

# Securing an energy lifeline for the nation

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**T**he possibility of a military confrontation in our Gulf neighbourhood should bring the government's focus back on oil, as it embarks on a second mandate. Having served in Iran during the 1990-91 Gulf crisis, the visit of Iran's foreign minister a few weeks ago, brought back to me past memories of that tense period, when the spike in oil prices nearly drove us into national default. The crisis atmosphere then was aggravated by a panic over oil supplies, as we had only a few days' consumption requirements in stock in the country. If hostilities break out, there can be no assurance that supplies from the entire Gulf region will not get disrupted.

India has come a long way since 1990, having built a Strategic Reserve and acquired oil assets in over 25 foreign countries. However, our oil imports have grown from fewer than one million barrels per day (bpd) to about 4.5 million bpd, in the same period, which means our Strategic Reserve holds just over a week's oil requirements. Ramping up supplies from Indian-owned oil fields abroad will require long lead times. Refineries now hold stocks that might see us through a temporary supply disruption, but the risk, and costs, of shortages will loom large over the economy.

The risk arises because of our increased dependence on imports — from less than 50 per cent of oil demand in 1990, to over 80 per cent today — most of it coming from the Gulf region. The bulk of our imports pass through the Straits of Hormuz; even a short-term closure of shipping through the Straits will hit us hard, at a time when our current account deficit is mounting and industrial growth is slowing. The dramatic growth trajectory of renewable energy will not cut our dependence on oil, which meets almost all transportation fuel needs (including that of the armed forces) and almost 25 per cent of total energy demand. And current projections are that oil imports are set to increase to eight million bpd in the next decade.

Prime Minister Narendra Modi set a target back in 2015, for increasing domestic crude production to reduce import dependence by 10 per cent by 2022. Since then, oil production has actually declined, and imports have grown from about 77 per cent to 83 per cent of total consumption, costing about ₹8 trillion — some four per cent of GDP! The government has proactively begun to reduce regulatory constraints on exploration and production (E&P); discovered small fields were bid out for faster development, and the first rounds of open acreage licensing have begun. There has been a fairly encouraging response, mainly from Indian companies, but investment plans are not on the scale required to achieve

the PM's goal; and the new licensing will at best yield oil many years from now.

Globally significant players in the oil E&P space have in the past largely stayed out of India, partly because India's geology is perceived as relatively unfavourable, but more because of policies and regulations that act as disincentives, and unending tax problems. ENI gave up on exploration in India (and went on to uncover massive gas reserves off Mozambique and Egypt), while Cairn, after discovering the Mangala field in Rajasthan, was slapped with retrospective tax demands.

Mr Modi initiated policy reforms after personally engaging with international experts, and the government brought in the Hydrocarbon Exploration Licensing Policy (HELP) regime, which included the open acreage licensing policy, and later an Enhanced Oil Recovery incentive policy. While HELP improves the Ease of Doing Business in the E&P sector, it impacts future operations; and it has been held back by North Block's pursuit of revenue maximisation. Corporate boardrooms continue to prefer jurisdictions with more reasonable tax regimes, and hence investment has declined. More than 50 per cent of India's sedimentary basins remain unexplored.

The Niti Aayog, in its February report, made a useful contribution to policy by focusing on the immediate national priority of raising domestic production. It proposed production enhancement contracts, maximising recovery from existing fields (our recovery rates are below the global average), accessing international expertise, incentivising E&P in both explored and unexplored basins, marketing and pricing freedom for gas, as well as a review of tax provisions.

The government has accepted many of the key recommendations, but it is time for a renewed thrust to meet the PM's target. We need to incentivise our national oil companies — ONGC and OIL — as well as private oil and gas companies to step up production, by putting all legacy issues behind us, quickly bringing a new regime of greater operational and marketing freedom, as well as incentives for enhanced recovery, without adding new layers of bureaucratic delay. A review of the self-defeating burdens of tax and cess, which increase costs and inhibit production — and therefore revenue growth — will also stimulate investor interest.

In 2014, the UK turned around a declining offshore oil industry by reducing taxes and implementing more industry-friendly regulation; which kept international investments flowing in. It has had four years of increased production since then, with major benefits for its economy, employment, and indeed revenue. We too should recognise that energy security, like charity, begins at home.

**The dramatic growth of renewable energy will not cut India's dependence on oil, which meets almost all transportation fuel needs and close to 25 per cent of total energy demand**

# Hike in oil, coal price compels power units to improve efficiency

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A hike in the price of energy commodities, including oil and coal, over the past few quarters have forced state-run thermal power plants in Uttar Pradesh to improve plant efficiency for commercial viability and sustainability.

In the wake of the rising oil and coal prices and stiff competition arising out of the 'merit order dispatch' system for power plants, state power utility UP Utpadan Nigam had drawn a strategic road map to improve the functioning of its thermal power plants against various parameters to pare the cost of generation during 2018-19.

These parameters include plant load factor or PLF, auxiliary consumption, oil and coal consumption and heat rate.

Merit order dispatch is a mechanism of ranking available energy sources, especially electrical, based on ascending order of price together with the amount of energy that will be generated, thus giving advantage to lower cost of production and higher PLF.

According to UP energy minister Shrikant Sharma, the

Nigam had saved over ₹1,100 crore by reducing the cost of production by ₹0.38 per unit from ₹3.49 per unit in 2017-18 to ₹3.11 per unit in 2018-19.

It has posted record improvement in PLF to 78.53 per cent, which is 9.31 per cent higher than last fiscal. Similarly, the auxiliary consumption has also registered 0.66 per cent reduction from 7.88 per cent last year.

It also registered an improvement in the minimum static coal consumption and minimum static oil consumption which are reflected in the lower cost of thermal power generation.

Currently, the total installed capacity of the thermal power plants run by the Nigam is more than 5,500 megawatt (Mw) at Harduaganj, Pariccha, Obra and Anpara.

The private sector power plants have an additional installed capacity of nearly 6,360 Mw at Anpara, Roja, Bara and Lalitpur.

However, the net generation by these public and private sector plants is to the tune of 10,000 Mw while the state gets about 7,000 Mw from the central sector. The state also imports power from other sources.