

MINISTRY OF ENERGY

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GHANA'S ENERGY POLICY PRESENTATION & PRE-ACTION

Energy Policy Training Program by JICA

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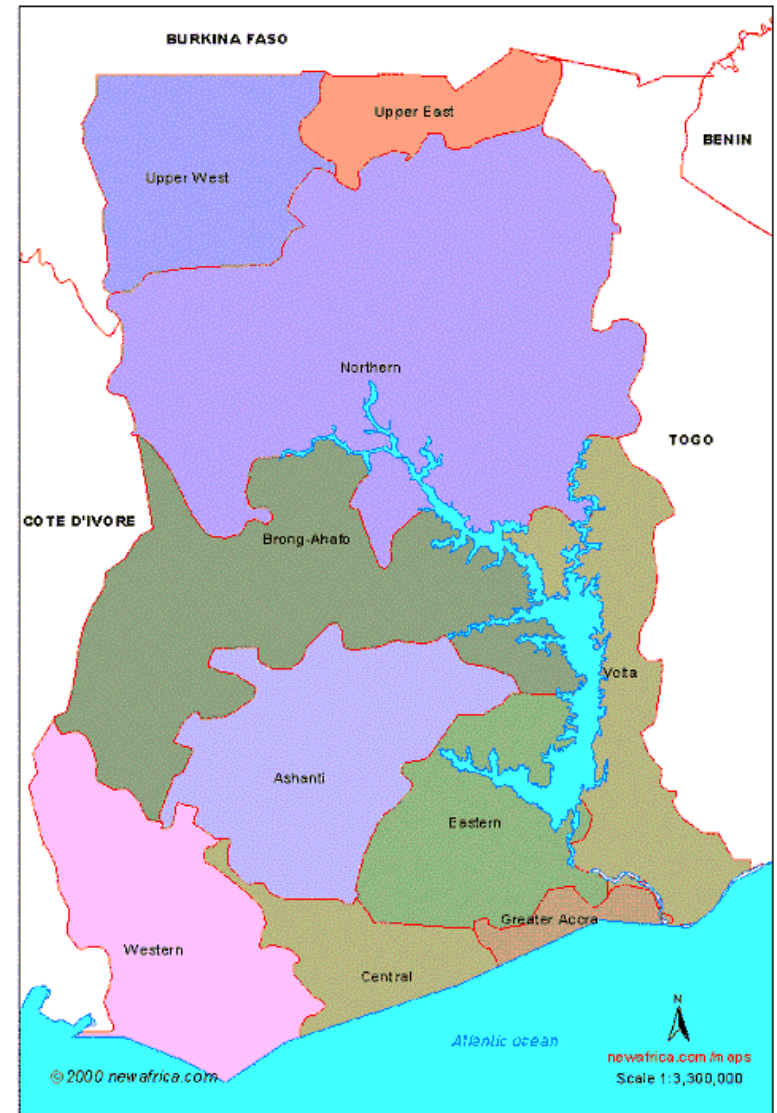
Outline

- **Overview of Ghana**
- **Ghana's Development Challenge**
- **The Energy Resources and Vision**
- **Energy Policy Platform**
- **Major Difficulties**
- **Interested Subjects**

OVERVIEW OF GHANA

- Land Area: 238.5 km²
- Population: 24,658,823 (2010)
- **Electricity Access: 72% (2011)**
- GDP Growth Rate: 7.7%

Major Export: Cocoa, Gold, Timber, Bauxite, & Oil



THE ENERGY RESOURCES AND VISION

- Ghana is well endowed with a variety of energy resources including **biomass**, **hydrocarbons**, **hydropower**, **solar** and **wind**. It has the capacity to produce modern bio-fuels and is exploring options to develop nuclear energy.
- The energy sector vision is to develop an “Energy Economy” to secure a reliable supply of high quality energy services for all sectors of the Ghanaian economy and also to become a major exporter of oil and power by 2012 and 2015 respectively

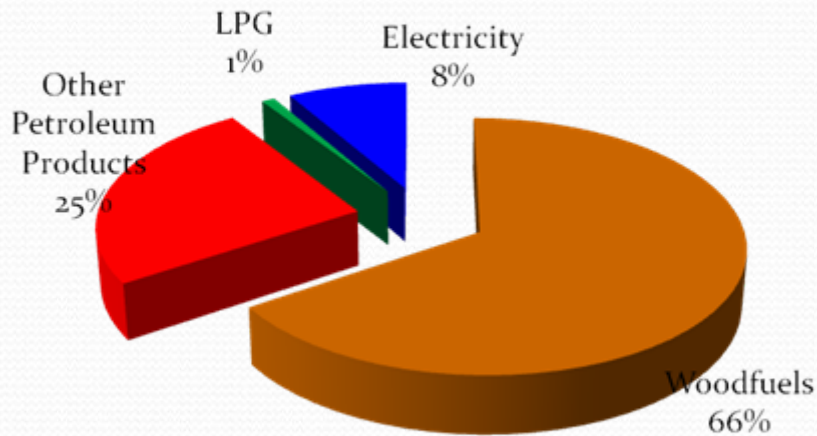
GHANA'S DEVELOPMENT CHALLENGE

- Ghana's total energy supply has to grow significantly to help achieve the development agenda goal.
- The challenge is **how to increase the energy supply** and also **expand the energy infrastructure** in the country in a way that is sustainable.

GHANA'S DEVELOPMENT CHALLENGE

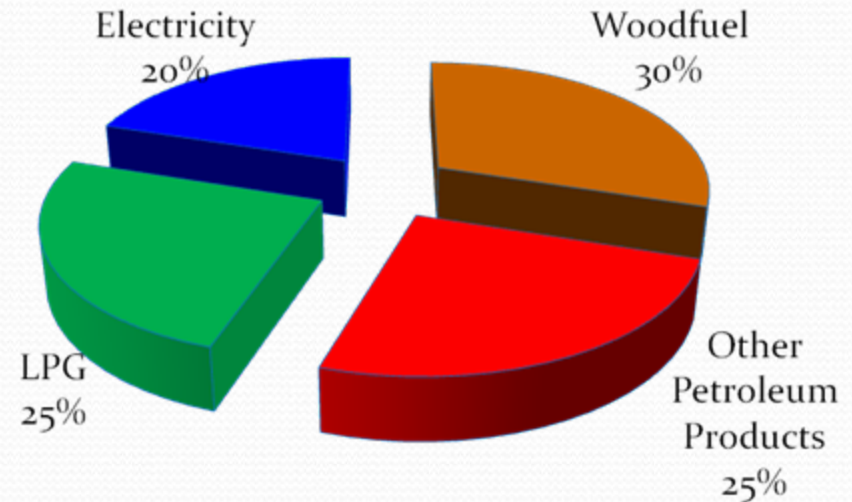
Achieve Universal Access to modern energy forms by 2020

Energy Consumption by Type in 2010



•Ghana is predominantly a woodfuel-based Energy economy

Energy Consumption by Type by 2020



Universal access to electricity and high penetration of LPG to substitute for woodfuels

GHANA'S DEVELOPMENT CHALLENGE

- The share of modern renewable energy technologies (Wind, Solar PV, hydro below 100MW, Bio-fuel) for electricity is however very negligible (<0.1%).

SHARE OF GRID ELECTRICITY SUPPLY TO THE DEMAND SECTORS SINCE 2008

Year	Industrial		Non Residential		Residential		Total
	(Gwh)	(% Share)	(GWh)	(% Share)	(GWh)	(% Share)	
2008	2966	48.1	928	15.1	2269	36.8	6163
2009	2943	47.2	978	14.1	2408	38.7	6229
2010	3156	46.6	966	14.3	2738	40.7	6772

ENERGY POLICY PLATFORM

- Power Sub-sector;
- Petroleum Sub-sector;
- Renewable Energy Sub-sector;
- Waste-to-Energy;
- Energy Efficiency and Conservation;
- Energy and Environment;
- Energy and Gender; and
- Managing the future of the sector.

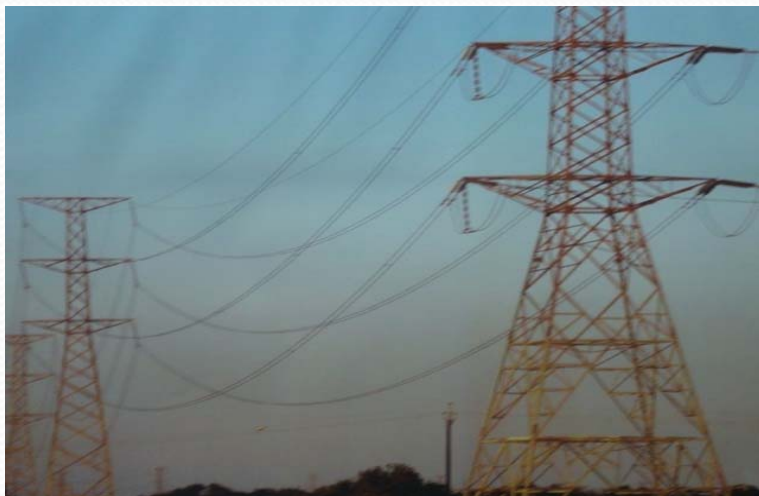
MEDIUM POLICY TERM FOCUS

- Increase access to adequate, reliable and economically priced modern forms of energy supply
- Diversify the national energy mix including the use of environmentally friendly indigenous sources of energy
- Ensure efficient management of the energy sector
- Ensure productive and efficient use of energy
- Promote Private Sector Participation in the energy sector

POWER SUB SECTOR

Issues

- Power supply shortages: frequent interruptions
- Inadequate access to electricity – 72% national access
- Poor financial health of Utility Companies -



Policy Goals

- Increase power generation capacity to 5,000 MW by 2015
- Improve and modernise distribution infrastructure and reduce system losses: 25% to 18% by 2015
- Develop a non-constrained transmission network by 2015
- Achieve universal access by 2020 and at least 80% national access by 2015
- Restore financial health of Utility Companies by achieving cost-efficient tariffs by 2015
- Strengthen Regulatory Agencies



RENEWABLE ENERGY

Issues

- Low level in Renewable Energy in National Electricity mix.
- Over dependence on woodfuel and its inefficient utilization
- Potential for Bio-fuels production for job creation and export

Policy Goals

- Increase Renewable Energy in the Supply-mix to **10%** by **2020**
- Promote exploitation and use of mini-hydro, solar and wind
- Promote efficient utilization of woodfuels and alternative cooking fuels such as biogas, LPG etc
- Support private sector investment in biofuel production
- Balance bio-fuel development against food security

POLICY DIRECTIONS - PETROLEUM SECTOR

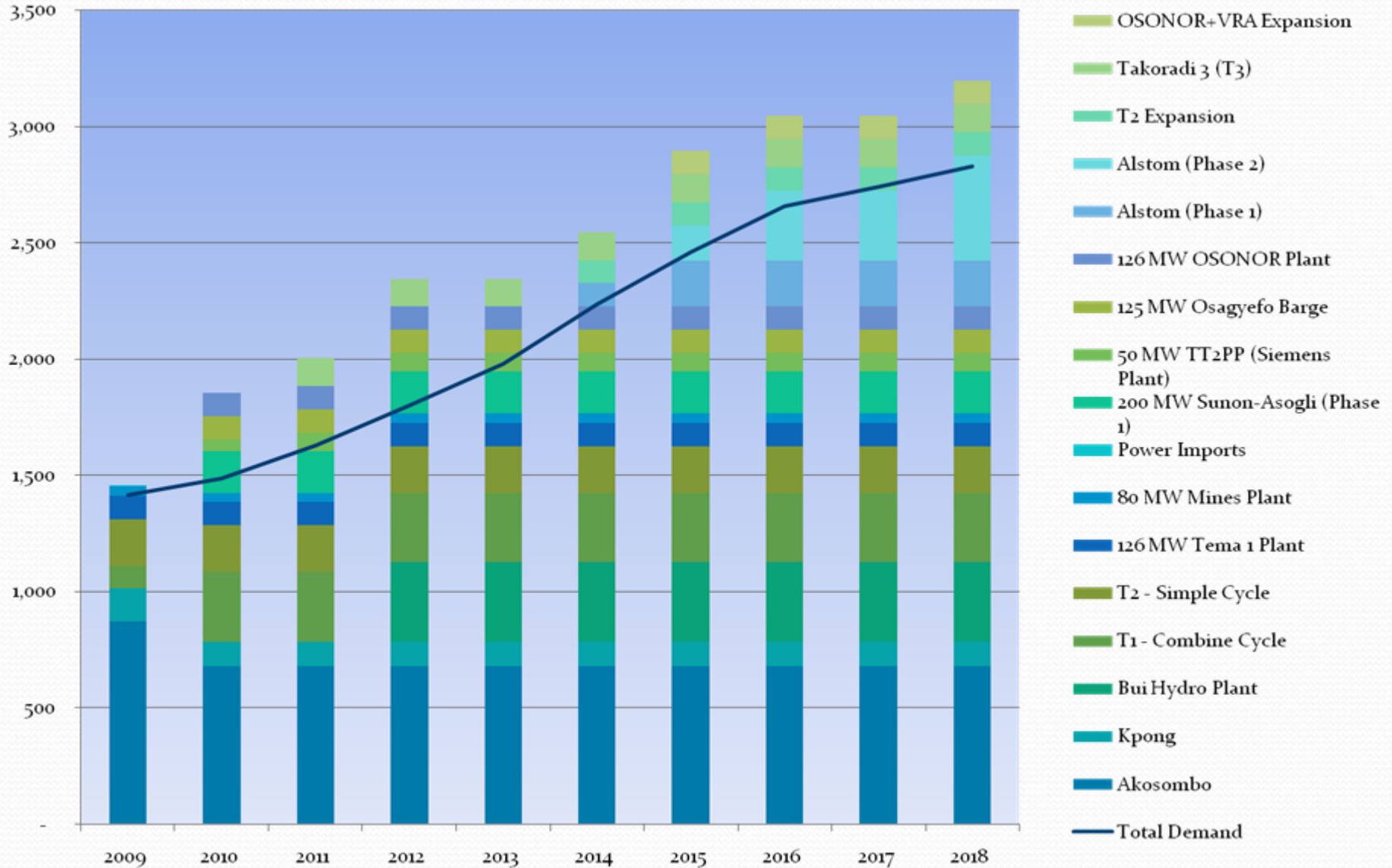
Issues

- Inadequate exploration, development and production of oil and gas resources of Ghana
- Maximise the benefits of exploration, development, production and utilisation of oil and gas to Ghanaians
- Limited availability of petroleum products to consumers

Policy Goals

- Sustain and optimise the exploitation and utilisation of Ghana's oil and gas endowment for the overall benefit and welfare of all Ghanaians, present and future
- Facilitate the universal access to adequate, reliable and cost effective petroleum products such as Liquefied Petroleum Gas (LPG).

FUTURE POWER DEMAND & SUPPLY



MAJOR DIFFICULTIES

- Inadequate human resource capacity and logistical support for the implementation and monitoring of the Energy Policy;
- Inadequate interaction between the Ministry of Energy and relevant Ministries, Departments and Agencies, Traditional Authorities, Members of Parliament, District Assemblies to discuss issues relating to the National Energy Policy;
- Inadequate personnel at Policy, Planning, Monitoring and Evaluation Divisions of relevant Ministries, Departments and Agencies

Interested Subjects

- Demand & Supply forecasting
- Energy Economic
- Learn from Japan's experience in Energy Policy Formulation

THANK YOU

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