

Oil India to Capture CO2 Emissions from Rajasthan Natgas Field, Store in Dry Wells

Move part of net zero plan for 2040; preliminary studies done, consultant soon for feasibility report

Sanjeev Choudhary

New Delhi: Oil India is working on a plan to capture carbon dioxide emitted from its natural gas field in Rajasthan and store it in some of the nearby dry wells, in what could be one of the first such projects in the country. "As part of our net zero planfor 2040, we have identified a lot of initiatives," Oil India chairman Raniit Rath told ET.

Carbon sequestration is one of those initiatives, which Oil India is well placed to undertake as it has deep knowledge of the subsurface and has access to many not-so-successful wells that could be used to store CO2, he said. The company's field in Jaisalmer, Rajasthan, produces gas with about a quarter of CO2 content. The company is planning to set

SWEETENING PLAN



up a gas sweetening plan, where CO2 will be stripped, rendering the gas from the field more valuable for customers. Rath said.

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The company has done some preliminary studies and will soon engage a consultant to prepare a feasibility report for the carbon sequestration project, which will offer a plan

ALL IS WELL!



on carbon capture, transportation, storage and monitoring, he said.

Five dry wells have been identified for the project and the consultant will select two of these for a pilot. Some dynamic modelling will be undertaken for the pilot.

Carbon capture, utilisation and storage (CCUS) technologies are still advancing and quite expensive today. Multiple projects involving carbon capture and utilisation or storage are currently underway across the globe but most are on a pilot scale.

In India, ONGC and Indian Oil Corporation tied up years ago for a CCUS project but the heavy cost hasn't allowed it to advance rapidly. Under the project, the CO2 captured from Indian Oil's refinery in Gujarat is to be transported to ONGC's oilfield. ONGC plans to inject CO2 into its ageing Gujarat field to boost output.

Globally, oil companies such as ExxonMobil and Saudi Aramco see carbon capture technologies as a key climate solution, expecting them to reduce emissions without disrupting the usual productionconsumption cycle of fossil fuels.

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PNGRB Receives 20 Bids for City Gas Distribution Licences in NE & J&K

Our Bureau

New Delhi: The Petroleum and Natural Gas Regulatory Board (PNGRB) has received 20 bids for six city gas distribution licences in north-eastern states and Jammu & Kashmir, the regulator said in a statement on Monday.

PNGRB had sought bids under the 12th city gas distribution (CGD) bidding round for seven geographical areas (GAs) covering Aruna-



chal Pradesh, Meghalaya, Manipur, Nagaland and Sikkim, and union territories of Jammu & Kashmir and Ladakh. It

opened technical bids on Monday.

Eight entities submitted bids for six GAs. Six bids came in for Meghalaya, four for Sikkim, four for Nagaland, three for Manipur, two for Arunachal Pradesh and one for J&K. No bid was received for Ladakh.

"This initiative would help in creating a robust CGD infrastructure and play a significant role in transforming to a gas-based economy. This would bring an investment of more than ₹35,500 crore and generate employment," the regulator said.





US-led strikes won't stop Houthi attacks on ships. GOI should prepare for trade disruptions. Low-value/high-volume exports, critical imported parts for factories, Russian oil are among critical commodities at risk. GOI should consider subsidising higher freight, insurance costs

Ajay Srivastava



The Bab-el-Mandeb Strait, fittingly named Gate of Tears in Arabic, is a vital trade link between the Mediterranean and Indian Ocean through Red Sea and Suez Canal. A mere 26 km-wide at its slimmest, it has indeed become a Gate

of Tears for passing ships as they face drones and missiles fired by Houthi rebels.

On January 12, US and allies struck over 60 Houthilinked sites in Yemen. Subsequent outpouring of support for Houthis in Yemen's capital Sanaa indicates that conflict and disruptions may persist for a long time.

Attacks are forcing big shipping companies to use the longer Cape of Good Hope route to get to Europe. This detour adds about 4,000-5,000 nautical miles to the journey, an extra 15-20 days of travel. Transportation becomes more expensive and deliveries are delayed.

India and several European and Asian countries are getting ready for major trade and supply chain disruptions. The Red Sea-Suez Canal route carries 12% of global trade and 20% of India's \$1.1 trillion merchandise trade. It's the fastest sea route connecting India with Europe, US east coast, and some West Asia and North Africa (Wana) nations. Additionally, it's the main way India imports crude oil from Russia.

Roots of conflict | Houthis say they're targeting ships going to Israeli ports until Gaza receives food and medicine. However, most ships they attack aren't headed for Israel, nor are they Israeli-owned.

Houthis are targeting a key trade route to gain leverage in their fight against Yemeni government and the Saudi-led coalition. In December, they attacked ships from 35 countries with drones and missiles, partly as a reaction to Israeli actions in Gaza. Increase in conflict is viewed as a strategy by groups Iran supports. This includes diverting Israel and US's attention and resources, and raising costs of their involvement in these conflicts.

Impact on India's trade | The conflict has increased shipping costs (40-60%). Rates for shipping a 20-ft container to Europe and US have risen sharply, from an average of \$500 before crisis to \$2,000. Freight rates to ship a container to Saudi Arabia have doubled from \$700 to \$1,500. Indian shipments to Saudi Arabia, Yemen, and Egypt, which are geographically closer, have dramatically increased costs given the longer shipping routes needed.

costs given the longer shipping routes needed.
Export Credit Guarantee Corporation of India, government's insurance agency for exporters, might need to cover additional shipping costs for goods currently under transit, if exporters have insured through them.

- 1. Pricier low-value, high-volume goods [Increased transportation costs will make Indian chemicals, plastics, and petrochemicals expensive in European markets. These low-value but high-volume products are exported at thin profit margins, making it difficult for firms to adjust for extra shipping costs. High-value, low-volume and high-margin items like diamonds, jewellery, and medicines can be shipped by air.
- 2. Time-sensitive exports | Export of Basmati rice may be impacted due to quality degradation from longer transit times and higher freight. Delays are causing textiles and manufactured goods buyers to opt for air cargo, especially for seasonal fashion items, to avoid missing sales opportunities over late delivery. Indian exporters are holding back almost a quarter of their

consignments that require transit via Red Sea. Shipping urgency is now based on buyers' inventory levels.

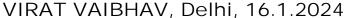
- 3. Disrupted the sum-of-all-parts | Indian factories making electronics, cars, and machines rely on parts from Europe, Korea, Japan, and elsewhere. If one part is delayed, the whole factory might have to stop. This is because everything needs to be there to build a car. Long shipping delays can mess up India's factories and the global trades are the medium trades implicantly.
- global trade system, reducing trade significantly.

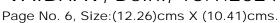
 4. Oil imports | Iraq, Saudi Arabia, UAE and Kuwait supply 55% of India's crude oil imports. This will remain unaffected as they can use obstruction-free Persian Gulf and some Red Sea routes for supplies to India. However, supplies from Russia, which supplies one-third of India's crude oil, will be severely impacted as they rely on the conflicted Suez Canal route.

India strategy | The Red Sea situation particularly affects sectors with lower margins that cannot absorb increased costs. GOI's role is limited but crucial in mitigating these impacts. A few suggestions:

- Subsidise part of Indian firms' additional freight and insurance expenses for critical products.
- Negotiate to get Russian oil from the non-Suez Canal route.
- Enhance economic cooperation with all West Asian countries. Refrain from taking sides.
- Ensure safety of Indian ships in Red Sea. However, effectiveness might be limited since global and not Indian shipping firms transport most Indian cargo.
- Explore ways to provide humanitarian aid to Yemen. This will open new avenues for engagement.

The writer heads a research group focused on trade, technology and climate change







कृष्णा-गोदावरी बेसिन से उम्मीद

भारत अपनी तेल आवश्यकताओं के लगभग 85 प्रतिशत हिस्से का आयात करता है. इस पर बड़ी मात्रा में विदेशी मुद्रा खर्च होती है तथा वित्तीय घाटे में भी बढ़ोतरी होती है। ऐसे में कृष्णागोदावरी बेसिन से तेल उत्पादन का प्रारंभ होना एक महत्वपूर्ण परिघटना है। प्रधानमंत्री नरेंद्र मोदी ने इस उत्पादन की प्रशंसा करते हुए उचित ही कहा है कि यह भारत की ऊर्जा यात्रा में उद्धेखनीय कदम है तथा इससे 'आत्मिनर्भर भारत' अभियान को गति मिलेगी। जिस प्रकार देश के लिए सीमा सुरक्षा अहम है, उसी प्रकार खाद्य और ऊर्जा के क्षेत्र में भी सुरक्षा सुनिश्चित करना आवश्यक होता है। खाद्य उत्पादन के क्षेत्र में हम पहले ही आत्मिनर्भरता के लक्ष्य को हासिल कर चुके हैं।तेल और गैस के दाम जब बढ़ते हैं, तो हर चीज महंगी हो जाती है। दिनेश पुराणिक,नई दिल्ली