Saleque Sufi

Bangladesh Gas Supply Chain: Challenges and Prospect

Seven months into the new BNP-led government's term, Bangladesh's energy and power sector remains under severe strain. The country has experienced unprecedented load shedding amid shortages of primary fuel, while its proven recoverable gas reserves continue to decline. Efforts to discover major new resources may take time, and LNG imports remain constrained by inadequate infrastructure and high global prices. The disruption of supply chains following the closure of the Strait of Hormuz has added another layer of uncertainty.

The new government has inherited an energy sector burdened by shortages, rising costs and heavy debt. It has launched several initiatives to address the crisis, ranging from accelerated domestic gas exploration and LNG imports to connecting Bhola's stranded gas resources to the national grid and pursuing offshore exploration. This article critically examines these initiatives and considers what more may be required to put the sector on a sustainable path.

Drilling of 50 and 100 Wells

The government has announced plans to revitalize the drilling initiatives of the previous regime after identifying key issues and challenges. The activities of BAPEX, SGFL and BGFCL have been revitalized. One of the major challenges identified is the protracted DPP approval process, an essential nuisance. It is alleged that DPPs often take more than a year from the conceptual stage to approval. Unnecessary questions are also raised by inexperienced government officials.

The government must streamline the DPP approval process to expedite gas exploration and development initiatives, considering them top-priority national projects.

Land acquisition is also a critical activity for drilling projects. The government must assist the executing agencies

in shortening the process. A drilling project requires land development and access-road construction before the drilling rig can be mobilized and work can commence.

Our E&P company, BAPEX, and production companies, BGFCL and SGFL, have achieved commendable success despite several constraints. We expect some great news to emerge soon from the successful endeavors of Petrobangla companies. Success in drilling deeper prospects at Titas, Bakhrabad and Srikail could change the scenario. Some wells drilled recently by SGFL may also add significant new resources. There is a prospect of finding oil as well.

After visiting some drill sites and interacting with technical personnel, I feel optimistic about the discovery of significant new resources soon. I would like to advise carrying out extensive 2D followed by 3D seismic surveys in the prolific Surma Basin, Block 9 and Block 7 areas. I would also suggest launching a PSC bidding round for land blocks outside BAPEX's ring-fenced areas.

If 10 exploration rigs are put into operation by 2028, I believe it is possible to add at least 5 Tcf of new gas to recoverable reserves by 2031.

LNG Import Initiative

Bangladesh now utilizes 900–1,000 MMCFD of imported LNG through two FSRUs anchored in shallow water off Moheshkhali, Cox's Bazar. LNG imports have been stressed by the war in the Middle East and disruption to supply chains.

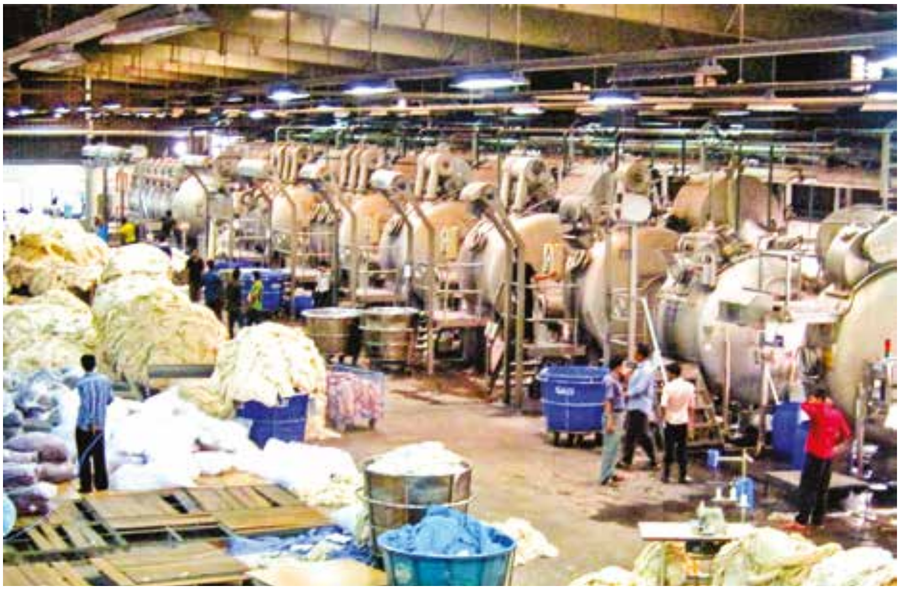
The interim government of Dr. M. Yunus, out of what I believe was a misplaced decision, canceled a signed contract with Summit Group for a new FSRU. If not, an additional 500 MMCFD of RLNG could have been added by the end of 2026. The Yunus government also brought several discussions on LNG imports that were at an advanced stage to an end. During the one and a half years of that government's tenure, no initiative was taken to increase LNG imports.

The new government is in the process of finalizing a contract with a Chinese company. We hope the government will clarify some controversies arising in the local media about the competence of the Chinese company. We would suggest resolving the dispute with Summit over the third FSRU in the greater national interest. At this stage, that would be the best course of action if viewed with positive intent.

Proposals for setting up FSRUs at Khulna and Barishal appear overambitious. Plans for importing LNG in ISO tanks also appear unrealistic. Apart from launching initiatives to expand LNG import capacity through FSRUs and land-based terminals, the government has to construct the required additional gas transmission infrastructure.

The two existing gas pipelines from Moheshkhali to Anowara have a combined capacity to evacuate 1,600 MMCFD. But this would lower the pressure at the inlet of the gas grid to 500 PSI. Hence, at least one new parallel pipeline must be built by GTCL from Feni to Bakhrabad.

If acquisition of the right of way at a safe distance from the existing pipeline is launched now, along with simultaneous procurement of materials and engagement of contractors, the pipeline may be ready for operation within three years.



We do not think the government needs any additional gas-based power plants at this stage. Any new fertilizer plant would take 8–10 years. However, gas supply to Barishal and Khulna could stimulate green industrialization in the region.

Connecting Gas Fields of Bhola to National Gas Grid

It is a national failure that the gas resource discovered at Bhola remains stranded even as the nation suffers from a gas famine. We have heard with shock and awe that the Prime Minister thinks it could take up to seven years to evacuate gas from the Bhola gas fields to the national grid.

As a pipeline professional with about 50 years of proven experience, I can assure you that it should not take more than three years to connect Bhola's gas resources to the national grid by constructing a 120-km Bhola–Barishal–Khulna pipeline. Any other proposal to transport the gas by converting it to CNG or LNG would be a waste of time.

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For this to happen, the government must professionally assess the proven gas reserve by engaging an internationally accredited reservoir assessor. GTCL must engage a reputed subsea pipeline developer to design the crossings of three large rivers, along with at least three HDD contractors for the other rivers. A couple of contractors could be tasked with constructing the land sections of the pipeline.

The existence of a gas transmission facility in the region would encourage IOCs to consider investment in Block 7 and adjoining areas.

Offshore PSC Bidding

We have observed a less-than-optimistic response so far to Petrobangla's invitation for offshore exploration. We are not sure that roadshows in Singapore, London and New York would be beneficial. We would rather suggest holding a conference in Dhaka and inviting potential bidders.

The deteriorating law-and-order situation in Bangladesh does not provide sufficient security confidence to potential investors. Some regional countries, including Thailand, Vietnam, Malaysia and Indonesia, have also announced bidding rounds. Those countries have far better records of dealing with IOCs. Still, we hope that Bangladesh will secure some investment.

Finally, I would suggest strengthening the technical and managerial capacity of Petrobangla and its companies. Many senior officials have reached retirement age. A huge void of competent officials may be created soon. The government must plan to retain some of them, as their institutional memory will be invaluable.

The government must also move away from exclusive reliance on bureaucrats for gas-system planning and management. The task of recovering from the crisis is intense but manageable if approached pragmatically.

The bottom line remains an aggressive initiative to explore and develop Bangladesh's own gas resources, both onshore and offshore. Domestic gas must contribute at least 50% of the country's gas requirements through 2040. LNG import initiatives must also be planned carefully, considering the financial stress they create. EP

Saleque Sufi, *Energy Expert, Former Director of Operations, GTCL*