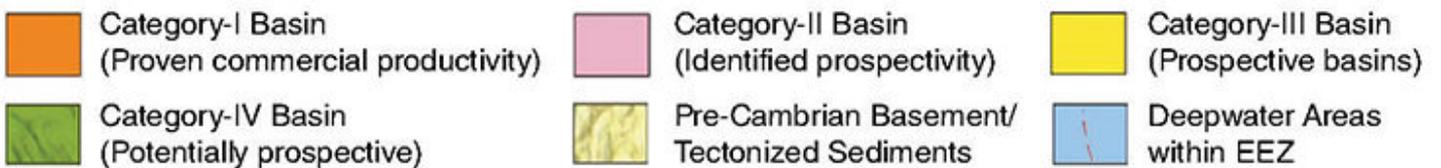
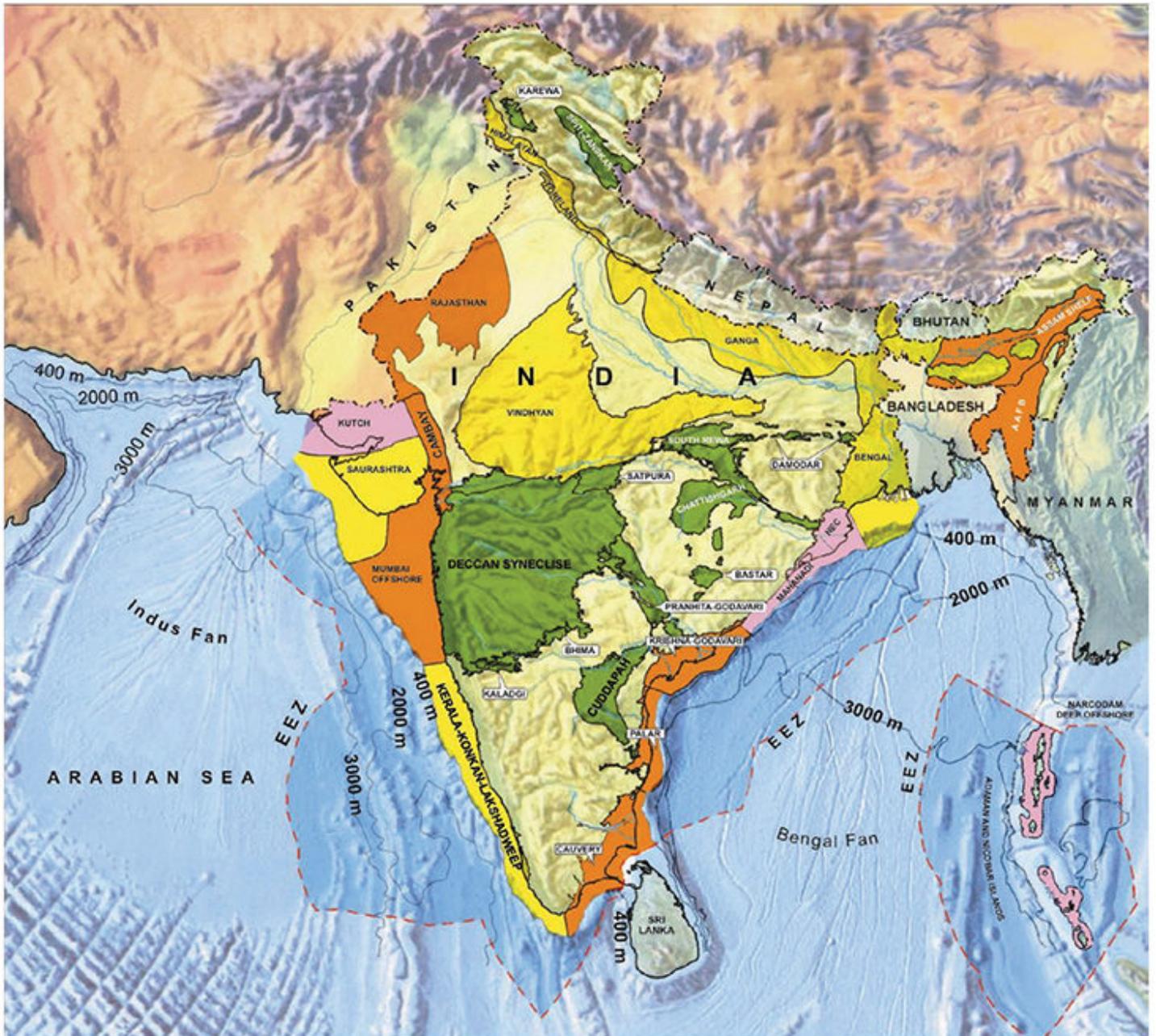


India Asks Big Oil Companies "Where Do You Want to Drill?"

Stephen Rassenfoss, JPT Emerging Technology Senior Editor | 24 March 2017

Topics: [Data and information management](#)



Source: Directorate General of Hydrocarbons.

The proven producing oil and gas basins in India (orange) cover a fraction of the area with gas and oil exploration potential (pink, yellow, green).

- [seismic](#)
- [India](#)
- [bidding](#)

India is putting its aggressive program to sharply reduce oil and gas imports over the next 5 years to the test with an upcoming bidding round aimed at winning back international oil companies with the skills and money to make major discoveries.

Last year's discovered small fields auction by state oil firm ONGC attracted strong bidding from smaller - Indian players, many new to the business. But "this is much more ambitious," said Atanu Chakraborty, director general of India's Directorate General of Hydrocarbons (DGH).

The country is trying to reach the goal set by India's Prime Minister Narendra Modi to reduce oil and gas imports by 10% by 2022.

To increase the odds of getting bids, operators have been asked to choose the blocks they want included in the [bidding round](#) to be held later this year. The contracts are based on revamped energy policies designed to eliminate the regulation that limited international interest in the past.

"The government is not in the business of trying to micromanage production," said Dharmendra Pradhan, the minister in charge of the Ministry of Petroleum and Natural Gas, India, during a presentation at the recent IHS Markit CERAWEEK conference in Houston. At the conference, the government announced the bidding round at a meeting drawing top executives from international companies.

Indian energy officials need the exploration help as domestic production falls further behind the exploding level of demand. The percentage of imported oil has risen from nearly 77% about 3 years ago to 82% in the current fiscal year, Pradhan said, according to a recent [report](#).

Given the time needed for large exploration and production (E&P) projects, a 10% reduction in 5 years is a stretch. Adding to the difficulty is rapid demand growth due to the 7%-plus annual increase in India's gross domestic product.

"There is skyrocketing demand in almost every energy sector," said Charles Ebinger, senior fellow at the global energy center of the Atlantic Council, during a panel session at the conference.

There is oil and gas potential there. DGH estimates it has produced only 3% of its proven natural gas reserves and around 5% of its proven oil reserves. While it is not a big oil and gas producer, the 115 drilling rigs working there in mid-February were just behind the 120 rigs drilling in Saudi Arabia, according to the Baker Hughes rig count.

E&P is dominated by the national oil company ONGC, with other government-owned companies and some local independents working as well. But in a country with more than 3 million km² of sedimentary basins, where gas discoveries have been more common, it imports 50% of its gas.

Curious explorers can look for opportunities on DGH's recently opened [National Data Repository](#). It holds 160 terabytes of seismic surveys, well logs, and production reports. Most of the data were gathered within 500,000 km² in India's 26 sedimentary basins. "We hope the data will attract investment by reducing risks," Chakraborty said.

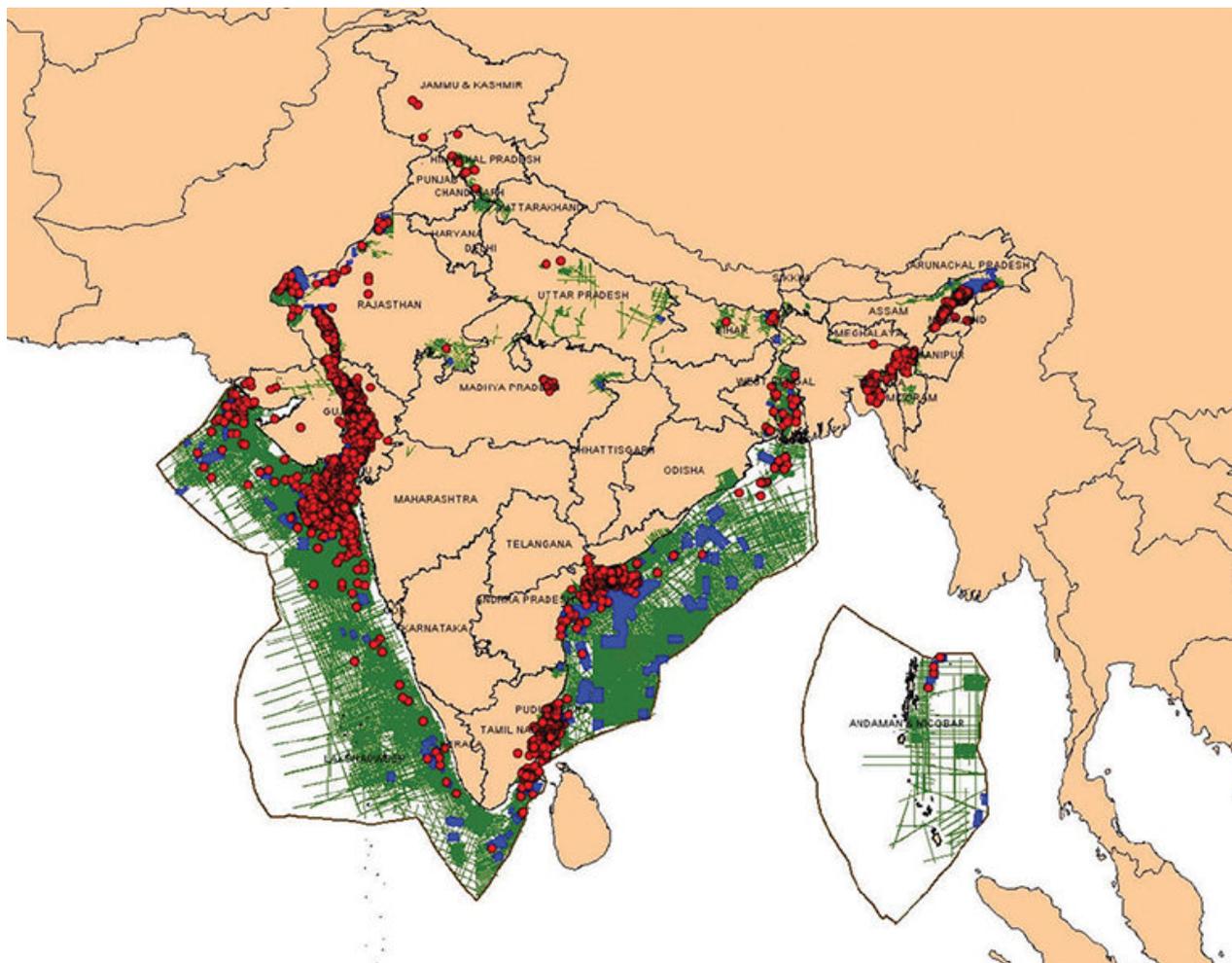
Maps showing where the data were gathered indicate that are from parts of India with concentrations of past discoveries, with little coverage on the frontiers.

The repository fills a gap in India where seismic data have not been readily available to international companies considering exploration there. Chakraborty said it will be available for a nominal fee.

Indian energy officials have also been publicly pushing the biggest national oil companies to expand their seismic data collection and make that available through the repository.

The repository holds hundreds of onshore and offshore seismic surveys as well as well and log data from thousands of wells according to a summary sheet that suggests that it will grow significantly over time. But it does not offer any production data.

"India does not have an open data policy," said Balaji Chennakrishnan, founder and chief executive officer of Telesto Energy, an energy consultant with an analytics operation based in India. "DGH is the custodian of data in India but still ONGC and other companies do not part with complete data."



The areas covered by seismic and well data held in India's National Data Repository largely coincide with where there is oil and gas production. Source: National Data Repository.

Discovered Fields

The directorate is trying to build on the success of last year's discovered fields round, which showed it could run a successful auction. That round sold 31 of 46 blocks offered, with the strongest interest onshore (23 of 26 blocks awarded onshore, and 8 of 20 awarded offshore). The 31 awarded blocks were marginal discoveries, most of which were surrendered by ONGC. Interest was strongest onshore.

Of the 19 private companies submitting winning bids, 15 of them were new to the sector. New rules eliminated strict limits on bidding by those without past experience as an operator. Most of the rest of the acreage went to government-owned entities and, in one case, a public-private partnership. While there was one winning bidder listed as foreign, South Asia Consultancy, its ownership and interests have strong Indian ties, Chennakrishnan said.

The auction process laid out in a DGH flow chart includes the following:

- A company can apply for a production contract giving 8 years to explore a block, or a reconnaissance contract providing 3 years to study a block, with an option to switch to a production contract.
- If interested, a bidder proposes a block to the DGH, which decides if it will be offered.
- A list of available blocks will be published before the auction.
- A production contract offer requires a revenue-sharing offer as well as details about the operator's experience, work plan, and financial resources.

- Online bids are evaluated—those proposing blocks receive an incentive—and a winner is declared.
- Based on the timeline, the process takes 23 weeks.

More Pipelines

An advantage India can offer is an enormous base of potential customers nearby, but major construction is required to deliver gas to them.

“There are 15000 km of gas pipelines now. We are working on doubling that, and adding a big LNG regasification facility,” Pradhan said.

There are “prodigious challenges” associated with executing that plan, Ebinger said. He explained that oil companies learned in the past that “land acquisition is hard, just knowing who owns it can be a challenge.”

A survey of risks facing investors in the Indian oil sector last year gave less than a top mark in only one area: potential problems associated with executing projects. Chakraborty responded that the “project risk is about what it would be anywhere else in the developing world.”

While Ebinger talked about the many obstacles to modernizing the Indian energy sector, he added that based on what he has seen on many visits going back decades, “India is on the cusp of a major transformation.”

India Asks Big Oil Companies "Where Do You Want to Drill?"

Stephen Rassenfoss, JPT Emerging Technology Senior Editor

24 March 2017

Volume: 69 | Issue: 5
