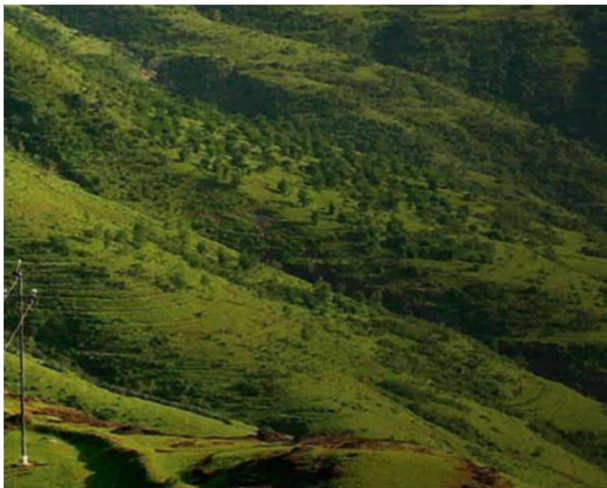


# Budget Takes Green Road To Growth

FM bets ₹35,000 crore towards India's global net zero commitment.

BY P.B. JAYAKUMAR



# P

**PANCHAMRIT** is mentioned in Indian scriptures as a holy concoction of five elements for immortality. At the UN Climate Change Conference in Glasgow (COP26) in November 2021, Prime Minister Narendra Modi set the tone for India's climate action plan for achieving net zero emission target by 2070 when he proposed a 'Panchamrit' of five goals-500 GW renewable energy capacity, 50% energy from non-fossil fuels, one billion tonne carbon emission reduction, bringing down carbon intensity of economy to 45% (all by 2030), and from there, transitioning to net zero emissions by 2070. Later, he came up with a vision for LiFE, or Lifestyle For Environment, starting a movement for adoption of an environmentally conscious lifestyle.

Finance Minister Nirmala Sitharaman set in motion the process of implementing the prime minister's sustainable growth and energy transition vision in her first Budget in 'Amrit Kaal', a vision for India's growth for next 25 years. She brought in another word from scriptures, Saptarshi (seven sages), to focus on seven priority

## KEY BUDGET ANNOUNCEMENTS



**₹35,000 crore** for priority capital investments by Ministry of Petroleum & Natural Gas for meeting net zero objectives.

**Viability** gap funding for energy storage systems with a capacity of 4,000 MWh and extension of customs duty exemptions for capital goods for making lithium-ion batteries.

**Plan to** set up 200 compressed bio-gas plants and 300 community and cluster-based biogas plants. In hydropower, a framework for pumped storage projects has been proposed.

PHOTOGRAPH BY GETTY IMAGES

**GOING GREEN**

CLEAN ENERGY CAPACITY

173<sub>GW</sub>

UNDER CONSTRUCTION

80<sub>GW</sub>

TARGET BY 2030

500<sub>GW</sub>

growth engines, one of which was green growth.

"The FY24 Budget appears to have ushered in a phase of green transition, guiding the economy towards a sustainable development pathway. By focusing on initiatives to increase energy efficiency and lower carbon intensity, it demonstrates a commitment to fostering green growth," says Satish Kumar, president & executive director, Alliance for an Energy Efficient Economy. "The increased outlay for energy transition, particularly for green hydrogen and waste-to-energy, and Pranam scheme and bio-input centres, will incentivise sustainable and regenerative agriculture practices," says Anjali Bansal, founder, Avaana Capital, a climate change fund.

The Budget has proposed several measures to push the green agenda. These include Green Credit Programme under Environment (Protection) Act; PM-Pranam for promoting alternative fertilisers and balanced use of chemical fertilisers; 500 'waste-to-wealth' plants under GOBARdhan scheme; 10,000 Bio-Input Resource Centres; help to over one crore farmers for adoption of natural farming in three years; mangrove plantations along coastlines and on salt pan lands; scheme for optimal use of wetlands; promotion of energy-efficient coastal shipping; and schemes to promote electric vehicles and scrapping of old vehicles. Experts say these assume significance in the backdrop of the country hosting G20 leaders' summit in September. India's theme for G20

is "One Earth, One Family, One Future."

"We are implementing programmes for green fuel, green energy, green farming, green mobility, green buildings and green equipment, and policies for efficient use of energy across sectors. These green growth efforts will reduce carbon intensity of economy and provide large-scale green job opportunities," she said while introducing the Budget for 2023-24. The Budget has allocated ₹10,222 crore for renewable energy sector, 48% higher than last year's ₹6,900 crore and 45.3% more than the revised estimate of ₹7,003 crore.

One of the major announcements was provision of ₹35,000 crore for priority capital investments by Ministry of Petroleum & Natural Gas for meeting net zero objectives. PSU energy compa-

nies Indian Oil, Bharat Petroleum Corporation (BPCL) and Hindustan Petroleum (HPCL) had announced their net zero targets last year. Indian Oil's target of 2046 will require an investment of ₹2 lakh crore. BPCL (investment ₹1.6 lakh crore) and HPCL (₹1 lakh crore) are targeting net zero emissions by 2040. They plan to increase biofuel sales, set up EV charging stations and develop green technologies like hydrogen. The finance minister also exempted basic customs duty on denatured ethyl alcohol to support the ethanol blending programme.

The plan to set up 200 compressed bio-gas plants and 300 community and cluster-based biogas plants also demonstrates a commitment towards building a sustainable ecosystem, says Raghunath K., country representative, Thyssenkrupp India. "Globally, India ranks fourth in installed renewable energy capacity and Budget will give a fillip to addition of capacity in areas such as wind and solar," says Anil Chaudhry, zone president, India, and CEO & MD, Schneider Electric.

The Budget has also proposed viability gap

funding for energy storage systems with a capacity of 4,000 MWh (megawatt hour) and extension of customs duty exemptions for capital goods and machinery required for making lithium-ion batteries. Development of a battery ecosystem will be important for grid stabilisation and uninterrupted power supply. India Energy Storage Alliance has estimated that annual demand for energy storage market will grow from under 10 gigawatt hour (GWh) to over 50 GWh by 2025 and over 150 GWh by 2030. As per NITI Aayog, India's battery storage market is expected to reach more than 1,000 GWh by 2030, a cumulative

INVESTMENT TARGET BY 2030

\$223<sub>BN</sub>

## POWERING WITH HYDROGEN

₹8 Lakh Cr

PROPOSED INVESTMENT BY 2030

6 Lakh

ESTIMATED JOB CREATION BY 2030

market size of \$250 billion. Of this 1,000 GWh, power sector demand alone is expected to be close to 150 GWh, translating into \$60 billion capital investment, says Sumant Sinha, chairman and CEO, ReNew Power. "For the total 1,000 GWh capacity deployment, we will need investment of \$16.5 billion in manufacturing over five-six years. This will translate into capacity of around 150 GWh per annum," says Sinha. In July 2022, government had approved the Production Linked Incentive (PLI) Scheme, National Programme on Advanced Chemistry Cell Battery Storage, for manufacturing capacity of 50 GWh. The Indian lithium-ion battery market was valued at \$1.66 billion in 2020, and is expected to reach \$4.85 billion by 2027, a CAGR of 17.23% between 2022 and 2027, says a Mordor Intelligence report.

The government also intends to build an inter-state power transmission system for evacuation and grid integration of 13 GW renewable energy from Ladakh with an investment of ₹20,700 crore, including central support of ₹8,300 crore. The plan is to develop Ladakh, which is sparsely

populated but gets good sunshine throughout the year, as a solar power hub. The potential of the region is estimated to be over 30 GW. Government intends to set up 10 GW solar fields between Spang and Zara Dho. Earlier, Solar Energy Corporation of India had floated a tender for 7.5 GW solar fields in Leh and Kargil but had to cancel it due to lack of interest from developers worried about absence of power evacuation infrastructure. Sources say Power Grid Corporation of India has completed surveys for laying transmission lines from Kaithal in Haryana to Spang in Ladakh to bring power to Delhi-NCR and from Spang to Leh to power Kashmir valley.

In hydropower, the finance minister proposed a framework for pumped storage projects. Pumped storage hydropower (PSH) involves linking two reservoirs at different elevations to generate power as water moves down from one to the other. The system requires power for pumping water back into the upper reservoir. In India, PSH potential is estimated to be 120 GW, across 120 sites. Only nine plants with installed capacity of 4.7 GW are operational while three, with capacity of 2.7 GW, are under construction. Attracting investments in PSH can discourage construction of huge dams and minimise environment damage. Also, a proposal to replace old and polluting vehicles owned by government will make scrapping centres more viable, says Manish R. Sharma, partner and leader, Capital Projects & Infrastructure, PwC India.

The Budget did not address industry demands like PLI scheme for makers of wind turbine generators.

However, the Budget did not address some major industry demands like PLI scheme for makers of wind turbine generators, devices, electrolyzers and related equipment. The industry was also demanding reduction in import duty on electrolytes and imposition of green hydrogen purchase obligations. "Wind turbine makers were expecting inclusion in PLI. Also, there are no special benefits for FDI in wind turbine manufacturing. However, the CCDC (concessional custom duty exemption certificate) benefit has been extended up to 2025, which is a bit of relief," says P.K.C. Bose, vice chairman and MD, Enercon.

In a nutshell, Budget proposals will go a long way in decarbonising the Indian economy, says Debasish Mishra, partner and leader, Energy, Resources and Industrials, Deloitte India. ■



## JOTTINGS

# India Waves the Green Flag at Energy Week



Photograph by PIB

**T**HE INDIA ENERGY WEEK, which took place between 6-8 February, was the first major energy event under India's G20 presidency to showcase India's rising prowess as an energy transition powerhouse. Energy transition has become an important component of energy security for India, where use of green fuels has received many incentives. With India having a first-mover advantage in the Green Hydrogen space, it now aspires to become a net energy exporter.

This is an ambitious stance for a nation that continues to depend heavily on fossil fuels like coal and crude oil as sources of energy and has had to take tough diplomatic stands for its energy security. Through the year-long Russia-Ukraine War, India has stuck to its stand on importing Russian oil despite veiled threats of sanctions

from the West. Union Minister of External Affairs S. Jaishankar, has at various fora, taken pot shots at the West, especially Europe, for pointing fingers at India, while persisting with its own imports of Russian natural gas. "I have a population of \$2,000 (per capita income). I also need energy, and I am not in a position to pay high prices for oil," he said recently.

India's focus on energy security was also evident at the COP26 Summit in Glasgow in 2021, when through tough last-minute negotiations, India changed an important clause in the agreement from "phasing out" use of coal to "phasing down" coal for energy generation. The emphasis now on energy transition demonstrates India's intent to move speedily toward green fuels.

— Arjun Yadav

## Essar Oil & Gas reports record revenue and profit, in Dec quarter

**NEW DELHI:** Essar Oil and Gas Exploration and Production Ltd (EOGEPL) on Monday reported record net profit and revenues for the third quarter ended December 31, 2022 after production doubled and company cut operating cost.

Net profit at Rs 97 crore in October-December was a massive 273 per cent higher than Rs 26 crore net profit in the same period a year back, the company said in a statement.

Revenue soared 54 per cent to Rs 219 crore while EBITDA almost doubled to Rs 171 crore.

Production of coal bed methane (or gas from coal seams) doubled to over 0.8 million standard cubic meters per day after commissioning of the Urja Ganga pipeline connecting its Raniganj assets to customers.

Also, elevated global gas prices was a tailwind, it said.

For the first nine months of current fiscal year, the company posted a net profit of Rs 284 crore on a revenue of Rs 696 crore. This compares with a loss of Rs 11 crore on a revenue of Rs 327 crore a year back.

EOGEPL produces over 0.8 mmscmd of gas from around 350 wells in the block.

It is taking "a systematic approach of well revival through adaptation of world-class technology and stimulation techniques including re-fracs and close monitoring to enhance gas production from the existing wells," the statement said.

"EOGEPL maintains robust

momentum to remain the leader in the unconventional space with a clear road map to double its CBM reserve base and increase production from the block to over 3 mmscmd in the coming years".

The company has roped in globally renowned service providers and technical consultants to roll out a phased growth programme. The programme includes drilling of new directional and horizontal wells, and expeditious development of the deeper CBM area of Raniganj block.

It is also working towards opening up new frontiers, one of them being shale gas exploration which will help the company consolidate its position as one of the largest unconventional hydrocarbon players in the region.

Commenting on the performance, Prashant Ruia, Director, Essar Capital and EOGEPL, said, "Essar aims to participate in India's vision of reducing carbon footprint and provide industries with alternate clean fuel at economical prices. We are committed to contribute to India's vision of becoming a gas-based economy in the next decade by ramping up its gas production".

Pankaj Kalra, chief executive officer, EOGEPL said the strong operating performance was attributable to the ramp-up in gas production and reduction in internal consumption by about 12 per cent. MPOST

# Essar Oil and Gas reports net profit of ₹97 cr in Q3

**Our Bureau**

New Delhi

Essar Oil and Gas Exploration and Production (EOGEPL), on Monday, reported a multi-fold increase in its net profit at ₹97 crore for Q3 FY23 aided by ramp-up in gas production and reduction in internal consumption.

The company reported its highest-ever quarterly revenue of ₹219 crore in Q3 FY23, with 54 per cent Y-o-Y growth. The profit after tax (PAT) increased by 273 per cent to ₹97 crore, it said in a statement.

EOGEPL Director Prashant Ruia said, "Essar aims to participate in India's vision of reducing carbon footprint and provide industries with alternate clean fuel at economical prices. We are

committed to contributing to India's vision of becoming a gas-based economy in the next decade by ramping up its gas production."

EOGEPL CEO Pankaj Kalra noted that the company delivered a strong operating performance with a ramp-up in gas production and reduction in internal consumption by around 12 per cent.

"The company continues to focus on key priorities of field upgradation and a further reduction in internal consumption, which will be acting as a holistic rationalisation of the cost, while also adding to the company's top line," he added.

EOGEPL doubled its coal bed methane (CBM) production to over 0.8 million standard cubic meters per day (mscmd) after the commissioning of the Urja Ganga Pipeline.





### Windfall tax on oil cos introduced on July 1

First imposed the windfall tax on oil companies on July 1, 2022, joining a number of countries that tax super normal profits of energy companies. It levied export duties of ₹6 per litre each on petrol and ATF, and ₹13 a litre on diesel.

Also, ₹23,250 per tonne on domestic crude production. Windfall tax was reviewed every fortnight and rates are moderated based on international oil prices

## Govt expects to mop up ₹25,000 crore from windfall gain tax this fiscal year

ENS ECONOMIC BUREAU

@ New Delhi

THE government is expecting to mop up ₹25,000 crore from windfall gain tax, or Special Additional Excise Duty (SAED) from the production of crude oil and the export of diesel, petrol, and aviation turbine fuel (ATF) in this fiscal, minister of state Rameshwar Teli told parliament.

“As per the Department of Revenue, Ministry of Finance, the data for SAED on production of crude oil is not maintained separately. The collection of SAED, for the current financial year, is estimated at the level of ₹25,000 crore from

production of crude oil, export of petrol, diesel and ATF,” said the minister in a written reply to Rajya Sabha.

The ministry first imposed the windfall tax on oil companies on July 1, 2022, joining a number of countries that tax super normal profits of energy companies. It levied export duties of ₹6 per litre each on petrol and ATF, and ₹13 a litre on diesel. Also, ₹23,250 per tonne on domestic crude production. The windfall tax was reviewed every fortnight and rates are moderated based on international oil prices.

On the ethanol blending, Teli said oil marketing companies (OMCs) have procured 80.09

crore litres of ethanol up to January 30, 2023, for blending in petrol during the Ethanol Supply Year (ESY) 2022-23 and nearly 6 crore litres of bio-diesel for blending with diesel during the financial year 2022-23. Further, 57 Bio-CNG projects including 40 under the sustainable alternative towards affordable transportation (SATAT) initiative have been commissioned till December 31, 2022.

“The blending of ethanol in petrol during the (ethanol supply year) ESY2021-22 has resulted in a saving of nearly 3073 TMT of petrol and the blending of bio-diesel in diesel during FY23 has resulted in a saving of nearly 47 TMT of diesel.



**STRENGTHENING TRADE TIES.** External Affairs Minister S Jaishankar with Foreign and Security Policy Advisor to German Chancellor Jens Plötner to discuss expanding strategic partnership and exchange views on the situation in Europe and the Indo-Pacific region, in New Delhi

## India is benefitting from price cap on Russian oil: German security advisor

**Amiti Sen**  
New Delhi

India, which has not formally endorsed the price cap on Russian seaborne crude oil imposed by the EU and other G7 nations in December 2022, is also benefitting from its dampening effect on oil prices, Germany's top foreign and security policy official Jens Plötner has said.

Plötner, who is in New Delhi ahead of German Chancellor Olaf Scholz's scheduled India-visit later this month, underlined the importance of India's voice in resolving the Russia-Ukraine conflict although Moscow was showing no "willingness" to stop the war.

### ON RUSSIAN CRUDE

Russia attacked Ukraine in February 2022 and the almost year-long war has not just caused loss of lives and property but also disrupted global supply chains.

Responding to questions on India's continued purchase of Russian crude at a media briefing on Monday, the Foreign and Security Policy Advisor to German Chancellor Scholz, indicated that it was New Delhi's decision but emphasised that the country had benefited from the price cap imposed by the EU and other Western nations on Russia.

"We are quite satisfied with the effect this (the price cap) is having. And I would argue that even countries who are not formally part of this coalition, as India is not, are actually benefitting from the effects with prices going down. So, I think this is good news that Russia is not able to earn as much money as it did in the past," Plötner said.

Plötner, who met his counterparts External Affairs Minister S Jaishankar and National Security Advisor Ajit Doval in New Delhi, said that the voice of India was very important as it was listened to in Moscow.

However, he said that mediation wouldn't help as Russia was unwilling to withdraw its troops.

### MIGRATION ISSUES

India and Russia also discussed legal migration of Indians to meet Germany's needs for workers and Plotner said that Germany was working to reduce the time for issuance of student visas.

"Now, we are aware that at the moment the waiting times are a bit too long and the embassy is working double time to reduce the length of the visa procedure," he said, adding that students should also make their study plans well in time and avoid last-minute decisions.

New fields of cooperation, including renewable energy, green hydrogen, and the adoption of green technologies by industries in both countries as part of a collaboration to counter climate change, were also discussed by the two sides.



## More money to go into new energy areas, says Thermax

GEETA NAIR  
Pune, February 13

**ENERGY AND ENVIRONMENT**  
company Thermax is entering a phase where its mix of work would change over the next couple of years with opportunities emerging in the climate and energy transition space, MD & CEO Ashish Bhandari said on Monday. More money will be going into new energy areas, he added.

Thermax created a new energy division two years ago to work on these areas. With the focus on new energy, Bhandari said, the company would be investing in new products, engineering capability and people.

Investments will be made in the green solutions business and the green solutions energy-as-a-service segment, including solar and biomass-based services. In the solar energy space, it targets to reach the 200 MW market next year and is also looking to enter the hybrid solar wind energy space soon.

In the area of bio-CNG, the company had secured orders to the tune of ₹40-50 crore with leadership in areas such as municipal waste to CNG and biomass to CNG, Bhandari said. "The company has invested around ₹400 crore in the solar and bio-CNG energy services business. These would be profitable in the long term and have an expected rate of return of around 15%," he added.

In its existing business, Thermax is seeing momentum in orders from the sugar, steel, cement, sugar, chemicals, pharma, and food and beverages sectors. Green solutions are also contributing to an increase in the order flow. The government capex push in the Budget and support to green technologies is expected to further spur the company's clean energy portfolio.

Thermax saw an increase in revenues, stabilisation of commodity prices and lower international freight costs, which enabled it to report a surge in profits and improve margins during the December quarter.

Profit after tax was up 59% o-y to ₹126 crore, revenue rose by 27% to ₹2,049 crore, and margins improved by 90 bps.

# Planning for energy transition



**ALOK KUMAR**

Secretary, ministry of power

G20 Working Group members agree any such efforts must ensure as little trade-off with Sustainable Development Goals as possible

**THE FIRST ENERGY** Transitions Working Group Meeting concluded successfully in Bengaluru on February 7, 2023. Over 110 delegates representing 18 member countries, 9 special invitee guest countries, and 15 international organisations participated in the meeting.

The India Presidency showcased its achievements in Energy Transitions and its success in providing universal energy access to clean energy to its population through various interventions by the government such as Saubhagya, Ujjwala, and Ujala schemes. India's call for managing the demand side and promoting responsible consumption through the LiFE campaign (lifestyle for environment) received full support from all the participating countries.

There was also overwhelming support from the member countries on six priority areas proposed by the Indian presidency, which included energy transition through addressing technology gaps; low-cost financing for energy transition; energy security and diversified supply chains; energy efficiency, industrial low carbon transitions, and responsible consumption; Fuels for Future: Green Hydrogen and Bio-fuels; and universal access to clean energy and just, affordable, and inclusive energy transition pathways. Enhancing efficiency and bringing down cost of electrolyzers, fuel cells, carbon capture utilisation and storage (CCUS), and advanced chemistry cells for battery storage and small modulator

nuclear reactors were identified as key areas for international collaboration. The deliberations resulted in consensus on inseparable importance of energy security in realising global energy transition. It was recognised that each country will have its own energy transition pathway based on its endowment of energy sources.

To reach a net-zero future, 90% of the world's electricity in 2050 must come from renewables, up from 29% in 2021. Global solar and wind capacities need to grow exponentially. Solar capacity alone is projected to grow 17 times between 2020 and 2050. By 2050, annual battery deployment in the power sector will have to increase to more than 300 GW globally, i.e., 51 times the battery requirement in 2021. Similarly, for green hydrogen, unprecedented growth is projected, where a compounded annual growth rate of 129% of electrolyser capacity (~850 GW) is required by 2030.

A key challenge identified was urgent need to diversify supply chains as the world ramps up building new RE generation capacities. One analysis shows that in year 2022, more than 80% manufacturing capacities of key technologies—solar PV module (~480 GW), wind (~120 GW), lithium-ion batteries (1000 GWh),

and more than 50% of electrolyzers (8GW/year) are concentrated in just three countries. In last decade, for instance, only five countries were responsible for 70% of the global trade of solar PV materials and in area of wind power, only four exporting countries made up for 80% of the total trade. The manufacturing of lithium-ion batteries is also concentrated in a few countries. Only four countries made up for 70% of the total trade. Recognising that at present, renewable energy manufacturing is highly concentrated and trade flows pose risk for energy security, the member countries highlighted the urgency to address augmenting manufacturing with a focus on local manufacturing and diversification of supply chains for key materials, critical minerals and components required for new energy systems. There was a huge support for promoting green hydrogen/ammonia as well. Some members, in addition, proposed considering the full range of low-carbon hydrogen technologies.

There were suggestions on the need to address private sector finance along with catalytic public sector finance to lower the cost of financing. Invitee countries further pointed out the need for taking the requirements of the global south

into account. They also emphasised the need for governments to give clear long-term signals to encourage investments in these technologies. Member countries recognised energy efficiency as being the "first fuel" in decarbonising economies and highlighted a range of national policies that they have adopted in this regard. These provided good insights on the building blocks for the expected outcome on proposing a roadmap for doubling global rate of improvement in energy efficiency by 2030. The importance of electrification of industry and transport as a means of driving green growth and green jobs was highlighted.

As per IEA reports, 75 million people are likely to lose access to electricity in the world during the Covid crisis due to issue of affordability. For clean cooking, where we already have 2.4 billion people without access to clean cooking technologies and fuels globally, an additional 100 million who had access to clean cooking are likely to be not able to afford it. Members agreed that any energy transition, therefore, must ensure minimum trade-offs across SDGs, leaving no one behind. While some member countries pointed out the need to also recognise natural gas as a transitional fossil fuel in meeting energy security considerations, the Group agreed that wide range of fuels for the future typically encompassing ethanol to compressed biogas to green hydrogen would play much larger role in the clean energy transition.

**We need to recognise natural gas as a transitional fossil fuel for energy security; the needs of the Global South must be taken into account**

# Reliance Industries seeks \$12.75 for CBM gas, ONGC wants \$9.35

*Reliance's e-bidding will happen on February 24, while e-auction of ONGC gas will take place on March 2*

**NEW DELHI:** Billionaire Mukesh Ambani's Reliance Industries Ltd and state-owned Oil and Natural Gas Corporation (ONGC) are separately auctioning natural gas extracted from coal seams at prices linked to Brent crude oil price.

Reliance is seeking a minimum \$12.75 per million British thermal unit for coal bed methane (CBM) from a block in Shahdol district of Madhya Pradesh, while ONGC wants \$9.35 for the same kind of fuel from North Karanpura in Jharkhand, according to tender documents.

Reliance has sought bids for sale of 0.65 million standard cubic meters per day from CBM block SP(West)-CBM-2001/1 for one year beginning April 1, 2023, the company's tender document showed.

It asked bidders to quote a variable 'v' as a percentage of dated Brent crude oil price.

Starting bid price has been kept as 15 per cent of Brent ('v' = 15 per cent). At the current Brent price of \$85 per barrel, this translates into a price of \$12.75 per mmBtu. e-bidding will happen on February 24.

ONGC has offered 0.015



mmscmd of gas from North Karanpura (NK) block in Jharkhand for 3 years. It asked bidders to quote a premium 'p' as a percentage of Brent price.

The reserve or bid start price has been kept at 11 per cent of Dated Brent price (\$9.35 per mmBtu at Brent oil price of \$85

per barrel).

Price of gas "shall be higher of the reserve gas price plus quoted premium (p) or floor price plus quoted premium (p)," ONGC said. The floor price will be \$1 per mmBtu higher than the domestic gas price (which currently is \$8.57 per mmBtu). The e-auction of ONGC gas will take place on March 2, it said.

CBM is an unconventional form of natural gas found in coal deposits or coal seams. Just like natural gas, it can be used to produce electricity and as feed-stock for fertilisers, industrial uses such as in cement produc-

tion, rolling mills, steel plants, and for methanol production. It can also be compressed into CNG for use as fuel in automobiles or piped to household kitchens for cooking.

While the government every six months fixes the price of natural gas produced from conventional fields, the pricing of gas from coal seams, called CBM, is free or market-determined.

The minimum price ONGC is seeking in the latest tender is less than what it had sought for CBM from a Bokaro block in Jharkhand last year. In June 2022, ONGC invited bids for

the sale of 0.20 mmscmd at a reserve or floor price of 14 per cent of the Dated Brent crude oil price plus \$1 per million British thermal unit, the sale tender had shown.

Bidders will have to quote a premium they are willing to offer over that reserve price. The floor price was the government-mandated price for domestic natural gas plus a \$1 per mmBtu mark-up. The "Contract Gas price shall be the higher of the 14 per cent of Dated Brent Price plus \$1 per mmBtu plus 'P' (the biddable parameter); or the floor price," it had said. PTI



# Reliance Seeks \$12.75 for CBM Gas, ONGC \$9.35

PTI

**New Delhi:** Billionaire Mukesh Ambani's Reliance Industries Ltd and state-owned Oil and Natural Gas Corporation (ONGC) are separately auctioning natural gas extracted from coal seams at prices linked to Brent crude oil price. Reliance is seeking a minimum \$12.75 per million British thermal unit for coal bed methane (CBM) from a block in Shahdol district of Madhya Pradesh, while ONGC wants \$9.35 for the same kind of fuel from North Karanpura in Jharkhand, according to tender documents.

Reliance has sought bids for sale of 0.65 million standard cubic meters per day from CBM block SP(West)-



**RIL asked bidders to quote a variable 'v' as a percentage of dated Brent crude oil price. Starting bid price has been kept as 15% of Brent**

CBM-2001/1 for one year beginning April 1, 2023, the company's tender document showed. It asked bidders to quote a variable 'v' as a percentage of dated Brent crude oil price. Starting bid price has been kept as 15% of Brent ('v' = 15 per cent). At the current Brent price of \$85 per barrel, this translates into a price of \$12.75 per mmBtu. e-bidding will happen on February 24.

ONGC has offered 0.015 mmscmd of gas from North Karanpura (NK) block in Jharkhand for 3 years. It asked bidders to quote a premium 'p' as a percentage of Brent price. The reserve or bid start price has been kept at 11% of Dated Brent price (\$9.35 per mmBtu at Brent oil price of \$85 per barrel).

Price of gas "shall be higher of the reserve gas price plus quoted premium (p) or floor price plus quoted premium (p)," ONGC said.

The floor price will be \$1 per mmBtu higher than the domestic gas price (which currently is \$8.57 per mmBtu). The e-auction of ONGC gas will take place on March 2, it said.

CBM is an unconventional form of natural gas found in coal deposits or coal seams.

## Reliance seeks \$12.75 for CBM gas, ONGC wants \$9.35

PTI ■ NEW DELHI

Billionaire Mukesh Ambani's Reliance Industries Ltd and state-owned Oil and Natural Gas Corporation (ONGC) are separately auctioning natural gas extracted from coal seams at prices linked to Brent crude oil price.

Reliance is seeking a minimum \$12.75 per million British thermal unit for coal bed methane (CBM) from a block in Shahdol district of Madhya Pradesh, while ONGC wants \$9.35 for the same kind of fuel from North Karanpura in Jharkhand, according to tender documents.

Reliance has sought bids for sale of 0.65 million standard cubic meters per day from CBM block SP(West)-CBM-2001/1 for one year beginning April 1, 2023, the company's tender document showed.

It asked bidders to quote a variable 'v' as a percentage of dated Brent crude oil price.



Starting bid price has been kept as 15 per cent of Brent ('v' = 15 per cent). At the current Brent price of \$85 per barrel, this translates into a price of \$12.75 per mmBtu. E-bidding will happen on February 24.

ONGC has offered 0.015 mmscmd of gas from North Karanpura (NK) block in Jharkhand for 3 years. It asked bidders to quote a premium 'p' as a percentage of Brent price.

The reserve or bid start price has been kept at 11 per cent of Dated Brent price (\$9.35 per mmBtu at Brent oil price of \$85 per barrel).

## Reliance seeks \$12.75 for CBM gas, ONGC wants \$9.35

---

**Press Trust of India**

New Delhi

Reliance Industries Ltd and state-owned Oil and Natural Gas Corporation (ONGC) are separately auctioning natural gas extracted from coal seams at prices linked to Brent crude oil price.

Reliance is seeking a minimum \$12.75 per million British thermal unit for coal bed methane (CBM) from a block in Shahdol district of Madhya Pradesh, while ONGC wants \$9.35 for the same kind of fuel from North Karanpura in Jharkhand, according to tender documents.

Reliance has sought bids for the sale of 0.65 million standard cubic meters per day from CBM block SP (West)-CBM-2001/1 for one year beginning April 1, 2023, the company's tender document showed.

It asked bidders to quote a variable 'v' as a percentage of dated Brent crude oil price. E-bidding will happen on February 24.

The e-auction of ONGC gas will take place on March 2, it said.



# Reliance seeks \$12.75 per unit for CBM gas, ONGC wants \$9.35

NEW DELHI, FEBRUARY 13

Billionaire Mukesh Ambani's Reliance Industries Ltd and state-owned Oil and Natural Gas Corporation (ONGC) are separately auctioning natural gas extracted from coal seams at prices linked to Brent crude oil price.

Reliance is seeking a minimum \$12.75 per million British thermal unit for coal bed methane (CBM) from a block in Shahdol district of Madhya Pradesh, while ONGC wants \$9.35 for the same kind of fuel from North Karanpura in Jharkhand, according to tender documents.

Reliance has sought bids for sale of 0.65 million standard cubic meters per day from CBM block SP(West)-CBM-2001/1 for one year beginning April 1, 2023, the company's tender document showed.

It asked bidders to quote a variable 'v' as a percentage of dated Brent crude oil price.

Starting bid price has been kept as 15% of Brent ('v' = 15 per cent). At the current Brent price of \$85 per barrel, this translates into a price of \$12.75 per mmBtu. e-bidding will happen on February 24.

ONGC has offered 0.015 mmscmd of gas from North Karanpura (NK) block in Jharkhand for 3 years. It asked bidders to quote a premium 'p' as a percentage of Brent price.

The reserve or bid start price has been kept at 11



## ON THE BLOCK

- Reliance has sought bids for sale of 0.65 million standard cubic meters per day from CBM block SP(West)-CBM-2001/1 for one year beginning April 1, 2023, the company's tender document showed
- ONGC has offered 0.015 mmscmd of gas from North Karanpura (NK) block in Jharkhand for 3 years. It asked bidders to quote a premium 'p' as a percentage of Brent price

per cent of Dated Brent price (\$9.35 per mmBtu at Brent oil price of USD 85 per barrel).

Price of gas "shall be higher of the reserve gas price plus quoted premium (p) or floor price plus quoted premium (p)," ONGC said.

The floor price will be USD 1 per mmBtu higher than the domestic gas price (which currently is USD 8.57 per mmBtu). The e-auction of ONGC gas will take place on March 2, it said.

CBM is an unconventional form of natural gas found in coal deposits or coal seams. Just like natural gas, it can be used to produce electricity. — PTI



## Reliance seeks \$12.75 for CBM gas, ONGC wants \$9.35

PRESS TRUST OF INDIA  
New Delhi, February 13

**BILLIONAIRE MUKESH AMBANI'S** Reliance Industries Ltd and state-owned Oil and Natural Gas Corporation (ONGC) are separately auctioning natural gas extracted from coal seams at prices linked to Brent crude oil price.

Reliance is seeking a minimum \$12.75 per million British thermal unit for coal bed methane (CBM) from a block in Shahdol district of Madhya Pradesh, while ONGC wants \$ 9.35 for the same kind of fuel from North Karanpura in Jharkhand, according to tender documents.

Reliance has sought bids for sale of 0.65 million standard cubic meters per day from CBM block SP(West)-CBM-2001/1 for one year beginning April 1, 2023, the company's tender document showed.

It asked bidders to quote a variable 'v' as a percentage of dated Brent crude oil price.

Starting bid price has been kept as 15% of Brent ('v' = 15 per cent). At the current Brent price of \$85 per barrel, this translates into a price of \$12.75 per mmBtu. e-bidding will happen on February 24.

ONGC has offered 0.015 mmscmd of gas from North Karanpura (NK) block in Jharkhand for three years.



## RIL, ONGC plan to auction CBM gas

**R**eliance Industries Ltd and state-owned Oil and Natural Gas Corporation (ONGC) are separately auctioning natural gas extracted from coal seams at prices linked to Brent crude oil price. Reliance is seeking a minimum \$12.75 per million British thermal unit for coal bed methane (CBM) from a block in Shahdol district of Madhya Pradesh, while ONGC wants \$9.35 for the same kind of fuel from North Karanpura in Jharkhand, according to tender documents.

Reliance has sought bids for sale of 0.65 million standard cubic meters per day from CBM block SP(West)-CBM-2001/1 for one year beginning April 1, 2023, the company's tender document showed.

Reliance Industries asked bidders to quote a variable 'v' as a percentage of dated Brent crude oil price.

Starting bid price has been kept as 15%. **PTI**



# ₹25,000 cr likely to be collected as windfall tax'

**Our Bureau**

New Delhi

The collection of Special Additional Excise Duty (SAED) for FY23 is estimated at the level of ₹25,000 crore from the production of crude oil, export of Petrol, Diesel, and Aviation Turbine Fuel (ATF)," Minister of State for Petroleum & Natural Gas Rameswar Teli said in response to a query in Rajya Sabha.

Commonly referred to as windfall tax, the SAED came into effect from July 1, 2022, is imposed on oil companies making windfall, or exceptionally high profits on account of high global crude oil prices since February-March 2022.

The Minister also informed that the standalone Profit after Tax (PAT) of the national oil companies from all activities including the sale of crude oil up to September 30, 2023, in FY23 includes ₹28,032 crore by Oil & Natural Gas Corporation (ONGC) and



₹3,276 crore by Oil India (OIL).

"The SAED for domestic crude production has been revised from ₹10,200 per tonne (from November 17 to December 1, 2022) to ₹4,900 (from December 2 to December 15) to ₹1,700 (from December 16, 2022 to January 2, 2023) to ₹2,100 (from January 3 to January 16, 2023) to ₹1,900 (from January 17 to February 3, 2023) to ₹5,050 (from February 4, 2023 till date)," Teli said.

The SAED is not applicable to entities whose annual crude oil production is less than 2 million barrels in the previous financial year, he added.

# Russia to sell 80% of oil to 'friendly' nations in 2023

## EU set to propose fresh sanctions on Moscow tech and vehicles

REUTERS

Novak, 13 February

Russia plans to sell more than 80 per cent of its oil exports to what it calls "friendly" countries in 2023, Deputy Prime Minister Alexander Novak said on Monday, referring to countries that have not sanctioned Moscow over its invasion of Ukraine.

He added that these countries would also receive 75 per cent of Russia's refined oil products, and that Moscow continued to look for new markets.

Russia has stepped up discounted sales to China and India, in particular, since it was hit by sanctions and a G7 price cap.

### EU's new plans

The European Union (EU) is set to propose a new package of sanctions to further restrict Moscow's ability to support its war machine, according to sources.

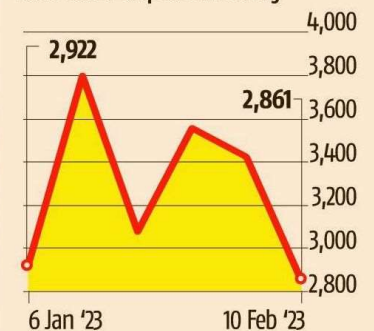
The measures will include extensive new export bans on a number of products, technologies and components that have been identified in Russian weapons deployed in Ukraine, said the sources.

EU's executive arm, the European



### FALLING FUEL EXPORTS (per barrel)

Russian total crude oil seaborne exports weekly



Source: Bloomberg

Commission, is planning to also propose export measures aimed at heavy vehicles — including trucks and machines — as well as possible import restrictions on Russian rubber and asphalt.

### EU's embargo drop Russia's exports

Russia's seaborne oil product exports fell about 10 per cent from February 1-12 from the same period in January due to the EU's

embargo, the lack of available tankers and the closure of ports due to storms, traders said and Refinitiv data showed.

Vysotsk loadings stood at 330,000 tonnes of fuel compared with 440,000 tonnes in the same period last month. St Petersburg has loaded only 50 per cent of volumes in the same period of January - 150,000 tonnes during 1-12 February, Refinitiv data showed.

## रिलायंस, ओ.एन.जी.सी. कोयला भंडार से निकली प्राकृतिक गैस की नीलामी करेंगी

नई दिल्ली, 13 फरवरी (एजेंसी): उद्योगपति मुकेश अंबानी की रिलायंस इंडस्ट्रीज और सार्वजनिक क्षेत्र की ऑयल एंड नैचुरल गैस कॉर्पोरेशन (ओ.एन.जी.सी.) कोयला भंडार यानी कोयला सीम से निकाली गई प्राकृतिक गैस की अलग-अलग नीलामी कर रही हैं। इसकी कीमत ब्रेंट क्रूड तेल कीमतों से जुड़ी है।

रिलायंस ने मध्य प्रदेश के शहडोल जिले में स्थित ब्लॉक से 'कोल बेड मिथेन' (सी.बी.एम.) के लिए



12.75 डॉलर प्रति 10 लाख ब्रिटिश थर्मल यूनिट की कीमत मांगी है। वहीं ओ.एन.जी.सी. ने झारखंड के उत्तरी कर्णपुरा से सी.बी.एम. यानी कोयले की सीमा

से निकले मिथेन गैस के 9.35 डॉलर प्रति यूनिट की दर पर बोली मांगी है।

रिलायंस के दस्तावेज के अनुसार कंपनी ने मध्य प्रदेश के सी.बी.एम. ब्लॉक से निकाली गई प्राकृतिक गैस को लेकर 6.5 लाख घन मीटर प्रतिदिन के लिए बोलियां आमंत्रित की हैं। यह बोली 1 अप्रैल, 2023 से एक साल के लिए मंगाई गई है।

वहीं ओ.एन.जी.सी. ने 15 हजार घन मीटर गैस की पेशकश की है। ओ.एन.जी.सी. के अनुसार गैस के लिए ई-नीलामी 2 मार्च को होगी।



## रिलायंस, ओएनजीसी कोयला भंडार से निकली प्राकृतिक गैस की नीलामी करेंगी

नई दिल्ली, (भाषा)। उद्योगपति मुकेश अंबानी की रिलायंस इंडस्ट्रीज और सार्वजनिक क्षेत्र की ऑयल एंड नैचुरल गैस कॉर्पोरेशन (ओएनजीसी) कोयला भंडार यानी कोयला सीम से निकाली गई प्राकृतिक गैस की अलग-अलग नीलामी कर रही है। इसकी कीमत ब्रेट क्रूड तेल कीमतों से जुड़ी है। रिलायंस ने मध्य प्रदेश के शहडोल जिले में स्थिति ब्लॉक से कोल बेड मिथेन (सीबीएम) के लिए 12.75 डॉलर प्रति 10 लाख ब्रिटिश थर्मल यूनिट की कीमत मांगी है। वहीं ओएनजीसी ने झारखंड के उत्तरी कर्णपुरा से सीबीएम यानी कोयले की सीमा से निकले मिथेन गैस के 9.35 डॉलर प्रति यूनिट की दर पर बोली मांगी है। रिलायंस के दस्तावेज के अनुसार, कंपनी ने मध्य प्रदेश के सीबीएम ब्लॉक से निकाली गई प्राकृतिक गैस को लेकर 6.5 लाख घन मीटर प्रतिदिन के लिये बोलियां आमंत्रित की है। यह बोली एक अप्रैल, 2023 से एक साल के लिये मंगाई गयी है। वहीं ओएनजीसी ने 15 हजार घन मीटर गैस की पेशकश की है। ओएनजीसी के अनुसार गैस के लिये ई-नीलामी दो मार्च को होगी। सीबीएम यानी कोल-बेड मिथेन प्राकृतिक गैस का गैर-परंपरागत स्रोत है। इसे कोयला भंडार या कोयला सीम से निकाला जाता है। प्राकृतिक गैस की तरह इसका उपयोग बिजली पैदा करने के साथ-साथ उर्वरक, सीमेंट उत्पादन, इस्पात संयंत्रों आदि में बतौर कच्चा माल किया जा सकता है। इसका उपयोग वाहन ईंधन के तौर पर सीएनजी और पाइप के जरिये घरों में पहुंचने वाली रसोई गैस के रूप में भी हो सकता है।

# रिलायंस, ओएनजीसी कोयला भंडार से निकली प्राकृतिक गैस की नीलामी करेंगी

वैभव न्यूज ■ नई दिल्ली

उद्योगपति मुकेश अंबानी की रिलायंस इंडस्ट्रीज और सार्वजनिक क्षेत्र की ऑयल एंड नैचुरल गैस कॉर्पोरेशन (ओएनजीसी) कोयला भंडार यानी कोयला सीम से निकाली गई प्राकृतिक गैस की अलग-अलग नीलामी कर रही हैं। इसकी कीमत ब्रेंट क्रूड तेल कीमतों से जुड़ी है। रिलायंस ने मध्य प्रदेश के शहडोल जिले में स्थिति ब्लॉक से कोल बेड मिथेन (सीबीएम) के लिए 12.75 डॉलर प्रति 10 लाख ब्रिटिश थर्मल यूनिट की कीमत मांगी है। उन्होंने बताया कि वहीं ओएनजीसी ने झारखंड के उत्तरी कर्णपुर से सीबीएम यानी कोयले की सीमा से निकले मिथेन गैस के 9.35 डॉलर प्रति यूनिट की दर पर बोली मांगी है। रिलायंस के दस्तावेज के अनुसार, कंपनी ने मध्य प्रदेश के सीबीएम ब्लॉक से निकाली गई



प्राकृतिक गैस को लेकर 6.5 लाख घन मीटर प्रतिदिन के लिए बोलियां आमंत्रित की हैं। यह बोली एक अप्रैल, 2023 से एक साल के लिए मंगाई गई है। उन्होंने बताया कि वहीं ओएनजीसी ने 15 हजार घन मीटर गैस की पेशकश की है। ओएनजीसी

के अनुसार गैस के लिए ई-नीलामी दो मार्च को होगी। सीबीएम यानी कोल-बेड मिथेन प्राकृतिक गैस का गैर-परंपरागत स्रोत है। इसे कोयला भंडार या कोयला सीम से निकाला जाता है। प्राकृतिक गैस की तरह इसका उपयोग बिजली पैदा करने के

साथ-साथ उर्वरक, सीमेंट उत्पादन, इस्पात संयंत्रों आदि में बतौर कच्चा माल किया जा सकता है। इसका उपयोग वाहन ईंधन के तौर पर सीएनजी और पाइप के जरिए घरों में पहुंचने वाली रसोई गैस के रूप में भी हो सकता है।