Regulatory Cooperation to Facilitate Knowledge sharing, Addressing Cross Cutting Energy/Electricity Regulatory Issues

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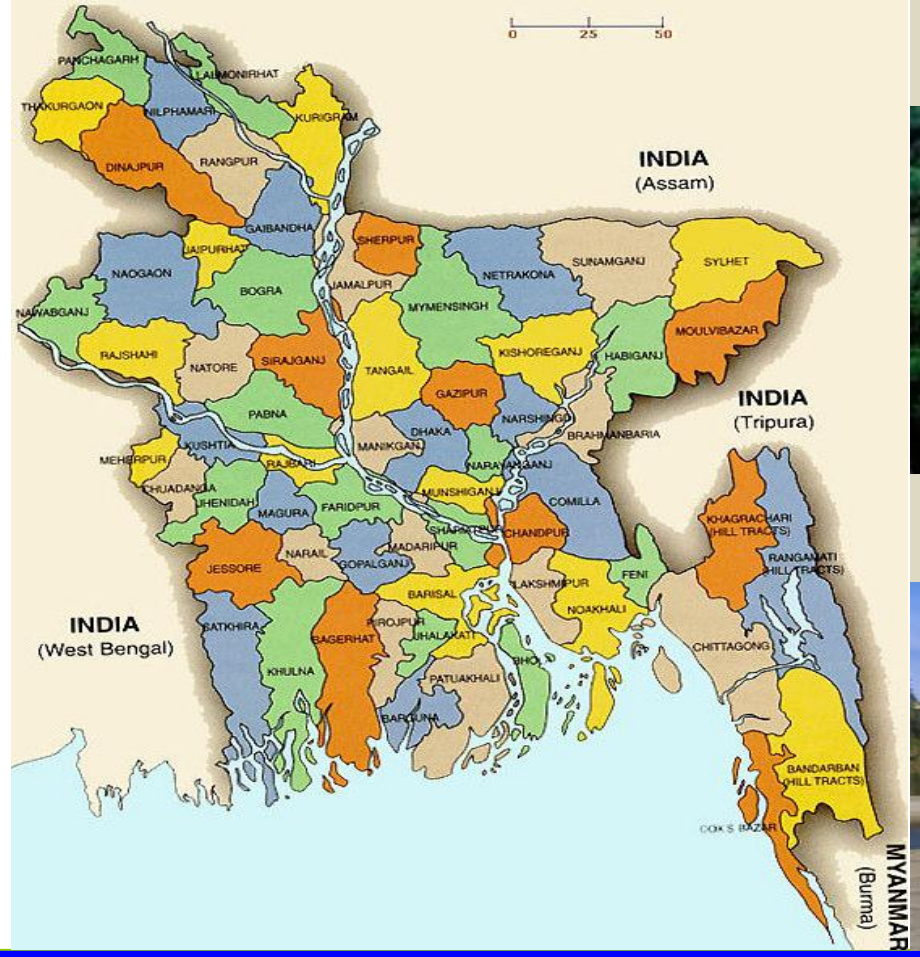
Bangladesh Country Profile

- **Latitude : 20˚34´ & 26˚38´N Longitude: 92˚41´E**
- **Total Area: 147,570** km²
- **Population :160.8** Million
- **Per Capita Income:**

  $ 1909
- **GDP Growth Rate:**

  8.3 %



Sundarban :World's Largest Mangrove Forest

Cox's Bazar : World's Largest Sandy Sea Beach

VISION

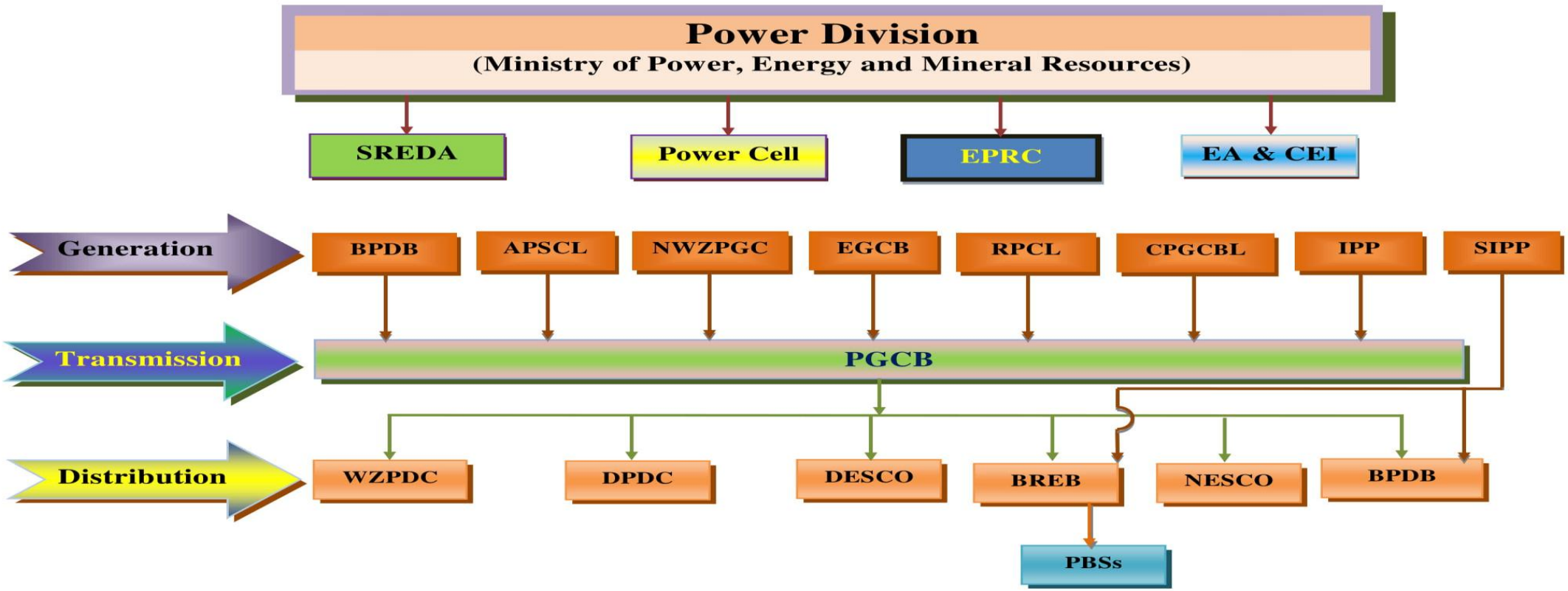
Vision 2021-

- To be a Middle-Income Country

Vision for Power Sector:

- **To provide quality electricity to all at affordable price**

Bangladesh Power Sector : Structure



BERC ACT 2003

Bangladesh Energy Regulatory Commission Act, 2003

Enacted on 13 March, 2003

And

came into effect on 24 April, 2004

Vision

To establish
Bangladesh Energy Regulatory Commission
as a world class organization
to ensure justice and good governance
in Energy Sector by 2030.

Mission

- To promote equal opportunities for public and private investment
- To ensure justice through dispute settlement
- To protect consumers' interest in energy sector
- To ensure good governance in energy sector
- To fix up reasonable tariff in energy sector
- To issue licenses among the government and private agencies dealing with energy business
- To ensure efficiencies in energy sector
- To develop competitive market for energy sector

Major Functions of BERC

- **Licensing:**
  - **Electricity Generation incl. captive, Transmission and Distribution**
  - **Natural Gas Transmission and Distribution;**
  - **Petroleum Storage, Distribution, Marketing**
- **Tariff Setting:**
  - **Electricity- Bulk and Retail**
  - **Gas**
- **Dispute Settlement: Between Licensees; Licensee and Consumers**
- **Consumers' Complain Handling**

Bangladesh Power Sector : Overview

- **Generation Capacity : 22,051 MW**
- **Total Consumers : 34.3 Million**
- **Transmission Line : 11,650 Ckt. km**
- **Distribution Line : 5,02,000 km**
- **Distribution System Loss: 9.35 %**
- **Per Capita Generation : 510 kWh**
- **Access to Electricity : 94%**

Generation Plan: 2021-2041

Year	2021	2030	2041
Grid Capacity (MW)	24,000	40,000	60,000

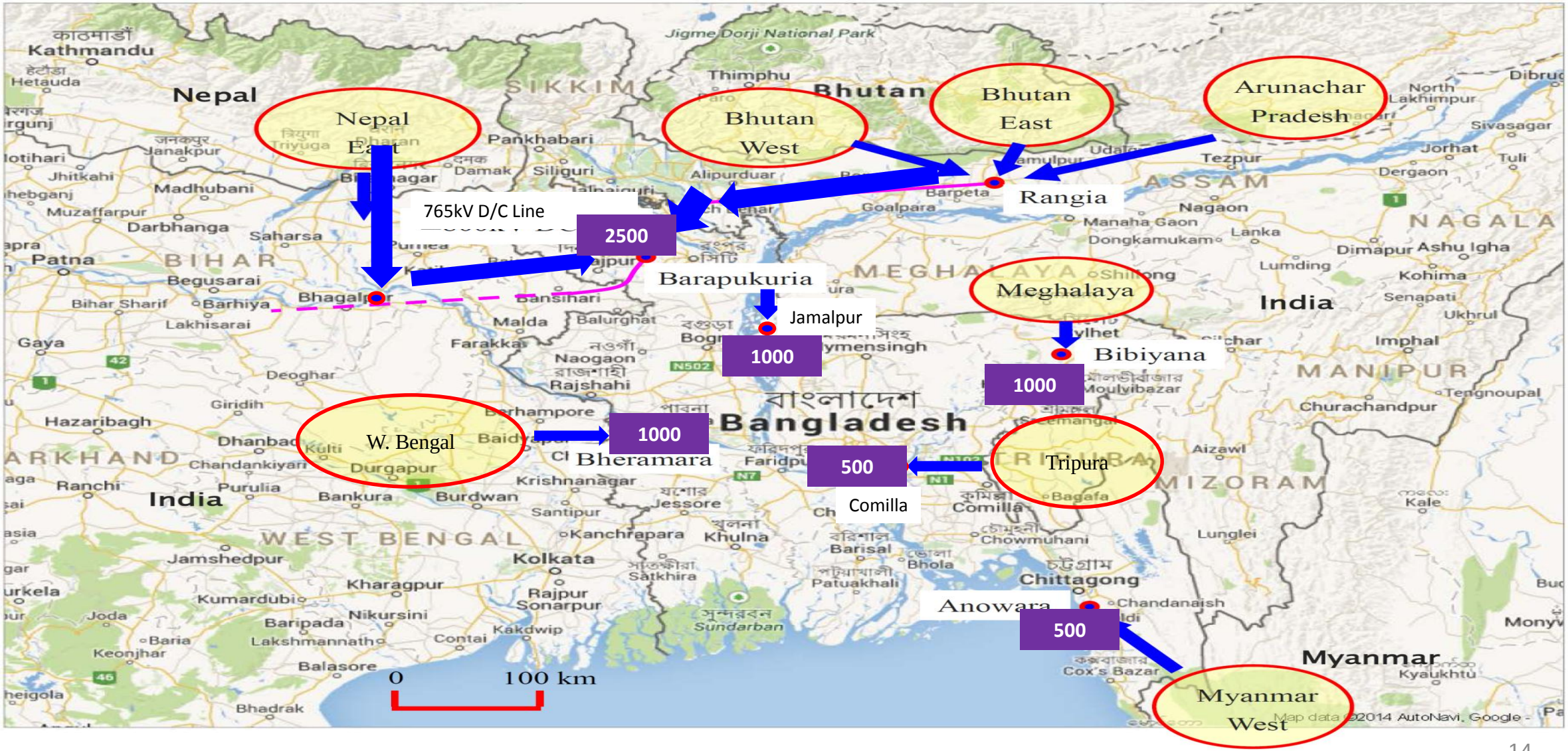
Primary Fuel Options: Indigenous Resources

- Gas: Only 12 tcf proven reserve; No significant gas discovery in recent years; Depleting gas reserve restricts gas based generation expansion; R/P ration is only about 12 years.
- Hydro: Present capacity 230 MW and average energy generation- 800 GWh; No further significant potential
- Coal: Total 3.2 billion ton reserve in 5 mines; Near term option;
- Renewable: Present capacity of Solar is only 300 MW; still high cost

Bangladesh in Regional Power Cooperation

Regional Cooperation: Opportunities

Proposed Cross border Links with Neigboring Countries by 2035 (PSMP-2016)



Current Status:

- Now Bangladesh is importing 1160 MW from India

➢ 1000 MW (400 KV HVDC) through Bheramara (Bangladesh) – Baharampur (India) interconnection From National Thermal Power Company (NTPC), India

➢ 160 MW (132 KV Aerial mode) through Tripura (India) - Comilla (Bangladesh) interconnection from same Company.

- PSMP-2016' encompasses 9000 MW by 2041

Near future

- India:

  400 MW, February 2020

  500MW, December 2021

  1600 MW, December 2022

- Nepal:

  Total 2000MW, 500 MW very soon (by GMR)

- Myanmar: MoU signed for 500

- Bangladesh Bhutan and India (BBI)

  2000 MW

Source: Annual Report 2018-19, Power Division

Existing Frameworks

- **SAARC Framework Agreement for Energy Cooperation [Electricity]**
- **The South Asia Subregional Economic Cooperation (SASEC)**
- **BIMSTEC [**MoU was signed on 31 August '18 for the establishment of BIMSTEC grid interconnection**]**
- **UNSCAP [APEF]**
- **Developing-8 (**The fifth D-8 Summit Declaration Bali, 2006 reaffirmed commitment to enhance co-operation in the field of energy to develop alternative & renewable energy resources**)**

Challenges for Power Trade in Future

- Development of hydro power projects in Nepal, Bhutan and North-eastern India at competitive price
- Development of regional transmission inter-connections with adequate capacity
- Non-discriminatory ‘Open Access’ power flow regulation to allow power transmission through a third country
- Removal of technical and commercial barriers for power trade- like harmonization of grid codes, standards, norms, dispute resolution etc

Way Forward

- To harmonize codes and standards for inter relationship
- To uphold officials amongst regulatory bodies
- To strengthen regulatory bodies through capacity building
- To collect, review, maintain and publish statistics and data

Thank You