## **ENERGY COMMISSION**



## **ANNUAL REPORT FOR 2006**

and

Audited Financial Statements for 2004, 2005 and 2006

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## **Abbreviations & Acronyms**

- **BOT**: Build Operate and Transfer
- CNG: Compressed Natural Gas
- **EC:** Energy Commission
- GIPC: Ghana Investment Promotion Centre
- HDPE: High Density Polyethylene
- LDC: Local Distribution Companies
- LNG: Liquefied Natural Gas
- MDPE: Medium Density Polyethylene
- PURC: Public Utilities Regulatory Commission
- **RFP**: Request for Proposals
- WAGP: West African Gas Pipeline

#### 1.1 CHAIRMAN'S REMARKS

This report is being submitted to the Minister for Energy in accordance with the requirements of Section 50 of the Energy Commission Act, 1997 (Act 541) and covers the period from January to December, 2006. It also includes the audited financial statements for the periods 1<sup>st</sup> January, 2004 to 31<sup>st</sup> December, 2004, 1<sup>st</sup> January 2005 to 31<sup>st</sup> December 2005 and 1<sup>st</sup> January, 2006 to 31<sup>st</sup> December, 2006.

A major challenge for the energy sector is the inadequate supply of power to industry, the mines, the service sector and households. This situation became pronounced during the period under review to the extent that the utilities resorted to a power rationing exercise in August 2006, a situation which affected all sectors of the economy.

In the mid 1990s the Government of Ghana took a major decision to reform the Power Sector in order to enable and attract private sector participation in the sector. However, in order to achieve this objective a number of steps and actions needed to be taken, among which was the establishment of two regulatory agencies - the Energy Commission and the Public Utilities Regulatory Commission. Since their establishment in 1997 these two statutory Commissions have initiated and seen the enactment of legislative instruments aimed at creating the enabling environment for achieving the aims of the reform process. The Energy Commission has, apart from LI 1816 (Electricity Supply, Distribution and Sale {Technical & Operational} Rules, 2005 which was developed and passed under Section 28 of the Energy Commission Act (Act 541), collaborated with the Public Utilities Regulatory Commission (PURC) to complete the development of the Standards of Performance for the electricity Industry, which are yet to be passed into Law. The criteria for classification of bulk customers who operate in the deregulated electricity market have also been determined and is being implemented.

One of the final actions that needed to be taken by government is the unbundling of transmission and system operation from generation. In this regard the practical separation of transmission from generation has been enabled by the amendment of the VRA Act (Act 46, 1961) by the VRA Amendment Act (Act 691, 2005).

In December, 2006 Government incorporated the National Grid Company (GRIDCO) which will pave the way for the operation of the National Interconnected Transmission System (NITS) independent of the Volta River Authority (VRA) and in accordance with the Grid Code, determined by the Energy Commission. The Energy Commission is expected to develop the technical and market rules for the system operation and the operation of the wholesale electricity market. The Commission will also cause a legislation to be passed to introduce and enforce the technical rules for the system operation and the commercial and market operations of the wholesale market

The Energy Commission in 2006 finally completed the preparation of the Strategic National Energy Plan (SNEP) 2006-2020 which would serve as a guide to the development of the Energy Sector in the country. The SNEP include strategies and recommendations for government to:

- facilitate the timely completion of the West African Gas Pipeline Project;
- sustain its commitment to achieving the National Electrification Scheme objective of 100% universal electrification by 2020;
- facilitate the upgrading and expansion of the transmission and the distribution network;
- ensure more competitive Regulatory Regime for the conduct of upstream petroleum operations in Ghana in the face of favourable conditions in Nigeria, La Cote d'Ivoire, Equatorial Guinea and Gabon;
- support energy efficiency activities to ensure reduction in the petroleum product intensity in the economy;
- create attractive investment climate to encourage construction of new refineries to serve the local and export market;
- support promotion and development of sustainable management of the country's natural forest and woodlands for sustainable supply of wood including woodfuels;
- regulate the woodfuels transportation, marketing and export system to encourage more sustainable practices; and

The report also recommended the introduction of feed-in tariffs for electricity from embedded generation, particularly renewable energy sources, to allow distributed generation systems to be connected to the distribution grid network.

The development of the SNEP commenced in 2000 with the assistance of the Danish International Development Agency (DANIDA). Among the numerous reports produced as Part of the SNEP are:

- Technology Catalogue, KNUST, December 2002
- Energy Resource Catalogue, KNUST, December 2002
- Integrated Resource Planning in the Energy Sector, January 2003
- Estimation of Woodfuels Demand and Use in Industrial, Commercial and Institutional Sectors in Ghana, December, 2002
- Estimation of Woodfuels Demand in the Household Sector of Ghana, December, 2002
- LEAP documentation on the Energy Model for Ghana outline, June 2002
- Communication Strategy for the EC, Energy Commission, November 2002

A striking observation that has been made in the electricity sector recently is the rapid expansion in the power demand of the residential sector by 23% in 5 years from 1,585GWh in 2000 to 1,957GWh in 2005. In contrast the share of power consumption in the industrial sector, which includes agriculture reduced over the same period by 37% -from 4,026.4 GWh in 2000 to 2,542.6GWh in 2005. Within the same period system losses increased by 20% from 1,177GWh to 1418GWh in 2005. This trend is worrying especially since the residential sector, whose contribution to GDP is minimal and is subsidized by the other sectors of the economy, is increasing electricity consumption at such a fast rate.

In the coming months the Energy Commission will initiate a debate on the way forward for the energy sector using the conclusions and recommendations in the Strategic National Energy Plan as a guide. This is necessary so as to ensure that the expansion of the power system is based on proven and sustainable technologies. Since these additions are expected to be undertaken by Independent Power Producers there is the need to develop appropriate regulations and guidelines that will govern the operations of the power market with the view of attracting the much needed private capital into the power sector.

Finally, the issue of energy efficiency and conservation needs to be taken seriously since these measures will reduce the immediate investment requirements in the energy sector, reduce energy consumption and in the process harness revenues that is available for actions that reduce green house gas emissions. The Energy Commission officially became a member of Ghana's negotiating team to the UN Conference on Climate Change Convention in 2005. Energy Commission serves as the mouthpiece on energy in the Ghanaian team.

The EC team attended the 12<sup>th</sup> UN Conference on Climate Change Convention and Kyoto Protocol held in Kenya in December, 2006 where a proposal on Energy Efficiency of Room Air Conditioners was presented for consideration as a Programmatic Clean Development Mechanism (CDM) project.

The EC is of the opinion that a country can reduce its GHG emissions by replacing for instance, traditional incandescent bulbs with more efficient compact fluorescent lamps (CFLs) if that country's electricity is generated partly from fossil fuels. The EC's proposal would be open for discussion by members during the UNFCCC's subsidiary bodies' meetings where proposals are evaluated technically, in June 2007 in Bonn, Germany.

The Commission initiated a process of registering the Ghana Energy Association as an Association with the Registrar Generals Department. The Ghana Energy Association as registered is to serve as the Ghana member committee of the World Energy Council. Meanwhile the EC and VRA jointly continued to represent the interests of Ghana in the WEC and participated actively in its activities during the year under review.

The concerns over crude oil supply and energy security have motivated countries to consider biofuels as an alternative to imported petroleum. In recent times the interest in biofuels in Ghana has been rekindled. The focus is mainly on the production of biodiesel from the seeds of the jatropha plant, oil palm, soyabeans, etc and bio-alcohol from sugar cane and cassava among others.

Biofuels may be one of the keys to weaning ourselves off the petroleum merry-go-round, but several issues must be addressed to make them a true competitor with petroleum.

The challenge of food security versus fuel and the increased demand for these products as a feedstock for biofuels can cause increases in commodity prices which would translate into higher food prices for consumers.

## A.K. Addae

## 2.1 THE COMMISSION

The Energy Commission is a statutory body corporate with perpetual succession and a common seal established by an act of Parliament, the Energy Commission Act, 1997 (Act 541). The Commission may sue and be sued in its corporate name. The Commission consists of seven Commissioners appointed by the President acting in accordance with the Council of State. 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 Commission and is required to ensure the implementation of the decisions of the Commission.

The current composition of the Commission is as follows:

1. Prof. A.K. Addae	- Ag. Chairman
2. Prof. F.O. Akuffo	- Commissioner
3. Prof. A.K. Allotey	- Commissioner
4. Mr. Seth Asante	- Commissioner
5. Mr. J.K. Hagan	- Commissioner
6. Dr. A.K. Ofosu Ahenkorah	- Commissioner/Ag.Executive Secretary

#### 2.1.1 Statutory Mandates

The statutory mandates of the Energy Commission are the following:

- (i) to recommend national policies for the development and utilization of indigenous energy resources;
- (ii) 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;
- (iii) to prepare, review and update periodically indicative national plans to ensure that all reasonable demands are met;
- (iv) to secure a comprehensive data base for national decision making the extent and utilization of energy resources available to the nation;

- (v) to receive and assess applications and grant licences under the Act to public utilities for the transmission, wholesale supply, distribution and sale of natural gas and electricity;
- (vi) 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;
- (vii) promote and ensure uniform rules of practice for the transmission, wholesale supply, distribution and sale of electricity and natural gas;
- (viii) to maintain a register of public utilities, licensed under the Act in the country;
- (ix) to pursue and ensure strict compliance with the Act and regulations made under this Act; and
- (x) to perform any other functions assigned to it under this Act or any other enactments;

## 2.1.2 Mission, Vision and Values

The Energy Commission's mission is to provide leadership and collaborate with our clients the leading energy providers such as VRA, TOR, BOST, ECG, GHANA GRID COMPANY and INDEPENDENT POWER PRODUCERS (IPPs) to effectively and efficiently create an enabling environment for excellence and fair competition in energy service delivery.

The Commission is fully committed to serving effectively and efficiently the national interest in the discharge of its statutory mandates and functions. The Commission is equally committed to accepting and dealing with the challenges that Ghana must meet head-on in its quest for a truly functioning, competitive energy industry that creates affordable energy supplies, improves energy reliability, efficiency and security, and above all, protects and enhances public safety, economic well-being and environmental quality.

The Energy Commission welcomes investors; Ghanaian, African and foreign in efficient energy production projects and programmes in a competitive market. As a regulatory body the Energy Commission encourages building energy efficiency standards and insists on energy efficient appliances. This it has done through the enactment of L.I 1815 namely Energy Efficiency Standards and Labelling (Non-ducted Air Conditioners and self-ballasted Fluorescent Lamps) Regulations, 2005. The Commission has also enacted the Electricity Distribution and Supply (Technical and Operational) Rules, 2005 (LI 1816) which specifies the rules of practice for electricity distribution service providers.

## 3.1 STRATEGIC PLANNING AND POLICY

## 3.1.1 Introduction

The Energy Commission is mandated by Act 541, 1997 to prepare, periodically review and update indicative national plans to ensure that all reasonable demands for energy are met in a sustainable manner.

In fulfilment of this mandate, the Commission compiles and collates energy production, transportation, distribution and consumption data as well as economic and demographic data for the development and analysis of policy options that will ensure sufficient energy to support the socio-economic development of the country.

The Commission carried out the following activities in 2006:

- Publication of the Strategic National Energy Plan 2006 2020
- Finalisation of the National Energy Statistics 2000 2005
- Initiation of a process to set up a National Energy Database and Information Centre.
- Preparation of survey instruments for industrial and commercial energy survey of the Economy.
- Evaluation of efficiencies of Household Refrigerators.
- Assessment of the impact of solar electrification in beneficiary rural communities.
- Training in IAEA modelling software as part of continued capacity building of the Commission; and
- Climate Change Mitigation Assessment

## 3.1.2 Strategic National Energy Plan 2006 – 2020

The Strategic National Energy Plan (SNEP) is a comprehensive roadmap for the development of available energy sources and resources to meet the current and future energy demand of the country. It outlines optimal strategies to develop these resources economically and timely to ensure secure and adequate energy supply for sustainable economic growth into the future. SNEP which is in five volumes has been finalised for formal launching.

## 3.1.3 National Energy Statistics 2000 – 2005

The National Energy Statistics is a database of energy production, transportation, losses and usage in the country. It covers the electricity, petroleum and the renewable energy sub-sectors including woodfuels. The last time a National Energy Statistics was published in Ghana was in 1997 by the then Technical Wing of the Ministry of Mines and Energy.

The handbook was completed and made ready for formal launching in the year under review.

## 3.1.4 National Energy Database and Information Centre

The Energy Commission is mandated under Act 541 to establish a comprehensive national energy database for effective energy planning and policy formulation to guide the management and the utilisation of energy resources.

A formal procurement process was initiated during the year to secure consulting services for the design of the database and the information centre. When completed and operational the Centre will store and update all available data on energy and related socioeconomic activities

## 3.1.5 Industrial and Commercial Energy Survey of the Economy.

Survey instruments for the Industrial and Commercial Energy Survey were prepared during the year for implementation in 2007. The objective of this activity is to use the data to compute the cost of unserved grid electricity demand in the country.

The industrial sector, especially the manufacturing sub-sector, is expected to lead in the rapid socio-economic transformation of the Ghanaian economy from a low-income to a middle-income country with US\$1,000 per capital GNP by 2015. After a downward trend in annual growth rates from a peak of 6.4% in 1997 to 2.9% in 2001, the industrial sector has recovered steadily to growth rates of 4.7% in 2002, 5.1% in 2003 and 2004, and 5.6% in 2005. The recovery is however not satisfactory when set against the government target of 12% annual growth by 2007. Preliminary results have indicated that unreliable energy supply is one of the major obstacles to more rapid industrial growth. Diesel fuel for standby electricity generation increased from about 37,000 tonnes in 2001 to over 80,000 tonnes in 2004. Diesel based-electricity generation on the other hand costs more than twice the grid tariff.

Whilst data on energy supply can easily be obtained from the producers such as VRA and Tema Oil Refinery, it is not so with the data on energy consumed by industries and commercial entities. The industries have to be visited for the data collection which can then be analyzed to establish the actual consumption figures. The last time primary field data for industries and the commercial sector was collected was in 2001. The exercise would also furnish data to update the share of the industrial and commercial/services sector in the overall national energy profile.

#### 3.1.6 Efficiencies of Household Refrigerators

Even though, it is generally known that refrigeration efficiency improvements could provide the greatest energy saving potential in the residential sector, there has not been sufficient, accurate and detailed data on refrigerator energy use in Ghana. Moreover a large fraction of the refrigerators in Ghana and imported used appliances. The Energy Commission therefore initiated the survey in 2006 to collect data that will enable the establishment of efficiency levels of refrigerators used in Ghana as compared to modern and more efficient refrigerators currently available on the global market. Data from 500 communities and involving 1,000 refrigerators and deep freezers was collected during the year.

The data would be analyzed in 2007 leading to the establishment of the much needed efficiency standards and labelling regime for refrigerators and deep freezers in the country. The activity would also help produce a detailed database on refrigerator efficiencies in selected urban, sub-urban and rural communities in Ghana.

### 3.1.7 Impact of solar electrification in beneficiary rural communities

Over the years, the Ministry of Energy has undertaken a number of projects aimed at harnessing solar energy and which also sought to demonstrate the application and viability of solar photovoltaic (PV) systems in off-grid communities in Ghana. Prominent among these is the GEF funded RESPRO project that was undertaken in thirteen communities in the Upper East region from 1998 to 2002. Others are the Wechiau Solar Battery Centre which was implemented in 1996 and the Spanish government sponsored solar electrification project in 1998, and the DANIDA sponsored Renewable Energy Development Project (REDP) which was implemented in 2000 – 2002. Detailed socio-economic impact studies have been completed during the year to assess the impact of these projects. A comprehensive analysis of the field data will be performed in 2007.

Preliminary findings indicated among other things that the Wechiau Solar Battery charging Centre was still being used by the community. Nonetheless only three charging lines were in use out of the initial ten.

# 3.1.8 IAEA-Ghana Capacity Building Project: GH/0/008: Planning for Sustainable Development.

The International Atomic Energy Agency (IAEA) is assisting Ghana to expand and upgrade its energy planning capacity. The activity aims at strengthening the energy planning capacity of the Ghanaians. The Energy Commission hosts the project and a national project team with members drawn from the Commission, Ministry of Energy, Volta River Authority, ECG, and Ghana Atomic Energy Commission (GAEC) was constituted during the year.

A steering committee to exercise oversight responsibility was also established. It is made up of representatives from the Energy Commission, Ministry of Energy, Statistical Service, National Planning Development Commission (NDPC), Ministry of Trade & Industry, Ghana Atomic Energy Commission and Tema Oil Refinery (TOR).

A two-week training workshop on Model for Analysis of Energy Demand (MAED), one of the IAEA modelling tools was successfully organised by the Commission during the year.

## 3.1.9 Climate Change Mitigation Assessment

The Energy Commission collaborated with the Environmental Protection Agency to develop a national-level analysis of potential costs and impacts of the various technologies and practices that have the capacity to mitigate climate change during the year under review. A Memorandum of Understanding (MOU) to this effect has been signed with the EPA and the study is expected to be completed in 2007.

## 3.2 POWER

#### 3.2.1 Introduction

The Energy Commission has responsibility for matters relating to the development and regulation of the electricity supply and distribution industry in Ghana. Specifically, this relates to;

- 1. Licensing of electricity service providers;
- 2. Elaboration of regulations and codes of practice for the electricity supply and distribution industry; and
- 3. Inspection and monitoring of compliance with licensing terms and conditions, regulations, rules and codes of practice by electric power service providers.

In fulfilment of the requirements under section 29 of the Energy Commission Act, (Act 541) the Energy Commission has set up the Electricity and Natural Gas Technical Committee to serve as an advisory body to the Commission on all technical matters related to the formulation of rules and regulations for efficient development and operation of the domestic electricity and natural gas markets as well as establishment and implementation of procedures for monitoring compliance with the rules and regulations. The Technical Committee is made up of two sub-committees with responsibility for electricity and natural gas respectively.

The Electricity Sub-Committee of the Technical Committee, during 2006, focused its deliberations on the following:

- i) recommendation for the adoption of a draft Licensing Manual for electricity service providers;
- ii) development of draft permanent licences for service providers in the electricity supply industry;
- iii) development of draft standard of performance regulations for electricity distribution and supply; and
- iv) review and approval of draft Terms of Reference for the development and establishment of wholesale power supply market rules and the development of a national electricity grid code for the operation of the national interconnected power system.

The completion of the above documentation and activities associated with them is expected to lead to an accelerated development of the Independent Power Production (IPP) market in Ghana.

## 3.2.2 Licensing

The Energy Commission has developed a Licensing Manual which sets out the framework for licensing service providers engaged in the electricity supply and distribution industry in Ghana. The Manual essentially provides guidance and direction to existing and prospective participants in the electricity supply and distribution industry in the country. It explicitly outlines the procedures for entry into and exit from the industry in Ghana and expected behaviour of industry players. The draft Licensing Manual was subjected to a comprehensive review by the Electricity Sub-Committee and stakeholders were offered the opportunity to review the proposals therein. The Commission finally adopted the Manual in November, 2006 and gave approval for it to be published and launched early in 2007 to establish the framework for licensing of electricity service provision under the EC Act (Act 541). Draft outlines of licences for services in the various segments of the industry have also been developed as part of the Licensing Manual and in line with the established framework. These outlines are expected to be developed into permanent licences to be issued to existing service providers in the electricity supply and distribution industry.

## 3.2.3 Regulations, Rules & Standards

Activities undertaken during 2006 included the following:

- i. development of draft Standards of Performance Regulations for Electricity Supply and Distribution;
- ii. development of draft Rules and Regulations for Wiring and Electrical Installations;
- iii. development of draft Regulations and Guidelines for Wholesale Electricity Supply Market;
- iv. development of the draft National Grid Code for operations of the National Interconnected System (NIS); and
- v. public education on enacted legislations on Energy Efficiency Standards and Labelling of Electrical Appliances (LI 1815) and Technical and Operational Rules for Electricity Supply and Distribution (LI 1816)

## 3.2.4 Standards of Performance Regulations for Electricity Supply and Distribution

Substantial progress has been made with the review and redrafting of this regulation which seeks to set reasonable benchmarks to facilitate measurement of the performance of electricity distribution utilities with respect to the Technical and Operational Rules of Practice (LI 1816) which was enacted in December 2005. The review was carried out to reconcile the proposals in

the new draft legislation with the provisions in LI 1816. The Commission also initiated direct discussions with the distribution utilities involved, so as to reach a practical consensus on the proposed benchmarks to be enacted into legislation.

#### 3.2.5 Wiring Regulations

The objective of this project is for the Commission to establish a licensing and enforcement regime for electrical contractual services as a measure to curb the rampant incidence of electrical fires and accidents resulting mainly from substandard wiring materials and practices.

A technical team of experts drawn from the industry has been set up to review and update the existing regulations for enactment into a legislative instrument by the Minister for Energy under Section 56 of the EC Act (Act 541).

# **3.2.6** Rules and Regulations for the Operation of the Wholesale Electricity Supply Market and Development of the National Electricity Grid Code

The EC is required under section 56 of the Act (Act 541) to collaborate with the Minister for Energy to establish the rules and regulations for the operation of the proposed wholesale electricity supply market (WESM) with the view to enhance transparency and thereby promote private participation in the sector. In addition to the establishment of the Rules & Regulations for the WESM the EC is required under Section 28 of the Act to develop the Technical and Operational Rules of Practice (i.e. the Grid Code) for the operation of the National Interconnected Transmission System.

Following prolonged delays to access funds under the West Africa Power Pool (WAPP) APL-1 Project (World Bank Credit Facility No. 4092-GH) to initiate the required studies, the Energy Commission took a decision to use its own funds for the engagement of local consultants to assist with the development of the Wholesale Electricity Supply Market (WESM) rules and the National Electricity Grid Code. The procurement process for the consultancy services was completed during the year under review and contracts were awarded to two local consultants to begin work in January 2007. The consultants are expected to develop draft proposals for the WESM structure and rules as well as a draft National Electricity Grid Code by July 2007.

#### 3.2.7 Inspection and Monitoring of Compliance

The Takoradi Thermal Power Station Complex and the Osagyefo Power Barge which is now docked at the Effasu berth were visited to carry out routine inspection checks and compliance monitoring activities during the year. The 220MW TICO power plant was found to be in a very good condition and operating within stipulated environmental limits as reported in their respective quarterly performance statistics submissions. The 330MW TAPCO plant, on the other hand, was found to be undergoing thorough refurbishment (mainly corrosion treatment). One-half of the plant had been shut down between April-November, 2006 due to mechanical problems suffered by one of the combustion turbine rotors which had to be shipped abroad for repairs. Preparatory works had also commenced to convert the fuel systems of the plant to receive and run on natural gas fuel when the West African Gas Pipeline being constructed to transport natural gas from Nigeria to Tema in the Greater Accra region and Takoradi in the Western region of Ghana is completed.

The Osagyefo Power Barge, berthed at Effasu continues to receive good maintenance from the dedicated staff provided by VRA to keep the barge in good condition void of rust and undue deterioration arising from non-operation. Meanwhile arrangements for the strategic relocation of the power barge for utilization to mitigate the power curtailment problems that surfaced towards the last quarter of the year were also being pursued.

## 3.3 NATURAL GAS

## 3.3.1 Introduction

The Energy Commission has the responsibility of developing, regulating, managing, monitoring and granting of licenses for transmission, wholesale supply, distribution and sale of natural gas. During the year under review, the Commission undertook the following activities:

- 1. Preparation of Natural Gas Transmission and Distribution Infrastructure Plan for Ghana;
- 2. Preparation of draft Natural Gas Rules and Regulations; and
- 3. held a Parliamentary Forum on Natural Gas Rules and Regulations

## **3.3.2** Infrastructure Development

In 2006 the Energy Commission conducted a study which culminated in the definition of the Natural Gas Infrastructure Master Plan in which recommendations for the development of the Natural Gas Secondary Market in Ghana were outlined.

To ensure the development of enabling policies and a regulatory environment that will optimize the development and utilization of natural gas for all stakeholders, it was recognised that:

- 1. The policy and regulatory regime should:
  - reflect fair returns to all stakeholders, including government and other stakeholders.
  - be transparent, predictable, clearly defined and open to all investors that meet specified criteria.
  - be simple to administer and not impose unnecessary bureaucratic 'red-tape' on private investors.
- 2. It would be beneficial for the government to:
  - actively promote development by attracting private sector investment, particularly in the Tema/Accra area.
  - promote education and technical assistance for end-user groups.
  - develop a gas utilization plan alongside the infrastructure plan
  - expand the transmission system beyond the Tema/Accra franchise area,

- take equity position through a specified government entity in the distribution network in the Tema/Accra area.
- ensure that the operatorship of both transmission and distribution systems nationwide be performed by a qualified private operator.
- ensure that one aggregator be responsible for the sale of the commodity (gas) to the initial franchise area (Tema/Accra) as well as other areas throughout the country.
- 3. The development of indigenous gas supply sources (eg Saltpond and Tano fields) should be encouraged to enhance supply security.
- 4. The system should not only focus on the initial local flow requirements but should be strategically designed to handle unplanned flows beyond the forecast volumes.
- 5. To manage the risk of possible supply disruption, the "depleted" reservoir in Saltpond could be used as a gas storage site.
- 6. If longer disruption periods are anticipated, an LNG source, with provision for a regasification unit, could be considered.
- 7. To reassess the available storage capacity in Saltpond (and any other possible storage site) and estimate the cost of the required injection and withdrawal facilities.

## 3.3.3 Natural Gas Rules and Regulations

The Commission has since January 2006 completed the following draft rules and regulations for the natural gas secondary market in Ghana.

- 1. Natural Gas Licence Regulations
- 2. Natural Gas Distribution and Sale (Standards of Performance) Regulations *(in collaboration with PURC)*
- 3. Natural Gas Distribution and Sale (Technical and Operational) Rules
- 4. Natural Gas Transmission Utility (Standards of Performance) Regulations (*in collaboration with PURC*)

- 5. Natural Gas Transmission Utility Operational Regulations
- Natural Gas Occupational, Health and Safety (Standards and Procedure for Design, Construction and Maintenance of Facilities) Regulations.

## 3.3.4 Parliamentary Forum on Draft Natural Gas Rules and Regulations

The Commission organized a two-day Parliamentary/Stakeholders Forum in December, 2006 on the Draft Natural Gas Rules and Regulations, and the Infrastructure Master Plan for the local natural gas market.

The purpose of the forum was to enable the Parliamentary Select Committee and stakeholders comment on the draft rules and regulations before they were formally presented to Parliament.

## 3.3.5 Features of the Natural Gas Market Development Plan

In the last quarter of 2006 the Energy Commission identified the following features which will enhance economic development using natural gas as an energy resource:

- 1. The Ghana Gas Supply and Distribution System shall be developed, similar to the Electricity System. The system will evolve around one state owned open access transmission system, that shall interconnect the various distribution utilities in identified distribution franchise areas, and several suppliers and distributors. The transmission system shall also provide access to gas to bulk customers, such as Independent Power Producers (IPP) who are not covered under the industrial tariffs under WAGP protocols.
- 2. A state owned institution shall either be established or an existing one empowered to play an active role in the development of the natural gas secondary market either alone or in partnership with other foreign private sector operators with the necessary technical expertise and experience. The mandate of the "Natural Gas Transmission Utility" shall include the development of the Natural Gas Transmission System and the bulk purchase of Natural Gas from suppliers (in Nigeria and elsewhere) and subsequent supply to distribution franchise operators or bulk customers.

- 3. Local entrepreneurs or companies should be encouraged to team up with foreign operators with the necessary expertise and experience to build the distribution systems, especially compressed natural gas (CNG) stations that will provide cheaper, cleaner alternative fuel to petrol and diesel for the transport sector.
- 4. Although the transmission system is intended to be built and owned by government, it is possible for the government to allow private sector participation in the development of the transmission system on a Build Operate and Transfer (BOT) basis. In principle it is also possible to allow one investor to develop both the transmission and distribution systems provided it is agreed that the transmission component of the system shall be open access and built on BOT basis and that other distribution franchise areas could be connected to the transmission system at any time.
- 5. Drawing lessons from recent incidents of gas supply disruptions to Europe, Ukraine and Georgia from Russia, other sources of gas and storage facilities should be developed to ensure reliable and uninterrupted supply of gas once industries convert to gas. Possible alternative supply sources that could be considered are Tano basin, Cote d'Ivoire and liquefied natural gas terminals. The Tano and Saltpond fields could be considered for gas production and storage respectively.
- 5. Fiscal incentives: Government may enhance fiscal incentives as applicable to investors under the provisions of the Ghana Investment Promotion Centre (GIPC).
- 6. Market Development: Given the very infant nature of the natural gas as a fuel in Ghana, the development of the market needs to be promoted vigorously by attracting private sector investment, providing technical assistance for end-user groups, as well as information on the cost of switching to gas and the development of a gas utilization plan alongside the gas infrastructure plan.

- 7. Regulatory framework:
  - (i) The Energy Commission, as provided for under EC Act 541, will define concession or franchise areas for local gas distribution and license local distribution companies (LDC) to operate in such areas.
  - (ii) Energy Commission will license operators in the Natural Gas Secondary Market in accordance with the rules and regulation formulated under EC Act 541.
  - (iii) Technical regulation of operators in the Natural Gas Secondary Market will be under the purview of EC as provided for under EC Act 541.
  - (iv) Natural gas distribution pricing will be subject to approval of the Public Utilities Regulatory Commission (PURC) in accordance with guidelines developed by PURC.
  - (v) Distribution Franchise Area operators or Local Distribution Companies (LDC) shall be selected on a competitive basis in accordance with the provisions of a Request for Proposals (RFP) that will be prepared and issued by the regulators in due course.

## 3.4 RENEWABLE ENERGY RESOURCES

## 3.4.1 Introduction

The Energy Commission is responsible for recommending plans and programmes for the exploration of renewable energy resources and technologies and promoting their development and utilisation as well as regulating the renewable energy sub sector. The Commission also monitors:

- compliance and enforcement of the rules and regulations by service providers and consumers; and
- the effectiveness of the regulatory framework for service providers in terms of permitting, codes of practice and standards of performance.

The key areas of concern in respect of programmes and projects include: solar, wind, small hydro resources, biofuels and the promotion and its utilisation of such resources.

Activities undertaken during the period under review include the following:

- 1. Off-grid Rural Electrification.
- 2. Solar and Wind Energy Resources Assessment (SWERA)
- 3. Development of Biofuels Policy
- 4. Issuing of Permits to Renewable Energy Service Providers
- 5. Monitoring of export of charcoal produced from waste wood.

## 3.4.2 Off-grid Rural Electrification

The Energy Commission under this project installed 12 units of solar street lights in Teacher Mante and Kyekyewere in the Suhum Kraboa Coaltar District in the Eastern Region as a community street lighting system. In addition, three solar school systems were installed; two at Teacher Mante Junior Secondary School (JSS) and the other at Kyekyewere JSS. (See Figures 1 and 2).

A cross-section of Teacher Mante citizens has indicated that the installation of the streetlights has boosted commercial activities in the town. Food vendors, fruit sellers and others have increased their sales because they are able to sell their wares deep into the night. Security in the town has also improved. The pupils in the Junior Secondary School (JSS) have also taken advantage of the improved lighting system in the school to study and participate in classes organised by the school authorities in the evenings.

To facilitate the duties of the Police and CEPS officials, the Energy Commission installed 10 solar security lights at the Ofankor, Ashiaman and Adenta police barriers, and two CEPS outposts at Atuna in the Brong Ahafo Region and Kubease in the Ashanti Region to assist in the inspection of vehicles and documents by the Police, and goods in transit by CEPS.



Fig.1: Solar Street Lights installed at Teacher Mante

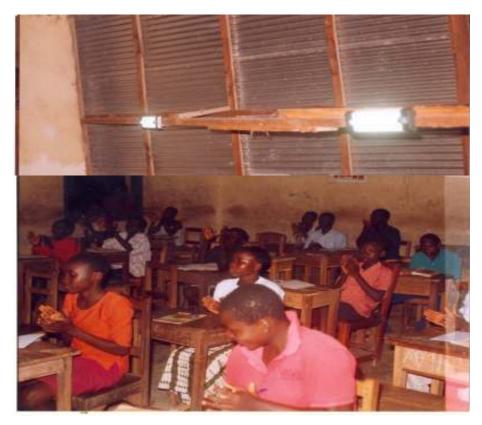


Fig. 2: School children using the Solar Lighting System to study in the evening at Teacher Mante

## 3.4.3 Solar and Wind Energy Resources Assessment (SWERA)

Wind measuring equipment have been installed on two sites at Nkwanta (at 30m height) one site each at Amedzofe (at 20m height) and Anloga (at 20m height) to measure wind speed and direction. The measurement would be done for a period of 3 years in order to obtain reliable wind data and information on the diurnal, seasonal and annual variations. (See Fig. 3).



Fig. 3: Wind measurement being taken at the various measurement sites

During the period under review, 8 months of data, from May to December 2006, was collected and analysed with a special software (WASP). The preliminary results indicate the wind speeds as shown in fig.4:

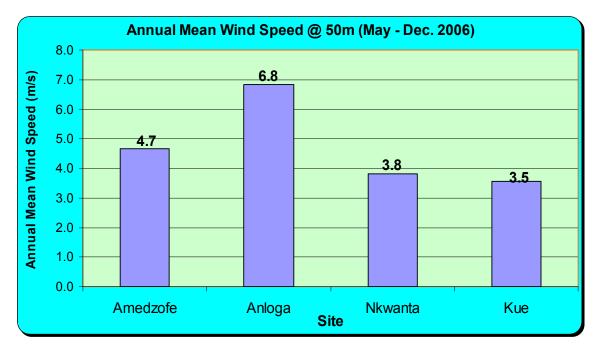


Fig. 4: Annual mean wind speed at 50 m at the various measuring sites

The wind speed at Anloga, Volta region (mean wind speed of 6.8 m/s) is high and indicates that the site is suitable for the development of a wind farm for electricity production. Wind speeds at the three other locations which are situated inland, so far do not suggest their suitability for commercial production of electricity. The measurements will continue in these and other sites to be identified.

## 3.4.4 Development of Biofuels Policy

The National Biofuels Committee completed its report towards the end of the year. Some of the recommendations in the report include:

- Integration of biofuels into the national fuel mix: It was recommended that the mandatory mix of biofuels in the national fuel consumption should be 5% by 2010 and 10% by 2015.
- ii. Feedstock for biofuel production: Cassava and sugar cane were identified as possible feedstock for the production of ethanol whilst oil palm and jatropha curcas were identified as feedstock for the production of biodiesel. It must however be emphasised that that under no circumstances should biofuel production be allowed to endanger food production and security.
- iii. Local Processing Capacity: It was suggested that an esterification plant capable of processing 80,000 to 100,000 tonnes per annum be established, preferably by the private sector, at a strategic location where the feedstock is available. A processing plant for processing cassava starch and sugar cane into alcohol capable of producing 60,000 to 80,000 tonnes of ethanol per annum could also be established around Komenda to process sugar cane produced in the area and starch produced by the Ayensu Starch Company at Bawjiase into fuel grade ethanol.
- Technology development relating to end use: An initial blend of up to 10% biofuel was recommended. This could subsequently be upgraded to 20% as the local production capacity and engine technology improved.
- v. Consumer acceptance of the new fuel: Vigorous education on biofuels shall be required to ensure consumer awareness and acceptance of biofuel.
- vi. Cost Competitiveness: In order to avoid the payment of subsidies to biofuel producers, a pricing policy which allows local biofuel prices to be based on import parity prices (FOB) of the various biofuels and guaranteed by the Oil Marketing Companies (OMCs) or the National Petroleum Authority (NPA) could be the way forward.

## 3.4.5 Issuing of Permits to Renewable Energy Service Providers

During the period under review charcoal export permits of two companies were renewed. The companies were:

- Beetel Limited whose production site is located at Akyem Oda in the Eastern Region; and
- Big K Products Limited whose production site is at Manso Amenfi in the Western Region.

A new permit for charcoal export was also granted to Nanuel Enterprise whose production site is located at Techiman in the Brong Ahafo Region.

## 3.4.6 Monitoring of Charcoal exports

Compliance monitoring was conducted for charcoal exports. The monitoring exercise examined the sources of wood used for the production of charcoal, production methods, quantity of charcoal exported and destination. The exercise confirmed that all the companies issued with permits to export charcoal conformed to the regulations. Data released by the Ministry of Trade, Industries & PSI showed that in 2006, a total of 2,920 tonnes of charcoal was exported. Quantities exported in 2003, 2004 and 2005 were 4,590 tonnes, 4,630 tonnes and 5,630 tonnes respectively as indicated in Fig 5. The 20% reduction in export in 2006, as compared to 2003 when there were no rules governing the production and export of charcoal, is the result of effective monitoring and regulation of the business that restricts exports to only charcoal produced from waste wood and planted forest.

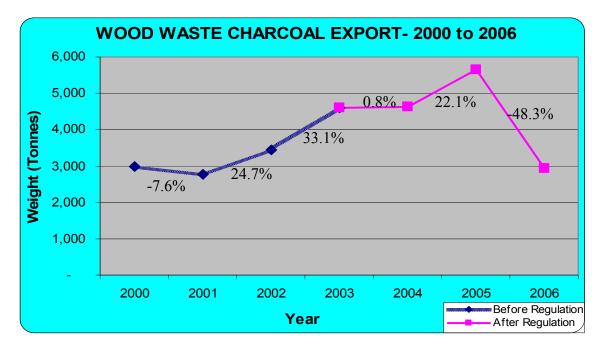


Fig. 5: Charcoal Export from 2000 to 2006

## 3.5 HUMAN RESOURCE AND ADMINISTRATION

### 3.5.1 Introduction

The Human Resource and Administration (HR&A) Unit provides support services to the Commission, including personnel administration, manpower planning, recruitment and selection, as well as compensation management. It is also responsible for internal communication at the Commission and oversees general services in terms of procurement, store keeping, transport and estate management.

In an effort to meet its responsibilities, the HR&A unit during the year under review pursued the following activities:

- (i) Training and Development
- (ii) Recruitment and selection of staff
- (iii) Development of a Human Resource Policy and Procedures Manual
- (iv) Human Resource software development and implementation.

#### 3.5.2 Training and development

The Commission during the year under review facilitated the training of 30 staff from various Divisions and Units both locally and abroad to help improve and sharpen expertise and to fill identified competency gaps for improved staff performance. The 30 were made up of 5 management staff, 18 senior staff and 7 drivers. Some of the training programmes were sponsored by development partners.

#### 3.5.3 Development of Human Resource Policy & Procedures

In an effort to streamline HR activities and to foster uniformity and transparency, the Commission embarked on a process to develop a Human Resource Policy and Procedures Manual for the Energy Commission. As at the end of 2006 the first draft of the Policies and Procedures Manual had been completed for review and comments before being finalised. It is expected that the completion of the HR Policy and Procedures will enhance productivity and retention of expertise at the Commission.

The Commission also procured and installed specialised Human Resource Management software to enhance efficient staff administration and effective Human Resource Management. Training in the use of this software began in 2006 and would end in March, 2007 for subsequent implementation.

## 3.5.4 Procurement

The EC established a Procurement Unit in 2005. In 2006 the assigned staffs was trained on the Public Procurement Law in order to streamline the Commission's procurement procedures to conform to the new law. An Entity Tender Committee was formed and a procurement plan for the Commission was prepared and implemented. The unit would be strengthened to ensure that the EC is in full compliance with the law.

#### 3.5.5 Vehicle Management

The operations of vehicle fleets could result in serious financial drains if efforts are not made to track the movement and technical performance of vehicles. To enhance early identification of technical issues that could affect productivity, the EC has developed a computerised vehicle management system which tracks fuel and lubricant consumption of its fleet of vehicles, maintenance schedules as well as the frequency of purchase and cost of spare parts. It is expected that this system would enhance the smooth running and management of the Commission's fleet of vehicles.

## 3.5.6 Internal Communication and Staff welfare issues

Internal communication and staff welfare issues in 2006 were improved greatly with the formation of the Staff Welfare Association. The Staff Welfare Association has therefore become a medium for handling staff concerns.

## **3.6 PUBLIC EDUCATION**

#### 3.6.1 Introduction

As a regulatory institution, the ability to create awareness about new regulations and deeper understanding of existing ones among stakeholders and the general public is crucial to ensure compliance with the regulations. The Public Affairs Unit is responsible for enhancing the public image of the Commission and also for creating and deepening public awareness on energy as a crucial resource for national development and livelihood. It manages the Commission's media relations and gathers relevant information of the various Divisions and Units of the Commission in order to provide information to the public and stakeholders.

## 3.6.2 Public Awareness Campaign

i. During the year under review, the Unit embarked on a public education and awareness campaign on new legislations that were passed at the end of 2005. These legislations seek to improve the quality of supply of electricity and promote the efficient utilization of electrical energy in the country. Specifically educational information on the Energy Efficiency Standards and Labelling Regulations, 2005 (LI 1815) and Technical and Operational Rules for Electricity Supply and Distribution Regulations, 2005 (LI 1816) were vigorously communicated to the public following a launch by the Minister for Energy. The campaign covered the Sekondi-Takoradi, Kumasi and Tamale metropolitan areas. The fora which were held between June and November 2006 were preceded in each case by radio talk shows during which the provisions of the regulations were explained to the general public.

#### 3.7 INTERNATIONAL CO-OPERATION

#### 3.7.1 World Energy Council (WEC) Activities

The effort and drive to encourage local energy affiliated agencies and institutions to subscribe to the membership of the Ghana Committee of the World Energy Council (WEC) which was formally established in 2005 continued. Efforts also were made to officially register the Ghana Energy Association with the Office of the Registrar General's Department.

The Commission participated in the Africa Regional WEC meeting held in Algeria in April 2006. The need for energy market reforms and integration was re-emphasised as important ingredients for the accelerated development of the African region. The Commission was however unable to attend follow-up meetings in South Africa to discuss Africa's Energy Scenario development task which is required as input for the WEC's world-wide international energy outlook for the next 50-years which is a study being executed by WEC. The study report is expected to be presented and launched as part of the November 2007 World Energy Congress scheduled to be held in Rome, Italy.

## 3.7.2 Participation in Climate Change negotiations

The United Nations Framework Convention on Climate Change (UNFCCC) under the auspices of the United Nations Secretary-General has been holding annual conferences dubbed United Nations Climate Change Conference, since 1992. The UN conference assembles member countries of the UN to discuss measures aimed at reducing greenhouse gas (GHG) emissions that is believed to be responsible for Climate Change. The Energy Commission officially became a member of Ghana's negotiating team to the UN Conference in 2005.

Energy Commission serves as the mouthpiece and expert on energy related matters in the Ghanaian team.

The EC attended the 12<sup>th</sup> UN Conference on Climate Change and the Kyoto Protocol held in Kenya in December. Discussions on Ghana's Programmatic CDM proposal on Energy Efficiency of Room Air Conditioners continued after it had been referred by the Meeting of Partners (MOP) held in Montreal, Canada in 2005.

CDM is one of the flexible mechanisms through which developed countries, usually referred to as Annex 1 (Annex B under the Kyoto Protocol) countries, are allowed to earn carbon credits by investing in non-carbon or low-carbon projects in developing countries. Non-carbon or low-carbon projects are activities, such as renewable energy and energy efficiency, that reduce GHG emissions into the atmosphere.

The EC is of the opinion that a country can reduce its GHG emissions by replacing for instance, traditional incandescent bulbs with more efficient compact fluorescent lamps (CFLs) if that country's electricity is generated partly from fossil fuels. The EC's proposal would be open for discussion by members during the UNFCCC's subsidiary bodies' meetings where proposals are evaluated technically, in June 2007 in Bonn, Germany.

## **APENDICES**

#### Appendix I

ENERGY STATISTICS (2000 – 2005)

#### **1.0 ENERGY PRODUCTION**

#### Electricity

NAME OF PLANT	2000	Share (%)	2005	Share (%)
Total Hydro	1,072	65	1,180	68
Akosombo Hydro	912	55	1020	59
Kpong Hydro	160	10	160	9
Total Thermal	580	35	550	32
ТАРСО	330	20	330	19
TICO	220	13	220	13
Tema Diesel	30	2	0	0
TOTAL	1,652		1,730	

Table 1: Installed Generation Capacities in 2000 & 2005 (MW)

Source: Energy Commission and VRA

Table 2: Electricit	y Generation Levels
---------------------	---------------------

	2000	2001	2002	2003	2004	2005
			Gigav	vatt-hour		
Hydro	6,610	6,608	5,036	3,885	5,281	5,629
Shares (%)	92	84	69	66	87	83
Thermal	613	1,251	2,260	2,015	758	1,159
Shares (%)	8	16	31	34	13	17
Total Generation	7,223	7,859	7,296	5,900	6,039	6,788

Source: VRA

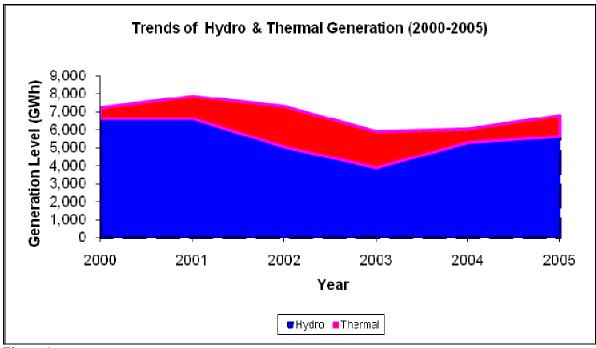


Figure 1

Table 3:	Electricity Im	ports & Expor	ts in GWh
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	2000	2001	2002	2003	2004	2005
Imports	864	462	1,146	940	878	815
Exports <sup>1</sup>	392	302	612	604	665	639
NET	472	160	534	336	213	176

Source: VRA

#### Petroleum

#### Table 4: Crude Oil Imports in Tonnes

	2000	2001	2002	2003	2004	2005
Crude Oil for Refinery	1,131,834	1,262,872	1,179,364	1,406,205	1,813,464	1,645,516
Crude Oil for Electricity Generation	153,094	275,907	601,647	527,600	163,428	321,985
TOTAL	1,284,928	1,538,779	1,781,011	1,933,805	1,976,892	1,967,501

<sup>&</sup>lt;sup>1</sup> Exports exclude sales to VALCO

Total	1,028,409	1,069,876	1,155,414	1,351,757	1,604,031	1,456,775
RFO	261,920	261,082	195,685	163,534	199,075	206,419
Gas oil	358,098	353,476	446,535	506,603	568,363	406,269
ATK	108,297	63,978	81,601	85,631	106,907	110,970
Kerosene	51,788	98,087	61,052	109,642	111,092	87,740
Gasoline	238,638	286,300	346,171	433,795	553,076	567,088
LPG	9,668	6,953	24,371	52,552	65,518	78,289
	2000	2001	2002	2003	2004	2005

Table 5: Petroleum Products Produced at TOR in Tonnes

Source: TOR

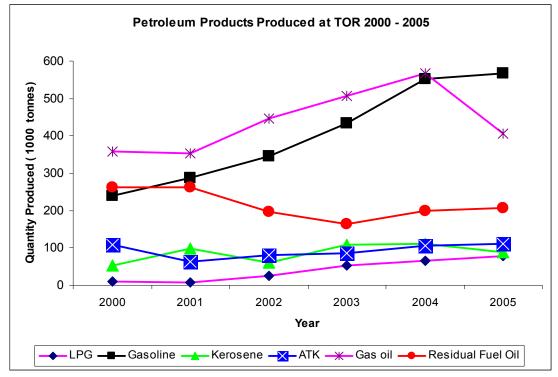


Figure 2

	Table 6. Feußleun Floducts imports in Tonnes							
	2000	2001	2002	2003	2004	2005		
LPG	35,424	35,558	31,962	16,691	11,011	7,077		
Premium Gasoline	386,995	389,400	370,844	232,051	255,362	167,482		
Kerosene (DPK)	30,444	21,522	48,767	34,560	0	0		
Diesel (Gas oil)	363,191	354,311	298,042	285,747	313,103	403,730		
RFO	290	147	77	0	0	0		
Total	816,344	800,938	749,692	569,049	579,476	578,289		

Table 6: Petroleum Products Imports in Tonnes

DPK means Dual Purpose Kerosene (it can either be used as aviation fuel or as normal kerosene)

	Tuble // Terroream Trouver Exports in Tonnes						
PRODUCT	2000	2001	2002	2003	2004	2005	
LPG	6,237	1,161	4,475	11,178	5,989	12,541	
Gas Oil	597	966	1,890	11,970	42,351	37,650	
RFO	190,748	215,650	151,701	89,364	168,886	162,769	
Heavy Gasoline	97,064	126,722	129,221	102,952	146,453	161,870	
ATK	0	0	0	838	0	77	
Premium Gasoline	0	0	0	1,050	4,386	41,883	
Total	294,646	344,499	287,287	217,352	368,065	416,790	

**Table 7: Petroleum Product Exports in Tonnes** 

. ATK is Aviation Turbine Kerosene. Source: TOR

#### 2.0 **ENERGY UTILISATION**

#### **Electricity Consumption**

Table 8: Sec	toral Elect	ricity Consu	umption in C	GWh		
	2000	2001	2002	2003	2004	2005
Household	1,585	1,688	1,795	1,854	1,971	1,957
Commercial	445.4	503.3	477.3	492.9	530.2	746. 9
Industry <sup>2</sup>	4,026.4	4,336.5	3,899. 8	2,206.1	2,085. 3	2,542.6
TOTAL	6,057	6,528	6,172	4,553	4,587	5,247
Total System Losses	1,177	1,199	1,244	1,294	1,434	1,418

Table 9. Sectoral Electricity Co -----

System Losses is sum of technical and commercial losses in distribution Source: Energy Commission

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<sup>&</sup>lt;sup>2</sup> Agricultural sector consumption is included in Industries.

#### **Petroleum Products Consumption**

	oleum i louueus	Supply to the I	neer nur tyrar kee	(in neres excep	t EI C III Kgs)				
PRODUCTS	2000	2001	2002	2003	2004	2005			
LPG	44,999,648	42,519,123	49,954,999	56,707,826	65,666,614	70,460,665			
Gasoline Premix	42,187,000	37,190,667	36,922,500	39,861,089	38,004,600	43,267,500			
GBS Export	59,569,046	39,809,812	40,734,171	40,079,790	22,233,304	44,063,658			
Gasoline Premium	707,879,250	722,377,200	769,763,190	647,761,842	777,086,900	726,024,190			
Kerosene	83,662,286	87,326,650	92,666,660	85,154,700	90,582,050	92,025,700			
ATK	120,005,250	94,570,500	111,997,200	111,180,450	132,993,600	147,672,710			
Diesel / Gas oil	790,695,840	813,926,690	852,512,318	896,957,186	1,008,137,950	1,045,569,250			
RFO	63,347,700	57,722,900	57,591,990	50,689,900	50,212,750	53,126,550			
*GBS stands fo	*GBS stands for Ghana Bunkering Services, ATK is Aviation Turbine Kerosene Source: NPA								

Table Q. Patroloum Products	Supply to the Internal Market (	(In litras aveant I PC in las)
Table 7. Tell oleum Trouucis	s Supply to the Internal Market (	(In nu es except Li e in kgs)

#### Light Crude Oil Consumption

#### Table 10: Consumption of Light Crude Oil for Electricity Generation (m<sup>3</sup>)

PLANT	2000	2001	2002	2003	2004	2005
ТАРСО	112,953	180,044	223,982	368,704	145,801	214,270
TICO	73,181	178,344	476,535	233,168	76,555	113,523
Total	186,134	358,388	700,517	601,872	222,356	327,793

\*Approximated to the nearest whole number Source: VRA

#### **Woodfuel Consumption**

100101		1		2002	2002	2004	2005	
		2000	2001	2002	2003	2004	2005	
Estima	Estimated Consumption in million tonnes							
С	Wood used as	7.1	8.0	8.3	8.6	8.7	8.8	
C	Firewood	/.1	8.0	0.5	8.0	0.7	0.0	
	Wood for							
D	Charcoal <sup>3</sup>	5.0-7.5	5.2-7.8	5.4-8.1	5.6-8.4	5.8-8.5	5.8-8.5	
	Production							
	<b>Total Primary</b>							
C+D	Woodfuel	12.1-14.6	13.2-15.8	13.7-16.4	14.2-17.0	14.5 - 17.2	14.6-17.3	
	Consumed							
Percen	tage Shares of the I	Demand Sec	ctors					
Reside	ntial	72.3	71.8	71.3	70.8	71.0	71.0	
Agricu	lture & Fisheries	0.1	0.1	0.1	0.1	0.1	0.1	
Indust	ry	24.5	25.9	25.4	25.8	25.7	25.7	
Comm	ercial & Services	3.1	3.2	3.2	3.2	3.2	3.2	

Table 11: Woodfuel Consumption in Million tonnes

Industrial Wood Consumption includes the consumption of Bakeries, Bricks and Tiles Source: Energy Commission

 $<sup>^{3}</sup>$  Based on the assumption that between 4 – 5 units of wood is required to produce one unit of charcoal. 4 units of hard wood yields about a unit of charcoal, whilst 6 units of soft wood yields about a unit of charcoal

#### **Appendix II**

#### Audited Financial Statements for the year ended 31st December, 2004

#### **ENERGY COMMISSION**

#### **Report of the Commissioners**

The Commission has the pleasure to present to the Honorable Minister of Energy the audited financial statements of the Commission for the year ended 31st December, 2004 and to report as follows:

#### **Principal Activities**

The principal activities of the Commission include the regulation and management of the utilization of energy resources in Ghana and the co-ordination of policies relating to them. In particular to:

- advise the Minister of Energy on national policies for the efficient, economical, and safe supply of electricity, natural gas, and petroleum products having due regard to the national economy;
- provide legal, regulatory and supervisory framework for providers of energy (i.e. licensing, monitoring, compliance, prescription of rules and regulations by legislative instruments);
- recommend national policies for the development and utilization of indigenous energy resources.

The Commission is also responsible for the management and administration of the Energy Fund which for this purpose includes the Controller and Accountant-General or his representative.

Results		¢'000
•	<b>Recurrent Activities</b> The Commission made excess of expenditure over income of	(1,118,919)
	This is added to the balance on Accumulated Fund Account brought forward of	477,650
	Balance on Accumulated Fund Account carried forward is	(641,269)

Energy Fund Account	
Balance as at 1st January, 2004	7,526,498
Net Decrease in the year	(3,587,032)
Balance at 31st December, 2004	3,939,466
Balance at 31st December, 2004	3,939,466

BY ORDER OF THE COMMISSION

COMMISSIONER

•

COMMISSIONER

#### Report of the Auditors for the year ended 31st December, 2004

We have audited the financial statements of the Commission set out on pages 4 to 6 which have been prepared under the historical cost convention and the accounting policies set out on pages 9 and 10.

#### Respective responsibilities of the Commissioners and Auditors

The Commissioners are responsible for the preparation of the financial statements. It is our responsibility to form an independent opinion, based on our audit, on those statements and to report our opinion thereon.

#### **Basis of opinion**

We conducted our audit in accordance with International Standards on Auditing. An audit includes examination, on test basis, of evidence relevant to the accounts and disclosures in the financial statements. It also includes an assessment of the significant estimates and judgments made by the Commissioners in the preparation of the financial statements, and of whether the accounting policies set out on pages 9 and

10 are appropriate to the Commission's circumstances, consistently applied and adequately disclosed.

We planned and performed our audit so as to obtain all the information and explanations which we considered necessary in order to provide us with sufficient evidence to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or other irregularity or error.

In forming our opinion we also evaluated the overall adequacy of the presentation of information in the financial statements.

#### Opinion

In our opinion, proper books of account have been kept and the financial statements, which are in agreement therewith, give a true and fair view of the state of affairs of the Commission at as 31st December, 2004 and of its results and cash flows for the year then ended and comply in all material respects with the Energy Commission Act, 1997 (Act 541).

#### STATE ENTERPRISES AUDIT CORPORATION

(A.M. NYAMPONG)	<b>4TH FLOOR REPUBLIC HOUSE</b>
AG. MANAGING DIRECTOR	KWAME NKRUMAH AVENUE
DATE:	

#### Income and Expenditure Account for the year ended 31st December, 2004

	Notes	2004	2003
		¢'000	¢'000
Income			
Revenue Grants	2	16,010,000	8,284,412
Grants for Bui Development Committee	2A	-	989,265
Other Income		166,120	-
		16,176,120	9,273,677
Expenditure			
Personnel Emoluments	3	3,245,347	3,057,318
Administrative and General expenses	4	10,733,318	7,917,090
Service Activity expenses	5	3,316,374	1,481,127
		17,295,039	12,455,535

Excess of expenditure over income transferred to Accumulated Fund Account	(1,118,919)	(3,181,858)
Accumulated Fund Account for the year ended 31st December, 2004		
	2004	2003
	¢'000	¢'000
Balance as at 1st January	477,650	3,659,508
Excess of expenditure over income		
transferred from Income and Expenditure Account	(1,118,919)	(3,181,858)
Balance as at 31st December	(641,269)	477,650

The notes on pages 9 to 15 form an integral part of these financial statements.

#### Balance Sheet as at 31st December, 2004

		2004	2003
	Notes	¢'000	¢'000
Non-Current Assets			
Property, Plant and Equipment	6	4,359,889	4,278,664
Deferred Expenditure	6A	5,670,926	6,030,231
Deposits		326,368	-
		10,357,183	10,308,895
Current Assets			
Accounts Receivable	7	210,521	176,938
Prepayments	8	4,741,582	5,863,573
Cash and Bank balances	9	8,652,287	10,407,848
Cash and Bank balances	9	8,652,287	10,407,848

		13,604,390	16,448,359
Current Liabilities			
Accounts Payable	10	296,500	1,205,890
Net Current Assets		13,307,890	15,242,469
Total Net Assets Employed		23,665,073	25,551,364
Financed by:			
Capital Grant	11	16,366,876	17,547,216
Special Fund Account	12	4,000,000	-
Accumulated Fund		(641,269)	477,650
Energy Fund		3,939,466	7,526,498
		23,665,073	25,551,364

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#### COMMISSIONER

#### COMMISSIONER

The notes on pages 9 to 16 form an integral part of these financial statements.

#### Cash Flow Statement for the year ended 31st December, 2004

	Notes	2004 ¢'000	2003 ¢'000
Net cash outflow into operating activities	13	(9,874,220)	(11,123,996)
Deduct proceeds from disposal of fixed assets		177,493	-
Deduct cash inflows into the Energy Fund in the year		11,530,877	11,544,640
Add Bank charges on Energy Fund Account		(10)	(420)
Net cash inflow before investing activities		1,834,140	420,224

#### **Investing Activities**

Fixed assets purchased		(2,204,906)	(4,160,208)
Capital work-in-progress		(1,058,427)	(2,707,674)
Deposit for vehicle		(326,368)	
		(3,589,701)	(6,867,882)
Total Net cash outflow in the year	13A	(1,755,561)	(6,447,658)
Cash and cash equivalents at 1st January		10,407,848	16,855,506
Cash and cash equivalents at 31st December The notes on pages 9 to 16 form an integral part of these financial s	statements	8,652,287	10,407,848

#### Report of the Auditors on movements on the Energy Fund Account for the year ended 31st December, 2004

We have audited the accompanying Statement of Movements on the Energy Fund Account for the year ended 31st December, 2004.

It is the responsibility of the Commissioners to maintain proper accounting records for the fund. Our responsibility is to express an independent opinion on the statement of movements on the Fund account.

We conducted our audit in accordance with generally accepted auditing standards. We planned and performed our audit to enable us obtain reasonable assurance that the fund account is free from material misstatement. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the statement of movements on the Energy Fund account is in agreement with its underlying records and gives a true and fair view of the financial

position of the Fund as at 31st December, 2004.

#### STATE ENTERPRISES AUDIT CORPORATION

#### A.M. NYAMPONG

#### **4TH FLOOR REPUBLIC HOUSE**

AG. MANAGING DIRECTOR

KWAME NKRUMAH AVENUE ACCRA

DATE:

#### Statement of Movements on the Energy Fund Account for the year ended 31st December, 2004

	2004 ¢'000	2003 ¢'000
Resources:		
Balance at bank at 1st January	7,526,498	11,938,304
Cash inflows in the year:		
Petroleum levy	9,003,931	10,498,240
Permits and Licensing fees	2,405,971	1,046,400
Refund from Energy Commission in respect of 2003		
Investment Activity (Note 2)	120,975	

Total cash available	19,057,375	23,482,944
Less Expenditures:		
Capital expenditure of the Energy Commission	3,602,934	13,786,444
Special Fund Account created by Energy Commission	4,000,000	-
General Administrative expenses of Energy Commisson	7,514,965	1,977,250
Bui Dam Development Committee	-	192,332
Bank charges	10	420
Total expenditures	15,117,909	15,956,446
Balance at bank at 31st December	3,939,466	7,526,498

The notes on pages 9 to 16 form an integral part of these financial statements.

#### Notes to the Financial Statements for the year ended 31st December, 2004

Note

#### 1: Accounting Policies

The following are the significant accounting policies adopted by the Commission in the preparation of the financial statements.

#### a) **Basis of accounting**

The financial statements have been prepared under the historical cost convention.

#### b) Fixed Assets

Fixed assets are stated at the cost of purchase together with any incidental costs of acquisition.

Depreciation is charged on fixed assets on a straightline basis over the expected useful lives of the assets concerned.

The principal annual rates used for this purpose are:

Office furniture and fittings	-	121/2%
Motor Vehicles	-	25%
Plant, machinery and equipment	-	20%
Computers and accessories	-	33 1/3%
Wind measurement equipment	-	20%

c) Grants

 (i) Deferred credit
 Grants received in the form of fixed assets or cash for the purchase of fixed assets are credited to a deferred credit account and amortized by equal installments over the expected useful lives of the related fixed assets.

 (ii) Bevenue grant

### (ii) Revenue grant

Revenue based grants are credited to the income and expenditure account as and when received and utilized.

#### d) Foreign currency transactions

Transactions involving foreign currencies are translated into cedis at the exchange rates prevailing at the date of transaction. Monetary assets and liabilities are translated at the ruling rate at the balance sheet date. Exchange differences arising are dealt with in the income and expenditure account.

e)	<b>Debtors</b> Debtors are stated at book value. Specific provisions are made for debts considered doubtful.
f)	<b>Energy Fund</b> The Energy fund is accounted for on cash basis.

·		2004 ¢'000	2003 ¢'000
Note 2:	Revenue Grants		
	Subvention from Government of Ghana Less refund to Energy Fund in respect	3,832,736	3,795,552
	of 2003 Investment Activity	(120,975)	_
	0.2000	3,711,761	3,795,552
	Transfers from Energy Fund	7,514,965	1,977,250
	Capital Grant amortised	4,783,274	2,511,610
		16,010,000	8,284,412
Note 2A:	Grants for Bui Development Committee		
	Government Grant	-	796,934
	Transfers from Energy Fund		192,331
			989,265
Note 3:	Personnel Emoluments		
	Basic Pay	2,196,709	2,078,151
	Allowances	812,406	749,393
	Gross Pay	3,009,115	2,827,544
	Employer's 12 <sup>1</sup> / <sub>2</sub> % SSNIT Contribution	236,232	229,774
		3,245,347	3,057,318
Note 4:	Administrative and General expenses		
	Research and Consultancy expenditure	-	272,594
	Commissioners' Allowances	455,400	386,373
	Stationery and Printing	416,954	359,584
	Insurance	342,443	198,037
	Travelling and Transport	146,070	163,224
	Overtime and Honorarium	221,368	59,977
	Office Accommodation	1,538,349	1,469,627
	Audit fees	172,500	138,000
	Telephone, Postage and Network services	339,014	192,267
	Training, Seminars and Conferences	398,452	433,450

		2004 ¢'000	2003 ¢'000
Note 4:	(continued)	¢ 000	¢ 000
	Rent - Residential Accommodation	120,000	240,000
	Repairs and Maintenance	698,029	702,913
	Medical	489,029	401,696
	Foreign Travels	808,098	370,933
	Office Consumables	435,878	150,977
	Motor Vehicle Running	292,572	259,461
	Advertising	1,200	183,278
	End of Year Staff Awards	-	40,000
	Depreciation charge	2,025,074	1,609,514
	Amortisation of Deferred Expenditure (Note 6)	1,417,732	-
	Bank charges	1,346	1,775
	Water and Electricity	413,810	283,410
		10,733,318	7,917,090
Note 5:	Service Activity expenses		
	Renewable Energy Division	269,881	87,404
	Petroleum Division	217,766	268,566
	Power Division	292,425	8,735
	Strategic Policy Planning Division	15,530	13,170
	Bui Project	539,528	1,103,252
	Publications	1,981,244	
		3,316,374	1,481,127

Note 6:	Property, Plant and Equ	uipment			
	Motor Vehicles	Fittings Furniture & Equipment	Computers and Accessories	Plant and Equipment	Total
	¢'000	¢'000	¢'000	¢'000	¢'000
Cost					
Balance at 1/1/2004	3,806,202	1,820,788	1,153,860	463,881	7,244,731
Additions in the year	1,338,222	737,387	129,297	-	2,204,906
Disposals in the year	(197,215)				(197,215)
Balance at 31/12/2004	4,947,209	2,558,175	1,283,157	463,881	9,252,422
Depreciation					
Balance at 1/1/2004	1,955,797	364,046	533,757	112,467	2,966,067
Charge in the year	1,236,802	319,772	380,646	87,854	2,025,074
Disposals in the year	(98,608)				(98,608)
Balance at 31/12/2004 <b>Net Book Values</b>	3,093,991	683,818	914,403	200,321	4,892,533
At 31/12/2004	1,853,218	1,874,357	368,754	263,560	4,359,889
At 31/12/2003	1,850,405	1,456,742	620,103	351,414	4,278,664
Note 6A:	Deferred Expenditure			2004 ¢'000	2003 ¢'000
	Capital work-in-progress at	1st January		6,030,231	3,307,534
		i st suituut y			
	Additions in the year			1,058,427	2,722,697
	Less Portion amortised in th	ne year		7,088,658 1,417,732	6,030,231
	Balance at 31st December			5,670,926	

This is in respect of the expenditure incurred in refurbishing the leasehold property being used as office accommodation of the Commission. The expenditure incurred is expected to be amortised over a five year period, commencing from 31st December, 2004.

#### Notes to the Financial Statements for the year ended 31st December, 2004 (continued)

Telephone/postages and network

ior die ge		2004	2003
		¢'000	¢'000
Note 7:	Accounts Receivable		
	Staff Loans	182,521	148,938
	Sundry Debtors	28,000	28,000
		210,521	176,938
Note 8:	Prepayments		
	Rent	4,615,050	5,665,921
	Insurance	85,876	117,170
	Communication charges - Multichoice	40,656	80,482
		4,741,582	5,863,573
Note 9:	Cash and Bank balances		
	Energy Fund bank account Energy Commission's operational accounts:	3,939,466	7,526,498
	Banks	4,663,572	2,833,838
	Cash on hand	49,249	47,512
		8,652,287	10,407,848
Note 10:	Accounts Payable		
	Danish Embassy – unutilized funds		
	for Solar Dryer Project	-	439,264
	Solar Dryer Project creditors	-	103,344
	Internal Revenue Service	-	165,169

-

6,276

Accrued Rent	-	240,000
Premises expenses, repairs and		
maintenance	-	11,353
Audit fees	296,500	240,484
	296,500	1,205,890

2004

2003

Note 11:	Capital Grant	¢'000	¢'000
	Balance at 1st January	17,547,216	6,272,382
	Grants received in the year	3,602,934	13,786,444
		21,150,150	20,058,826
	Less amount amortized in the year	(4,783,274)	(2,511,610)
	Balance at 31st December	16,366,876	17,547,216
	This is made up of transfers from the Energy		
	Fund to finance Capital Expenditure of the		
	Commission less amounts amortised.		
Note 12:	Special Fund Account		
	The fund was set up with transfers from the Energy F to create an investment account to generate income the operations of the Commission.		
Note 12 :	Reconciliation of excess of expenditure over income to net cash outflow into		
	operating activities		
	Excess of expenditure over income	(1,118,919)	(3,181,858)
	Adjust for:	0.005.054	1 (00 51 4
	Depreciation charge	2,025,074	1,609,514
	Deferred expenditure amortised Capital grants	1,417,732	-
	amortized	(4,783,274)	(2,511,610)
	Gain on disposal of asset	(78,886)	-
	(Increase)/Decrease in Accounts Receivable	(33,583)	116,372
	(Increase)/Decrease in prepayments	1,121,991	(5,451,758)
			57

Increase/(Decrease) in Accounts Payable	(909,390)	464,926
Transfers from Energy Fund for		
recurrent expenses	(7,514,965)	(2,169,582)
	(9,874,220)	(11,123,996)

Note 13 (A):	Analysis of mov	ements in cash and	d cash equivalents	1	
	Balances 2002 ¢,000	at 31st Decemb 2003 ¢,000	er 2004 ¢,000	Changes in 2003 ¢,000	the year 2004 ¢,000
Energy Fund					
Bank Account	11,938,304	7,526,498	3,939,466	(4,411,806)	(3,587,032)
Cash on hand	104,099	47,513	49,249	(56,586)	1,736
Energy Commission Operation's Bank					
Accounts	4,813,103	2,833,837	4,663,572	1,979,266	1,829,735
	16,855,506	10,407,848	8,652,287	(6,447,658)	(1,755,561)

#### **Appendix III**

#### Audited Financial Statements for the year ended 31st December, 2005

#### **REPORT OF THE COMMISSIONERS**

The Commission has the pleasure to present to the Honourable Minister of Energy the audited financial statements of the Commission for the year ended 31st December, 2005 and to report as follows:

#### **Principal Activities**

The principal activities of the Commission include the regulation and management of the Utilization of energy resources in Ghana and the co-ordination of policies relating to them. In particular to:

 advise the Minister of Energy on national policies for the efficient, economical, and safe supply of electricity, natural gas, and petroleum products having due regard to the national economy;
 provide legal, regulatory and supervisory framework for providers of energy (i.e. licensing, monitoring, compliance, prescription of rules and regulations by legislative instruments);
 recommend national policies for the development and utilization of indigenous energy resources.

The Commission is also responsible for the management and administration of the Energy Fund which for this purpose includes the Controller and Accountant-General or his representative.

Results			¢'000
	•	<b>Recurrent Activities</b>	
		The Commission made excess of	
		income over expenditure of	1,665,637
		This is added to the balance on Accumulated Fund	
		Account brought forward of	(641,269)
		Balance on Accumulated Fund Account carried	
		forward is	1,024,368

•	<b>Energy Fund Account</b>	
	Balance as at 1st January, 2005	3,939,466
	Net Increase in the year	1,131,364
	Balance at 31st December, 2005	5,070,830

#### **BY ORDER OF THE COMMISSION**

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#### COMMISSIONER

#### COMMISSIONER

#### **REPORT OF THE AUDITORS FOR THE YEAR ENDED 31ST DECEMBER, 2005**

We have audited the financial statements of the Commission set out on pages 4 to 6 which have been prepared under the historical cost convention and the accounting policies set out on pages 9 and 10.

#### Respective responsibilities of the Commissioners and Auditors

The Commissioners are responsible for the preparation of the financial statements. It is our responsibility to form an independent opinion, based on our audit, on those Statements and to report our opinion thereon.

#### **Basis of opinion**

We conducted our audit in accordance with International Standards on Auditing. An audit includes examination, on test basis, of evidence relevant to the accounts and disclosures in the financial statements. It also includes an assessment of the significant Estimates and judgments made by the Commissioners in the preparation of the financial statements, and of whether the accounting policies set out on pages 9 and 10 are appropriate to the Commission's circumstances, consistently applied and adequately disclosed.

We planned and performed our audit so as to obtain all the information and explanations which we considered necessary in order to provide us with sufficient evidence to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or other irregularity or error.

In forming our opinion we also evaluated the overall adequacy of the presentation of information in the financial statements.

#### Opinion

In our opinion, proper books of account have been kept and the financial statements, which are in agreement therewith, give a true and fair view of the state of affairs of the Commission as at 31st December, 2005 and of its results and cash flows for the year then ended and comply in all material respects with the Energy Commission Act, 1997 (Act 541).

# STATE ENTERPRISES AUDIT CORPORATION(A.M. NYAMPONG)4TH FLOOR REPUBLIC HOUSEAG. MANAGING DIRECTORKWAME NKRUMAH AVENUE

DATE:

#### Income and Expenditure Account for the year ended 31st December, 2005

	Notes	2005 ¢'000	2004 ¢'000
Income		,	,
Revenue Grants Other Income	2	18,895,047 770,056	16,010,000 166,120
		19,665,103	16,176,120
Expenditure			
Personnel Emoluments	3	5,561,050	3,245,347
Administrative and General expenses	4	10,870,254	10,733,318
Service Activity expenses	5	1,568,162	3,316,374
		17,999,466	17,295,039
Excess of income over expenditure/ (excess of expenditure over income			
Transferred to Accumulated Fund Account		1,665,637	(1,118,919)
Accumulated Fund Account for the year ended 31st December, 2005			
•		2005 ¢'000	2004 ¢'000
Balance as at 1st January		(641,269)	477,650
Excess of income over expenditure/ (excess of expenditure over income Transferred from Income and			
Expenditure Account		1,665,637	(1,118,919)
Balance as at 31st December		1,024,368	(641,269)

The notes on pages 9 to 16 form an integral part of these financial statements.

Balance Sheet as at 31st December, 2005

2005	2004
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4,359,889 5,670,926 326,368 - 10,357,183
5,670,926 326,368
326,368
10.357,183
10,357,183
, ,
210,521
4,741,582
8,652,287
13,604,390
296,500
13,307,890
23,665,073
16,366,876
4,000,000
(641,269)
3,939,466
23,665,073

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#### COMMISSIONER

#### COMMISSIONER

The notes on pages 9 to 16 form an integral part of these financial statements.

#### Cash Flow Statement for the year ended 31st December, 2005

	Notes	2005 ¢'000	2004 ¢'000
Net cash outflow into operating activities	13	(8,948,332)	(9,874,220)
Deduct proceeds from disposal of fixed assets		225,629	177,493
Deduct cash inflows into the Energy Fun year	d in the	11,668,423	11,530,877
Add Payments made out of Energy Fund to third parties:			
Bui Dam Development Committee		(770,797)	-
Public Utility Regulatory Committee (PURC)		(500,000)	-
Bank charges		(10)	(10)
Net cash inflow before investing activities		1,674,913	1,834,140
Investing Activities			
Fixed assets purchased		(256,885)	(2,204,906)
Capital work in progress		-	(1,058,427)
Deposit for vehicle		-	(326,368)
Investment in fixed deposit		(4,318,000)	
Total net cash outflow in the year	13A	<u>(4,574,885)</u> (2,899,972)	(3,589,701) (1,755,561)

equivalents at 1 <sup>st</sup> January	8,652,287	10,407,848
Cash and cash equivalents at 31 <sup>st</sup> December	5,752,315	8,652,287
The notes on pages 9 to 16 form an integral part of	these financial statem	ents.

#### Report of the Auditors on movements on the Energy Fund Account for the year ended 31st December, 2005

We have audited the accompanying Statement of Movements on the Energy Fund Account for the year ended 31st December, 2005.

It is the responsibility of the Commissioners to maintain proper accounting records for the Fund. Our responsibility is to express an independent opinion on the statement of movements on the Fund Account.

We conducted our audit in accordance with generally accepted auditing standards. We planned and performed our audit to enable us obtain reasonable assurance that the Fund Account is free from material misstatement. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the statement of movements on the Energy Fund Account is in agreement with its underlying records and give a true and fair view of the financial position of the Fund as at 31st December, 2005.

#### STATE ENTERPRISES AUDIT CORPORATION

#### A.M. NYAMPONG AG. MANAGING DIRECTOR

#### 4TH FLOOR REPUBLIC HOUSE KWAME NKRUMAH AVENUE ACCRA

DATE:

#### Statement of Movements on the Energy Fund Account for the year ended 31st December, 2005

	2005	2004
	¢'000	¢'000
Resources:		
Balance at bank at 1st January	3,939,466	7,526,498
Cash inflows in the year:		
Petroleum levy	9,442,042	9,003,931
Permits and Licensing fees	2,226,381	2,405,971
Refund from Government of Ghana in respect of		
2003 Investment Activity		120,975
Total cash available	15,607,889	19,057,375
Less Expenditures:		
Capital expenditure of Energy Commission	377,294	3,602,934
Special Fund Account	-	4,000,000
General Administrative expenses of the Energy Commission		
expenses of the Commission	8,888,958	7,514,965
Bui Dam Development Committee	770,797	-
Public Utility Regulatory Committee (PURC)	500,000	-
Bank charges	10	10
Total expenditures	10,537,059	15,117,909
Balance at bank at 31st December	5,070,830	3,939,466
The notes on pages 9 to 16 form an integral part of these financial s	statements.	

The notes on pages 9 to 16 form an integral part of these financial statements.

#### Notes to the Financial Statements for the year ended 31st December, 2005

Note

#### 1: Accounting Policies

The following are the significant accounting policies adopted by the Commission in the preparation of the financial statements.

#### a) Basis of accounting

The financial statements have been prepared under the historical cost convention.

#### b) Fixed Assets

Fixed assets are stated at the cost of purchase together with any incidental costs of acquisition.

Depreciation is charged on fixed assets on a straightline basis over the expected useful lives of the assets concerned.

The principal annual rates used for this purpose are:

Office furniture and fittings	-	121/2%
Motor		
Vehicles	-	25%
Plant, machinery and equipment	-	20%
Computers and accessories	-	33 1/3%
Wind measurement equipment	-	20%

# c) Grants (i) Deferred Credit Grants received in the form of fixed assets or for the purchase of fixed assets are credited to a deferred credit account and amortised by equal instalments over the expected useful lives of the related fixed assets. (ii) Revenue Grant Revenue based grants are credited to the income and expenditure account as and when received and utilised.

#### d) Foreign currency transactions

Transactions involving foreign currencies are translated into Cedis at the exchange rates prevailing at the date of transaction. Monetary assets and liabilities are translated at the ruling rate at the balance sheet date. Exchange differences arising are dealt with in the income and expenditure account.

e)	Debtors
	Debtors are stated at book value. Specific provisions are made for debts considered doubtful.
f)	<b>Energy</b> Fund The Energy Fund is accounted for on cash basis.

for the year chucu 31st Decemb	(continued)	2005	2004
Note 2:	Revenue Grants	¢'000	¢'000
	Subvention from Government of Ghana Transfers from Energy Fund	3,726,095	3,711,761
	Account	8,888,958	7,514,965
	Capital Grant amortised	6,279,994	4,783,274
		18,895,047	16,010,000
Note 3:	Personnel Emoluments		
	Basic Pay	5,561,050	2,196,709
	Allowances		812,406
	Gross Pay	5,561,050	3,009,115
	Employer's 12 <sup>1</sup> / <sub>2</sub> % SSNIT Contribution		236,232
		5,561,050	3,245,347

for the year ended 31st December, 2005 (continued)

<i>j</i>		2005	2004
Note 4:	Administrative and General Expenses	¢'000	¢'000
	Commissioners' Allowances	402,484	455,400
	Stationery and Printing	465,812	416,954
	Insurance	303,263	342,443
	Travelling and Transport	264,404	146,070
	Overtime and Honorarium	257,525	221,368
	Office Accommodation	1,578,973	1,538,349
	Audit Fees	172,500	172,500
	Telephone, Postage and Network services	383,693	339,014
	Training, Seminars and Conferences	248,947	398,452
	Rent - Residential Accommodation	120,000	120,000
	Repairs and Maintenance	690,407	698,029
	Medical	166,703	489,029
	Foreign Travels	424,254	808,098
	Office Consumables	526,925	435,878
	Motor Vehicle Running expenses	370,079	292,572
	Advertising End of Service Benefits Awards	407,243 374,120	1,200 -
	Depreciation charge	1,937,648	2,025,074
	Amortisation of Deferred Expenditure	1,417,732	1,417,732
	Bank charges	11,470	1,346
	Water and Electricity	346,072	413,810

		10,870,254	10,733,318
Note 5:	Service Activity Expenses		
	Renewable Energy Division	185,437	269,881
	Petroleum Division	893,659	217,766
	Power Division	133,479	292,425
	Strategic Policy Planning Division Public Affairs Division Sound and Wind Energy Resource	188,397 30,000	15,530 -
	Assessment (SWERA) Bui Project	17,325	- 539,528
	Publications	119,865	1,981,244
		1,568,162	3,316,374

#### Note 6: Property, Plant and Equipment

1 0/	Motor Vehicles	Fittings Furniture & Equipment	Computers and Accessories	Plant and Equipment	Total
	¢'000	¢'000	¢'000	¢'000	¢'000
Cost					
Balance at 1/1/2005	4,947,209	2,558,175	1,283,157	463,881	9,252,422
Additions in the year	-	237,385	19,500	-	256,885
Disposals in the year	(255,815)				(255,815)
Balance at 31/12/2005	4,691,394	2,795,560	1,302,657	463,881	9,253,492
Depreciation					
Balance at 1/1/2005	3,093,991	683,818	914,403	200,321	4,892,533
Charge in the year	1,190,429	327,303	332,062	87,854	1,937,648
Disposals in the year	(63,954)				(63,954)
Balance at 31/12/2005	4,220,466	1,011,121	1,246,465	288,175	6,766,227
Net Book Values					
At 31/12/2005	470,928	1,784,439	56,191	175,707	2,487,265
At 31/12/2004	1,853,218	1,874,357	368,754	263,560	4,359,889
				2005 ¢'000	2004 ¢'000
Note 6A: Deferred Ex	penditure				
Balance at 1st January				5,670,926	7,088,658
Less: Portion amortised in the year				1,417,732	1,417,732
Balance at 31st December				4,253,194	5,670,926

This is in respect of the expenditure incurred in refurbishing the leasehold property being used as office accommodation of the Commission. The expenditure incurred is to be amortised over a five year period, commencing from 31st December, 2004.

#### Notes to the Financial Statements (continued)

		2005	2004
		¢'000	¢'000
Note 7:	Accounts Receivable		
	Staff Loans	198,878	182,521
	National Petroleum Authority	426,959	-
	Sundry Debtors Accrued Interest	28,000 672,888	28,000
	Accrued Interest	072,888	
		1,326,725	210,521
Note 8:	Prepayments		
	Rent	3,036,077	4,615,050
	Insurance	101,794	85,876
	Communication charges (Multichoice)	40,656	40,656
		3,178,527	4,741,582
Note 9:	Cash and Bank balances		
	Energy Fund Bank Account	5,070,830	3,939,466
	Energy Commission's operational accounts:		
	Bank Accounts	670,049	4,663,572
	Cash on Hand	11,436	49,249
		5,752,315	8,652,287
Note 10:	Accounts Payable		
	Internal Revenue Service (PAYE)	602,728	-
	Audit fees	345,000	296,500
	SSNIT	135,392	
		1,083,120	296,500

Notes to th	e Financial Statements (continued)		
		2005 ¢'000	2004 ¢'000
Note 11:	Capital Grant	¢ 000	¥ 000
	Accumulated transfers from the Energy Fund to Finance Capital Expenditure of the Commission		
	Balance at 1st January Grants received in the year	16,366,876 <u>377,294</u>	17,547,216 3,602,934
	Less Amount amortized in the year	16,744,170 (6,279,994)	21,150,150 (4,783,274)
	Balance at 31st December	10,464,176	16,366,876
Note 12:	Special Fund Account		
Note 13:	<ul> <li>The fund was set up with transfers from the Energy Furce reate an investment account to generate income to support operations of the Commission.</li> <li>Reconciliation of excess of income over expenditure to net cashflow from operating activities.</li> </ul>		
	Excess of income over expenditure Adjust for:	1,665,637	(1,118,919)
	Depreciation charge Deferred expenditure amortised Capital grants amortised Profit on sale of vehicle Increase in Accounts Receivable Decrease in prepayments Increase in Accounts Payable Transfers from Energy Fund for recurrent expenses	1,937,648 $1,417,732$ $(6,279,994)$ $(33,768)$ $(443,316)$ $1,563,055$ $786,620$ $(8,888,958)$ $(8,948,332)$	2,025,074 1,417,732 (4,783,274) (78,886) (33,583) 1,121,991 (909,390) (7,514,965) (9,874,220)

	Balances	at 31st De	ecember	Changes in	the year
	2003	2004	2005	2004	2005
	¢'000	¢'000	¢'000	¢'000	¢'000
Energy Fund Bank					
Account	7,526,498	3,939,466	5,070,830	(3,587,032)	1,131,364
Cash on Hand	47,513	49,249	11,436	1,736	(37,813)
Energy Commission's					
<b>Operations Bank</b>					
Accounts	2,833,837	4,663,572	670,049	1,829,735	(3,993,523)
	10,407,848	8,652,287	5,752,315	# (1,755,561)	(2,899,972)

# Note 12A: Analysis of movements in cash and cash equivalents

# Notes to the Financial Statements (continued)

	Balances	at 31st Decem	ber	Changes in	the year
	2003	2004	2005	2004	2005
	¢'000	¢'000	¢'000	¢'000	¢'000
Energy Fund Bank					
Account	7,526,498	3,939,466	5,070,830	(3,587,032)	1,131,364
Cash on Hand	47,513	49,249	11,436	1,736	(37,813)
Energy Commission's					
Operations Bank					
Accounts	2,833,837	4,663,572	670,049	1,829,735	(3,993,523)
Accounts	2,835,857	4,003,372	070,049	1,829,735	(3,993,323)
	10,407,848	8,652,287	5,752,315	(1,755,561)	(2,899,972)

# Note 13A: Analysis of movements in cash and cash equivalents

# Appendix IV

Audited Financial Statement for the year ended 31<sup>ST</sup> December 2006

# **GENERAL INFORMATION** Commissioners

Prof. A.K. Addae	-	Ag. Chairman (4-05-2005)	Appointed	18-12-2001
Prof. F.K.A. Allotey	-	Commissioner	Re-appointed	18-12-2001
Prof. F.O. Akuffo	-	Commissioner	Appointed	18-12-2001
Mr. J.K. Hagan	-	Commisioner	Appointed	18-12-2001
Mr. Seth Asante	-	Commissioner	Appointed	18-12-2001
Ag. Executive Secretary		Dr. A.K. Ofosu-Ahenkorah	Appointed	4-05-2005
Head Office		Frema House Plot No. 40 Spintex Road Accra		
Bankers		Bank of Ghana Ecobank Ghana Limited Ghana Commercial Bank Limit	ed	
Auditors		State Enterprises Audit Corporation 4th Floor Republic House P. O. Box M.198 Accra		

#### **REPORT OF THE COMMISSIONERS**

The Commission has the pleasure to present to the Honorable Minister of Energy the audited financial statements of the Commission for the year ended 31st December, 2006 and report as follows:

#### **Principal Activities**

The principal activities of the Commission include the regulation and management of the utilization of energy resources in Ghana and the co-ordination of policies relating to them. In particular to:

- advise the Minister of Energy on national policies for the efficient, economical, and safe supply of electricity, natural gas, and petroleum products having due regard to the national economy;
- provide legal, regulatory and supervisory framework for providers of energy (i.e. licensing, monitoring, compliance, prescription of rules and regulations by legislative instruments);
- recommend national policies for the development and utilization of indigenous energy resources.

The Commission is also responsible for the management and administration of the Energy Fund which for this purpose includes the Controller and Accountant-General or his representative.

Results	¢'000
The Commission made an excess of income over expenditure of	999,781
To which is added the balance on Accumulated Fund Account brought forward of	850,444
To arrive at balance on Accumulated Fund Account carried forward of	1,850,225

#### **BY ORDER OF THE COMMISSION**

COMMISSIONER

COMMISSIONER

#### **REPORT OF THE AUDITORS FOR THE YEAR ENDED 31ST DECEMBER, 2006**

We have audited the financial statements of the Commission set out on pages 4 to 6

which have been prepared under the historical cost convention and on the basis of the accounting policies set out on page 7.

#### Respective responsibilities of the Commissioners and Auditors

The Commissioners are responsible for the preparation of the financial statements. It is our responsibility to form an independent opinion, based on our audit, on those statements and to report our opinion thereon.

#### **Basis of opinion**

We conducted our audit in accordance with International Standards on Auditing. An audit includes examination, on test basis, of evidence relevant to the accounts and disclosures in the financial statements. It also includes an assessment of the significant estimates and judgments made by the Commissioners in the preparation of the financial statements, and of whether the accounting policies set out on page 7 is appropriate to the Commission's circumstances, consistently applied and adequately disclosed.

We planned and performed our audit so as to obtain all the information and explanations which we considered necessary in order to provide us with sufficient evidence to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or other irregularity or error.

In forming our opinion we also evaluated the overall adequacy of the presentation of information in the financial statements.

#### Opinion

In our opinion, proper records of account have been kept and the financial statements, which are in agreement therewith, give a true and fair view of the state of affairs of the Commission as at 31st December, 2006 and of its results and cash flows for the year then ended and comply, in all material respects, with the Energy Commission Act, 1997 (Act 541).

#### STATE ENTERPRISES AUDIT CORPORATION

(A.M. NYAMPONG) REPUBLIC HOUSE AG. MANAGING DIRECTOR

#### **4TH FLOOR**

#### **KWAME NKRUMAH AVENUE**

DATE:

Income

Income and Expenditure Account for the year ended 31st December, 2006

Notes	2006	2005
	¢'000	¢'000

Revenue Grants	2	18,268,129	18,577,047
Other Income	3	1,250,682	97,168
		19,518,811	18,674,215
Expenditure			
Personnel Emoluments	4	5,547,946	4,823,030
Administrative and General expenses	5	8,885,263	10,851,110
Service Activity expenses	6	4,085,821	1,568,162
		18,519,030	17,242,302
Excess of income over expenditure transferred to Accumulated Fund Account		999,781	1,431,913
Accumulated Fund Account for the year ended 31st December, 2006			
		2006 ¢'000	2005 ¢'000
Balance as at 1st January		850,444	(581,469)
Excess of income over expenditure transferred from Income and Expenditure Account		999,781	1,431,913
Balance as at 31st December		1,850,225	850,444

The notes on pages 7 to 13 form an integral part of these financial statements.

# Balance Sheet as at 31st December, 2006

		2006	2005
	Notes	¢'000	¢'000
Non-Current Assets			
Property, Plant and Equipment	7	1,716,002	2,487,265
Deferred Expenditure	8	2,835,462	4,253,194
Deposits		-	326,368
Fixed Deposit Investment		4,318,000	4,318,000
		8,869,464	11,384,827
Current Assets			
Accounts Receivable	9	742,571	653,837
Prepayments	10	1,489,184	3,137,871
Cash and Bank balances	11	2,178,634	681,485
		4,410,389	4,473,193
Current Liabilities			
Accounts Payable	12	441,125	225,400
Bank Overdraft		19,545	
		460,670	225,400
Net Current Assets		3,949,719	4,247,793
Total Net Assets Employed		12,819,183	15,632,620
Financed by:			
Capital Grant	13	6,650,958	10,464,176
Special Fund Account	14	4,318,000	4,318,000
Accumulated Fund		1,850,225	850,444
		12,819,183	15,632,620

### COMMISSIONER

COMMISSIONER

The notes on pages 7 to 13 form an integral part of these financial statements.

# Cash Flow Statement for the year ended 31st December, 2006

	Notes	2006 ¢'000	2005 ¢'000
Net cash inflow/(outflow) into operating			
activities	15	29,668	(377,374)
Investing Activities			
Interest on fixed deposit		774,856	-
Payments towards purchase of property,			
plant and equipment		(230,810)	(256,885)
Proceeds from disposal of property, plant			
and equipment		-	225,629
Investment in fixed deposit			(4,318,000)
		544,046	(4,349,256)
Financing activities			
Capital grants received from Energy Fund		324,450	695,294
Net cash inflow/(outflow) in the year	15A	1,477,604	(4,031,336)
Cash and cash equivalents at 1st January		681,485	4,712,821
Cash and cash equivalents at 31st December		2,159,089	681,485

The notes on pages 7 to 13 form an integral part of these financial statements.

### Note 1: Accounting Policies

The following are the significant accounting policies adopted by the Commission in the preparation of the financial statements.

#### a) Basis of accounting

The financial statements have been prepared under the historical cost convention.

#### b) **Property, plant and equipment**

Fixed assets are stated at the cost of purchase together with any incidental costs of

acquisition.

Depreciation is charged on property, plant and equipment on a straight-line basis over the expected useful lives of the assets concerned.

The principal annual rates used for this purpose are:

Office furniture and fittings	- 121/2%
Motor Vehicles	- 25%
Plant, machinery and equipment	- 20%
Computers and accessories	- 33 ½%

#### c) Grants

#### (i) Deferred Credit

Grants received in the form of property, plant and equipment or for the purchase of property, plant and equipment are credited to a deferred credit account and amortized by equal installments over the expected useful lives of the related property, plant and equipment.

#### (ii) Revenue Grant

Revenue based grants are credited to the income and expenditure account as and when received and utilized.

#### d) Foreign currency transactions

Transactions involving foreign currencies are translated into Cedis at the exchange rates prevailing at the date of transaction. Monetary assets and liabilities are translated at the ruling rate at the balance sheet date.

Exchange differences arising are dealt with in the income and expenditure account.

#### e) Debtors

Debtors are stated at book value. Specific provisions are made for debts considered doubtful.

		2006 ¢'000	2005 ¢'000
Note 2:	Revenue Grants		
	Subvention from Government of Ghana	6,509,963	3,726,095
	Transfers from Energy Fund Account	7,620,498	8,570,958
	Capital Grant amortized	4,137,668	6,279,994
		18,268,129	18,577,047
Note 3:	Other Income		
	Interest on fixed deposit	774,856	-
	Profit on disposal of fixed assets	330,286	33,768
	Grants from Energy Foundation	42,551	-
	Miscellaneous Income	102,989	63,400
		1,250,682	97,168
Note 4:	Personnel Emoluments		
	Gross pay	5,014,794	4,220,151
	Employer's SSNIT Contribution	533,152	602,879
		5,547,946	4,823,030
Note 5:	Administrative and General Expenses		
	Commissioners' Allowances	469,440	402,484
	Stationery and Printing	135,029	465,812
	Insurance	165,955	303,263
	Travelling and Transport	20,363	264,404
	Overtime and Honorarium	73,161	257,525
	Office Accommodation	1,578,974	1,578,973
	Audit Fees	126,500	112,700

Notes to the	Financial Statements for the year ended 31st	December, 2006 (co	ontinued)
		2006	2005
		¢'000	¢'000
Note 5:	(continued)		
Telephone, P	ostage and Network services	64,018	424,349
Training, Sen	ninars and Conferences	1,388,877	248,947
	Rent - Residential Accommodation	9,000	120,000
	Repairs and Maintenance	649,986	690,407
	Medical	424,001	166,703
	Foreign Travels	-	424,254
	Office Consumables	552,932	526,925
	Motor Vehicle Running expenses	278,769	370,079
	Advertising	4,935	407,243
	End of Service Benefits Awards	-	374,120
	Depreciation charge	1,079,287	1,937,648
	Amortization of Deferred Expenditure	1,417,732	1,417,732
	Bank charges	15,047	11,470
	Water and Electricity	348,709	346,072
	Consultancy	82,548	
		8,885,263	10,851,110
Note 6:	Service Activity Expenses		
	Renewable Energy Division	885,564	185,437
	Petroleum Division	-	893,659
	Power Division	913,337	133,479
	Strategic Policy Planning Division	411,563	188,397
	Public Affairs Division	306,603	149,865
	Natural Gas Division	1,568,754	-
	Solar and Wind Energy Resource		
	Assessment (SWERA) Project		17,325
		4,085,821	1,568,162

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	Motor Vehicles ¢'000	Fittings Furniture & Equipment ¢'000	Computers and Accessories ¢'000	Plant and Equipment ¢'000	Total ¢'000
Cost					
Balance at 1/1/2006	4,691,394	2,795,560	1,302,657	463,881	9,253,492
Additions in the year	408,480	18,669	130,029	-	557,178
Disposal/Transfer	(596,915)				(596,915)
Balance at 31/12/2006	4,502,959	2,814,229	1,432,686	463,881	9,213,755
Depreciation					
Balance at 1/1/2006	4,220,466	1,011,121	1,246,465	288,175	6,766,227
Charge in the year	544,226	354,229	92,978	87,854	1,079,287
Disposal/Transfer	(347,761)				(347,761)
Balance at 31/12/2000 Net Book Values	6 4,416,931	1,365,350	1,339,443	376,029	7,497,753
At 31/12/2006	8,628	1,448,879	93,243	87,852	1,716,002
At 31/12/2005	470,928	1,784,439	56,191	175,707	2,487,265
				2006 ¢'000	2005 ¢'000
Note 8:	<b>Deferred</b> <b>Expenditure</b> Balance at 1st			4 252 104	5 (70.02)
	January	11		4,253,194	5,670,926
This is in second	Less portion amortize Balance at 31st December	·		(1,417,732) 2,835,462	(1,417,732) 4,253,194

### Note 7: Property, Plant and Equipment

This is in respect of the expenditure incurred in refurbishing the leasehold property being used as office accommodation of the Commission. The expenditure incurred is to be amortized over a five year period, commencing from year ended 31st December, 2004.

		2006	2005
		¢'000	¢'000
Note 9:	Accounts Receivable		
	Staff Loans National Petroleum	118,321	198,878
	Authority	579,750	426,959
	Sundry Debtors	44,500	28,000
		742,571	653,837
Note 10:	Prepayments		
	Rent	1,457,103	3,036,077
	Insurance	32,081	101,794
		1,489,184	3,137,871
Note 11:	Cash and Bank balances		
	Bank Accounts	2,168,149	670,049
	Cash on Hand	10,485	11,436
		2,178,634	681,485
Note 12:	Accounts Payable		
	Audit fees	351,900	225,400
	Others	89,225	
		441,125	225,400

		·	2006	,	2005
Note 13:	<b>Capital Grant</b>		¢'000		¢'000

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

Balance at 1st January	10,464,176	16,366,876
Add Grants received in the year	324,450	377,294
	10,788,626	16,744,170
Less Amount amortized in the year	(4,137,668)	(6,279,994)
Balance at 31st December	6,650,958	10,464,176

#### Note 14: Special Fund Account

In accordance with Section 44 (2) of Energy Commission Act, 1997 (Act 541) a special fund was set up with transfers from the Energy Fund Account to create an investment account to generate additional income to support the operations of the Commission.

# Note 15: Reconciliation of excess of income over expenditure to net cashflow from operating activities

Excess of income over expenditure for the year	999,781	1,431,913
Adjust for:		
Depreciation charge	1,079,287	1,937,648
Deferred expenditure amortized	1,417,732	1,417,732
Capital grants amortized	(4,137,668)	(6,279,994)
Profit on sale of vehicle	(330,286)	(33,768)
Interest on fixed deposit	(774,856)	-
Increase in Accounts Receivable	(88,734)	(443,316)
Decrease in prepayments	1,648,687	1,603,711
Increase/(Decrease) in Accounts Payable	215,725	(11,300)
	29,668	(377,374)

Balances at	31st Decembe	r	Changes in	the year	
	2004	2005	2006	2005	2006
	¢'000	¢'000	¢'000	¢'000	¢'000
Cash on Hand	49,249	11,436	10,485	(37,813)	(951)
Bank Accounts	4,663,572	670,049	2,168,149	(3,993,523)	1,498,100
Bank Overdraft		-	(19,545)	-	(19,545)
	4,712,821	681,485	2,159,089	(4,031,336)	1,477,604

# Note 15A: Analysis of movements in cash and cash equivalents

# **ENERGY FUND ACCOUNTS**

#### **General Information**

#### (i) Commissioners

Prof. A.K. Addae	-	Ag. Chairman
Prof. F.K.A. Allotey	-	Commissioner
Prof. F.O. Akuffo	-	Commissioner
Mr. J.K. Hagan	-	Commissioner
Mr. Seth Asante	-	Commissioner

Controller and Accountant-General, per Section 43 (1) of the Energy Commission Act, 1997, Act 541.

Dr. A.K. Ofosu-Ahenkorah - Ag. Executive Secretary

#### (ii) Objectives of the Fund - Section 42, Act 541, 1997.

"Monies of the Fund shall be applied as follows -

- (a) promotion of energy efficiency and productive uses of electricity, natural gas and petroleum products;
- (b) promotion of projects for the development and utilization of renewable energy resources, including solar energy;
- (c) human resource development in the energy sector; and
- (d) such other relevant purposes as may be determined by the Commission".
- (iii) Head Office Frema House Plot No. 40 Spintex Road Accra
- (iv) **Bankers** Bank of Ghana
- (v) Auditors State Enterprises Audit Corporation 4th Floor Republic House P. O. Box M.198 Accra

#### **REPORT OF THE AUDITORS FOR THE YEAR ENDED 31ST DECEMBER, 2006**

We have audited the financial statements of the Commission set out on pages 3 to 5 which have been prepared under the historical cost convention and on the basis of the accounting policies set out on page 6.

#### Respective responsibilities of the Commissioners and Auditors

The Commissioners are responsible for the preparation of the financial statements. It is our responsibility to form an independent opinion, based on our audit, on those statements and to report our opinion thereon.

#### **Basis of opinion**

We conducted our audit in accordance with International Standards on Auditing. An audit includes examination, on test basis, of evidence relevant to the accounts and disclosures in the financial statements. It also includes an assessment of the significant estimates and judgements made by the Commissioners in the preparation of the financial statements, and of whether the accounting policies set out on page 6 is appropriate to the Commission's circumstances, consistently applied and adequately disclosed.

We planned and performed our audit so as to obtain all the information and explanations which we considered necessary in order to provide us with sufficient evidence to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or other irregularity or error.

In forming our opinion we also evaluated the overall adequacy of the presentation of information in the financial statements.

#### Opinion

In our opinion, proper records of account have been kept and the financial statements, which are in agreement therewith, give a true and fair view of the state of affairs of the Energy Fund as at 31st December, 2006 and of its results, and comply, in all material respects, with the Energy Commission Act, 1997 (Act 541).

#### STATE ENTERPRISES AUDIT CORPORATION

(A.M. NYAMPONG)

AG. MANAGING DIRECTOR

4TH FLOOR REPUBLIC HOUSE KWAME NKRUMAH AVENUE

DATE:

# Statement of Resources and Disbursements for the year ended 31st December, 2006

	Notes	2006 ¢'000	2005 ¢'000
Resources:			
Bank balance at 1st January		5,070,830	3,939,466
Add Receipts in the year:			
Releases by Controller and Accountant General's Department from Petroleum Levy Account		9,894,140	9,442,042
Fees from permits and licenses issued to Oil Marketing Companies		105,600	2,226,381
Total Resources available		15,070,570	15,607,889
Less Disbursements in the year:			
Capital expenditure of Energy Commission	2	324,450	377,294
Fixed Deposit Investment held by Energy Commission		-	318,000
Support for recurrent expenditure of Energy Commission		7,620,498	8,570,958
Transfers to Bui Dam Development Committee		232,000	770,797
Transfers to Public Utility Regulatory Committee (PURC)		500,000	500,000
Transfers to Ministry of Energy		560,000	-
Bank charges		80	10
Total disbursements		9,237,028	10,537,059
Bank balance at 31st December		5,833,542	5,070,830

The notes on page 6 form an integral part of the financial statements.

### **Balance Sheet**

as at 31st December, 2006

	2006 ¢'000	2005 ¢'000
Current Assets		
Bank balance	5,833,542	5,070,820
Represented by		
Energy Fund Account	5,833,542	5,070,830
BY ORDER OF THE COMM	IISSION	

COMMISSIONER

COMMISSIONER

The notes on page 6 form an integral part of the financial statements.

# Statement of Movements on the Fund Account for the year ended 31st December, 2006

	2006 ¢'000	2005 ¢'000
Balance as at 1st January	5,070,830	3,939,466
Add Inflows during the year	9,999,740	11,668,423
	15,070,570	15,607,889
Less Disbursements during the year	(9,237,028)	(10,537,059)
Balance as at 31st December	5,833,542	5,070,830

The notes on page 6 form an integral part of the financial statements.

#### Notes to the Financial Statements for the year ended 31st December, 2006

#### Note 1: Accounting Policies

The following are the significant accounting policies adopted by the Commission in the preparation of the financial statements.

#### (a) Basis of accounting

The financial statements have been prepared under the historical cost convention.

#### (b) Resources

The income of the Energy Fund is derived from:

- (i) Transfers, into the Energy Fund Account, by the Controller and Accountant-General's Department from Petroleum Levy.
- (ii) Fees from licenses and permits issued to oil marketing companies.

The above sources of income are accounted for on cash basis.

#### (c) Disbursements

These are accounted for on cash basis.

#### Note 2: Capital Expenditure

	2006 ¢'000	2005 ¢'000
Computers and Accessories	324,450	20,425
Motor Vehicles	-	200,000
Equipment	-	48,282
Furniture	-	108,587
	324,450	377,294