MILLENNIUM POST, Delhi, 1.2.2024
Page No. 10, Size:(7.99)cms X (7.04)cms.

NTPC Limited signed a non-binding MoU with Numaligarh Refinery Limited (NRL) for partnership opportunities in the proposed bamboo-based Bio-Refinery at NTPC Bongaigaon and other Green projects. The MoU was signed in the august presence of Gurdeep Singh, CMD NTPC, Dr Ranjit Rath, CMD OIL & Chairman NRL, and Bhaskar Jyoti Phukan, MD NRL

ECONOMIC TIMES, Delhi, 1.2.2024
Page No. 4, Size:(8.12)cms X (13.69)cms.

Vedanta Seeks Bidders for Gas from Barmer Block

To offer 2.8 mmscmd of natural gas at February 21 auction

Our Bureau

New Delhi: Vedanta is seeking buyers for 2.8 million metric standard cubic meters a day (mmscmd) of natural gas it plans to produce in 2024-25 from its Barmer block in Rajasthan.

The gas will be auctioned on February 21 and bidders can seek a minimum volume of 50,000 standard cubic meters per day.

The sales price of the gas would be determined by combining the monthly value of Asian spot LNG benchmark JKM with a variable that bidders would quote in the auction. The value of the variable would start from a negative $0.20 per metric million British thermal unit (mmbtu). At the current JKM value of $9.40 per mmbtu, the starting bids would be $9.20.

The gas price will be subject to a floor determined by adding $0.40 to the government-set price ceiling for domestic gas from difficult fields. The price ceiling is revised in April and October every year.

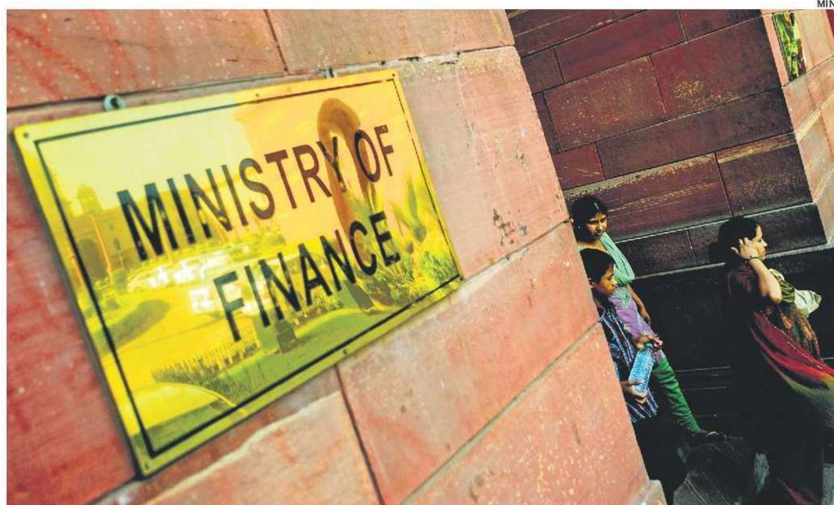
REUTERS

Bidders are required to provide bank guarantees. Vedanta aims to conclude gas sales agreements with buyers by March 1.

The gas will be delivered at the Raageshwari terminal of the Barmer block. The gas field is connected to the Mehsana-Bhatinda pipeline.

Increased availability of locally produced gas is expected to spur consumption. Falling international prices have already boosted imports and domestic consumption. Domestic gas is usually cheaper than imports.

Indian gas marketers have recently stitched multiple LNG import deals to meet future gas demand in the country. In January, Gail tied up with Vitol for the purchase of 1 million tonnes per year of LNG, and with UAE's Adnoc Gas for half a million tonnes of LNG a year.



Has disinvestment lost priority or got held up?

The government's programme to offload equity stakes and other assets has shown paltry progress. We await clarity on why so little emphasis is placed on this deficit-bridging path

India's market-embracing effort to disinvest in non-strategic sectors of the economy seems to have dropped down the government's list of policy priorities. It has only raised ₹12,504 crore by way of stake sales so far in 2023-24, as against the budgeted ₹51,000 crore. With just two months to go, bridging that gap would be a tall order. Notably, this year isn't an exception, with data pointing to a steady slide in disinvestment aims. After climbing at first under the Narendra Modi government until 2020-21, the targets set for offloading stakes dropped for three years in a row—a trend marker. And barring 2017-18 and 2018-19, in all years, actual mop-ups from stake sales fell short of their budget estimates by large margins. This is at odds with the stance of the government having 'no business doing business,' as Prime Minister Modi has often stated. "Its job is to think about food for the poor, make houses and toilets for them, get them clean drinking water, make health facilities available to them, make roads... to think about the small farmers," Modi said in 2022. The pace of the Centre's extrication from the businesses it runs, however, does not reflect due urgency.

No doubt, disinvestment is easier said than done, as it is fraught with hurdles ranging from regulatory okays to labour relations. But this government, with its parliamentary strength and reform-friendly posture, was expected to accelerate that agenda. Progress, unfortunately, has been inexplicably slow. A political calculus may have played a role. Amid opposition tirades over 'state jewels' being given away, resistance along this path could have risen. Power turfs and gravy trains, though, would not be hard for a determined administration to stare down and roll back. Moreover, the market embrace this policy represents seems like an odd candidate for sacrifice at the altar of politics. Still, perhaps the rationale needs to be pitched better. While sell-offs clearly help bridge fiscal gaps, the idea must be judged by its larger economic benefits. Private participation in an economy goes with greater efficiency, as market competition and investor diversification gain sway. Privatizing state-held enterprises, as with Air India, would serve that end. Even their exposure to market discipline, as with LIC, could alter management incentives for the better. And as more firms get competitive, it will favour the whole economy.

One temptation for New Delhi is to sell only under-performers and retain dividend givers. In 2023-24, such payouts have joined buoyant tax collections to act as a harness against fiscal slippage. But for the whole economy to benefit, what matters is the state ceding commercial space. With this clarity, sell-off choices can be made by asset saleability as a big operative criterion. The basic conditions for it have been convergent: Private demand for Indian assets has been robust and our public finances must be tightened after the fiscal expansion brought on by covid. And while it's good to command high sale prices, we should not rule out selling state assets cheaply if they attract weak investor interest. That bargain-price offloading may be needed explains why doubling down on the agenda takes political confidence. This aspect heightens the wonder over why the programme has languished. It seems forlorn, if not entirely adrift. For the sake of reforms, we hope this is just a pause and not a reflection of a rethink on its value as a policy thrust. And even though an interim budget may not be the best platform for this, the government would do well to clarify its position and outline the way forward on it.

Core sector growth at 3.8% in Dec, slowest in 14 months

Coal output grew 10.6%, the lowest since May 2023, which may reflect slow industrial activity.

Dhirendra Kumar & Rhik Kundu
NEW DELHI

Output in the eight core infrastructure sectors that account for two-fifths of India's industrial output expanded at a sluggish clip of 3.8% in December, official data released on Wednesday showed.

This was its slowest monthly growth in this financial year and marked a 14-month low, even as all major sectors barring crude oil saw some degree of production growth. In the same month a year earlier, core sector output grew at a revised rate of 8.3%.

Commerce ministry data showed that coal production grew in double digits in December. Steel, natural gas, refinery products, cement and fertilizers grew at a single digit.

Crude oil output declined 1%, while electricity grew 0.6%.

Growth in India's manufacturing activity fell to an 18-month low in December as output growth and new orders softened, a private survey released earlier this month said.

According to the HSBC India Manufacturing Purchasing Managers' Index (PMI), compiled by S&P Global, manufacturing PMI fell to 54.9 in December from 56 in November and 55.5 in October.

A reading of 50 separates expansion from contraction.

1.3% growth in cement production, seen as weak

Crude oil output declined 1%, while electricity grew 0.6%. REUTERS

The new data showed that coal supported core industries' output with a double-digit increase in production in December, while crude oil production contracted.

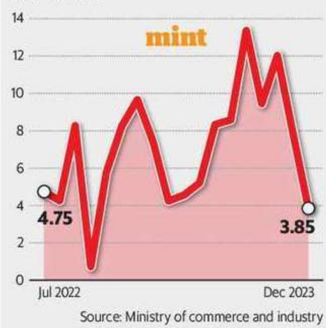
Freight loading through Indian Railways recorded an annual growth in December, registering 138.99 million tonnes (mt) due to the movement of coal and goods, up from 130.66 mt during the same period of the previous year.

"Growth of eight core industries in December 2023 was the slowest in 14 months. Production of steel, coal, oil and gas and electricity have all declined consistently since October 2023," said Prof Biswajit Dhar, an economist Delhi's Jawaharlal Nehru University.

Sluggish clip

New data showed that coal supported core industries' output with a double-digit increase in production in December.

Year-on-year growth in output in eight core industries (%)



PRANAY BHARDWAJ/MINT

"This trend could adversely affect the growth rate of the manufacturing sector in Q3, given the substantial weight of these industries," Dhar added.

Cement production saw a weak growth of 1.3%, reflecting lower demand for construction, though the base effect was high as growth stood at 9.5% during December last year.

5.7% expansion in steel production in December

The core sector output numbers assume significance as the eight industries—coal, crude oil, natural gas, refinery products, fertiliser, steel, cement and electricity—contribute 40.27% to the index of industrial production (IIP).

Among the eight industries, coal output recorded 10.6% growth, the lowest since May 2023. This growth may be because of mining in anticipation of greater demand in the winter.

A slowdown in coal production reflects slower industrial activity. In the corresponding month of the previous financial year, coal output grew 12.3%.

Steel production expanded 5.7% in December, down from 9.4% in November. The sector had seen 12.3% growth in December 2022. Electricity generation grew 0.6% in December 2023 against 10.4% in December 2022. Refinery products' production growth stood at 2.6% in December 2023, while the production of fertiliser grew by 5.8% in December.

"As expected, the core sector growth slowed to a 14-month low of 3.8% in December weighed by base normalization. While seven out of eight sectors witnessed a year-on-year increase in output, growth was seen moderating in most sectors," said Rajani Sinha, chief economist, CARE Ratings Ltd. "The positive aspect was the improvement in cement output with growth of 1.3% following contraction seen in the previous month. With the base turning unfavourable, we expect the industrial output to record a muted growth in range of 1-2% in December."

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गेल GAIL
FINANCIAL EXPRESS, Delhi, 1.2.2024
Page No. 8, Size:(6.68)cms X (15.17)cms.

Indigenising energy

Decarbonisation is a necessary long-term goal, but medium-term plan must include hiking production

THE GOVERNMENT HAS set an ambitious target to eliminate imports of coal varieties that can be extracted from indigenous mines by FY26, after having cut imports' share in domestic consumption of the fuel from 26% in FY20 to 21% in the current fiscal. End-use restrictions for captive coal mines are no longer there, and more and more mines, including partially explored ones, are being auctioned off to the private sector. On its part, Coal India has substantially increased its production in recent years, and there is a promising shift in focus to tech-intensive, but highly-rewarding underground mining. Also, capital-intensive in situ coal gasification is set to get support in the form of viability gap funding, boosting hopes that the country's plentiful, difficult-to-extract coal reserves would be converted to combustible gas.

All this, and the rise in the share of non-fossil fuels in the electricity capacity from 31% in 2014 to 43% in 2023 are kosher. But the picture continues to be grim in the oil and gas sector. India's oil production has stagnated for several years, leading to even higher import dependence (87.5% in April-December this fiscal compared with 77.6% in FY14). Though benign global prices—and lately discounted Russian Urals supplies—and a relative slowing of demand helped the country contain its oil import bill, it was still a humongous $158 billion in FY23. As forecast by Opec, India will still be the largest contributor to the incremental oil demand till 2045. Its oil consumption might not peak till late 2030s, if not early 2040s.

While the doggedness with which the government seems to be acting to slash coal imports inspires confidence, the strategy for the oil and gas sector seems to largely revolve around containing import costs using intelligent sourcing strategies. The focus is much less on boosting domestic production, and securing "equity oil" from overseas hydrocarbon ventures. At the heart of the problem is the lack of many lucrative new hydrocarbon finds. Of course, the open acreage licensing policy has allowed firms to carve out areas they want to explore, and ended gold-plating (high capex claims by investors), as the bid variable is now revenue share, instead of profit-share after all cost deductions. The regime has led to an increase in active acreage, but it's yet to reflect on production, which came in at a new low of 27.8 million tonne in FY23, as against 35.9 MT in FY15. ONGC's DWN-98/2 block in the deep waters of the Bay of Bengal going on stream recently has been a rare piece of good news after a long time.

New gas-based thermal power units don't seem to have economic rationale for the time being—green power costs less than ₹2.5/unit while gas-based power is estimated to cost ₹6.4/unit, given the ceiling price of $6.5/unit for gas from ONGC-OIL's legacy fields. However, gas is still competitive for transportation and cooking. Since gas from the "difficult fields" is being allowed to be sold at a substantial premium, domestic production could pick up—the Reliance-BP combine's MJ field in the KG-D6 block is promising. The long-term strategy to slash import reliance for energy necessarily involves decarbonisation efforts. However, the medium-term goals must include scaling up domestic production of hydrocarbons, besides support to bio-fuels and hybrid vehicles. Public capital investments in charging infrastructure for electric vehicles must be designed and implemented without further delay.

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FINANCIAL EXPRESS, Delhi, 1.2.2024
Page No. 8, Size:(6.31)cms X (13.32)cms.

Wind power is starting to learn Big Oil's secret

FOR THE FOSSIL fuel industry, every crisis has always contained both danger and opportunity. It's a trick the renewables business has struggled to master.

John D Rockefeller created Standard Oil Co. by paying liquidation prices for rival refiners amid an industry-wide glut—and then using his control of processing to squash the cycles of boom and bust in oil drilling, too. Losing its monopoly on Iranian crude after a 1953 coup spurred BP Plc to explore fields in Alaska and the North Sea that would sustain it for decades. The global oil market exists largely because of the way the eight-year closure of the Suez Canal after the 1967 Arab-Israeli war prompted shipping companies to develop unprecedentedly large tankers.

The darkest art behind this history of survival lies in the way companies have used their moments of weakness to bend governments to their will. European Union capitals more than doubled their fossil fuel subsidies to €123 billion ($133 billion) in 2022 to offset cost increases following Russia's invasion of Ukraine. The UK issued additional carbon allowances to industry last year, causing the price of domestic permits to drop to about half those in the EU and cutting costs for polluters. The US government in 2022 promised to buy crude to refill its Strategic Petroleum Reserve whenever prices dip below a $67-$72 per barrel range, encouraging domestic production by creating a price floor that other energy producers would kill for.

The wind industry often still appears to be failing at this game. In September, a UK auction for offshore licenses closed without any bids after developers warned that the government's ceiling prices were too low, given the rising costs of materials and finance. Two months later, Orsted A/S took a $4 billion impairment as it cancelled two projects off the coast of New Jersey, citing the same factors. Within weeks, Siemens Energy AG had to seek a €15 billion support package, half of it from the German government, after losses from its wind unit hurt its ability to win new contracts.

DAVID FICKLING
Bloomberg

In retrospect, that conflagration appears to have nurtured the seeds of the industry's renewal. The UK in November lifted the price ceiling on offshore auctions by 66%. A month later, Orsted announced it would go ahead with its Hornsea 3 project, taking advantage of the new rules. The 2.9 gigawatt offshore farm will be the world's largest when completed in 2027, and was widely predicted to have been on the verge of cancellation.

Far from collapsing, the offshore market seems to be resetting at prices that better reflect developers' costs — exactly what the industry was lobbying for. At an auction last week, New Jersey issued licenses totaling 3.7 gigawatts at a price 23% higher than the previous record, according to estimates by BloombergNEF analyst Atin Jain.

The good news seems to be spreading to turbine manufacturers, too. General Electric Co. said last week it will target an April date for the spinoff of its Vernova energy unit, suggesting there is appetite from equity investors for such stocks. While losses offshore are still dragging down a renewable division that comprises about half of the Vernova business, margins are improving in onshore and the order book is up 40%, according to the unit's Chief Executive Officer Scott Strazik.

Managers of large-scale engineering projects aren't stupid. Striking the best price with the government is only one small part of making money. The real advantage comes from dealing with your subcontractors and timing the market's deflationary and inflationary periods, so you can reel in the cash when margins are widening, and get out of mispriced projects early. By paying fees to cancel old marginal contracts, offshore developers are able to take advantage of more profitable opportunities.

Those hoping that the transition to green power was going to usher in a less cut-throat era for the energy business might be disappointed. Those hoping renewables will win, however, will be glad to see it. If we're to switch to a zero-emissions economy, the future of energy is going to have to be every bit as good as its past at using lobbying, financial engineering, and regulatory arbitrage to its private benefit.

Export of petroleum products falls to 15-month low in Jan

Shipments held back amid Red Sea tensions

ARUNIMA BHARADWAJ
New Delhi, January 31

INDIA'S EXPORT OF petroleum products fell to a 15-month low at 1.02 million barrels a day in January as escalating tensions over the Red Sea prompted exporters to hold back shipments, data from Kpler, a data and analytics firm, showed.

January figures were the lowest since October 2022, when the export volume of refined oil products had stood at around 887,000 barrels a day, it added.

India's shipments to Europe declined in January as many tankers had opted for the longer route via the Cape of Good Hope, resulting in higher shipping costs. Africa's Cape of Good Hope shipping route can extend voyages for up to 14 days or beyond.

"To take just one specific example, the route from Jamnagar to Rotterdam takes 24 days via the Suez Canal and 42 days via the Cape of Good Hope," Viktor Katona, lead crude analyst at Kpler, said.

The UAE, the Netherlands and Malaysia were among the top buyers of Indian petroleum products in January. While the UAE imported 103,690 barrels a day of refined fuels, the Netherlands imported 75,411 barrels a day. Indian exports to Malaysia stood at 64,098 barrels a day.

PETROLEUM PRODUCT EXPORTS
(in million barrels per day, 2023-24)

Aug	Sept	Oct	Nov	Dec	Jan
1.43	1.22	1.09	1.38	1.31	1.02

Though Russian oil cargoes taking the Suez Canal-Red Sea route to India and China, its major buyers, have been secured so far, India's exports transiting the Suez Canal have been hit.

The country's export of petroleum products to Europe had dropped to just 100,000 barrel a day, from 350,000-400,000 barrel a day in November and December, Katona said. "Many tankers have opted for the longer route via the Cape of Good Hope which has resulted in increased shipping costs." The shipping cost has increased by 60-70%.

India's export of petroleum products fell by 17.6% to $6.88 billion in December, compared with $8.35 billion in the year-ago period, the latest government data show. Exports were down 15.6% during the first nine months of the current fiscal to $62.07 billion.

Not just India faces a threat in its export volumes of petroleum products, but the country's own domestic consumption is seen registering a modest 3% growth in the financial year beginning April 1, data published by the Petroleum Planning and Analysis Cell showed. The growth will be lowest since FY22.

The country's demand for petroleum products including jet fuel, diesel, LPG among others is likely to grow to 239 million tonne in the financial year 2024-25. The country's consumption of petroleum products stood at 233 million tonne last year, the data showed.

State refiners may face margin pressure as cheap Russian oil imports dip

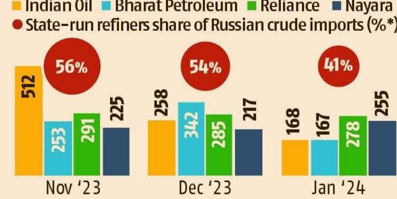
S DINAKAR
Amritsar, 31 January

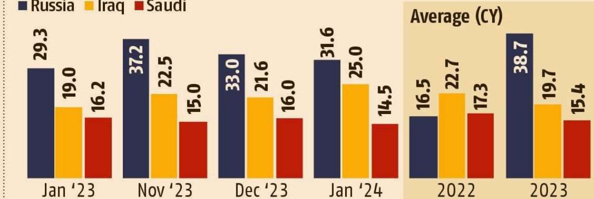
State-run refiners could face margin pressure after the share of discounted Russian oil in India's imports dipped to a year's low in January. Volumes inched up from December, when fresh US sanctions were introduced, but were still 11 per cent lower in January than in November, according to ship tracking data and industry officials.

The share of state-owned oil firms, excluding joint-sector HMEL, in Russian crude imports shrunk to 41 per cent in January from 54 per cent in December, according to calculations based on Kpler data. The reduction in discounted Russian supplies will affect gross refining margins as cheaper crude contributes to the profits of Indian Oil, Bharat Petroleum and Hindustan Petroleum, refining officials say. Private refiners Reliance Industries, Nayara Energy and joint sector refiner HMEL accounted for the rest. Interoceanic, whose details are unknown, brought in a million barrels in January, and there was a record 4.8 million barrels bought by the "others" category. West Asia and Africa, which sell fully priced oil, gained market share at Moscow's expense.

"The increased US sanctions on shipping companies that have violated the price cap is likely to tighten the vessel supply available to load Russian crude, at least in the near-term, pushing up freight premiums and narrowing the price competitiveness of Russian crude with Middle East crude," said Serena Huang, head of Asia-Pacific market analysis at market intelligence agency Vortexa. "The recent attacks on tankers laden with Russian oil in the Red Sea have added another hurdle by increasing the risk of moving Russian barrels to the East."

Russia accounted for only 31.6 per cent of India's 4.75 million barrels per day of crude oil imports in January, the lowest since a 29.3 per cent share a year earlier, when the G-7 group of nations enforced a $60 per barrel price cap on exports of Russian crude, according to loading data by Paris-based market intelligence agency Kpler. The share has fallen by 15 percentage points to 1.5 million bpd since a record 46 per cent in May. It was 33 per cent in December and 37 per cent in November, a month prior to the US sanctions on Russian shipping companies.





The share of Russian crude in Indian Oil's overall crude imports has dropped to below 12 per cent of its total crude imports in January from 34 per cent in November, Kpler data shows. Issues with the delivery of 10 cargoes of Sokol crude in December had trimmed the share to 18 per cent. BPCL's share of Russian crude in the October-December quarter averaged 40 per cent of its overall imports, company officials said on an earnings call. That has shrunk to 25 per cent in January, Kpler data shows.

Iraq gained the most from Russia's decline, ratcheting up a 25 per cent share, the highest in more than a year, at around 1.2 million bpd. The gap between supplies of both nations was the narrowest since December 2022. Shipments of Nigerian grades — light, sweet varieties, similar to Russian Sokol, deliveries of which were hurt by the new US sanctions — tripled in both January and December from November. No Sokol cargoes were imported in December and January.

"Discounts on Russian crude have moderated, and we think they will be stable unless the Red Sea situation worsens," a top Bharat Petroleum official said on an earnings call.

Last week, Yemen-based Houthi rebels fired a missile at Achilles, a ship operated by Gaurik Ship Management that was carrying crude oil to India. It was crossing the Suez and heading to the Red Sea when fired upon, the first known attack on a Russian crude tanker.

"I would not be surprised if Indian refiners turn more to Middle East crude once again to meet their crude import requirements in the months ahead," Huang of Vortexa said.

However, the BPCL official said the company had faced no interruption in Russian supplies. Another official said Russia was well-networked with both Iran and the rebels and could influence them not to attack Russian ships.

"There is an observable increase in oil imports from the Middle East," said Petras Katinas, energy analyst at Finnish think tank CREA. Recently, the decrease in the price differential between Urals and West Asian crude could be identified as contributing to a decline in Russian oil imports to India, he added.

BUSINESS LINE, Delhi, 1.2.2024
Page No. 11, Size:(12.71)cms X (8.52)cms.

India should explore East Mediterranean, North Sea to acquire oil and gas assets

Rishi Ranjan Kala
New Delhi

Indian oil and gas companies should look at hydrocarbon assets in regions such as the North Sea (UK) and East Mediterranean, which have the potential to create value over time, S&P Global Commodity Insights Senior Vice-President and Chief Energy Strategist Atul Arya said.

Arya, who has in the past worked with oil major BP for over 20 years in various capacities, emphasised that it is important to analyse the value that asset will create over the long term.

"I think Indian companies need to kind of expand their horizons. I think what needs to happen is and also not to look at the bargain right now, because the tendency is (that) the price will go down and we will jump in. But deals are happening today. In fact, in the US, there were two big consolidations with Chevron buying Hess and ExxonMobil buying Pioneer (Natural Resources) in the last two to three months. They were not looking at the price, they were looking at the value, which is very important," he elaborated.

ABROAD ASSETS

When asked about the regions where Indian oil and gas firms can explore acquisitions, Arya said that this is a long-term game. Referring to Harbour Energy's around $9 billion deal in the North Sea recently, he said that the North Sea is a really good example. Located in northern Europe, the North Sea is part of the Atlantic Ocean. It is bordered by the UK, Norway, Denmark, Germany, the Netherlands, Belgium and France.

"These are very high-quality assets. They're mature assets. And remember, the UK is pretty stable, taxes are stable, the government is stable and (has) a good relationship with India. So I think Indian companies need to kind of expand their horizon," Arya said.

Of course, do business with countries that India has good relationships with, but think broader than that because sometimes these relationships can then come back and create more challenges such as in Venezuela, Sakhalin-I, etc, he warned.

"You have to be creative. The other great province is the Eastern Mediterranean. East Med is one of the largest gas provinces today in the world because of Egypt, Cyprus and Israel, all the countries with which India has good relationships," he suggested.

According to the US EIA, the Oil & Gas Journal (January 1, 2022) said that Egypt has the largest crude oil reserves in the Eastern Mediterranean, holding about 3.3 billion barrels in proved reserves. Turkey is the second largest, holding 371 million barrels. Greece, Israel, and Jordan hold relatively small volumes.

In the case of natural gas, Egypt again has the largest reserves in the Eastern Mediterranean, followed by Israel, albeit they are significantly smaller volumes than the proved reserves in Egypt. Greece, Jordan and Turkey all hold below 1 trillion cubic feet of proved natural gas reserves.

BUSINESS LINE, Delhi, 1.2.2024
Page No. 6, Size:(17.32)cms X (20.19)cms.

Compressed biogas has a future

ECO MOVES. Stepping up production of compressed biogas to blend with natural gas, is vital for green energy transition

ALOK KUMAR

To promote clean energy transition, the government has set a goal of reaching up to 15 per cent of energy supply from natural gas from the present level of about 6 per cent.

According to CEA data, CO2 emissions generated in producing electricity from Natural Gas are only 54 per cent of what is emitted in producing the same amount of electricity from coal. However, there is one major difficulty in pursuing this goal.

India currently imports about 50 per cent of the gas consumed and imports are going increase further as we enhance the share of gas because of limited domestic availability.

But the supply disruptions due to the Russia-Ukraine war and the maritime conflict in the Middle East could hamper energy security of India.

This challenge can be addressed to a large extent by blending domestically produced Compressed Bio-Gas (CBG) with Natural Gas similar to the Renewable Purchase Obligations for electricity consumers – which mandates electricity purchase in laid down proportion from renewable sources.

CBG is derived from the anaerobic decomposition of waste and biomass sources like agriculture residue, food waste, and municipal solid waste and is a renewable, cleaner alternative to conventional fossil fuels.

It has calorific value and other properties similar to CNG and can be used as substitute fuel in mobility, industries and commercial areas.

We have abundant quantities of waste and other residue material in India for producing CBG. In Europe, CBG has been promoted as a clean energy option through legislative measures, awareness creation and supportive policy interventions.

Germany doubled the number of biogas plants to about 9,000 since 2010. India also announced a national initiative in 2018 to set up 5,000 CBG plants by 2023-24 with annual production of 15 million tonnes.

But progress on this front has been sluggish with the number of commissioned plants hardly touching 100.

CBG – THE CURRENT CHALLENGES

CBG production depends upon seasonally available raw material and varying quality and uncertain supply chains are areas of concern.

It is produced in remote areas closer to sources of raw material. Due to the seasonal availability of raw material, there are additional costs involved in storing and transporting it to either a petrol pump or to an injection point on the gas pipeline network.

Further, given the uncertainty in offtake, either the surplus gas has to be flared or sold in the local market with price realisation uncertainty.

For example, in the SATAT scheme, oil marketing firms offer a price which includes transportation of CBG in cascades only upto 25 km and in case of low off take, there is no commitment to pay.

Even in the fermented organic manure market, the by-product of CBG production has not matured. The CBG programme envisaged simultaneous development of linkages to natural gas pipeline network for injection of CBG in the pipeline for blending and transport. This has not progressed.

So what can be done in the interim to give a fillip to CBG?

The Oil Ministry's report of the 'Energy Transition Advisory Committee' has identified several drivers for CBG Market Development.

> **An Oil Ministry report has proposed trading CBG's green attributes and the creation of an extra** revenue stream for biogas producers by monetising these attributes

One key aspect involves proposing CBG blending mandates for all CGD entities marketing CNG and PNG.

The report suggests trading CBG's green attributes and the creation of an extra revenue stream for biogas producers by monetising these attributes. This strategy involves creating certificates that hold a premium value over standard natural gas.

Recently, the National Biofuels Coordination Committee, led by the Union Petroleum Minister, announced the gradual mandatory blending of CBG in the CNG and PNG segments of the CGD sector.

The Compressed Biogas Obligation (CBO), which is voluntary till FY25, is proposed to be made mandatory from FY26. It will start at 1 per cent, and raised to 5 per cent by 2028-29.

The amended Energy Conservation Act empowers the Centre to mandate consumption of a particular non-fossil fuel in laid down proportion.

CBG CERTIFICATION SCHEME

Currently, there's no system for trading, purchasing, and monitoring of green attributes of CBG. To address this gap, the CBG mechanism needs to be be formulated. This scheme entails creating and managing a registry for CBG certificates (CBGCs). The gas is traded and transported similar to regular gas.

However, once CBG is produced and sold either through pipelines, cascade or in LNG form (Bio-LNG), its "green" attribute can be tokenised as a CBG Certificate, allowing it to be traded independently from the physical use of CBG. Due to the flexibility provided by CBG certificates CBG producers can opt to sell the gas produced as green gas along with CBG certificate.

They also have the option of separating CBG from its certificate, selling the CBG as regular gas in the local energy market and trading the certificate separately in a virtual market for CBG Certificates. It aims to empower both mandated and voluntary buyers to procure certificates tailored to their specific needs.

This mechanism will require a transparent trading platform. Since gas sector already has authorised Gas Exchanges, they can be designated for trading. The whole mechanism can be regulated under PNGRB.

But there is one particular challenge. In case of renewable electricity, generation and consumption can be easily measured through grid level electricity meters whereas in case of CBG, accredited verifiers will have to be deployed to verify the production of CBG. But this is doable.

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DAINIK BHASKAR, Delhi, 1.2.2024
Page No. 1, Size:(2.41)cms X (6.05)cms.

8 बुनियादी उद्योगों की ग्रोथ दिसंबर में घटकर 3.8 फीसदी रही

नई दिल्ली | देश के 8 कोर सेक्टरों की ग्रोथ दिसंबर में घटकर 3.8% रह गई। दिसंबर 2022 में ये 8.3% थी। वहीं नवंबर 2023 में 8 कोर सेक्टरों की ग्रोथ 7.9% रही थी। 2022 में ग्रोथ रेट ऊंचा रहने की एक बड़ी वजह 2021 में कोरोना की वजह से इंडस्ट्रीज में सुस्ती थी। चालू वित्त वर्ष 2023-24 में अप्रैल-दिसंबर के दौरान इन 8 कोर सेक्टर्स की ग्रोथ 8.1% पर स्थिर रही। इन 8 कोर सेक्टर में कोयला, बिजली, सीमेंट, स्टील और कच्चे तेल के अलावा नेचुरल गैस, रिफाइनरी प्रोडक्ट (पेट्रोल-डीजल) और फर्टिलाइजर्स शामिल हैं। देश के औद्योगिक उत्पादन इंडेक्स (आईआईपी) में 8 कोर सेक्टर्स का वेटेज 40.27% है। कोयला सेक्टर की ग्रोथ दिसंबर 2023 में 10.6% की दर से हुई।