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BANGLADESH'S LNG DEPENDENCE

Rising Costs, Security Risks And The Need For A Balanced Energy Strategy

Bangladesh, a developing country with limited domestic primary energy resources—many of which remain underexplored or untapped—must develop a prudent fuel-mix strategy, improve energy efficiency and optimize fuel utilization to achieve sustainable energy security. Increasing dependence on imported liquefied natural gas (LNG) without strengthening domestic energy production could expose the country to greater economic and geopolitical risks.

For decades, Bangladesh relied predominantly on its domestic natural gas reserves. However, as gas demand increased and domestic production began to decline, successive governments failed to make sufficient progress in exploring the country's petroleum resources and developing its discovered coal reserves. In 2010, the government began importing LNG and coal to address the widening gap between energy demand and domestic supply. Bangladesh also expanded imported electricity and continued to depend heavily on imported crude oil and petroleum products.

The COVID-19 pandemic, the Russia–Ukraine war and subsequent geopolitical conflicts, including the Iran-related regional crisis, have exposed the vulnerability of this import-dependent energy model. By September 2026, Bangladesh was facing severe gas and electricity supply constraints, placing additional pressure on industries, households and the wider economy.

There is no quick fix. Restoring a sustainable balance between energy demand and supply could take three to five years, requiring a carefully planned fuel mix, improved utilisation of available resources and stronger energy conservation measures. In the short and medium term, Bangladesh must pursue a balanced and affordable combination of domestic and imported fuels rather than continuing to increase its dependence on imported LNG, coal and liquid fuels.

Domestic natural gas and coal resources deserve renewed national attention, while renewable energy should be expanded through technically feasible

and commercially viable projects. An excessive dependence on imported LNG would increase subsidy requirements, put pressure on foreign-exchange reserves and leave the economy vulnerable to international price fluctuations and supply disruptions.

Domestic Gas Decline and Growing LNG Dependence

Bangladesh's declining domestic gas production and increasing reliance on imported LNG illustrate the growing challenge.

According to the figures provided for this analysis, the country's daily domestic gas supply fell from 2,447 million cubic feet per day (MMCFD) on October 1, 2020, to 1,620 MMCFD on October 1, 2026. During the same period, LNG supply increased from 702 MMCFD to 1,003 MMCFD.

The six-year comparison is presented below. (Table)

Depletion of Own Gas Supply and Increase of LNG Contribution

Year (Considering 1 October)	Own Gas MMCFD	LNG MMCFD	Total Supply MMCFD
2020	2447	702	3149
2021	2336	894	3230
2022	2274	484	2758
2023	2106	796	2102
2024	2002	530	2532
2025	1784	969	2753
2026	1620	1003	2623

The 2023 total has been calculated by adding the reported domestic gas and LNG figures; the original draft contained an inconsistent total.

The figures indicate that domestic gas supply declined by 827 MMCFD, or approximately 34%, over six years. LNG supply, meanwhile, increased by 301 MMCFD, or nearly 43%.

This shift highlights a fundamental concern: Bangladesh is increasingly using imported LNG to compensate for declining domestic production, but imports cannot guarantee energy security when international markets become volatile or supply routes are disrupted.

Unless significant new domestic gas reserves are discovered and brought into production, Bangladesh could become even more dependent on imported LNG. The proportion of LNG in the national gas supply could rise substantially, potentially reaching 60–70% under some scenarios.

The critical question is whether Bangladesh's economy and foreign-exchange reserves can sustain the financial burden of such dependence, particularly when LNG prices rise sharply in international markets.

Geopolitical Risks and the Cost of Imported LNG

Bangladesh currently imports LNG under long-term agreements with Qatar and Oman and supplements these supplies through spot-market purchases. While long-term contracts can provide greater predictability, spot-market procurement exposes the country to sudden price increases.

Regional conflicts have demonstrated that even established suppliers may face difficulties when production facilities are damaged, or strategic shipping routes are disrupted. The Strait of Hormuz is particularly important to global energy trade, and any prolonged disruption can affect LNG availability, shipping costs and prices.

During periods of heightened geopolitical tension, spot LNG prices can rise sharply, increasing the cost of power generation, industrial production and gas supply. Bangladesh must also compete with other importing countries for available cargoes.

To reduce these risks, the government should diversify its sources of LNG through a combination of long-term contracts and carefully managed spot purchases. Potential suppliers could include Australia, Malaysia, Indonesia, Papua New Guinea and selected African producers, subject to commercial viability, available export capacity, shipping economics and contractual terms. Other potential suppliers should be assessed on a case-by-case basis.

The author recommends securing approximately 80% of future LNG requirements through long-term contracts. Such a target could reduce exposure to spot-market volatility, although contracts should include appropriate pricing formulas, supply flexibility and safeguards against excessive take-or-pay obligations.

Diversification alone, however, will not eliminate geopolitical risk. Bangladesh must also reduce its overall dependence on imported LNG by developing domestic resources, expanding renewables and improving energy efficiency.

Setting a Sustainable Limit on LNG Imports

Bangladesh must assess how much LNG it can realistically afford to import over the long term. The author argues that the country cannot sustainably increase LNG imports beyond approximately 5,000 MMCFD given the likely financial burden.

This figure should be treated as a proposed policy benchmark rather than an established technical limit. Any decision on future import volumes must be based on demand projections, foreign-exchange availability, contract prices, infrastructure capacity and the relative cost of alternative energy sources.

Bangladesh currently operates two floating storage and regasification units (FSRUs). The government may consider developing two additional FSRUs by 2035, alongside land-based LNG terminals at suitable locations. However, new infrastructure should be approved only after a comprehensive assessment of demand, utilization rates, costs and long-term financial risks.

The country should also establish strategic reserves of LNG and liquid fuels to strengthen its ability to respond to emergencies. The author proposes maintaining supplies equivalent to two months of consumption. Achieving this would require a detailed assessment of storage technology, costs, infrastructure requirements and the different characteristics of LNG and liquid fuels.

Bangladesh should avoid pursuing technically or economically questionable proposals, including transporting large volumes of LNG in ISO containers from Bhola or

overseas sources without a thorough feasibility assessment. Such proposals must be evaluated against pipeline transportation, conventional LNG shipping and other alternatives.

Similarly, potential locations for additional FSRUs or land-based terminals should be selected through rigorous technical, environmental and economic studies rather than political or commercial preferences.

Strengthening LNG Infrastructure and Regional Cooperation

Alongside plans for additional LNG import capacity, Bangladesh must ensure that regasified gas can be transported efficiently to consumers. The author recommends that Gas Transmission Company Limited (GTCL) construct a third parallel transmission pipeline from Maheshkhali to an appropriate connection point in the national gas grid.

Any such investment should be supported by updated gas-flow modelling, demand forecasts and an assessment of existing pipeline capacity. Expanding terminal capacity without adequate transmission infrastructure could create bottlenecks and reduce the value of new investments.

Bangladesh should also explore cooperation with major Asian LNG importers, including Japan, China, South Korea and India. A structured LNG purchasing arrangement or importers' consortium could strengthen negotiating power, improve information-sharing and facilitate the reallocation or resale of cargoes when demand changes.

Such cooperation would require careful consideration of competition rules, commercial confidentiality, contract restrictions and the differing energy requirements of participating countries. Nevertheless, greater coordination among importers could improve procurement flexibility and reduce exposure to sudden market disruptions.

Domestic Resources and Renewable Energy Must Take Priority

Bangladesh cannot achieve lasting energy security through LNG imports alone. Reversing the decline in domestic gas production must become a national priority.

The government should accelerate exploration in prospective onshore and offshore areas, improve seismic surveys, expedite the development of commercially viable discoveries and rehabilitate existing fields where additional production is possible. Transparent procurement, competitive exploration terms and access to modern technology would help attract investment.

The country's discovered coal resources also require a transparent, evidence-based assessment. Decisions on their development should consider energy security, economic viability, environmental impacts, water use, land acquisition and climate commitments.

Renewable energy must play a larger role in reducing pressure on imported fuels. Rooftop solar, utility-scale solar, wind power where viable, battery storage and grid modernization can diversify the electricity mix. However, renewable energy targets must be supported by realistic assessments of land availability, financing, grid integration, storage requirements and system reliability.

Energy efficiency and conservation should receive equal attention. Reducing unnecessary consumption in power generation, industry, buildings and transport can limit the need for expensive new fuel imports. Better demand forecasting and improved power-plant efficiency would also help reduce overall system costs.

Rationalizing Gas Use and Protecting Industrial Competitiveness

Bangladesh must review its gas-allocation policy to ensure that scarce domestic and imported supplies are used where they create the greatest economic and social value.

Natural gas should not be supplied indiscriminately to sectors where more efficient or commercially viable alternatives are available. Priority should be given to efficient power generation, fertilizer production and industries where gas is an essential input and where reliable supplies support productivity, employment and export earnings.

At the same time, allocation decisions must be based on transparent criteria rather than administrative discretion. Industries should be encouraged to improve efficiency, adopt alternative fuels where feasible and invest in renewable energy.

Bangladesh should also exercise caution in adopting market-based or cost-plus gas pricing under present economic conditions. Rapidly passing the full cost of imported LNG on to consumers could increase production costs, weaken the competitiveness of export-oriented industries and place additional pressure on households.

This does not mean that pricing reforms should be abandoned. Instead, they should be introduced gradually and accompanied by targeted support for vulnerable consumers, transparent subsidy accounting and measures to improve the efficiency of energy supply.

The government should also review its fuel-import commitments, including those involving the United States, to ensure that procurement arrangements preserve Bangladesh's ability to source LNG and liquid fuels competitively from multiple countries. Diversification should be pursued in accordance with contractual obligations and applicable trade rules.

Conclusion: Energy Security Requires a Balanced Strategy

Global conflicts and geopolitical tensions may continue to disrupt energy markets for the foreseeable future. Bangladesh must therefore prepare for a period in which imported LNG remains exposed to price volatility, supply interruptions and uncertainty over shipping routes.

Expanding LNG infrastructure may help address supply shortages, but it cannot substitute for a comprehensive energy strategy. Excessive dependence on imported gas would expose the economy to higher subsidies, foreign-exchange pressures and external shocks. EP

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