

Securing Ghana's Energy Future Today

ANNUAL **REPORT and audited** FINANCIAL STATEMENTS FOR 2020





ENERGY COMMISSION ANNUAL REPORT AND AUDITED FINANCIAL STATEMENTS FOR 2020

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CHAIRMAN'S REMARKS

he Year 2020 began with the Energy Commission poised to undertake activities for which funds from the Energy Fund and other revenue sources were to be applied.

The strategic objective of the Energy Commission Work Programme for the year was to ensure that the resources available to the Commission were allocated to strategic and critical programmes, such as enforcing regulations, renewable energy promotion, implementation of the Local Content & Local Participation Regulations, and compensation and staff welfare programmes, whilst ensuring maximum productivity.

However just as the year began, the COVID-19 pandemic broke out and dislocated the work programme and operational budget approved by the Board. Government imposed a strict lockdown on the Country at the end of March, and put a total ban on all public gatherings, conferences, workshops, stakeholder engagements and business travels. All economic activities virtually came to a halt.

To implement the COVID protocols instituted by government, Management of the EC, with the approval of the Board, introduced a rotational system to enable only essential staff to operate from the office, while other staff members worked online and in the office on alternative weeks.

Management also proposed for Board approval significant modifications of the Workplan and budget in consideration of the serious down turn in economic activities and the inevitable fall in expected revenues. Most of the Commission's flagship programmes could not survive.

The Commission was thus able to undertake only a limited number of its planned programmes and activities in 2020. These included the issuance of a Wholesale Supply Operating license for the newly constructed Amandi 203MW power plant at Aboadze, an operating license for an embedded power generation plant constructed by Genser Ghana Limited in the Western Region and siting and construction permits to the Millennium Development Authority (MiDA) for the construction of four bulk supply points (BSPs) at the 37 Military Hospital, the University of Ghana, Kasoa and Kanda.

The Commission also commenced work on the review of the 2009 edition of the National Electricity Grid Code. This included its update with the existing Renewable Energy Sub-Code. In addition, the Commission continued engagements with stakeholders aimed at reducing the cost of accessing electricity in Self-Help Electricity Project (SHEP)-benefiting communities.

The Commission, in the year under review, initiated processes towards the development of a Natural Gas Distribution Franchise in Tema. Siting and construction permits were thus granted to AKSA Energy Limited to construct a 4.158 km Natural Gas pipeline in the Tema power generation enclave.

The Commission continued with the third phase of the installation of capacitor banks in some selected public institutions to reduce their electricity consumption, bringing the total number installed in this phase to 42 units. The 6^{th} edition of the Commission's flagship Renewable Energy Fair was held virtually and proved a great success.

The Commission published several important documents in 2020. These included the Draft 2020 National Energy Policy; the National Energy Statistics (2000 - 2019) and the 2020 Energy Outlook,

which were updated and published on the Commission's website. Others were a Report on the performance of the Wholesale Electricity Market; six (6) editions of the WEM Bulletin; and the 2019 Integrated Power Sector Master Plan. A curriculum for solar PV certifications, as well as a data collection and monitoring system for solar PV installations (GHSOLAR Monitor) were established.

Overall, in the face of the unprecedented economic crisis caused by the COVID pandemic, the performance of the energy sector generally and the Energy Commission in particular can only be described as satisfactory. In the end, the capacity of the Commission to endure and overcome challenges was strongly brought to the fore.

PROFESSOR GEORGE P. HAGAN CHAIRMAN

1. THE COMMISSION

The Energy Commission Act, 1997 (Act 541) mandates the Commission to regulate, manage and coordinate the efficient development and utilization of the energy resources of 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 832), the Energy Commission received the additional 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 Electricity Supply Industry in Ghana and also to develop capacity in the industry for the manufacture of electrical equipment, electrical appliances and renewable energy equipment.

MISSION

The Mission of the Energy Commission is to regulate and manage the development and utilization of the energy resources of Ghana;

- (a) to ensure the provision of affordable energy supplies in a reliable, efficient and secure manner,
- (b) to promote the social and economic well-being of the people of Ghana, and
- (c) to enhance environmental quality and public safety.

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.

1.2 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.

1.3 MEMBERS OF THE BOARD OF THE ENERGY COMMISSION IN 2020



Professor George Panyin Hagan Chairman



Dr. Isaac Frimpong Mensa-Bonsu Member, (NDPC Representative, 2017-2020)



Hon. Nana Akua Owusu Afriyieh (MP) Member



Dr. Kodjo Mensah-Abrampah (NDPC Representative, 2020-Present), Member



Kpembewura Babine Ndefoso (IV) Member



Moses Aristophanes Kwame Gyasi, Member



Alhaji Jabaru Abukari Member



Ing. Oscar Amonoo-Neizer Executive Secretary/Member

1.4 OBJECT AND FUNCTIONS

The Commission is required by law to regulate, manage the utilization of energy resources and coordinate policies in relation to them. It is also to 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 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 develop 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 from 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;
- (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 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 develop 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) recommend, in consultation with the Public Utilities Regulatory Commission, 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) set targets for the development and utilization of renewable energy resources in consultation with relevant stakeholders; 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.

1.5 STRUCTURE

The Commission is organised under the following five (5) Directorates:

1.5.1 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.

In addition, the Directorate is in charge of inspection and enforcement functions including conducting inspections, compliance monitoring and enforcement of regulations in respect of the following licensees:

A. Electricity Service Providers

- I. Power Generating Plants
- II. Transmission Utility
- III. Distribution and Sales Companies

B. Natural Gas Service Providers

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

1.5.2 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

1.5.2.1 Renewable Energy Division

The Energy Commission is mandated to develop national policies and strategies for all renewable resources such as biomass, solar, geothermal, water and wind, as well as for technologies including solar photovoltaic systems for both stand-alone and grid connected, wind energy resource assessment and generation, small hydro development in Ghana covering mini, micro; biomass/biofuel and woodfuel resource assessment, development and generation.

The Renewable Energy Division is also responsible for regulation and licensing in the renewable energy sector. They control and coordinate various engagements such as:

- production and supply of electricity from renewable energy sources, biofuel, woodfuel (firewood and charcoal);
- bulk transportation of biofuel and woodfuel;
- bulk storage of renewable energy products including biofuel and woodfuel;
- distribution, sale and marketing of renewable energy products;
- exportation and re-exportation of renewable energy products;
- importation of renewable energy products; and
- installation and maintenance of renewable energy facilities (solar, wind, biogas, biofuel and small hydro).

1.5.2.2 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).

1.5.3 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.

1.5.4 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 guidelines and monitor 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 make recommendations regarding their use in Ghana; and
- (d) prepare environmental and technology policy review papers for the Commission.

1.5.5 Finance, Human Resource and Administration Directorate

The Directorate is made up of the following entities:

- (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 effectively and efficiently to execute the mandate of the Commission.

The specific tasks of this Directorate are to:

- (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 the annual budget of the Commission;
- (f) consolidate and incorporate the Commission's need for equipment and materials into an overall financial 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.

1.5.6 Other Units

The Commission has other special units, which are:

- (a) Legal Unit;
- (b) Internal Audit Unit;
- (c) Procurement Unit; and
- (d) Electricity Market Oversight Panel 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 administration and financial activities necessary to achieve the functions and objectives of the Commission, provides assurance and services designed to add value and improve the operations of the Commission and assesses risks.

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

d) Electricity Market Oversight Panel (EMOP) Secretariat

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 functions aimed at sponsoring the market operators. The EMOP Secretariat is the administrative office of the Electricity Market Oversight Panel and implements the decisions taken by the Panel.

The EMOP Secretariat is mandated to:

- (a) monitor the general performance of the market administration functions of the Market Operators;
- (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 Market Operator 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.



Figure 1: Organogram of the Energy Commission

1.6 ORGANOGRAM OF THE ENERGY COMMISSION

PROJECT ACTIVITIES AND ACHIEVEMENTS

2. TECHNICAL REGULATION

The Commission has responsibility for matters relating to the Technical 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). The Renewable Energy Act, 2011 (Act 832) also mandates the Commission to regulate all commercial activities in the renewable energy industry.

2.1 LICENSING

The Commission is responsible for the issuance of licences and enforcement of conditions to the licences issued to eligible persons who apply to carry out activities in the Electricity, Natural Gas and Renewable Energy sectors. Permits are also granted to eligible Bulk Customers to operate in the deregulated Wholesale Electricity and Natural Gas Markets.

2.1.1 Licensing in Electricity Supply Industry

The Commission in 2020 issued the following Licences and Permits to service providers in the Electricity Supply Industry:

- 1. An Operating Licence to Cenpower Ghana limited to commence the operation of a 360MW thermal power plant at Tema.
- 2. A Permit to test and commission a 200MW power plant was granted to Early Power Limited.
- 3. Five (5) Bulk Customer Permits were issued.
- 4. Eleven (11) Bulk Customer Permits were renewed.

2.1.2 Licensing in the Natural Gas Industry

The following licences were granted by the Commission to service providers in the Natural Gas Industry:

- Two (2) Construction Permits were granted to Genser Energy Ghana Limited for the construction of a 158Km 20" Natural Gas Pipeline from Prestea in the Western Region to Nyinahin in the Ashanti Region and 20km 12" Natural Gas Pipeline from Damang to Wassa in the Western Region of Ghana.
- 2. A Construction Permit was granted to Tema LNG Terminals Limited for the construction of a Liquefied Natural Gas (LNG) facility at Tema.

2.1.3 Licensing in the Renewable Energy Industry

The following licences were granted by the Commission to service providers in the Renewable Energy Industry:

- 2 Operational Wholesale Electricity Supply Licences (Rooftop Solar PV);
- 2 Provisional Wholesale Electricity Supply Licences (Hybrid Hydro-Solar PV and Solar PV);
- 1 Siting Permit (Hybrid Hydro-Solar PV);

- 41 Installation & Maintenance Licences;
- 36 Importation Licences;
- 8 Charcoal Production Licences; and
- 4 Briquette Production Licences.

2.2 DEVELOPMENT OF NATURAL GAS DISTRIBUTION FRANCHISE IN TEMA

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

It is worth stating that, there has been increasing interest in the development and use of natural gas as an alternate fuel source for heating in industries in the country. The development of a secondary gas network is expected to facilitate the distribution of gas to customers in the country.

In line with this, the Commission issued an invitation to Expression of Interest (EOI) to appoint a concessionaire for the development, management and operation of Natural Gas Distribution Network in Tema Industrial Area. This will promote the consumption of natural gas in the country.

The Commission also identified the potential of Compressed Natural Gas (CNG) as one of the very reliable options for the supply of gas to potential customers. To facilitate its use, the Commission revised the Natural Gas Licence Application Manual to include licencing regimes for CNG.

2.3 IMPLEMENTATION OF ELECTRICAL WIRING REGULATIONS

The Electrical Wiring Regulations, 2011 (L.I. 2008) was passed by the Parliament of Ghana into law and came into force in 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 and faults with electricians equipment! The Energy Commission executes this mandate in collaboration with various stakeholders in the electrical wiring industry, especially educational and training institutions to enforce these regulations.

In 2020, a total of 789 candidates who passed the Nov/Dec 2019 certification examination were provided with Certification Packages to aid in their electrical wiring practice. A total of 1,106 candidates undertook the certification examinations in 2020 out of which 818 candidates were successful, bringing the total number of certified electricians in the country to about 10,500.

An online registration platform was developed for Industrial and Inspector categories. A training session on various electrical wiring training modules, including electrical wiring design and installation, inspection and testing and how to fill the Installation Completion Certificate, was facilitated for certified practitioners nationwide.

Monitoring exercises were undertaken in the following ECG/NEDCo District Operational areas: Afienya, Tema North, Tema South, Nungua, Prampram, Dodowa, Kwabenya, Roman Ridge, Effiduase, Kumawu, Offinso, Savelugu, Buipe, Yapei, Salaga, Bimbilla, Wulensi, Kpandai, Abuakwa, Kwabre, Korle Bu and Makola. Framework for registration of electrical contractors, guidelines for the certification of electrical wiring professionals and examination syllabus for the certification of electrical wiring professionals were developed by Energy Commission.

2.4 IMPLEMENTATION OF THE LOCAL CONTENT AND LOCAL PARTICIPATION REGULATIONS

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

The following activities were undertaken in the year 2020 towards the implementation of the Regulations:

- i. Finalisation of the guidelines for implementing the Energy Commission (Local Content and Local Participation) (Electricity Supply Industry) Regulations (L.I.2354).
- ii. Four (4) Licence applications of service providers were assessed for compliance with the requirements of L.I. 2354.
- iii. A survey on the usage and patronage of locally manufactured cables was conducted to determine the level of usage of locally manufactured cables in the country as required by L.I. 2354. The key findings of the study include the following:
 - a. Twenty-nine (29%) of the total sampled population comply fully with provisions of L.I.2354 with regards to the 100% utilization of locally manufactured cables;
 - Approximately seven percent (7%) of the 29% indicated in (a) above had between 1 to 2 years' experience in the industry and 93% had 3 or more years' experience in the industry. This signifies a relationship between the number of years of practice by an electrical wiring practitioner and their choice of cables;
 - c. Eleven percent (11%) of the total sampled population use only foreign cables. It was however noted that none of the practitioners in the industrial class use only foreign cables in their electrical wiring activities;
 - d. Most respondents (i.e. 60%) indicated that they use both local and foreign cables in their operations;
 - e. Nexans Kablemetal emerged the most patronized local cable brand amongst practitioners;
 - f. Seventy-four percent (74%) of the practitioners indicated that locally manufactured cables are of a higher quality than foreign cables;
 - g. Ninety-six percent (96%) of the respondents indicated that foreign cables were more affordable than local cables;

- h. Sixty-one percent (61%) indicated that locally manufactured cables were more accessible;
- i. Majority (71%) of respondents were unaware of the Regulations even though the Regulations have been in existence since December 2017; and
- j. Seventy-eight (78%) percent indicated unawareness of 50% to 100% utilization of local cables in all activities in the ESI.
- iv. The Commission circulated the L.I. 2354 to Stakeholders, including service providers, and manufacturers, for their comments towards its review.
- v. The Commission collaborated with the United States Agency for International Development (USAID) to facilitate a review of L.I. 2354 with stakeholder engagement and developed the capacity of the Local Content and Local Participation Committee. A consultant was engaged through the partnership to review the L.I. 2354.
- vi. The Commission conducted a market analysis of the demand profile for electrical appliances, electrical equipment and renewable energy equipment in the country and did an analysis of the existing supply capacity to meet the demand profile.
- vii. The Commission finalized and successfully test-run an Online Registration Portal for receiving and assessing local content plans of service providers and registering manufacturers of electrical appliances and renewable energy equipment.

2.5 ELECTRICITY MARKET OVERSIGHT PANEL

The EMOP and its working committees meet at least once every month for the dispatch of its mandate in accordance with L.I 1937. In 2020, the EMOP performed the following activities, with regards to its oversight role in the Wholesale Electricity Market (WEM).

2.5.1 Allocation of electricity generation from the Akosombo and Kpong generation plants for 2020

The EMOP approved the electricity generation of 6,000 GWh from the Akosombo and Kpong hydroelectric dams proposed by the Volta River Authority (VRA). This activity was done to fulfill the EMOP's mandate of ensuring the long-term optimization of the hydro supply sources in the country. The EMOP further allocated the 6,000 GWh to the various consumers in the WEM, in line with its hydro allocation framework (a market manual developed by Panel).

2.5.2 Review of the Ghana Wholesale Electricity Market Rules

The Market Rules are a set of rules to govern the operations in the wholesale electricity market including pre-dispatch, real-time dispatch, and settlements as well as the resolution of disputes between Market Participants. The Electricity Transmission Utility (ETU) acting as the Market Operator has the responsibility to develop the Market Rules for the approval of the Energy Commission.

The EMOP, in July 2020, organised a two-day retreat to review the draft Market Rules developed by the Market Operator. At the retreat, the market implementation team from GRIDCo presented the

draft Market Rules to the Panel. The Panel reviewed the Market Rules and discussed the implementation plan for the WEM. The Panel recommended further stakeholder engagement on the draft Market Rules before finalization.

2.5.3 Development of Market Manuals

The EMOP developed the Procedure for Operations Planning and Scheduling Dispatch of Electricity. This Market manual was developed to guide planning of dispatch of electricity in the National Interconnected Transmission System (NITS).

Also, the dispatch procedures are to ensure that the following are met:

- i. the security of the power system;
- ii. technical and operational constraints in the NITS;
- iii. requirements of existing bilateral contracts between Market Participants;
- iv. legal and regulatory requirements; and
- v. strategic national policy directives.

2.5.4 Engagement of Stakeholders

The oversight responsibility of EMOP over the market requires interaction with all the key stakeholders of the power sector, principally the Transmission Utility, Regulators and market participants. In view of this, the EMOP, in 2020, held series of stakeholder fora in different parts of the country to engage market participants to fully apprise them of the activities of EMOP as well as events in the WEM.

2.5.5 Market Monitoring and Publication of Market Information

In order to engender confidence and improve transparency in the Wholesale Electricity Market (WEM), the EMOP publishes information on the Market on periodic bases. The publications are the Wholesale Electricity Market Monthly Bulletin and Annual Reports on the Review of the Ghana Wholesale Electricity Market.

2.5.6 Wholesale Electricity Market Monthly Bulletins

The monthly bulletin analyses the performance of the key WEM indicators against their benchmark and examines the likely implications of discernable trends in the market. The bulletin mimics the market by using operational data in producing market indicators such as the System Marginal Cost (SMC) and Average Market Prices (AMP). It also provides information on power plants' operations, efficiency and prices of fuel used for electricity generation. The EMOP also publishes surveys, market related articles and provide update on development in the WEM in the bulletin.

In 2020, the EMOP published eleven (11) monthly editions of the bulletin which are available on the Commission's website.

2.5.7 Annual Report on the Review of the Wholesale Electricity Market

In 2020, the EMOP published the 2019 Annual report on the operation of the Wholesale Electricity Market.

The Annual report on the review of the Wholesale Electricity Market is a major source of information to stakeholders and policy makers of the power sector. The report presents information on the transactions made in the WEM; including the total amount of electricity traded, the amount of fuel used and their sources and the capacity utilization of the power plants. While the Report highlights the challenges in the WEM and the energy sector in general, it also makes recommendations to address the challenges

3 DEVELOPMENT OF REGULATIONS

3.1 **REVISION OF L.I. 1816**

Revision of Electricity Supply and Distribution (Technical and Operational) Rules, 2005 (L.I. 1816) and Electricity Supply and Distribution (Standards of Performance) Regulations, 2008 (L.I. 1935).

Pursuant to 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.

The Commission in 2020 reviewed and consolidated the two Regulations to enable Parliament amend portions of these rules and regulations to meet current reforms in the electricity distribution sector in Ghana.

The Commission organised a stakeholder consultation forum to review the consolidated L.I. which will subsequently be submitted to Parliament for approval.

3.2 AMENDMENT OF THE RENEWABLE ENERGY ACT, 2011 (ACT 832)

The Renewable Energy Act, 2011 (Act 832) was amended by Parliament after a stakeholder review was conducted by the Commission. Key amendments made were:

- replacement of the Feed-in Tariff (FiT) Scheme with a competitive procurement scheme for utility scale renewable energy projects;
- introduction of renewable energy obligation on fossil fuel-based wholesale electricity suppliers, fossil fuel producers, and other companies that contribute to greenhouse gas emissions to complement the global effort of climate change mitigation by investing in non-utility scale renewable energy technologies; and
- an amendment of the transitional provisions under Section 53 of Act 832 to transfer the mandate of the Ministry of Energy to any public entity designated by the Minister to execute and manage renewable energy projects initiated by the State or in which the State has an interest.

3.3 WOODFUEL REGULATIONS

Woodfuel (firewood and charcoal) continues to contribute significantly to Ghana's primary energy supply and consumption. Woodfuel serves as the primary cooking fuel for over 70% 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 fuels such as liquefied petroleum gas (LPG) are not affordable, 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.

In an effort to address the above challenges, the Energy Commission, developed a draft Woodfuel Regulation in 2018 and conducted five stakeholder workshops (Ejura-Sekyedumase, Dambai, Nkoranza, Donkokrom and Gushegu) to solicit for inputs into the document.

In 2020, four (4) additional stakeholder workshops were organized at Atebubu, Prang, Yeji and Accra to further engage stakeholders on the development of the Regulations.

The draft Woodfuel Regulations has since been reviewed by selected members of relevant public institutions, NGOs and CSOs and their recommendations have been incorporated into the draft document.



Fig. 2 Workshop at Dambai & Charcoal Bulk Supply Facility at Ejura

3.4 IMPROVED COOKSTOVES REGULATIONS

The Energy Commission developed a draft Improved Biomass Cookstove Regulations in 2018 for the cookstove sector in Ghana. Significant progress was made towards the finalisation of the Regulations. With support from the African Development Bank (AfDB) through the Clean Cooking Alliance, two stakeholder engagements were held on the draft Regulations; one with improved cookstove producers and distributors to be impacted by the proposed regulations and a larger engagement with key government institutions, development partners, financial institutions and nongovernmental organisations.

3.5 DEVELOPMENT OF REGULATIONS TO PRESCRIBE STANDARDS FOR THE CONSTRUCTION, OPERATION & MAINTENANCE OF RENEWABLE ENERGY FACILITIES

The Energy Commission as part of its mandates per the Renewable Energy Act, 2011 (Act 832), has the responsibility of setting targets for the development and utilisation of renewable energy sources in Ghana. This is to be done in consultation with relevant stakeholders. The Commission, being the technical regulator, is also responsible for developing technical standards and regulations for all relevant players in the renewable energy industry.

Although there are technical codes for the interconnection of variable generation sources to the transmission and distribution networks, there are no regulations, standards or technical codes for the installation of these systems. This means that licensed installers are not obligated to adhere to any standards or codes when installing these systems. Hence, each company adopts its own mode of installation making it challenging to ensure that all installations are properly done. Installations, which are improperly done can have adverse effects on the facility on which they are installed and, to some extent, the national grid. Poor installations have been known to cause fires and damage equipment in the homes and offices of entities who have invested huge sums of money into these systems.

The objectives of the project are to:

- 1. Develop regulations to prescribe standards for the construction, operation & maintenance of renewable energy facilities.
- 2. Enhance compliance to regulatory requirements.
- 3. Strengthen framework for the adoption and use of renewable energy in Ghana.

It is expected that the development and enforcement of the Regulations will result in the growth of the renewable energy industry, due to more efficient installations. The following activities were conducted in the year 2020:

- I. A total of 116 Technical Standards were reviewed and adopted by the Technical Committee set up by GSA. The breakdown is as follows:
 - 53 main Standards and 28 Normative Standards for solar PV
 - 27 main Standards and 8 Normative Standards for wind energy.
- II. A draft of the Regulations for the Construction, Operation & Maintenance of Renewable Energy Facilities, was prepared.

4 INSPECTION AND ENFORCEMENT

The Energy Commission is mandated to enforce rules, regulations and codes in relation to the electricity, natural gas and renewable energy industries in Ghana to ensure safe, economic and efficient delivery of gas and electricity. The Commission is also mandated to ensure the full implementation of appliance standard and labelling (S&L) regime in the country to ensure compliance.

Enforcement actions in the year under review were designed to address non-compliance. Written directives and warnings were issued depending on the severity of the utilities' non-compliance. In most cases, the Commission ensured that the defaulting licensee took corrective action and measures to prevent a recurrence of the fault. The Commission also undertook routine monitoring, enforcement activities at the country's port of entry and market surveillance across the country to ensure full compliance with the appliance standards and labelling requirements.

4.1 INSPECTION AND MONITORING IN THE NATURAL GAS INDUSTRY

The Commission in 2020 carried out the following inspection and enforcement activities:

- 1. An inspection and monitoring visit to Genser Energy Ghana Limited was carried out to ascertain the progress of work as reported in their quarterly reports. It was realised during the inspection that, work was progressing steadily but behind schedule due to the COVID-19 pandemic.
- 2. An inspection and monitoring progress of work at the construction site of Tema LNG Terminals Limited to ensure adherence of the contractors to construction procedures, as outlined in Natural Gas Pipeline Safety, Construction, Operations and Maintenance Regulation (L.I. 2189).
- 3. The Commission conducted compliance inspection monitoring on the Gas Processing Plant (GPP) at Atuabo in the Western Region of Ghana to ensure compliance with the provisions of the license and will continue to monitor developments of all projects and ensure all regulatory requirements are met.



Fig. 3 Engagement of some local artisans in welding by Inspection team of the Commission.

4.2 INSPECTION AND ENFORCEMENT IN ELECTRICITY SUPPLY INDUSTRY

The Commission in 2020 carried out the following inspection and enforcement activities in the electricity supply industry:

- 1. Visual inspection and a monitoring checklist was developed for licensed electricity distribution, transmission and generation utilities.
- 2. Regulatory compliance audit of four operational regions of ECG (Ashanti Strategic Business Unit (SBU), Accra East, Accra West and Western) were carried out. The inspection activities include transformer load monitoring, meter accuracy check, primary and secondary sub-station inspection, feeder line patrol on the medium voltage lines and voltage quality monitoring. Load readings of distribution transformers in the above mentioned areas at times of system peak were checked.
- 3. A follow-up and verification inspection was also carried out at the following districts: Teshie, Legon, Roman Ridge, Sekondi, Takoradi, Achimota, Kwabenya, Manhyia, Asokwa, Kaneshie and Makola. The maximum transformer load per phase was obtained from the load reading and the average transformer loading at system peak was determined. The results of all the transformer load monitoring conducted reflected the true transformer loading and could be used for transformer load management. Issues such as unbalanced loads on distribution transformers, overloaded transformers and poor vegetation control (i.e. combustible weeds in and around substations) were reported. The fuses in the distribution panel at most substations were blown and had been linked. The operational efficiency of the distribution system in all the regions inspected was enhanced by balancing distribution transformers and ensuring vegetation control at substations. Recommendations were made for substations to be given identifiable and uniform nomenclature and the single line diagrams updated accordingly. All faulty meters that were identified were changed. The Commission recommended for linked fuses to be replaced with the right fuse rating.
- 4. Conducted investigations to resolve matters relating to the construction of a dedicated 33kV line to Sunda Ghana Ltd.
- 5. An independent assessment and inspection of a 36kW solar system at Midindi Hotel was carried out. (Outcome of investigation)
- 6. The Commission conducted a technical audit of the meters at MND Metals Company Limited and Wilmar Company limited.



Figure 4: Transformer load monitoring at Nigeria High Commission Substation



Fig. 5: Installation of power analyzer for power quality monitoring (replace pics)

4.3 INSPECTION AND ENFORCEMENT OF ENERGY EFFICIENCY REGULATIONS

Enforcement of the Regulations on Standards and Labelling for household refrigerating appliances were undertaken. The objective was to ensure full compliance with:

- 1. regulations on light emitting diodes (LEDs) and self-ballasted fluorescent lamps (L.I. 2353).
- 2. ban on importation of used fridges, air-conditioners and incandescent filament lamps (L.I. 1932).
- 3. regulations on standards and labelling of refrigerating appliances, Room Air Conditioners (RACs) and CFL lamps at points of entry. (LIs 1958 and 1815)
- 4. regulations on standards and labelling of refrigerating appliances, RACs and CFL lamps in the markets across the country.

4.3.1 Inspection and Enforcement at Ports of Entry

By enforcing L.I. 1932, the Commission seized a total of 4,884 units of used refrigerating appliances and 678 used RACs that were illegally imported into the country and have been evacuated for proper disposal. In addition, a total of 523,615 units (3,097 containers) of new regulated refrigerating appliances and about 160,024 units (960 containers) of new RACs imported to the country were inspected at the Port of Tema in accordance with L.I. 1958 and L.I. 1815, respectively. About 97% and 96% of all the new refrigerating appliances and RACs respectively were compliant.

About 75% (3 in 4) of the refrigerating appliances were either of 2- or more star energy efficiency ratings, whilst over half (56.5%) of the RACs were of 1-star ratings with an average Energy Efficiency Ratio (EER) of 2.87 which is above the Minimum Energy Performance Standards (MEPS) of 2.80W/W and average annual consumption of 3,347.4 kWh.



Figure 6: Share of the star ratings of the new refrigerating and air-conditioners imported in 2020.

The importation of the new refrigerating appliances into the country has seen an upward trajectory over the years, while the importation of the used fridges has seen a drastic reduction. Historical data suggests a decline in the importation of used fridges from 2013, as a result of the enforcement of L.I. 1932. Figure 7 shows how the refrigerating appliance market has been transformed over the years.



Figure 7: Trends in New Versus Used Refrigerators Imports (2005 - 2020)

In all, about **3,093,148** new refrigerating appliances and about **732,450** new RACs were imported through the Port of Tema since 2005. Additionally, about **46,666** old refrigerators and **11,003** RACs were confiscated/intercepted at ports of Tema and Takoradi, since the inception of the enforcement of L.I. 1932 in 2013.

 Table 1: Average Annual Expected Energy Consumption Patterns for New Refrigerating

 Appliances in kWh/year

| Category | F | ridge/freeze | r | Chest Freezer | | | Fridge | | |
|------------------|----------|--------------|---------|---------------|------------|---------|----------|------------|---------|
| Sub estagen | Small | Meduim | Large | Small | Meduim | Large | Small | Meduim | Large |
| Sub-category | (=<340L) | (341-510L) | (>519L) | (=<340L) | (341-510L) | (>519L) | (=<340L) | (341-510L) | (>519L) |
| Average | 303.4 | 409.5 | 512.5 | 327.1 | 448.6 | 635.0 | 171.3 | 297.0 | N/A |
| Category Average | | 328.7 | | 390.0 | | | 196.0 | | |
| Overall Average | 340.0 | | | | | | | | |

N/A = Not Available

4.3.2 Market Surveillance

Although COVID-19 negatively affected our market surveillance activities, the Commission conducted this activity in 11 cities and 2 border towns involving 177 distributing and retailing outlets covering 3,165 refrigerating appliances and 502 RACs. About 95.5% of the refrigerating appliances found in the market were compliant with L.I. 1958 whilst 94.7% of RACs were in conformity with L.I. 1815. Importers of non-compliant appliances were contacted to remove them from the stands until the appropriate documentations have been submitted for proper labelling. In addition, a total of 543 "use electricity wisely" and "Refrigerating Appliance Standards and Labelling" flyers were distributed during the market surveillance in 2020 to create more awareness on Energy Efficiency.

A full report on the EC's website.

5 RENEWABLE ENERGY, ENERGY EFFICIENCY AND CLIMATE CHANGE (EECC)

5.1 **RENEWABLE ENERGY PROMOTION**

5.1.1 Annual Renewable Energy Fair – Virtual Edition

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 aim is to create a platform for collaboration between government, the private sector and civil society for promoting the benefits of renewable energy in order to identify opportunities and facilitate investment in the utilization of Ghana's renewable energy resources.

There have been 6 editions of the Fair. 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 power to transform the energy landscape in Ghana and the sub-region.

Despite the outbreak of the COVID-19 pandemic, the 6th Ghana Renewable Energy Fair was successfully held virtually from 27th – 28th October, 2020 and was opened to the general public for free participation. The theme for the Fair was "Renewable Energy and Energy Efficiency in Achieving Ghana's Industrialisation Agenda". The conference was held via Zoom and on Facebook. A studio with a dedicated internet service was setup at the Board Room of the Commission for use by all speakers under strict COVID-19 protocols. This was done to eliminate the risk of internet failure and other technical challenges that were envisaged with online meetings.

The Fair was aimed at exploring the use of renewable energy technologies and energy efficiency solutions to boost industrialisation in Ghana. For Ghana to achieve its industrialisation agenda, there is the need for affordable, reliable, accessible and sustainable energy to make the cost of local manufacturing of goods and provision of services, competitive. Thus, it was imperative that industry experts were assembled to deliberate on this important theme and come up with recommendations for the economic development of the country.

The Fair focused mainly on:

- 1. Renewable energy and energy efficiency in achieving Ghana's industrialisation agenda;
- 2. The use of renewable energy solutions in building resilience in health delivery;
- 3. Creating an enabling environment for renewable energy development in post-COVID-19 Ghana;
- 4. The end-of-life for renewable energy and energy efficiency technologies the Switch Africa Green E-waste management initiative; and
- 5. Promoting Science Technology Engineering and Mathematics (STEM) in Schools-the inclusion of renewable and energy efficiency in the curriculum.

The Opening Ceremony for the 6th Ghana Renewable Energy Fair thus took place on 27th October, 2020 and it was graced by the Senior Minister, Hon. Yaw Osafo Maafo, the Minister of Energy, Hon. John Peter Amewu, a Deputy Minister of Energy, Hon. Joseph Cudjoe and the CEO of Ghana Investment Promotion Center, Mr. Yoofi Grant.

A total of 9 presentations were delivered during the Fair by specially selected experts in the renewable energy and energy efficiency industry. All the presentations and a short documentary of the Fair are available on the Renewable Energy Fair website (www.ghanarefair.energycom.gov.gh).

Seven hundred and forty-three (743) persons registered to participate in the event.



Figure 8: Sections of the virtual RE fair

5.1.2 Establishment of Data Collection and Monitoring System for Solar PV Installations (GHSOLARmonitor)

The Energy Commission (EC), under the Renewable Energy Act, 2011 (Act 832), has a mandate to promote the development and utilisation of the country's renewable energy (RE) resources. This is geared towards the achievement of the national target of scaling up the contribution of renewable energy by 10% by 2030.

Apart from promoting the adoption and utilisation of RE sources, the Energy Commission also has a mandate to regulate the RE industry, as well as secure a comprehensive database for national decision-making on the extent of development and utilisation of renewable energy resources available to the nation, as per the Renewable Energy Act, 2011 (Act 832) and Energy Commission Act, 1997 (Act 541), as amended respectively. The regulation is done mainly through the licensing of

RE service providers and enforcing the licence conditions. A requirement for the renewal of a licence is the provision of data on systems installed. This is to facilitate the acquisition of data on installed solar PV systems for planning purposes. However, the manner, timing and verification of data submitted by installers make it difficult to conduct proper planning and policy formulation. In addition, social acceptance of renewable energy technologies, especially solar PV, is a vital factor for the development of RE in Ghana. If installed systems do not function efficiently, the image which will be painted for the general public will be negative and discouraged others from showing interest. Real-time monitoring of solar PV systems and access to remote data from these systems will help solve this issue.

The project is being piloted with focus on a number of solar installations with capacities ranging from 50kW and above. A total of 200 pieces of data logging equipment would be installed to transmit realtime data from the solar PV systems to a data center managed by the Commission.

For the period under review, the following planned activities were conducted:

- 1. Virtual stakeholder consultation workshop was organised for licensed solar PV installers.
- 2. Forty-eight (48) owners of solar PV systems, were sensitized on the objectives of the projects.
- 3. Seventeen (17) solar PV installations visited and inspected.

5.2 IMPLEMENTATION OF SUSTAINABLE ENERGY FOR ALL (SEFORALL) INITIATIVE

The Commission continues to play its role of coordinating, monitoring, evaluating and reporting on SEforALL relevant initiatives in Ghana. In 2020, the Commission identified and visited businesses that produce and distribute improved biomass cookstoves, pellet from sawdust, and carbonized briquette from coconut shells and husks in the Ashanti, Central, Eastern, and Greater Accra Regions of Ghana.

The Commission also visited the Cookstove Testing Centre at the KNUST Technology Consultancy Centre (TCC) and the Intermediate Technology Transfer Unit at Suame, to assess the state of equipment donated by the UNDP through the Commission and the operations of the two facilities.

Two (2) newsletters were published and disseminated to update stakeholders on the progress of implementation of Ghana's SEforALL action agenda.

The Commission worked with Ghana Energy Sector Transformation Initiative Project (GESTIP) Secretariat of the Ministry of Energy and the National Petroleum Authority (NPA) to recruit a Consultant (EMOS Consultancy) to conduct a Consumer and Market Assessment Study and develop a National Clean Cooking Strategy and Investment Prospectus document for Ghana with technical assistance from the World Bank.

5.3 PROMOTION OF IMPROVED COOKSTOVES

Three cookstove products, namely; Gyapa charcoal stove, Obaa Hemaa firewood stove and Cooksafe pellet stove, were selected to be supported to improve on their technical performance through an open and competitive expression of interest process, A sample each of the selected stoves plus two baseline technologies (the charcoal stove, popularly known as "coal pot"; and the three-stone-firewood stove) were taken to the Centre for Research in Energy and Energy Conservation (CREEC) at the Makerere University in Kampala, Uganda for testing. Technology modifications have been recommended by CREEC and a proposal is being put together to organise a training workshop in 2021, for stove producers on stove design principles, selection of materials, basic stove testing protocols, etc. The stove tests were supported by the World Bank.



Fig. 10: Participants of the stakeholder engagement on the Draft Regulations for Improved Biomass Cookstoves, held at CSIR-STEPRI Auditorium

5.4 ENERGY EFFICIENCY PROMOTION

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).

The Commission undertook the following activities to promote the efficient use of energy in the country.

5.4.1 Energy Efficiency Training and Promotion

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, the Commission has enhanced its energy efficiency training for electricity consumers by focusing on identifiable consumer groups.

In 2018, the Commission started the energy efficiency training and sensitisation for the security agencies. The Commission continued this activity in 2019 and successfully trained 1,594 officers of the Ghana Police Service in all the Regional Commands.

In 2020, the second phase of the training for police officers was successfully undertaken in five (5) of the newly created regions. A total of 508 Police personnel and their families were trained in energy efficiency and conservation measures.

In addition, TV and radio interviews on energy efficiency and conservation were successfully undertaken across the regions.

To support and facilitate information dissemination on energy efficiency and conservation, energy efficiency educational materials were also distributed nationwide. A total of 4,000 pieces of flyers on energy efficiency and refrigerating appliance standards and labelling were distributed.



Fig. 11: Training of Police Officers in Ahafo and Western Regional Commands

5.4.2 Update of Energy Efficient Appliance Database and Application (APP)

As part of the strategy to ensure compliance with the appliance energy efficiency regulations, the Commission established a web-based database with related application (APP) for the regulated appliances. Currently, the APP has data and information on certified refrigerators, air conditioners and lighting bulbs. The APP enables consumers to verify whether these appliances meet the minimum energy efficiency standards set by the Commission. The APP also helps users to find the nearest distribution and retail outlets for these appliances via Google map or phone contact and further provides energy efficiency and conservation tips for these appliances.

To update the APP with current market and certified appliance data, the Commission in 2020 embarked on a nationwide appliance data collection. The exercise involved an inventory of all unique models of air conditioners and refrigerating appliances being sold in the market, checking the availability of approved technical documentation of each model and ascertaining the labelling status according to the approved standards of each unique model on display. The exercise was successfully conducted in eleven (11) selected cities and two (2) border towns in ten (10) regions. A total number of 177 appliances distribution and retail outlets were visited.

Through the market surveillance and compliance monitoring exercise, the Commission took inventory of a total number of 3,667 regulated appliances, comprising 3,165 refrigerating appliances and 502 air conditioners in distribution and retail outlets across the country. It was determined through the exercise that, the compliance levels of test report availability for refrigerators and air conditioners on the market were 97.01 % and 97.97%, respectively. The appliances labelling compliance levels in all retail outlets and shops for refrigerators and air conditioners were 95.53% and 94.73% respectively.

During the exercise, 162 shop managers and attendants were trained in the appliances energy efficiency standards and labelling requirements.

A total number of 543 educational materials on appliance energy efficiency were distributed in all the retail shops visited. Furthermore, 195 non-compliant refrigerators and 50 air conditioners were identified during the exercise and necessary action taken to ensure compliance. A full report is available at the Commission's website.

| Star Rating | Fridge Type | Consumption (kWh/Year) | | | Total Volume / litre | | | Price (GHS) | | |
|----------------|----------------|---------------------------|-------|-------|----------------------|-------|-------|-------------|---------|----------|
| | | Min | Ave | Max | Min | Ave | Max | Min | Ave | Max |
| | Freezer Only* | 225.0 | 225.0 | 225.0 | 165.0 | 165.0 | 165.0 | 1,299.0 | 1,525.9 | 1,799.0 |
| 5 Star | Fridge Only | 112.0 | 142.0 | 172.0 | 346.0 | 354.5 | 363.0 | 4,750.0 | 5,168.0 | 5,586.0 |
| | Fridge+Freezer | 450.0 | 452.5 | 455.0 | 592.0 | 600.0 | 608.0 | 5,999.0 | 7,271.0 | 8,300.0 |
| 4 Star | Freezer Only | 190.0 | 272.4 | 475.0 | 142.0 | 231.5 | 345.0 | 749.0 | 1,706.2 | 5,569.0 |
| | Fridge Only | 100.0 | 110.7 | 142.0 | 45.0 | 166.7 | 375.0 | 599.0 | 1,122.0 | 4,999.0 |
| | Fridge+Freezer | 151.0 | 309.5 | 482.0 | 59.0 | 337.7 | 937.0 | 769.0 | 3,319.9 | 13,799.0 |
| | Freezer Only | 219.0 | 346.4 | 456.0 | 25.0 | 227.4 | 418.0 | 1,439.0 | 1,868.3 | 4,300.0 |
| 3 Star | Fridge Only | 117.0 | 152.5 | 259.0 | 43.0 | 124.4 | 207.0 | 580.0 | 988.8 | 1,999.0 |
| | Fridge+Freezer | 135.0 | 317.8 | 690.0 | 57.0 | 276.5 | 852.0 | 600.0 | 2,634.7 | 7,999.0 |
| | Freezer Only | 140.0 | 343.3 | 635.0 | 63.0 | 298.1 | 708.0 | 799.0 | 1,858.3 | 4,000.0 |
| 2 Star | Fridge Only | 112.0 | 203.1 | 362.0 | 45.0 | 96.0 | 150.0 | 595.0 | 846.9 | 1,299.0 |
| | Fridge+Freezer | 146.0 | 341.9 | 719.0 | 53.0 | 219.2 | 517.0 | 143.0 | 1,814.8 | 9,969.0 |
| | Freezer Only | 150.0 | 410.2 | 906.0 | 42.0 | 313.8 | 867.0 | 699.0 | 1,834.3 | 5,580.0 |
| 1 Star | Fridge Only | 212.0 | 219.0 | 226.0 | 80.0 | 83.8 | 92.0 | 575.0 | 712.8 | 1,299.0 |
| | Fridge+Freezer | 130.0 | 384.8 | 730.0 | 45.0 | 192.2 | 506.0 | 599.0 | 1,293.8 | 4,999.0 |

Table 2: Summary of Refrigerating Appliances Parameters on the Market

* Insert footnote to explain 5 star for freezer only



| Star | Average | Average Cooling | Average Price | Average Rated |
|----------|---------|-----------------|---------------|---------------|
| Detine | | Average Cooling | Average The | Power |
| Rating | EEK | Capacity | (GHS) | (kWh/Yr) |
| 1 - Star | 2.87 | 4.83 | 2,553.22 | 3,347.44 |
| 2 - Star | 3.23 | 4.64 | 2,934.19 | 2,949.72 |
| 3 - Star | 3.51 | 5.02 | 2,669.81 | 2,849.30 |
| 4 - Star | 3.83 | 5.05 | 3,775.00 | 2,701.20 |

Table 3 Prices, EER and Rated Power of Air Conditioners

Figure 12: Number of Personnel Trained and Number Educational Materials Distributed.



5.4.3 Installation of Capacitor Banks in Public Institutions

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

To address the problem, the Commission embarked on installation of power factor correction equipment (Capacitor Banks) in large electricity-consuming public institutions. The project seeks to improve electrical efficiency of public buildings and facilities with the aim of improving their power factors and reducing their expenditure on electricity. It is expected that the power factors of the beneficiary institutions would be improved to at least 0.9.

The project which commenced some years back is now in its third phase. The installation of capacitor banks in selected government buildings and facilities in this phase commenced in 2017 and was scheduled for completion in 2019. By 2019, thirty-six (36) out of the total of forty-three (43) capacitor banks were installed in public institutions across the country.

The remaining seven (7) capacitors were installed successfully in 2020, bringing the total installed capacitors to forty-three (43). The public institutions that benefited from the installation of the seven (7) capacitor banks in 2020 are National Health Insurance Authority (NHIA) Head Office, University of Health and Allied Sciences (UHAS), University of Professional Studies, Accra (UPSA) Takoradi Airforce Station, Affia-Nkwanta, Korle-Bu and Ho government hospitals.

As a result of the capacitor bank installations, power factor improvements and monetary savings are being observed in the beneficiary institutions. Most of the beneficiary institutions have improved their power factors to the preferred minimum of 0.9 and are making monetary savings from power factor surcharges.

A total savings of GHC 34,116.19 was realized per month due to the installation of the 43 capacitor banks.

Also, based on the Commission's technical advice to the Judicial Service, a savings of GHC20,000.00 per month was realized at the new court complex in Accra from 1st November, 2020.

In 2020, the Commission further identified and assessed fifteen (15) public institutions with poor power factors to benefit from new capacitor bank installations in 2021. These fifteen public institutions include four health facilities namely, Atibie Government Hospital, Volta Regional Hospital, Tetteh Quarshie Hospital and Takoradi Polyclinic.

5.5 CLIMATE CHANGE

5.5.1 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: the energy data collection, data analysis, estimation of the energy sector GHG emissions, inventory quality control and report writing.

The GHG emission estimations for Ghana have been done for the period 1990-2016 and need to be updated with 2017, 2018 and 2019 estimations for the next reporting period. The GHG inventory conducted for 2016 indicated that the energy sector is the second highest emitter of greenhouse gases after the Agriculture, Forestry and Other Land Uses (AFOLU) sector. The energy sector in 2016, contributed 35.6% of the total 42.2MtCO2e emissions generated in Ghana.
The Grid Emission factor of Ghana also needs to be calculated each year to determine 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, assessed and tracked to determine their contributions to Ghana's emission reduction targets.

In 2020, the Commission compiled fuel consumption data on the Energy Sector for the period (2017 - 2019) for the estimation and reporting of Ghana's energy sector GHG emissions and the Grid Emission Factor.

The Commission also identified and assessed the energy sector mitigation actions being implemented. The information was provided to EPA for the preparation of Ghana's third Biennial Update Report (BUR) to the UNFCCC.



Fig. 13: Energy Sector GHG Emissions (MtCo2e)

6 PLANNING AND POLICY ACTIVITIES

The Planning and Policy activities are in fulfilment of the mandate of the Commission as stated in Section 2(2) (a)–(d) of the Energy Commission Act 1997 (Act 541). The following activities were therefore undertaken:

6.1 2020 ENERGY DEMAND & SUPPLY OUTLOOK FOR GHANA

The Commission prepared and published the Energy Demand and Supply Outlook for 2020. The industries and businesses with indications of the levels and quantities required by the country for the year 2020 and proposes strategies to meet the requirement. 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 2020. It also serves as a decision-making tool for government, operators and potential investors willing to operate in the country. The 2020 Energy Demand and Supply Outlook is available on the Commission's Website.



Figure 14: Monthly consumption of major petroleum products in 2020



6.2 2020 NATIONAL ENERGY STATISTICS

Timely and reliable statistics are essential to monitor the energy situation at the country level as well as at the international level. In 2020, the Annual Energy Statistics and the Ghana Energy Statistics Handbook were updated and published. These Energy Statistics publications have been a very important source of energy data on Ghana for energy policymakers, researchers, students, organizations and institutions in the energy sector. It contains timely and clearly presented historical data on energy resources, production and consumption in Ghana.



Fig. 16: Ghana's installed capacity, dependable capacity and peak load from 2000 to 2019



Fig 17: Grid Electricity generation from 2000 to 2019

6.3 2020 ELECTRICITY SUPPLY PLAN FOR THE GHANA POWER SYSTEM

The 2020 Electricity Supply Plan (ESP) presents an outlook of electricity demand and supply for 2020. The plan is jointly prepared by Energy Commission and Ghana Grid Company (GRIDCo). It reviews demand, generation, transmission and distribution performance for 2019; and presents the 2020 demand forecast and the outlook for power supply, taking into consideration all the existing sources of generation as well as ongoing projects.



System Peak Demand: Forecast and Actuals for 2020

Fig. 18: forecasted and actual peak demand for 2020



Electricity Consumption by Bulk Customers: Forecast and Actuals for 2020

Fig. 19: Forecasted and actual electricity consumption by Bulk Customers for 2020

6.4 ENERGY PROFILE OF DISTRICTS IN GHANA

The Commission published on its website, 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 utilization. The Government of Ghana has initiated a number of flagship programmes [such as the "One District, One Factory (1D1F)," "One Village One Dam," and "Planting for Food and Jobs" initiatives] seeking to reinvigorate Ghana's industrialization 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. To support this initiative, the Commission developed a comprehensive report on the energy profile of all districts in the country to provide relevant information for execution of Government programmes at the district level, such as the One District One Factory initiative.



Fig. 20: District Energy Demand map of Ghana

The report also presents a comprehensive database on Ghana's energy profile at the district level, indicating the indigenous energy resources. It further presents data on electricity access, charcoal production areas and LPG filling stations in the various districts.

7 HUMAN RESOURCE DEVELOPMENT AND ADMINISTRATION

7.1 TRAINING AND DEVELOPMENT

Staff capacity building is crucial to meeting the requirements of the Commission's mandate. In the year under review, the EC was unable to carry out most of its planned training activities due to the impact of COVID-19. That notwithstanding, some employees were trained in the following areas:

- 1. In-house Leadership and Public Speaking
- 2. Road Safety Management for Licensed Drivers Intercity STC (Accra)
- 3. Transport Management for Transport Officers Intercity STC (Accra)

7.2 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 during internships. In 2020, three (3) students from the following institutions had opportunities for internship at the Commission:

- 1. EU Business School, Geneva Switzerland.
- 2. The University of Freiburg, Breisgau Germany.
- 3. University of Energy & Natural Resources, Sunyani Ghana.

7.3 STAFF LEARNING FORA

The Commission holds cross-functional team meetings every last Friday of the 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 healthy discourse. These meetings dubbed 'Happy Hour', strengthen the bond of unity amongst Directorates and afford staff the opportunity to provide feedback for effective teamwork.

In 2020, due to COVID-19 implications, these meetings were held via video conferencing.

7.4 AWARDS AND RECOGNITION

In 2020, the Commission received the LEADERSHIP IMPACT AWARD IN ENERGY POLICY at the Ghana Energy Awards ceremony.

8 PUBLIC ENGAGEMENT AND EDUCATION

8.1 PUBLIC ENGAGEMENT

8.1.1 Support for combating COVID 19

The year 2020 was undoubtedly dramatic, globally. The outbreak of the novel corona virus pandemic (COVID-19) and all sectors of national economy corporate bodies, compelling them to revise their programmes in all areas of operation. The Energy Commission was not exempt. The pandemic limited, to a large extent, the ability of the Commission to carry out its planned activities in fulfilment of its legal mandates.

To reverse the spate of infection of the highly contagious virus, institutions deployed mandatory and innovative strategies to ensure that while person-to-person engagements were limited to a barest minimum, work schedules could be carried out as much as possible.

At the Energy Commission, safety protocols were observed, including running staff on a twogroup shift, with each group doing a weekly schedule. Meetings were held on virtual platforms whilst monitoring and enforcement activities were limited to only essential stakeholders. Hand washing and social distancing were enforced. Sufficient information on COVID–19 safety protocols was provided to staff and members of the public who still called at the offices of the Commission. In addition, and as part of the Energy Commission's Corporate Social Responsibility activities, the Commission made a token donation to the National COVID–19 Trust Fund to support Government's effort at combating the pandemic in Ghana.



Fig. 21: COVID-19 Safety Tips Posters

8.1.2 National Energy Quiz

The Commission supported the National Energy Quiz (NEQ) which is an innovative competition designed to empower students of Senior High Schools in Ghana with knowledge of the entire energy value chain, including petroleum upstream and downstream, power generation, transmission and distribution. The competition aims at educating the youth in both Senior High Schools (SHS) and Technical and Vocational Education and Training (TVET) on the energy sector.

The grand finale of the Second Edition of the NEQ was held in February 2020, at the Krobo Girls SHS in Odumase - Krobo. The Energy Commission has been a supporter of the Competition since its inception and was honoured with a citation.

8.2 PUBLIC EDUCATION

8.2.1 Training of Journalists in Energy Reporting

The Energy Commission has always prided itself on collaborating with its stakeholders to effectively deliver on its mandates under the Energy Commission Act, 1997 (Act 541). The importance of the Media as an intermediary stakeholder cannot be overemphasized. However, the freedom of expression has led to the opening of numerous media houses and resulted in an almost overwhelming number of Press Men and Women who sometimes attend functions uninvited and more worryingly produce inaccurate reports that misinform the public.

Since 2014, the Energy Commission has sought to maintain a selected crop of journalists on whom it can rely for consistent and accurate reporting on its activities. The main objective of the training programme was to build the capacity of media practitioners to effectively report on energy and energy related issues and to enhance future collaboration between the Commission and the Media Houses for effective public education. In February, 2020, the Commission held its second Training Workshop for about 16 Members of its Press Corps at the Hill View Guest Center at Teiman, near Abokobi.

Among the topics covered in the training programme were the following:

- Institutional Framework of the Energy Sector;
- Introduction to Energy: What is Energy; Forms of Energy and Energy Terminologies and Units;
- Energy Efficiency & Conservation Practical Session on Mobile Apps;
- The Ghana Energy Access Toolkit;
- Energy Access Issues;
- Social and Environmental Impact of Energy Plans, Programmes and Projects;
- Energy Regulation and Participation;
- The Concept of Renewable Energy: Energy Generation, Transmissions and Distribution;
- Certification of Electrical Wiring Practitioners;
- Local Content and Local Participation in the Electricity Supply Industry;
- Energy Policy Formulation and Implementation; and
- Gender issues in the Energy Sector.



Fig. 22: EC Board Chair, Executive Secretary and Staff in a Group Photograph with Journalists trained in Energy Reporting

8.2.2 In-House Public Speaking Training Sessions

As part of its capacity building efforts, the Commission organized a Workshop on Public Speaking and Presentations for its Management Staff, as well as its Public Relations Team, comprising staff with functions related to engaging the external public. The sessions exposed Participants to expositions on speech writing, leadership and persuasive presentation skills, and the handling media interviews. The objective of the training was to shore up the confidence level of participating staff and enhance their ability to professionally represent the Commission on any platform.

8.2.3 Electrical Wiring Examinations and Certificate Awards Ceremony in Accra, Kumasi and Tamale

The outbreak of the coronavirus pandemic almost totally scrambled arrangements for the May/June 2020 Electrical Wiring Certification Examinations. After an initial postponement communicated via mass media channels in print and on radio, the Examinations were held in Accra, Takoradi, Kumasi and Tamale under strict health protocols to avoid infection.



Fig. 23: Observing COVID-19 Protocols during the Electrical Wiring Examinations

The 13th Electrical Wiring Certificate Awards Ceremonies scheduled to be held in Accra, Kumasi and Tamale, had to be cancelled because of the pandemic. Alternative arrangements were made to distribute the Certification packages to the Graduates.

8.3 LAUNCH OF ECOFRIDGES

The UN Environment Programme's United for Efficiency (U4E) Initiative, in partnership with the Governments of Senegal and Ghana, the ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE), the African Development Bank (AfDB) and the Basel



Fig. 24: Launch of ECOFRIDGES

Agency for Sustainable Energy, launched the ECOWAS Refrigerators and Air Conditions Initiative, ECOFRIDGES.

The initiative is aimed at ridding West African markets of outdated refrigerators and air conditioners that consume excess energy and often contain refrigerant gasses that are harmful to the planet.

The Energy Commission facilitated the Media Launch of the Programme in October, 2020 at the City Escape Hotel, Airport. The event was streamed Live on the Multimedia Company Limited's news channels including Joy 99.7 FM.



ANNUAL FINANCIAL STATEMENTS/REPORT FOR THE YEAR ENDED 31st december 2020

Financial Statements for the year ended 31st December, 2020

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Financial Statements for the year ended 31 December, 2020

Corporate Information for the year ended 31 December, 2020

Governing Board

| Prof. George Panyin Hagan | Chairman (up to July 2021) |
|--------------------------------------|--|
| Dari Bismark Haruna (Kpembewura IV) | Member |
| Moses Aristophanes Kwame Gyasi | Member |
| Dr. Isaac Frimpong Mensa-Bonsu | Member (up to May 2020) |
| Dr. Kodjo Esseim Mensah-Abrampa | Member (Appointed June, 2020) |
| Hon. Nana Akua Owusu Afriyieh | Member (up to January 2021) |
| Alhaji Jabaru Abukari | Member (up to January 2021) |
| Kwasi K. Bosompem | Member (up to January 2021) |
| Ing. Oscar Amonoo-Neizer | Member (Executive Secretary) |
| | |
| Board Secretary/Legal Officer | Ms. Cecilia Agbenyega |
| | |
| Principal place of business | Ghana Airways Avenue Behind Alliance Francais |
| | Airport Residential Area |
| | GA-057-5212. |
| Registered office | PMB Ministries Post Office, Accra. |
| | |
| Independent Auditor | Eddie Nikoi Accounting |
| | GA-056-8119 |
| | P.O. Box OS 51 |
| | Usu - Accra |
| Bankers | Bank of Ghana |

Bank of Ghana Ecobank Ghana Limited Ghana Commercial Bank

Financial Statements for the year ended 31 December, 2020

FIVE YEAR FINANCIAL SUMMARY AND HIGHLIGHTS FOR THE YEAR ENDED 31 DECEMBER 2020

(All amounts are in Ghana cedi unless otherwise stated)

| Five-year Financial summary | 2020 GHØ | 2019 GHØ | 2018 GHØ | 2017 GHØ | 2016 GHØ |
|--------------------------------|--------------|--------------|--------------|--------------|--------------|
| Income | 50,483,794 | 61,392,953 | 43,765,482 | 41,302,101 | 40,335,935 |
| Expenditure | (29,361,003) | (36,714,798) | (30,863,549) | (35,337,194) | (31,711,686) |
| Excess | 21,122,791 | 24,678,155 | 12,901,933 | 5,964,907 | 8,624,249 |
| Total assets | 92,595,190 | 78,948,542 | 53,692,825 | 39,899,555 | 33,615,755 |
| Total equity | 89,484,404 | 72,165,339 | 47,487,184 | 34,585,251 | 28,620,344 |
| Total Liabilities | 3,110,786 | 6,783,203 | 6,205,641 | 5,314,304 | 4,995,411 |

| Financial Highlights | 2020 GH¢ | 2019 GHØ | Change GHØ | Percentage Change % |
|----------------------|--------------|--------------|---------------|------------------------|
| Income | 50,483,794 | 61,392,953 | (10,909,159) | (18) |
| Expenditure | (29,361,003) | (36,714,798) | 7,353,795 | 20 |
| Excess | 21,122,791 | 24,678,155 | (3,555,364) | (14) |
| Total assets | 92,595,190 | 78,948,542 | 13,646,648 | 17 |
| Total equity | 89,484,404 | 72,165,339 | 17,319,065 | 24 |
| Total Liabilities | 3,110,786 | 6,783,203 | 3,672,417 | 54 |

Financial Statements for the year ended 31 December, 2020

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, 2020.

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

- Select suitable accounting policies and then apply them consistently.
- Make judgements 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 the period. In preparing these Financial Statements, the Governing Board selected suitable accounting policies and then applied them consistently, made judgements 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 Ac 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 by Energy Commission Act 2017, (Act 933)] which is:

To manage the utilization of energy resources in Ghana, to provide the legal, regulatory and supervisory framework from all providers of energy services in the country: specifically, by the granting of licenses for the transmission, wholesale supply, distribution and sale of electricity and natural gas and related matters. There was no change in the nature of the business during the year.

Financial Statements for the year ended 31 December, 2020

Report of the Governing Board of Directors

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 has a material interest in any contract of significance.

Financial results for the year:

| | 2020 | 2019 |
|---|-------------|------------|
| | GHØ | GH¢ |
| Beginning balance of equity brought forward of | 72,165,339 | 47,487,184 |
| Prior year adjustment of (Note 21) | (3,803,726) | - |
| The Commission recorded excess income over expenditure of | 21,122,791 | 24,678,155 |
| | ********* | |
| Closing balance on equity carried forward of | 89,484,404 | 72,165,339 |
| | | |

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

- H The Financial Statements, prepared in accordance with applicable laws and IPSAS, give a true and fair view of the Commission's Financial Position, Performance and Cash Flows 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 the 2020 financial year.

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: Prof. George Panyin Hagan Executive Secretary: Ing. Oscar Amonoo-Neizer

| Signature: Alegen | Signature: |
|-------------------|-----------------|
| Date: 14/01/2022 | Date: 14/112022 |

Financial Statements for the year ended 31 December, 2020

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 delegate's authority 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 Commissions' commitment to ensuring international best practice in terms of corporate Governance remains strong and unwavering.

Board Chairman: Prof. George Panyin Hagan Executive Secretary: Ing. Oscar Amonoo-Neizer

lafan Signature:....

Signature: _____

14/01/2022 Date:

14/01/2022 Date:



aulina's Beauty Salon Building, Dzorwulu - Accra Tel: (233-302) 783403 Fax: (233-302) 760396 E-mail: infodz@enacgh.com

Independent Auditor's report to the Governing Board

Fax: (233-302) 760396

E-mail: info@enacgh.com

Website: www.enacgh.com

Opinion

In our opinion, the Financial Statements presented on pages 8 to 11 give a true and fair view of the financial position of the Energy Commission as at 31st December, 2020 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 2020, 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 12 to 43.

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.

Financial Statements for the year ended 31 December, 2020

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.

Financial Statements for the year ended 31 December, 2020

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.

In our opinion, proper books of account have been kept by the Commission, in so far as appears from our examination of those books; and

i) 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)



DATE: JATH JANVARY, 2022

7

Financial Statements for the year ended 31 December, 2020

STATEMENT OF FINANCIAL POSITION as at 31 December 2020 (All amounts are stated in Ghana cedi unless otherwise stated)

| Assets | Note | 2020 | 2019 |
|------------------------------|------|----------------|------------|
| Non- Current Assets | | GHØ | GH¢ |
| Property and Equipment | 4 | 12,084,825 | 9,857,869 |
| Intangible Assets | 5 | 30,952 | 140,204 |
| Trade and Other Receivables | 7 | - | 17,225,471 |
| Total Non-Current Assets | | 12,115,777 | 27,223,544 |
| Current Assets | | | ********** |
| Inventories | 6 | 242,315 | 269.055 |
| Trade and Other Receivables | 7 | 75,118,651 | 49,424,239 |
| Cash and Cash Equivalent | 8 | 5,118,447 | 2,031,704 |
| Total Current Assets | | 80,479,413 | 51,724,998 |
| Total Assets | | 92,595,190 | 78,948,542 |
| Equity | | | ======= |
| Accumulated Fund | 9 | 89,484,404 | 72,165,339 |
| Total Equity | | 89,484,404 | 72,165,339 |
| Current Liabilities | | *********** | |
| Trade and Other Payables | 10 | 3,110,786 | 6,783,203 |
| Total Liabilities | | 3,110,786 | 6,783,203 |
| Total Equity and Liabilities | | 92,595,190 | 78,948,542 |
| | | | |

APPROVAL OF THE FINANCIAL STATEMENTS

The financial statements of Energy Commission, were approved by the Governing Board on 29th Nov..., 2021 and signed on their behalf by:

| Board Chairman: Prof. George Panyin Hagan | Executive Secretary: Ing. Oscar Amonoo-Neizer |
|---|---|
| Signature: Alayan | Signature: Q. A N |
| Date: 14/02/2022 | Date: 14 01 2022. |

Financial Statements for the year ended 31 December, 2020

STATEMENT OF FINANCIAL PERFORMANCE as at 31 December, 2020 (All amounts are stated in Ghana cedi unless otherwise stated)

| Income | Note | 2020 GH¢ | 2019 GHØ |
|---|------|--------------|--------------|
| Revenue | 11 | 50,275,871 | 61,212,203 |
| Other Income | 12 | 207,923 | 180,750 |
| Total Income | | 50,483,794 | 61,392,953 |
| Expenditure | | | |
| Personnel Emoluments | 13 | (15,539,787) | (15,201,088) |
| General and Administrative Expenses | 14 | (6,851,041) | (7,006,585) |
| Service Activity Expenses | 15 | (6,970,175) | (14,507,125) |
| Total Expenditure | | (29,361,003) | (36,714,798) |
| Surplus transferred to Accumulated Fund | | 21,122,791 | 24,678,155 |

Financial Statements for the year ended 31 December, 2020

STATEMENT OF ACCUMULATED FUND as at 31 December, 2020 (All amounts are stated in Ghana cedi unless otherwise stated)

| | Note | 2020 GHØ | 2019 GHØ |
|--------------------------------------|------|--------------------|-------------|
| Balance at the beginning of the year | | 72,165,339 | 47,487,184 |
| Prior year adjustment | 21 | (3,803,726) | - |
| Surplus for the year | | 21,122,791 | 24,678,155 |
| Balance at the end of the year | | 89,484,404 | 72,165,339 |

Financial Statements for the year ended 31 December, 2020

STATEMENT OF CASH FLOW as at 31 December, 2020 (All amounts are stated in Ghana cedi unless otherwise stated)

| | Note | 2020 GHØ | 2019 GH¢ |
|--|------|-------------|-------------|
| Net Cash generated from operating activities | 16 | 6,073,143 | 3,866,909 |
| Cash flow from investing activities | | | |
| Acquisition of property and equipment | 4 | (2,986,400) | (1,884,330) |
| Acquisition of Intangible Assets | 5 | - | (154,583) |
| Net Cash used in investing activities | | (2,986,400) | (2,038,913) |
| Net increase in cash and cash equivalent | | 3,086,743 | 1,827,996 |
| Balance at the beginning of the year | | 2,031,704 | 203,708 |
| Balance at the end of the year | 8 | 5,118,447 | 2,031,704 |



Financial Statements for the year ended 31 December, 2020

STATEMENT OF COMPARISON OF BUDGET AND ACTUAL PERFORMANCE

for the twelve months period ended 31 December, 2020 (All amounts are stated in Ghana cedi unless otherwise stated)

| | | Actual on | Variance |
|---------------------------------------|-----------------|----------------|------------|
| | Budget | Comparable bas | is |
| | 2020 | 2020 | 2020 |
| | GH¢ | GH¢ | GH¢ |
| INFLOW | | | |
| Energy Fund | 43,883,026 | 32,280,113 | 11,602,913 |
| Regulatory Levy | 6,174,898 | 4,162,659 | 2,012,239 |
| Other Income | 534,552 | 534,552 | - |
| Total Expected Inflow | 50,592,476 | 36,977,324 | 13,615,152 |
| | | | |
| EXPENDITURE | | | |
| Renewable Energy, Energy Efficiency | Promotion & Cli | mate Change: | |
| Renewable Energy & SE4ALL | 4,806,793 | 554,859 | 4,251,934 |
| Energy Efficiency & Climate Change | 4,795,573 | 471,305 | 4,324,268 |
| Sub-total | 9,602,366 | 1,026,164 | 8,576,202 |
| | | | |
| Electricity and Natural Gas Directora | te | | |
| Electricity Market Oversight Panel | 1,663,300 | - | 1,663,300 |
| Technical Regulations | 1,703,525 | 587,166 | 1,116,359 |
| Social Environmental impact unit | 319,190 | 8,900 | 310,290 |
| Sub-total | 3,686,015 | 596,066 | 3,089,949 |
| | | | |
| Strategic Planning & Policy Directora | ate: | | |
| Planning & Policy Research unit | 1,395,270 | 489,035 | 906,235 |
| Monitoring & Evaluation unit | - | - | - |
| Sub-total | 1,395,270 | 489,035 | 906,235 |

Financial Statements for the year ended 31 December, 2020

STATEMENT OF COMPARISON OF BUDGET AND ACTUAL PERFORMANCE

for the twelve months period ended 31 December, 2020 (All amounts are stated in Ghana cedi unless otherwise stated)

| | | Actual on | Variance |
|---------------------------------|------------|------------------|------------|
| | Budget | comparable basis | |
| | 2020 | 2020 | 2020 |
| | GH¢ | GH¢ | GH¢ |
| Office of Executive Secretary | | | |
| Executive Secretary Secretariat | 2,697,667 | 646,672 | 2,050,995 |
| Board and Legal Secretariat | 1,958,000 | 1,213,706 | 744,294 |
| Internal Audit | 233,472 | 167,228 | 66,2 44 |
| Sub-total | 4,889,139 | 2,027,606 | 2,861,533 |
| | | | |
| Finance and Admin Directorate: | | | |
| Human Resources & Admin | 9,171,547 | 6,243,642 | 2,927,905 |
| Finance Unit | 17,407,260 | 16,605,603 | 801,657 |
| Procurement Unit | 2,707,881 | 397,797 | 2,310,084 |
| Public Affairs Unit | 1,307,000 | 712,416 | 594,584 |
| Information Technology Unit | 1,175,573 | 546,841 | 628,732 |
| Sub-total | 31,769,261 | 24,506,299 | 7,262,962 |
| Grand Total Expenditure | 51,342,051 | 28,645,170 | 22,696,881 |

Financial Statements for the year ended 31 December, 2020

STATEMENT OF COMPARISON OF BUDGET AND ACTUAL PERFORMANCE

for the twelve months period ended 31 December, 2019

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

| | | Actual on | Variance | | |
|--|-------------|------------------|--------------|--|--|
| | Budget | Comparable basis | | | |
| | 2019 | 2019 | 2019 | | |
| | GH¢ | GH¢ | GH¢ | | |
| INFLOWS | | | | | |
| Energy Fund | 53,501,017 | 39,209,158 | (14,291,859) | | |
| Other Income | - | 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 Funds (WB/MiDA/UNDP) | 3,814,304 | - | (3,814,304) | | |
| Total Expected Inflows | 61,592,196 | 40,226,413 | (21,365,783) | | |
| EXPENDITURE | | | | | |
| Renewable Energy, Energy Efficiency Promotion and Climate Change | | | | | |
| Renewable Energy & SE4All | 4,207,000 | 2,605,916 | 1,601,084 | | |
| Energy Efficiency & Climate Change | 1,874,400 | 747,464 | 1,126,936 | | |
| Sub-total | 6,081,400 | 3,353,380 | 2,728,020 | | |
| Electricity and Natural Gas Directorate | | | | | |
| Electricity Market Oversight Panel (EMOP) |) 1,049,035 | - | 1,049,035 | | |
| Technical Regulations | 870,000 | 1,849,458 | (979,458) | | |
| Social & Environmental Impact Unit | 107,700 | 88,220 | 19,480 | | |
| Sub-total | 2,026,735 | 1,937,678 | 89,057 | | |
| Studenie Diaming & Delieu Diverteurte | | | | | |
| Diagram & Daliay Descende Unit | 2 204 250 | 747 422 | 1 646 917 | | |
| Planning & Policy Research Unit | 2,394,230 | /4/,433 | 1,040,817 | | |
| Monitoring and Evaluation Unit | - | - | - | | |
| Subtotal | 2,394,250 | 747,433 | 1,646,817 | | |

Financial Statements for the year ended 31 December, 2020

STATEMENT OF COMPARISON OF BUDGET AND ACTUAL PERFORMANCE

for the twelve months period ended 31 December, 2019 (All amounts are stated in Ghana cedi unless otherwise stated)

| | | Actual on | Variance |
|--|---------------------|------------------|------------|
| | Final Budget | Comparable basis | |
| | 2019 | 2019 | 2019 |
| | GH¢ | GH¢ | GH¢ |
| Office of Executive Secretary | | | |
| Legal & Board Secretariat | 1,465,452 | 1,366,854 | 98,598 |
| Internal Audit | 300,000 | 226,765 | 73,235 |
| Ministerial & inter-institutional Coop | eration 760,000 | 398,933 | 361,067 |
| Drive Electric vehicle initiative | 350,000 | - | 350,000 |
| International Cooperation | 2,687,455 | 2,994,563 | (307,108) |
| Sub-total | 6,082,907 | 5,386,047 | 696,860 |
| | | | |
| Finance and Admin Directorate | | | |
| HR & Admin | 9,785,639 | 8,284,854 | 1,500,785 |
| Finance Unit | 18,911,200 | 15,918,777 | 2,992,423 |
| Procurement Unit | 11,250,552 | 318,296 | 10,932,256 |
| Public Affairs Unit | 4,793,200 | 1,286,952 | 3,506,248 |
| Information Com Tech Unit | 190,000 | 266,249 | (76,249) |
| Subtotal Finance | 44,930,591 | 26,075,128 | 18,855,463 |
| Subtotal | 63,068,883 | 37,717,536 | 31,634,629 |

Financial Statements for the year ended 31 December, 2020

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, especially 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 utilization 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 utilization 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 and performance for public utilities engaged in the transmission, wholesale supply, distribution and sale of electricity and natural gas;
- Promote and ensure uniform rules of practice for the transmission, wholesale supply, distribution and sale of electricity and natural gas;

Financial Statements for the year ended 31 December, 2020

NOTES TO THE FINANCIAL STATEMENTS

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

- 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, 2020 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 authorized for issue by the Governing Board on $\frac{14/21/2022}{2021}$

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 Cedis.

Financial Statements for the year ended 31 December, 2020

NOTES TO THE FINANCIAL STATEMENTS

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

2.4 Significant judgments and sources of estimation uncertainty

The preparation of the Commission's financial statements in conformity with IPSAS requires management to make judgments, estimates and assumptions that affect the report 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 of 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 Significant judgments and sources of estimation uncertainty

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.

2.6 Estimates and assumptions

The key assumptions concerning the future and other key sources of estimation 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.

Financial Statements for the year ended 31 December, 2020

NOTES TO THE FINANCIAL STATEMENTS

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

2.7 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 assets based on the assessment of experts employed by the Commission.
- The nature of the asset, its susceptibility and adaptability to change 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

2.8 Held-to-maturity investments and loans and receivables

The Commission assesses its loans and receivables (including trade receivables) and its held-tomaturity 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.

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 rations, 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 rations are applied to loan balances in the portfolio and scaled to the estimated loss emergence period.

Financial Statements for the year ended 31 December, 2020

NOTES TO THE FINANCIAL STATEMENTS

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

3. Summary of significant accounting policies

3.1 Cash and cash equivalents

Cash and cash equivalent 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 valve. 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 con-exchange transactions (for no cost or for a nominal cost), the cost of the inventory is its fair value at the date of acquisition. Cost incurred on 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.

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 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 is 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 Computer software (general ledger account and payroll). The useful lives of these assets are 3 - 5 years. Intangible assets with a finite useful life are amortization that the assets may be impaired. The amortization period and the amortization method, for an intangible asset with a

Financial Statements for the year ended 31 December, 2020

NOTES TO THE FINANCIAL STATEMENTS

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

3.3 Intangible assets (contd.)

finite useful life are reviewed at the end of each reporting period. Changes in the expected useful life are reviewed according to the pattern of consumption of future economic benefits embodied in the asset as considered to modify the amortization period or method, as appropriate and are treated as changes in accounting estimates. The amortization expenses category that is consistent with the nature of the measured as the 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 of deficit when the asset is derecognized.

Class of Assets

Annual Amortisation (%) 33.33

Software

3.4 Property and equipment

All property and equipment are stated as 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 acquired in a non-exchange transaction for nil or nominal consideration the asset is initially measured at its far 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 (%) |
|-------------------------------|-------------------------|
| Land and Building | 2 |
| Motor Vehicle | 25 |
| Machinery | 20 |
| Office Furniture and Fittings | 12.5 |
| Computer and Accessories | 33.33 |

Financial Statements for the year ended 31 December, 2020

NOTES TO THE FINANCIAL STATEMENTS

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

Property and equipment (continued)

The assets' residual value 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 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 services potential is expected from its continuing use. Any gain or loss arising on derecognition 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 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 leases. 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 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. Operating leases are leases that do not transfer substantially all the risks and benefits incidental to ownership of the lease ditem 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.
Financial Statements for the year ended 31 December, 2020

NOTES TO THE FINANCIAL STATEMENTS

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

3.5.2 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 lease. 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 period term. Contingency rents are recognised 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 regulations or convention in the marketplace (regular way trades) are recognized on the trade date, i.e., the date the Commission commits to purchase or sell the asset. The Commission's financial assets include: cash and short-term deposits and trade receivables; loans and other receivables.

3.6.1b Subsequent measurement

The subsequent measurement of financial assets depends on the 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 of premium on acquisition and fees or cost that are an integral part of the effective interest rate. Losses arising from impairment are recognized in the surplus or deficit.

Financial Statements for the year ended 31 December, 2020

NOTES TO THE FINANCIAL STATEMENTS

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

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 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.

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 is impaired. A financial asset or a group of financial assets is deemed to be impaired if, and only if, there is objective evidence of impairment as a result of one or more events that have 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 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).

Financial Statements for the year ended 31 December, 2020

NOTES TO THE FINANCIAL STATEMENTS

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

For financial assets carried at amortized cost, the Commission first assess whether objective evidence of impairment exists individual for financial assets that are 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 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.

3.6.1e Financial assets carried at amortized cost

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 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 financial 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 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.

Financial Statements for the year ended 31 December, 2020

NOTES TO THE FINANCIAL STATEMENTS

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

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

The Commission's financial liabilities are mainly trade and other payable.

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 parts of the effective interest rate.

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 instrument

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 rights 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.

Financial Statements for the year ended 31 December, 2020

NOTES TO THE FINANCIAL STATEMENTS

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

3.6.2e Fair value of financial instrument

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 benefit

3.7.1 Retirement benefit plans

The Commission provides retirement benefits for its employees. Defined contribution plans are postemployment 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 asset to pay all employee benefits relating to employee service in the current and prior periods. The contributions to fund obligations for the payments of retirement benefits are charged against income in the year in which they become payable. The Commission is required by the National Pension 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 contributions are charged to the operating account when employees have rendered the service entitling them to the contributions.

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 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.

Financial Statements for the year ended 31 December, 2020

NOTES TO THE FINANCIAL STATEMENTS

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

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 benefit or service potential is remote.

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 transaction 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 the 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. Revenues are recognized by the Commission based on a funding allocation letter received from the Ministry of Finance.

Financial Statements for the year ended 31 December, 2020

NOTES TO THE FINANCIAL STATEMENTS

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

3.9.2 Permits, Fees and Licenses

These are derived from any business or commercial activity for the transmission, wholesale supply, distribution or sale or electricity or natural gas in compliance with the Energy Commission Act, 1997 (Act 541).

- (c) Unless expressly exempted under this act, all business 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.

3.9.3 Regulatory Levy

Revenue in this category are derived 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 revenue when it receives notification from Ghana Grid Company Limited (GRIDCo) confirming how much its allocation will amount to.

3.9.4 Electrical 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 a retrospective application is impractical. The Commission recognizes the effects of changes in accounting estimate prospectively by including in surplus or deficit.

Financial Statements for the year ended 31 December, 2020

NOTES TO THE FINANCIAL STATEMENTS

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

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.

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, 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 amount 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 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.

Financial Statements for the year ended 31 December, 2020

NOTES TO THE FINANCIAL STATEMENTS

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

Budget information (continued)

- (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 Commission and then was submitted to the sector ministry (Ministry of Energy) for a no-objection approval. 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 functional expenses in the statement of financial performance, while 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 statement were also adjusted to conform to the budget categories adopted from 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.
- (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 Statements of Cash Flows for the year ended 31 December 2020 is presented as follows.

Financial Statements for the year ended 31 December, 2020

NOTES TO THE FINANCIAL STATEMENTS

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

Budget information (continued)

(e) Explanation of material difference between actual amounts and budgeted

The Commission did not realize its budgeted revenue budget because:

| Inflows 2020 |
|--|
| • With respect to expected inflows from Energy fund (transfers), the Commission |
| experienced the following shortfalls; |
| 1. The Commission received GH \mathbb{C} 19.5 million of the Petroleum levy in 2020 out of a |
| budgeted amount of GHC 41.5 million from the Ministry of Finance representing 47% |
| collection. |
| 2. Inflows from permits and licenses were reduced as a result of customers' reluctance |
| to pay regulatory or mandatory fees/charges due to the energy sector cash-freeze facing |
| institutions. In addition, the Commission stopped issuing wholesale renewable energy |
| licenses in 2019 further impacting collections because of existing excess of power. |
| 3. Energy production and distributions data collection was difficult to obtain, and this |
| affected invoicing and billing. |
| • The Regulatory fees collection performance was on point this year due to the cash- |
| water-fall mechanism the Government put in place. The Commission is working |
| on resolving the settlement of its outstanding receivables of GHs24.4 million from |
| Public Utilities Regulatory Commission (PURC). |



Financial Statements for the year ended 31 December, 2020

NOTES TO THE FINANCIAL STATEMENTS

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

| Ex | pen | ditures 2020 |
|----|-----|--|
| | | Renewable Energy, Energy Efficiency Promotion and Climate Change |
| | | Expenditure performance under this directorate in 2020 was 11% of approved |
| | | budget. Obviously, COVID 19 restrictions had an impact on the department's |
| | | operations. Only few on-line activities and desk-top programmes such as RE Fair, |
| | | etc. took place. |
| | | |
| | | Electricity and Natural Gas Directorate |
| | | The directorate's expenditure fell short of the budgeted figure to about 7.6% |
| | | because; |
| | 0 | A number of activities related to Power sector regulations, Inspections and |
| | | monitoring were affected by on-site physical restrictions due to Covid. Much of |
| | | the activities undertaken were done through telephone and other on-line means. |
| | | |
| | | Strategic Planning & Policy Division (SPPD) |
| | | The expenditure performance for this department stood at about 34% of approved |
| | | budget for the year under review. Key activities undertaken include district energy |
| | | resources appraisal, data collection through on-line means, procurement of |
| | | software for data analysis, completion and publication SNEP document on the |
| | | Commission's websites. |
| | | |
| | | Office of Executive Secretary |
| | | This Secretariat is headed by the Executive Secretary and houses three (3) different |
| | | units of the Commission that report directly to him. |
| | | The directorate performed about 40% of its approved budgetary allocation |
| | | |
| | | |
| | | |

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Financial Statements for the year ended 31 December, 2020

NOTES TO THE FINANCIAL STATEMENTS

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

4. Property and Equipment

| | | | | Office | | |
|--------------------------------|------------|-----------|-----------|-------------|-------------|------------|
| | Land & | Motor | | Furniture & | Computer & | |
| Cost | Building | Vehicle | Machinery | Fittings | Accessories | Total |
| Balance at 1 January 2019 | 8,542,328 | 3,854,253 | 259,284 | 505,768 | 1,309,289 | 14,470,922 |
| Additions | 1,726,200 | I | I | 65,097 | 93,033 | 1,884,330 |
| | | | | | | |
| Balance as at 31 December 2019 | 10,268,528 | 3,854,253 | 259,284 | 570,865 | 1,402,322 | 16,355,252 |
| | | | | | | |
| Balance at 1 January 2020 | 10,268,528 | 3,854,253 | 259,284 | 570,865 | 1,402,322 | 16,355,252 |
| Additions | I | 1,495,100 | 858,267 | 193,046 | 439,987 | 2,986,400 |
| | | | | | | |
| Balance as at 31 December 2020 | 10,268,528 | 5,349,353 | 1,117,551 | 763,911 | 1,842,309 | 19,341,652 |
| | | | | | | |
| Accumulated Depreciation | | | | | | |
| Balance at 1 January 2019 | 716,515 | 3,246,004 | 257,484 | 244,930 | 1,034,180 | 5,499,113 |
| Depreciation charge | 170,847 | 553,250 | 1,800 | 51,844 | 220,529 | 998,270 |
| | | | | | | |
| Balance as at 31 December 2019 | 887,362 | 3,799,254 | 259,284 | 296,774 | 1,254,709 | 6,497,383 |
| | | | | | | |
| Balance at 1 January 2020 | 887,362 | 3,799,254 | 259,284 | 296,774 | 1,254,709 | 6,497,383 |
| Depreciation charge | ı | 428,775 | I | 72,559 | 258,110 | 759,444 |
| | | | | | | |
| Balance as at 31 December 2020 | 887,362 | 4,228,029 | 259,284 | 369,333 | 1,512,819 | 7,256,827 |
| | | | | | | |
| Carrying amount | | | | | | |
| Balance as at 31 December 2019 | 9,381,166 | 54,999 | I | 274,091 | 147,613 | 9,857,869 |
| Balance as at 31 December 2020 | 9,381,166 | 1,121,324 | 858,267 | 394,578 | 329,490 | 12,084,825 |

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Financial Statements for the year ended 31 December, 2020

NOTES TO THE FINANCIAL STATEMENTS

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

| 5.Intangibles Assets | |
|--|-------------------|
| Cost | GH¢ |
| At 1 January 2019 Additions | 81,776 154,583 |
| Balance at 31 December 2019 | 236,359 |
| At 1 January 2020 Additions | 236,359 |
| Balance at 31 December 2020 | 236,359 |
| Accumulated amortisation At 1 January 2019 Charge for the year | 65,238 30,917 |
| Balance at 31 December 2019 | 96,155 |
| At 1 January 2020 Charge for the year | 96,155 109,252 |
| Balance at 31 December 2020 | 205,407 |
| Net book Value Balance as at 31 December 2019 Balance as at 31 December 2020 | 140,204 30,952 |
| 2020 GHØ | 2019 GHØ |
| 6. Inventories | |
| Office Consumables 242,315 | 269,055 |
| 242,315 | 269,055 |

Financial Statements for the year ended 31 December, 2020

NOTES TO THE FINANCIAL STATEMENTS

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

| | 2020 | 2019 |
|--|-------------|------------|
| | GHØ | GH¢ |
| 7. Trade and other receivable | | |
| Trade Receivables | 73,944,783 | 48,493,843 |
| Staff Car Loan | 1,084,069 | 780,520 |
| Prepayment | 89,799 | 149,876 |
| | 75,118,651 | 49,424,239 |
| Trade and other receivable-Non Current | | 17,225,471 |
| | | |
| 8. Cash and Cash Equivalent | | |
| Cash and Bank | 5,118,447 | 2,031,704 |
| | 5,118,447 | 2,031,704 |
| 9. Accumulated Fund | | |
| Balance at the 1 January | 72,165,339 | 47,487,184 |
| Prior year adjustment (Note 21) | (3,803,726) | _ |
| Surplus for the year | 21,122,791 | 24,678,155 |
| | 89,484,404 | 72,165,339 |
| 10. Trade and other accounts payable | | |
| Trade payables | 2,637,714 | 6,475,723 |
| Audit fees | 340,725 | 259,875 |
| Accrued Liabilities | 132,347 | 47,605 |
| | 3,110,786 | 6,783,203 |
| 11 Dovonuo | | |
| Transfer from Energy Fund | 32,280,000 | 39 065 127 |
| Receivable from the Energy Fund | 11,603,026 | 14,435,890 |
| Regulatory Levy | 6,174.898 | 7,459.025 |
| Rebate Scheme (UNDP) | 217,947 | 252,161 |
| | 50,275,871 | 61,212,203 |

Financial Statements for the year ended 31 December, 2020

NOTES TO THE FINANCIAL STATEMENTS

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

| | 2020 CHC | 2019 GHØ |
|------------------|-------------|-------------|
| 12. Other Income | Une | Unc |
| Other revenue | 207,923 | 180,750 |
| | | 180 750 |
| | ====== | ======= |

Other revenues consist primarily of payments and sponsors participating in and /or attending Energy

Fairs during the year.

| | 6,851,041 | 7,006,585 |
|---|------------|------------|
| Vehicle Insurance | | 19,896 |
| Protessional fees | 90,052 | 26,995 |
| Refreshment for meetings | 144,241 | 41,869 |
| Utilities | 6,369 | 222,836 |
| Ground Rent | 44,000 | 42,000 |
| Fuel and Lubricants | 326,431 | 498,395 |
| Bank Charges | 16,379 | 1,492 |
| Depreciation and Amortisation | 868,695 | 1,029,187 |
| Advertising | 126,841 | 176,281 |
| Travels | 48,442 | 114,910 |
| Motor Vehicle Running | 55,566 | 229,135 |
| Office Rent | 98,284 | 95,474 |
| Office Consumables | 362,267 | 61,514 |
| Medicals | 497,893 | 610,192 |
| Repairs and Maintenance | 1,386,385 | 1,129,426 |
| Sanitation and Security | 189,103 | 168,204 |
| ICT and Communication | 546,841 | 316,216 |
| Audit Fees | 262,350 | 259,875 |
| Insurance | 320,084 | 158,908 |
| Stationery and Printing | 247,112 | 436,926 |
| Board and Legal Expenses | 1,213,706 | 1,366,854 |
| 14. General and Administrative Expenses | | |
| | 15,539,787 | 15,201,088 |
| Employer Provident Fund Contribution | 1,226,342 | 894,687 |
| Employer SSNIT Contribution | 1,119,045 | 1,301,552 |
| Salaries and Wages | 13,194,400 | 13,004,849 |
| 13. Personnel Emoluments | 10 104 400 | 12 004 040 |

Financial Statements for the year ended 31 December, 2020

NOTES TO THE FINANCIAL STATEMENTS

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

| | 2020 | 2019 |
|---|-------------|--------------|
| | GH¢ | GH¢ |
| 15. Service Activities Expenses | | |
| Renewable Energy | 554,829 | 2,605,916 |
| Energy Efficiency and Climate Change | 471,405 | 747,464 |
| Technical Regulations | 587,166 | 1,849,458 |
| Strategic Planning and Policy | 489,035 | 747,433 |
| Public Affairs | 712,416 | 1,286,952 |
| Human Resources Development | 2,499,265 | 2,307,456 |
| Procurement | 397,797 | 318,296 |
| Finance Unit and 2019 Outstanding Commitments | 357,121 | 944,534 |
| Social Impact, Environment and Technical Assistance | 8,900 | 88,220 |
| Internal Audit | 167,228 | - |
| Inspectorate | 55,600 | 217,900 |
| Ministerial and Inter-Institutional Cooperation | - | 398,933 |
| International Co-operation and Affiliations | 22,740 | 2,994,563 |
| Office of Executive Secretary | 646,673 | - |
| | 6,970,175 | 14,507,125 |
| 16. Cash generated from operations Excess Income over Expenditure | 21,122,791 | 24,678,155 |
| Prior year adjustment | (3,803,726) | - |
| Depreciation and amortisation | 868,696 | 1,029,187 |
| | 18,187,761 | 25,707,342 |
| Changes in Working Capital | | |
| Changes in Inventories | 26,740 | - |
| Changes in Trade and Other Receivables | (8,468,941) | (22,417,995) |
| Changes in Trade and Other Payables | (3,672,417) | 577,562 |
| Net cash generated from operation activities | 6,073,143 | 3,866,909 |
| | | |

Financial Statements for the year ended 31 December, 2020

NOTES TO THE FINANCIAL STATEMENTS

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

17. Financial Risk Management

17.1 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.

17.1.1 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 receivables.

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 receivables, 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). This requires that for overdue debts the sector Minister as well as the Minister of Finance have to participate in any decision to write off any overdue debts.

Financial Statements for the year ended 31 December, 2020

NOTES TO THE FINANCIAL STATEMENTS

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

17.1.2 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 Commission's 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.

Contractual maturities of financial liabilities

| 31 December, 2020 | Less than 3 months |
|---------------------|--------------------|
| Trade Payables | 2,637,714 |
| Audit fees | 340,725 |
| Accrued liabilities | 132,348 |
| 31 December, 2019 | |
| Trade Payables | 6,475,723 |
| Audit fees | 259,875 |
| Accrued liabilities | 47,605 |
| | |

18. Related party transactions

Transactions with key Management Personnel

(i) Key Management Personnel Compensation

Key Management Personnel Compensation comprised the following:

| | 2020 | 2019 |
|--------------------------|-----------|-----------|
| | GH¢ | GH¢ |
| Short-Term Benefits | 3,256,578 | 2,028,857 |
| Post-Employment Benefits | 951,962 | - |
| | 4,208,540 | 2,028,857 |

Financial Statements for the year ended 31 December, 2020

NOTES TO THE FINANCIAL STATEMENTS

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

19. Contingent assets, liabilities and capital commitments

The Commission is committed to the payment of total capital expenditure of GHS 1,231,250 for the purchase of its Head Office land at the airport residential area. As at the reporting date the amount has been settled.

20. 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.

21. Prior year adjustment

This relates to an overstatement of the amount due from annual operators and public utilities by GHC 3,803,726. The adjustment impacted the trade receivable account and the opening accumulated fund.



ANNUAL FINANCIAL STATEMENTS/REPORT FOR THE YEAR ENDED 31st december 2020

Financial Statements for the year ended 31st December, 2020

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Financial Statements for the year ended 31 December 2020

Corporate information for the year ended 31 December, 2020 Governing Board

Bankers

| Prof. George Panyin Hagan | Chairman |
|-------------------------------------|---|
| Dari Bismark Haruna (Kpembewura IV) | Member |
| Moses Aristophanes Kwame Gyasi | Member |
| Dr. Isaac Frimpong Mensa-Bonsu | Member (up to May 2020) |
| Dr. Kodjo Esseim Mensah-Abrampa | Member (Appointed June, 2020) |
| Hon. Nana Akua Owusu Afriyieh | Member |
| Alhaji Jabaru Abukari | Member |
| Kwasi K. Bosompem | Member |
| Ing. Oscar Amonoo-Neizer | Member (Executive Secretary) |
| | |
| Board Secretary | Ms.Cecilia Agbenyega Energy Commission |
| Principal Place Of Business | Ghana Airways Avenue Behind Alliance Francais Airway 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 |

Bank of Ghana Ecobank Ghana Limited

Financial Statements for the year ended 31 December 2020

Financial summary and highlight for the year ended 31 December, 2020 (All amounts are stated in Ghana Cedis unless otherwise stated)

Five-year financial summary

| | 2020 | 2019 | 2018 | 2017 | 2016 |
|-------------------|--------------|--------------|--------------|--------------|--------------|
| Receipts | 30,583,393 | 42,713,110 | 27,295,558 | 33,706,788 | 33,165,743 |
| Disbursements | (32,280,000) | (39,209,158) | (27,435,045) | (34,871,901) | (31,810,135) |
| (Deficit)/Surplus | (1,696,607) | 3,503,952 | (139,487) | (1,165,114) | 1,355,608 |
| Bank balance | 2,025,607 | 3,722,214 | 218,262 | 357,749 | 1,522,863 |

| Financial highlights | 2020 | 2019 | Percentage Change (%) |
|----------------------|--------------|--------------|--------------------------|
| Receipts | 30,583,393 | 42,713,110 | (28.40%) |
| Disbursement | (32,280,000) | (39,209,158) | 17.67% |
| (Deficit)/Surplus | (1,696,607) | 3,503,952 | (148%) |

Financial Statements for the year ended 31 December 2020

Report of the Governing Board of the Energy Fund

The Governing Board of Directors (Governing Board) is pleased to submit its 2020 annual reports and the Financial Statements on the operations of the Energy Fund for the year ended 31st December, 2020.

In preparing this annual report and financial statements, the Governing Board is required to:

- 1. Select suitable accounting policies and then apply them consistently.
- 2. Make judgements and estimates that are reasonable and prudent.
- 3. State whether International Public Sector Accounting Standards (Cash basis IPSAS) have been followed, subject to any material departure disclosed and explained in the financial statement.
- 4. Prepare the annual report on a going-concern basis unless it is inappropriate to presume that the Fund will continue in business into the foreseeable future.

Governing Board's Responsibility for the Annual Reports

The Governing Board is responsible for the preparation of the annual report for each year, which gives true and fair view of Statement of Cash Receipts and Disbursement for the period. In preparing this report, the Governing Board selected suitable accounting policies and applied them consistently, made judgements and estimates that are reasonable and prudent and follows cash-basis International Public Sector Accounting Standards (IPSAS) and the requirements of the Public Financial Management Act 2016 (Act 921) and the Energy Commission Act 1997 (Act 541) as amended.

The Governing Board is also responsible for ensuring that the Fund keeps proper accounting records that support and disclose with reasonable accuracy at any point in time, the financial position of the Fund, to enable the Board to safeguard the fund and take the necessary steps to detect and prevent fraud and any irregularities.

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 petroleum product;
- 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 in the Energy Fund.
 - i. In addition, the Fund shall be managed and administered by the Energy Commission which shall for this purpose include the Controller and Accountant-General or his representative.

Financial Statements for the year ended 31 December 2020

Report of the Governing Board of the Energy Fund (continued)

- ii. All monies for the Fund shall be paid into a bank account opened for the purpose 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 | GHC | |
|---|----------------------------|--|
| During the year under review, releases through the Controller and Accountant | | |
| General Department (CAGD) for the Petroleum Levy into the Energy | | |
| Fund account held at the Bank of Ghana amounted to | 19,523,514 | |
| Added to this were the following sources of revenue: | | |
| Fees from permits and licenses Electricity Demand Management Fund (EDMF)Project fund Other income | 10,931,631 - 128,248 | |
| Total inflow for the year amounted to | 30,583,393 | |
| Add cash balance at 1 January, 2020 on Energy Fund | 3,722,214 | |
| Total amount available for disbursement in the year | 34,305,607 | |
| Deduct disbursement in the year | (32,280,000) | |
| Cash balance on the Energy Fund account as at 31st December, 2020 | 2,025,607 | |

Auditors

In accordance with section 49 of the Energy Commission Act 1997, (Act 541), [as amended], Eddie Nikoi Accounting Consultancy (Chartered Accountants) has been appointed and authorized by the Auditor-General of Ghana, to act as the Fund's Auditors for the year 2020.

Financial Statements for the year ended 31 December 2020

Report of the Governing Board (Continued)

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

Financial Statements for the year ended 31 December 2020

Corporate Governance (CG) Report

The Energy Commission is committed to strong corporate governing practises 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 investor's confidence. The Commission's corporate governance over the Fund's key affairs, include, the appointment of Executive Management, approval of business strategies, evaluation of performance and assessment of major risk 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. The Governing Board is made up of majority Non-Executive Directors.

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

PROF. GEORGE PANYIN HAGAN Name of Chairman...

open Signature: ...

14/01/2022 Date: ..

Date: ... 14 01 2022



Dzorwulu - Accra Tel: (233-302) 783403 Fax: (233-302) 760396 E-mail: infodz@enacgh.com

Independent Auditor's report to the Governing Board

Fax: (233-302) 760396

E-mail: info@enacgh.com Website: www.enacgh.com

Opinion

In our opinion, the Financial Statements presented on page (11) give a true and fair view of the financial position of the Statement of Cash Receipt and Disbursement of the Fund as at 31st December, 2020 and its financial performance 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 the Energy Fund, which comprises the Statement of Cash receipts and Disbursements for the year then ended 31 December 2020, and notes to the Financial Statements which include a summary of significant Accounting Policies and other explanatory notes as set out on pages 12 to 16.

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) 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 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.

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Financial Statements for the year ended 31 December 2020

Independent Auditor's Report to the Governing Board

Report on the Financial Statements

Opinion

We have audited the Financial Statement of the Energy Fund, which comprises the Statement of cash receipts and disbursements for the year ended 31 December, 2020 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 statement of Cash Receipt and Disbursement of the Fund as at 31st December, 2020 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 provision 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 operation, or has no realistic alternative but to do so.

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.

In our opinion, proper books of account have been kept by the Fund, in so far as appears from our examination of those books; and

) The Fund's books of account are in a form approved by the Auditor-General.

iii) The financial year of the Fund 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

CHARTERED ACCOUNTANTS P. O. BOX OS 51, OSU - ACCRA WEST AFRICA

Nikoi (Practicing Certificate Number ICAG/P/1040)

EDDIE NIKOI ACCOUNTING CONSULTANCY: (ICAG/F/2021/110) P. O. BOX OS 51 **OSU-ACCRA**

Financial Statements for the year ended 31 December 2020

Statement of Cash Receipts and Disbursements (All amounts are stated in Ghana cedi unless otherwise stated)

| Cash Receipts for the year | Note | 2020 | 2019 |
|--|---------------|-------------|------------|
| Receipts | 4 | 30,455,145 | 42,634,387 |
| Other income | 5 | 128,248 | 78,723 |
| Total Cash Receipts | | 30,583,393 | 42,713,110 |
| Disbursements in the year | | | |
| Promotion of energy efficiency and productive use of electricity | | | |
| and natural gas | 6 | 2,647,600 | 6,622,577 |
| Human resource development in the energy sector | 7 | 9,690,900 | 7,792,624 |
| Promotion of projects for the development of and utilisation of Renewable Energy Resources including | | | |
| solar energy | 8 | 463,500 | 1,628,000 |
| Other relevant expenditure | 9 | 19,478,000 | 23,165,957 |
| Total disbursements for the year | | 32,280,000 | 39,209,158 |
| (Deficit)/Surplus of cash receipts over | disbursements | (1,696,607) | 3,503,952 |
| Cash balance at the beginning of the year | r | 3,722,214 | 218,262 |
| Cash balance at the end of the year | 10 | 2,025,607 | 3,722,214 |

The financial statements of the Energy Fund have been approved by the Governing Board and Signed on their behalf by: 4.0 A Dered ~

| Name of Chairman PROFGEORGE PANYINH | Name of Executive Secr | OSCAL | AMONTO-NOI LOIG |
|-------------------------------------|------------------------|-------|-----------------|
| Si-ature Dlagon | Signature: | Ą | M2 |
| Data: 124/01/2022 | Date: 14 of | 50221 | 4 |
| Date: | Date | | |

The accompanying notes on pages 12 to 16 form an integral part of these financial statements.

Financial Statements for the year ended 31 December 2020

NOTES TO THE FINANCIAL STATEMENTS (All amounts are stated in Ghana cedi unless otherwisc 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 petrolcum 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

Objectives of the Fund

The objects of the Fund (section 42 of the Energy Commission Act, 1997 Act 541) (as amended) included 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.

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

Financial Statements for the year ended 31 December 2020

NOTES TO THE FINANCIAL STATEMENTS (All amounts are stated in Ghana cedi unless otherwise stated)

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, 2020 have been prepared in accordance with 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 presented in this statement of cash receipt and disbursement.

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 Receipt 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 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

Financial Statements for the year ended 31 December 2020

iv. Other various sources of receipts such as application fees, Annual Renewable Energy Fair exhibition fees, etc.

NOTES TO THE FINANCIAL STATEMENTS (All amounts are stated in Ghana cedi unless otherwise stated)

3.3 Disbursements

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

| 4. Receipts | 2020 | 2019 |
|--|------------|------------|
| | GHC | GHØ |
| Petroleum Levy | 19,523,514 | 19,629,908 |
| Bulk Customers fees | 1,036,444 | 3,591,065 |
| Annual operating fees | 8,393,622 | 12,491,926 |
| Electricity Demand Management Fund | - | 5,290,992 |
| Enforcement fees | 125,000 | 63,900 |
| Permit (Siting & construction) | 266,046 | 283,000 |
| Wind License Fees | - | 5,200 |
| License fees | 825,597 | 773,972 |
| Application fees | 284,922 | 504,424 |
| | | |
| | 30,455,145 | 42,634,387 |
| | | |
| 5. Other Income | | |
| Exchange Gain | 157 | 3,622 |
| Sundry Income | 128.091 | 75,101 |
| | | |
| | 128,248 | 78,723 |
| 6 Promotion of Energy Efficiency and | | |
| Productive uses of Electricity | | |
| Energy efficiency, conversation and climate change | 471,405 | 292,743 |
| Inspections | 624,716 | 858,154 |
| Strategic planning and policy development | 489,035 | 747,433 |
| Social and Environmental impact assessment | 15.800 | 108,320 |
| Technical Regulation | 491.815 | 1.850,400 |
| Renewable Energy Sector Development | 554.829 | 2.765.527 |
| rene mane morely bench bereichnone | | |
| | 2,647,600 | 6,622,577 |
| | | |

Financial Statements for the year ended 31 December 2020

NOTES TO THE FINANCIAL STATEMENTS (All amounts are stated in Ghana cedi unless otherwise stated)

| 7. Human Resource development | 2020 | 2019 |
|--|------------|------------|
| in the energy sector | GHØ | GHC |
| Human Resource development | 2,942,207 | 2,920,789 |
| General and admin Expenses | 6,748,693 | 4,871,835 |
| | 9.690.900 | 7,792,624 |
| | | |
| 8. Promotion of porjects for the development of and utilisation of Renewable Energy Resources including solar energy | | |
| Promotion of solar projects and others | 463,500 | 1,628,000 |
| | 463,500 | 1,628,000 |
| | | |
| 9. Other relevant expenditure | | |
| International cooperation | 79,733 | 3,230,500 |
| Procurement | 3,384,197 | 1,170,000 |
| Staff compensation | 15,379,786 | 15,201,088 |
| Administrative Support | 634,284 | 3,560,762 |
| Bank charge | | 3,607 |
| | | 00 1/2 020 |
| | 19,478,000 | 23,165,957 |
| 10. Cash and Cash Equivalent | | |
| Bank of Ghana | 1,965,577 | 3,719,618 |
| Ecobank Ghana Limited (Forex) | 60,030 | 2,596 |
| | 2 025 (05 | 2 722 214 |
| | 2,025,607 | 3,/22,214 |
| 11. Trade Receivables | | |
| Annual operating license fees | 38,122,052 | 25,477,486 |
| Bulk customer license fees | 2,109,312 | 840,795 |
| Annual petroleum levy | 7,854,534 | 6,966,119 |
| | 48,085,898 | 33,284,400 |
| | | |

Financial Statements for the year ended 31 December 2020

NOTES TO THE FINANCIAL STATEMENTS (All amounts are stated in Ghana cedi unless otherwise stated)

12. Contingent liabilities and Capital commitments

There were no contingent assets, contingent liabilities or capital commitments as at 31 December, 2020

13. 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.

14. 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, 2020 and the comparative information presented in these financial statements for the year ended 31 December, 2020.
