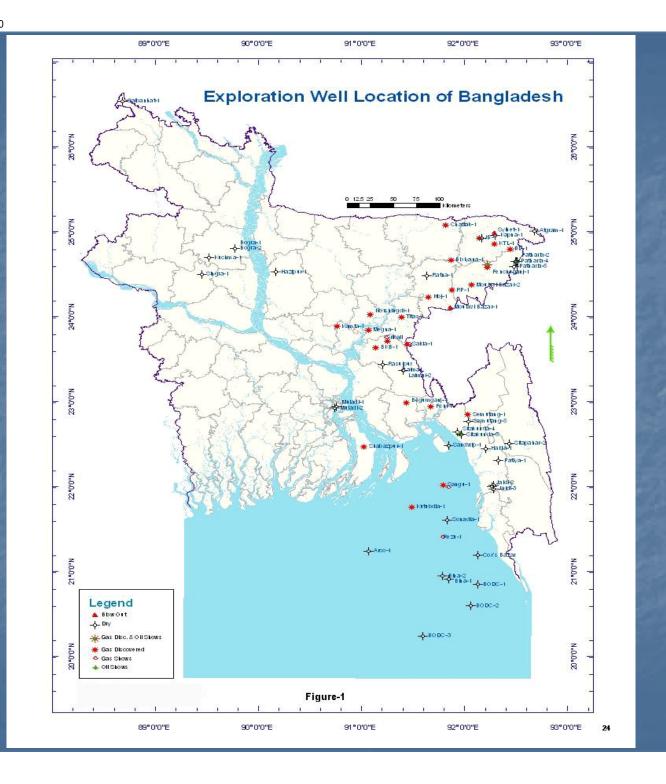
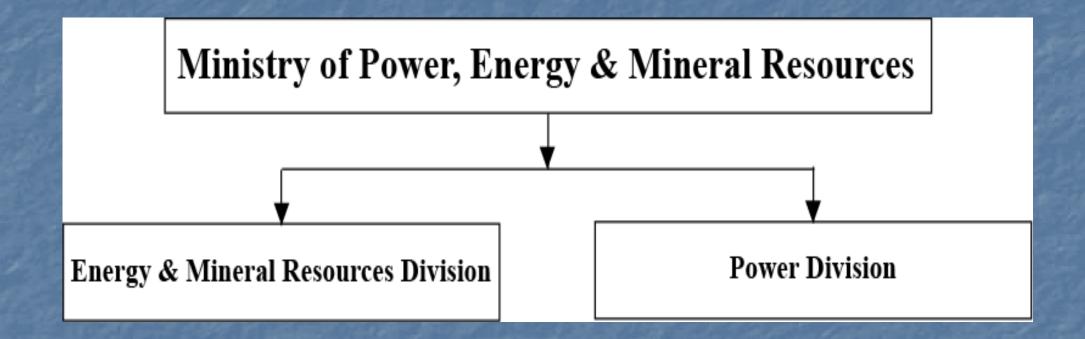
WELCOME
To
Presentation
on
Energy Scenario: Bangladesh







# Functions of Energy and Mineral Resources Division

- All policies and matters relating to Petroleum, Natural Gas and Mineral Resources.
- General Policy (Regulatory & Development) relating to Petroleum, Gas & Mineral Resources.
- Administration & control of Bangladesh Oil, Gas and Mineral Corporation (PETROBANGLA), Bangladesh Petroleum Corporation (BPC), Geological Survey of Bangladesh (GSB), Bureau of Mineral Development (BMD), Department of Explosives, Bangladesh Petroleum Institute (BPI) and Hydrocarbon Unit (HCU),.

# **Energy Position: Bangladesh**

# 1.0 National Energy Policy:

Present Energy Policy was prepared and enacted in 1996.

# 1.1 Objectives:

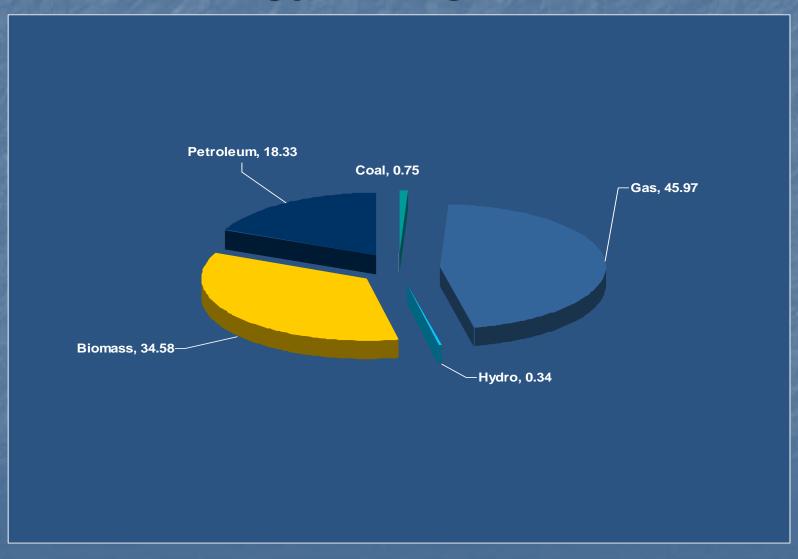
The objectives of the National Energy Policy (NEP) are outlined as follows:

- To provide energy for sustainable economic growth so that the economic development activities of different sectors are not constrained due to shortage of energy.
- ii) To meet the energy needs of different zones of the country and socio-economic groups.
- lii) To ensure optimum development of all the indigenous energy sources.
- iv) To ensure sustainable operation of the energy utilities.
- V) To ensure rational use of total energy sources.
- Vi) To ensure environmentally sound sustainable energy development programmes causing minimum damage to environment.
- Vii) To encourage public and private sector participation in the development and management of the energy sector.

# **Emphasis given on Energy Policy:**

- a) Primary energy resources.
- b) Primary Bio Mass Fuel
- c) Animal Power
- d) New and Renewable Energy Technology
  - i) Mini Hydro Power
  - ii) Solar
  - iii) Wind
  - vi) Tidal and Wave Power
- e) Imported Fuel
- f) Power:
  - i) Power Generation, Distribution and Consumption
  - ii) Rural Electrification Program
  - iii) Load management
  - vi) Energy Conservation

# 2.0 Energy Share of Energy, Bangladesh



#### 2.1 Fossil Fuel

Fossil Fuel comprises Natural Gas, Coal and Imported Petroleum Product.

#### 2.1.1 Natural Gas

In Bangladesh natural gas is one of the most important sources of energy that accounts for 73% of the commercial energy of the country. Till now 23 gas fields have been discovered in the country. As of June 2009 the estimated proven recoverable reserve was 15.10 TSCF, total 8.40 TSCF gas has been already produced leaving only 6.71 TSCF of recoverable category (P1), 5.20 TSCF of probable (P2) and 7.70 TCF under possible (P3) category. 79 wells in 17 gas fields are in production. Average production of natural gas was about 1900 MMSCFD and total of 656.64 billion cubic feet (BCF) gas was produced in 2008-09. Now daily average production of natural gas is about 2000 MMSCFD.

## 2.1.2 Oil & Gas Exploration under Production Sharing Contract (PSC) -2008

Total Block -28

Bid Submitted for-14

Negotiation going on with two companies for signing contract.

#### 2.1.3 CNG

Government has been encouraging private sector participation for installation CNG re-fuelling stations. To facilitate CNG use, about 500 CNG re-fuelling stations and 146 conversion workshops have already been set-up in the country and 1,88,034 CNG vehicles run in the country as of February 2010.

CNG activities is keeping positive role in economy of the country. Average CNG usage (approx.) is 92.19 MMCM per month which is equivalent to 0.065 million liters of Petrol/Octane.

#### 2.1.4 Petroleum

Bangladesh imports about 1.2 million metric tons of crude oil along with 2.6 million metric tons (approx) of refined petroleum products per annum. Locally liquid fuels in terms of condensate and other liquid products are also extracted from different gas fields. Major consumer of liquid fuel is transport followed by agriculture, industry and commercial that is mostly met by imported liquid fuel.

#### 2.1.5 Coal

In Bangladesh, five coal deposits namely Barapukuria, Phulbari, Dighipara (in Dinajpur District), Khalashpir (in Rangpur District) and Jamalgonj (in Joypurhat District) were discovered. Total insitu proven+probable reserves is 3300 Million Tones. So far, only one coal field i.e. Barapukuria has been developed. Commercial production of Barapukuria coal mine commenced from 2005 with the targeted capacity of one million metric tons per year and present average production 0.6-0.8 Million Tones per year.

# 2.1.6 Estimated Coal Resources of Bangladesh

Location/ Field	Year of Discovery	Drilled Well	Depth (Meier)	Estimated Coal Resources (Mn Tones)	Total In-situ Reserves (Mn Tones)	Proved In-situ Reserves (Mn Tones)	Remarks
Barapukuria (Dinajpur)	1985- 87	31	118 - 509	390	390	303***	Yearly Production Capacity appx. 1 MnTon
Khalaspir (Rangpur)	1989 - 90	14	257 - 483	685	685	143*	Feasibility Report submitted by HOSAF Int. Ltd. & Shangdong-Ludi Min. Co. China under reviewed.
Phulbari (Dinajpur)	1997	108	150 - 240	572	572	288**	Asia Energy Corporation submitted feasibility report to BMD
Dighipara (Dinajpur)	1994 - 95	5	328 - 407	600	600	150*	Exploration license awarded to Petrobangla Joint venture exploration plan submitted
Jamalganj (Joypurhat)	1962	10	640 - 1158	1053			Greater depth, good for Coal Bed Methane
			Total	3300	2247	884	

# 2.2 Renewable Energy

The major sources of renewable energy in Bangladesh are Hydro Power, Biogas and Solar Energy.

# 2.2.1 Hydro Power:

There is one large hydro facility in the country at Kaptai, installed in the 1960s and producing 1000GWh per year. More assessments for hydropower have to be carried out to identify handful possible sites.

### 2.2.2 Nuclear Energy:

In Bangladesh steps are being taken to setup nuclear plants to meet up the emerging demand of energy in future.

# 2.2.3 Biogas:

Biogas may be the most promising renewable energy resource for Bangladesh. Presently there are ten thousands of households and village-level biogas plants in place throughout the country.

# 2.2.4 Solar photovoltaic:

Solar photovoltaic are in use throughout the country with over 2,00,000 household-level installations comprising around 12 MW total capacity. Scaling-up of solar PV systems has been supported by the World Bank and implemented through both the Rural Electrification Board (REB) and the Infrastructure Development Company (IDCOL).

# 3.0 Power Supply Position:

In Bangladesh total Installed Electricity Generation Capacity 5,400 MW, Derated Electricity Generation Capacity 4,800 MW and Generation Capacity around 4,000 MW. Total around 43% people have got access to electricity. Per capita consumption of electricity is 165 kWh.

# 4.1 Promote Renewable Energy:

Through the expansion of Renewable Energy Technology, power may reach the remote and inaccessible areas. This will help to establish small and cottage industries and to educate and raise awareness on important issues to the people of remote and inaccessible areas. As a result, there will be a positive impact on poverty reduction.

# 4.2 Expansion of Solar, Wind and other Renewable Energy Technology and Initiation of measures for Energy Savings:

Developing country like Bangladesh has plans to generate electricity from environmentally friendly energy sources to complement commercial sources. Bangladesh has a hot weather and sun shine is available all the year. By using Solar, Wind and other renewable energy we can generate Electricity for the people of inaccessible area of the country. This will help for improvement of standard of living, modernization and employment generation for the people of the country. If Bangladesh can attempt to keep pace with renewable energy technology in other countries, electricity can be produced from renewable energy sources and distributed to those areas where expansion of grid line is very expensive. This will accelerate governments electrification programe and will ease the current electricity supply shortfall. That is why this has been given priority.

# Thanks