
Decarbonisation in India gets a big boost

India's decarbonisation journey received a boost last week when the Cabinet approved the National Green Hydrogen Mission (NGHM) with an allocation of ₹19,744 crore. It aims to produce five million tonnes of green hydrogen annually by 2030, reduce emissions by nearly 50 million tonnes annually, save India ₹1 trillion in fossil fuel imports, attract investments worth ₹8 trillion by 2030, and create 600,000 green jobs. India spends over \$160 billion of foreign exchange annually on energy imports and this bill is likely to double in the next 15 years. Here, green hydrogen can make a difference.

The green hydrogen policy was first announced in August 2021 by Prime Minister Narendra Modi to make India a hub for producing and exporting green hydrogen. There is still some way to go to fulfil these pledges. Topping the agenda is the adoption of renewable power and vehicle electrification, and the need to prioritise green hydrogen as a solution to decarbonise sectors such as refining, manufacturing ammonia, methanol, and iron and steel, and heavy-duty trucking. The costs of production along with logistical and transportation issues remain, and the government and industry will need to pay attention to this problem and ramp up manufacturing.

The good news is that India has an advantage in terms of low-cost renewable electricity (green hydrogen is produced from renewable sources by electrolysis). This, complemented by rapidly falling electrolyser prices, can enable green hydrogen to be economical. With collaboration among innovators, entrepreneurs (Reliance and Adani have announced manufacturing plans) and the government, green hydrogen can be an energy molecule that is "made-in-India" and a bulwark against the climate crisis.

Power to hydrogen

Assured demand, creation of ecosystem are crucial

The Centre's much-awaited green hydrogen policy is finally here, with an allocation of ₹19,744 crore for promoting the production of electrolyzers, green hydrogen gas (produced when power from renewables is passed through water, as opposed to splitting methane), setting up pilot projects and R&D. The draft policy had been put out in February last year, so it has been a long wait for the industry.



However, the government seems to have more than made up for keeping the industry waiting by making a bumper allocation; most in the industry had been expecting not more than ₹3,000-4,000 crore. The policy is expected to generate five million tonnes of green hydrogen annually from 2030, which is the quantity of (non-green) hydrogen consumed by the industry today. The government has said that this would entail an investment of ₹8-lakh crore and create six lakh jobs. These numbers are broadly in agreement with those put out by the National Chemical Laboratory (NCL), Pune, which has been working on developing electrolyser technologies. According to NCL, five million tonnes of green hydrogen production would mean 32 GW of electrolyser capacity, which would consume 115 MLD of water. This would require the setting up of 90 GW of solar and 38 GW of wind power that would use 340,000 hectares of land. This shift would save 30-40 million tonnes of carbon dioxide emissions annually and avert purchase of ₹60,000 crore worth of LNG. All through 2022, there had been many corporate announcements with respect to green hydrogen. Now, the action can begin.

However, the government needs to create an assured demand and resolve ecosystem issues. It can be presumed that the promised 'green hydrogen purchase obligation' is round the corner. The government has promised separate frameworks for the creation of a green hydrogen ecosystem, standards and regulations, PPPs for R&D and skill development. The success of the Mission depends much on how these frameworks are crafted. The government should incentivise green hydrogen transportation and storage. Green hydrogen can be used to make steel, chemicals and in refineries, besides powering vehicles and ships.

Finally, the big question is the price of hydrogen, which depends on cost of green power. By all accounts, the holy grail of '\$1 per kg' is unattainable. Rough calculations show that with the best of technologies, the cost of production of a kilogram of green hydrogen would be not less than \$3, which would be higher at the point of use. If green hydrogen is to be cheaper, the cost of green power needs to come down. Since it is not always possible to co-locate renewable power and hydrogen production plants, reducing green energy costs would mean slashing open access charges and removing other policy niggles. This should be done simultaneously so that the promise of green hydrogen power is realised.

Deadline to submit bids for 10 oil & gas blocks under OLAP extended

Rishi Ranjan Kala

New Delhi

The Ministry of Petroleum & Natural Gas (MoPNG) has extended the bid submission period for 10 oil and gas blocks under the eighth round of Open Acreage Licensing Programme (OLAP) for international competitive bidding.

The last date of submitting bids is January 31, the Directorate General of Hydrocarbons (DGH) said in a notification. In July 2022, the DGH had floated the notice inviting offers (NIO) for the exploration and development of oil and gas blocks in India under the Hydrocarbon Exploration & Licensing Policy (HELP). The 10 blocks include two on-land blocks, four shallow water blocks,

two deep water blocks and two ultra-deep water blocks. It is expected that this round will generate an immediate exploration work commitment of around \$600-700 million.

REDUCING IMPORTS

The exercise is part of the government's plans to reduce the country's dependence on imports. In this round as well, the MoPNG is trying to incentivise offshore exploration through a graded system of reduced royalty rates.

To incentivise early commercial production, the concessional royalty rates will be applicable if production commences within four years for onland and shallow water blocks and five years for deep water and ultra-deep water blocks from the effective date of contract.

Russia restores 20% ONGC arm stake in new Sakhalin-I co

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New Delhi: Russia has restored ONGC Videsh Ltd's (OVL) 20% stake in Sakhalin-I oil and gas field, now owned by a Russian limited liability company that was formed after Moscow took over the ExxonMobil-led venture, which was operating the asset earlier.

Officials familiar with the development said a joint operatorship model under the new entity is being considered. OVL, the overseas investment arm of state-run explorer ONGC, is keen on participating in the management of operations if the joint model is finalised.

Russian president Vladimir Putin had in October seized the Sakhalin-I project and transferred the rights of investors in the Exxon-led joint venture, in which OVL had a 20% stake, to Rosneft subsidiary Sakhalinmaorneftegazshelf. **TOI** had on July 8 last year first reported OVL

JOINT MGMT

was eyeing a larger role in the project ahead of an imminent government takeover and transfer of interests into a new entity.

The decree of seizure, signed by Putin, followed Exxon's exit from the project due to western sanctions on Russia slapped after its invasion of Ukraine.



OVL retakes 20% stake in Sakhalin-1

ONGC Videsh Ltd (OVL), the overseas arm of state-owned Oil and Natural Gas Corporation (ONGC), has retaken a 20% stake in the Sakhalin-1 oil and gas fields in the far east region of Russia, an official said. Russian President Vladimir Putin in October last year disbanded Exxon Neftegaz—a regional subsidiary of US super major ExxonMobil—as operator of the Sakhalin-1 and transferred the project and all of its assets and equipment to a new operator. The other former foreign shareholders in the project were asked to apply to the Russian government to regain their shareholdings in the project. ONGC Videsh Ltd applied and has been given the same shareholding as it had previously, the official said. Production from Sakhalin-1 stopped in April 2022 after Exxon Neftegaz declared force majeure at the project in response to international sanctions imposed on Russia following its invasion of Ukraine. **PTI**

ONGC Part-Owned Sakhalin-1 Output to be Near Normal by Mar

Production at Russian block came to a halt last year after the exit of ExxonMobil

Our Bureau

New Delhi: Production at Russia's Sakhalin-1 block, in which ONGC has a 20% stake, will reach near normal by March after a halt for months last year following the force majeure by operator ExxonMobil, an official said.

The Sakhalin block is producing around 140,000 barrels per day of oil, which will likely rise to 200,000 barrels per day by the end of the current fiscal year, the official said. The block produced around 220,000 barrels per day of oil before Russia's invasion of Ukraine in February.

In response to the war, western oil majors such as ExxonMobil, BP, Shell and Equinor decided to exit Russia. ExxonMobil, the operator with a 30% participating interest in Sakhalin-1, declared force majeure, leading to a halt of production at the block in May.

In October, Russia removed Ex-



xon as the operator and made a newly-formed Russian entity the new operator of the block. The existing stakeholders in the Sakhalin-1 were assigned a proportionate stake in the new entity after they applied for it. ONGC now has a 20% stake in the new operator while Russia's Rosneft and Japan's Sodeco have 20% and 30% stakes, respectively, the official said. Exxon is yet to apply for a stake in the new entity. The new operator is being managed mainly by the Russian executives.

ONGC gets the share of its oil from the Sakhalin block, which it can sell to its customers. ONGC as well as other state-run firms—Oil India, Indian Oil, BPCL—have investments in other Russian fields from which they receive cash dividends, not oil. They have not been

able to repatriate their dividends for the last year as Russia imposed restrictions following the war. Companies are in discussions with the Russian government for repatriation, the official said. He didn't give more details.

If Indian firms will be keen on buying the share Exxon has not yet subscribed to in the new operator, the official said it would depend on whether Russia offers it and at what price. "It will have to be evaluated as any other new business investment proposal in the light of the block's production capacity, oil prices, and the geopolitical situation," the official said.

Russia has made a similar intervention at the Sakhalin-2 block, where Shell was the operator. Shell's share in the new operating entity is still unassigned.



OVL retakes 20% stake in Sakhalin-1 oil, gas fields

PRESS TRUST OF INDIA
New Delhi, January 9

ONGC VIDESH, THE overseas arm of state-owned Oil and Natural Gas Corporation (ONGC), has re-taken a 20% stake in the Sakhalin-1 oil and gas fields in the far east region of Russia, an official said on Monday.

Russian President Vladimir Putin in October last year disbanded Exxon Neftegaz - a regional subsidiary of US super major ExxonMobil - as operator of the Sakhalin-1 and transferred the project and all of its assets and equipment to a new operator.

The other former foreign shareholders in the project - Japan's Sodeco consortium and ONGC Videsh - were asked to apply to the Russian government to regain their shareholdings in the project. OVL applied and has been given the same shareholding as it had previously, the official said. Production from Sakhalin-1 stopped in April 2022 after Exxon Neftegaz declared force majeure at the project in response to international sanctions imposed on Russia following its invasion of Ukraine.

OVL retakes 20% stake at Sakhalin-I oil & gas fields

Our Bureau

New Delhi

State-run ONGC's overseas arm, ONGC Videsh (OVL) has retaken its 20 per cent stake in the oil and gas fields at Sakhalin-I in Russia's Far East. The production at the blocks resumed last year in December, sources said.

Production at Sakhalin-I stopped last year after its operator ENL, a subsidiary of Exxon Mobil, declared force majeure following international sanctions on Russia.

MULTIPLE OPTIONS

"The supply from the fields do not seem to be a problem at present as Russian authorities say there are multiple options for insurance, including sovereign guarantees, and crude oil is being delivered through Russian flag vessels and the same



thing would be applicable for Sakhalin," an official source said.

Following the Ukraine conflict, the International Group of Protection & Indemnity (IG P&I), an international insurance club for all seaborne vessels especially crude oil vessels, stopped providing insurance due to which the vessels could not sail and subsequently production also came to a halt.



OVL retakes 20% stake in Sakhalin-1 oil & gas fields

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PTI

OVL retakes its stake in Sakhalin-1 oil field

New Delhi, Jan. 9: ONGC Videsh Ltd, the overseas arm of state-owned ONGC, has re-taken a 20 per cent stake in the Sakhalin-1 oil and gas fields in the far east region of Russia, an official said on Monday.

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OVL retakes 20% stake in Sakhalin-1 oil, gas fields

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OUR CORRESPONDENT

NEW DELHI: ONGC Videsh Ltd, the overseas arm of state-owned Oil and Natural Gas Corporation (ONGC), has retaken a 20 per cent stake in the Sakhalin-1 oil and gas fields in the far east region of Russia, an official said on Monday.

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Moscow assigned the Sakhalin-1 project and operatorship to a regional subsidiary of Russian oil producer Rosneft. Russia



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then asked foreign shareholders in the project - ExxonMobil, Sodeco and ONGC Videsh - to apply to reinstate their shareholdings in the project before mid-November.

The Sodeco consortium too has retained its stake but there is no clarity on what will happen to ExxonMobil's stake.

ExxonMobil had previously stated that it had fully exited Sakhalin-1 after the confiscation of assets and has no plans to operate the project.

Sakhalin-1 was producing

220,000 barrels per day of oil before the Ukraine war. Of this, OVL's share was 44,000 bpd or 2.2 million tonne per annum. However, western sanctions following the Russia-Ukraine war led to constraints in evacuating oil.

Production resumed in November and has reached 140,000-150,000 bpd, the official said adding the output is likely to restore to original levels by March end.

Sakhalin-1 is a large oil and gas field in far-east offshore Rus-

sia, spread over 1,140 square kilometers, which includes three offshore fields namely Chayvo, Odoptu and Arkutun-Dagi. OVL acquired 20 per cent stake in the project in July 2001.

Exxon Neftegaz Limited (ENL) and Sodeco held a 30 per cent stake each. The remaining 20 per cent is held by Russia's Rosneft through its subsidiaries SMNG (11.5 per cent) and RN Astra (8.5 per cent).

Almost all of Sakhalin-1's oil production is shipped to international markets via the De-Kastri terminal, located in the Khabarovsk region on the Russian mainland, which is linked to Sakhalin-1 via a dedicated pipeline.

On October 7, 2022, the Russian President issued a decree, consequent to which the rights and obligations of the consortium under the Sakhalin-1 production sharing agreement (PSA) was transferred to a new company, Sakhalin-1 Limited Liability Company.

This new company has OVL and Rosneft with 20 per cent stake each and Sodeco with another 30 per cent, the official said adding Russia hasn't decided what it will do with the 20 per cent of ExxonMobil.

The partners currently are discussing a joint operatorship model for the fields.



Adani, CNG

Ahmedabad: Private player Adani Total Gas Limited hiked the price of compressed natural gas (CNG) in Gujarat by Re 1 per kilogram effective from Monday. This has taken the price from Rs 79.34 to Rs 80.34 per kilogram.

India's December fuel demand rises 3.1% y-o-y



India's fuel consumption rose 3.1 per cent year-on-year in December to 19.60 million tonnes, data from the Petroleum Planning and Analysis Cell (PPAC) showed on Monday. Sales of gasoline, or petrol, were 5.9 per cent higher at 2.98 million tonnes. Cooking gas or liquefied petroleum gas (LPG) sales increased 3.9 per cent to 2.58 mt. REUTERS

SC Rejects Govt Plea to Halt Arbitration in KG-D6 Cost Case

LEGAL SETBACK Centre had alleged bias against 2 arbitrators in case involving RIL, BP and Niko

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New Delhi: In a major setback to the government, the Supreme Court on Monday dismissed its appeal to halt ongoing arbitration proceedings initiated by Reliance Industries (RIL), BP Exploration and Niko Resources against the petroleum ministry for "having lost faith" in two arbitrators.

A bench led by Chief Justice of India DY Chandrachud rejected the Centre's allegation of "bias" against arbitrators Michael D Kirby and Bernard Rix looking into a \$400-million cost recovery dispute involving natural gas exploration in the KG-D6 block.

Former Chief Justice of India VN Khare is the third arbitrator nominated by the government.

The top court upheld the Delhi High Court's December 9 order that accepted RIL's preliminary objections and rejected the ministry's allegations that serious distrust and justifiable doubts existed with respect to the independence and impartiality of the two foreign members of the tribunal.

The court said the government's petition is not maintainable, but it can raise the issue before the tribunal itself.

Alleging that the way the tribunal proceedings were conducted clearly showed an evident bias and harboured justifiable doubts as to the independence and impartiality of the arbitrators, senior counsel AK Ganguly, appearing for the government, argued that the HC's order had rendered the government "remediless despite the legal misconduct on the part of the two arbitrators evident on the face of the record".

Justice Chandrachud, however, told Ganguly, "It's not bias but will be an error...unless you show some element of motivated error."

Pointing out various procedural orders passed by the arbitral tribunal, Ganguly argued that "the vital question that arises is whether a party affected by such legal misconduct of the arbitrator would have no remedy at all".

The senior counsel contended that no arbitrator could decide al-



PLEA NOT MAINTAINABLE

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legations against him himself and this can be done only by the court.

"Impartiality is a fundamental criterion for a free and fair conduct of the arbitration proceedings. The fact that an arbitrator has not acted impartially is independent of his relationship, if any, which are considered to be a disqualification under the Fifth and Seventh Schedule to the (Arbitration) Act," the appeal said.

It claimed that the HC order was "not only erroneous" but also "contrary" to the scheme of the Arbitration Act and Section 14 in particular and also against various SC decisions in this regard.

Senior counsel Harish Salve, appearing for RIL and others, argued that eligibility of an arbitrator is not temporary and continues throughout the proceedings till the award is pronounced. "These points of bias are statutorily kept open," he said.

In 2002, a production sharing contract was signed between the oil ministry and the companies related to the development and production of gas from D1 to D3 gas discoveries falling in the D-6 block and marketing of gas. The dispute regarding it went to the arbitral tribunal.



अडाणी टोटल ने गुजरात में सीएनजी के दाम एक रुपए प्रति किलोग्राम बढ़ाए

अहमदाबाद (भाषा)। निजी क्षेत्र की कंपनी अडाणी टोटल गैस लिमिटेड ने गुजरात में सीएनजी के दाम एक रुपए प्रति किलोग्राम बढ़ा दिए हैं।

फेडरेशन आफ गुजरात पेट्रोलियम डीलर्स एसोसिएशन के अध्यक्ष अरविंद ठक्कर ने सोमवार को बताया कि एक रुपए प्रति किलोग्राम की वृद्धि के बाद सीएनजी की कीमत 79.34 रुपए से बढ़कर अब 80.34 रुपए प्रति किलोग्राम हो गई है। ठक्कर ने कहा कि इसके कुछ दिन पहले सार्वजनिक क्षेत्र की कंपनी गुजरात गैस ने सीएनजी के दाम में करीब 3.5 रुपए प्रति किलोग्राम की बढ़ोतरी की थी।

idows

ओएनजीसी विदेश को सखालिन-एक गैस, तेल क्षेत्र में 20 प्र. हिस्सेदारी वापस मिली

वैभव न्यूज़ नई दिल्ली

सार्वजनिक क्षेत्र की पेट्रोलियम कंपनी ऑयल एंड नैचुरल गैस कॉर्पोरेशन (ओएनजीसी) की विदेशी इकाई ओएनजीसी विदेश लिमिटेड (ओवीएल) ने रूस के सुदूर पूर्वी क्षेत्र में स्थित सखालिन-1 तेल एवं गैस क्षेत्रों में 20 प्रतिशत हिस्सेदारी फिर से हासिल कर ली है। एक अधिकारी ने सोमवार को यह जानकारी दी। रूस के राष्ट्रपति व्लादिमीर पुतिन ने अमेरिकी कंपनी एक्सॉनमोबिल की एक क्षेत्रीय अनुषंगी एक्सॉन नेफ्टेगान्ज को पिछले साल अक्टूबर में भंग कर दिया था। यह कंपनी सखालिन-1 की परिचालक थी। उन्होंने इस परियोजना



और इसकी सभी परिसंपत्तियों एवं उपकरणों को एक नए परिचालक को हस्तांतरित कर दिया था। परियोजना की पूर्व शेरधारक अन्य विदेशी कंपनियों-जापान के सोडेको गठजोड़ और ओएनजीसी विदेश से कहा गया कि परियोजना में अपनी हिस्सेदारी हासिल करने के लिए वे रूस सरकार

को आवेदन दें। एक अधिकारी ने बताया कि ओवीएल ने आवेदन दिया और उसे पहले के समान ही हिस्सेदारी वापस मिल गई है। यूक्रेन और रूस के बीच युद्ध की पृष्ठभूमि में रूस पर अंतरराष्ट्रीय पाबंदियां लगने और इसके जवाब में रूस के कदमों के चलते सखालिन-1 से उत्पादन अप्रैल, 2022 में बंद हो गया था। रूस ने परियोजना और इसका परिचालन रूस की तेल उत्पादक रोजनेफ्ट की क्षेत्रीय अनुषंगी को सौंप दिया था और अन्य विदेशी हिस्सेदारों को अपनी हिस्सेदारी फिर से पाने के लिए आवेदन देने को कहा था। सोडेको गठजोड़ को भी अपनी हिस्सेदारी वापस मिल गई है।