



ANNUAL REPORT

AND AUDITED
**FINANCIAL
STATEMENTS**
FOR 2016 



ANNUAL **REPORT**

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Audited Financial
Statements For 2016*



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Audited Financial Statements for the Year ended
31 December, 2016

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***CHAIRMAN'S
REMARKS***



▶ Dr. Kwame Ampofo
CHAIRMAN

The power sector in 2016 recovered from a host of challenges, including but not limited to inadequate availability of power supply infrastructure, over reliance on hydro for power supply, inadequate gas supply and high cost of fuel for electricity generation.

The Commission in the year 2016 mapped out strategies to maintain the relatively stable electricity supply in the country after saying resolving the issue of *dumsor*. The Commission rolled out a couple of projects in an attempt to maintain stable power in the country.

The Rooftop Solar (RSP) Program was launched as an intervention to reduce demand on the grid. The program which is still ongoing is targeted to bring a load relief of up to 200MW from solar. The program seeks to introduce self-generation especially from renewable energy sources in the country. The Commission therefore gave incentives of up to 500Wp solar panels to interested individuals who already had the Balance of System (BOS) components installed. A total of 58 applications were approved for installation under the RSP.

One (1) Operational License and two (2) Provisional Licenses were granted to Independent Power Producers (IPPs) to

participate in the electricity supply business in the country. Three (3) natural gas wholesale supply licenses were also issued to companies for the supply of reliable natural gas in the country.

The Commission also graduated a total of 1,691 Certified Electrical Wiring Professionals (CEWPs) in 2016 to join the association of over 4000 already certified professionals in the country to undertake safe wiring in the country. Two graduation ceremonies were organized throughout the country to induct newly qualified professionals into the stream of certified professionals in the country.

In order to keep players in the Wholesale Electricity and Natural Gas supply industries updated, the Commission in 2016 came out with the monthly bulletin of the Electricity Market Watch. The Market Watch gives Monthly updates of the electricity and natural gas supply situation in the country. Projections on the availability of power plants for the preceding month are published in this Bulletin to keep key players in the industry up date with supply trends.



1.0 THE COMMISSION

1.1 INTRODUCTION

The Energy Commission Act, 1997 (Act 541) mandates the Commission to regulate, manage and coordinate the development and utilization of energy resources in Ghana. It also provides for the granting of licenses for the transmission, wholesale supply, distribution and sale of electricity and natural gas. With the coming into force of the Renewable Energy Act, 2011 (Act 823), the Energy Commission received the extended responsibility of harnessing the available renewable energy resources in the country and promoting the deployment of technologies to enhance further integration of RE into the national energy mix. The EC Act was amended in December 2016 by the Energy Commission (Amendment) Act, 2016 (Act 993) to extend further the responsibilities of the EC to include the promotion of local content and local participation in the energy supply industry.

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.

In 2016 the composition of the Commission was as follows:

1. Dr. Kwame Ampofo – Chairman
2. Hon. Kwabena Fosu – Member
3. Dr. Isaac Frempong Mensa-Bonsu – Member
4. Dr. Rudith King – Member
5. Mr. Innocent Akwayena – Member
6. Mr. Stephen Duodu – Member
7. Dr. Alfred Kwabena Ofori Ahenkorah
– Executive Secretary (on secondment to the Ministry of Power)
8. Mr. Michael Opam – Ag. Executive Secretary

1.3 OBJECT AND FUNCTIONS

The Commission is required by law to regulate, manage the utilization of energy resources in Ghana, and to provide the legal, regulatory and supervisory framework for all energy service providers in the country, specifically by the granting of licenses for the transmission, wholesale, supply, distribution and sale of

electricity and natural gas and of renewable energy technology and services; promotion of local content and local participation in the electricity supply industry in Ghana.

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

- (a) To recommend national policies for the development and utilization of indigenous energy resources;
- (b) To advise the Minister on national policies for the efficient, economical, and safe supply of electricity, natural gas, and petroleum products having due regard to the national economy;
- (c) To prepare, review and update periodically indicative national plans to ensure that all reasonable demands for energy are met;
- (d) To secure a comprehensive data base for national decision making on the extent of development and utilization of energy resources available to the nation;
- (e) To receive and assess applications, and grant licenses under Act 541 to public utilities for the transmission, wholesale supply, 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 transmission, wholesale supply, distribution and sale of electricity and natural gas;
- (g) To promote and ensure uniform rules of practice for the transmission, wholesale supply, distribution and sale of electricity and natural gas;

- (h) To pursue and ensure strict compliance with Act 541 and regulations made under it; and
- (i) To perform any other function assigned to it under the Act or any other enactment.
- (j) 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 resources
 - c. recommend and advice relevant stakeholders on the educational curriculum on efficient use of renewable energy sources and evolve programmes for its mainstreaming on the educational institutions
 - d. recommend for exemptions from customs, levies and other duties, equipment and machinery necessary for the development, production and utilization of renewable energy resources;
 - e. in consultation with the Public Utilities Regulatory Commission recommend financial incentives necessary for the development, production and utilization of renewable energy resources;
 - f. promote the local manufacture of components to facilitate the rapid growth of renewable energy resource;
 - g. Promote plans for training and supporting local experts in the field of renewable energy
 - h. promote the benefits of renewable energy to facilitate its utilization
 - i. in consultation with relevant stakeholders set targets for the development and utilization of renewable energy sources; and
 - j. implement the provisions of the Act.

- (k) Section 1 of the Energy Commission (Amendment) Act, 2016 (Act 993), empowers 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.

1.4 STRUCTURE

Following the enactment of the Renewable Energy Act, 2011 (Act 823), the activities of the Commission were restructured under four (4) Directorates as follows:-

1.4.1 Technical Regulation Directorate

This is made up of the following Divisions :

- (a) Technical Regulation Division;
- (b) Inspectorate and Enforcement Division;

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 responsible specifically 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.

The Inspectorate and Enforcement Division undertakes inspection and monitoring of compliance with licensing

terms and conditions, regulations, rules and codes of practice by service providers in the power, natural gas and renewable energy sectors.

In December 2016, the Inspectorate was transformed into a full Directorate to enable it concentrate on inspections and enforcement.

1.4.2 Renewable Energy and Energy Efficiency Promotion Directorate

The Renewable Energy and Energy Efficiency Promotion Directorate comprises the following:

- (a) Office of Renewable Energy Promotion
- (b) Office of Energy Efficiency Promotion

The two Offices were strengthened and upgraded to Directorate status at the end of the year.

1.4.3 Planning, Policy and Social, Environmental Impact and Technology Assessment Directorate

This Directorate is made up of the following Divisions:

- (a) Strategic Planning and Policy Division (SPPD); and
- (b) Social, Environmental Impact and Technology Assessment Division

The two Divisions were upgraded to Directorate status at the end of the year.

The overarching responsibility of the Strategic Planning and Policy Division (SPPD) is to prepare indicative plans and recommend policies to ensure that all demands for energy are met in an efficient and sustainable manner to

ensure steady socio-economic growth. The SPPD is required per the provisions of Act 541 to advise the Energy Commission's Board and Minister for Energy on national policies for the development and utilization of indigenous energy resources; to review energy policies and prepare Energy Policy Briefs; prepare Annual and Medium-term Energy Outlooks for Ghana; prepare Annual National Energy Statistics; and manage the National Energy Data Processing and Information Centre (NEDPIC) at the Commission.

The Social, Environmental Impact and Technology Assessment (SEITA) Division is also responsible for the following: (i) conducting environmental impact assessment of all national energy plans, programmes and projects; (ii) preparing and monitoring guidelines to ensure that environmental and social issues are incorporated into the development and implementation of energy projects; (iii) conducting and reporting on the assessment of energy technologies and making recommendations regarding their use in Ghana; and (iv) preparing environmental and technology policy review papers for the Commission.

1.4.4 Finance, Human Resource and Administration Directorate

This is made up of the following:

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

The Finance, Human Resource and Administration Directorate is responsible for ensuring that the Commission maintains the needed financial and human resource capacity required to effectively and efficiently plan and

regulate the energy sector.

The specific tasks of this Office include the following:

- (i) develop and implement systems and procedures for the efficient and effective delivery of general administrative services of the Commission;
- (ii) coordinate the preparation of annual budgets of the Commission;
- (iii) develop a human resource plan to provide the requisite skill levels to meet the Energy Commission's mission and objectives;
- (iv) coordinate the procurement of contracted goods and general services for the Commission;
- (v) develop and implement staff performance appraisal and incentive systems; and
- (vi) 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.

1.4.5 Other Units

The Commission has two special units, which are

(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 to advise Members of the Board on all legal matters;
- (iii) represent the Commission on all legal matters;

- (iv) maintain an accurate Register of licenses; and
- (v) follow up on inspection reports and where necessary take appropriate legal action against defaulting service providers.

(b) Internal Audit Unit

The Internal Audit Unit reviews governance, assesses risks and controls of all activities (operations, administration and finance) necessary to achieve the object and functions of the Commission.

1.4.6 Technical Committee

In accordance with section 29 of the Energy Commission Act, 1997 (Act 541) an Electricity and Natural Gas Technical Committee has been established at the Commission. The Committee is to oversee the development, implementation and monitoring of rules of practice for electricity and natural gas public utilities to ensure compliance.

1.5 ORGANOGRAM OF THE ENERGY COMMISSION

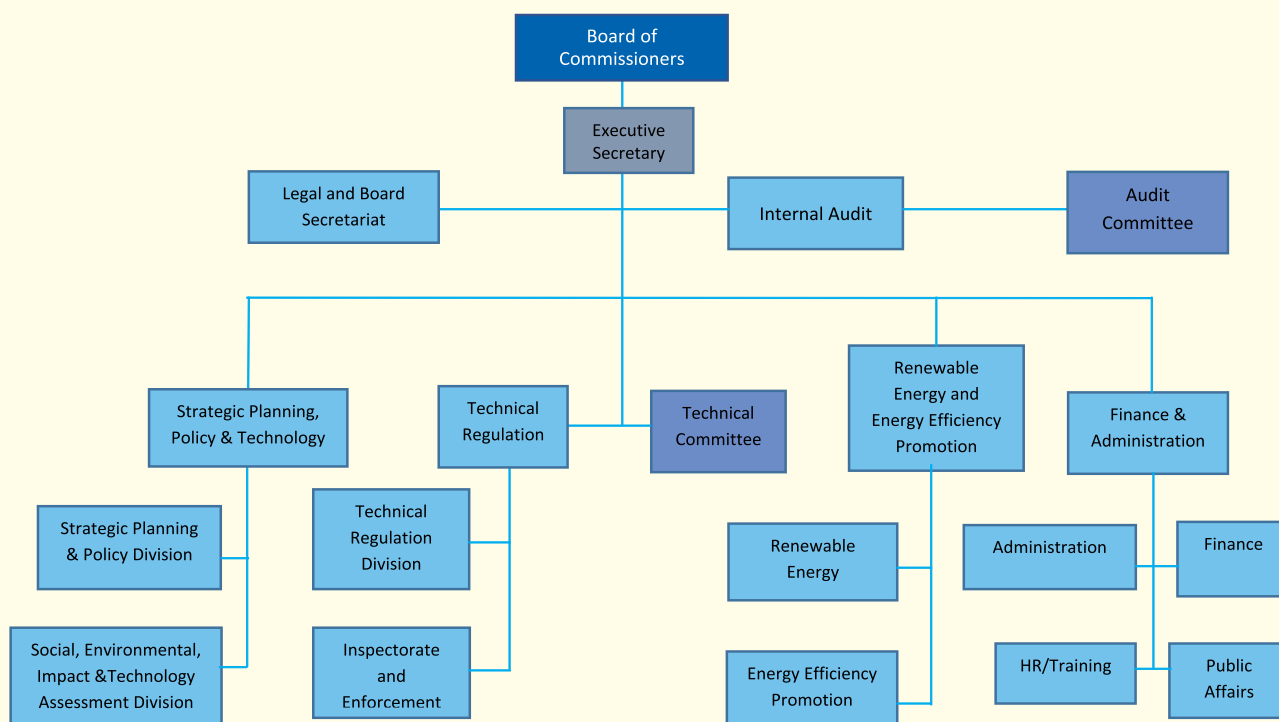


Figure 1: Organogram of the Energy Commission

1.6 OUR MISSION

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

1.7 OUR VISION

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

2.0 TECHNICAL REGULATION

2.1 ELECTRICITY SUPPLY INDUSTRY

2.1.1 Implementation of the provisions of the Electrical Wiring Regulations, 2011 (LI 2008)

Since the Electrical Wiring Regulations (EWR) (LI 2008) was passed into law by the Parliament of Ghana in 2011, Guidelines for the certification of electricians have been developed, published and launched. A curriculum for the certification examination has been published in collaboration with the Technical/Vocational Education Directorate of the Ghana Education Service.

The Commission continued in 2016, to collaborate with the agencies involved in the process of coordinating activities towards the certification of the fifth and sixth batches of Electrical Wiring Practitioners (EWPs) under the approved scheme. During the period under review, the Commission accomplished the following:

1. Certified 1,691 EWPs;
2. Certified 23 EWIs;
3. Successfully negotiated with three (3) equipment dealers for the supply of testing instruments to CEWPs nationwide;

4. Designed and launched the Certified Electrician Android Mobile Application for EWPs;
5. Introduced Forms A and B to become a requirement for new service connections;
6. Carried out nationwide training on inspection and testing;
7. Successfully carried out monitoring exercises in 22 districts of the Northern Electricity Distribution Company (NEDCo) and Electricity Company of Ghana (ECG) to ensure compliance with the requirements of LI 2008;
8. Conducted graduation ceremonies to award certificates to successful candidates in the electrical wiring examinations held in Accra, Kumasi and Tamale. Working logistics were provided for all successful candidates and their names published on the Commission's website;
9. A Public Notice for the inspection of all Commercial facilities with electrical installations that are Ten (10) years or more to determine the electrical integrity and safety was published in the dailies; and
10. Undertook a nationwide sensitization tour to educate the general public and prospective EWPs on the certification guidelines.

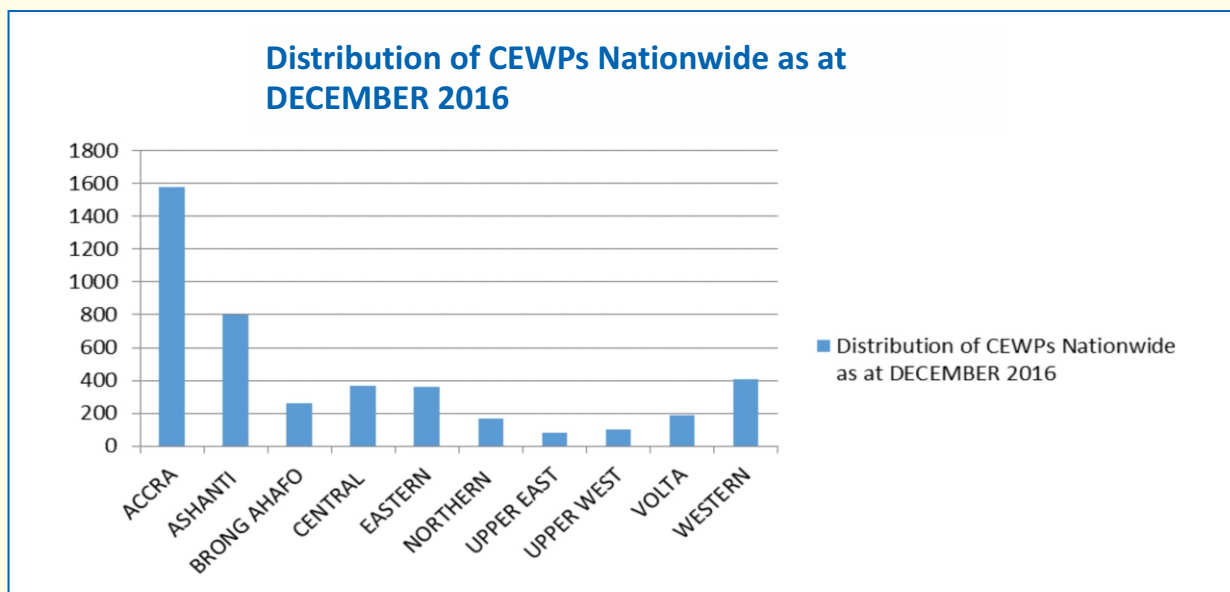


Figure 2: Regional distribution of Electrical Wiring Professionals and Inspectors in the country

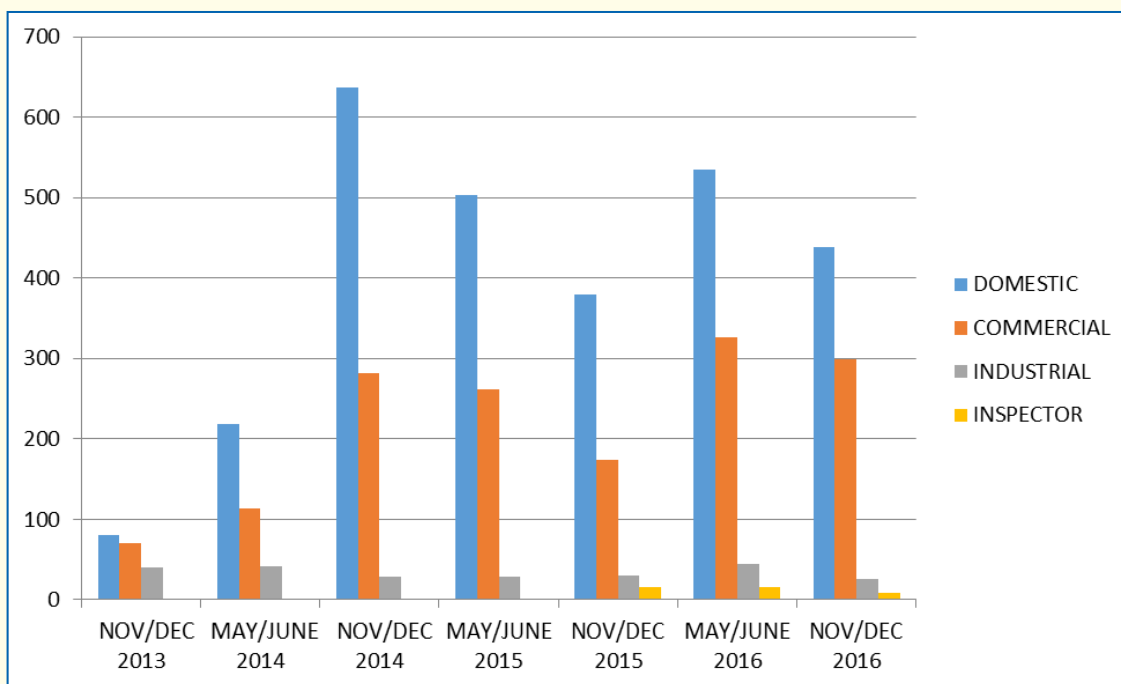


Figure 3: Distribution of CEWPs by categories

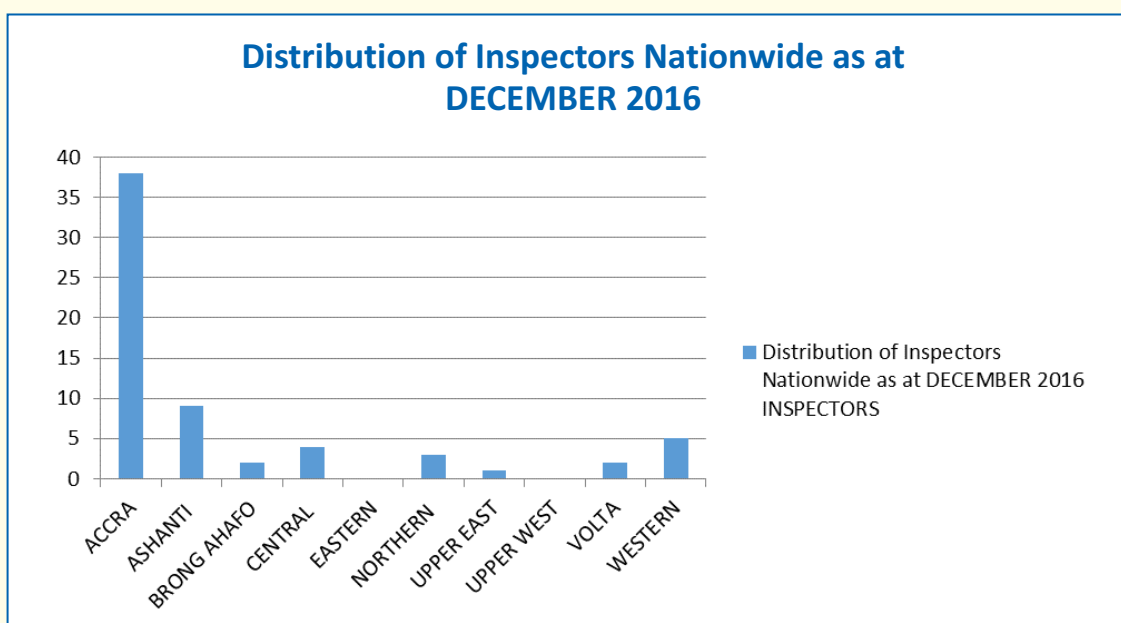


Figure 4: Distribution of CEWIs Nationwide

2.2 INSPECTION AND MONITORING

2.2.1 Enforcement of Energy Efficiency Regulations

Pursuant to the enforcement of the requirements of the Energy Efficiency (Prohibition of Manufacture, Sale or Importation of Incandescent Filament Lamp, used Refrigerator, used Refrigerator-Freezer, used Freezer and used Air-Conditioner) Regulations,

2008 (LI 1932), officials of the Commission stationed at the Tema Port inspected about 1,964 containers containing household refrigerating appliances. Out of this number, 244 containers were found to contain non-compliant goods under various aspects of the Regulations. Fifteen (15) containers of substandard refrigerating appliances were directed to be re-exported out of the country. The total number of used refrigerating appliances seized by the

Commission at the end of 2016 stood at 7,078, while 568 used air-conditioners imported into the country through the Takoradi and Tema Ports were also confiscated. All seized appliances were sent to the disposal site at Afienya for proper disposal.

Verification of information on labels and test reports provided by importers on their appliances is undertaken at the Refrigerating Testing Laboratory at the Ghana Standards Authority (GSA). In the year under review, a total of 25 importers were directed to send 32 brands of refrigerating appliances consisting of 59 models to the test facility for testing. 19 models of these appliances were found to be below standards and 30 models mislabelled. The appropriate enforcement actions were taken on all these appliances.

The Commission conducted market surveillance in about 123 sales outlets of household refrigerating appliances and air-conditioners to ensure compliance with Regulations. The level of compliance of refrigerating appliance with the regulations with regard to technical reports submission and labelling was about 95%. The necessary enforcement actions were taken against all those found to be non-compliant.

Six (6) importers were directed to recall 10 models of household refrigerating appliances from the market after they were found to be noncompliant.

In the year under review, in line with the requirements of importers/suppliers to submit technical documents on the appliances prior to importation, reports on about 546 models of refrigerating appliances were assessed and the appropriate ratings provided. The enforcement actions on imported air-conditioners are the same as that of refrigerating appliances with detention in the EC warehouse of non-compliant

air-conditioners. 326 containers of air-conditioners were inspected at the Tema Port of which 66 containers were found to contain non-compliant appliances. The required enforcement actions were taken on them. Two importers were directed to re-export 4 (four) models of substandard air-conditioners out of the country.

The Commission envisages expanding its inspection and enforcement functions to the Takoradi Port with the acquisition of office accommodation in the Western Region in 2017.

2.2.2 Enforcement of Statutory Requirements and Licensing Conditions in the Electricity Supply Industry

Various sites of prospective players in the electricity and Natural Gas industries were visited to ascertain their suitability for the construction of power plants by the Siting Committee. Inspections were also carried out on Genser Tarkwa and Genser Damang construction sites to examine the state of construction works prior to the issuance of operating Licences. Inspections were carried out at the GPP, and some Bulk Customers of Natural Gas sector to ensure compliance with the codes of practice in the Electricity and Natural Gas supply industries. Site inspection reports with some recommendations were submitted.

In response to a directive from the Ministry of Power, the Commission set up a Task Force to check electricity billing inaccuracies. The checks were conducted together with officials of the Electricity Company of Ghana (ECG) in seven districts under the Accra East, Accra West and Tema operational Regions of the Company. The checks covered both residential and SLT customer meters. The checks revealed that 85% of the meters tested were operating within the accepted accuracy limits for their various accuracy classes. The remaining 15% were either faulty or outside the accepted accuracy limits.



Figure 5: Briefing on a site inspection

2.2.3 Inspection and Enforcement of Regulations in the Natural Gas Industry

Ensured compliance of the operation of the 110km Gas Transmission Pipeline from Atuabo to Takoradi with the Natural Gas Transmission License and Natural Gas Pipeline Safety (Construction, Operation and Maintenance) Regulations, L.I 2189.

The Ghana Gas Company began the construction of the 70km, 20-inch diameter Natural Gas Transmission Pipeline from Essiama to Prestea in 2015. The Commission had earlier conducted an inspection of repaired/replaced pipe segments during the construction of the Pipeline to ensure their acceptability. The Commission undertook an inspection to witness the hydrostatic testing of the pipeline to confirm the integrity of welding operations and its compliance with the requirements under the Natural Gas Pipeline Safety (Construction, Operation and Maintenance), Regulations, 2012 (L.I. 2189).

The Commission also conducted an inspection of the operations and maintenance activities of Ghana Gas Company to ascertain their compliance with the requirements of the Natural Gas Transmission License, Natural Gas Pipeline Safety (Construction, Operation and Maintenance) Regulations, L.I 2189 and licensing conditions. The inspections largely covered operations and maintenance manuals and procedures as well as issues that had to do with corrosion control.

2.2.4 Enforcement of Regulations in the Renewable Energy Industry.

The Commission inspected the offices of fifty-eight (58) solar PV companies that applied for Installation and Maintenance Licenses to determine the nature and services being offered by these companies.

The Commission inspected the production facilities of three (3) companies prior to the grant of Charcoal Production (for Export) License and Briquette Production (for Export) Licences to ensure compliance with the requirements of the

Licence Manual for Renewable Energy Service Providers. These inspections were carried out in order to verify the sources and quantities of feedstock used for the production of charcoal.

The Commission also carried out compliance monitoring exercises at six (6) charcoal production facilities to ensure that charcoal meant for export were produced at these facilities using the approved feedstock and production technologies.

In connection with a case the Energy Commission pursued against two charcoal exporting companies regarding the illegal export of charcoal, the consignment of 2 x 40ft containers of seized charcoal was in 2016 auctioned to the general public.

2.3 RENEWABLE ENERGY PROMOTION

2.3.1 National Solar Rooftop Programme

The Ministry of Power through the Energy Commission began the implementation of a Capital Subsidy Scheme on 8th February, 2016 to facilitate the installation of 200,000 rooftop solar PV systems in residential (homes) and commercial facilities under the National Rooftop Solar Photovoltaic (PV) Programme. The primary objective of the Programme is to provide 200MW peak load relief on the national grid through solar PV technology in the medium term.

Under the Programme, a capital subsidy is given to beneficiaries in the form of FREE solar panels up to a maximum capacity of 500Watts peak, after the prospective beneficiary has satisfied the following conditions:

1. Changed all lamps in his/her facility to LED lamps; and
2. Purchased and installed the requisite Balance of System (BoS) components such as inverter, batteries, charge controllers, change over, etc. from an accredited solar vendor, whose products meet the minimum Technical Standards set by Ghana Standards Authority (GSA).

At the end of the year 2016, the Commission had received 2,064 applications from interested residential Applicants. Five hundred and seventy-two (572) Applicants received approvals to install a maximum of 500Wp solar panels each, out of which 355 installations have been completed. Inspection of their facilities was conducted prior to the approvals. Eighty (80) licensed solar vendors signed Agreements with the Energy Commission to supply and install the rooftop solar PV systems under the Programme.

UMB and UniBank launched solar loan facilities to provide loan facilities to interested beneficiaries of the programme to procure BoS components.

2.3.2 Implementation of Net Metering Scheme

The Public Utilities Regulatory Commission (PURC) gazetted the Net Metering Scheme in September, 2016. The Scheme is based on the Net Metering Sub-Code developed by the Energy Commission in January, 2015. Net metering is a billing-related scheme designed to encourage electricity customers to supplement their purchase of electricity with grid-connected renewable energy self-generation. The approved net metering rate consists of energy exchange measured in kilowatt-hour (kWh) between the customer-generator and the distribution utility. The implementing agency for the Net Metering Scheme is the Electricity Company of Ghana (ECG). The Company installed a total of 35 net meters in 2016.

2.3.4 2nd Annual Renewable Energy Fair

In fulfillment of the provisions of the Renewable Energy Act 2011, (Act 832), the Commission in February, 2015 launched the First Ghana Renewable Energy Fair (Conference and Exhibition). The objective of the Fair is to provide a platform for renewable energy industry practitioners to deliberate on strategies aimed at promoting the sustainable development of energy from renewable sources in Ghana.

Following the success of the 1st Ghana Renewable Energy Fair, the 2nd Ghana Renewable Energy was organized from 9th – 11th August, 2016 at the Accra International Conference Centre (AICC). The 2nd RE Fair organised by the Energy Commission in partnership with the Ministry of Power focused on Renewable Energy and Energy Efficiency. Over 2,000 visitors attended the Fair. The Hon. Deputy Minister for Finance, Mrs. Mona Quartey, led dignitaries, including the Attorney-General Mrs. Marietta Brew Appiah-Oppong to cut the ribbon to officially open the Fair. Also in attendance was the Hon. Dr. Bernice Adiku Heloo, Deputy Minister, Ministry of Environment, Science and Technology.

The Conference consisted of 31 technical sessions which covered the following thematic areas:

1. renewable energy technologies;
2. productive uses of renewable energy;
3. energy efficiency solutions;
4. innovations in renewable energy and energy efficiency; and
5. improved cookstoves and alternative fuels.

Experts who spoke to these subjects included Dr. Fred McBagonluri, Dean of Engineering and Executive Director of the Ghana Climate Innovation Centre, Ashesi University, Ghana; Dr. Alfred Ofori Ahenkorah, Executive Secretary, Ghana Energy Commission; Mr. Wisdom Ahiataku-Togobo, Deputy Director, Renewables, Ministry of Energy, Ghana; Mr. Samuel Adu Somuah, Deputy Director, Agricultural Engineering Services Directorate, Ministry of Food and Agriculture, Ghana; and Mr. Venan Sondo, Curator, Sustainable Business Forum, Ghana.

A tour to a renewable energy mini-grid installation at Peditorkope, an island community on the Volta River was organized for interested participants on the third day of the Fair. Twenty-two (22) people embarked on the tour.



Figure 6: Scenes from the 2nd RE Fair - From Top left Mrs. Marietta Brew Appiah-Oppong and Mrs. Mona Quartey, cutting the tape to open the Fair; Down right, Dr. Kwame Ampofo, Chairman, EC and Hon. Dr. Bernice Heloo, Deputy Minister of MEST touring the Stands



Figure 7: Scenes from the 2nd RE Fair – Top left, dignitaries touring the Exhibition Stands; Top right, student of Ashesi University making a Presentation at the Technical Session; Down left, Team that toured the mini-grid installation at Peditorkope in the Volta Region; Down right, Members of the RE Fair Organising Committee, Mr. Julius Nkansah-Nyarko, Fair Co-ordinator, Ms. Linda Mensah and Dr. Nii Darko Asante

2.3.7 Implementation of Sustainable Energy for All (SE4ALL) Initiative

The first SE4ALL Inter-Ministerial Steering Committee (IMSC) meeting was held at the Ministry of Energy during which the Terms of Reference (TOR) for the committee was reviewed and adopted by the committee members.

The SE4ALL Secretariat in collaboration with staff of the Renewable and Alternative Energy Directorate of the Ministry of Energy visited selected bioenergy initiatives (improved cookstoves and fuels companies) in the Ashanti, Brong Ahafo, Eastern, and Greater Accra Regions to assess their operations and challenges. The Team also visited the German Development Cooperation's Energizing Development Cookstove and Irrigation Project to evaluate the impact of the intervention. Data was collected on the number of improved cookstoves produced, imported, and distributed in Ghana in 2016 and a report prepared accordingly.

Two workshops were organized in Accra and Koforidua to raise awareness on Productive Uses of Energy (PUE) and SE4ALL priority intervention areas. The Workshops were used to solicit for information on existing PUE interventions. Data gathered was used to develop a draft PUE catalogue.

The Programme contributed additional questions to the Ghana Statistical Service questionnaire for the Ghana Living Standards Survey Round 7 to measure the actual adoption of improved cookstoves in Ghana.

Thirteen (13) project proposals and concept notes were drafted and submitted to funding institutions including the Green Climate Fund, and New Energy Partnership for Africa's Development (NEPAD). The proposals cover improved cookstoves for agro-processing and solar PV powered irrigation schemes. SE4ALL Quarterly Newsletters were also prepared and disseminated to relevant stakeholders.

The SE4ALL Coordinator and Projects Advisor participated in a SE4ALL Africa Meeting in Abidjan, Cote d'Ivoire. During that meeting, Ghana's SEforALL Monitoring Evaluation and Reporting Framework, developed with technical assistance from the SE4ALL Africa Hub at the African Development Bank in Abidjan, was shared with participants from other countries. The Coordinator also participated in an ECOWAS Workshop on the Implementation of Sustainable Energy Action Plans and Development of Investment Prospectus for SE4ALL Projects, organized by the ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE) in Dakar, Senegal.

The SE4ALL Secretariat, with support from the Ministry of Lands and Natural Resources, collaborated with the Nkoranza District Assembly and the District Forestry Commission to organise a public awareness workshop on improved charcoal production technologies and improved biomass cookstoves, features and benefits. The workshop was attended by a representative of the Ghana Alliance for Clean Cookstoves and Fuels (GHACCO), selected charcoal producers and marketers, caterers and matrons, community representatives and the district assembly staff.

2.3.8 Licensing of Renewable Energy Service Providers

2.3.8.1 Charcoal, Briquette and Pellet Licences

The Commission granted three (3) Charcoal Production for Export Licences to the following companies:

1. Hafco Charcoal Industry (EC/CPL/05-16-022)
2. Sol Plus Ghana Company Limited (EC/CPL/11-16-25)
3. Husmed Company Limited (EC/CPL/12-16-026)

One (1) Briquette Production Licence was also issued to Cook Clean Ghana Limited, Licence No. EC/BPEL/07-16-003 for briquette production for export.

2.3.8.2 Wholesale Electricity Supply Licences

Fifteen (15) Provisional Wholesale Electricity Supply Licences were granted to Independent Power Producers (IPPs) to generate a total capacity of 921 MW of electricity from renewable energy sources. The breakdown of the Provisional Licences granted, the Siting and Construction Permits issued as at 31st December 2016 according to renewable energy technologies is presented in Table 1:

LICENCES AND PERMITS ISSUED AS AT DECEMBER 2016		
	Technology	Number
Provisional Licences issued	Solar	67
	Wind	11
	Small and Medium Hydro	5
	Biomass/Waste-to-Energy	14
	Wave	1
		98
Siting Permits issued	Solar	27
	Wind	2
	Small and Medium Hydro	0
	Biomass/Waste-to-Energy	2
	Wave	1
		32
Construction Permits issued	Solar	3
	Wind	1
	Small and Medium Hydro	0
	Biomass/Waste-to-Energy	1
	Wave	1
		6

The list of the companies granted construction permits as at December, 2016 is presented below in Table 2.

Table 2: Construction Permits granted as at December 2016

No.	Name of Company	Plant Type	Capacity (MW)	Licence Number	Location of Plant
1.	BXC Company Ghana Ltd	Solar PV	20	EC/GWSL/08-13-021	Gomoa Onyadze, Central Region
2.	Savanna Solar Ltd	Solar PV	400	EC/GWSL/04-13-008	Kusawgu, near Tamale in the Northern Region,
3.	TFI Power Ltd	Solar PV	30	EC/GWSL/08-13-017	Mahe-Obom, Greater Accra Region
4.	TC's Energy	Wave	20	EC/GWSL/08-13-023	Ada Foah, Greater Accra Region
5.	Upwind Ayitepa Ltd	Wind	150	EC/GWSL/02-14-037	Ayitepa, Greater Accra Region
6.	Safi Sana (Ghana) Ltd	Waste-to-Energy	0.1	EC/GWSL/12-14-063	Ashaiman, Greater Accra Region

2.3.8.3 Importation, and Installation and Maintenance Licences

The Commission granted 15 Importation Licences for the importation of solar panels and accessories.

Fifty-eight (58) Installation and Maintenance Licences were also granted to companies to install and maintain equipment for the supply of energy from renewable sources.

A full complement of the list of companies issued with licenses is provided in Table 3 below:

Table 3: List of Installation and Maintenance Licenses granted in 2016

Solarkiosk Ghana Limited	EC/IM/R1-02-16-019
Burro Brand Ghana Limited	EC/IM/02-16-058
Dreegh Industrial Services Limited	EC/IM/02-16-059
SunPower Innovations	EC/IM/02-16-060
Solar Light Company Limited	EC/IM/02-16-061
SSA Ventures Limited	EC/IM/02-16-062
Oak Solar Systems Limited	EC/IM/02-16-063
Global Square Limited	EC/IM/02-16-064
Solar Hill Ghana Limited	EC/IM/R1-02-16-005
Summit Energy Solutions Limited	EC/IM/02-16-065
Rotan Renewable Energy Limited	EC/IM/02-16-067
Funko Lagoon Development Company Limited	EC/IM/02-16-068
IT Market Limited	EC/IM/02-16-069
Powering Africa (GH) Limited	EC/IM/04-16-066
NorthLite Solar Limited	EC/IM/R1-04-16-070
Atlas Business and Energy Systems Limited	EC/IM/04-16-071
GSA-Green Solar Africa Limited	EC/IM/04-16-072
AIS Energy Company Limited	EC/IM/04-16-073
Junk Solutions Limited	EC/IM/R1-04-16-074
Energy One Limited	EC/IM/04-16-075
State Housing Company Limited	EC/IM/05-16-078

Mascot Energy Savings High Technology (Ghana) Limited	EC/IM/R1-05-16-079
Power Prime Engineering Company Limited	EC/IM/05-16-080
Tino Solutions Limited	EC/IM/05-16-081
Sylprin Company Limited	EC/IM/05-16-082
Africano Electro Limited	EC/IM/05-16-083
Fountain Technologies Ghana Limited	EC/IM/05-16-084
Milky-Way Energy Company Limited	EC/IM/R1-05-16-007
Chesinc Global Services Technologies Limited	EC/IM/07-16-085
Leaf Energy Limited	EC/IM/07-16-086
NewSun Greentech Company Limited	EC/IM/07-16-087
Axcon Energy Limited	EC/IM/07-16-089
Japan Energy Factory	EC/IM/08-16-091
Crown Subsea Services Limited	EC/IM/08-16-092
Garphil Limited	EC/IM/08-16-093
Solar Pioneers Ghana Limited	EC/IM/09-16-094
Telereliance Communications Limited	EC/IM/09-16-095
Greenhouse Solutions Limited	EC/IM/09-16-096
Royal Shemesh Limited	EC/IM/09-16-097
Aeko Solar Enterprise	EC/IM/09-16-098
EnergyPlus Limited	EC/IM/09-16-099
Euromart Promocost Company Limited	EC/IM/09-16-100
C.G.C Ghana Limited	EC/IM/11-16-101
Sun In Limited	EC/IM/11-16-102
Reroy Energy Limited	EC/IM/11-16-103
Telenet Systems Limited	EC/IM/11-16-104
Wi Energy Limited	EC/IM/11-16-105
Saflex Engineering Co. Ltd.	EC/IM/11-16-106
Kobbecom Ghana Limited	EC/IM/11-16-107

Kezbon Power & Projects Solutions Ltd.	EC/IM/11-16-108
Ultra Sola Energy Limited	EC/IM/11-16-109
Sam-Monney Limited	EC/IM/11-16-110
Sparkx [SM] Ghana Limited	EC/IM/11-16-111
PowerLink Co. Ltd.	EC/IM/12-16-112
Mint Energy Solutions Ltd.	EC/IM/12-16-113
Enio Energy Ltd.	EC/IM/12-16-114
Giglo Solar Energy Systems Ltd.	EC/IM/12-16-115
Brighten Ghana Consult Ltd.	EC/IM/12-16-116

Table 4: List of Importation Licences granted in 2016

Dreegh Industrial Services Limited	EC/IL/02-16-020
Dutch and Company Limited	EC/IL/02-16-021
SSA Ventures Limited	EC/IL/02-16-023
IT Market Limited	EC/IL/02-16-024
Rotan Renewable Energy Limited	EC/IL/02-16-026
Burro Brand Ghana Limited	EC/IL/04-16-022
Energy One Limited 06/04/2016 05/04/2017	EC/IL/04-16-025
Funko Lagoon Development Company Limited	EC/IL/04-16-027
Sylprin Company Limited	EC/IL/05-16-028
Japan Energy Factory	EC/IL/07-16-029
Alliance Marketing Group Ltd	EC/IL/11-16-030
Surveillance Solutions Limited	EC/IL/11-16-031
Sun In Limited	EC/IL/11-16-032
C.G.C Ghana Limited	EC/IL/11-16-033
Kezbon Power & Projects Solutions Ltd.	EC/IL/11-16-034

Table 5: List of Provisional Wholesale Electricity Supply Licences granted in 2016

NAME OF COMPANY	CAPACITY	TECHNOLOGY	LICENCE NO.
Axcon Energy Ltd	20	Solar PV	EC/GWSL/04-16-085
Sunrise Power Development Limited	20	Solar PV	EC/GWSL/05-16-088
Quadran Ghana Limited	50	Solar PV	EC/GWSL/06-16-087
BTSA Buipe Solar Limited	20	Solar PV	EC/GWSL/07-16-089
Cape Coast Marina City Limited	200	Solar PV	EC/GWSL/08-16-090
Planet Core Ghana Limited	20	Solar PV	EC/GWSL/09-16-091
Armo Power & Renewable Energy Ltd.	100	Solar PV	EC/GWSL/09-16-092
SGL-Nvision Energy Limited	10	Solar PV	EC/GWSL/09-16-093
Yingli Namene West Africa Ltd.	50	Solar PV	EC/GWSL/11-16-093
UDM Power	200	Solar PV	EC/GWSL/11-16-094
Energy Green Power Ghana Ltd.	100	Solar PV	EC/GWSL/11-16-095
Simbrofo Light Ghana Ltd.	20	Solar PV	EC/GWSL/12-16-097
EnerGhana Energy Production Co. Ltd.	51	Wind	EC/GWSL/09-16-087
Heptagon Winds Farms Ltd.	70	Wind	EC/GWSL/11-16-096
Smart Energies Ghana Limited	30	Waste-to-energy	EC/GWSL/04-16-086

2.3.9 China-Ghana Renewable Energy Technology Transfer (RETT) Project

In 2014, the Danish International Development Agency (DANIDA) approved the China-Ghana Renewable Energy Technology Transfer (RETT) Project supported with funding support from UNDP-Ghana and UNDP-China.

A Project Management Unit (PMU), Coordinating structures and a Project Steering Committee were constituted for the implementation of the Project by the Energy Commission.

The aim of the project is to:

- contribute to attaining universal energy access;

- undertake off-grid community-based electrification in the country;
- increase the share of renewable energy in the country's energy mix;
- promote productive uses of energy; and
- promote the production of renewable energy technologies in the country with a strong focus on private sector development.

A Taskforce was constituted with representatives from the Ministry of Power, Energy Commission, National Development Planning Commission

(NDPC) and the Project Management Unit to develop a Renewable Energy Masterplan for Ghana. The Draft Masterplan was developed in consultation with relevant stakeholders. The Draft Renewable Masterplan will be reviewed by a broader stakeholder consultation and subsequently finalized.

As part of the project, a Memorandum of Understanding was signed by the Commission with five (5) research institutions to develop criteria and set standards for the selection of renewable energy technologies for transfer as well as to conduct pre-feasibility studies on potential sites to set up facilities for demonstrating renewable energy technologies. A series of consultative meetings and a field visit to the People's Republic of China to study potential RETs for transfer were conducted.

The Project Management Team also paid visits to several renewable energy project sites in the country. This exercise was undertaken to review the status of renewable energy projects, which have been implemented by Government, the private sector and development partners. The information gathered from the assessment of these renewable energy projects would serve as a good baseline for the development of future renewable energy projects in the country.

2.4 ENERGY EFFICIENCY PROMOTION

2.4.1 Energy Efficiency and Climate Change (EECC)

The Energy Commission Act 1997, (541) mandates the Commission to promote the efficient use of energy resources which also have implications on climate change mitigation and adaptation. In 2016, the Energy Commission continued with the promotion of energy efficiency and conservation, and collaborated with key stakeholders to address energy-related climate change mitigation and adaptation issues.

2.4.1.1 Promoting Appliance Energy Efficiency and Transformation of Refrigerating Appliance Market

The Commission with the support of the Global Environmental Facility (GEF), United Nation Development Programme (UNDP) and the Multilateral Fund (MLF) commenced a three-year project to improve the energy efficiency of refrigerators/freezers in 2010.

The project sought to transform the electrical appliance market in Ghana from a market of inefficient appliances to that of high efficiency through a combination of energy performance standards and labeling and consumer incentives.

One of the key components of the project was the Refrigerator Rebate and turn-in Scheme (RRS). Under this scheme, consumers turned-in their old and inefficient refrigerators and obtained a rebate on the new and efficient refrigerators that they purchased. The turned-in old and inefficient refrigerators were collected, scrapped and the refrigerants collected for proper disposal.

During the year under review, the following were accomplished under the Programme:

- About 10,000 inefficient old refrigerators replaced with new and efficient ones at the end of the RRS;
- Over 30,000 imported used refrigerators confiscated and dismantled;
- About 400GWh of electricity and 1.1MTCO₂ was saved through the RRS;
- The refrigerator market was transformed from an inefficient to an efficient one.
- Public education and sensitization activities on energy

efficient refrigerators were undertaken nationwide

2.4.1.2 Energy Efficiency and Conservation Campaign and Awareness Creation

Energy efficiency campaigns and awareness creation activities are effective tools that can be employed to ensure that consumers conserve and use energy efficiently. They constitute an important element to support energy conservation and energy efficiency promotion policies and programmes. Furthermore, public awareness campaigns play crucial roles in the propagation of positive behavioral changes in the area of energy use efficiency and conservation.

In view of these benefits, public awareness campaigns are being used by the Commission as one of the strategies to promote energy efficiency and conservation in Ghana. The Commission has been using documentaries, jingles, training workshops, radio interviews, posters, flyers for energy efficiency campaigns and awareness creation.

The Energy Commission, in the wake of the power supply challenges facing the country, mapped out a strategy targeted at the Ministries, Departments and Agencies (MDAs) to reduce their energy consumption. For this to be achieved, the Commission sensitized the MDAs and subsequently appointed Energy Managers in each of these institutions to lead the campaign on energy efficiency and conservation. The Commission further trained members of the Ghana Hoteliers Association on the various ways of reducing their hotel energy consumption in the areas of lighting, air conditioning, refrigeration and ironing. As a result of the above strategy, energy efficiency training and awareness creation in MDAs, MMDAs and hotels

were held nationwide. Over 300 hundred people were trained in energy efficiency and conservation.

2.4.1.3 Energy Audit and Development of Energy Efficiency Standards and Regulatory Framework for Commercial and Public Buildings

The share of commercial/public sector electricity consumption is rising due to the increasing number of high rise office buildings, hospitals, hotels and super markets. Consequently the demand for electricity for air conditioning, lighting, special purpose refrigeration and operation of office equipment has increased significantly.

To address the problem, the Energy Commission collaborated with the African Development Bank to undertake a project on the development of energy efficiency standards and regulatory framework for commercial and public buildings. The project involved energy audits in existing commercial buildings to establish their energy use baseline. The data and information obtained from the baseline study provided the necessary inputs into the development of energy efficiency standards and regulatory framework for commercial/public buildings. In addition, capacity building and stakeholder consultation workshops were organized as a prelude to the development of the framework.

A Final Report on Energy Efficient Building Code and Proposed Labelling for Efficient Buildings was developed and submitted to the Ministry of Works and Housing and the Ghana Green Building Council for further action.

3.0 POLICY, PLANNING AND IMPACT ASSESSMENT

3.1 STRATEGIC PLANNING AND POLICY FORMULATION

3.1.1. National Energy Data Processing and Information Centre (NEPIC)

In fulfillment of the requirements of section 2(d) of the Energy Commission Act, 1997, (Act 541), which is to secure a comprehensive database for national decision making, the Commission runs the National Energy Data Processing and Information Centre (NEDPIC) within its offices. NEDPIC has two components - a national energy database and a Library. The Centre hosts the Ghana Energy Access (GhEA) Database and Toolkit. The Toolkit is a web-enabled, Geospatial Information Systems (GIS)-oriented software which relies on data lodged within the GhEA Database to show data on maps on Ghana's energy resources, including renewable energy, liquefied petroleum gas (LPG) and electricity access in communities across the country. The system also possesses trend analysis and projection functionalities.

The GhEA Database and Toolkit were developed with financial support from the United Nations Development Programme (UNDP) and the Renewable Energy and Energy Efficiency Partnership (REEEP). The GhEA Database is populated with data collected by a Task Force with membership drawn from government and other institutions including the Ministry of Energy, the Ministry of Local Government and Rural Development, the National Petroleum Authority (NPA), ECG, NEDCo, the Ghana Statistical Service (GSS), the Energy Centre (KNUST, Kumasi), and the Centre for Remote Sensing and Geospatial Information Systems (CERSGIS). The Library stocks reliable energy materials from selected local and international sources.

In 2016, the energy database was updated with 2015 energy data while the Energy Commission's website was also reconstructed and re-launched. A draft Library Handbook/Manual was

completed while the Commission's 2015 Annual Report was reviewed and finalized.

3.1.2 Woodfuel Resource Assessment

In 2001, the Energy Commission with funding support from the Food and Agriculture Organization (FAO) reassessed Ghana's woodfuel base. The results of the assessment served as input for the maiden Strategic National Energy Plan (SNEP) study. A Final Report on the country's woodfuel base was completed in November 2015 with the following recommendations:

- Woodlots and plantations must be established around the country as a matter of urgency to augment the wood-fuel supply.
- Wood-fuel harvesting should not substantially diminish growth potential of harvesting sites. A portion of the biomass should always be left on the harvesting sites to serve as seed trees and/or standards for coppices.
- Quality and energy content of woodfuel should be maximized through seasoning and proper storage to reduce pressure on the resource base.
- Woodfuel harvesting should not diminish biodiversity of forest ecosystems, i.e. tree species diversity and natural stand structure should be maintained.
- Climate change mitigation should be a prime consideration in all wood-fuel harvesting operations. Harvesting therefore should not considerably reduce the carbon sinks of the harvested sites.

The Report also concluded that institutions and key stakeholders such as Forestry Commission, Forestry Research Institute of Ghana (FORIG) and Energy Commission should collaborate and share information on wood-fuel sustainability in the country.

Also as part of the woodfuel resource re-assessment, nationwide monthly charcoal weights per bag and prices were collated from 32 selected locations in the country. In addition, the Final Report on the update of charcoal prices across Ghana for 2015 was completed and uploaded on the website for public use.

3.1.3 Update of the Strategic National Energy Plan (2010-2030)

In fulfillment of the requirements of the Energy Commission Act, 1997 (Act 541), which is to prepare review and update periodically indicative national energy plans to ensure that all reasonable demands for energy are met; the Commission continued with the process of updating the Strategic National Energy Plan (2006 to 2020), which was published in 2006.

In connection with the updating process, a draft Final Report on all the SNEP II documents was completed as highlighted below:

- i) The Energy Technology Catalogue, compiled and published in 2004, was updated to include all new energy technologies, which could be introduced onto the Ghanaian market between 2010 and 2030. The catalogue contains information on characteristics of the technology (e.g. Construction time, efficiency, availability, lifetime, etc.) environment characteristics (e.g. emission levels of pollutants) and cost data (capital, operation and maintenance, and fuel costs) for 2010.
- ii) The demands for energy (by fuels and sectors) from 2010 to 2030 of the demands scenarios developed were evaluated using the Long Range Energy Alternative Planning system (LEAP model).
- iii) The First Drafts of the following reports were also completed in 2016:
 - Energy Demand Projections;
 - Electricity Supply Strategies;
 - Renewable Supply Strategies;
 - and
 - Petroleum Supply Strategies.

The 2016 Energy Outlook available on the Commission's website was updated.

3.1.4 Update of National Energy Statistics

The National Energy Statistics (2005-2015), which contains the Energy Balance and Indicators, Primary Energy Supply, Total Final Energy Use, Electricity Supply and Use, Petroleum Supply and Use and Use of Biomass and the prices of all forms of Energy used in the Economy was uploaded onto the Commission's website. In addition, the Commission published a Handbook entitled Key Ghana Energy Statistics 2016.

3.2 SOCIAL, AND ENVIRONMENTAL IMPACT AND TECHNOLOGY ASSESSMENT

3.2.1 Environmental Compliance, Monitoring and Management of VRA 2.5 MW Solar PV Wholesale Electricity Supply Project at Navrongo

Section 2(e) of the Energy Commission Act 1997, (Act 541) provides for the granting of licenses to public utilities for the generation and wholesale supply of electricity in the country. In line with that mandate, the Energy Commission as part of its environmental compliance monitoring of licensed energy facilities, carried out a compliance monitoring activity of a 2.5 MW Solar PV Power Project operated at Pungu-Telania from 18th-25th November, 2016.

The Volta River Authority (VRA) in 2011 obtained a Provisional Wholesale Electricity License to develop the 2.5MW Solar Photo Voltaic (PV) power plant on a 4.77 hectare land at Pungu-Telania, Navrongo in the Upper East Region. Following the grant of an Environmental Protection Agency Permit in May 2013, VRA began the operation of the facility, supplying wholesale power to the national grid for the first time in June 2013. As at mid-year 2016, VRA was yet to obtain a Final License for the operation

of the Plant. The Energy Commission therefore prioritised the facility for monitoring in November 2016. The goal of the exercise was to

ensure environmental compliance and operational impact management of the 2.5 MW solar facility.

Name of Agency	Regulatory Requirements and Permits	Status		Advice
		Compliant	Non-Compliant	
Energy Commission	<ul style="list-style-type: none"> Siting Clearance Permit Construction Permit Provisional License Operational License Corporate Social Responsibility between VRA and Pungu-Telania community 	✓	<ul style="list-style-type: none"> ✓ ✓ ✓ ✓ 	<p>Apply and obtain an Operating License from the Energy Commission.</p> <p>Complete Documentation of CSR.</p>
Environmental Protection Agency	<ul style="list-style-type: none"> Environmental Permit Annual Environmental Reports Fire certificate 	✓	<ul style="list-style-type: none"> ✓ ✓ 	<p>Renew the expired Environmental Permit.</p> <p>Apply for a Fire Certificate from Ghana National Fire Service.</p>
Town and Country Planning	<ul style="list-style-type: none"> Land documentation Site plan Fire buffer 		<ul style="list-style-type: none"> ✓ ✓ ✓ 	<p>Obtain the necessary land documentations.</p> <p>Request for the preparation of a Site Plan.</p> <p>Create a Fire buffer around the plant.</p>
Water Resources Commission	Underground water usage		✓	Request for permit or an exemption from Water Resources Commission

Table 6: Results of Assessment on Status of Compliance



Figure 8: EC Monitoring Team and Site Engineers inspecting the Invertor Room

The Environmental Compliance Assessment found that the 2.5 MW Solar PV Power Plant, the first of its kind in the country and operated by the VRA fell short of the essential regulatory requirements and permits. Using the criteria score in Table 6, the facility was found to be 17% compliant.

The Energy Commission accordingly advised the VRA to comply with the following:

1. Acquire land documentation of the project site;
2. Obtain siting clearance permit from the Energy Commission;
3. Obtain a construction permit from the Energy Commission;
4. Obtain an Operating License from the Energy Commission;
5. Obtain Water Use Permit from Water Resource Commission;
6. Renew the acquired 2014 Environmental Protection Agency Permit;
7. Obtain a fire certificate from the Ghana National Fire Service; and
8. Establish a documented Corporate Social Responsibility (CSR) between VRA and Pungu-Telania.

4.3 Staff Learning Forum

Consistent with the Commission's needs and its drive to adopt best practices, an opportunity has been created for collaboration among cross-functional teams to take turns to share information on their work programmes. This enables staff to benefit from the synergy of working with a diversity of experience, knowledge and competencies. These meetings,

held on the last Friday of every month, dubbed 'Happy Hour', strengthens the bond between Divisions and affords staff the opportunity to provide positive feedback necessary for effective work and to respond to questions from the public on the activities of the EC.



Figure 9: Best Worker Awardees: Dorothy, Adam and William

4.4 Recognition and Awards Program

The Commission recognizes the contribution of its staff and its annual awards for best workers and runner-ups is one way of doing this. The selection of awardees was based on the principles of merit, openness and transparency. In all, the following three employees were awarded for outstanding performance:

1. The Best Senior Worker was Dorothy Akua Yeboah Adjei, a Senior Programme Officer of the Renewable Energy Directorate;
2. Mr. Joseph Alhassan Adam, a Programme Officer, of the Technical Regulation Division was Runner Up in the senior category; and
3. Mr. William Opare a Senior Office Assistant, of the Finance Division emerged as Best Worker in the junior staff category.

4.5 National and International Awards

In 2016, the Commission received three awards for outstanding performance.

- i. Plaque of Merit Award from 1st GH Green Awards, 2016 in recognition and

appreciation of the Commission's efforts at adhering to policies and practices that promote environmental sustainability; making strides to mitigate climate change; and striving to alleviate greenhouse gases.

- ii. Recognition Award from The Engineering Training School in recognition of the Commission's dedicated and meritorious service to the Engineering Training School.
- iii. Recognition Award from the Business Executive (producers of the Business Executive Pan African Magazine with circulation in Ghana, Nigeria, Sierra Leone, Gambia and Liberia) for introducing innovative policies and applications that have enhanced safety installation in buildings through the Ghana Electrical Wiring Regulation L.I. 2008, 2011

NATIONAL AND INTERNATIONAL AWARDS



Figure 10: Plaques and citations received by the Energy Commission in 2016

Some staff also received international awards from Nigeria and Germany respectively. Dr. Mrs. Josephine Oduro-Asare was awarded the Omoworare Lucas Award for the Best Ph.D. Thesis produced in the University of Ibadan 2015/2016 session. She also received

Postgraduate School Award for the Best Ph.D. Thesis in the University during the same session. Mrs. Judith Ron Oppong-Tawiah was adjudged the best at the International School on Energy Systems (ISES 2016) Summer School in Germany.



Figure 11: Mrs. Judith Oppong-Tawiah (far left) with one of the Awards



Figure 11: Dr. Mrs. Josephine Oduro-Asare one of the Awardees

4.6 Promoting Employee Well-being

Health, safety and wellness play an important role in keeping employees motivated and performing at an optimal level. In this regard, the Commission continued to promote employee well-being by bringing gym services to its office premises for staff to exercise in order to keep fit, enhance productivity and reduce stress levels.

During the year, a free-eye screening exercise was conducted for staff and their families. In addition, a well-stocked first-aid kit and a blood

pressure monitor was procured for use by staff to improve their well-being.

4.7 PUBLIC AFFAIRS

In line with the Energy Commission's restructuring to promote aspects of its mandate under Act 541 including renewable energy technologies and energy efficiency and conservation, the Commission in 2016 continued with its strategy of awareness creation and education of its stakeholders in the public and private sectors as well as the Media.

4.7.1 Awareness Creation on the Electrical Wiring Regulations, 2011 (LI 2008)

The Commission carried out in all 10 regional capitals, public sensitization activities to create awareness among the general public on the provisions of the EWR. The objective was to facilitate and coordinate activities towards the certification of 100 Electrical Wiring Inspectors (EWIs) and the facilitation of two (2) certification examinations and interviews leading to the certification of 300 EWPs to carry out safe electrical wiring and inspections in accordance with the regulations by December 2014.

The May/June Electrical Wiring Examination for CEWPs and CEWIs, the 6th since the inception of the Electrical Wiring Programme was conducted across the country from 18th June to 27th June 2016. 581 candidates from the southern sector and 285 candidates from the northern sector gave an overall total exam pass distribution of 866 in the examination. These candidates were awarded their certificates during an award presentation ceremony held on 7th September 2016 in Accra, 13th September 2016 in Kumasi and 15th September 2016 in Tamale respectively. The Commission appealed to the media to use their stations as a platform to inform and educate the public on the benefits of the services of CEWPs/CEWIs. The Commission further developed an android mobile App platform application called Certified Electricians to assist stakeholders and the general public to identify certified electricians across the country. Key stakeholder meetings and sensitization of the general public amongst others were held.

4.7.2 Promotion of the Rooftop Solar Programme

The following sensitization activities were carried out under the Programme:

- The RSP was presented to the Ghana Insurers Association, the Ghana Electrical Contractors Association (GECA), the Sekondi-Takoradi Metropolitan Assembly (STMA), Ledzokuku Krowor Municipal Assembly (LEKMA), the Ga East

District Assembly (GEDA) and Bibiani-Awhiaso-Bekwai District Assembly (BABMA), UNDP and other UN agencies and the Ashanti Regional branch of the Ghana Institution of Engineers (GhIE), and some churches within the Accra Metropolis.

- The Commission also showcased the RSP at the 2nd Ghana Renewable Energy Fair 2016; at the WACEEE 2016; and at the Habitat Fair 2016.
- 3,000 flyers were printed and distributed to the public to create awareness on the Programme.
- To whip up interest in the RSP, a raffle was held on 20th June, 2016 to offer 200, 1000W inverters, in addition to free 500W solar panels to participants. The National Lottery Authority (NLA) supervised the raffle.
- Radio Jingles for the Programme were developed in five (5) different languages; English, Ewe, Dagbani, Ga and Twi.

4.7.3 Launch of 2nd Renewable Energy Fair

The Commission launched the 2nd Renewable Energy (RE) Fair with media coverage at Coconut Grove Hotel on 17th May 2016 with a call on the mass media to assist the Commission to educate the citizenry to increase their level of awareness and understanding of RE technologies in Ghana. It also created a social media platform on Facebook, with over 1,000 followers to drive awareness about the 2nd RE Fair.

The Commission partnered with media houses including the Business & Financial Times,

the Daily Graphic, TV3, GTV and Unique FM to disseminate information on RE and its benefits to stakeholders and the general public.

4.7.4 Promotion of Energy Efficiency and Energy Conservation

The government's initiative to conserve energy further by replacing all Compact Fluorescent Street Lamps (CFLs) with Light Emitting Diode (LED) received considerable exposure during the period under review. The Programme was commenced in Accra and some selected regions. LEDs were promoted as cost effective alternatives which can save the country millions of dollars.

In view of the critical role played by the media in the implementation of the Refrigerator Energy

Efficient Project, the Commission further organised a media event to share the success story of the Project at the Best Western Premier Hotel, Accra on Tuesday, 27th September, 2016.

4.7.5 Launch of the 1st Edition of Key Energy Data for Ghana

The Commission launched the first ever Key Energy Data for Ghana on 20th June, 2016. The Handbook was an addition to the publications that the Commission had produced for official and public use in fulfillment of its mandate. Data and statistics are essential in the socio-economic development planning of a nation since they are used to draw general conclusions on the progress or retrogression of a society or the well-being of a nation's population.



FINANCIAL STATEMENTS

FOR THE YEAR ENDED 31ST DECEMBER 2016

STATE ENTERPRISES AUDIT CORPORATION

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ENERGY COMMISSION

Accounts for the Year Ended 31st December, 2015

Corporate information for the year ended 31 December 2016

Governing Board

Dr. Kwame Ampofo	Chairman
Dr. Alfred Kwabena Oforu Ahenkorah	Member
Dr. Rudith King	Member
Mr. Innocent Akwayena	Member
Dr. Isaac Frimpong Mensa-Bonsu	Member
Mr. Stephen Duodu	Member
Hon Kobina Fosu	Member
Mr. Michael Opam	Member

Board Secretary

Ms. Cecilia Agbenyega

Principal place of business

Ghana Airways Avenue
Behind Alliance Francais
Airport Residential Area

Registered office

PMB Ministries Post Office
Accra

Independent Auditor

James Quagraine Associates
(Chartered Accountants)
P.O.Box GP 3947
Accra

Bankers

Bank of Ghana
Ghana Commercial Bank Limited
Ecobank Ghana Limited

ENERGY COMMISSION

Financial summary and highlights for the year ended 31 December, 2016

(All amounts are in Ghana cedi unless otherwise stated)

Five year financial summary	2016	2015	2014	2013	2012
Income	40,193,925	18,039,152	13,413,441	10,101,460	8,874,480
Expenditure	31,669,302	15,709,693	12,297,692	8,590,548	9,082,809
Excess of income over expenditure	8,524,623	2,329,459	1,115,749	1,510,912	(208,329)
Total assets	29,442,671	19,979,188	12,455,620	6,487,271	5,789,889
Total equity	24,447,261	15,922,637	9,590,552	3,774,069	2,519,807
Total liabilities	4,995,411	4,056,551	2,865,068	2,713,202	3,270,082

Financial highlights	2016	2015	Percentage change (%)
Income	40,193,925	18,039,152	122.81
Expenditure	31,669,302	15,709,693	101.59
Excess of income over expenditure	8,524,623	2,329,459	265.95
Total assets	29,442,671	19,979,188	47.37
Total equity	24,447,261	15,922,637	53.54
Total liabilities	4,995,411	4,056,551	23.14

ENERGY COMMISSION

Report of the Directors to the members of Energy Commission

The Directors are pleased to submit the annual report to the members of the Commission together with the audited financial statements of the Commission for the year ended 31 December, 2016.

Principal activity

The principal activity the Commission is mandated under the Energy Commission Act 1997, (Act 541) is:

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

Financial results for the year

The Commission recorded an excess income over expenditure of	GH¢ 8,524,623
to which is added balance on accumulated fund brought forward of	<u>13,018,992</u>
leaving a balance on accumulated fund carried forward of	<u>21,543,615</u>

Auditors

In accordance with Energy Commission Act 1997, (Act 541), James Quargraine Associates (Chartered Accountants) will continue in office as the Commission's auditors.

George Panyin Hagan

Chairman



Signature

26th January, 2018

Date

Dr. Alfred Oforu Ahenkorah

Executive Secretary



Signature

26th January, 2018

Date

ENERGY COMMISSION

Statement of directors' responsibilities

Directors' responsibilities in respect of the financial statements

The Directors are required to ensure that adequate accounting records are maintained so as to disclose at reasonable adequacy, the financial position of the Commission. They are also responsible for steps to safeguard the assets of the Commission and to prevent and detect fraud and other irregularities. They must present financial statements for each financial year, which give a true and fair view of the affairs of the Commission, and the results for that period. In preparing these financial statements, they are required to:

- select suitable accounting policies and apply them on a consistent basis using reasonable and prudent judgment
- state whether or not the General Accepted Accounting Principles (GAAP) have been adhered to and explain material departures thereto
- use the going concern basis unless it is inappropriate.

The Board acknowledges its responsibility for ensuring the preparation of the annual financial statements in accordance with GAAP and the responsibility of external auditors to report on these financial statements. The Board is responsible for ensuring the maintenance of adequate accounting records and an effective system of internal controls and risk management.

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

The financial statements are prepared from the accounting records on the basis of consistent use of appropriate records supported by reasonable and prudent judgments and estimates that fairly present the state of affairs of the Commission. The financial statements have been prepared on a going concern basis and there is no reason to believe that the Commission will not continue as a going concern in the next financial year. The Directors confirm 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 the General Accepted Accounting Principles (GAAP)
- prepared the financial statements on the going concern basis

The Directors are responsible for keeping proper accounting records which disclose with reasonable accuracy at any time the financial position of the Commission and to enable them ensure that the financial statements comply with the Energy Commission Act, 1997 (Act 541). They are also responsible for safe guarding the assets of the Commission and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

By the order of the Board

George Panyin Hagan

Chairman



Signature

26th January, 2018

Date

Dr. Alfred Oforu Ahenkorah

Executive Secretary



Signature

26th January, 2018

Date

ENERGY COMMISSION

Corporate Governance (CG) report

Energy commission is committed to strong corporate governance practices that allocate rights and responsibilities among the Commission's members, the Board and Executive Management to provide an effective oversight and management of the Commission in a manner that enhances shareholder value and promotes investors' confidence. The Commission's corporate governance principles are contained in a number of corporate documents. The 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, approval of business strategies, evaluation of performance and assessment of major risks facing the Commission. In discharging its obligations, the Board exercises judgment 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 Board informed, and maintain and promote high ethical standards. The Board delegates authority in management matters to the Commission's Executive Management subject to clear instructions in relation to such delegation of authority and the circumstances in which Executive Management shall be required to obtain Board approval prior to taking a decision on behalf of the Commission. The Board is made up of majority Non-Executive Directors.

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

George Panyin Hagan

Chairman



Signature

26th January, 2018

Date

Dr. Alfred Oforu Ahenkorah

Executive Secretary



Signature

26th January, 2018

Date

Independent Auditor's report to the members of Energy Commission

Report on the audited financial statements

Opinion

In our opinion, Energy Commission has kept proper accounting records and the financial statements are in agreement with the records in all material respects and report in the prescribed manner, information required by the Generally Accepted Accounting Standards (GAAPs). The financial statements give a true and fair view of the financial position of the Commission as at 31 December, 2016, and of its financial performance and statement of cash flow for the year then ended and are drawn up in accordance with the Generally Accepted Accounting Principles (GAAP) and in the manner required by the Energy Commission Act, 1997 (Act 541).

What we have audited

We have audited the accompanying financial statements of Energy Commission for the year ended 31 December, 2016.

The financial statements comprise:

- statement of financial performance for the year ended;
- statement of financial position as at 31 December, 2016;
- statement of changes in equity for the year ended;
- statement of cash flows for the year then ended; and
- the notes to the financial statements, which include a summary of significant accounting policies

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

Independence

We are independent of the Commission within the meaning of International Ethics Standards Board for Accountants (IESBA). We have fulfilled our other ethical responsibilities with the IESBA code.

ENERGY COMMISSION

Independent Auditor's report to the members of Energy Commission (continued)

Report on the audited financial statements (continued)

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements. Key audit matters are selected from the matters communicated with those charged with governance but are not intended to represent all matters that were discussed with them. Our audit procedures relating to these matters were designed in the context of our audit of the financial statements as a whole. Our opinion on the financial statements is not modified with respect to any of the key audit matters described below, and we do not express an opinion on these individual matters.

Key audit matters	How our audit addressed the matter
The financial statements for the year ended 31 December, 2016 have not been converted to meet the requirements of IFRS as a directive from the office of the Auditor General. This was due to the limited budget of the Commission.	We advised the client to write to the office of the Auditor General. The Commission wrote to the Auditor General for an extension of the deadline to meet the IFRS conversion deadline in 2017.

Other information

The directors are responsible for the other information. The other information comprises the report of Governing Board and chairman's report and any other information not subject to audit, which are expected to be made available to us after that date but does not include the financial statements and our auditor's report thereon, which we obtained prior to the date of this auditor's report.

Our opinion on the financial statements does not cover the other information and we have nothing to report in this regard.

In connection with our audit of the financial statements, our responsibility is to read the other information published with the financial statements to identify areas of material inconsistency between the unaudited information and the audited financial statements and obvious misstatements of fact to other information.

Inconsistency is when other information contradicts information contained in the audited financial statements. A material inconsistency may raise doubt about the audit conclusions drawn from audit evidence previously obtained and, possibly, about the basis for the auditor's opinion on the financial statements.

Independent Auditor's report to the members of Energy Commission (continued)

Report on the audited financial statements (continued)

Misstatement of fact is when other information that is unrelated to matters appearing in the audited financial statements is incorrectly stated or presented. A material misstatement of fact may undermine the credibility of the document containing audited financial statements.

If, based on the work we have performed on the other information that we obtained prior to the date of this auditor's report, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

When we read the other information like Chairman's report, if we conclude that there is a material misstatement therein, we are required to communicate the matter to those charged with governance.

Responsibilities of Directors for the financial statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with GAAPs, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatements, whether due to fraud or error. Management is responsible for overseeing the Commission's financial reporting process.

Going concern

In preparing the financial statements, the Governing Board are 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 intend to liquidate the Commission or to cease operations, or have no realistic alternative but to do so.

The Governing Board are responsible for overseeing the Commission's financial reporting process.

Auditor's responsibilities for the audit of the financial statements

The objectives of our audit are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatements, whether fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

Independent Auditor's report to the members of Energy Commission (continued)

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional scepticism throughout the planning and performance of the audit. We also:

- Identify and assess the risks of material misstatements 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. The risk of not detecting a material misstatements resulting from the fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- 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 entity's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by Governing Board.
- 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
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities and business activities within the Commission to express an opinion on the financial statements. We are responsible for the direction, supervision and performance of the Commission audit. We remain solely responsible for our audit opinion.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit. We are also required to provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

The engagement partner on the audit resulting in this independent auditor's report is **Emmanuel K. D. Abbey (ICAG/P/1167)**.

Signed by: 

For and on behalf of
James Quagraine Associates (ICAG/F/2017/184)
Chartered Accountants
P.O. Box GP 3947
Accra

Date:.....26th January, 2018.....

ENERGY COMMISSION

FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2016

STATEMENT OF FINANCIAL POSITION

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

		As at December	
	Note	2016	2015
Assets			
Tangible non-current asset			
Property, land and equipment	3	<u>8,681,154</u>	<u>6,522,727</u>
Current assets			
Inventory	4	25,001	21,704
Trade and other accounts receivable	5	20,681,334	13,430,745
Cash and cash equivalents	6.1	<u>55,182</u>	<u>4,012</u>
Total current assets		<u>20,761,517</u>	<u>13,456,461</u>
Total assets		<u>29,442,671</u>	<u>19,979,188</u>
Equity			
Accumulated fund		21,543,615	13,018,992
Capital grant	10	2,415,315	2,415,315
Special fund	11	<u>488,330</u>	<u>488,330</u>
Total equity		<u>24,447,260</u>	<u>15,922,637</u>
Non-current liabilities			
Medium term loan	9	<u>742,560</u>	<u>1,058,482</u>
Current liabilities			
Trade and other accounts payables	7	4,252,851	2,900,688
Bank overdraft	8	-	<u>97,381</u>
Total current liabilities		<u>4,252,851</u>	<u>2,998,069</u>
Total liabilities		<u>4,995,411</u>	<u>4,056,551</u>
Total equity and liabilities		<u>29,442,671</u>	<u>19,979,188</u>

The financial statements on pages 42 to 54 were approved by the Board of Directors on.....26th January, 2018.....

Notes 1 to 10 form an integral part of these financial statements.

George Panyin Hagan

Chairman



Signature

26th January, 2018

Date

Dr. Alfred Oforu Ahenkorah

Executive Secretary



Signature

26th January, 2018

Date

ENERGY COMMISSION

FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2016

STATEMENT OF FINANCIAL PERFORMANCE*(All amounts are stated in Ghana cedi unless otherwise stated)*

		For the year ended 31 December	
Income	Note	2016	2015
Revenue	12	39,173,517	17,849,113
Other revenue	13	<u>1,020,408</u>	<u>190,039</u>
Total income		<u>40,193,925</u>	<u>18,039,152</u>
Expenditure			
Personnel emoluments	14	(10,011,826)	(5,840,997)
General and administrative expenses	15	(5,124,033)	(3,921,242)
Service activity expenses	16	<u>(16,533,443)</u>	<u>(5,947,454)</u>
		<u>(31,669,302)</u>	<u>(15,709,693)</u>
Excess of income over expenditure transferred to accumulated fund		<u>8,524,623</u>	<u>2,329,459</u>

Notes 46 to 53 form an integral part of these financial statements.

ENERGY COMMISSION

FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2016

STATEMENT OF CHANGES IN EQUITY

(All amounts are expressed in Ghana cedis unless otherwise stated)

For the year ended 31 st December, 2016	Accumulated fund	Capital grant	Special fund	Total equity
At start of year	13,018,992	2,415,315	488,330	15,922,637
Surplus for the year	8,524,623	-	-	8,524,623
Transfer	-	-	-	-
At end of year	<u>21,543,615</u>	<u>2,415,315</u>	<u>488,330</u>	<u>24,447,260</u>

For the year ended 31 st December, 2015	Accumulated fund	Capital grant	Special fund	Total equity
At start of year	7,258,973	1,843,249	488,330	9,590,552
Prior year adjustment	3,430,560	-	-	3,430,560
Surplus	2,329,459	-	-	2,329,459
Additions	-	1,071,000	-	1,071,000
Transfer	-	(498,934)	-	(498,934)
At end of year	<u>13,018,992</u>	<u>2,415,315</u>	<u>488,330</u>	<u>15,922,637</u>

Notes 46 to 54 form an integral part of these financial statements.

ENERGY COMMISSION

FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2016

STATEMENT OF CASH FLOWS*(All amounts are stated in Ghana cedi unless otherwise stated)*

		For the year ended December	
	Note	2016	2015
Net cash generated from operating activities	17	<u>3,538,765</u>	<u>137,823</u>
Cash flows from investing activities			
Purchase of property, plant and equipment		<u>(3,074,292)</u>	<u>(464,676)</u>
Net cash used in investing activities		<u>(3,074,292)</u>	<u>(464,676)</u>
Cash flows from financing activities			
Payment of medium term loan		(315,922)	(483,040)
Receipt of capital grant		—	<u>1,071,000</u>
Net cash used in financing activities		<u>(315,922)</u>	<u>287,971</u>
Net increase or (decrease) in cash & cash equivalents		148,551	261,107
Cash and cash equivalents:			
At beginning of year		<u>(93,369)</u>	<u>(354,476)</u>
At end of year	6.2	<u>55,182</u>	<u>(93,369)</u>

Notes 46 to 54 form an integral part of these financial statements.

ENERGY COMMISSION

FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2016

NOTES TO THE FINANCIAL STATEMENTS

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

Notes

1. Reporting entity

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

The address of its principal place of business is P.M. B. Ministries, Accra Ghana.

Object and function of the Commission

The objects of the Commission (Section 2 of the Energy Commission Act, 1997 Act 541) include the following:

- regulate and manage the utilisation of energy resources in Ghana and co-ordinate policies in relation to them;
- recommend national policies for the development and utilisation of indigenous energy resources;
- advise the Minister on national policies
- 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;
- 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 utilisation of energy resources available to the nation;
- receive and assess applications, and grant licences under this Act to public utilities for the transmission, wholesale supply, distribution, and sale of electricity and natural gas;
- establish and enforce, in consultation with the Public Utilities Regulatory Commission, standards of performance for public utilities engaged in the transmission, wholesale supply, distribution and sale of electricity and natural gas;
- promote and ensure uniform rules of practice for the transmission, wholesale supply, distribution and sale of electricity and natural gas;
- receive and assess applications, and grant licences under this Act for the refining, storage, bulk transportation, marketing and sale of petroleum products;
- establish and enforce standards of performance for bodies engaged in the supply, marketing, and sale of petroleum products;
- promote competition in the supply, marketing and sale of petroleum products;
- maintain a register of public utilities, petroleum product marketing companies, retail stations and reseller outlets 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

ENERGY COMMISSION

FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2016

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

(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 Commission for the year ended 31 December, 2016 have been prepared in accordance with the Generally Accepted Accounting Principles (GAAP), and with the requirements of the Energy Commission Act, 1997 (Act 541).

2.2 Basis of measurement and accounting

The measurement basis applied is the historical cost basis. The financial statements are presented in Ghana cedis (GH¢), and rounded to the nearest thousand.

2.3 Significant judgments and sources of estimation uncertainty

In preparing these financial statements in conformity with best practices, management makes judgments, estimates and assumptions that affect the application of policies and reported amounts of assets, liabilities, incomes and expenses. It also requires the use of accounting estimates and assumptions that may affect disclosures in the financial statements. The estimates and associated assumptions are based on historical experience and various factors that are believed to be reasonable under circumstances, the results of which form the basis of making the judgment about carrying values of assets and liabilities that are not readily apparent from other sources. The actual results could, by definition therefore, often differ from the related accounting estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting policies and estimates are recognized retrospectively and prospectively respectively.

Certain accounting policies have been identified where management has applied a higher degree of judgment that have a significant effect on the amounts recognised in the financial statements, or estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year.

2.3.1 Estimates of assets economic useful life and residual values

Property, plant and equipment is depreciated over its useful life taking into account residual values, where appropriate. The actual economic useful lives of the assets and residual values are assessed at each financial year-end and may vary depending on a number of factors. In re-assessing asset lives, factors such as technological innovation, pre-cut life cycles and maintenance programs are taken into account.

2.4 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 Cedis. Except where otherwise indicated, the financial statements are presented in Ghana Cedis.

ENERGY COMMISSION

FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2016

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

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

(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 and from the translation at year end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the statement of financial performance.

2.5 Revenue recognition

Revenue is recognized to the extent that it is probable that the economic benefits will flow to the commission and the revenue can be reliably measured. The following specific recognition criteria apply in revenue recognition.

2.5.1 Government grants and donor support

Grants from the government and donor support are recognised at their fair value where there is a reasonable assurance that the grant or support will be received and the Commission will comply with all attached conditions.

Government grants and donor support relating to costs are deferred and recognised in the income statement over the period necessary to match them with the costs that they are intended to compensate.

Government grants and donor support relating to property, plant and equipment are included in non-current liabilities as deferred government grants and deferred donor support and are credited to the income statement on a straight – line basis over the expected lives of the related assets.

2.5.2 Transfer from energy fund and regulatory levy

Revenue from funds transferred to the Commission from the energy fund and regulatory levy to cater for revenue expense are recognised when the transfer is received. Fund transfers relating to property, plant and equipment are included in equity as deferred income and are credited to the profit or loss account on a straight – line basis over the expected lives of the related assets.

2.6 Cash and cash equivalents

Cash and cash equivalents are recorded in the statement of financial position at cost. For the purpose of the cash flow statement, cash and cash equivalents comprise cash on hand and demand deposits and other short-term highly liquid investments that are readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value and bank overdrafts. These are initially and subsequently recorded at fair value.

2.7 Employee benefits

2.7.1 Short term employment benefits

Short-term employee benefits are amounts payable to employees that fall due wholly within twelve months after the end of the period in which the employee renders the related service. The cost of short-term employee benefits are recognised as an expense in the period when the economic benefit is given, as an employment cost. Unpaid short-term employee benefits as at the end of the accounting period are recognised as an accrued expense and any short-term benefit paid in advance.

ENERGY COMMISSION

FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2016

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

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

are recognised as prepayment to the extent that it will lead to a future cash refund or a reduction in future cash payment. Wages and salaries payable to employees are recognised as an expense in the profit or loss account at gross amount. The Company's contribution to social security fund is also charged as an expense.

2.7.2 Social Security and National Insurance Trust (SSNIT)

In accordance with the Act establishing the Social Security and National Insurance Trust, the Company contributes monthly amount equivalent to 13%(defined contribution scheme) of its employee's salaries and wages to the Social Security Fund to cover future pension payments to its employees. All employer contributions are charged to the statement of financial performance as incurred under staff costs. The employees contribute 5.5% to the fund.

2.7.2 Provident fund

Energy commission contributes 5% of its employee's basic salary to the provident fund, to serve as an additional payment for staff upon retirement or resignation. The employees also contribute 5% of their basic salary to the fund. The employer contributions are charged to the statement of financial performance as part of staff cost.

2.7.3 End of service benefits

The Company does not make provision for long term service awards or end of service benefits. These are treated on a cash basis as and when they arise.

2.8 Inventories

Inventories are measured at the lower of cost and net realisable value. Cost of inventories are measured using the weighted average method.

Net realisable value is the estimated selling price in the ordinary course of business less the estimate costs of completion and the estimated costs necessary to make the sale.

Cost of inventories comprises of all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition.

2.9 Property, plant and equipment

The cost of an item of property, plant and equipment is recognised as an asset when it is probable that future economic benefits associated with the item will flow to the Commission; and the cost of the item can be measured reliably in monetary terms.

Property, plant and equipment is initially measured at cost.

Costs include cost incurred initially to acquire or construct an item of property, plant and equipment and costs incurred subsequently to add to, replace part of, or service it. If a replacement cost is recognised in the carrying amount of an item of property, plant and equipment, the carrying amount of the replace part is derecognized.

ENERGY COMMISSION

FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2016

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

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

Depreciation

Property, plant and equipment is depreciated on the straight line basis over their expected economic useful lives to their estimated residual value (if any).

The useful lives of items of property, plant and equipment have been assessed as follows:

Class of assets	Average useful life (%)
Office furniture and fittings	12.5
Motor vehicle	25
Land and building	2
Computer & accessories	33.33
Plant, machinery & equipment	20

The residual value, useful life and depreciation method of each asset are reviewed at the end of each reporting year. If the expectations differ from the previous estimates, the change is accounted for as a change in accounting estimate with the effect of any change in estimate accounted on a prospective basis.

The depreciation charge for each period is recognised in the statement of financial performance.

The gain or loss arising from the derecognition of an item of property, plant and equipment is included in the statement of financial performance when the item is derecognized. The gain or loss arising from the derecognition of an item of property, plant and equipment is determined as the difference between the net disposal proceeds, if any, and the carrying amount of the item.

An item of property, plant and equipment are subsequently measured at cost less accumulated depreciation and any accumulated impairment losses.

2.10 Trade and other receivables

Trade receivables are measured at initial recognition at fair value, and are subsequently measured at amortised cost using the effective interest rate method. Appropriate allowances for estimated irrecoverable amounts are recognised in profit or loss when there is objective evidence that the asset is impaired. Significant financial difficulties of the debtor, probability that the debtor will enter into bankruptcy or financial reorganization, and default or delinquency in payments are considered indicators that the trade receivable is impaired. The allowance recognised is measured as the difference between the asset's carrying amount and the present value of the estimated future cash flows discounted at the effective interest rate computed at initial recognition.

The carrying amount of the asset is reduced through the use of an allowance account, and the amount of the loss is recognised in profit or loss within operating expenses. When a trade receivable is uncollectible, it is written off against the allowance account for trade receivables. Subsequent recoveries of amounts previously written off are recognised in profit or loss.

2.11 Trade and other payables

Trade payables are initially measured at fair value, and are subsequently measured at amortised cost, using the effective interest rate method.

ENERGY COMMISSION

FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2016

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)*(All amounts are stated in Ghana cedi unless otherwise stated)***2.12 Bank overdraft and borrowings**

Bank overdrafts and borrowings are initially measured at fair value, and subsequently measured at amortised cost, using the effective interest rate method.

3a. Property, plant and equipment

Cost/valuation	1 January	Additions	31 December
Land and building	6,351,370	939,000	7,290,370
Motor vehicle	1,729,353	1,993,000	3,722,353
Plant & machinery	252,873	41,350	294,223
Furniture & fittings & equip	502,272	60,659	562,931
Computers and accessories	<u>707,241</u>	<u>40,283</u>	<u>747,524</u>
	<u>9,543,109</u>	<u>3,074,292</u>	<u>12,617,401</u>

Accumulated depreciation	1 January	Charge for the year	31 December
Land and building	254,054	145,807	399,861
Motor vehicle	1,725,052	502,551	2,227,603
Plant & machinery	88,249	58,845	147,094
Furniture & fittings & equip	370,655	70,367	441,022
Computers and accessories	<u>582,372</u>	<u>138,295</u>	<u>720,667</u>
	<u>3,020,382</u>	<u>915,865</u>	<u>3,936,247</u>

Carrying amount

At 31 December, 2016	<u>8,681,154</u>
At 31 December, 2015	<u>6,522,727</u>

ENERGY COMMISSION

FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2016

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

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

3b. Property, plant and equipment

Cost/valuation	1 January	Additions	Disposal	31 December
Land and building	6,351,370	-	-	6,351,370
Motor vehicle	1,900,801	99,000	(270,448)	1,729,353
Plant & machinery	49,207	203,666	-	252,873
Furniture & fittings & equip	435,160	67,112	-	502,272
Computers and accessories	<u>622,342</u>	<u>84,899</u>	-	<u>707,241</u>
	<u>9,358,880</u>	<u>454,677</u>	<u>(270,448)</u>	<u>9,543,109</u>

Accumulated depreciation	1 January	Charge for the year	Disposal	31 December
Land and building	127,027	127,027		254,054
Motor vehicle	1,833,043	137,257	(245,248)	1,725,052
Plant & machinery	46,952	41,297		88,249
Furniture & fittings & equip	353,494	17,161		370,655
Computers and accessories	<u>481,688</u>	<u>100,684</u>	-	<u>582,372</u>
	<u>2,842,204</u>	<u>423,426</u>	<u>(245,248)</u>	<u>3,020,382</u>

Carrying amount

At 31 December, 2015	<u>6,522,727</u>
At 31 December, 2014	<u>6,516,676</u>

ENERGY COMMISSION

FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2016

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

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

4. Inventory	2016	2015
Consumables	<u>25,001</u>	<u>21,704</u>

5. Trade and other accounts receivables	2016	2015
Trade receivables	16,315,591	13,324,440
Staff loans	288,622	21,305
Deposit paid for land	-	85,000
Prepayment (grounds rent)	142,000	-
Sundry debtors	22,281	-
Others	<u>3,912,840</u>	<u>-</u>
	<u>20,681,334</u>	<u>13,430,745</u>

6. Cash and cash equivalents

6.1 Cash and bank balance	2016	2015
Cash on hand	633	202
Cash at banks	<u>54,549</u>	<u>3,810</u>
	<u>55,182</u>	<u>4,012</u>

6.2 Cash and cash equivalents for the purpose of cash flow include:

	2016	2015
Cash and bank balance	55,182	4,012
Bank overdraft	<u>-</u>	<u>(97,381)</u>
	<u>55,182</u>	<u>(93,369)</u>

ENERGY COMMISSION

FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2016

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

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

7. Trade and other accounts payables	2016	2015
Trade payable	211,466	447,740
Audit fees	203,575	226,625
Accrued liabilities	3,837,810	2,066,467
Sundry payables	-	2,542
Others	-	<u>157,314</u>
	<u>4,252,851</u>	<u>2,900,688</u>

8. Bank overdraft	2016	2015
Bank of Ghana Service and investment	-	40,720
GCB Bank	-	48,875
Bank of Ghana Admin	-	<u>7,786</u>
	-	<u>97,381</u>

9. Medium term loan	2016	2015
Unibank	<u>742,560</u>	<u>1,058,482</u>

This represents a medium term loan obtained from Unibank Limited for the completion of the office building. It is a five year loan at an interest rate of (33 + -2) % calculated on a reducing balance basis, which is secured by a mortgage of office building of the Commission.

10. Capital grant

This is made up of transfers from the Energy Fund to finance capital expenditure of the Commission.

	2016	2015
Balance at 1 st January	2,415,315	1,843,249
Grant received	-	<u>1,071,000</u>
	2,415,315	2,914,249
Less:		
Amortisation in the year	-	<u>(498,934)</u>
Balance at 31 th December	<u>2,415,315</u>	<u>2,415,315</u>



ENERGY FUND

FINANCIAL STATEMENTS

FOR THE YEAR ENDED 31ST DECEMBER 2016

STATE ENTERPRISES AUDIT CORPORATION

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ENERGY FUND

Corporate information for the year ended 31 December 2016

Governing Board

Dr. Kwame Ampofo	Chairman
Dr. Alfred Kwabena Ofosu Ahenkorah	Member
Dr. Rudith King	Member
Mr. Innocent Akwayena	Member
Dr. Isaac Frimpong Mensa-Bonsu	Member
Mr. Stephen Duodu	Member
Hon Kobina Fosu	Member
Mr. Michael Opam	Member

Board Secretary

Ms. Cecilia Agbenyega

Principal place of business

Ghana Airways Avenue
Behind Alliance Francais
Airport Residential Area

Registered office

P.M.B. Ministries Post Office
Accra

Independent Auditor

James Quagraine Associates
(Chartered Accountants)
P. O. Box GP 3947
Accra

Fund Lawyers

Bankers

Bank of Ghana
Ghana Commercial Bank

Limited
Ecobank Ghana Limited

ENERGY FUND

Financial summary and highlights for the year ended 31 December, 2016
(All amounts are stated in Ghana cedi unless otherwise stated)

Five year financial summary	2016	2015	2014	2013	2012
Receipts	37,292,081	15,501,805	10,167,086	6,267,409	4,587,982
Disbursements	31,810,135	12,316,657	9,738,772	6,649,201	4,416,572
Excess of receipts over disbursement	5,481,946	3,185,148	438,318	(381,792)	171,410
Bank balance	1,522,863	167,255	512,892	84,578	466,372
Account receivable	7,555,361	4,079,403	-	-	-
Account payable	-	548,618	-	-	-
Energy fund	9,078,224	3,698,040	512,892	84,578	466,372

Financial highlights	2016	2015	Percentage change (%)
Receipts	37,292,081	15,501,805	140.57
Disbursements	31,810,135	12,316,657	158.27
Excess of receipts over disbursement	5,481,946	3,185,148	72.11
Bank balance	1,522,863	167,255	810.50
Account receivable	7,555,361	4,079,403	85.21
Account payable	-	548,618	(100)
Energy fund	9,078,224	3,698,040	145.49

Report of the Directors to the members of Energy Fund

The Directors are pleased to submit the annual report to the members of the Fund together with the audited financial statements of the Fund for the year ended 31 December, 2016.

Principal activity

The principal activity the Fund is mandated under Section 42 of the Energy Commission Act 1997, (Act 541) are:

- Promotion of energy efficiency and productive uses of electricity, natural gas and petroleum products;
- Promotion of projects for the development and utilization of renewable energy resources, including solarenergy;
- Human resource development in the energy sector; and
- Such other relevant purposes as may be determined by the Fund.

Financial results

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During the year under review releases by the Controller and Accountant General's Department from the Petroleum Levy Account into the Energy Fund account held at the Bank of Ghana amounted to	25,044,776
- Added to this were the following sources of revenue:	
- fees from permits and licenses	11,917,452
- EDMF project fund	300,000
- Other income	<u>29,853</u>
Total inflow for the year amounted to	37,292,081
Add balance at 1 st January, 2016 on Energy Fund	3,698,040
Prior year adjustment	<u>(101,762)</u>
Total amount available for disbursement in the year	40,888,359
Deduct disbursements in the year amounted to	<u>(31,810,135)</u>
Balance carried forward on the Energy Fund account at 31 December, 2016	<u>9,078,224</u>

Auditors

In accordance with Energy fund Act 1997, (Act 541), James Quagraine Associates (Chartered Accountants) will continue in office as the Fund's auditors.

George Panyin Hagan

Chairman


Signature

26th January, 2018

Date

Dr. Alfred Oforu Ahenkorah

Executive Secretary


Signature

26th January, 2018

Date

ENERGY FUND

Statement of directors' responsibilities

Directors' responsibilities in respect of the financial statements

The Directors are required to ensure that adequate accounting records are maintained so as to disclose at reasonable adequacy, the financial position of the 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 statements for each financial year, which give a true and fair view of the affairs of the Fund, and the results for that period. In preparing these financial statements, they are required to:

- select suitable accounting policies and apply them on a consistent basis using reasonable and prudent judgment
- state whether or not the General Accepted Accounting Principles (GAAP) have been adhered to and explain material departures thereto
- use the going concern basis unless it is inappropriate.

The Board acknowledges its responsibility for ensuring the preparation of the annual financial statements in accordance with GAAP and the responsibility of external auditors to report on these financial statements. The Board is responsible for ensuring the maintenance of adequate accounting records and an effective system of internal controls and risk management.

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

The financial statements are prepared from the accounting records on the basis of consistent use of appropriate records supported by reasonable and prudent 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 Directors confirm 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 the General Accepted Accounting Principles (GAAP)
- prepared the financial statements on the going concern basis

The Directors are responsible for keeping proper accounting records which disclose with reasonable accuracy at any time the financial position of the Fund and to enable them ensure that the financial statements comply with the Energy Fund Act, 1997 (Act 541). 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.

By the order of the Board

George Panyin Hagan

Chairman



Signature

26th January, 2018

Date

Dr. Alfred Ofose Ahenkorah

Executive Secretary



Signature

26th January, 2018

Date

ENERGY FUND

Corporate Governance (CG) report

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

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

George Panyin Hagan

Chairman



Signature

26th January, 2018

Date

Dr. Alfred Oforu Ahenkorah

Executive Secretary



Signature

26th January, 2018

Date

Independent Auditor's report to the members of Energy Fund Report on the audited financial statements

Opinion

In our opinion, the Energy Fund has kept proper accounting records and the financial statements are in agreement with the records in all material respects and report in the prescribed manner, information required by the Ghana National Accounting Standards. The financial statements give a true and fair view of the financial position of the Fund as at 31 December, 2016, and of its financial performance and statement of cash flow for the year then ended and are drawn up in accordance with the Generally Accepted Accounting Principles (GAAP) and in the manner required by the Energy Fund Act, 1997 (Act 541).

What we have audited

We have audited the financial statements of Energy Fund for the year ended 31 December, 2016.

The financial statements comprise:

- statement of financing and disbursement for the year ended;
- statement of financial position as at 31 December, 2016;
- statement of movement on the Fund for the year ended;
- the notes to the financial statements, which include a summary of significant accounting policies

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

Independence

We are independent of the Fund within the meaning of International Ethics Standards Board for Accountants (IESBA). We have fulfilled our other ethical responsibilities with the IESBA code.

Independent Auditor's report to the members of Energy Fund (continued)

Report on the audited financial statements (continued)

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements. Key audit matters are selected from the matters communicated with those charged with governance but are not intended to represent all matters that were discussed with them. Our audit procedures relating to these matters were designed in the context of our audit of the financial statements as a whole. Our opinion on the financial statements is not modified with respect to any of the key audit matters described below, and we do not express an opinion on these individual matters.

Key audit matters	How our audit addressed the matter
The financial statements for the year ended 31 December, 2016 have not been converted to meet the requirements of IFRS as a directive from the office of the Auditor General. This was due to the limited budget of the Commission.	We advised the client to write to the office of the Auditor General. The Commission wrote to the Auditor General for an extension of the deadline to meet the IFRS conversion deadline in 2017.

Other information

The directors are responsible for the other information. The other information comprises the report of directors and chairman's report and any other information not subject to audit, which are expected to be made available to us after that date but does not include the financial statements and our auditor's report thereon, which we obtained prior to the date of this auditor's report.

Our opinion on the financial statements does not cover the other information and we have nothing to report in this regard.

In connection with our audit of the financial statements, our responsibility is to read the other information published with the financial statements to identify areas of material inconsistency between the unaudited information and the audited financial statements and obvious misstatements of fact to other information.

Inconsistency is when other information contradicts information contained in the audited financial statements. A material inconsistency may raise doubt about the audit conclusions drawn from audit evidence previously obtained and, possibly, about the basis for the auditor's opinion on the financial statements.

Misstatement of fact is when other information that is unrelated to matters appearing in the audited financial statements is incorrectly stated or presented. A material misstatement of fact may undermine the credibility of the document containing audited financial statements.

Independent Auditor's report to the members of Energy Fund (continued)

Report on the audited financial statements (continued)

Responsibilities of Directors for the financial statements

If, based on the work we have performed on the other information that we obtained prior to the date of this auditor's report, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report on this regard.

When we read the other information like Managing Director's report, if we conclude that there is a material misstatement therein, we are required to communicate the matter to those charged with governance.

Management is responsible for the preparation and fair presentation of these financial statements in accordance with GAAPs, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatements, whether due to fraud or error. Management are responsible for overseeing the Fund's financial reporting process.

Going concern

In preparing the financial statements, the directors are 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 directors either intend to liquidate the Fund or to cease operations, or have no realistic alternative but to do so.

The Directors are responsible for overseeing the Fund's financial reporting process.

Auditor's responsibilities for the audit of the financial statements

The objectives of our audit are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatements, whether fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional scepticism throughout the planning and performance of the audit. We also:

Independent Auditor's report to the members of Energy Fund (continued)

- Identify and assess the risks of material misstatements 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. The risk of not detecting a material misstatements resulting from the fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- 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 entity's internal control

Report on the audited financial statements (continued)

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- 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
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities and business activities within the Fund to express an opinion on the financial statements. We are responsible for the direction, supervision and performance of the Fund audit. We remain solely responsible for our audit opinion.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit. We are also required to provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

The engagement partner on the audit resulting in this independent auditor's report is Emmanuel K.D. Abbey (ICAG/P/1167).

Signed by: 

For and on behalf of
James Quagraine Associates (ICAG/F/2017/184)
Chartered Accountants
P. O. Box GP 3947
Accra

Date: 26th January, 2018

ENERGY FUND

FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2016

STATEMENT OF FINANCIAL POSITION

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

		As at 31 December	
	Note	2016	2015
Current assets			
Accounts receivables	3	7,555,361	4,079,403
Cash and cash equivalents	4	<u>1,522,863</u>	<u>165,255</u>
Total assets		<u>9,078,224</u>	<u>4,246,658</u>
Equity			
Accumulated energy fund account		<u>9,078,224</u>	<u>3,698,040</u>
Current liabilities			
Accounts payables	5	—	<u>548,618</u>
Total equity and liabilities		<u>9,078,224</u>	<u>4,246,658</u>

The financial statements on pages 56 to 69 were approved by the Board of Directors on.....

Notes 1 to 12 form an integral part of these financial statements.

George Panyin Hagan

Chairman



Signature

26th January, 2018

Date

Dr. Alfred Oforu Ahenkorah

Executive Secretary



Signature

26th January, 2018

Date

ENERGY FUND

FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2016

STATEMENT OF FINANCING AND DISBURSEMENT

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

		For the year ended 31 December	
Receipts for the year	Note	2016	2015
Releases by Controller and Accountant General's Department from petroleum levy		25,044,776	1,827,741
Fees from permits and licenses	6	11,917,452	12,498,129
EDMF project fund		300,000	1,000,000
Other income	7	<u>29,853</u>	<u>175,935</u>
Total receipts for the year		<u>37,292,081</u>	<u>15,501,805</u>
Disbursements in the year			
Promotion of energy efficiency and productive uses of electricity	8	1,700,593	1,384,132
Renewable energy resources ,including solar energy		2,938,425	619,095
Human resources development in the energy sector		6,625,590	628,534
Other relevant expenditures approved by the board of Fund of energy fund	9	20,243,261	8,682,615
EDMF –Refrigerator rebate scheme project		300,000	1,000,000
Bank charges		<u>2,265</u>	<u>2,381</u>
		<u>31,810,135</u>	<u>12,316,657</u>
Excess of receipts over disbursements		<u>5,481,946</u>	<u>3,185,148</u>

Notes 70 to 73 form an integral part of these financial statements.

ENERGY FUND

FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2016

STATEMENT OF MOVEMENT ON THE ENERGY FUND ACCOUNT

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

	For the year ended 31 December	
	2016	2015
At start of year	3,698,040	512,892
Prior year adjustment	(101,762)	-
Transfer from revenue account	<u>5,481,946</u>	<u>3,185,148</u>
At end of year	<u>9,078,224</u>	<u>3,698,040</u>

Notes 70 to 73 form an integral part of these financial statements.

ENERGY FUND

FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2016

STATEMENT OF MOVEMENT ON THE ENERGY FUND ACCOUNT*(All amounts are stated in Ghana cedi unless otherwise stated)*

Resources	For the year ended 31 December	
	2016	2015
Bank balance on 1 January	3,698,040	3,698,040
Prior year adjustment	<u>(101,762)</u>	<u>-</u>
	<u>3,596,278</u>	<u>3,368,040</u>
Add receipts in the year		
Releases by the Controller and Accountants General's department		
From petroleum levy account	25,044,776	1,827,741
Fees from permits and licenses	11,917,452	12,498,129
EMDF project fund	300,000	1,000,000
Other income	<u>29,853</u>	<u>175,935</u>
Total receipts for the year	<u>37,292,081</u>	<u>15,501,805</u>
Less disbursements in the year towards :		
Promotion of the energy efficiency and productive uses of efficiency	1,700,593	1,384,132
Renewable energy resources ,including solar energy	2,938,425	619,095
Human resources development in the energy sector	6,625,590	628,534
Other relevant expenditure approved by the Board of Fund of energy fund	20,243,261	8,682,615
EMDF –Project fund payment	300,000	1,000,000
Bank charges	<u>2,265</u>	<u>2,281</u>
	<u>31,810,134</u>	<u>12,316,657</u>
Balance on account at 31st December ,2016	<u>5,481,946</u>	<u>3,698,040</u>

Notes 70 to 73 form an integral part of these financial statements.

ENERGY FUND

FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER, 2016

NOTES TO THE FINANCIAL STATEMENTS

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

Notes

1. Reporting entity

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

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

Objective of the Fund

The object of the Fund (Section 42 of the Energy Commission Act, 1997 Act 541) include the following:

- Promotion of energy efficiency and productive uses of electricity, natural gas and petroleum products;
- Promotion of projects for the development and utilization of renewable energy resources, including solar energy;
- Human resource development in the energy sector; and
- Such other relevant purposes as may be determined by the Fund.

2. Basis of preparation and summary of significant accounting policies

2.1 Statement of compliance and presentation of financial statements

The financial statements of Energy Fund for the year ended 31 December, 2016 have been prepared in accordance with the Energy Commission Act, 1997 Act 541 and Generally Accepted Accounting Principle (GAAP).

2.2 Basis of measurement and accounting

The measurement basis applied is the historical cost basis convention. The financial statements are presented in Ghana cedis (GH¢).

2.4 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. Except where otherwise indicated, the financial statements are presented in Ghana Cedi

ENERGY FUND

FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2016

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

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

(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 and from the translation at year end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the statement of profit or loss and other comprehensive income.

2.5 Revenue recognition

Revenue is recognized to the extent that it is probable that the economic benefits will flow to the Fund and the revenue can be reliably measured. The following specific recognition criteria apply in revenue recognition.

- i) Transfers from the Petroleum Levy Account into the Energy fund account by the Controller and Accountant-General's Department.
- ii) Fees from licenses and permits issued to energy service providers by the Energy Fund and receipts from other relevant sources

2.6 Cash and cash equivalents

Cash and cash equivalents are recorded in the statement of financial position at cost. For the purpose of the cash flow statement, cash and cash equivalents comprise cash on hand and demand deposits and other short-term highly liquid investments that are readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value and bank overdraft.

2.7 Trade and other receivables

Trade and other receivables are recognised initially at fair value and subsequently at amortised cost less any provision for impairment. A provision for impairment is made on a case by case basis when there is evidence that the amount due will not be fully recovered at the original terms. The amount of the provision is the difference between the asset's carrying amount and the present value of estimated future cash flows discounted at the effective interest rate. The amount of the provision is recognised in profit or loss.

2.8 Trade and other payables

Trade and other payables are initially measured at fair value, and are subsequently measured at amortised cost, using the effective interest rate method.

ENERGY FUND

FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2016

NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)

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

3. Account receivables	2016	2015
Annual operating license fees	6,934,648	1,229,004
Bulk customers	<u>620,713</u>	<u>2,850,399</u>
	<u>7,555,361</u>	<u>4,079,403</u>
4. Cash and cash equivalents	2016	2015
Bank of Ghana	1,494,738	165,311
Ecobank Limited (forex)	<u>28,125</u>	<u>1,944</u>
	<u>1,522,863</u>	<u>167,255</u>
5. Trade payables	2016	2015
Annual operating license fees	-	548,618
Bulk customers	<u>-</u>	<u>-</u>
	<u>-</u>	<u>548,618</u>
6. Receipts –Permits and licenses	2016	2015
Permit	1,293,858	5,208,469
Annual operating fees	9,254,216	4,344,276
Enforcement fees	61,000	133,600
Sale of license manual	690	157,958
Sitting permit	218,046	397,750
License fees	115,320	1,605,875
Application	<u>874,322</u>	<u>650,200</u>
	<u>11,917,452</u>	<u>12,198,128</u>
7. Other income	2016	2015
Exchange gain	12,253	1,975
Insurance	-	80,840
Levy on natural gas	-	73,920
Wind data	<u>17,600</u>	<u>19,200</u>
	<u>29,853</u>	<u>175,935</u>

ENERGY FUND

FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER, 2016

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

8. Promotion of energy efficiency and productive uses of electricity	2016	2015
Energy efficiency, conversation and climate change	1,300,482	719,915
Power	-	577,596
Strategic planning and policy development	13,169	26,580
Social and environmental impact assessment	50,000	-
Public affairs	-	48,301
Inspectorate	<u>70,000</u>	<u>11,740</u>
	<u>1,433,651</u>	<u>1,384,132</u>
9. Other relevant expenditure approved by the Board of Fund of the energy fund	2016	2015
International co-operation	1,540,971	1,021,646
Capital work in progress –new office building	1,300,000	1,071,000
Procurement of official vehicles and office equipment	1,590,924	501,158
Sundries	14,924,728	6,088,812
Electrical wiring regulation	<u>886,638</u>	<u>-</u>
	<u>20,243,261</u>	<u>8,682,616</u>

10. Events after the statement of assets and liabilities date

The Fund adjusts the amounts recognized in its financial statements to reflect events that provide further evidence of conditions that existed at the statement of financial position date.

Where there are material events that are indicative of conditions that arose after the statement of financial position date the Fund discloses 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.

11. Contingent liabilities and capital commitments

There were no contingent assets and liabilities or capital commitments as at 31 December, 2016.

12. International Financial Reporting Standards (IFRS) Conversion

The financial statements for the year ended 31 December, 2016 have not been converted to meet the requirements of IFRS as a directive from the office of the Auditor General. This was due to the limited budget of the Commission.

Further, the Commission wrote to the Auditor General for an extension of the deadline to meet the IFRS conversion deadline in 2017.

