

Government of the People's Republic of Bangladesh
Ministry of Power, Energy & Mineral Resources
Energy and Mineral Resources Division

Country Paper on Bangladesh Energy Sector

INTRODUCTION

Energy plays very important role in the economic development and progress of a country. Energy consumption is one of the parameters to evaluate scale of development of a nation. Bangladesh Government articulated its plan to transform the country into Middle Income Country (Vision-2021) and Develop Country (Vision-2041) by 2021 and 2041, respectively. In addition, Bangladesh is committed to achieve the targets of SDGs within 2030. To achieve all these targets Bangladesh Energy Sector is working to ensure uninterrupted energy supply to all with affordable cost. The economic growth over the last decade was above 7%, however, due to Covid-19 pandemic the pace of growth is little bit squeezed. About 70% of country's commercial energy is being supplied from indigenous natural gas. However, due to fast economic growth the demand of natural gas is increasing so since September 2018 LNG import had been stated. About 95% of liquid fuel is import based. So, Bangladesh is basically net energy importer.

Gas Sub-Sector:

Natural gas is the major primary energy source of Bangladesh. It is regarded as main driving force of the economy of the country. Presently, 20 gas fields are producing about 2521 million cubic feet gas per day (MMCFD) and about 560 MMCFD imported LNG is being added to the national gas grid.

Bangladesh is trying its best to achieve SDG 7.1 (By 2030, ensure universal access to affordable, reliable and modern energy services). Steps have been undertaken to intensify oil and gas exploration activities by a state owned exploration and production company in potential onshore areas of the country. To explore oil/gas and increase gas production, a total of 33 wells have already been drilled in onshore areas out of 40 wells as planned for vision 2021. To explore oil and gas in the offshore areas, production sharing contracts (PSCs) have been signed with some International Oil Companies (IOCs) for 4 offshore blocks. Onshore Model PSC and Offshore Model PSC have been approved to attract more foreign investment for exploration and extraction of oil/gas. Moreover, contract has been signed with the highest evaluated bidder to conduct 2D Non-Exclusive Multi-Client Seismic Survey in offshore areas.

In order to meet the increasing energy demand, Bangladesh has already installed 2 (two) Floating Storage and Re-Gasification Units (FSRUs) with capacity of 500 MMCFD each at Moheshkhali on BOOT basis. Moreover, Government has decided to install a land based LNG Terminal with re-gasification capacity of 1000 MMCFD on BOOT basis at Matarbari, Cox's Bazar. Two long term LNG Sale and Purchase Agreements (SPA) have been signed with Ras-Laffan Natural Gas Company Limited of Qatar Gas and OQ Trading Limited (OQT) on G to G basis. Beside this,

Master Sale and Purchase Agreement (MSPA) have been signed with 14 nos. LNG suppliers/traders to supply LNG on Spot basis.

To overcome the country challenges, Government of Bangladesh is giving emphasize to short, mid and long term plan for gas exploration, extraction, well development and gas production. To identify the potential gas reserves and increase gas production, projects have been planned for 2D/3D seismic survey, drilling of exploratory wells, development wells and work over. The Government has given priorities in budget allocation in energy sector. Gas Development Fund (GDF) has been created for undertaking projects in oil and gas exploration and production. Moreover, Energy Security Fund (ESF) has been created for importing LNG.

Petroleum Sub-Sector:

The consumption of petroleum products in Bangladesh at present is around 8.6 million metric tons per annum. Every year 1.3 million metric tons of crude oil is processed by Eastern Refinery Limited (ERL). Rest of the products is being imported as refined products.

Based on increasing demand of petroleum products and to achieve Sustainable Development Goals (SDG) No-7, Bangladesh Petroleum Corporation (BPC) is implementing a project to establish a new petroleum refinery of having crude oil processing capacity 3.0 million metric tons at ERL premises.

Government of Bangladesh has started different activities for building ports, industrial areas and energy hubs at Moheshkhali-Matarbari region of Cox'sbazar district and Payra port area of Patuakhali district. This development is continuous activities of the present government and aligned with election manifesto. Government of Bangladesh is encouraging to use of LP Gas for cooking purpose and to use it as auto-gas for vehicles. Considering the growing demand of petroleum oil in future, BPC is considering to set up petroleum refinery and large LPG terminal in Maheshkhali-Matarbari and Payra port area.

Coal Sub-Sector:

Geological Survey of Bangladesh has already discovered five Coal field. The potential coal reserve is about 7.8 Billion MT. The quality of the discovered coal is very high (Bituminous grade). Coal and Peat are used in power generation and house hold necessities.

Possible Regional energy cooperation:

It may be mentioned that Bangladesh, India, Nepal and Bhutan are agreed to establish a regional connectivity for economic purposes among the countries. It is expected that the import/export of goods (transit) will be increased remarkably through Chattogram, Mongla and upcoming Payra port to Nepal, Bhutan and India by road/river/railway communication. The inbound and outbound vehicles will receive petroleum product from Bangladesh territory. In view of this, the demand of petroleum products will be increased remarkably.

The entire coastal area of the country has been mapped in 1:250,000 scale. GSB signed Memorandum of Understanding (MoU) with Geological Survey of India (GSI) and China Geological Survey (CGS) to make collaboration in geoscientific arena in future.

CONCLUSION

All those projects have direct linkage with seven five years Plan of Bangladesh & Sustainable Development Goal (SDG) (Goal no.7: Ensure access to affordable, reliable, sustainable, and modern energy for all).