

# Bangladesh

---

## Bangladesh's Power Sector: Investment Opportunities

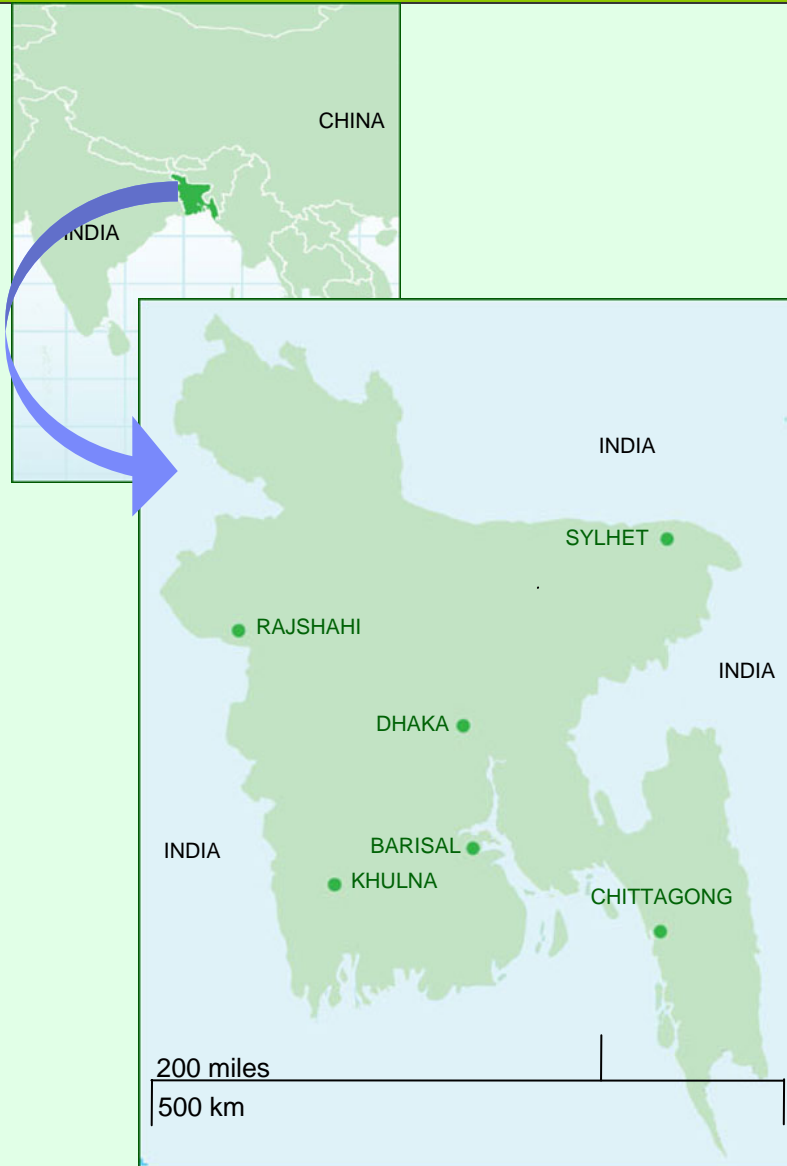
A K Azad

Secretary Power Division

July 19, 2011



# Bangladesh at a Glance

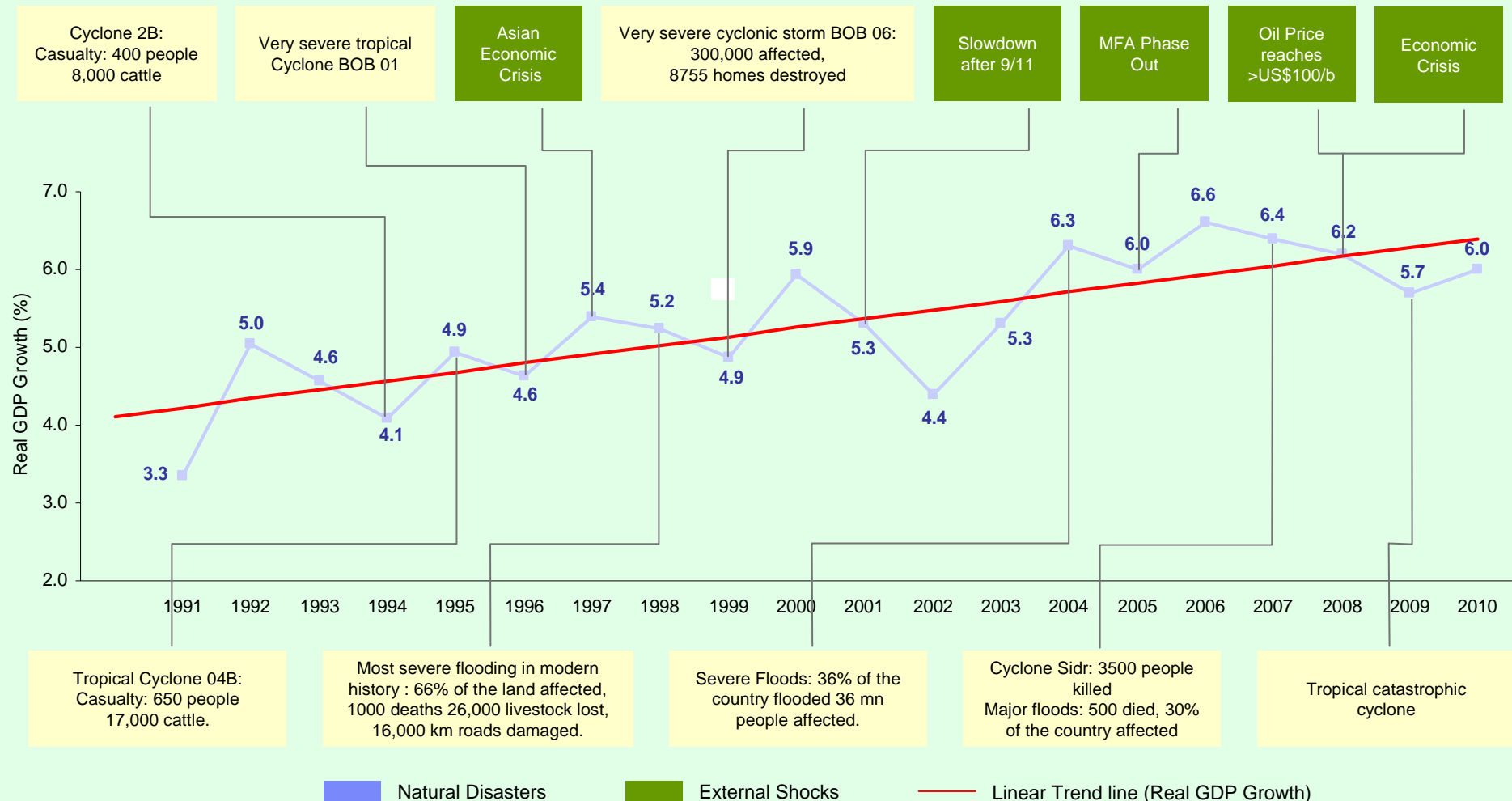


- **Official Name** : People's Republic of Bangladesh
- **Political System**: Parliamentary Democracy
- **Population** : 146 million
- **Area** : 147,570 km<sup>2</sup>
- **Time Zone** : GMT+6 Hours
- **GDP total** : USD 100 bill (FY2010)
- **GDP Per Capita**: USD 685 (FY 2010)
- **Total Exports** : USD 16.2 billion (FY2010)
- **Total Imports** : USD 23.7 billion (FY2010)
- **Forex Reserve** : USD 12 billion (Jan, 2011)
- **Major Maritime Ports**: Chittagong, Mongla
- **Currency** : BDT (1 BDT = USD 0.0142)
- **Major Cities** : Dhaka, Chittagong, Khulna, Sylhet, Rajshahi, Barisal,
- **Dialing Code** : +880

# GROWTH IS REMARKABLY STABLE AGAINST ALL SHOCKS

Resilient growth despite regular political, environmental and external setbacks

**Bangladesh has maintained consistent growth and never defaulted on its internal or external debt obligations despite the Asian and Global Financial Crises, numerous political upheavals and countless natural disasters. This consistency is practically unrivaled amongst countries of a similar level of development**



# Vision 2021 and Growth Targets

## Vision 2021: In Quest of a Happy, Prosperous and Inclusive Bangladesh

### Medium Term Economic Targets (2013)

- Raising economic growth rate to 8%
- Reducing poverty rate to 25%
- Reducing absolute poverty rate to 15%
- Enhancing electricity supply to 7,000 MW

### Long Term Economic Targets (2021)

- Boosting economic growth rate to 10% in 2017 and sustaining it till 2021
- Reducing poverty rate to 15%
- Enhancing electricity supply to 20,000 MW
- Raising the economy to the level of a middle-income country

# Investment Environment

- Sovereign Credit Rating **BB** - (Moody's) and **Ba3** (S&P) indicates better investment environment
- 23 bn US \$ export, 12 bn US \$ remittance and 12 bn US \$ foreign exchange reserve indicates capability of IPP payment
- Existing policy and concessions will be continued
- Tested and successful approach to IPP development and management will be continued;
- Transparency and “level playing field” in the selection of Bidders ensured

# ***Policy, Incentives and Security Mechanism for Investment in Private Power***

# Private Sector Power Generation Policy

- Tariff based bidding
  - Capacity Charge : ensures reasonable return on investment
  - Energy Charge : fuel cost is pass through item in the tariff
- Sovereign guarantee from the Government for obligations of Government entities through Implementation Agreement (IA)
- Assistance in getting clearances from various agencies
- Attractive incentive packages

# Major Incentives for IPPs

## **Private Sector Power Generation Policy**

- Exemption from corporate income tax for a period of 15 years.
- Plant and equipment (full value) and spare parts (10% of original plant cost) without payment of customs duties, VAT and any other surcharges.
- Repatriation of equity along with dividends.

Cont...



# Major Incentives for IPPs

## **Private Sector Power Generation Policy**

- Tax exemption and repatriation facilities on royalties, technical know — how and technical assistance fees
- Avoidance of double taxation on the basis of bilateral agreements
- The Bangladeshi currency, Taka is freely convertible for FDI

# Payment Guarantee

- Implementation Agreement (IA) and PPA ensure fair and reasonable risk allocation, and payment by the Purchaser is guaranteed by GOB
- Two component tariff - 'Capacity Price' and 'Energy Price' - ensures sufficient cash flow to recover investment and return
- Payments under the PPA continue in the event of fuel supply disruption or dispatch failure
- Payment under the PPA is ensured by Letter of Credit
- Payment to ' Escrow Account' ensures lenders re - payment

# Why invest in Bangladesh's Power Market ?

- Project Agreements are of international standard with properly allocated risks;
- IPPs are operating about 50 % of total generation and making profit;
- IPPs and BPDB have met their obligations under the PPA without problems or controversy and no conflict or major problems/issues have arisen
- Many IPPs are presently operating their businesses with local managers, engineers and technical staff to the benefit of all concerned
- Increased interest reflected in the recent biddings by private sector developers

# ***Present Scenario of Power Sector, Future Plan and Projects***

# Bangladesh's Power Sector: At a Glance (FY 2010)

- Electricity Growth : 10 % in FY-2010 (Av. 7 % since 1990)
- Generation Capacity : 6727 MW (June 30, 2011)
- Total Consumers : 12 Million
- Transmission Lines : 8,500 km
- Distribution Lines : 2,70,000 km
- Per Capita Generation : 236 kWh (incl. Captive)
- Access to Electricity : 49 %

# Present Generation Capacity (June 08, 2011)

<b>Public Sector</b>			
<b>SL.</b>			<b>Generation Capacity (MW)</b>
<b>1.</b>	<b>BPDB</b>		<b>2620</b>
<b>2.</b>	<b>APSCL</b>		<b>659</b>
<b>3.</b>	<b>EGCB</b>		<b>255</b>
	<b>Subtotal</b>		<b>3534 (53 %)</b>
<b>Private Sector</b>			
<b>1.</b>	<b>IPPs</b>		<b>1271</b>
<b>2.</b>	<b>SIPPs (BPDB)</b>		<b>99</b>
<b>3.</b>	<b>SIPPs (REB)</b>		<b>226</b>
<b>4.</b>	<b>15 YR. Rental</b>		<b>168</b>
<b>5.</b>	<b>3/5 YR. Rental</b>		<b>1429</b>
	<b>Subtotal</b>		<b>3193 (47 %)</b>
<b>Total</b>			<b>6727</b>

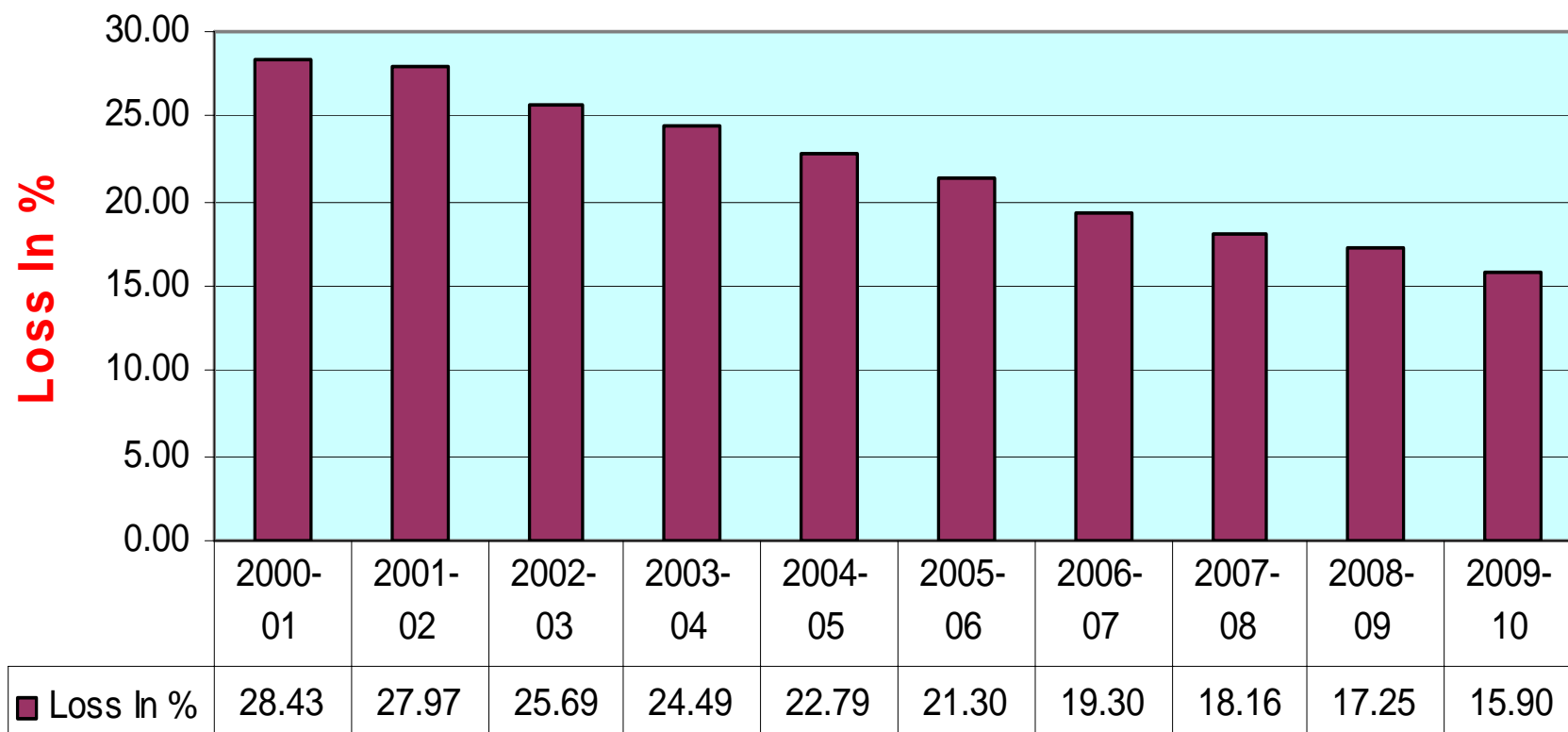
- Considering 15-20 % Maintenance and Forced Outage, Available Generation Capacity is in the range of 5300 – 5600 MW without fuel constraint

# Demand Supply Situation

- Generation on Jan 6, 2009: 3268 MW (Capacity- 4931 MW)
- Generation: 4600 – 4900 MW (Capacity- 6727 MW)
- Highest so far: 4890 MW ( 13 June 2011)
- Gas shortage causes 300 - 500 MW less Power Generation
- Peak Demand: 6000 MW (with DSM)
- Load shedding up to 1000 MW during hot summer days (with DSM)
- Shortage and unreliable power supply has constrained economic growth

# Transmission and Distribution Loss

**Comparison of Tr & Dis system loss (FY 2001-2010)**





# Priority area

- Comprehensive and integrated plan for power generation, transmission and distribution sub – sectors
- Fuel diversity and sustainable supply of fuels
- Private sector participation in power generation
- Harnessing renewable energy sources
- Demand Side Management (DSM) and Energy Efficiency improvement program
- Rationalize power tariff and “life line” tariff
- Cross Boarder Power Trade

# ***Generation Expansion Plan***

# Primary Fuel Supply Scenario

- **Gas:** No significant gas discovery in recent years; off – shore and on – shore gas exploration initiatives & increased reserves in present fields may change the present scenario
- **Coal:** Near term option; Indigenous or Imported; Base Load;
- **Oil:** Volatile market; High price; ■ For peaking duty
- **LNG:** Necessary to ensure secure and reliable gas supply
- **Nuclear:** Safe technology; No pollution; Expected to be future Base Load option

# Generation Expansion Plan

- **Immediate:** 6 -12 Months
  - Rental Plants (liquid fuel)
- **Short term:** 18 - 24 Months
  - Peaking Plants (liquid fuel)
- **Medium term:** 3 - 5 years
  - Combined Cycle Plants (Gas or dual fuel)
  - Peaking Plant (Gas or dual fuel)
  - Coal fired steam plants
- **Long term:** beyond 5 years
  - LNG based Combined Cycle Plants
  - - Domestic/Imported Coal Power Plant
  - - Gas/Oil based Peaking Plant
  - - Nuclear Power Plant
  - - Renewable Energy

# Power Generation Projects up to 2016

## Calendar Year Wise Projects Completion (From 2010 to 2016)

YEAR	2010 (MW) Commissioned	2011 (MW)	2012 (MW)	2013 (MW)	2014 (MW)	2015 (MW)	2016 (MW)	TOTAL (MW)
Public	255	851	838	1040	1270	450	1500	6204
Private	520	1343	1319	1134	1053	1900	1300	8569
Total	775	2194	2157	2174	2323	2350	2800	14,773

- Public Sector : 6204 MW (comm: 308 MW, u/c: 1681 MW, Tender: 890 MW); (42%)
- Private Sector : 8569 MW (comm:1258 MW, u/c: 1622 MW, Tender: 2989 MW); (58%)

# ***Project Implementation***



# Power Generation Addition From Jan 09 to June 11

- **Gen Addition Jan 09 – Dec 09 : 356 MW**
- **Gen Addition Jan 10 – Dec 10 : 775 MW**
- **Gen Addition Jan 11 – June 11 : 791 MW**
- **Total Gen. Addition (Jan 09 – June 11): 1922 MW**

# Successful Contract Signed since Jan 2009

Sl. No.	Description	No. of Contract	No. of Plant	Capacity (MW)
01.	Private Sector	22	24	1753
02.	Public Sector	17	17	1734
	<b>Total</b>	<b>39</b>	<b>41</b>	<b>4504</b>

- Out of 4504 MW, 1201 MW (15 Plants) already commissioned.
- 26 Projects with capacity 3303 MW under construction.



# Projects Under Tendering Process: Contract within Next 6 Months

Sl. No.	Description	No. of Projects	Capacity (MW)
01.	Public Sector	3	890
02.	Private Sector (IPP's)	27	2989
	<b>Total</b>	<b>30</b>	<b>3879</b>

# ***Investment Opportunity in Thermal Power Projects***

# Future Projects Under Pre Tendering Process

Sl	Description	Capacity (MW)	Fuel	Expected COD	Remarks
1	Bibiyana 450 MW CC # 3	450	Gas	June, 2014	<ul style="list-style-type: none"> <li>DPP prepared</li> <li>Initial Feasibility Stage</li> </ul>
2	Shahjibazar 300 MW CC	300	Gas	June, 2014	<ul style="list-style-type: none"> <li>DPP prepared</li> <li>Initial Feasibility Stage</li> </ul>
3	Ashuganj 450 MW CC South	450	Gas	Sept, 2014	<ul style="list-style-type: none"> <li>Tender Invited on 04 June,2011.</li> </ul>
4	Ashuganj 450 MW CC North	450	Gas	March, 2015	<ul style="list-style-type: none"> <li>DPP Prepared</li> </ul>
5	Bheramara 360 MW CCPP	360	Gas	Dec, 2014	<ul style="list-style-type: none"> <li>DPP approved..</li> <li>EOI invited for consultancy</li> </ul>
6	Meghnaghat 750 MW CC	750	Gas	March, 2016	<ul style="list-style-type: none"> <li>PDPP prepared</li> <li>Initial Feasibility Stage</li> </ul>
7	Khulna Coal; ST	1,320	Coal	March 2015	<ul style="list-style-type: none"> <li>JV Agreement in July 2011 with NTPC</li> <li>land acquisition (1834 Acre) under process</li> </ul>
8	Chittagong Coal; ST	1,200	Coal	June. 2016	<ul style="list-style-type: none"> <li>Feasibility Study will start soon.</li> <li>land acquisition (1834 Acre) under process</li> </ul>
9	Chittagong South Coal; ST	600	Coal	June 2017	<ul style="list-style-type: none"> <li>Feasibility Study will start soon.</li> <li>land acquisition (1834 Acre) under process</li> </ul>
	<b>Sub-Total</b>	<b>5,880</b>			

# Future Generation Projects

1. Bibiyana 450 MW CC # 3

2. Shahjibazar 300 MW CC

3 & 4. Ashuganj 2X450 MW CC North & South

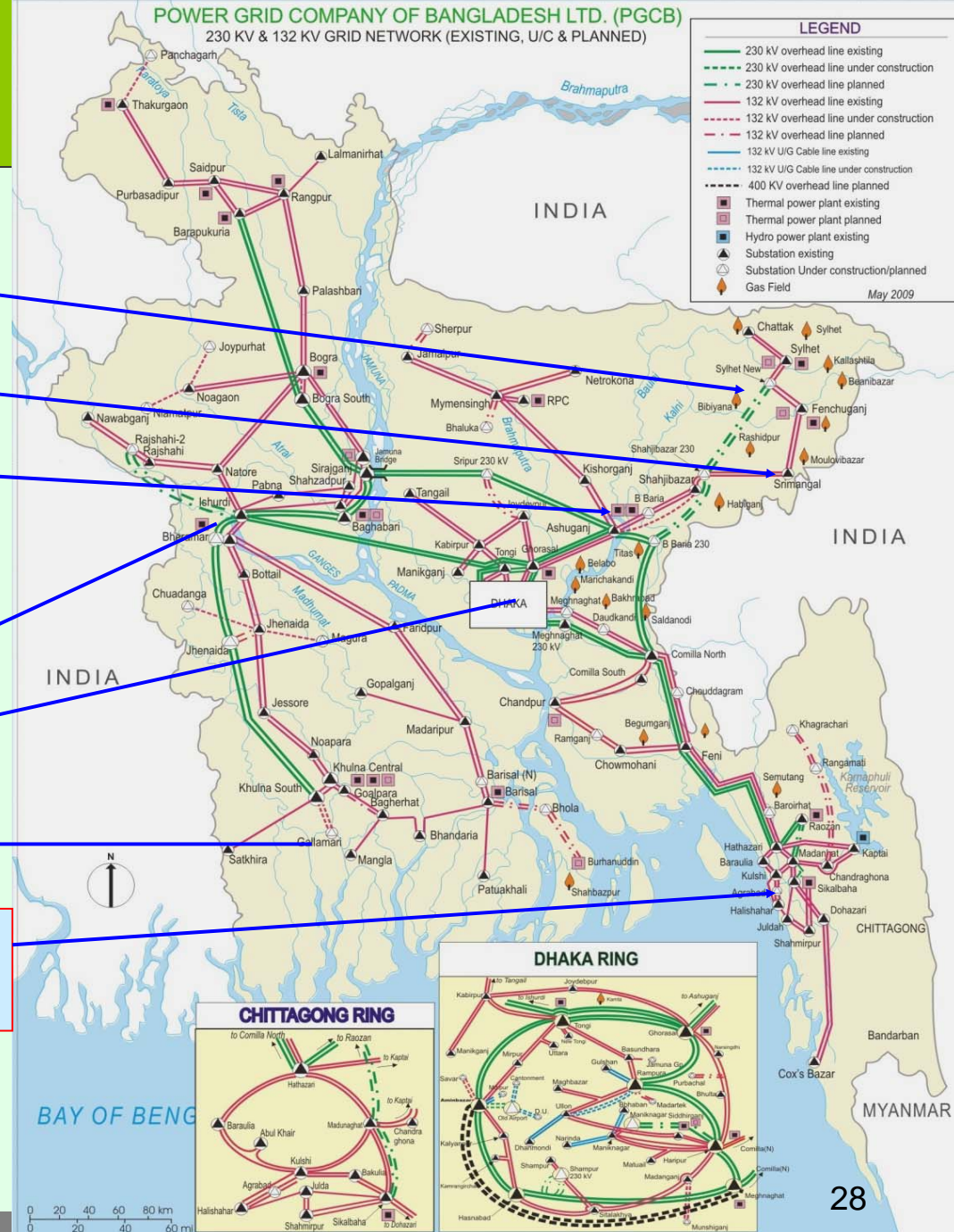
5. Bheramara 360 MW CC

6. Meghnaghat 750 MW CC

7. Khulna 2X660 MW Imported Coal

8. Chittagong 2X600 MW Imported Coal

9. Chittag South 600 MW Impoted Coal



# Renewable Energy Projects

Sl. No	Location of the Project	Ownership	Capacity (MW)	Type of Project
1	Parki Beach, Chittagong	Private	100-200	Wind Power
2	Moghnamoghat, Cox's Bazar	Private	10	Wind Power
3	Hatia, Sandwip, and Monpura Islands	Private	4	Wind Power
4	Kaptai, Rangamati	Public	5	Grid Connected Solar PV
5	Sarishabari, Jamalpur	Private	2-4	Grid Connected Solar PV
6	RTC, Rajshahi	Private	1	Grid Connected Solar PV
7	Rajabarihat, Rajshahi	Private	2-4	Grid Connected Solar PV
8	St. Martin Island	Public	1.5	Wind and Solar Hybrid

# Small Projects Under Pre Tendering Process

Sl No.	Description	Capacity (MW)	Fuel	Expected COD	Remarks
1	Chapai Nababganj 100 MW Peaking	100	HFO	Nov, 2012	<ul style="list-style-type: none"> <li>• Procurement Process will start soon</li> </ul>
2	Bhola 150-225 MW CCPP	225	Gas	December, 2013	<ul style="list-style-type: none"> <li>■ Final Feasibility Report submitted.</li> <li>■ Tender doc under preparation</li> </ul>
3	Barapukuria 250-300 MW Coal (3rd Unit)	250	Coal	June, 2014	<ul style="list-style-type: none"> <li>■ In house feasibility completed.</li> <li>■ DPP is under preparation.</li> </ul>
4	Ashuganj 150 CCPP	150	Gas	June, 2014	<ul style="list-style-type: none"> <li>■ Tender Invite: 04.04.2011</li> <li>■ Tender Submission: 05.06.2011</li> </ul>
5	Shikalbaha 150-225 MW CCPP	150	Gas/HFO	June, 2014	<ul style="list-style-type: none"> <li>■ Preliminary Study going on</li> <li>■ Finance: Kuwait Fund</li> </ul>
6	Fenchugonj CCPP	100-150	Gas	Dec 2013	<ul style="list-style-type: none"> <li>■ PQ &amp; RFP Invited: 21.04.11</li> <li>■ PQ &amp; RFP Sub: 21.07.11</li> </ul>
7	Savar 100 MW Peaking PP, Dhaka	100	Gas/HFO	March, 2013	<ul style="list-style-type: none"> <li>■ PQ and RFP documents under preparation.</li> </ul>
	<b>Sub-Total</b>	<b>1075</b>			

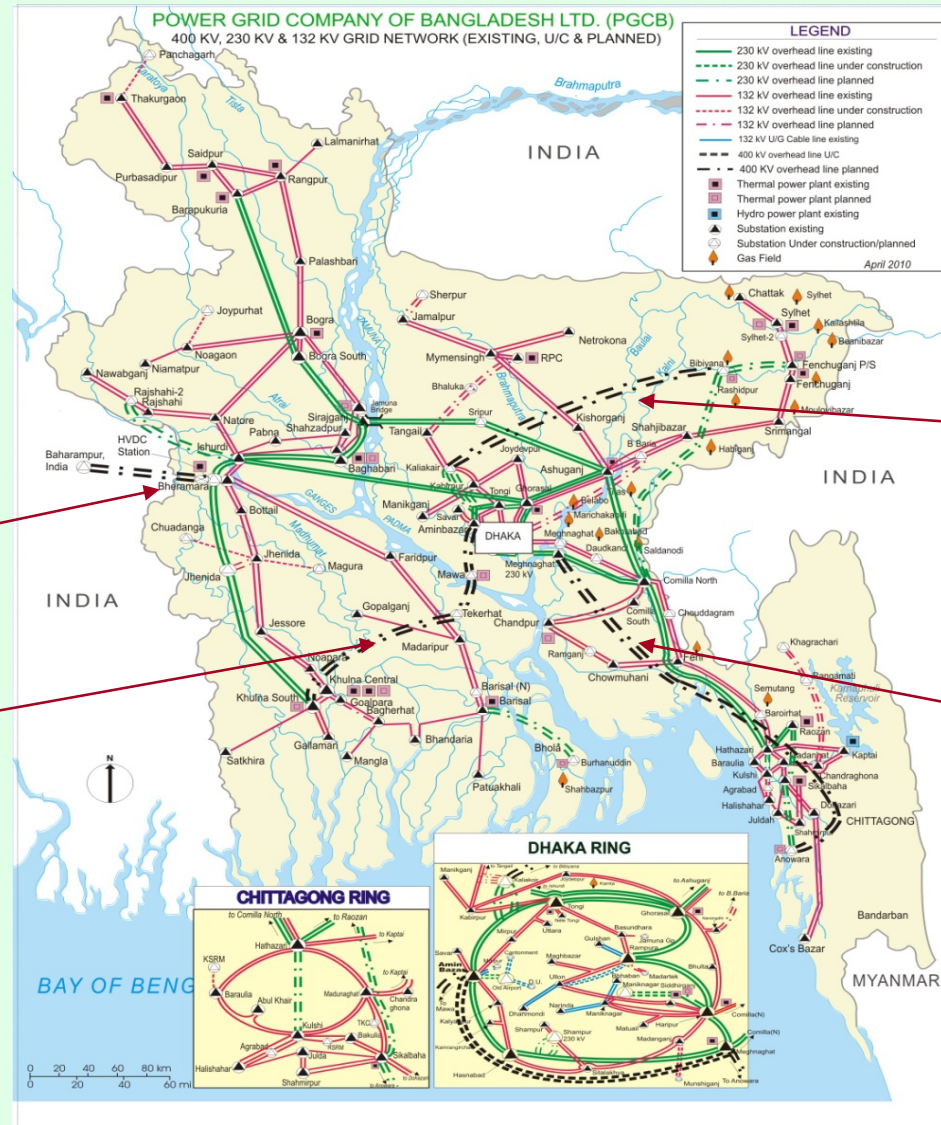
# Public Sector CC Conversion Projects (Energy Efficiency Improv.)

SI No	Name of the Power Plant	Capacity (MW)	Owner	Fuel	Est. Project Cost (Million US \$)	Expected COD
1.	Conversion of Ghorashal 4x210 MW (3,4,5,6 Unit) Steam into 2290 MW CCCP	1450	BPDB	Gas	1800	2015
2.	Conversion of Baghabri 171 MW GT into 250 MW CCPP	85	BPDB	Gas	65	2013
3.	Conversion of Sikalbaha 150 MW Peaking Plant into 225 MW CCPP	75	BPDB	Gas/ Liquid Fuel	60	2013
4.	Conversion of Shahjibazar 2x35 MW into 105 MW CCPP	35	BPDB	Gas	40	2013
	<b>Total (Public)</b>	<b>1,645</b>			<b>1,965</b>	

# ***Major Transmission Projects***



# Bangladesh Transmission Network



# Major Transmission Projects: Tender Invitation Soon

SI No	Project Name	Total Project Cost (Million US\$)	Project Completion Year	Present Status
1	Bibiyana-Kaliakoir 400 kV and Fenchuganj-Bibiyana 230 kV T/ L; <b>168 km</b>	293	2011– 12	EDCF, Korea
2	Aminbazar-Maowa-Mongla 400 kV & Mongla-Khulna(S) 230 kV Transmission line (NG3): <b>192 &amp; 40 km</b>	220	2014 – 15	DPP Approved
3	Anowara-Meghnaghat 400 kV Transmission line (NG4): <b>260 km</b>	283	2014 – 15	DPP under preparation
4	Eight new 132/33 kV S/Ss with Interconnecting 132 kV line: <b>860 MVA</b>	86	2012 – 13	DPP Approved
	<b>Total:</b>	<b>882</b>		

# ***Long Term Generation Plan***



# Power System Master Plan (up to 2030)

- **Updates of PSMP 2006:** Due to change of planning perspective
- **PSMP 2010 :** Long term planning up to 2030
- **Study completion:** February 2011
- **Findings:**
  - Generation capacity requirement by 2021: 24,000 MW
  - Generation capacity requirement by 2030: 39,000 MW
  - Coal based generation capacity by 2030: 19,000 MW
  - Coal and Nuclear for base load power requirement
  - Cross Boarder Trade with neighboring countries

# Probable Power Generation: Primary Fuel Sources by 2030

Sl. No.	Description	Capacity (MW)	Probable Location (s)
1	Domestic Coal	11,250	North West Region at Mine Mouth
2	Imported Coal	8,400	Chittagong and Khulna
3	Domestic Gas/LNG	8,850	Near Load Centers
4	Nuclear	4,000	Ruppur
5	Regional Grid	3,500	Bahrapur - Bheramara, Agartola - Comilla, Silchar - Fenchuganj, Purnia-Bogra, Myanmar - Chittagong
6	Others (Oil, Hydro and Renewable)	2,700	Near Load Centers
Total		38,700	



- 230 KV overhead line existing
- - - 230 KV overhead line under construction
- erhead line planned
- erhead line existing
- erhead line under construction
- erhead line planned
- Cable line existing
- - - 132 KV U/G Cable line under construction
- - - 400 KV overhead line planned
- Thermal power plant existing
- Thermal power plant planned
- Hydro power plant existing
- Substation existing
- Substation Under construction/planned
- Gas Field

May 2009

# Road Map for Coal Power Development (as of 2030)

## Domestic Coal

K-D-P 6x1000 MW USC

K-D-P 8x 600 MW USC

## Import Coal

Meghnaghat 2x600MW

Zajira/New Meg 3x600MW

Chittagong 3x660MW

Moheshkhali/Matarbari 4x600MW

Khulna 2x660MW (Dom Future)

**Total 19,200MW (New)**

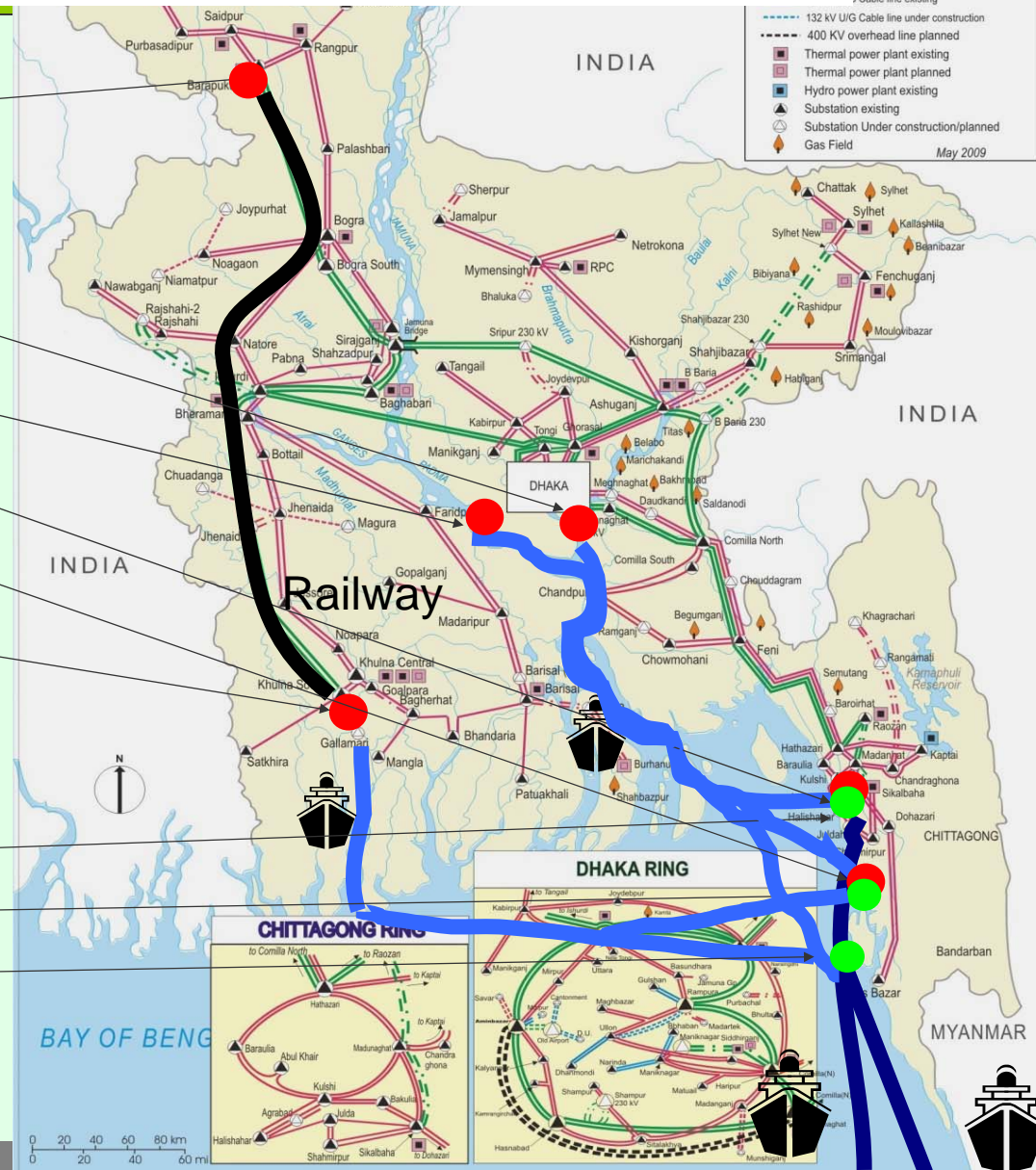
## Coal Center

Chittagong

Matarbari

Sonadia Island

- : Potential Coal PS
- : Potential Coal Center
- : Ocean-going vessel
- : Transship



# Generation Plan: From 2017 to 2021

Sl	Description	Capacity (MW)	Executing Agency	Fuel	Expected COD
1	Meghnaghat Large #4, 750 MW, CC	750	BPDB	Gas	2017
2	Chittagong South 600MW #1ST	600	BPDB	Coal-I	2017
3	Karnafuli Hydro #6,7	100	BPDB	Hydro	2017
4	Megnagatt 600MW #1	600	BPDB	Coal-I	2018
5	Keraniganj #1, 750 MW, CC	750	BPDB	Gas	2018
6	Power import from Myanmar	500	BPDB	Import	2018
7	Rooppur Nuclear # 1, 1000 MW	1000	BAEC	Nuclear	2018
8	B-K-D-P 1 600MW #1	600	BPDB	Coal-D	2019
9	B-K-D-P 1 600MW #2	600	BPDB	Coal-D	2019
10	Peaking Power- 2019	200	BPDB	HFO	2019
11	B-K-D-P 1 600MW #3	600	BPDB	Coal-D	2020
12	Rooppur Nuclear # 2, 1000 MW	1000	BAEC	Nuclear	2020
13	Peaking Power -2020	200	BPDB	HFO	2021
14	Power Import Bahra-Bhera Phase-2	500	BPDB	Import	2021
15	Peaking Power-2021	100	BPDB	HFO	2021
<b>Total:</b>		<b>8,100</b>			

# Challenges

## **Primary Fuel Supply**

- Enhanced Gas Exploration, Production
- Domestic coal development
- Coal Import (long term contract) and deep sea port for coal handling
- LNG import

## **Project Financing**

- Ensuring financing for Public and Private sector projects is a major challenge
- Availability of foreign currency

## **Transportation of fuel and equipment**

- Infrastructure development by Railway
- Dredging of river routes by BIWTA
- Capacity build up of BPC, Railway, R&H and BIWTA



# Conclusion



- Government is committed to realize its 'Vision' for the power sector and the economic development of Bangladesh
- Government is committed to ensure transparency and an "level playing field" in every aspect of the procurement process
- Government is committed to promote and encourage Private Sector Participation in power sector development

We look forward to your  
participation in the power  
sector development of  
Bangladesh

**Thank you**

Visit website: [www.bpddb.gov.bd](http://www.bpddb.gov.bd) for further  
information on power generation projects

# Bibiyana 450 MW # 3 Combined Cycle Power Plant Project

Sl.	Item	Particulars
1.	Project Owner	Bangladesh Power Development Board (BPDB)
2.	Location of the Power Plant	Bibiyana, Hobigonj
3.	Type of Fuel	Natural Gas
4.	Type of Technology	Combined Cycle Gas Turbine
5.	Capacity of the Plant	450 MW $\pm$ 10 %
6.	Expected Plant availability	90 %
7.	Approx. Total Project Cost	Million US\$ 450-500
8.	Site Arrangement	BPDB
9.	Gas Supply	Jalalabad Gas Distribution Company
10.	Transportation of Fuel & Equipment	 Road Communication available  River Communication available
11.	Expected Commissioning Date (COD)	June, 2014

# Bibiyana 450 MW # 3





# Present Activities of Bibiyana # 1,2



[Back](#)

# Shahjibazar 300 MW Combined Cycle Power Plant Project

Sl.	Item	Particulars
1.	Project Owner	Bangladesh Power Development Board (BPDB)
2.	Location of the Power Plant	Shahjibazar, Hobigonj
3.	Type of Fuel	Natural Gas
4.	Type of Technology	Combined Cycle Gas Turbine
5.	Capacity of the Plant	300 MW $\pm$ 10 %
6.	Expected Plant availability	90 %
7.	Approx. Total Project Cost	Million US\$ 300-340
8.	Site Arrangement	BPDB
9.	Gas Supply	Jalalabad Gas Distribution Company
10.	Transportation of Fuel & Equipment	 Rail Communication available  Road Communication available
11.	Expected Commissioning Date (COD)	June, 2014



# Site of Shahjibazar 300 MW CCPP Project



6 Hectares  
Land :  
Acquisition  
process started

4 Hectares  
Land: BPDB  
land

[Back](#)

© 2010 Google  
© 2010 Europa Technologies  
© 2010 Mapabc.com  
Image © 2010 DigitalGlobe



elev 59 ft

Dec 14, 2004

Eye alt 1451 ft



24°15'08.01" N 91°22'45.84" E

# Ashuganj 450 MW (South) Combined Cycle Power Plant Project

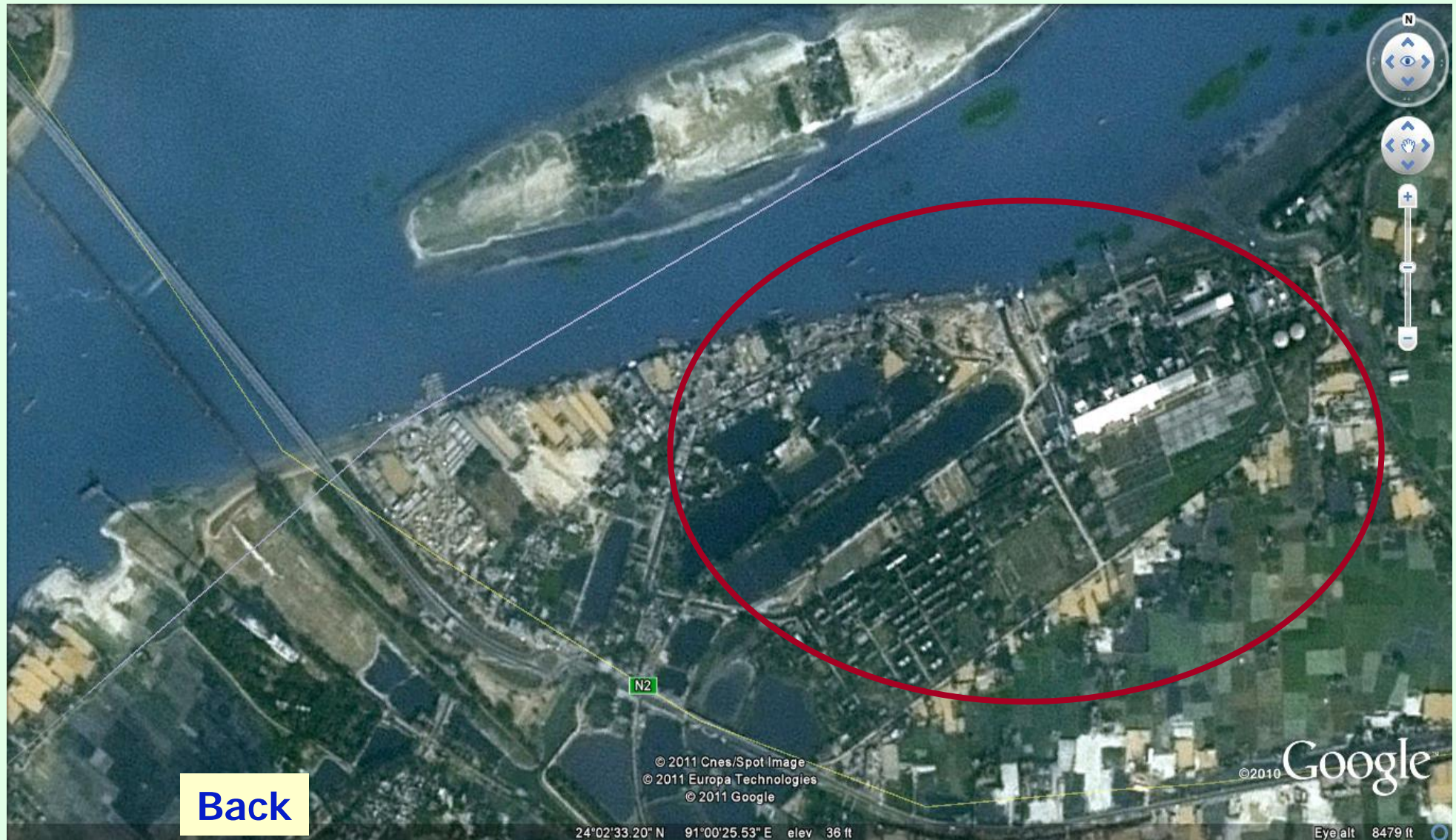
Sl.	Item	Particulars
1.	Project Owner	Ashuganj Power Station Company (APSCL)
2.	Location of the Power Plant	Ashugonj, B. Baria
3.	Type of Fuel	Natural Gas
4.	Type of Technology	Combined Cycle Gas Turbine
5.	Capacity of the Plant	450 MW $\pm$ 10 %
6.	Expected Plant availability	90 %
7.	Approx. Total Project Cost	Million US\$ 450-500
8.	Site Arrangement	APSCL
9.	Gas Supply	Titas Gas Distribution Company
10.	Transportation of Fuel & Equipment	 River Communication available  Road Communication available
11.	Expected Commissioning Date (COD)	September, 2014





# Ashuganj 450 MW (North) Combined Cycle Power Plant Project

Sl.	Item	Particulars
1.	Project Owner	Ashuganj Power Station Company (APSCL)
2.	Location of the Power Plant	Ashugonj, B. Baria
3.	Type of Fuel	Natural Gas
4.	Type of Technology	Combined Cycle Gas Turbine
5.	Capacity of the Plant	450 MW $\pm$ 10 %
6.	Expected Plant availability	90 %
7.	Approx. Total Project Cost	Million US\$ 450-500
8.	Site Arrangement	APSCL
9.	Gas Supply	Titas Gas Distribution Company
10.	Transportation of Fuel & Equipment	 River Communication available  Road Communication available
11.	Expected Commissioning Date (COD)	March, 2015

# Site of Ashuganj South and North 2X450 MW CCPP Project



# Bharamara 360 MW Combined Cycle Power Plant Project

Sl.	Item	Particulars
1.	Project Owner	North West Power Generation Company Ltd.
2.	Location of the Power Plant	Bharamara, Kustia
3.	Type of Fuel	Natural Gas
4.	Type of Technology	Combined Cycle Gas Turbine
5.	Capacity of the Plant	360 MW $\pm$ 10 %
6.	Expected Plant availability	90 %
7.	Approx. Total Project Cost	Million US\$ 500
8.	Site Arrangement	NWPGC
9.	Gas Supply	Paschimanchal Gas Distribution Company
10.	Transportation of Fuel & Equipment	 River Communication available  Road Communication available
11.	Expected Commissioning Date (COD)	December, 2014





# Site of Bheramara 360 MW CCPP Project



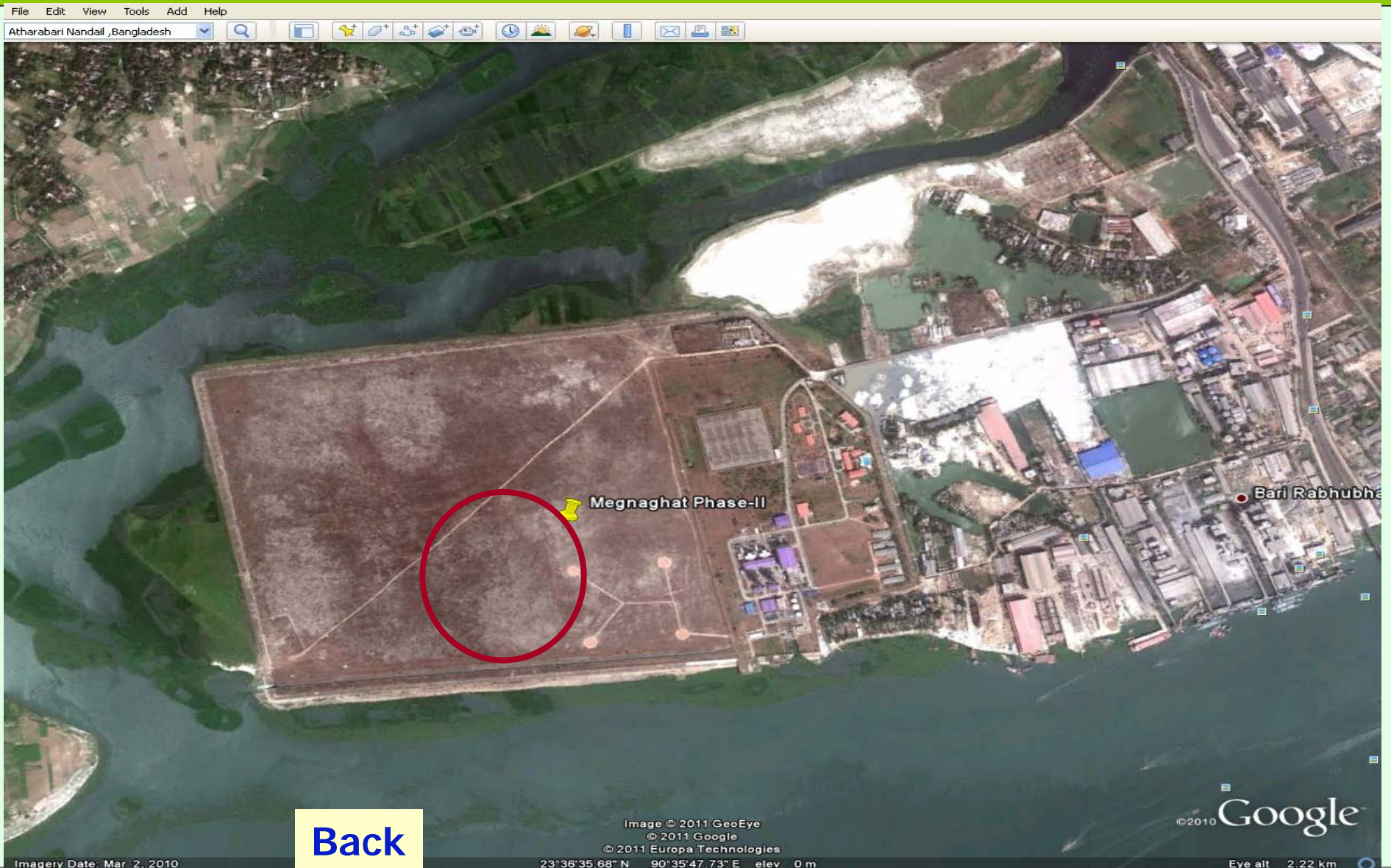
[Back](#)

# Meghnagat 750 MW Combined Cycle Power Plant Project



Sl.	Item	Particulars
1.	Project Owner	Bangladesh Power Development Board (BPDB)
2.	Location of the Power Plant	Meghnagat
3.	Type of Fuel	Natural Gas
4.	Type of Technology	Combined Cycle Gas Turbine
5.	Capacity of the Plant	750 MW $\pm$ 10 %
6.	Expected Plant availability	90 %
7.	Approx. Total Project Cost	Million US\$ 800
8.	Site Arrangement	BPDB
9.	Gas Supply	Titas Gas Distribution Company
10.	Transportation of Fuel & Equipment	 River Communication available  Road Communication available
11.	Expected Commissioning Date (COD)	March, 2016



# Project Location: Meghnaghat 750 MW CC



# Khulna 2 x 660 MW Imported Coal Power Plant Project

Sl.	Item	Particulars
1.	Project Owner	JV of BPDB and NTPC
2.	Location of the Power Plant	Bagerhat, Khulna
3.	Type of Fuel	Imported Coal
4.	Type of Technology	Coal Fired Steam Turbine
5.	Capacity of the Plant	1320 MW $\pm$ 10 %
6.	Expected Plant availability	90 %
7.	Approx. Total Project Cost	Million US\$ 1800-2000
8.	Site Arrangement	BPDB
9.	Coal Supply	
10.	Transportation of Fuel & Equipment	 Road Communication available  River Communication available
11.	Expected Commissioning Date (COD)	March, 2015



# Project Location : Khulna 1320 MW Coal

District: Bagerhat  
Upazila: Rampal  
Union: Rajnagar and Gauramba  
Mouza : Sapmari Katakhal, (4 Nos)  
Baserhula, Kaigar, Daskati, and  
Kapasdanga

Total Area (acre): 475+1,834= 2,309 acres

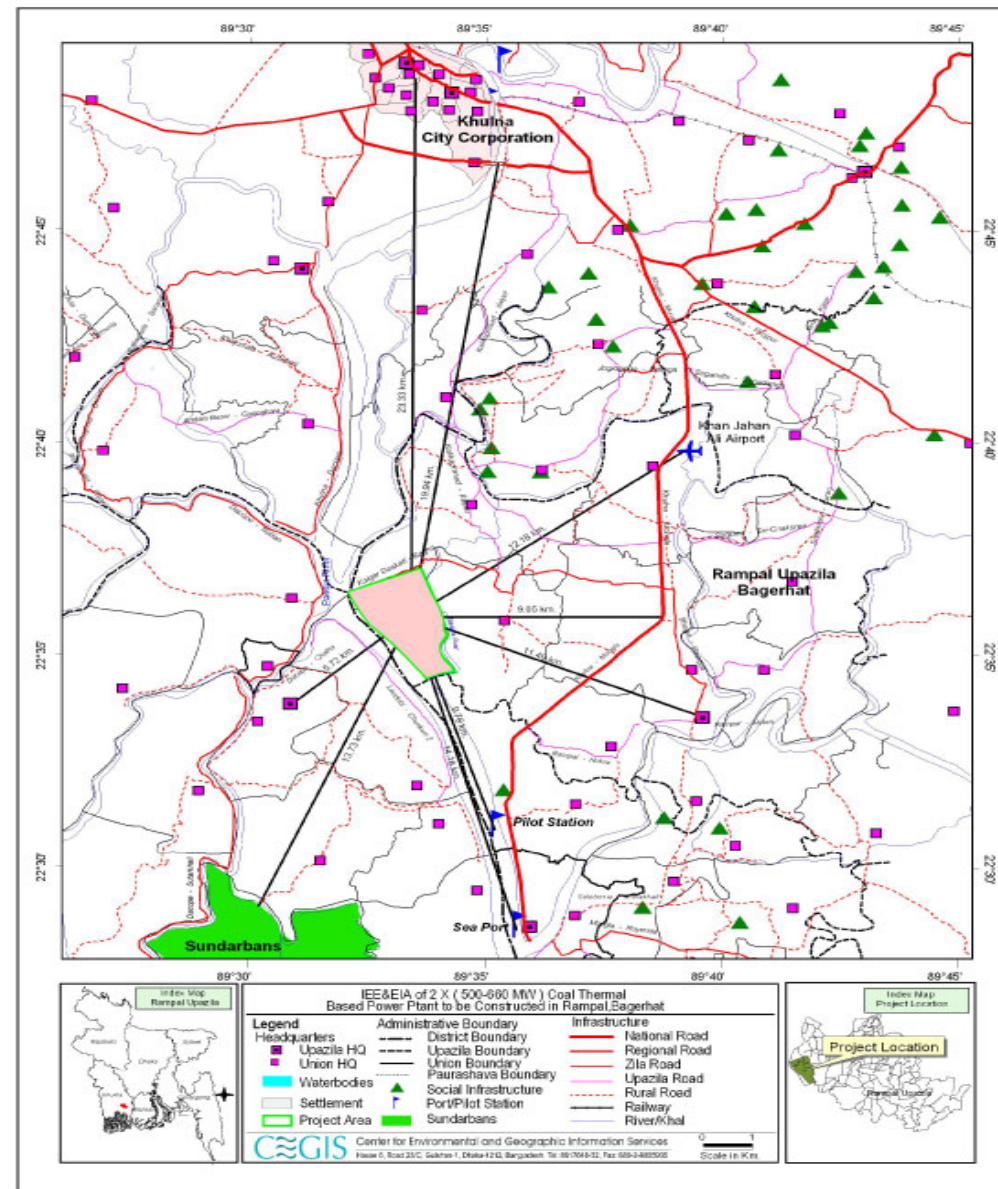
## Distance from Important location

Khulna City	23 km
Mongla Port	14 km
Proposed Khan Jahan Ali Air Port	12.18
Sundarbans	14 km
Proposed Deep Sea Port at Akram Point of Sundarbans	67 km

## Project Status



- Aviation Clearance: Obtained on 12 Oct, 10
- IEE: Report submitted to DOE
- Geo-technical: Investigation completed
- Land: Notice served under section 6 (DC)

[Back](#)






# Chittagong 2 x 600 MW Imported Coal Power Plant Project

Sl.	Item	Particulars
1.	Project Owner	BOO Project
2.	Location of the Power Plant	Chittagong
3.	Type of Fuel	Imported Coal
4.	Type of Technology	Coal Fired Steam Turbine
5.	Capacity of the Plant	1200 MW $\pm$ 10 %
6.	Expected Plant availability	90 %
7.	Approx. Total Project Cost	Million US\$ 1800-2000
8.	Site Arrangement	BPDB
9.	Coal Supply	
10.	Transportation of Fuel & Equipment	 Rail Communication available  River Communication available
11.	Expected Commissioning Date (COD)	June, 2016

# Chittagong South 600 MW Imported Coal Power Plant Project

Sl.	Item	Particulars
1.	Project Owner	Bangladesh Power Development Board (BPDB)
2.	Location of the Power Plant	Chittagong South / Moheshkhali
3.	Type of Fuel	Imported Coal
4.	Type of Technology	Coal Fired Steam Turbine
5.	Capacity of the Plant	600 MW $\pm$ 10 %
6.	Expected Plant availability	90 %
7.	Approx. Total Project Cost	Million US\$ 900-1000
8.	Site Arrangement	BPDB
9.	Coal Supply	
10.	Transportation of Fuel & Equipment	 Rail Communication available  River Communication available
11.	Expected Commissioning Date (COD)	June, 2017

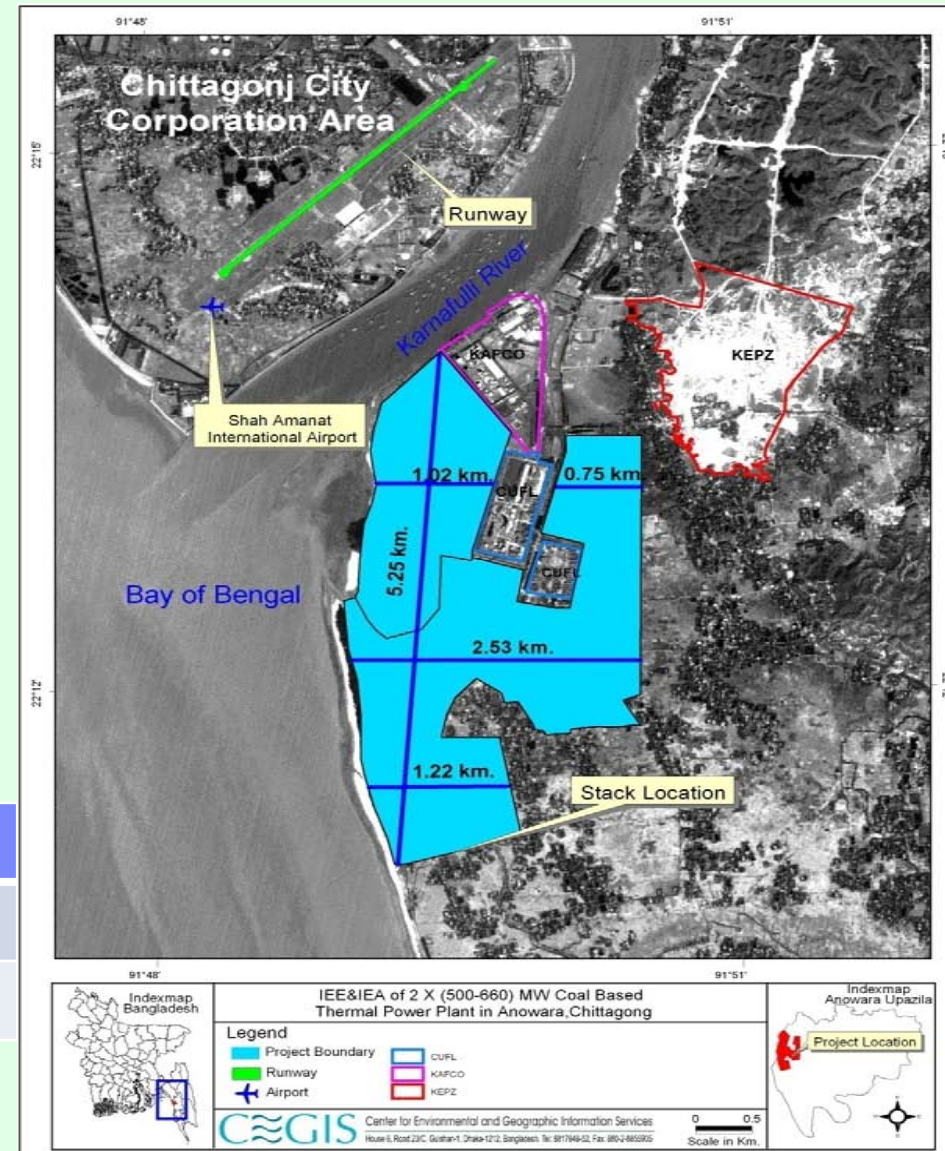
# Location: Chittagong 2X600 MW Coal Project

District: Chittagong  
Upazila: Anwara  
Union: Barasat,  
Mouza: Rangadia, Majerchar,  
Gobadia, (12 Nos)  
Paschim Tulatali, Phultoli,  
Dudhkumra, Uttar Paruapara,  
Boalia, Barasat, Chalitatali,  
Paschim Chal and Bandar

Total Area (acre):  $645 + 2543 = 3,188$  acre

## Distance from Important location

Chittagong Port	11.53
Shah Amanat Int. Air Port	4.3 km



# Location: Chittagong South 600 MW

- District Cox's Bazar
- Upazila: Maheshkhali
- Total Area: 5,000 acres
- Land acquisition process started

## Arial Distance from site

Chittagong City	85 Km
Cox's Bazar City	21 Km
Maheshkhali Upazila City	10 Km
Cox's Bazar Air Port	17 Km
Sonadia Island (Proposed Deep Sea Port site)	6 km
Kutubdia Island	30 km

