the Local Content and Local Participation Committee held on 02 May, 2019





The Commission also conducted a baseline study to ascertain the current level of local content in the electricity of the electricity supply industry.

The first draft of the Guidelines for implementing the Regulations was completed and submitted to the Board after reviews by an internal Technical Committee and the Electricity Supply Industry, Local Content and Local Participation Committee. A stakeholder session was subsequently held on the Regulations and the draft Guidelines. Other achievements include the following:

- i. Licence applications submitted to the Commission by Service providers were reviewed for local participation compliance;
- ii. Institutional visits were paid to stakeholders to sensitize them on the regulations and to find out their challenges and recommendations and how to make the implementation possible. The following institutions were the Association of Ghana Industries, Tropical Cables & Conductor Limited, AB and David Law Firm, Nexans Kablemetal Limited, Electricity Company of Ghana, Ghana Standards Authority, Association of Small Scale Industries, Petroleum Commission, Cenpower Generation Company Limited, Bethel Logistics Company Limited, Strategic Security System, Appliance Masters Company Limited, Halo International Ghana Limited and ENS Law Firm.
- iii. A dedicated local content portal (i.e. Universal Qualification System) was created on the Commission's website to hosts among other things, a scanned copy of the regulations and infographics of the findings of the baseline. The portal would be used for registering and receiving local content reports from service providers in the electricity supply industry.
- iv. Presentations on local content were made at conferences and seminars including the Local Content Summit in Takoradi, Ghana Institution of Engineers Annual Conference in Accra, West Africa Clean Energy and Environment Conference in Accra, GIZ's Renewable Energy Conference in Accra and Ghana Energy Summit in Accra.
- v. Media engagements were initiated with major media including the Daily Graphic, GhOne, Business and Financial Times and Bloomberg to create awareness about the Regulations. In addition, one hundred (100) hard-copies of the Regulations were distributed to service providers within the electricity supply industry.
- vi. A draft check-list for local content Inspectors was completed and presented to the Board of the Commission for approval.



2.0 RENEWABLE ENERGY, ENERGY EFFICIENCY AND CLIMATE CHANGE (REEECC)

2.1 Renewable Energy

2.1.1 National Solar Rooftop Programme

The National Rooftop Solar Programme (NRSP) has 3 components; capital subsidy for urban households project in the form of free 500Wp solar panels, rural off-grid households project and private installations. The implementation framework of the 2nd component, which focuses on rural off-grid communities and seeks to support the achievement of the universal access to electricity by 2030, was developed in 2019 drawing key lessons from the implementation of the 1st phase of the Programme, as well as lessons learnt from the pilot rural off-grid household project.

During the period under review, 301 systems in residential households under Component 1 of NRSP were monitored. Ninety five percent (95%), representing 285 systems of those monitored were found to be in good working condition.

The Commission was also able to secure an amount of €150,000 funding support from GIZ for the establishment of a data collection & monitoring system for solar PV installations, and the development of Regulations/Guidelines for their construction in Ghana.

2.1.2 Annual Renewable Energy Fair

In line with the Renewable Energy Act, 2011 (Act 832), which seeks to develop and promote renewable energy in Ghana, the Renewable Energy Fair was instituted in 2015. The Fair is aimed at creating a platform for collaboration between government, the private sector and civil society for the promotion of the benefits of renewable energy in order to identify opportunities and facilitate investment in the utilisation of Ghana's renewable energy resources.

There have been 5 editions of the Fair so far and key features of the Fair have been policy and technology discussions within the technical sessions and display of renewable energy and energy efficiency technologies that have the potential to transform the energy landscape in Ghana and the sub-region.



The 5th Ghana Renewable Energy Fair & National Energy Symposium (Conference & Exhibition) was held from 7th – 11th October, 2019 at the Accra International Conference Centre. The theme for the Fair was “*Opportunities for Renewable Energy and Energy Efficiency in a Constrained Energy Market*”. The Fair was aimed at exploring the various opportunities for renewable energy and energy efficiency in the constrained energy market. Key highlights of the Fair were:

1. the Drive Electric Initiative which was launched by the Senior Minister on behalf of the President of Ghana;
2. the maiden edition of the Senior High School Renewable Energy & Energy Efficiency Challenge; and
3. the relaunch of the National Energy Symposium under the theme ‘Energy and Sustainable Development in the Era of Ghana Beyond Aid. It is expected that the National Energy Symposium would be held yearly together with the Renewable Energy Fair.

The Renewable Energy Fair introduced the Senior High School Renewable Energy Challenge, a competition aimed at instilling a passion for solving renewable energy, energy efficiency and climate change challenges in students through research and innovation. It is also to develop research skills of Senior High School students and thus promoting self-confidence and encouraging hard work through public recognition and rewards.

This session was a huge success as it was heavily attended by students from 11 Senior High Schools in Ghana. The six best schools selected from the zonal competitions participated in the finals of the Challenge. These were Ebenezer Secondary High School, Forces Senior High Technical School, Manhean Senior High School, Tema Technical Institute, Achimota Senior High School, Presbyterian Senior High School - Osu.

At the end of the competition, Ebenezer Senior High School emerged winners with Forces Senior High Technical School and Manhean Senior High School placing 2nd and 3rd respectively. Special prizes, trophies and medals were given to the schools, students and teachers for their efforts.



Fig 12: A cross-section of activities during the 5th Ghana Renewable Energy Fair

2.1.3 Development of Regulations for Woodfuel and Improved Cookstoves

Woodfuel Regulations

Woodfuel in the form of firewood and charcoal continue to contribute significantly to Ghana’s primary energy supply and consumption.



Woodfuel serves as the primary cooking fuel for over 64%(GLSS7 report) of Ghanaian households to date and is the main fuel source for various agro-processing and cottage industries both in the rural and urban areas. It would continue to be the primary cooking and heating fuel for majority of rural and peri-urban populations if clean fuel such as liquefied petroleum gas (LPG) is not more affordable, more accessible and readily available.

Despite the important role that it plays in meeting institutional and household energy needs in Ghana, woodfuel is produced and supplied to the market unsustainably by the informal sector

making it very difficult to undertake relevant planning and environmental impact assessment activities on woodfuel use.

The Energy Commission, therefore, constituted an inter-institutional task force in 2017 to conduct a baseline study on the woodfuel value chain and draft regulations for the production, transportation and marketing of woodfuel in Ghana. Baseline report after the study was prepared and a draft woodfuel regulations was developed in 2018.

In 2019, five stakeholder workshops (Ejura-Sekyedumase, Dambai, Nkoranza, Donkokrom and Gushegu) were organized to solicit for inputs into the document. The draft Regulations have passed the review of the Board of Energy Commission.



Fig. 13: Stakeholder Workshop at Dambai and Nkoranza

Cookstoves Promotion

The promotion of improved biomass cookstoves is one of the objectives of Ghana's Sustainable Energy for All (SEforALL) initiative. Activities outlined under this objective is the development of regulatory framework for the cookstove sector in Ghana.

Under the year in review, two key stakeholder engagements were held on the draft Improved Biomass Cookstove Regulations for actors in the cookstoves and fuels sector; and the EC Board and Technical Committee. These engagements were supported by the Netherlands Development Organization (SNV). Comments and inputs received from these engagements were used to revise the draft Regulations.

Additional support was mobilized from the African Development Bank through the Clean Cooking Alliance (for 2020) to provide technical assistance to the stove testing laboratory at CSIR-IIR and selected stove producers to prepare them for the proposed improved Biomass Cookstove Standards and Labelling Scheme.



Fig. 14: Some participants at the stakeholder engagement on the draft Improved Biomass Cookstoves Regulations



Fig. 15: Engagement with the EC Board and Technical Committee

2.1.4 Sustainable Woodlot for Schools Programme

With the Energy Commission's aim of ensuring sustainable supply of woodfuel for local consumption in schools, the Commission initiated the Woodlot for Schools Programme where Senior High Schools (SHS) in the country are given the opportunity to establish woodlots with the aim of harvesting them for use in the schools. This noble decision was taken in view of the fact that almost all Senior High Schools depended heavily on firewood sourced from the natural forest for cooking and heating. The introduction of Free Senior High Schools by government and the provision of free meals to day students have increased the use of firewood for cooking in these schools.

The Commission in collaboration with Forestry Commission (FC) and Ghana Education Service (GES) expanded the scope of the Woodlot for Schools Programme to cover the entire country. This initiative is being undertaken by the Commission to provide Senior High Schools with the opportunity to cultivate their own trees and harvest them for the use of the school. This will help to reduce the cost of the woodfuel and the dependence of schools on the natural forest.

In 2019, one hundred (100) Senior High Schools were selected from the 16 regions to participate in the Programme. Over 200 hectares (Ha) of school lands have been planted with cassia species.

In total, over 266 Ha of school lands have been cultivated with fast growing tree species since the programme started in 2015.



Fig. 16: Meeting with project stakeholders and implementers



Fig. 17: Pictures of cassia tree species planted at Kaleo SHTS in the Upper West Region 2019

2.1.5 Implementation of Sustainable Energy for All (SEforALL) Initiative

Ghana developed and launched its Sustainable Energy for All (SEforALL) Country Action Plan (being updated into an Action Agenda) in May 2012 with the Energy Commission playing the coordinating role. The following high priority action areas were identified:

1. Promote productive uses of electricity;

2. Improve access to cleaner cooking solutions by promoting the use of improved cookstoves, LPG and biogas for cooking.
3. Extension of electricity access to remote communities for productive uses through the application of off-grid renewable energy solutions

A number of interventions are being implemented by responsible government ministries and agencies, civil society organisations, private sector and development partners to help the country achieve its universal access to electricity target, double the contribution of renewable energy to the national electricity generation mix, and double the rate of improvements in energy efficiency.

The SEforALL Secretariat has successfully established and maintained an up-to-date database of improved cookstove and fuel producers and importers in Ghana; and the number of stoves produced and distributed in Ghana from 2012 to date. Additionally, three SEforALL Newsletters were produced and disseminated.

For the year under review, the Commission visited businesses that produce ceramic liners as insulators for stoves, improved biomass stoves, sustainable charcoal from wood and agriculture waste, pellets from saw dust and institutional pellet stoves; in the Ashanti, Bono, Central, and Western regions of Ghana to familiarize with their activities and to identify areas of collaboration.



Fig. 18: Packaged briquette by AICPL, Bamang



Fig 19: NASAM Brand production site, Cape Coast



Fig. 20: Sun drying of liners produced by Ekem, Winneba Fig. 21: Solar electrified Asempanaye Community Health Post

2.1.6 Sustainable Use of Natural Resources and Energy Finance Programme (SUNREF)

The Commission has received a Technical Assistance Facility (TAF) from the [Agence Française de Développement](#) (AFD) to support the implementation of energy efficiency (EE) and renewable energy (RE) projects under the Sustainable Use of Natural Resources and Energy Finance Programme (SUNREF).

The programme seeks to provide both technical assistance and green credit loans to local financial institutions for them to finance small and medium scale renewable energy and energy efficiency projects in Ghana. This programme emanated from the conclusion of a feasibility study financed by AFD, which highlighted the urgent need for investment in RE & EE sectors in Ghana.

The SUNREF programme in Ghana is focused on three areas:

- Credit lines financed by AFD of up to EUR 30 million with two local banks
- A Technical Assistance Facility of EUR 1.88million, for which funding has been secured by European Union Africa Infrastructure Trust Fund (EU-AITF). It will be hosted by the Energy Commission.
- An investment grant scheme (also funded by the EU-AITF), to provide additional incentives to green investments.

In 2019, the following activities were undertaken:

- A signing ceremony between AFD and EC to firm-up the financial agreement under the TAF. This signing ceremony was witnessed by H.E. Mrs. Diana Acconcia, European Union Ambassador to Ghana, H.E. Mrs. Anne-Sophie Avé, French Ambassador to Ghana and Prof. G. P. Hagan, the Board Chairman of the Energy Commission.
- Establishment of the SUNREF Project Management Unit (PMU).
- An International Competitive Bidding (ICB) process to engage a consultant to assist partner financial institutions and EC in the implementation of the TAF under the

SUNREF programme in Ghana was initiated. As at the end of 2019, EC has received a “No Objection” from AFD to commence contract negotiation with the winner of ICB.

- Contract negotiation has been concluded with winning bidder.



Fig. 22: Signing of the SUNREF TAF Agreement

2.1.7 Licensing of Service Providers in the Renewable Energy Industry

The following licences were granted by the Board of the Commission in 2019:

- 14 Installation & Maintenance Licences;
- 8 Importation Licences;
- 2 Charcoal Production for Export Licences;
- 1 Provisional Wholesale Electricity Supply Licence.

Table 2: Licences & Permits issued for Renewable Energy Electricity as of December, 2019

Category	# of Wholesale Electricity Supply Licences Issued				Total Proposed Capacity (MW)
	Provisional Licences	Siting Permits	Construction Permits	Operational Licences	
Solar	83	30	9	3 (40.4MW)	4,509.869
Wind	16	6	1	-	1,460.00
Small Hydro	13	1	1	-	206.41
Biomass	2	-	-	-	68.00
Waste-to-Energy	15	2	1	1 (0.1MW)	766.31
Wave	1	1	1	-	20.00
Total	130	40	13	4	7,030.589

2.2 ENERGY EFFICIENCY AND CLIMATE CHANGE

2.2.1 Energy Efficiency/Conservation Training and Promotion for Consumers

Energy efficiency training and promotion are effective tools employed by the Commission to propagate positive behavioral changes and ensure that consumers conserve and use energy efficiently.

The Commission has been using training programmes, documentaries, jingles, radio interviews, posters and flyers for energy efficiency campaigns and awareness creation. In the last couple of years, Commission has enhanced its energy efficiency training for electricity consumers by focusing on identifiable consumer groups. Hence in 2018, the Commission started the energy efficiency training and sensitization for the security agencies, including the Military, Police and Prisons Service. In all, a total of 2,785 military officers were trained in energy efficiency and conservation during the first phase of this exercise.

In 2019 the Commission focused on the officers of the Ghana Police Service and successfully trained 1,594 officers in all the Regional Commands in the ten (10) already existing regions. The training for the police officers in the newly created regions will be undertaken in the second phase of the exercise in 2020.

To support and facilitate information dissemination on energy efficiency and conservation, energy efficiency brochures/leaflets were also distributed and jingles aired nationwide.

In this regard, the Commission in 2019, was able to distribute over 4,000 pieces of leaflets/brochures and aired 180 jingles and eight (8) adverts on energy efficiency as well as on the Certified Appliance App.



Fig. 23: Training of Police Officers at the Ho Regional Command (2019)

2.2.2 Establishment of Energy Efficient Appliance Database and Application (APP)

As part of the strategy to ensure that appliance energy efficiency standards and regulations are complied with, the Commission has established a web-based database with related application (APP) for energy efficient appliances. The application (APP) enables consumers to verify whether appliances on sale meet the minimum energy efficiency standards set by the

Commission before purchase. It also helps users find the nearest distributing and retail outlets for these appliances via Google map or phone contact and further provides energy efficiency and conservation tips for these appliances. This APP is available for download on Google Play Store and has already achieved over 8,722 downloads by consumers by end of 2018.

In 2019, the Commission expanded the scope of the APP to include data and information on energy efficient lighting bulbs (CFLs and LEDs) and updated the information on energy efficient refrigerators and air conditioners. The APP has achieved over 10,000 downloads as at the end of 2019.

2.2.3 Data Collection and Calculation of Energy Sector Greenhouse Gas Emissions and Grid Emission Factor

Ghana as a Party to the UN Convention on Climate Change, periodically undertakes Greenhouse Gas (GHG) inventory and reports to the UNFCCC, on its national GHG emissions. The GHG inventory covers the following four sectors: Energy, Agriculture, Forestry and Other Land Uses (AFOLU), Industrial Processes and Product Use (IPPU) and Waste.

The energy sector is one of the main sources of GHG emissions and therefore, a key sector in Ghana's GHG inventories. The Energy Commission is the lead agency in the energy sector GHG inventories and collaborates with the Climate Change Secretariat of EPA to undertake the following activities: energy data collection and analysis; estimation of energy sector GHG emissions; inventory quality control and reporting. The GHG emission estimations for Ghana have been done for the period 1990 – 2016. This report is required every two years and has to be updated annually for the next reporting period. The last GHG inventory conducted indicated that the energy sector is the second largest emitter of greenhouse gases after Agriculture, Forestry and Other Land Uses (AFOLU) sector in 2016. The energy sector contributed 35.6% of the total 42.2MtCO₂e emissions generated in Ghana that year.

In 2019, the Commission compiled fuel consumption data of the Energy Sector for the period (2017 – 2018) and updated Grid Emission Factor for 2018 accordingly. The Grid Emission factor determines how much emissions are produced per unit of electricity supplied to the national grid and the potential emission savings that could be achieved when green power generation options are introduced.

In addition, projects and actions in the energy sector that can contribute to the mitigation of GHG emissions need to be identified and tracked to determine their contributions to Ghana's emission reduction targets. Hence, the Commission commenced the process of tracking the progress and impacts of energy sector mitigation actions being implemented.

2.2.4 Energy Efficiency Retrofit in MDAs (Installation of Capacitor Banks)

Public institutions have been identified as high energy consuming entities leading to high electricity bills to be paid by government and a strain on the electricity network and capabilities of the power supply utilities. This has accounted for the high indebtedness of government to utility companies. Energy audits conducted by the Commission on public institutions confirmed that most of them have very low power factors and as a result record high electrical power demand which translates into high electricity bills.



To address this problem, the Commission has so far installed thirty-six (36) power factor correction equipment called Capacitor Banks in large electricity-consuming public institutions. The project seeks to improve energy efficiency of public buildings and reduce electricity demand and expenditure through the installation of these capacitor banks. It is expected that the power factors of the beneficiary institutions would be improved to at least 0.9.

The beneficiary institutions include hospitals, schools and research centers.

As a result of the capacitor bank installations, beneficiary institutions have improved their power factors to the preferred minimum of 0.9 and made monetary savings due to the non-payment of power factor surcharges.

3.0 STRATEGIC PLANNING AND POLICY ACTIVITIES

3.1 2019 Energy Demand & Supply Outlook for Ghana

The 2019 Annual Energy Outlook was developed and published on the Commission's Website. The Outlook provides industry and businesses with indicators of the quantities of energy, comprising electricity, woodfuels, liquid and gaseous fuels required by the country for the year in review and propose strategies to meet the requirements. The Outlook also serves as a guide to prospective energy sector operators as well as the wider business community on the energy demand and supply forecast for 2019. It also serves as a decision-making tool for operators and potential investors willing to operate in the country. The Commission, together with Ghana Grid Company (GRIDCo) also co-chaired the preparation of the 2019 Annual Electricity Supply Plan.

Grid Electricity Generation: Forecast and Actuals in 2019

Generation Source	Generation (GWh)		Deviation (Projected-Actual)	% Deviation	Remarks
	Projected	Actual			
Hydro	5,720	7,252	(1531.6)	-26.8	High generation from hydro was to make up for inadequate thermal supply
Thermal	11,460	10,508	952.2	8.3	Inadequate thermal supply was due to fuel and maintenance issues
Total	17,180	17,759	-579.4	-3.4	

Table 3: Forecast and actual grid electricity generation in 2019

Forecast and Actual Petroleum Product Consumption in 2019

Product	Products Supplied to the Economy	
	Requirement (Forecast)	Consumption (Actual)
	1000 Tonnes	
Total Gasolines (including premix)	1,350 - 1,400	1,405.00
Total Diesel	1,850 - 1,900	1,905.60
Kerosene	4 - 5	3.8
ATK	200 - 250	231.7
LPG	416 - 455	340.2
RFO	140 - 150	174.4
Total	3,950-4,160	4,060.80

Table 4: Forecast and actual petroleum product consumption in 2019

3.2 Strategic National Energy Plan (2020 – 2030)

The Energy Demand Projection for the Economy of Ghana report of the Strategic National Energy Plan (SNEP) was completed and published on the Commission's website. The SNEP provides a framework which guides decision-makers to ensure that all reasonable demand for energy in the economy are met in a sustainable manner. The report identifies possible energy (electricity, petroleum, woodfuels) demand profiles for the country up to 2030. The report took into consideration the following government policies and programmes:

- Coordinated Programme for Economic and Social Development Policies (CPESDP), (2017-2024);
- Integrated Bauxite and Aluminum Programme;
- one-district-one-factory;
- planting for food and jobs; and
- energy sector goals such as achieving universal access to the national electricity grid by 2020; achieving LPG penetration rate of 50% of households by 2020.

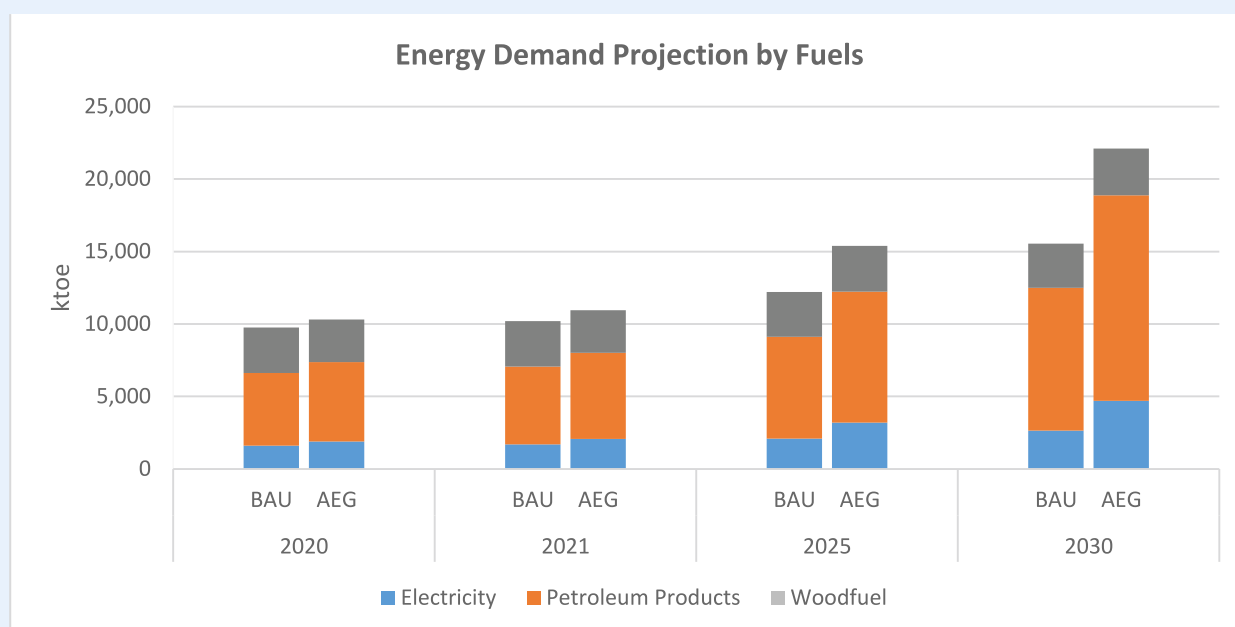


Fig. 24: Energy Demand projection by fuels

NB: The Business-as-Usual (BAU) scenario describes a socio-economic outlook based on trends from the historical past until 2030. The Accelerated Economic Growth (AEG) scenario considers the objectives of the Ghana Shared Growth and Development Agenda, Medium-Term National Development Policy Framework (2018-2021) and the Coordinated Programme for Economic and Social Development Policies (2017-2024), which included project and programmes in the industrial and agricultural sectors such as the 'One District-One Factory' initiative and the 'planting for food and jobs' policy.

3.3 Integrated Power Sector Master Plan (IPSMP) - 2019

The 2018 Integrated Power Sector Master Plan (IPSMP) was updated in 2019 based on comments received from stakeholders on the 2018 report and an analysis of Ghana's energy system as at the end of 2018. The IPSMP serves as the power sector component of a

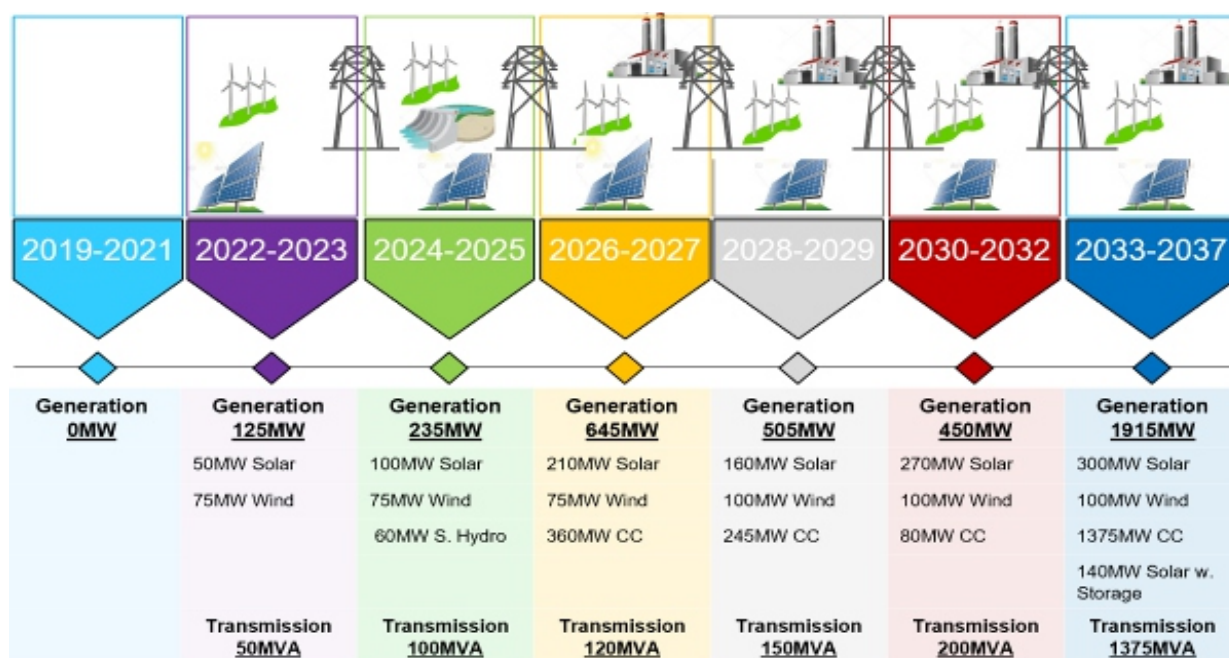
broader Energy Commission's Strategic National Energy Plan (SNEP). The vision of IPSMP is to plan for a resilient power system that reliably meets Ghana's growing power demand in a manner that supports sustainable socio-economic development. It is a long-term power sector resource plan to meet Ghana's current and future electricity demand through an assessment of current and future challenges and opportunities in Ghana's power sector. It is also to develop a resilient generation capacity expansion plan that adequately meets the electricity demand forecast at the least regrets¹. The Government of Ghana has adopted the IPSMP as the planning document to be relied on in the new policy for competitive procurement of energy supply and contracts in the country.

The 2019 IPSMP highlights significant excess capacity in the country's generation system. The excess capacity, which is expected to persist until mid-2020s, has associated financial implications, such as payment of capacity charges for plants that may not be fully utilised until demand picks up in the future. Furthermore, the sector's financial difficulties stem from:

- (a) high cost of fuel used by thermal power plants;
- (b) gas supply shortages;
- (c) high payments for installed capacity to Independent Power Producers (IPPs);
- (d) high distribution losses;
- (e) low revenue collections by Electricity Company of Ghana (ECG) and Northern Electricity Distribution Company; and
- (f) non-payment by Government entities.

Due to these factors, electricity sector revenues from tariff collection do not cover cost of operations.

Least-Regrets Build Plan



¹ A "Least-Regrets" Strategy is a set of policy objectives for the power sector that performs the best under a broad range of potential techno-economic futures

Fig 25: Least-regrets Build Plan

3.4 2019 Annual Energy Statistics

Timely and reliable statistics are essential for planning and monitoring the energy situation at a country level as well as at the international level. In 2019, the Annual Energy Statistics and the Energy Statistics Handbook were updated and published and can be assessed at the energy Commission website at www.energycom.gov.gh. These Energy Statistics publications have been a very important source of energy data of Ghana for

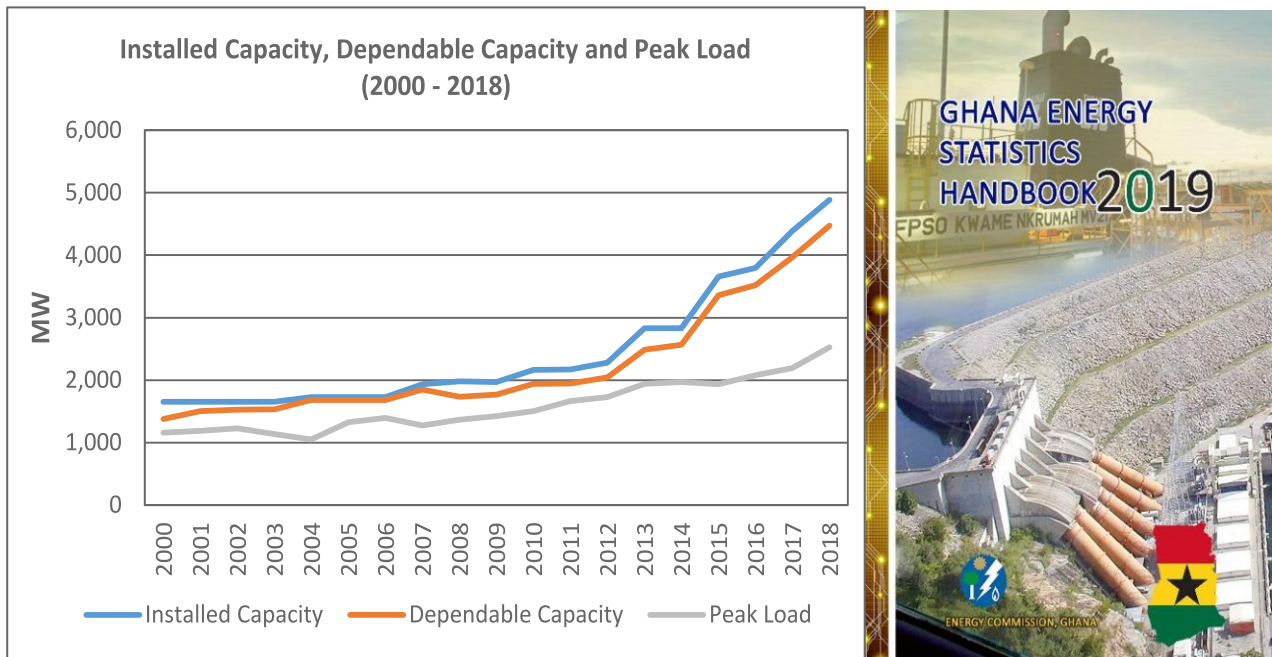


Fig. 26: The Ghana Energy Statistics Handbook

energy policymakers, researchers, academia and institutions in the energy sector. It contains timely and clearly presented historical data on energy resources, production and consumption in Ghana.

3.5 Energy Profile of Districts in Ghana

A comprehensive report providing information on Ghana's energy resources in the various districts in Ghana as well as their current and projected level of utilisation was completed and published on the Commission's website. The Government of Ghana has initiated a number of flagships

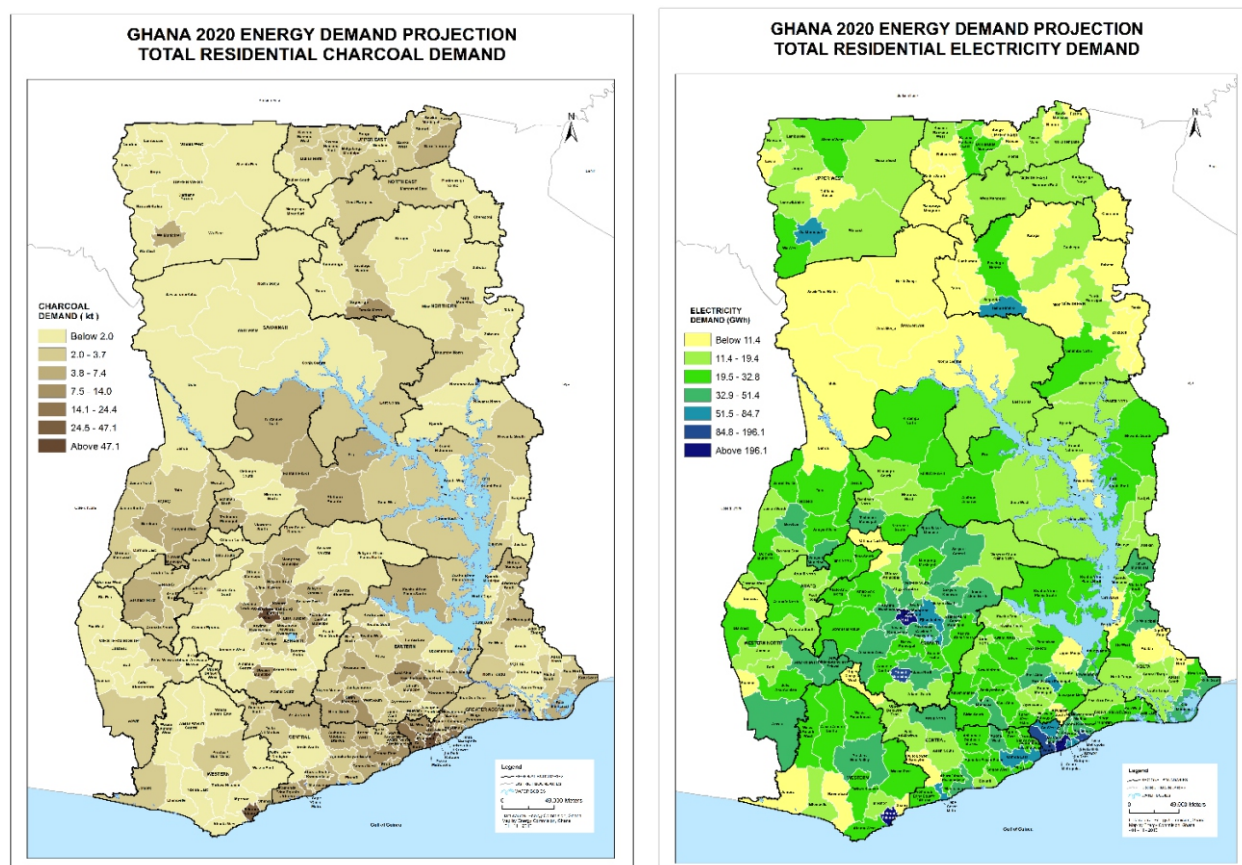


Fig. 27: Sample Energy Profile of Districts Maps

programmes such as the “One District, One Factory,” “One Village One Dam,” and “Planting for Food and Jobs” initiatives. These programmes seek to reinvigorate Ghana's industrialisation process and enhance the country's socio-economic development efforts through the process of linking agriculture to industry. In the case of the “One District One Factory” initiative, otherwise known as District Enterprises initiative, the Government seeks to establish medium-to-large-scale factories or industrial enterprises that have the potential to fundamentally affect the economy of the districts as well as adding value to the country's natural resource base. A comprehensive database on Ghana's energy profile at the district level, indicating the indigenous energy resources and energy utilisation in the various districts, is therefore essential for national development as this will assist in the development of the necessary policies and strategies for effective energy use in the country. This report presents information on the indigenous energy resources of districts in Ghana, as well as the projected energy use in the various households at the district level in the year 2020. The energy resources covered in the report are small and medium hydro potentials, solar and wind.

The report also presents data on electricity access, charcoal production areas and LPG filling stations in the various districts in the country.

4.0 SOCIAL, ENVIRONMENTAL IMPACT AND TECHNOLOGY ASSESSMENT

In January 2015, the Energy Commission (EC) granted Karpowership Ghana Company Limited (KGCL) a wholesale electricity supply license to operate a 235MW emergency power plant at Tema Fishing Harbour using Heavy Fuel Oil (HFO). A second wholesale electricity supply license was granted in October 2017 by the Commission to Karpowership for the deployment of a 470MW dual fuel power plant to replace the 235MW power plant.

In March 2018, the 235MW power plant was decommissioned whilst the 470MW power plant continued its operation at the Tema Fishing Harbour until August 2019, when it was relocated to Sekondi in the Western Region.

In line with power generation regulation in the country, all licensed utilities are required to go through a process of regular social and environmental monitoring to ensure compliance. This is because of the environmental impacts associated with the operations and maintenance of Thermal Power Plants particularly those using HFO.

It is in this regard that the Energy Commission in 2019 undertook an environmental compliance monitoring of the 470MW Karpowership plant and a Social, Health and Environmental Impact Assessment of both the operations of the 235MW and 470 MW Karpowership plants within the Tema, Manhean enclave. The assessment covered the following three communities namely: Awudum, U-Compound and Awudum-U Compound. The following recommendations were made from the study:

- **Installation of Continuous Emission Monitoring Systems (CEMS):** Karpowership Ghana Limited as well as other IPPs operating within close habitat areas should ensure the installation of real time environmental monitors for emissions and discharge level data capture.
- **Health screening:** The Company was asked to conduct regular health screening in the communities to help identify and control foreign ailments that may arise due to such projects or the aggravation of existing diseases as a result of certain chemicals or emissions from the power plant.
- **Regular meet-the-people durbars:** The Company was advised to engage members of the community regularly to find out the challenges the communities face as a result of the operation of the power plant and find possible solutions to them.



Fig. 28: Karpowership visible from Awudum Community



Fig. 29: Training session for field enumerators who carried out the Impact Assessment study on Karpowership at EC



Fig. 30: Enumerators interviewing targeted Respondents at U Compound, Tema Manhean

4.2 Assessment and Clearance for the Decommissioned 470 Mw Karpowership

The Commission, embarked on an inspection of the decommissioned 470MW Karpowership plant at Tema Fishing Harbour to assess the level of completion of the decommissioned activities.

The assessment rating was satisfactory which implies that all decommissioned activities proposed in the decommission plan were complied. Below are some pictures of the site after decommissioning:

4.3 Environmental Compliance Monitoring of Sunon Asogli Power Plant at Kpone near Tema

The Commission in December 2019 carried out a compliance monitoring activity to validate environmental data submitted to it and assess challenges in the implementation of the Environmental Management Plan (EMP) to ensure sound environmental management and public safety. The following recommendations were made to the Management of Sunon Asogli Power Company Limited:

- Air emission modelling should be conducted to determine the fallout areas and a report submitted to both the Commission and EPA by first quarter 2020.
- Expedite action on the procurement and installation of Continuous Emission Monitoring Systems (CEMS) to measure air quality parameters by second quarter 2020.
- Repair and calibrate noise monitoring equipment periodically to capture real time noise measurements.
- Develop and document a negotiated Cooperate Social Responsibility (CSR) with the project affected communities.



Fig. 31: Debriefing meeting with Sunon Asogli officials after the compliance monitoring visit

5.0 ELECTRICITY MARKET OVERSIGHT PANEL (EMOP)

5.1 Stakeholder Engagement

The oversight responsibility of the Electricity Market Oversight Panel (EMOP) over the Wholesale Electricity Market (WEM) requires interaction with invariably, all the key stakeholders of the power sector, principally the Transmission Utility and the Regulators as well as the Market Participants. In view of this, the EMOP has held series of stakeholder fora to engage market participants to fully apprise them of the activities of EMOP as well as events in the WEM. These engagements were mostly by visits to the sites of the Market Participants. These were to enable the EMOP familiarize itself with the daily operations of these participants and to understand, firsthand, challenges facing market participants.

In 2019, the EMOP made its first visits to NEDCo in Tamale and the VRA Solar plant in Navrongo to engage with the management of both institutions. The EMOP team also visited the GRIDCo Bulk Supply Point (BSP) at Nayagnia. Various engagements with bulk customers were also carried out in the Western and Ashanti regions. The EMOP, on a number of occasions, engaged and made presentations on the WEM to The Chamber of Mines to update the mining companies on the progress of the market.

Fig 32: The Team at the VRA Solar Plant, Navrongo



Fig 33: The Team at the BSP at Nayagnia



Fig 34: EMOP in a meeting with management of NEDCo



Fig 35: EMOP's engagement with Perseus Mining

5.2 Coordination of the Market Design/Rules Development

The Market Operator (GRIDCo), per LI 1937, has the responsibility to develop Market Rules which will govern the operations of the WEM. The EMOP has the role of coordinating the development of the Market Design and Market Rules. The EMOP, in 2019 reviewed the draft market design developed by GRIDCo. The Market design has been finalized while work on Market rules is ongoing.

5.3 Market Monitoring and Publications

The EMOP has been publishing the Wholesale Electricity Market (WEM) Bulletin since January 2016, when the Secretariat was set up by the Energy Commission in readiness for the inauguration of the EMOP, to help in the dissemination of information on the WEM. The bulletin covers major developments in the Wholesale Electricity Market of Ghana. It analyses the performance of key WEM indicators against their benchmarks, and examines the likely implications of any discernable trends in the market. The 2019 editions of the Wholesale Electricity Market Bulletin were published and can be accessed from <http://www.energycom.gov.gh/emop/ghana-wholesale-electricity-market-watch-monthly-bulletin>.

In 2019, the EMOP introduced the Mid-Year Report on the performance of the Ghana Wholesale Electricity Market. This report covered analysis on electricity generation and demand, the total fuel consumed by thermal power plants, the performance of the National Interconnected Transmission System (NITS), electricity pricing in the wholesale electricity market, and an outlook for the second half of 2019. A copy of this publication can be found on the Energy Commission website.

5.4 2019 Legacy-Hydro Allocation

The EMOP is mandated by regulations 18(1).b and 18(1).h of Electricity Regulations 2008, (L.I.1937), to ensure the smooth operation of the wholesale electricity market and to ensure the long-term optimization of the hydro-electricity supply sources in the country respectively.

Persuant to these regulations, the EMOP in 2019 approved the projected electricity generation from the Akosombo and Kpong dams. The EMOP further allocated the generation from the legacy hydro to various classes of consumers in conformity with the hydro allocation framework.

5.5 Dispute Resolution

Regulations 18 (b) and 18 (f) of Electricity Regulations, 2008, (L.I. 1937) mandates the EMOP to:

- (a) ensure the smooth operation of the Wholesale Electricity Market (WEM); and
- (b) resolve disputes referred to it by market participants in respect of transactions in the Wholesale Electricity Market.



Pursuant to these Regulations, the EMOP has developed a Complaint and Dispute Resolution Procedure to ensure that these functions are carried out effectively. The procedure sets out the guidelines for making a complaint to the EMOP and also the processes employed by the EMOP to resolve disputes between Market Participants.

In 2019, two (2) disputes between the Utility (GRIDCo) and wholesale suppliers and two (2) others between the Utility and bulk customers were presented to the EMOP for resolution. All of these disputes were resolve amicably by the EMOP.



6.0 HUMAN RESOURCE DEVELOPMENT AND ADMINISTRATION

6.1 Training and Development

In the year under review Staff and Board received training in the under listed areas to build their capacity to perform their current and future roles effectively:

1. Finance in the Boardroom for Board members (Maddison Pine) – UK
2. Energy Statistics, Residential Sector Energy Efficiency Data Collection (African Energy Commission) – Cote D'Ivoire
3. Utility Regulation & Strategy (Public Utility Research Centre) – USA
4. Energy & Climate (University of Bayreuth) – Germany
5. Performance Based Budgeting (SETYM International) – Canada
6. Energy and Sustainable Management (Africa Training Institute) – South Africa
7. Bio-gas Technology, Rural Energies and Environmental Protection for developing countries (Bio-gas Institute of Agriculture Affairs) – China
8. Best Practice on Financial and Reporting on IPSAS and IFRS Standards (Crown Agents) – UK
9. Design, Installation and Maintenance of Small Wind Turbines (NIWE) – India
10. Certified Network Defender (Koeing Solutions) – UAE
11. Mobile Application Development (Koeing Solutions) – UAE
12. CIPS Corporate Awards (Chartered Institute of Procurement & Supply) – UK
13. Local Content and Master Class (DAI) – USA
14. Moral Leadership in an Imperfect World (Harvard Kennedy School of Graduate) – USA
15. Training of Trainer on Energy Efficiency (Luxembourg Developing Corporation) – Cape Verde
16. Monitoring and Evaluation for Results (IMA International) – South Africa
17. Monitoring and Evaluation of Energy Projects (Regional Centre for Training and Development) – South Africa
18. In-house Public Speaking training Workshop

6.2 Collaboration with National and International Tertiary Institutions

The Commission offers national and international students the opportunity for internship and several students have built their capacity at the Energy Commission during internships. In 2019, 13 students from the following institutions had opportunities for internship at the Energy Commission:

1. University of Energy & Natural Resources, Sunyani – Ghana.
2. University of Ghana, Legon – Accra.
3. Kwame Nkrumah University of Science & Technology, Kumasi – Ghana.
4. Collaboration with MiDA on Compact II Gender and Internship Program, involving the provision of opportunities for six (6) female students of engineering to benefit from a mentorship and internship programme at the Commission.

6.3 Staff Learning Fora

The Energy Commission holds cross-functional team meeting every last Friday of each month to share knowledge and foster co-operation within the teams. Directorates take turns to share information on their work programmes and allow other staff to interrogate the presentations leading to a healthy discourse. These meetings dubbed ‘Happy Hour’, strengthen the bond of unity amongst Directorates and afford staff the opportunity to provide positive feedback for effective team work. In this regard, twelve (12) staff learning fora were held in the year under review.

6.4 Retired Employees

The following staff who served the Commission for several decades retired in 2019

1. Dr. Alfred Ofori Ahenkorah
2. Mr. Eric Johnson Kwao Ofori-Nyarko
3. Dr. Joseph Essandoh-Yeddu
4. Mr. Lester Vanlare



Fig. 32: Roll of 2019 Retirees - Dr. Alfred Ofosu Ahenkorah; Mr. Eric Ofori-Nyarko; Dr. Joseph Essandoh-Yeddu; Mr. Lestare Vanlare

The Energy Commission wishes them well and hopes to tap into their institutional memory to build a stronger Commission.

6.5 Promoting Employee Well-being

The Energy Commission organized a free health screening exercise and a Hepatitis B vaccination was conducted for staff and their families during the year under review. A well-stocked first-aid kit and a more advanced blood pressure monitor have been procured for use by staff to improve their well-being.

6.6 Opening of Regional Offices

Two regional office were opened in Takoradi and Tamale to expand the Commission's operations in those Regions.

7.0 PUBLIC ENGAGEMENT AND EDUCATION

The mandates of the Energy Commission under Act 541 require the strategic and effective engagement of in-house staff, industry stakeholders and members of the public, some of whom may be used as intermediaries to sell the Commission's messages. These include ensuring the sustainable use of indigenous energy resources and promoting renewable energy technologies and energy efficiency solutions in the country. Historically, the Commission has relied on extensive stakeholder engagements, target group discussions, consumer parliaments and the traditional media, to inform, educate and elicit the buy-in of its stakeholders in its programmes, projects and activities. The objectives of the choice of such channels are particularly to reach a wide range of audiences, build and maintain strong relationships with stakeholders, and to reinforce the benefits of public participation in the regulatory process generally.

In recent times, the Energy Commission like other state institutions has been compelled to enter the social media space in order to be seen, heard and remain relevant to its stakeholders. The Commission launched its social media presence with succinct messages crafted against pictures of some of its staff. These have been shared on Commission's website, WhatsApp and Facebook platforms. .

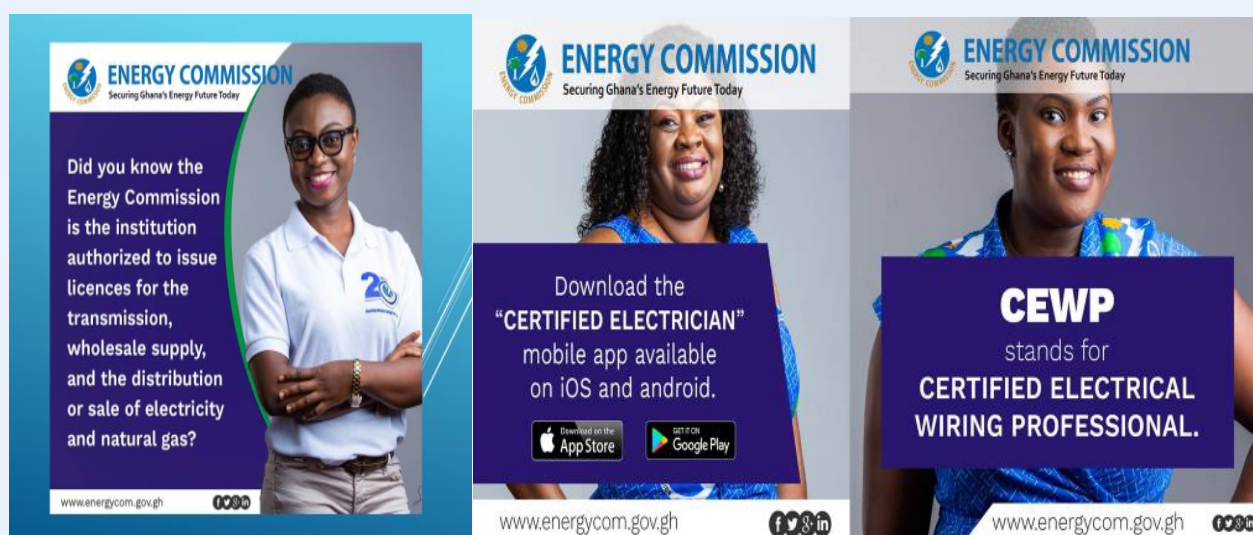


Fig. 33: Samples of creatives developed for the Commission's social media platforms

In 2019, the Commission engaged the public in the following activities:

7.1 Electrical Wiring Programme

The Commission carried out in all regional capitals, public sensitization activities to create awareness among the public on the provisions of the Electrical Wiring Regulations, particularly, the certification of Electrical Wiring Practitioners (EWPs) and Electrical Wiring Inspectors (EWIs) via certification examinations and interviews.

Radio and print advertisements were carried in the media to alert would-be electricians of the pending examinations held twice a year in May/June and in September/October. The effectiveness of these public sensitisation efforts are seen in the increasing numbers of electricians who partake in the examinations and graduate as Certified Electrical Wiring Professionals (CEWPs) or Certified Electrical Wiring Inspectors (CEWIs).

Graduation ceremonies are organized after every examination. These ceremonies have become a point of convergence for the Commission and its partners, including the security forces and companies operating in the electrical wiring sector in Ghana, as well as public institutions, to caution and encourage the new wiring practitioners as they begin their important career.

Fig. 34: Best Female Candidate, Ms. Gloria Aggrey-Fynn collects her Certificate from the Minister for Energy, Hon. John Peter Amewu



Fig. 31: Mr. Awal Sakib Mohammed, Trainer and Oral Examination Panel Member receives a Certificate of Recognition from the Executive Secretary of the PURC and Chairman for the occasion, Mrs. Afia Dufie



Fig. 32: A cross-section of Graduands at the 11th Electrical Wiring Graduation Ceremony

The Commission's website at www.energycom.gov.gh serves as an important store and source of information on the EWP, for example, a Register of CEWPs and CEWIs in good standing as well as contacts for easy access by the public.

7.2 Renewable Energy Fair

The RE Fair has become one of the flagship programmes of the Energy Commission with each Fair endorsing the importance of such an engagement with the public on energy matters in general but on renewable energy matters in particular. The Fair brings great visibility to the work of the Commission and strengthens the collaborative relationship it has with its stakeholders, especially actors in the RE space.

In 2019 the 5th edition of the Fair was used as a platform to re-launch the National Energy Symposium. The Commission partnered with media houses represented by its Press Corps to disseminate information on RE and its benefits to stakeholders and the general public.

7.3 National and International Awards

The Energy Commission's work in energy efficiency and energy conservation was recognized with the award of ENERGY EFFICIENT ORGANISATION of the YEAR (PUBLIC) – 2019 at the Ghana Energy Awards ceremony, while the ECOWAS Centre for Renewable Energy and Energy Efficiency also gave the Commission an Awards styled ENERGY EFFICIENCY CHAMPION for the year 2019.



Fig. 37: ENERGY EFFICIENT ORGANISATION - PUBLIC Award



Fig. 38: Award from ECREEE for ENERGY EFFICIENCY CHAMPION

7.4 Training of Press Corps in Energy Reporting

For years, the Energy Commission has maintained a Press Corps consisting of journalists drawn from Media Houses across the country. The rationale behind the formation of the Press Corps is to enhance visibility for the work of the Commission among its stakeholders and the public by maintaining a crop of media personnel the Commission could regularly rely on to cover and report accurately on its activities.

The advantages the Commission has enjoyed from such a collaboration with the media include a positive image among Press Houses and the ability to negotiate discounted rates with them. The Commission hopes that the rapport with these media houses and the group of pressmen and women would make the

journalists ambassadors of the Commission's messages and activities.

In 2019, the Press Corps was revived and the Commission relied on this crop of journalists for coverage of and reportage on its activities.

7.5 Organisational Branding

A personal branding Workshop was also held for women of the Commission as part of the International Women's Day. The activity included a photoshoot which has generated advertising content for the work of the Energy Commission.

7.6 Corporate Social Responsibility

Various groups, private bodies and educational institutions were assisted with various donations where their causes have a bearing on the mandate of the Commission.

The table below outlines the various groups, private bodies and educational institutions the Commission extended support to:

INSTTUTION	CAUSE
Ghana Mathematics Society	Commemoration of the 2019 Ghana Mathematics Day
Richoff Disability Sports	Building an entrepreneurial platform for persons with disability through education, sports, skills training etc.
Abutia Teti	Extension of electricity to parts of the Abutia community with no grid connection
National Disaster Management Organization (NADMO)	A Preventive drive to empower communities and the general public to be resilient
University for Energy and National Resources	4 th Science Festival



ENERGY COMMISSION
AUDITED FINANCIAL STATEMENTS
FOR
THE YEAR ENDED 31 DECEMBER, 2019

ENERGY COMMISSION

Corporate information for the year ended 31 December, 2019

Governing Board

Prof. George Panyin Hagan	Chairman
Dari Bismark Haruna (Kpembewura IV)	Member
Dr. Isaac Frimpong Mensa-Bonsu	Member
Moses Aristophanes Kwame Gyasi	Member
Hon. Nana Akua Owusu Afriyie	Member
Alhaji Jabaru Abukari	Member
Eugene Ofosuhene	Member
Dr. Alfred Kwabena Ofosu Ahenkorah	Member – Retired 13/9/2019
Ing. Oscar Amonoo-Neizer	Member – Appointed 17/9/2019

Board Secretary/Legal Officer

Ms. Cecilia Agbenyega

Principal place of business

Ghana Airways Avenue
Behind Alliance Français
Airport Residential Area
GA-037-3212

Registered office

PMB Ministries Post
Office, Accra

Independent Auditor

Eddie Nikoi Accounting
Consultancy.
H/No. 9, Nii Kofi Aniefi St
P.O. Box OS 51,
Osu - Accra.

Bankers

Bank of Ghana
Ecobank Ghana Limited
Ghana Commercial Bank

ENERGY COMMISSION

Five year financial summary and highlights for the year ended 31 December, 2019

(All amounts are in Ghana cedi unless otherwise stated)

Five-year financial summary	2019	2018	2017	2016	2015
Income	61,392,953	43,765,482	41,302,101	40,335,935	18,039,152
Expenditure	(36,714,798)	(30,863,549)	(35,337,194)	(31,711,686)	(15,709,693)
Excess of income over expenditure	24,678,155	12,901,933	5,964,907	8,624,249	2,329,459
Total assets	78,948,542	53,692,825	39,899,555	33,615,755	19,979,188
Total equity	72,165,339	47,487,184	34,585,251	28,620,344	15,922,637
Total liabilities	6,783,203	6,205,641	5,314,304	4,995,411	4,056,551

Financial highlights	2019	2018	Percentage change (%)
Income	61,392,953	43,765,482	40.27%
Expenditure	(36,714,798)	(30,863,549)	(18.96%)
Excess of income over expenditure	24,678,155	12,901,933	91.27%
Total assets	78,948,542	53,692,825	47.08%
Total equity	72,165,339	47,487,184	51.97%
Total liabilities	6,783,203	6,205,641	(9.31%)

ENERGY COMMISSION

Report of the Governing Board of Directors

The Governing Board presents its report and the Financial Statements of the Commission for the year ended December 31, 2019.

In preparing these financial statements, the Governing Board is required to:

- Select suitable accounting policies and then apply them consistently.
- Make judgments and estimates that are reasonable and prudent.
- State whether applicable International Public Sector Accounting Standards (IPSAS) have been followed, subject to any material departures disclosed and explained in the Financial Statements.
- Prepare the Financial Statements on a going concern basis unless it is inappropriate to presume that the Commission will continue in business into the foreseeable future.

Governing Board's Responsibility for the Financial Statements

The Governing Board is responsible for the preparation of the Financial Statements for each financial year, which gives a true and fair view of the Statement of Financial Position, Financial Performance and Cash Flows for that period. In preparing these Financial Statements, the Governing Board selected suitable accounting policies and then applied them consistently, made judgments and estimates that are reasonable and prudent and followed accrual basis of International Public Sector Accounting Standards (IPSAS) and the requirements of the Public Financial Management Act 2016 (Act 921), Financial Administration Regulations 2019, Income Tax Act, 2015 (Act 896), Value Added Tax Act 2013 (Act 870) [as amended], Public Procurement Act 2003 (Act 663) as amended and all other applicable laws and regulations.

The Governing Board is responsible for ensuring that the Commission keeps proper accounting records that disclose with reasonable accuracy at any time, the financial position of the Commission. The Governing Board is also responsible for safeguarding the assets of the Commission and taking reasonable steps for the prevention and detection of fraud and other irregularities

Principal Activity

The principal activity of the Commission is mandated under the Energy Commission Act 1997, (Act 541) [as amended] which is:

To manage the utilization of energy resources in Ghana, to provide the legal, regulatory and supervisory framework for all providers of energy services in the country: specifically, by granting of licenses for the transmission, wholesale supply, distribution and sale of electricity and natural gas and related matters.

ENERGY COMMISSION**Report of the Governing Board of Directors (continued)**

There was no change in the nature of the business during the year.

Ownership Structure

The Commission is established by an Act of Parliament, Energy Commission Act, 1997 (Act 541) [as amended] and as such fully owned by the Government of Ghana.

Governing Board's Interest

None of the Members of the Commission's Governing Board has any interest in the ownership of the Commission during the year under consideration. None of the Members of the Commission's Governing Board had a material interest in any contract of significance.

Financial results for the year 2019:

	2019	2018
Beginning balance	47,487,184	34,585,251
Add surplus for the year	24,678,155	12,901,933
Balance on equity	<u>72,165,339</u>	<u>47,487,184</u>

The Governing Board confirms to the best of their knowledge, that:

- The Financial Statements, prepared in accordance with applicable laws and IPSAS and
- The state of the Commission's affairs is satisfactory.

Auditors

In accordance with the Energy Commission Act 1997, (Act 541) [as amended], Messrs Eddie Nikoi Accounting Consultancy (ENAC) has been approved and appointed by the Auditor-General of Ghana as the Commission's auditors for 2019.

Approval of the Financial Statements

The financial statements of the Energy Commission, were approved by the Governing Board and signed on their behalf by:

Board Chairman: *P. George P. Hagan* Executive Secretary: Ing. Oscar Amonoo-Neizer

Signature: *P. George P. Hagan*

Signature: *O. A. Neizer*

Date: *5-1-21*

Date: *5-1-2021*



ENERGY COMMISSION

Corporate Governance (CG) Report

The Energy Commission (Commission) is committed to strong corporate governance practices that allocate rights and responsibilities among the Commission’s members, the Governing Board and Executive Management to provide an effective oversight and management of the Commission in a manner that enhances shareholders value and promotes investors’ and stakeholders’ confidence. The Commission’s corporate governance principles are contained in a number of corporate documents. The Governing Board oversees the conduct of the Commission’s business and is primarily responsible for providing effective governance over the Commission’s key affairs, including the appointment of Executive Management (excluding the Executive Secretary), approval of business strategies, and evaluation of performances and assessment of major risks facing the Commission.

In discharging its obligations, the Governing Board exercises judgement in the best interest of the Commission and relies on the Commission’s Executive Management to implement approved business strategies, resolve day-to-day operational issues, keep the Governing Board informed, and maintain and promote high ethical standards. The Governing Board delegates authority in management matters to the Commission’s Executive Secretary subject to clear instructions in relation to such delegation of authority and the circumstances in which Executive Secretary shall be required to obtain Governing Board’s approval prior to taking a decision on behalf of the Commission. The Governing Board is made up of majority Non-Executive members.

The Commission’s commitment to ensuring international best practice in terms of corporate Governance remains strong and unwavering.

Name of Chairman: Prof. George P. Hagen

Name of Executive Secretary: Ing. Oscar Amonoo-Neizer

Signature: [Handwritten Signature]

Signature: [Handwritten Signature]

Date: 5.1.21

Date: 5-01-2021



EDDIE NIKOI ACCOUNTING CONSULTANCY

Chartered Accountants, Management Consultants, Fixed Assets Management and Revaluation Experts,
Accountancy Tutors & Tax Experts

HEAD OFFICE:

Kofi Aniefi Street
Behind Osu KFC (Sixth Hse. on the left)
Osu RE, X'borg, Accra
P.O. Box OS 51, Osu - Accra
Tel: (233-302) 774041, 778784
Fax: (233-302) 760396
Mobile: 024 434 4041 / 020 434 4041 / 027 710 4041
E-mail: eddienikoiosu@gmail.com / enacosu@yahoo.com /
info@enacgh.com
Website: www.enacghana.com

DZORWULU ANNEX:

H/No. C617/14
Tetteh - Kwei Street
Last Chance Area
Paulina's Beauty Salon Building
Dzorwulu - Accra
Office Tel: (233-302) 783403
Mobile: 024 635 6568
E-mail: infodz@enacgh.com
Residence Tel: (233-302) 774043

Independent Auditor's report to the Governing Board

Opinion

In our opinion, the Financial Statements presented on pages 10 to 14 give a true and fair view of the financial position of the Energy Commission as at 31st December, 2019 and its financial performance and cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRS), the Public Financial Management Act, 2016 (Act 921), the International Public Sector Accounting Standards (IPSAS) and Energy Commission Act, 1997 (Act 541) as amended.

We have audited the Financial Statements of Energy Commission, which comprises the Statement of Financial Position as at 31 December 2019, Statements of Financial Performance, Changes in Accumulated Fund, Statement of Cash Flows for the year then ended and notes to the Financial Statements, which include a summary of significant Accounting Policies, Statement of Comparison of Budget and Actual Performance and other explanatory notes as set out on pages 15 to 50.

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Commission in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (IESBA Code), and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibility of the Governing Board for the Financial Statements

The Governing Board is responsible for the preparation of the Financial Statements that give a true and fair view in accordance with the International Public Sector Accounting Standards (IPSAS) and the provisions of the Energy Commission Act 1997 (Act 541) as amended, and for such internal controls as the Governing Board determines are necessary to enable the preparation of these Financial Statements that are free from material misstatement, whether due to fraud or error.

In preparing the Financial Statements, the Governing Board is responsible for assessing the Commission's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Governing Board either intends to liquidate or to cease operations, or has no realistic alternative but to do so.



ENERGY COMMISSION

Report on the Financial Statements (continued)

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with International Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance whether the Financial Statements are free from material misstatements.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the Financial Statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the Financial Statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the Financial Statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the Governing Board, as well as evaluating the overall presentation of the Financial Statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

As part of the audit in accordance with ISAs, we exercised professional judgment and maintained professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Commission's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Commission's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We again, obtained sufficient appropriate audit evidence regarding the financial information of the Commission to enable us express an opinion on the financial statements.

ENERGY COMMISSION

Report on the Financial Statements (continued)

Report on Other Legal and Regulatory Requirements

Compliance with the requirements of Section 49 of the Energy Commission Act 1997 (Act 541) [as amended].

We confirm that we have obtained all the information and explanations, which to the best of our knowledge and belief were necessary for the purposes of our audit.

In carrying out our audit we consider and report on the following matters.

- i) In our opinion, proper books of account have been kept by the Commission, as appears from our examination of those books; and
- ii) The Commission's books of account are in a form approved by the Auditor-General.
- iii) The financial year of the Commission is the same as the financial year of the Government of Ghana.

The engagement partner on the audit resulting in this independent auditor's report is **Edmund Nikoi** (Practicing Certificate Number ICAG/P/1040)



EDDIE NIKOI ACCOUNTING CONSULTANCY :(ICAG/F/2020/110)

EDDIE NIKOI ACCOUNTING
CONSULTANCY
CHARTERED ACCOUNTANTS
P. O. BOX US 51, OSU-ACCRA
WEST AFRICA

P. O. BOX OS 51

OSU-ACCRA

DATED: 6th 01 : 2021.....2020

ENERGY COMMISSION**FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019****Statement of financial position as at 31 December, 2019**

(All amounts are stated in Ghana cedi unless otherwise stated)

	Note	As at 31 December 2019	As at 31 December 2018
Assets			
Non-current assets			
Property and equipment	4a	9,857,869	8,971,810
Intangible assets	5a	140,204	16,538
Trade and other accounts receivables	7	<u>17,225,471</u>	<u>17,225,471</u>
		27,223,544	26,213,819
Current Assets			
Inventory	6	269,055	269,054
Trade/other accounts receivable	7	49,424,239	27,006,244
Cash and cash equivalent	8	<u>2,031,704</u>	<u>203,708</u>
Total Current Assets		<u>51,724,998</u>	<u>27,479,006</u>
Total assets		<u>78,948,542</u>	<u>53,692,825</u>
Equity			
Accumulated Fund	19	<u>72,165,339</u>	<u>47,487,184</u>
Total equity		<u>72,165,339</u>	<u>47,487,184</u>
Non-current liabilities			
Medium term loan		-	-
Current liabilities			
Trade and other accounts payable	9	6,783,203	6,205,641
Bank Overdraft		-	-
Total current liabilities		<u>6,783,203</u>	<u>6,205,641</u>
Total liabilities		<u>6,783,203</u>	<u>6,205,641</u>
Total equity and liabilities		<u>78,948,542</u>	<u>53,692,825</u>

The accompanying notes on pages 21 – 50 form an integral part of these financial statements.



ENERGY COMMISSION

FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019

Statement of financial position as at 31 December, 2019

(All amounts are stated in Ghana cedi unless otherwise stated)

APPROVAL OF THE FINANCIAL STATEMENTS

The financial statements of Energy Commission, were approved by the Governing Board

On, 2020 and signed on their behalf by:

Prof. George P. Hagan
Name of Chairman

Ing. Oscar Amonoo-Neizer
Name of Executive Secretary

Signature: 

Signature: 

Date: 5.1.21

Date: 5-01-2021

ENERGY COMMISSION**FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019****Statement of Financial Performance for the year ended 31 December, 2019***(All amounts are stated in Ghana cedi unless otherwise stated)*

Income	Note	2019	2018
Revenue	10	61,212,203	43,197,618
Other revenue	11	180,750	567,864
Total income		<u>61,392,953</u>	<u>43,765,482</u>
Expenditure			
Staff Compensation	12	(15,201,088)	(13,775,360)
General and Administrative expenses	13	(7,006,585)	(6,567,999)
Service activity expenses	14	(14,507,125)	(10,520,190)
Total Expenditure		<u>(36,714,798)</u>	<u>(30,863,549)</u>
Surplus transferred to Accumulated Fund		24,678,155	12,901,933

The accompanying notes on pages 21 – 50 form an integral part of these financial statements



ENERGY COMMISSION

FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019

Statement of Accumulated Fund as at 31 December, 2019

(All amounts are stated in Ghana cedi unless otherwise stated)

	Note	2019	2018
At beginning of the year	19	47,487,184	34,585,251
Surplus for the year	19	<u>24,678,155</u>	<u>12,901,933</u>
At the end of the year	19	<u>72,165,339</u>	<u>47,487,184</u>

The accompanying notes on pages 21 – 50 form an integral part of these financial statements.

ENERGY COMMISSION**FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019****Statement of Cash Flow as at 31 December, 2019***(All amounts are stated in Ghana cedi unless otherwise stated)*

	Note	2019	2018
Net cash generated from operating activities	15	<u>3,866,909</u>	<u>(103,127)</u>
Cash flow from investing activities			
Purchase of property and equipment	4a	(1,884,330)	(1,157,350)
Purchase of intangible assets	5a	<u>(154,584)</u>	<u>(24,807)</u>
Net cash used in investing activities		<u>1,827,996</u>	<u>(1,182,157)</u>
Cash flow from financing activities			
Payment of medium-term loan		-	=
Net cash used in financing activities		<u>-</u>	<u>-</u>
Net increase in cash & cash equivalents		1,827,996	(1,285,284)
Cash and cash equivalents:			
At the beginning of the year		<u>203,708</u>	<u>1,488,992</u>
At the end of the year	8	<u>2,031,704</u>	<u>203,708</u>

The accompanying notes on pages 21 – 50 form an integral part of these financial statements.

ENERGY COMMISSION**FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019****Statement of comparison of budget and actual performance for the year ended 31 December, 2019**

(All amounts are stated in Ghana cedi unless otherwise stated)

	Budget	Actual on comparable basis	Variance
	2019	2019	2019
	GH¢	GH¢	GH¢
INFLOWS			
Energy Fund	53,501,017	39,209,158	(14,291,859)
Cash/Bank bal b/fwd (31/12/18)	-	1,017,255	1,017,255
Regulatory Levy	4,276,875	-	(4,276,875)
Sub-total local inflows	57,777,892	40,226,413	(22,842,470)
Donor Fund (WB/MiDA/UNDP)**	3,814,304	-	(3,381,393)
Total Expected Inflows	61,592,196	40,226,413	(21,365,783)
EXPENDITURE			
Technical Regulation, Renewable Energy and Energy Efficiency Promotion			
Office of Technical Regulation	870,000	1,849,458	(979,458)
Energy Efficiency & Climate Change	1,874,400	747,464	1,126,936
Renewable Energy & SE4ALL**	4,207,000	2,605,916	1,601,084
Inspectorate	1,553,000	217,900	1,335,100
Electricity Market Oversight Panel	1,049,035	-	1,049,035
Subtotal Technical Regulation, Renewable Energy and Energy Efficiency Promotion	9,553,435	5,420,708	4,132,697
Strategic Planning and Policy Department (SPPD)			
Strategic Planning & Policy (SPPD)	2,394,250	747,433	1,646,817
Social Environment Impact and Technology Assessment Division (SEITA)	107,700	88,220	19,480
Subtotal Strategic Planning & Policy	2,501,950	835,653	1,666,297

**

- WB : World Bank
MiDA : Millennium Development Authority
UNDP : United Nations Development Programme
SE4ALL : Sustainable Energy for All Project

ENERGY COMMISSION**FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019****Statement of comparison of budget and actual performance for the year ended 31 December, 2019**

(All amounts are stated in Ghana cedi unless otherwise stated)

	Budget	Actual on comparable basis	Variance
	2019 GH¢	2019 GH¢	2019 GH¢
Procurement			
Procurement Management	340,000	318,296	21,704
Procurement of Goods & Services	4,325,500	-	4,325,500
Procurement of Works (Office Building Fence wall)	6,585,052	-	6,585,052
Subtotal Procurement	11,250,552	318,296	10,932,256
Finance			
Financial Management	1,319,200	717,769	601,431
Employee Compensation	17,592,000	15,201,008	2,390,992
Subtotal Finance	18,911,200	15,918,777	2,992,423
Human Resource Management & Administration			
Human Resource Development	4,169,877	2,307,456	1,862,421
Administration	5,615,762	5,977,398	(361,636)
Public Affairs	4,793,200	1,286,952	3,506,248
ICT unit	190,000	266,249	(76,249)
Sub-total Human Resource Management & Administration	14,768,839	9,838,055	4,930,784

The accompanying notes on pages 21 – 50 form an integral part of these financial statements.

ENERGY COMMISSION**FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019****Statement of comparison of budget and actual performance for the year ended 31 December, 2019***(All amounts are stated in Ghana cedi unless otherwise stated)*

	Budget	Actual on comparable basis	Variance
	2019 GH¢	2019 GH¢	2019 GH¢
Office of Executive Secretary			
Legal Affairs & Board Secretariat	1,465,452	1,366,854	98,598
Internal Audit	300,000	226,765	73,235
Ministerial & Inter-institutional Cooperation	760,000	398,933	361,067
Monitoring & Evaluation	520,000	398,932	121,068
Drive Electric vehicle initiative	350,000	-	350,000
International Cooperation	2,687,455	2,994,563	(307,108)
Subtotal Office of Executive Secretary	6,082,907	5,386,047	696,860
Total Expenditures ALL	63,068,883	37,717,536	31,634,629

The accompanying notes on pages 21 – 50 form an integral part of these financial statements.

ENERGY COMMISSION**FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019****Statement of comparison of budget and actual performance for the year ended 31 December, 2018***(All amounts are stated in Ghana cedi unless otherwise stated)*

	Budget	Actuals on comparable basis	Variance
	2018	2018	2018
	GH¢	GH¢	GH¢
INFLOWS			
Energy Fund	54,542,402	26,497,993	(28,044,409)
Other	2,266,000	505,750	(1,760,250)
Regulatory Levy	2,850,000	1,982,312	(867,688)
Sub-total local inflows	59,658,402	28,986,055	(30,672,347)
WB/MiDA/UNDP	73,569,064	-	(73,569,064)
Total Inflows	133,227,466	28,986,055	(104,241,411)
EXPENDITURES			
Technical Regulation, Renewable Energy and Energy Efficiency Promotion			
Office of Technical Regulation	1,124,000	756,106	367,894
Energy Efficiency & Climate Change	70,772,500	1,814,658	68,957,842
Renewable Energy & SE4ALL	10,251,809	3,372,335	6,879,474
Inspectorate	3,110,620	234,595	2,876,025
Subtotal	85,258,929	6,177,694	79,081,235
Office of Strategic Planning and Policy			
Strategic Planning & Policy Division (SPPD)	858,000	188,330	669,670
Social Environment Impact and Technology Ass.	192,200	76,855	115,345
ICT	-	-	-
Subtotal Strategic Planning and Policy	1,050,200	265,185	785,015

The accompanying notes on pages 21 – 50 form an integral part of these financial statements.

ENERGY COMMISSION**FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019****Statement of comparison of budget and actual amounts (Continued)**

(All amounts are stated in Ghana cedi unless otherwise stated)

	Budget	Actual on comparable basis	Variance ¹
	2018 GH¢	2018 GH¢	2018 GH¢
Procurement			
Procurement Management	340,000	241,786	98,214
Procurement of Goods & Services	3,140,000	1,182,157	1,957,843
Procurement of Works (Office Building Fence wall)	7,500,000	-	7,500,000
Subtotal Procurement	10,980,000	1,423,943	9,556,057
Finance			
Financial Management	2,126,000	957,587	1,168,413
Insurance of Office Building	-	103,315	(103,315)
Employee Compensation	14,400,000	12,611,759	1,788,241
Subtotal Finance	16,526,000	13,672,661	2,853,339
Human Resource Management & Administration			
Human Resource Management	1,172,640	1,506,383	(333,743)
Administration	2,071,331	2,112,597	(41,266)
Public Affairs	4,793,200	580,501	4,212,699
Employee Compensation	240,000	733,633	(493,633)
Subtotal Human Resource Management & Administration	8,277,171	4,933,114	3,344,057

The accompanying notes on pages 21 – 50 form an integral part of these financial statements.

ENERGY COMMISSION**FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019****Statement of comparison of budget and actual amounts (Continued)**

(All amounts are stated in Ghana cedi unless otherwise stated)

	Budget	Actual on comparable basis	Variance
	2018 GH¢	2018 GH¢	2018 GH¢
Office of Executive Secretary			
Legal Affairs & Board Secretariat	1,465,452	1,351,456	113,996
Internal Audit	282,000	535,681	(253,681)
Ministerial & Parliamentary Cooperation	460,000	341,400	118,600
Monitoring & Evaluation	780,270	-	780,270
Market Oversight Secretariat	1,333,880	-	1,333,880
International Cooperation	530,000	1,570,206	(1,040,206)
Subtotal Office of Executive Secretary	4,851,602	3,798,743	1,052,859
Subtotal Expenditure-(Locally funded)	59,658,402	30,271,340	29,387,062
EXPENDITURES-(Donor funded)			
Office of Technical Regulation	93,000	-	93,000
Energy Efficiency and Climate Change	67,192,500	-	67,192,500
Market Oversight Secretariat	1,410,810	-	1,410,810
Ghana-China South-South Corporation	4,872,754	-	4,872,754
Subtotal Expenditures-(Donor funded)	73,569,064	-	73,569,064
Total Expenditure-ALL	133,227,466	30,271,340	102,956,126

The accompanying notes on pages 21 – 50 form an integral part of these financial statements.



ENERGY COMMISSION

FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019

Notes to the financial statements

(All amounts are stated in Ghana cedi unless otherwise stated)

1. Reporting entity

The Energy Commission (Commission) is a statutory body corporate domiciled in Ghana with perpetual succession and a common seal established by Energy Commission Act 1997, (Act 541) [as amended]. The Commission is required by law to regulate and manage the development and utilization of energy resources in Ghana as well as to provide the legal, regulatory and supervisory framework for all providers of energy in the country, specifically by granting licenses for transmission, wholesale, supply, distribution and sale of electricity and natural gas and related matter.

The address of the Commission's principal place of business is Ghana Airways Avenue, Behind Alliance Française, Airport Residential Area, GA-037-3212.

Object and function of the Commission

The object of the Commission is to regulate and manage the utilisation of energy resources in Ghana and coordinate policies in relation to them.

In accordance with section 2 of Act 541 that elaborates the functions of the Commission, the Commission shall;

- Recommend national policies for the development and utilisation of indigenous energy resources;
- Advise the Minister on national policies for the efficient, economical, and safe supply of electricity and natural gas having due regard to the national economy;
- prepare, review and update periodically indicative national plans to ensure that all reasonable demands for energy are met;
- secure a comprehensive data base for national decision making on the extent of development and utilization of energy resources available to the nation;
- receive and assess applications, and grant licenses under this Act to public utilities for the transmission, wholesale supply, distribution, and sale of electricity and natural gas;
- establish and enforce, in consultation with the Public Utilities Regulatory Commission, standards of performance for public utilities engaged in the transmission, wholesale supply, distribution and sale of electricity and natural gas;

ENERGY COMMISSION**FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019****Notes to the financial statement**

(All amounts are stated in Ghana cedi unless otherwise stated)

1. Reporting entity (continued):

- promote and ensure uniform rules of practice for the transmission, wholesale supply, distribution and sale of electricity and natural gas;
- establish and enforce standards of performance for bodies engaged in the supply, marketing and sale of petroleum products;
- maintain a register of public utilities licensed under this Act in the country;
- Pursue and ensure strict compliance with this Act and regulations made under this Act; and perform any other function assigned to it under this Act or any other enactment.

2. Basis of preparation**2.1 Statement of compliance and presentation of financial statements**

The financial statements of Energy Commission for the year ended 31 December, 2019 have been prepared in accordance with International Public Sector Accounting Standards and in the manner required by the Energy Commission Act, 1997 (Act 541) [as amended] and any other applicable regulatory and legal requirements. The financial statements do not fully comply with accrual basis IPSASs as the Commission has elected to take advantage of the exemption provisions for recognition/measurement of assets/liabilities as listed below;

IPSAS 33; par 36 (d) – Defined benefit plans and other long-term employee benefits (IPSAS 3 – *Employee Benefits*). The Commission is taking advantage of a 3-year transition period to determine its initial liability for its defined benefit plan and other long-term employee benefits.

IPSAS 33; par 36 (h) – Financial instruments (IPSAS 29 – *Financial Instruments; Recognition and Measurement*); par 36, 38 and 42 allow a 3-year transition period to not recognize/measure financial instruments impairment.

The financial statements were authorised for issue by the Governing Board on, 20....



ENERGY COMMISSION

FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019

Notes to the Financial Statements (Continued)

(All amount are stated in Ghana cedi unless otherwise stated)

2.2 Basis of measurement

The measurement basis applied is the historical cost basis.

2.3 Functional and presentation currency

These financial statements are presented in Ghana Cedi which is the Commission's functional currency. All financial information presented has been rounded to the nearest Ghana Cedi.

2.4 Significant judgments and sources of estimating uncertainty

The preparation of the Commission's financial statements in conformity with IPSAS requires management to make judgments, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities and the disclosure of contingent liabilities at the end of the reporting period. However, uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of the asset or liability affected in future periods.

Judgments:

In the process of applying the Commission's accounting policies, management has made judgments, which have the most significant effect on the amounts recognized in the financial statements.

2.5 Operating lease commitments – Commission as lessee

The Commission has entered into property lease of the land on which its head office building is built. The Commission has determined, based on an evaluation of the terms and conditions of the arrangements, (such as the lease term not constituting a substantial portion of the economic life of the commercial property) that it does not receive substantially all the significant risks and rewards of ownership of these properties and accounts for the contracts as operating leases.



ENERGY COMMISSION

FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019

Notes to the Financial Statements (Continued)

(All amount are stated in Ghana cedi unless otherwise stated)

Estimates and assumptions:

The key assumptions concerning the future and other key sources of estimating uncertainty at the reporting date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are described below. The Commission based its assumptions and estimates on parameters available when the financial statements were prepared. However, existing circumstances and assumptions about future developments may change due to market changes or circumstances arising beyond the control of the Commission. Such changes are reflected in the assumptions when they occur.

Useful lives and residual values

The useful lives and residual values of assets are assessed using the following indicators to inform potential future use and value from disposal:

- The condition of the asset based on the assessment of experts employed by the Commission
- The nature of the asset, its susceptibility and adaptability to changes in technology and processes
- The nature of the processes in which the asset is deployed
- Availability of funding to replace the asset
- Changes in the market in relation to the asset

Held-to-maturity investments and loans and receivables

The Commission assesses its loans and receivables (including trade receivables) and its held-to-maturity investments at the end of each reporting period. In determining whether an impairment loss should be recorded in surplus or deficit, the Commission evaluates the indicators present in the market to determine if those indicators are indicative of impairment in its loans and receivables or held-to-maturity investments.

ENERGY COMMISSION

FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019

Notes to the Financial Statements (Continued)

(All amount are stated in Ghana cedi unless otherwise stated)

Held-to-maturity investments and loans and receivables (continued)

Where specific impairments have not been identified the impairment for held-to-maturity investments and loans and receivables is calculated on a portfolio basis, based on historical loss ratios, adjusted for national and industry-specific economic conditions and other indicators present at the reporting date that correlate with defaults on the portfolio. These annual loss ratios are applied to loan balances in the portfolio and scaled to the estimated loss emergence period.

3 Summary of significant accounting policies

3.1 Cash and cash equivalents

Cash and cash equivalents comprise cash on hand and cash at bank, deposits on call and highly liquid investments with an original maturity of three months or less, which are readily convertible to known amounts of cash and are subject to insignificant risk of changes in value. Bank account balances include amounts held at the Central Bank of Ghana and at various commercial banks at the end of the financial year. For the purpose of the statement of cash flows, cash and cash equivalents consist of cash and short-term deposits as defined above, net of outstanding bank overdrafts.

3.2 Inventories

Inventory is measured at cost upon initial recognition. To the extent that inventory was received through non-exchange transactions (for no cost or for a nominal cost), the cost of the inventory is its fair value at the date of acquisition. Costs incurred in bringing each product to its present location and condition is accounted for, as follows:

After initial recognition, inventory is measured at the lower of cost or current replacement cost. Inventories are recognized as an expense when deployed for utilization or consumption in the ordinary course of operations of the Commission. Inventory reported consists primarily of office supplies such as toners, paper and cleaning items.

ENERGY COMMISSION

FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019

Notes to the Financial Statements (Continued)

(All amount are stated in Ghana cedi unless otherwise stated)

3.3 Intangible assets

Intangible assets acquired separately are initially recognized at cost. The cost of intangible assets acquired in a non- exchange transaction is their fair value at the date of the exchange. Following initial recognition, intangible assets are carried at cost less any accumulated amortization and accumulated impairment losses. Internally generated intangible assets, excluding capitalized development costs, are not capitalized and expenditure is reflected in surplus or deficit in the period in which the expenditure is incurred. The useful life of the intangible assets are assessed as either finite or indefinite. Intangible assets with a finite life are Amortized over their useful lives. Intangible assets reported in the Energy Commission comprise accounting software and Microsoft office suits. The useful lives of these assets are 3 years. Intangible assets with a finite useful life are assessed for impairment whenever there is an indication that the asset may be impaired. The amortization period and the amortization method, for an intangible asset with a finite useful life, are reviewed at the end of each reporting period. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are considered to modify the amortization period or method, as appropriate, and are treated as changes in accounting estimates. The amortization expense on an intangible asset with a finite life is recognized in surplus or deficit as the expense category that is consistent with the nature of the intangible asset. Gains or losses arising from derecognition of an intangible asset are measured as the difference between the net disposal proceeds and the carrying amount of the asset and are recognized in the surplus or deficit when the asset is derecognized.

3.4 Property and equipment

All property and equipment are stated at cost less accumulated depreciation and impairment losses. Cost includes expenditure that is directly attributable to the acquisition of the items. When significant parts of property and equipment are required to be replaced at intervals, the Commission recognizes such parts as individual assets with specific useful lives and depreciates them accordingly.

Likewise, when a major inspection is performed, its cost is recognized in the carrying amount of the property and equipment as a replacement if the recognition criteria are satisfied. All other repair and maintenance costs are recognized in surplus or deficit as incurred. Where an asset is

ENERGY COMMISSION**FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019****Notes to the Financial Statements (Continued)****(All amount are stated in Ghana cedi unless otherwise stated)****Property and equipment (continued)**

acquired in a non-exchange transaction for nil or nominal consideration, the asset is initially measured at its fair value.

Depreciation on assets is charged on a straight-line basis over the useful life of the asset. Depreciation is charged at rates calculated to allocate the cost or valuation of the asset less any estimated residual value over its remaining useful life:

Class of Assets	Annual depreciation
	(%)
Office furniture and fittings	12.5
Motor Vehicle	25
Land and Building	2
Computer and accessories	33.33
Plant, machinery & equipment	20
In-tangible Assets	3 years

The assets' residual values and useful lives are reviewed and adjusted prospectively, if appropriate, at the end of each reporting period. An asset's carrying amount is written down immediately to its recoverable amount, or recoverable service amount, if the asset's carrying amount is greater than its estimated recoverable amount or recoverable service amount. The Commission derecognizes items of property and equipment and/or any significant part of an asset upon disposal or when no future economic benefits or service potential is expected from its continuing use. Any gain or loss arising on de-recognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the surplus or deficit when the asset is derecognized.

3.5 Leases**3.5.1 Commission as a Lessee (Finance Lease)**

Finance leases are leases that transfer substantially the entire risks and benefits incidental to ownership of the leased item to the Commission. Assets held under a finance lease are capitalized at the commencement of the lease at the fair value of the leased property or, if lower, at the present value of the future minimum lease payments. The Commission also recognizes the associated lease liability at the inception of the lease. The liability recognized is measured as the present value of the future minimum lease payments at initial recognition. Subsequent to initial recognition, lease payments are apportioned between finance charges and reduction of the lease

ENERGY COMMISSION

FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019

Notes to the Financial Statements

(All amount are stated in Ghana cedi unless otherwise stated)

Commission as a Lessee (Finance Lease) [continued]

liability so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are recognized as finance costs in surplus or deficit. An asset held under a finance lease is depreciated over the useful life of the asset. However, if there is no reasonable certainty that the Commission will obtain ownership of the asset by the end of the lease term, the asset is depreciated over the shorter of the estimated useful life of the asset and the lease term.

3.5.2 Commission as a lessee (Operating Lease)

Operating leases are leases that do not transfer substantially all the risks and benefits incidental to ownership of the leased item to the Commission. Operating lease payments are recognized as an operating expense in surplus or deficit on a straight-line basis over the lease term.

3.5.3 Commission as a lessor

Leases in which the Commission does not transfer substantially all the risks and benefits of ownership of an asset are classified as operating leases. Initial direct costs incurred in negotiating an operating lease are added to the carrying amount of the leased asset and recognized over the lease term. Rent received from an operating lease is recognized as income on a straight-line basis over the lease term. Contingent rents are recognized as revenue in the period in which they are earned.

3.6 Financial instruments

3.6.1 Financial assets (including receivables)

3.6.1a Initial recognition and measurement

Financial assets within the scope of IPSAS 29 Financial Instruments: Recognition and Measurement are classified as loans and receivables and held-to-maturity investments. The Commission determines the classification of its financial assets at initial recognition.

Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the marketplace (regular way trades) are recognized on the trade date, i.e., the date that the Commission commits to purchase or sell the asset.

The Commission's financial assets include: cash and short-term deposits; trade and other receivables; loans and other receivables.



ENERGY COMMISSION

FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019

Notes to the Financial Statements

(All amount are stated in Ghana cedi unless otherwise stated)

3.6.1b Subsequent measurement

The subsequent measurement of financial assets depends on their classification.

Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. After initial measurement, such financial assets are subsequently measured at amortized cost using the effective interest method, less impairment. Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the effective interest rate. Losses arising from impairment are recognized in the surplus or deficit.

Held-to-maturity

Non-derivative financial assets with fixed or determinable payments and fixed maturities are classified as held to maturity when the Commission has the positive intention and ability to hold it to maturity. After initial measurement, held-to-maturity investments are measured at amortized cost using the effective interest method, less impairment. Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the effective interest rate. The losses arising from impairment are recognized in surplus or deficit.

3.6.1c De-recognition

The Commission derecognizes a financial asset or, where applicable, a part of a financial asset or part of a Commission of similar financial assets when:

- The rights to receive cash flows from the asset have expired or is waived
- The Commission has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party; and either: (a) the Commission has transferred substantially all the risks and rewards of the asset; or (b) the Commission has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

ENERGY COMMISSION

FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019

Notes to the Financial Statements

(All amount are stated in Ghana cedi unless otherwise stated)

3.6.1d Impairment of financial assets

The Commission assesses at each reporting date whether there is objective evidence that a financial asset or a group of financial assets are impaired. A financial asset or a group of financial assets are deemed to be impaired if, and only if, there is objective evidence of impairment as a result of one or more events that has occurred after the initial recognition of the asset (an incurred 'loss event') and that loss event has an impact on the estimated future cash flows of the financial asset or the group of financial assets that can be reliably estimated. Evidence of impairment may include the following indicators:

- The debtors or a group of debtors are experiencing significant financial difficulty
- Default or delinquency in interest or principal payments
- The probability that debtors will enter bankruptcy or other financial reorganization
- Observable data indicates a measurable decrease in estimated future cash flows (e.g. changes in arrears or economic conditions that correlate with defaults)

3.6.1e Financial assets carried at amortized cost

For Financial assets carried at amortized cost, the Commission first assesses whether objective evidence of impairment exists individually for financial assets that are individually significant, or collectively for financial assets that are not individually significant. If the Commission determines that no objective evidence of impairment exists for an individually assessed financial asset, whether significant or not, it includes the asset in a group of financial assets with similar credit risk characteristics and collectively assesses them for impairment.

Assets that are individually assessed for impairment and for which an impairment loss is, or continues to be, recognized are not included in a collective assessment of impairment.

If there is objective evidence that an impairment loss has been incurred, the amount of the loss is measured as the difference between the assets carrying amount and the present value of estimated future cash flows (excluding future expected credit losses that have not yet been incurred). The present value of the estimated future cash flows is discounted at the financial asset's original effective interest rate. If a loan has a variable interest rate, the discount rate for measuring any impairment loss is the current effective interest rate.

The carrying amount of the asset is reduced through the use of an allowance account and the amount of the loss is recognized in surplus or deficit. Loans together with the associated allowance are written off when there is no realistic prospect of future recovery and all collateral



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(All amount are stated in Ghana cedi unless otherwise stated)

Financial assets carried at amortized cost (continued)

has been realized or transferred to the Commission. If, in a subsequent year, the amount of the estimated impairment loss increases or decreases because of an event occurring after the impairment was recognized, the previously recognized impairment loss is increased or reduced by adjusting the allowance account. If a future write-off is later recovered, the recovery is credited to finance costs in surplus or deficit.

3.6.2 Financial liabilities

3.6.2a Initial recognition and measurement

Financial liabilities within the scope of IPSAS 29 are classified as financial liabilities at fair value through surplus or deficit or loans and borrowings, as appropriate. The Commission determines the classification of its financial liabilities at initial recognition.

All financial liabilities are recognized initially at fair value and, in the case of loans and borrowings, plus directly attributable transaction costs.

The Commission's financial liabilities include trade and other payables, bank overdrafts, loans and borrowings.

3.6.2b Subsequent measurement

The measurement of financial liabilities depends on their classification.

Loans and borrowing

After initial recognition, interest bearing loans and borrowings are subsequently measured at amortized cost using the effective interest method. Gains and losses are recognized in surplus or deficit when the liabilities are derecognized as well as through the effective interest method amortization process.

Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the effective interest rate.



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3.6.2c Derecognition

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expires.

When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and the recognition of a new liability, and the difference in the respective carrying amounts is recognized in surplus or deficit.

3.6.2d Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount reported in the statement of financial position if, and only if, there is a currently enforceable legal right to offset the recognized amounts and there is an intention to settle on a net basis, or to realize the assets and settle the liabilities simultaneously.

3.6.2e Fair value of financial instruments

The fair value of financial instruments that are traded in active markets at each reporting date is determined by reference to quoted market prices or dealer price quotations (bid price for long positions and ask price for short positions), without any deduction for transaction costs.

3.7 Employee benefits

3.7.1 Retirement benefit plans

The Commission provides retirement benefits for its employees. Defined contribution plans are post-employment benefit plans under which an entity pays fixed contributions into a separate entity (a fund), and will have no legal or constructive obligation to pay further contributions if the fund does not hold sufficient assets to pay all employee benefits relating to employee service in the current and prior periods. The contributions to fund obligations for the payment of retirement benefits are charged against income in the year in which they become payable. The Commission is required by the National Pensions Act, 2008 (Act 766) as amended to make a monthly contribution of 13% of its employees' basic salaries, whilst the employee makes a contribution of 5.5%, making a total of 18.5% of workers basic salaries.

The Commission also contributes to a staff provident fund which is maintained for all permanent employees. The Commission contributes 5% of its employees' basic salary monthly to the funds. The employees also contribute 11.5% of their basic salaries to the fund. These



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Notes to the Financial Statements (Continued)

Retirement benefit plans (continued)

contributions are charged to the operating account when employees have rendered the service entitling them to the contributions.

The Commission's End of Service Benefits Exit Package is a post-employment benefit plan other than defined contribution plans. The defined-benefit funds are actuarially valued annually on the projected unit credit method basis. Deficits identified are recovered through lump sum payments or increased future contributions on proportional basis to all participating employers. The contributions and lump sum payments reduce the post-employment benefit obligation. The liability is recognized at the present value of the obligation, together with adjustments for the actuarial gains and losses, and past service costs. Actuarial gains or losses are fully accounted for in surplus or deficit in the year that they occur.

3.7.2 Short term employee benefits

The costs of all short-term employee benefits are recognised during the period in which the employee renders the related service. The Commission recognises the expected cost of performance bonuses only when the Commission has a present legal or constructive obligation to make such payment, and a reliable estimate can be made. When an employee has rendered service to the Commission during an accounting period, the entity shall recognise the undiscounted amount of short-term employee benefits expected to be paid in exchange for that service as an expense or as a liability (accrued expense), after deducting any amount already paid. If the amount already paid exceeds the undiscounted amount of the benefits, the Commission recognises that excess as an asset (prepaid expense) to the extent that the prepayment will lead to a reduction in future payments or a cash refund.

3.8 Provisions, Contingent Liabilities and Contingent Assets

3.8.1 Provisions

Provisions are recognized when the Commission has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits or service potential will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation.

Where the Commission expects some or all of a provision to be reimbursed, for example, under an insurance contract, the reimbursement is recognized as a separate asset only when the reimbursement is virtually certain.

3.8.2 Contingent liabilities

The Commission does not recognize a contingent liability, but discloses details of any contingencies in the notes to the financial statements, unless the possibility of an outflow of resources embodying economic benefits or service potential is remote.



ENERGY COMMISSION

FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019

Notes to the Financial Statements

(All amount are stated in Ghana cedi unless otherwise stated)

3.8.3 Contingent assets

The Commission does not recognize a contingent asset, but discloses details of a possible asset whose existence is contingent on the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Commission in the notes to the financial statements. Contingent assets are assessed continually to ensure that developments are appropriately reflected in the financial statements. If it has become virtually certain that an inflow of economic benefits or service potential will arise and the asset's value can be measured reliably, the asset and the related revenue are recognized in the financial statements of the period in which the change occurs.

3.9 Revenue recognition

Assets and revenue arising from taxation transactions are recognized in accordance with the requirements of IPSAS 23, Revenue from Non- Exchange Transactions.

The entity recognizes revenue from the Petroleum levy; Permits, Fees and Licenses; Regulatory levy; and Electricity Demand Management Funds when the event occurs and the recognition criteria are met. All these items have the common attribute that they transfer resources from one entity to another without providing approximately equal value in exchange.

Transfers satisfy the criteria for revenue recognition when it is probable that the inflow of resources will occur, and their fair value can be measured.

3.9.1 Petroleum Levy

Petroleum levy is derived from the Energy Sector Levies Act, 2015 (Act 899). The particular levy in the act is the Energy Fund Levy and is Ghp 1.0 per litre on Petrol, Kerosene, Diesel and Fuel oil. The collecting agency is the Ghana Revenue Authority and the purpose is to support the Energy Commission Activities. In recent years this revenue stream has been subject to capping from the Ministry of Finance. Revenues are recognized by the Commission based on a funding allocation letter received from the Ministry of Finance.

3.9.2 Permits, Fees and Licenses

These derive from the Energy Commission Act, 1997 (Act 541). Any business or commercial activity for

- (a) The transmission, wholesale supply, distribution or sale of electricity or natural gas; or
- (b) The refining, storage, bulk transportation, marketing or sale of petroleum products



ENERGY COMMISSION

FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019

Notes to the Financial Statements

(All amount are stated in Ghana cedi unless otherwise stated)

3.9.3 Permits, Fees and Licenses (Continued)

- (c) Unless expressly exempted under this act, all businesses or commercial activities are required to do so by license.
- (d) The permits, fees and licenses collected from businesses or commercial activity are recognized when a receipt is issued/billed to a customer. Measurement is based on the fair value of the accounts receivable or cash recognized as at the date of recognition.

3.9.4 Regulatory Levy

Revenues in this category derive from the Public Utilities Regulatory Commission (Amendment) Act, 2010 (Act 800). The Public Utilities Regulatory Commission (PURC) imposes a levy on electricity and natural gas transmission services. The Commission is to receive a 15% share of these levies imposed. The Commission recognizes revenues when it receives notification from Ghana Grid Company Limited (GRIDCo.) confirming how much its allocation will amount to.

3.9.5 Electricity Demand Management Fund (EDMF) project funding

The Commission as part of the regulatory framework of the Energy Sector in Ghana receives funding from the EDMF project in order to facilitate the comprehensive Demand Side Management (DSM) programme. This programme aims to improve the productivity and

Competitiveness of Ghanaian industries and consumer markets through the use of more efficient technologies. This revenue stream is recognized when funds are received as the Commission is already satisfying the conditions for receipt through its regulatory measures.

3.10 Changes in accounting policies and estimates

The Commission recognizes the effects of changes in accounting policy retrospectively. The effects of changes in accounting policy are applied prospectively if retrospective application is impractical. The Commission recognizes the effects of changes in accounting estimates prospectively by including in surplus or deficit.

3.11 Foreign currency transactions

Transactions in foreign currencies are initially accounted for at the ruling rate of exchange on the date of the transaction. Trade creditors or debtors denominated in foreign currency are reported at the statement of financial position reporting date by applying the exchange rate on that date. Exchange differences arising from the settlement of creditors, or from the reporting of creditors at rates different from those at which they were initially recorded during the period, are recognized as income or expenses in the period in which they arise.

ENERGY COMMISSION**FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019****Notes to the Financial Statements (Continued)****(All amount are stated in Ghana cedi unless otherwise stated)****3.12 Borrowing costs**

Borrowing costs are capitalized against qualifying assets as part of property, plant and equipment. Such borrowing costs are capitalized over the period during which the asset is being acquired or constructed and borrowings have been incurred. Capitalization ceases when construction of the asset is complete. Further borrowing costs are charged to the statement of financial performance.

3.13 Related parties

The Commission regards a related party as a person or an entity with the ability to exert control individually or jointly, or to exercise significant influence over the Commission, or vice versa. Members of key management are regarded as related parties and comprise the Governing Board, the Executive Secretary and Directors and Deputy Directors.

3.14 Budget information

The annual budget is prepared on the cash basis, that is, all planned costs and income are presented in a single statement to determine the needs of the Commission. As a result of the adoption of the cash basis for budgeting purposes, there are basis differences that would require reconciliation between the actual comparable amounts and the amounts presented as a separate additional financial statement in the statement of comparison of budget and actual amounts.

Explanatory comments are provided in the notes to the annual financial statements; first, the reasons for overall growth or decline in the budget are stated, followed by details of overspending or under spending on line items. These budget figures are those approved by the governing board.

- (a) The Commission's budget is prepared on a cash basis using classification based on selected budget categories and covers the same period (1 January to 31 December) as the conventional financial statements. The budget was approved by the Governing Board of the Energy Commission and then was submitted to the sector ministry (Minister of Energy) for a no-objection approval. There are no differences between the original and final budgets. During the year there were no reclassifications between budget line items.
- (b) The Commission's budget is prepared using a different basis from the financial statements. The financial statements are prepared on an accrual basis using a classification based on the function of expenses in the statement of financial performance, whiles the budget is prepared on a cash basis in the different budget categories. The amounts in the financial statements were therefore translated from the accrual basis to the cash basis and actuals from the financial statements were also adjusted to conform to the budget categories adopted for the Statement of Comparison of Budget and Actual Amounts.
- (c) Timing differences occur when the budget period differs from the reporting period reflected in the financial statements. There were no timing differences for the Commission.



ENERGY COMMISSION

FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019

Notes to the Statement of comparison of budget and actual amounts (Continued)

Explanation of material difference between actual amounts and budget (Continued)

(d) A reconciliation between the actual amounts on a comparable basis as presented in the Statement of Comparison of Budget and Actual amounts and the Statement of Cash Flows for the year ended 31 December 2019 is presented as follows:

(e) **Explanation of material difference between actual amounts and budget**

The Commission did not realize its budgeted revenue budget because:

Inflows 2019

- With respect to inflows from Energy Fund transfers, the shortfalls are;
 - As a result of the Government's continues Revenue Capping Policy of 34%,
 - Inflows from permits and licenses were also reduced as a result of customers' reluctance to pay regulatory mandatory fees due to the energy sector cash-freeze facing energy sector institutions.
 - In addition, the Commission stopped issuing wholesale renewable energy licenses since 2018.
- Other income is composed of miscellaneous cash receipts such as revenues from hosting Energy Fairs, etc. The shortfall is due to inflows expected from Energy Fairs not meeting anticipated budget.
- The Regulatory fees couldn't be realized for 2019 as budgeted due to distribution challenges from PURC. The Commission is working on resolving these issues with the Ministry of Energy and other stakeholders; therefore we are in high expectation of future receipt of these funds in the coming years.
- In 2019, processes required to start receiving project funds from project donors WB/MiDA/UNDP were not completed before the year ended.

ENERGY COMMISSION**FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019****Notes to the Statement of comparison of budget and actual amounts (Continued)****Explanation of material difference between actual amounts and budget (Continued)****Expenditures 2019****Technical Regulation, Renewable Energy and Energy Efficiency Promotion**○ **Office of Technical regulation:**

Expenditures incurred or to be paid and/or project activities under this directorate are on-going and all unspent budgeted expenses are expected to be incurred fully in next year's report.

Also, the directorate lacked the requisite number of engineers to execute budgeted projects within the period.

○ **Energy Efficiency & Climate Change:**

The earmarked funding for the activities of this division was the Electricity Demand Management Fund (EDMF) which is paid into the Energy Fund. During the year under review, releases for EDMF which are sourced from Electricity Company of Ghana (ECG) came very well though very late in the year. The lateness of receipts of EDMF affected the planned activities of the division. In addition, the general level of inadequate funds releases from Ministry of Finance into the Energy Fund affected planned performance of the division.

Renewable Energy & SE4ALL

This directorate was the most active amongst them in terms of expenditure though its operational performance was far below planned target. Most projects under this directorate underwent project reviews during the year in order to maximise policy objectives. As such, most projects were not fully operational and did not meet their current year budget objectives.

Inspectorate:

The directorate's expenditure fell short of the budgeted figure because;

- A number of activities related to Power and Renewable Energy sites planned for the year during the budget preparation stage were not embarked upon during the year, due to changes in programs in the division. These activities were inspection, monitoring and enforcement of regulations, license and permits conditions in the Renewable Energy Industry.
- The Commission's financial environment did not allow the directorate to embark on all their budgeted programs and as such the directorate had to prioritize their programs for the year.

○ **Strategic Planning & Policy Division (SPPD):**

The expenditures for SPPD for the year under review were below budget largely due to inconsistent flow of budgeted funds to the Commission. According to SPPD, activities undertaken within the year were therefore more of reviews and routine planning meetings and concept paper developments works.

ENERGY COMMISSION**FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019****Explanation of material difference between actual amounts and budget (Continued)**

Expenditures 2019	
	<p>Procurement</p> <p>Financial expenditures on Procurement for the year under review was below budget due largely to the following:</p> <p>Management directive was to manage the situation until all outstanding bills pertaining to capital or assets expenditure before we add up new ones. This also affected their operation for the year.</p>
	<p>Finance division</p> <p>Financial and Operational performance for Finance Division for the year under review was very encouraging. Most projects under it such as financial statements review, IPSAS conversion project, revenue collection up-scaling and reconciliation meetings were undertaken. Annual external financial statement audits for 2018 have been completed and 2019 draft account has been prepared.</p> <p><i>Employee compensation:</i></p> <p>Expenditure on Employee compensation was within budget largely due to;</p> <ul style="list-style-type: none"> ○ The budget was prepared with projected recruitments of new staff both permanent and temporal in mind. The Commission did not meet the entire number of such projected recruitments and therefore the difference represents the variance on the compensation budget. ○ The Commission increased its staff salary during the year 2019 by 15%, 20% and 25% across its category of employees.

ENERGY COMMISSION**FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019****Explanation of material difference between actual amounts and budget (Continued)**

Expenditures 2019	
	<p>Human Resource Management & Administration</p> <p>Budget estimates were on a high side during the costing stage of the budget preparation and therefore actual expenditures incurred during the year resulted in the huge variance at the end of the year.</p>
	<p>Office of Executive Secretary</p> <p>This is headed by the Executive Secretary and houses eight (8) different units of the Commission that report directly to him. Four of the units (Legal Affairs & Board Secretariat, Internal audit, Ministerial & Parliamentary Cooperation and International Cooperation) were the most active.</p> <ul style="list-style-type: none"> ○ Monitoring & Evaluation: This unit was the newest in the Commission reporting to the Executive Secretary. Their performance was very low. ○ Market Oversight Secretariat: This unit / Secretariat though budgeted for under the Commission's umbrella, couldn't spend anything probably due to self-financing means from elsewhere.

ENERGY COMMISSION**FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019****Notes to the Financial Statements (Continued)****(All amount are stated in Ghana cedi unless otherwise stated)****4a. Property and equipment 2019****Cost**

	1 January	Additions	31 December
Land and building	8,542,328	1,726,200	10,268,528
Motor vehicle	3,854,253	-	3,854,253
Plant & machinery	259,284	-	259,284
Furniture and fittings	505,768	65,097	570,865
Computers and accessories	<u>1,309,289</u>	<u>93,033</u>	<u>1,402,322</u>
	<u>14,470,922</u>	<u>1,884,330</u>	<u>16,355,252</u>

Accumulated depreciation

Land and building	716,515	170,847	887,362
Motor vehicle	3,246,004	553,250	3,799,254
Plant & machinery	257,484	1,800	259,284
Furniture and fittings	244,930	51,844	296,774
Computers and accessories	<u>1,034,180</u>	<u>220,530</u>	<u>1,254,710</u>
	<u>5,499,113</u>	<u>998,271</u>	<u>6,497,383</u>

Carrying amount

At 31 December, 2019

9,857,869

ENERGY COMMISSION**FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019****Notes to the Financial Statements (Continued)****(All amount are stated in Ghana cedi unless otherwise stated)****4b. Property and equipment 2018****Cost**

	1 January	Additions	31 December
Land and building	7,713,370	828,958	8,542,328
Motor vehicle	3,854,253	-	3,854,253
Plant & machinery	259,284	-	259,284
Furniture and fittings	321,628	184,140	505,768
Computers and accessories	<u>1,165,037</u>	<u>144,252</u>	<u>1,309,289</u>
	<u>13,313,572</u>	<u>1,157,350</u>	<u>14,470,922</u>

	Restated 1 January	Charge for the year	31 December
Accumulated depreciation			
Land and building	545,668	170,847	716,515
Motor vehicle	2,692,754	553,250	3,246,004
Plant & machinery	254,784	2,700	257,484
Furniture and fittings	195,380	49,550	244,930
Computers and accessories	<u>794,829</u>	<u>239,351</u>	<u>1,034,180</u>
	<u>4,483,415</u>	<u>1,015,698</u>	<u>5,499,112</u>

Carrying amount

At 31 December, 2018

8,971,810

ENERGY COMMISSION**FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019****Notes to the Financial Statements (Continued)****(All amount are stated in Ghana cedi unless otherwise stated)****5a. Intangible Assets**

Cost	1 January	Additions for the Year	31 December
Accounting Software	81,776	-	81,776
Microsoft Suite (Windows)	<u>-</u>	<u>154,583</u>	<u>154,583</u>
	<u>81,776</u>	<u>154,583</u>	<u>236,359</u>
<u>Accumulated amortisation</u>			
Accounting Software	65,238	8,269	73,507
Microsoft Suite (Windows)	<u>-</u>	<u>22,648</u>	<u>22,648</u>
	<u>65,238</u>	<u>30,917</u>	96,155
Carrying Amount			<u>140,204</u>
As at 31 December 2019			

5b. Intangible Assets

Cost	1 January	Additions	December
Accounting Software	<u>56,969</u>	<u>24,807</u>	<u>81,776</u>
	<u>56,969</u>	<u>24,807</u>	<u>81,776</u>
Accumulated amortization			
Accounting Software	<u>56,969</u>	<u>8,269</u>	<u>65,238</u>
	<u>56,969</u>	<u>8,269</u>	<u>65,238</u>
Carrying amount			
As at 31 December, 2018			<u>16,538</u>

ENERGY COMMISSION**FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019****Notes to the Financial Statements (Continued)****(All amount are stated in Ghana cedi unless otherwise stated)**

6. Inventory	2019	2018
Consumables	269,055	269,054
7. Trade and other accounts receivable		
	2019	2018
Non-current		
Regulatory levy Receivable	17,225,471	17,225,471
Current		
Regulatory Levy (PURC)	7,459,025	-
ERRERA & Ghana Standards Authority	-	64,049
Annual Operating Licence Fees	19,651,157	18,271,896
Annual Petroleum Levy	6,688,291	5,497,438
Bulk Customers	259,480	2,325,699
Energy fund Receivable	14,435,890	218,262
Staff Vehicle loan	780,520	492,014
Prepayment (Vehicle & Building Insurance & Ground rent)	<u>149,876</u>	<u>136,884</u>
	<u>49,424,239</u>	<u>27,006,244</u>
8. Cash & Cash Equivalent	2019	2018
Cash on hand (Petty Cash)	-	66
Revolving Fund(Car Loan	263,587	-
Cash at bank	<u>1,768,117</u>	<u>203,642</u>
	<u>2,031,704</u>	<u>203,708</u>
9. Trade and other accounts payable	2019	2018
Trade payables	6,475,723	2,979,708
Audit fees	259,875	239,050
Accrued liabilities	<u>47,605</u>	<u>2,986,883</u>
	<u>6,783,203</u>	<u>6,205,641</u>

ENERGY COMMISSION**FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019****Notes to the Financial Statements (Continued)****(All amount are stated in Ghana cedi unless otherwise stated)**

10. Revenue	Note	2019	2018
2019 Energy Fund Receivable	7	14,435,890	-
Transfers from Energy Fund		39,065,127	18,572,354
Rebate Scheme (UNDP)		252,161	23,325,264
Regulatory Levy		7,459,025	-
EDMF project funding		-	<u>1,300,000</u>
		<u>61,212,203</u>	<u>43,197,618</u>
11. Other revenue		2019	2018
Other revenue		<u>180,750</u>	<u>567,864</u>
		<u>180,750</u>	<u>567,864</u>

Other revenues consist primarily of payment from participants and sponsors participating in and/or attending Energy Fairs during the year and foreign exchange gains.

12. Staff Compensation	2019	2018
Salaries and wages	13,004,849	11,623,031
Employer SSNIT contribution	1,301,552	1,390,271
Employer provident fund contribution	<u>894,687</u>	<u>762,058</u>
	<u>15,201,088</u>	<u>13,775,360</u>

ENERGY COMMISSION**FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019****Notes to the Financial Statements (Continued)****(All amount are stated in Ghana cedi unless otherwise stated)**

13. General and Administrative Expenses	2019	2018
Legal & Board expenses	1,366,854	1,351,456
Stationery and printing	436,926	10,546
Insurance	158,908	103,315
Audit Fees	259,875	239,050
Audit Related Expense	-	134,067
ICT & Communication	316,216	505,140
Sanitation and security	168,204	193,311
Repairs and maintenance	1,129,426	946,537
Medicals	610,192	481,786
Office Consumables	61,514	90,947
Office Rent	95,474	61,080
Motor Vehicle Running	229,135	346,042
Travel	114,910	56,824
Advertising	176,281	146,484
Depreciation and Amortisation	1,029,187	1,023,966
Bank Charges	1,492	32,503
Fuel and lubricants	498,395	494,994
Grounds rent	42,000	58,000
Utilities	222,836	220,769
Refreshment for meetings	41,869	32,830
Professional Fees	26,995	38,351
Vehicle Insurance	19,896	-
	7,006,585	<u>6,567,999</u>

ENERGY COMMISSION**FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019****Notes to the Financial Statements (Continued)****(All amount are stated in Ghana cedi unless otherwise stated)**

14. Service activities expenses	2019	2018
Renewable Energy	2,605,916	3,312,389
Energy efficiency & Climate Change	747,464	481,001
Technical Regulations	1,849,458	756,106
Strategic Planning & Policy	747,433	188,330
Public Affairs	1,286,952	525,016
Human Resources Development	2,307,456	1,548,562
Procurement Unit Activities	318,296	241,786
Finance Division Activities	944,534	1,071,361
Social impact, Environment & Technical Assistance	88,220	76,855
Inspectorate	217,900	234,594
Ministerial & Inter-Institutional Cooperation	398,933	341,400
International Co-Operation & Affiliations	<u>2,994,563</u>	<u>1,742,790</u>
	<u>14,507,125</u>	<u>10,520,190</u>
15. Cash(used in)/ generated from operations	2019	2018
Cash flows from operating activities		
Excess of Income over Expenditure	24,678,155	12,901,933
Depreciation & Amortization	1,029,187	1,023,966
	25,707,342	13,925,899
Changes in working capital		
Increase in inventory	-	(140,937)
Increase in Trade & Other Accounts Receivable	(22,417,995)	(14,779,427)
Increase in Trade & Other Accounts Payable	577,562	891,337
Net cash generated from operating activities	<u>3,866,909</u>	<u>(103,127)</u>

ENERGY COMMISSION

FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019

Notes to the Financial Statements (Continued)

(All amount are stated in Ghana cedi unless otherwise stated)

16 Financial Risk Management

16.1 Financial Risk Factors

The Commission's activities are exposed to variety of financial risk: market risk (including currency risk, fair value interest rate and price risk), credit risk and liquidity risk. The Commission's overall risk management program focuses on the unpredictability of financial market and seeks to minimize potential adverse effect on the Commissions financial performance. Risk Management is carried out in compliance with the Commission policies approved by the Governing Board.

All of the financial instruments are denominated in Ghana cedi. As a result, there is no exposure to foreign currency risk.

16.1.1 Credit Risk

Credit risk is the risk of suffering financial loss should any of the Commission's counterparties fail to fulfil the contractual obligation. The financial instruments which potentially will subject the Commission to concentration of credit risk are primarily cash at bank and trade and other accounts receivable.

The Commission deals with financial institutions licensed by the Bank of Ghana as well as the Bank of Ghana itself. The risk of the counterparty failing to fulfil their contractual obligations is assessed to be minimal. The Commission does not hold collateral securities.

With respect to trade and other accounts receivable, the Commission undertakes a rigorous screening process for all customers prior to providing them their initial license. As some of the Commission's significant customers are government institutions, in the event of debts being long outstanding, round table meetings are held between the heads of these institutions and select members of the Commission's governing board to resolve overdue payment issues. The Auditor General requires that all overdue debts be treated in accordance with the provisions of Section 53 of the Public Financial Management Act, 2017 (Act 921).

ENERGY COMMISSION**FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019****Notes to the Financial Statements**

(All amount are stated in Ghana cedi unless otherwise stated)

16.1.2 Liquidity risk

Liquidity risk is the risk that the Commission will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivery of cash or other financial assets. The Commissions approach to managing liquidity is to ensure, as far as possible, that it will have sufficient liquidity (cash reserves) to meet its liabilities when they are due.

31 December, 2019

Contractual maturities of financial liabilities	Less than 3 months
Trade Payables	6,475,723
Audit fees	259,875
Accrued liabilities	47,605

31 December, 2018

Contractual maturities of financial liabilities

Trade payables	
Audit fees	2,979,708
	239,050
Accrued liabilities	2,986,883

ENERGY COMMISSION**FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019****Notes to the Financial Statements****(All amount are stated in Ghana cedi unless otherwise stated)****17. Related party transactions****Transactions with key Management Personnel****(i) Key Management Personnel Compensation**

Key Management Personnel Compensation comprised the following:

	2019	2018
Short-Term Benefits	3,256,578	2,028,857
Post-Employment Benefits	<u>951,962</u>	-
	<u>4,208,540</u>	<u>2,028,857</u>

(ii) Key Management Personnel Compensation

Key Management Personnel Compensation comprised the following:

	2018	2017
Short-Term Employment Benefits	2,028,857	1,366,854
Post-Employment Benefits	-	-
	<u>2,028,857</u>	<u>1,366,854</u>

18. Contingent assets, liabilities and capital commitments

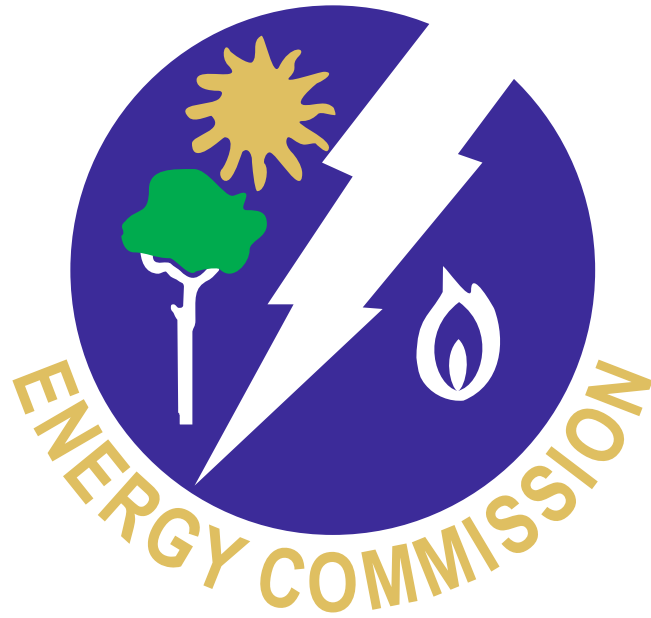
The Commission is committed to the payment of capital expenditures of GHS 1,726,200 for the purchase of its Head Office land at the airport residential area. An amount of GHS 61,650 was spent for plotting fees related to this purchase and GHS 753,598 for the construction of a security fence around the aforementioned land as at 31 December, 2019. There were no other contingent assets or contingent liabilities as at 31 December, 2019.

19. Events after Year- End

Where there are material events that are indicative of conditions that arose after the statement of financial position date, the Commission will disclose them by way of note, the nature of the event and estimate of its financial effect or a statement that such an estimate cannot be made. The Commission had no material subsequent events that required adjustment to or disclosure in the financial statements.

19. Accumulated Fund

	2019	2018
At beginning of the year	47,487,184	34,585,251
Surplus for the year	<u>24,678,155</u>	<u>12,901,933</u>
At the end of the year	<u>72,165,339</u>	<u>47,487,184</u>



ENERGY COMMISSION
AUDITED FINANCIAL STATEMENTS
FOR
THE YEAR ENDED 31 DECEMBER, 2019



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ENERGY FUND

Corporate information for the year ended 31 December, 2019

Governing Board

Prof. George Panyin Hagan	Chairman
Dari Bismark Harun (Kpembewura)	Member
Dr. Isaac Frimpong Mensa-Bonsu	Member
Moses Aristophanes Kwame Gyasi	Member
Hon. Nana Akua Owusu Afriyie	Member
Alhaji Jabaru Abukari	Member
Kwesi Kwaning Bosompem	Member
Dr. Alfred Kwabena Ofosu Ahenkorah	Member-Retired 13/9/2019
Ing. Oscar Amonoo-Neizer	Member-Elected 17/9/2019

Board Secretary

Ms. Cecilia Agbenyega
Energy Commission

Principal place of business

Ghana Airways Avenue
Behind Alliance Français
Airport Residential Area
GA-037-3212

Registered office

PMB Ministries Post Office
Accra

Independent Auditor

Eddie Nikoi Accounting Consultancy
H/No. 9, 17th Lane, P. O. Box OS 51
Osu Oxford Street, Nii Kofi Aniefi Street,
6th House Behind Osu KFC Restaurant

Bankers

Bank of Ghana
Ecobank Ghana Limited

ENERGY FUND**Financial summary and highlights for the year ended 31 December, 2019***(All amounts are stated in Ghana cedi unless otherwise stated)***Five-year financial summary**

	2019	2018	2017	2016	2015
Receipts	42,713,110	27,295,558	33,706,788	33,165,743	15,501,805
Disbursements	(39,209,158)	(27,435,045)	(34,871,901)	(31,810,135)	(12,316,657)
(Deficit) / Surplus	3,503,952	(139,487)	(1,165,114)	1,355,608	3,185,148
Bank balance	3,722,214	218,262	357,749	1,522,863	167,255
Trade and other receivables				-	4,079,403
Trade and other payables	-	-	-	-	548,618

Financial highlights	2019	2018	Percentage Change (%)
Receipts	42,713,110	27,295,558	56.48%
Disbursement	(39,209,158)	(27,435,045)	42.92%
(Deficit)/Surplus	3,503,952	(139,487)	2612.03%
Bank balance	3,722,215	218,262	1605.39%

ENERGY FUND**Report of the Governing Board of the Energy Fund**

The Governing Board of Directors (Governing Board) is pleased to submit the annual report to the members of the Energy Fund (Fund) together with the audited financial statement of the fund for the year ended 31 December, 2019.

Principal activities

The principal activities of the Fund are mandated under Section 42 of the Energy Commission Act 1997, Act 541 (as amended);

- Promotion of energy efficiency and productive uses of electricity, natural gas and petroleum products;
- Promotion of projects for the development and utilization of renewable energy resources, including solar energy;
- Human resource development in the energy sector;
- Local content and local participation development in the energy sector;
- Any other relevant purpose as may be determined by the Energy Fund.
 - i. In addition, the Fund shall be managed and administered by the Energy Commission (Commission) which shall for this purpose include the Controller and Accountant-General or his representative.
 - ii. All monies for the Fund shall be paid into a bank account for the purpose opened by the Commission with the approval of the Controller and Accountant-General.
 - iii. The provisions under sections 49 and 50 of the Energy Commission Act on accounts, audit and annual report shall apply to the Fund.

Financial results**GHS**

During the year under review, releases by the Controller and Accountant General's Department (CAGD) from the Petroleum Levy Account into the Energy Fund account held at the Bank of Ghana amounted to	19,629,909
Added to this were the following sources of revenue:	
- Fees from permits and licenses (bulk customers & AOF)	16,082,991
- Electricity Demand Management Fund (EDMF) Project Fund	5,290,992
- Other income	1,709,219
Total inflow for the year amounted to	42,713,110
Add cash balance at 1 January, 2019 on Energy Fund	<u>218,262</u>
Total amount available for disbursement in the year	42,931,372
Deduct disbursement in the year	<u>(39,209,158)</u>
Cash balance carried forward on the Energy Fund account at 31 December, 2019	<u>3,722,214</u>

ENERGY FUND

Report of the Governing Board (Continued)

Auditors

In accordance with Energy Commission Act 1997, (Act 541), [as amended] Eddie Nikoi Accounting Consultancy (Chartered Accountants) is authorized to act as the Fund's Auditors.

Director's responsibilities in respect of the Financial Statements

The Governing Board of Directors (Governing Board) are required to ensure that adequate accounting records are maintained so as to disclose at reasonable adequacy, the financial position of the Energy Fund (Fund). They are also responsible for steps to safeguard the assets of the fund and to prevent and detect fraud and other irregularities. They must present financial statement for each financial year, which give a true and fair view of the affairs of the fund, and the results for that period. In preparing this Financial Statement, we are required to:

- select suitable accounting policies and apply them on a consistent basis using reasonable and prudent judgement
- state whether or not the Cash Basis International Public Sector Accounting Standards (Cash Basis IPSAS) has been adhered to and explain material departures thereto
- use the going concern basis unless it is inappropriate.

The Governing Board acknowledges its responsibility for ensuring the preparation of the Annual Financial Statements in accordance with Cash Basis IPSAS and the responsibility of external auditors to report on these financial statements. The Governing Board is responsible for ensuring the maintenance of adequate accounting records and an effective system of internal control and risk management.

Nothing has come to the Governing Board's attention, to indicate any material breakdown in the functioning of the internal control system during the period under review, which could have material impact on the business.

The Financial Statements are prepared from the accounting records on the basis of consistent use of appropriate records supported by reasonable and prudent judgements and estimates that fairly present the state of affairs of the Fund. The Financial Statements have been prepared on a going concern basis

ENERGY FUND

Report of the Governing Board (Continued)

and there is no reason to believe that the fund will not continue as a going concern in the next financial year. The Governing Board confirms that in preparing the financial statements, they have:

- selected suitable accounting policies and applied them consistently
- made judgements and estimates that are reasonable and prudent
- following Cash Basis IPSAS
- prepared the financial statement on the going concern basis

The Governing Board is responsible for keeping proper accounting records which disclose with reasonable accuracy at any time, the financial position of the Fund. They are also responsible for safe guarding the assets of the Fund and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

ENERGY FUND

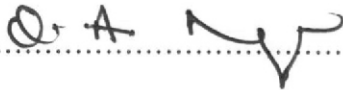
Corporate Governance (CG) Report

The Energy Commission is committed to strong corporate governance practices that allocate rights and responsibilities in managing the Energy Fund (Fund). The Governing Board and Executive Management are to provide an effective oversight and management of the Fund in a manner that enhances shareholder value and promotes investors' confidence. The Commission's corporate governance principles are contained in a number of corporate documents. The Governing Board oversees the conduct of the Fund's business and is primarily responsible for providing effective governance over the Fund's key affairs, including the appointment of Executive Management, approval of business strategies, evaluation of performance and assessment of major risks facing the Fund. In discharging its obligations, the Governing Board exercises judgement in the best interest of the Fund and relies on the Commission's Executive Management to implement approved business strategies, resolve day-to-day operational issues, keep the Governing Board informed, and maintain and promote high ethical standards. The Governing Board delegates authority in management matters to the Executive Management subject to clear instructions. It is upon such delegation of authority and circumstances that the Executive Management shall be required to obtain Governing Board approval prior to taking a decision on behalf of the Fund. Majority of the Governing Board is made up of Non-Executive Directors.

The Commission's commitment to ensuring international best practice in terms of Corporate Governance remains strong and unwavering.

Name of Chairman: Prof George P. Hagan Name of Executive Secretary: OSCAR A. NUNEZ

Signature: 

Signature: 

Date: 5-1-21

Date: 5-01-2021



EDDIE NIKOI ACCOUNTING CONSULTANCY

Chartered Accountants, Management Consultants, Fixed Assets Management and Revaluation Experts,
Accountancy Tutors & Tax Experts

HEAD OFFICE:

Kofi Aniefi Street
Behind Osu KFC (Sixth Hse. on the left)
Osu RE, X'borg, Accra
P.O. Box OS 51, Osu - Accra
Tel: (233-302) 774041, 778784
Fax: (233-302) 760396
Mobile: 024 434 4041 / 020 434 4041 / 027 710 4041
E-mail: eddienikoiosu@gmail.com / enacosu@yahoo.com /
info@enacgh.com
Website: www.enacghana.com

DZORWULU ANNEX:

H/No. C617/14
Tetteh - Kwei Street
Last Chance Area
Paulina's Beauty Salon Building
Dzorwulu - Accra
Office Tel: (233-302) 783403
Mobile: 024 635 6568
E-mail: infodz@enacgh.com
Residence Tel: (233-302) 774043

Independent Auditor's Report to the Governing Board

Report on the Financial Statements

Opinion

We have audited the Financial Statements of the Energy Fund, which comprises the Statement of cash receipts and disbursements for the year ended 31 December, 2019 and notes to the Financial Statements, which include a summary of significant Accounting Policies and other explanatory notes. In our opinion, the accompanying Financial Statements presented on page (11) give a true and fair view of the financial position of the Fund as at 31st December, 2019 and its financial performance for the year then ended in accordance with the Public Financial Management Act, 2016 (Act 921) and the International Public Sector Accounting Standards (IPSAS) and in a manner required by the Energy Commission Act 1997, (Act 541) [as amended].

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Fund in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (IESBA Code), and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibility of the Governing Board for the Financial Statements

The Governing Board is responsible for the preparation of the Financial Statements that give a true and fair view in accordance with the International Public Sector Accounting Standards (IPSAS) and

the provisions of the Energy Commission Act 1997 (Act 541), and for such internal controls as the Governing Board determines are necessary to enable the preparation of these Financial Statements that are free from material misstatement, whether due to fraud or error.

In preparing the Financial Statements, the Governing Board is responsible for assessing the Fund's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Governing Board either intends to liquidate or to cease operations, or has no realistic alternative but to do so.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with International Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance whether the Financial Statements are free from material misstatements.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the Financial Statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the Financial Statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the Financial Statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the Governing Board, as well as evaluating the overall presentation of the Financial Statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.


Report on Other Legal and Regulatory Requirements

Compliance with the requirements of Section 49 of the Energy Commission Act 1997, (Act 541) [as amended].

In carrying out our audit, we consider and report on the following matters. We confirm that we have obtained all the information and explanations, which to the best of our knowledge and belief were necessary for the purpose of our audit.

In our opinion, proper books of account have been kept by the Energy Fund, as appears from our examination of those books; and the Fund's transactions were within its powers and the Fund generally complied with the relevant provisions of the Public Financial Management Act, 2016 (Act 921), International Public Sector Accounting Standards (IPSAS) and the Energy Commission Act, 1997 (Act 541) [as amended].

The engagement partner on the audit resulting in this independent auditor's report is **Edmund Nikoi** (Practicing Certificate Number ICAG/P/1040)



EDDIE NIKOI ACCOUNTING CONSULTANCY : (ICAG/F/2020/110)

EDDIE NIKOI ACCOUNTING
CONSULTANCY
CHARTERED ACCOUNTANTS
P. O. BOX OS 51, OSU-ACCRA
WEST AFRICA

CHARTERED ACCOUNTANTS AND MANAGEMENT CONSULTANTS

NEAR OSU RE KFC RESTAURANT

P. O. BOX OS 51

OSU-ACCRA

DATED: 6: 01 : 20212021

ENERGY FUND**FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019****Statement of Cash Receipts and Disbursements***(All amounts are stated in Ghana cedi unless otherwise stated)*

Receipts for the year	Note	2019	2018
Releases from Controller and Accountant General's Department from petroleum levy	4	19,629,908	13,074,917
Fees from permits	4	16,082,991	12,858,527
Electricity Demand Management Fund (EDMF).	4	5,290,992	1,300,000
Other income	5	<u>1,709,219</u>	<u>62,114</u>
Total receipts for the year		<u>42,713,110</u>	<u>27,295,558</u>
Disbursements in the year			
Promotion of energy efficiency and productive use of electricity and natural gas	6	6,622,577	523,478
Human resource development in the energy sector		7,792,624	7,018,324
Promotion of projects for the development of and utilisation of Renewable Energy Resources, including solar energy		1,628,000	3,646,284
Local content and local participation		-	-
Other expenditures	7	23,165,957	16,246,959
Total disbursements for the year		<u>39,209,158</u>	<u>27,435,045</u>
(Deficit)/Surplus of cash receipts over disbursements		3,503,952	(139,487)
Cash balance at end of the year (2018)		<u>218,262</u>	<u>357,749</u>
Cash balance at the end of the year (2019)		<u>3,722,214</u>	<u>218,262</u>

APPROVAL OF THE FINANCIAL STATEMENTS

The financial statements of the Energy Fund were approved by the Governing Board and signed on their behalf by:

Name of Chairman: <u>Prof George P. Hagan</u>	Name of Executive Secretary: <u>Oscar A. Nwizer</u>
Signature: <u>[Signature]</u>	Signature: <u>[Signature]</u>
Date: <u>5.1.21</u>	Date: <u>5-01-2021</u>

The accompanying notes on pages 14 to 16 form an integral part of these financial statements.

ENERGY FUND

FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2019

Notes to the financial statements

(All amounts are stated in Ghana cedi unless otherwise stated)

1. Reporting entity

The Energy Fund (Fund) is an establishment under section 41 of the Energy Commission Act, 1997 (Act 541) (as amended). The resources of money for the Fund are as follows:

- such proportion of Government levy on petroleum products, electricity and natural gas as may be determined by the Cabinet and approved by Parliament (CAGD releases);
- money that accrues to the Commission in the performance of its functions (Fees from permits); and
- grants.

Objective of the Fund

The objects of the Fund (section 42 of the Energy Commission Act, 1997 Act 541) (as amended) include the following:

- promotion of energy efficiency and productive use of electricity, natural gas and petroleum products;
- promotion of projects for the development and utilization of renewable energy resources including solar energy;
- human resource development of the energy sector;
- local content and local participation development in the energy sector;
- such other relevant purposes as may be determined by the Fund.

Management of the Fund

Per the Energy Commission Act, 1997 (Act, 541) (as amended);

Section 43 – Management of the Fund: The Fund shall be managed and administered by the Commission which shall for this purpose include the Controller and Accountant-General or his representative.

ENERGY FUND

FINANCIAL STATEMENTS FOR THE YEA ENDED 31 DECEMBER, 2019

Notes to the financial statements

(All amounts are stated in Ghana cedi unless otherwise stated)

Management of the Fund (continued)

Section 44 – Functions of the Commission in Respect of the Fund:

- (1) The Commission shall for the purpose of managing the Fund;
 - (a) formulate policies to generate money for the Fund;
 - (b) determine the allocations to be made towards the objectives of the Fund; and
 - (c) determine annual targets of the Fund.

2. Basis of preparation and summary of significant accounting policies

2.1 Statement of compliance and presentation of financial statements

The financial statements of Energy Fund for the year ended 31st December, 2019 have been prepared in accordance with Cash Basis International Public Sector Accounting Standards (Cash Basis IPSAS) and in the manner required by the Energy Commission Act, 1997 (Act 541) (as amended) and any other applicable regulatory and legal requirements.

2.2 Basis of measurement

The measurement basis applied is the historical cost convention.

2.3 Foreign currency translation

(i) Functional and presentation currency

Items included in the financial statements are measured using the currency of the primary economic environment in which the entity operates ('the functional currency') Ghana Cedi. The financial statements are therefore presented in Ghana Cedis.

(ii) Transactions and balances

Transactions denominated in foreign currencies are recorded in the functional currency using the exchange rates prevailing at the date of the transactions. Monetary assets and liabilities denominated in foreign currencies are translated at the functional currency rate of exchange ruling at the reporting date. Foreign exchange gains and losses resulting from the settlement of foreign currency transactions are from the foreign currency differences arising on retranslation are recognized in the statement of cash receipts and disbursements.

3. Summary of significant accounting policies

The accounting policies set out below have been applied consistently to all periods presented in this statement of cash receipts and disbursement.

ENERGY FUND

FINANCIAL STATEMENTS FOR THE YEA ENDED 31 DECEMBER, 2019

Notes to the financial statements

(All amounts are stated in Ghana cedi unless otherwise stated)

3.1 Cash and cash equivalents

Cash and cash equivalents comprise cash at bank, deposits on call and highly liquid investments with an original maturity of three month or less, which are readily convertible to known amounts of cash and are subject to insignificant risk of changes in value. Bank account balances include amounts held at the Central Bank (Bank of Ghana) and various commercial banks at the end of the financial year.

3.2 Receipts recognition

Receipts are recognised once cash is received by the Energy Fund. The following are the main sources of cash receipts for the Energy Fund:

- i. Transfer by Controller and Accountant General's Department of a share of the Petroleum Levy to the Energy Fund;
- ii. Annual and Bulk Customer fees from Permits and Licenses;
- iii. EDMF from the Ministry of Energy and Electricity Company of Ghana (ECG) ; and
- iv. Other various sources of receipts such as application fees, Annual RE Fair exhibition fees, etc.

3.3 Disbursements

Disbursements are primarily composed out of outflows of cash to the Energy Commission and payment of other charges such as bank charges.

ENERGY FUND**FINANCIAL STATEMENTS FOR THE YEA ENDED 31 DECEMBER, 2019****Notes to the financial statements**

(All amounts are stated in Ghana cedi unless otherwise stated)

4. Receipts - Permits and license	2019	2018
Petroleum Levy	19,629,908	13,074,917
Permit:		
Bulk Customers	3,591,065	
Annual operating fees	12,491,926	12,858,527
EDMF	<u>5,290,992</u>	<u>1,300,000</u>
	<u>41,003,891</u>	<u>27,233,444</u>
5. Other income	2019	2018
Exchange gain	3,622	-
Sundry income	75,101	62,114
Enforcement fees	63,900	-
Permit (Sitting & Construction)	283,000	-
Wind license fees	5,200	-
License fees	773,972	-
Application fees	<u>504,424</u>	-
	<u>1,709,219</u>	<u>62,114</u>
6. Promotion of energy Efficiency and productive Uses of electricity	2019	2018
Energy efficiency, conservation and climate change	292,743	63,478
Inspections	858,154	310,000
Strategic planning and policy development	747,433	30,000
Social and environmental impact assessment	108,320	-
Technical regulation	1,850,400	120,000
Renewable Energy Sector development	<u>2,765,527</u>	-
	<u>6,622,577</u>	<u>523,478</u>
7. Other expenditure	2019	2018
International co-operation	3,230,500	1,729,584
Capital work in progress-new office building	370,000	404,655
Procurement of official vehicles and office equipment	800,000	288,530
Sundries/Staff Compensations	18,761,850	12,957,325
Electrical Wiring Regulation	-	856,000
Bank Charges	<u>3,607</u>	<u>10,865</u>
	<u>23,165,957</u>	<u>16,246,959</u>
8. Cash and Cash Equivalents	2019	2018
Bank of Ghana	3,719,618	91,508
Ecobank Ghana Limited (forex)	<u>2,596</u>	<u>126,754</u>
	<u>3,722,214</u>	<u>218,262</u>

ENERGY FUND**FINANCIAL STATEMENTS FOR THE YEA ENDED 31 DECEMBER, 2019****Notes to the financial statements**

(All amounts are stated in Ghana cedi unless otherwise stated)

9. Expectant receipts	2019	2018
Annual operating license fees	25,477,486	18,271,896
Bulk customers license fees	840,795	2,325,699
Annual petroleum levy	<u>6,966,119</u>	<u>5,497,438</u>
	<u>33,284,400</u>	<u>26,095,033</u>

Expectant receipts are those that the Energy Fund anticipated that they would receive in the respective years listed above. This did not occur and we therefore report these in the notes as expectant receipts.

10. Contingent liabilities and Capital Commitments

There were no contingent assets, contingent liabilities or capital commitments as at 31 December, 2019 (2018: Nil)

11. Related party transactions*Transactions with Executive Directors and key Management Personnel*

Key management personnel are defined as those persons having authority and responsibility for planning, directing and controlling the activities of the Commission (directly or indirectly) and comprise the directors and Senior Management of the Commission. There were no material transactions with companies in which a director or other members of key management personnel (or any connected person) is related.

12. Cash Basis IPSAS

As stated in note 2(1), the Fund's financial statement for 2019 was prepared in accordance with the Cash Basis IPSAS. The accounting policies set out in note 3 have been applied in preparing the financial statements for the year ended 31 December, 2019 and the comparative information presented in these financial statements for the year ended 31 December, 2019.