

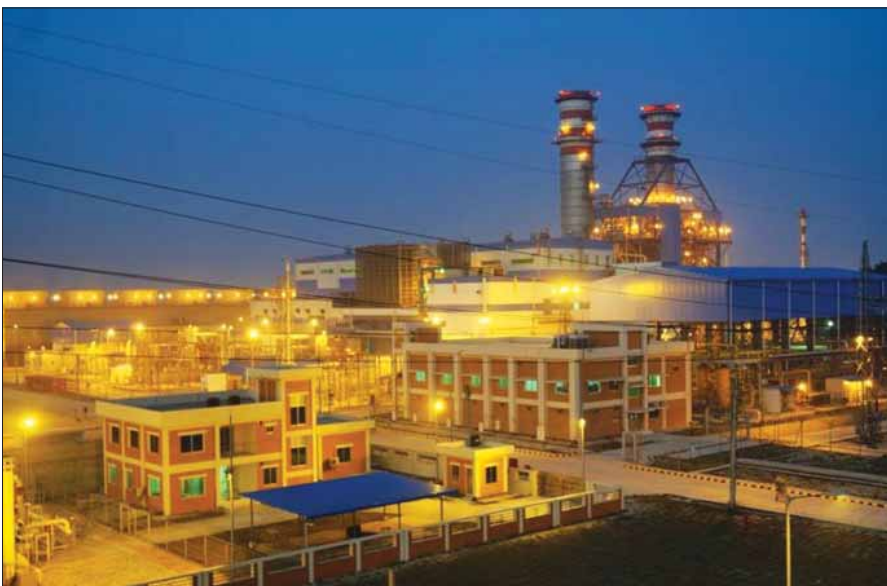
Energy Insecurity Deepens Amid Gas Shortage

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A substantial gas supply shortage continues, creating diabolic energy insecurity in Bangladesh. During this high summer towns and villages outside Dhaka are suffering from 8-10 hours of power load-shedding, only two of the six urea fertilizer factories are in operation, and gas supply to CNG is severely affected. Gas-using industries are suffering from a poor supply of gas. Petrobangla managed to supply only 2,610.90 MMCFD against its capacity of 3,829.00 MMCFD over 24 hours on June 29-30, 2024. Production

from our gas fields continues to deplete with no possibility of a major addition in the foreseeable future. One of the two FSRUs anchored on the shore of Moheshkhali is away in Singapore for repair after being damaged by a naval vessel during the cyclone on June 3. When the FSRU of Summit Energy returns after repair, the supply will increase to 3,150-3,200 MMCFD. The peak demand for gas during high summer reaches 4,200-4,500 MMCFD. There is no possibility of an increase in RLNG supply before the mid to end

2026. The third FSRU of Summit may come into operation and additional RLNG may be available from Qatar, Oman, Summit, and Excelerate Energy. By then gas supply from own fields may further deplete. The government may not have enough foreign exchange for purchasing LNG. The natural gas-based Bangladesh economy may continue to struggle. Some observers are suggesting considering natural gas and LNG as preferred interim fuels for the energy transition. Sustainable energy security in Bangladesh has run into deep uncertainty. FSRUs cannot operate on a 24/365 basis for the turbulent Bay of Bengal during monsoon. The crisis now has deepened from an FSRU meeting unforeseen incident. The situation has been created from a lack of perspective plan and negligence in the exploration and development of its petroleum resources. Petrobangla and EMRD have also failed to start the construction of a land-based LNG terminal at Matarbari. The present actions of exploration and LNG supply increase may not bring major success before 2030. How will Bangladesh manage energy generation till 2030? Why will investors risk investment in Bangladesh knowing about very uncertain energy and power sup-



ply? Unfortunately, the government initiative to start mining coal per the election pledge of the ruling party is also not visible yet. We have also not seen a special allocation for expediting gas oil exploration in the national budget for 2024-25. Experts cannot understand how export-oriented industries can meet export orders. The impacts of the ongoing fuel/gas supply crisis may surface from the depletion of export earnings soon. The Prime Minister in her budget speech assured the nation of an uninterrupted quality supply of electricity. When will that happen?

Petrobangla cannot even meet 50% of the demand of the power sector even after keeping the gas supply suspended to 4 of the 6 fertilizer plants. Gas-based IPPs are paid capacity charges. Low-pressure situations in industries are seriously impacting the operation of industries.

Petrobangla/EMRD Plans: After remaining in hibernation from 2000, Petrobangla/EMRD has launched actions for exploration and development of new gas resources onshore and offshore. Some successes are being observed from development wells and workovers. But these are like mere droplets in the big sea. The fruits if any from the delayed offshore bidding may not be available before 2030 if Petrobangla can conclude PSCs with the successful bidder(s) by the end of 2024. The responses to the bidding round have not been that encouraging till now. Petrobangla/EMRD has high hopes for their planned 100 wells drilling program. But exploration is like gambling where you win some and lose some. Yet we appreciate the present dynamism of Petrobangla.

We have noted government actions of new long-term LNG supply agreements with Qatar, and Oman as well with Summit Group and Excelerate. But

Gas Production and Supply (29-30 June 2024)

Company	Gas Field /FSRU	Gas Wells	Production Capacity MMCFD	Production over 24 Hours MMCFD
BGFCL	5	44	851	554.30
SGFL	4	14	118	117.30
BAPEX	8	15	145	121.80
IOCS	4	43	1645	1214.50
Total	21	116	2729	2007.90
RPGCL	2 FSRUs		1100	602.00
Total	21 GF +2 FSRU		3829.00	2610.00

A naval vessel damaged Summit Energy-owned FSRU on June 3. Gas fields at Bhola are not connected to the grid.

these may not come into effect before 2026. Summit Group and Excelerate are also setting up FSRUs at Maheshkhali and deep offshore of the Kuakata coast. We have confidence in Summit 3rd

Gas Demand and Supply to Power and Fertilizer (June 29-30, 2024)

Company	Power: Demand/Supply MMCFD	Fertilizer Demand/Supply MMCFD
TGTDCL	892.00/221.50	117.00/57/70
BGDCL	423.00/197.20	57.00/00.00
KGDCL	185.00/37.30	145.00/54.00
JGDSL	395.00/295.00	45.00/03.60
PGCL	247.00/92.70
SGDCL	174.00/121.50
Total	2316.00/966.40	329/116.70

FSRU. We are not sure about the economic viability of Excelerate's deep water LNG infrastructure and supply of RLNG through a 60 KM long subsea pipeline. We are not sure why the gas fields of Bhola are not connected to the national gas grid. It was feasible in 2000 when UNOCOL proposed WRIP. The IOC did not risk investing US\$700 million at that time without having detailed information about the reserves.

Whatever may be the case, Bangladesh must not grow exclusively dependent on imported LNG. At present, the LNG market is oversupplied and the price is within the reach of Bangladesh. However, global geopolitics may disrupt the supply chain and the appetite for LNG of China, Japan, Korea, and India may make the LNG market volatile. The fragile economy of Bangladesh may not let

Bangladesh buy LNG from the global market if the price shoots skyward.

What Bangladesh Must Do?

Bangladesh has no obligation to reduce emissions. The carbon footprint is the bare minimum. The per capita carbon emission is 0.42 tonne only. Bangladesh must make an immediate political decision to mine its coal and set up mine-mouth coal power

plants. There should be a second unit in place at Matarbari and Payra within the next 3 years. Payra, Matarbari, Rampal and Bashkhali power plants have already evidenced that modern coal plants can be built limiting emissions well below international permissible limits. The commissioning of the Rooppur power plant by 2025 will give comfort in providing a 2,400MW base load. But PGCB must complete all outstanding works for flawless evacuation of nuclear power to the grid. The government must also provide required incentives to solar power-producing entrepreneurs for increasing contributions of Renewable to the national power grid. SREDA and BEREC must be strengthened with professionals to

make these two important government organizations truly functional.

We hope the head of the Bangladesh government has realized the business-as-usual power and energy sector cannot ensure sustainable energy security. Without energy security, Bangladesh cannot achieve SDGs or national goals. Right persons must be placed in the right positions without being politically biased or prejudiced. If matters do not move on the right track soon, achieving the developed economy target by 2041 will be blown with the wind. Bangladesh must also aggressively develop its human capital to absorb modern technologies like Artificial Intelligence, Automation, SCADA, Smart Grid, Smart Metering, and Cyber Security.



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