

he key problem in Bangladesh's energy and power sector today is ensuring a sustainable supply of primary fuel. A substantial reserve of high-quality coal remains buried at mineable depths. Off-the-shelf, appropriate technology for mining is readily available. Yet, successive governments since the late 1990s have failed to make the necessary political decision to begin coal mining. The lone operating mine at Barapukuria is struggling for survival. For reasons best known to bureaucratdominated policymakers, exploration and development of petroleum resources have remained far below minimum levels.

Experts have continuously called for expediting petroleum exploration. Yet, the highly promising offshore resources of the Bay of Bengal remain virtually unexplored. Very little exploration has been conducted onshore either-twothirds of the onshore area remains unexplored. From 2000 to 2025, only slightly over 3 Tcf of new gas was discovered, while more than 12 Tcf from proven reserves has been consumed. The "coincident peak" demand now stands at 4,200 MMCFD. But even after adding 1,000 MMCFD of imported LNG, Petrobangla can supply a maximum of 2,800 MMCFD. LNG supply is also frequently disrupted due to the inconsistent operation of floating terminals in the turbulent Bay of Bengal.

Can you imagine that despite this gas famine, about 2 Tcf of proven gas reserves in Bhola Island remain stranded? Since the late 1990s, successive governments have been perplexed over how to evacuate Bhola gas to the national grid. A proposed project by the U.S. company UNOCAL titled the "Western Region Integrated Project (WRIP)" has remained an unrealized dream. Significant potential gas resources are also believed to lie untapped in the greater Chittagong Hill Tracts region. Similarly, potential resources at Chattak and Tengratilla remain unexploited due to a lack of attention.

True, Bangladesh may not possess massive reserves of primary fuel. But what the Bengal Delta does possess—if explored professionally—could ensure medium-term energy security. This country cannot achieve sustainable energy security without exploring and exploiting its own primary fuel resources. The global fuel market is becoming increasingly volatile due to geopolitical tensions. Supply chains may be disrupted, and price shocks are inevitable. In this context, restructuring and redeveloping the energy sector will be a major challenge for the next government seeking to win elections and form a stable administration.

Continuing with the current "businessas-usual" approach will lead to economic meltdown, with power generation, industrial operations, and general fuel use suffering badly. Export earnings will fall, industries will gradually shut down, and unemployment will become a serious issue. In the last few years, both FDI and local investments have sharply declined.

WRIP Could Be a Game Changer

It is unfortunate for Bangladesh that the gas reserve discovered at Shabajpur in Bhola Island by the Petrobangla company BAPEX in the mid-1990s has remained stranded for over three decades. BAPEX later discovered two more gas fields. Ten gas wells are ready for production, and Petrobangla has plans to drill ten more. Yet, according to a reliable source, a GTCL proposal for a gas transmission pipeline from Bhola to Barishal was rejected at the final stage of approval.

One may recall that in the late 1990s, U.S. company UNOCAL submitted a self-financed, comprehensive proposal titled the "Western Region Integrated Project (WRIP)." At an estimated cost of \$700 million, the project proposed developing Bhola's gas resources, constructing a 120-km, 20-inch OD cross-country gas transmission pipeline from Shabajpur in Bhola to Digholia in Khulna, building a 60 MW power plant in Bhola, a 100 MW plant in Barishal, and a 300 MW plant in Khulna. UNOCAL marketed it as "Our Money, Our Risk," meaning the company would

bear the resource, implementation, and market risks.

Several contracts—including PSC, GPSA, GSA, GTA, and IA-were extensively negotiated, and draft documents were prepared. This writer, along with some forward-thinking colleagues, negotiated with UNOCAL's highly professional team. During discussions, UNOCAL geologists and petroleum engineers informed us that they had credible data showing over 2 Tcf of proven reserves in Bhola. They also believed that a pipeline in the region would encourage further exploration in the southern region. UNOCAL viewed the greater Barishal and Khulna regions as potential industrial hubs, making WRIP a win-win for both the company and Bangladesh.

As Petrobangla's counterpart, I led a team for the right-of-way (ROW) survey and identification. The pipeline from Bhola to Khulna would need to cross 12 major rivers, including three mighty ones, each over 3 km wide. These tidal rivers had deep scouring conditions. Alongside UNOCAL experts, we traveled the entire route, finalized locations for river crossings and mainline valve stations. Α Bangladeshi Shamsuddin Mia & Associates, even prepared a detailed alignment sheet. Despite the challenging terrain, we believed construction was feasible. We saw similar pipelines built in the Netherlands using swamp buggies. During a visit to Gazprom HQ in Moscow, I learned about the Nord Stream pipeline, 90% of which was constructed deep below the seabed. Technologically, the Bhola-to-Khulna pipeline was feasible.

Just imagine—if WRIP had been built in the early 2000s, industries in southern Barishal and Khulna could have transformed Bangladesh. Sadly, at the same time, UNOCAL and the U.S. government were also pushing for a gas export pipeline from Bibiyana to India. Some bureaucrats and activists misled policymakers, and the WRIP opportunity was lost. Building the same infrastructure today would cost \$2–3 billion.

What's worse is that the government never engaged an accredited reservoir

assessment consultant to validate the reserves and instead relied on estimates, which may or may not be accurate. The change of government in 2001 caused the WRIP to be shelved, and Bhola's gas remained stranded.

Conspicuously, between 2020 and 2024, the government entertained a proposal from another U.S. company, Excelerate, to supply RLNG from a proposed deepwater LNG terminal 70 km off the Kuakata coast. Meanwhile, a pipeline from the national grid was built from Ishwardi to Khulna via Kushtia and Jashore. A distribution company— Sundarban Gas Distribution Company Limited—was also established. Yet the southern region still does not receive gas. An 800 MW gas-fired power plant and two dual-fuel plants in Khulna are struggling for gas. Hundreds of industries from Noapara to Rupsa could resume operations if a reliable gas supply were ensured. Think of Mongla, Satkhira, Bagerhat, and greater Barishal as potential hubs for agro-based industries.

All indicators support building a pipeline from Bhola to the national gas grid at Khulna via Barishal. There are proven gas resources and the potential for more discoveries, as well as anchor loads to justify the investment. However, the government must engage a top-tier, professional gas pipeline contractor to construct across the mighty tidal rivers. The pipeline from Bhola to Khulna will be part of the national gas grid. In the future, subject to reserve confirmation, the pipeline from Barishal can connect to the grid in Dhaka.

Chhatak and Tengratilla are Low-Hanging Fruits

We will not revisit the NIKO scandal here. Who deserved punishment and why is not the focus of this article. Our concern is why the government is not aggressively working to resolve outstanding arbitration issues with NIKO. BAPEX is reportedly ready to drill at Chhatak and Tengratilla. Within two years, Bangladesh could exploit these gas resources. There is also strong potential for discoveries. Both the Awami League and the BNP share responsibility for the NIKO scandal. Let us leave that

behind and urge the interim government to provide clear direction for exploiting these resources.

Untapped Potential in Greater CHT Experts believe that further exploration in Kasalang, Potiya, and Sitapahar could lead to new gas discoveries. These areas are not far from the existing gas grid. However, they may be challenging for BAPEX due to difficult geological structures. Over a decade and a half has been wasted in choosing strategic partners for BAPEX. Hopefully, the interim government will engage contractors before leaving office to start ex-

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ploiting these low-hanging fruits.

It's understood that no major international oil company (IOC) will risk investment in an uncertain political climate until an elected democratic government is restored. However, the interim government must approve updated Model Production Sharing Contracts (MPSCs) for onshore and offshore exploration to enable the elected government to act promptly.

Conclusion

Natural gas and LNG will remain the preferred transitional fuels until at least 2040. Bangladesh must explore and exploit its own resources while also importing LNG. To facilitate this, land-based LNG terminals at Maheshkhali or Matarbari must be fast-tracked. There is no viable option for an LNG terminal at Payra or elsewhere. Ideas like small-scale LNG terminals using Bhola gas should also be rejected.

The incumbent government must conduct thorough planning to meet the challenges of primary fuel supply in a professional, pragmatic manner. Top priorities must include exploration of discovered coal resources, evacuation of stranded gas to the national grid at Khulna, accredited reserve assessment at Bhola, immediate exploration at Chhatak, Tengratilla, and greater CHT.

Ultimately, Bangladesh needs a highly professional Petrobangla, led by proven experts, to drive the sector forward.

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