

# ISAS Brief

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## India's Energy Security: Challenges and Prospects

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The surge in oil prices from US\$28 per barrel in 2003/04 to US\$51 per barrel in April-June 2005 poses a challenge for Indian policy-makers. India's current account deteriorated from a surplus of US\$10.5 billion to a deficit of US\$6.5 billion over this period. The loss to oil companies amounted to Rupees 145 billion. According to one estimate, even if India did away with duties, attacked monopolistic practices of retailers, reduced the margins of producers, and put a ceiling on state-level levies, this would reduce the price of oil by about Rs3. India made the politically tough decision of raising the price of oil (by Rs3) and the price of diesel (by Rs2). The rise in Indian prices is much lower than international prices. The diesel price rise has a higher inflationary potential.

Crises in India have the propensity to produce policy change reflecting the will of the executive. The Prime Minister's Energy Coordination Committee is an effort at inter-ministerial coordination of the kind that produced success in the IT and telecom sectors in India. There will be obstacles to reform from particular ministries, which the Prime Minister's Office (PMO) will need to overcome, utilizing the crisis and the beneficiaries of policy change. The committee is being serviced by the PMO and the Planning Commission, both of which are coordinating their efforts well.

The longer-term measures are likely to be significant. First, the crisis should help to institutionalize competition in energy exploration in India. The Energy Coordination Committee has suggested competition in oil, gas and coal exploration. 100% foreign investment is allowed in captive mining in cement, coal and iron and steel sectors in India. The power sector, which had this privilege, has opposed this move. The exploration successes of companies like Reliance Industries, Cairn Energy and Gujarat Petrochemicals Corporation will make the state-owned monopolies like the Oil and Natural Gas Commission work harder. The crisis will aid the institutionalization of competitive exploration through a transparent and fair bidding process.

Stake holders should push for a transparent and fair bidding process in the interest of competition. The evolution of the bidding process in the power and telecom sectors reveals the propensity of government bureaucracies to load the dice in their favor. The regulatory successes highlight the significance of financial crises for facilitating an investor-friendly climate.

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Second, one expects greater financial, technical, and managerial commitment towards building India's Oil and Natural Gas Commission (Videsh) into a success story in international oil exploration. This will not be easy because of China National Petroleum Corporation's financial and strategic advantages. This was evident in the recent PetroKazakhstan case. There's been Sino-Indian competition, despite much talk about cooperation in energy exploration and a Petroleum Minister who prefers Asian solidarity to dependence on the West.

The Petroleum Minister is of the view that oil refining needs to be expanded in India, given India's proven export capacity and future oil demand. Refined product exports are about a quarter of India's crude oil import bill. The Indian advantage lies in cheap labor, engineering and local sourcing of supplies. India needs better ports. Reliance Industries has pledged to increase capacity at the Jamnagar refinery. In addition, it may be engineering a take-over of BP's subsidiary Innovene, in order to increase its capacity to produce petroleum products.

Non-traditional and renewable energy sources may get a boost due to this crisis. Nuclear power generation using India's abundant thorium deposits may benefit Indo-US cooperation in energy. There is talk about converting coal shale into oil, which becomes economic at oil prices greater than US\$35 per barrel. India has abundant shale and the hydro resources needed for the conversion. There is also talk in Delhi about converting 600 million hectares of wasteland for the cultivation of the jatropha plant, which yields oil seeds that can be converted to energy producing oil. Research on wind, solar, and biomass energy is likely to gain support.

The US has not blessed the Iran-Pakistan-India gas pipeline, which can fetch 20 million tons of 114 million tons of crude oil requirement of India. Iran is willing and Indo-Iranian relations are good. The US worries that Iran may divert oil revenues towards its nuclear program. This is a cost effective option for India, which could work, with security guarantees from Iran and Pakistan. Given the importance of the US in the region and the nature of Indo-Pakistan relations, this pipeline may not be the surest event in India's energy story.

The most challenging part of India's energy story could be reforming the power sector. The political will in this area is not proportional to the level of political difficulty, despite the Electricity Act 2003. Only 1% of energy in the power sector is derived from oil. The bad news is that energy theft, euphemistically called transmission and distribution losses, is of the order of 30% to 40%. There is irrational cross-subsidization and underinvestment. Governance problems that face this sector discourage investment, despite its dire need. It will be interesting to see how GE, Bechtel and some Indian financiers resuscitate the failed Dabhol Power Corporation, which had been promoted by Enron.

In sum, the crisis has led to another rise in the price of oil. This is only a short-term measure. India's energy security will depend to a great extent on success in exploration both within and outside India. India is also likely to use the oil refining route to earn foreign exchange. Non-traditional and non-renewable energy sources will be explored. The gas pipeline, and increasing the investment potential in the power sector, will be tougher to realize.

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