

‘Will help India step up manufacturing in green technology’

International Energy Agency (IEA) Executive Director **FATIH BIROL** tells Subhayan Chakraborty that nations are positioning themselves towards the new industrial age focused on green technologies, and that India should become a natural leader in battery, solar, and electric vehicle manufacturing. Edited excerpts:

You will meet Prime Minister Narendra Modi for a roundtable on energy on Monday. What will be the main focus of your discussions?

This is the main purpose of my visit to India this time. I will discuss with the Prime Minister and other ministers about the IEA's support to create a road map on how India can quickly

Q&A

FATIH BIROL

Executive Director of the International Energy Agency

step up manufacturing capacity for green technologies. I am also the head of the energy board of the World Economic Forum and I can tell you that there is a lot of competition among nations for positioning themselves towards the next chapter

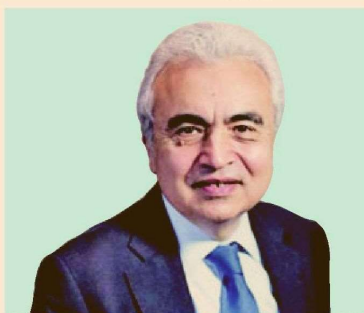
of industrial growth. Given India's strong economic fundamentals, it should be one of the leaders of this new industrial age.

What are IEA's official submissions on energy transition to India?

India has had an impressive track record in green transition. In recent years, it has provided electricity to 500 million people, which is close to the population of Europe. Another initiative which does not get much headlines but has been discussed widely by IEA colleagues is the Ujjwala scheme, which has changed the lives of women and children. It has promoted renewables by widely distributing LED lights. Now, the next step for India would be to play an important role in clean energy technology manufacturing.

Demand for renewable energy technologies have led to a meteoric rise in demand for critical minerals. How would this supply chain shape up?

China remains a major player in critical minerals refining. Unlike oil and gas, key mineral deposits are everywhere but countries have not begun to tap into their production. Mining for these minerals is now mushrooming across the world. Outside China, we are seeing this in the US, Canada, and many Asian nations. The first major international forum for critical minerals will be organised by the IEA in June. I will invite India to that meeting to discuss how to divert critical mineral



GIVEN INDIA'S STRONG FUNDAMENTALS, IT SHOULD BE ONE OF THE LEADERS OF THIS NEW INDUSTRIAL AGE"

production and refining.

You have said countries should not rely on one economy to make the green transition. Can you elaborate?

Nations are now focused on the production of new technology, such as batteries, hydrogen electrolysis, and EVs. Today, these sectors are massively dominated by one country. Seventy-five per cent of batteries, 90 per cent of solar PVs, and 80 per cent of wind equipment are manufactured in China. China has made a very good move by reducing the cost of production of these technologies, the reliance on one single supplier or one country is always risky.

India has refused to come on the Just Energy Transition Partnership discussion table as long as coal phase-out is on the agenda. How fair do you think this question is?

Coal is still a big chunk of India's energy generation. It would be unfair to ask it to stop using coal, without it being replaced by another source of electricity. India is not responsible for the climate problem we have today. When we look at carbon emissions over the past 100 years, India's share is only 3 per cent of the global total, while its population is 18 per cent of the global total. There should be a gradual reduction in coal production, but not because it is asked by other countries. It should be reduced keeping in mind the health and well-being of India's population.

More on business-standard.com

‘ONGC is looking at tie-ups with pvt cos’

We Have To Be Very Aggressive In Making Discoveries, Says Chairman A K Singh

Sanjay.Dutta@timesgroup.com

ONGC is willing to join hands with any party able to help it monetise discoveries quickly and enhance recovery in all areas, while stakes in deep-sea blocks will depend on partners bringing high-end technology and de-risking, chairman Arun Kumar Singh tells TOI. Excerpts:

ONGC has been at the receiving end for not moving fast to raise production. How do you plan to change that?

Globally, large discoveries are happening in deep-sea. Our deep-water is not well explored. We are hoping for major deep-water findings soon. We have to be very aggressive in making discoveries. So, we have to ramp up exploration and collaboration. Make decisions fast, explore more and collaborate in all the areas where there is more potential such as the deep-sea in eastern offshore. Second, since (oil) prices are good, we have to bring into production our discoveries quickly, either ourselves or through a private partner. Some may also involve foreign partners, based on commercial perspectives such as large capex or high-end technology. This has to be done in the country's interest. Third, we have to focus on how to maximise production (from existing fields) through collaboration. Globally, oil recovery is 30% or more. It is 26-27% in our case. It is only for difficult deep-water fields that technology experts can help us in the process. Essentially, you bring in anything that could add to the oil-recovery process.

Does collaboration mean offering stake in fields?

Talking about a stake in collaboration phase is a far-off question. In cases of some difficult terrains, why not? But then the party has to de-

risk us and bring capex, provided it knows better than us. The important thing is we are willing to collaborate and are looking at the 'India Energy Week' as a platform for forging relations.

Is the proposal to offer stake to private entity in Mumbai High still on the table?

Technologically, ONGC is strong in shallow waters. We know Mumbai High like the

field services into an SBU (special business unit). Is the proposal still on?

What will be the SBU's goal? SBU cannot be formed until all resources are embedded in it strategically, or else business won't run effectively. ONGC activities have multidisciplinary interdependence. All functional directors are involved in drilling of each single well. It means you are functional at the board level, but multifunctional at

“MAY INVOLVE FOREIGN PARTNERS

ON TIE-UPS | We have to ramp up exploration & collaboration...

Since (oil) prices are good, we have to bring into production our discoveries quickly, either ourselves or through a private partner. Some may also involve foreign partners... we have to focus on how to maximise production (from existing fields) through collaboration. Globally, oil recovery is 30% or more. It is 26-27% in our case...



SPECIAL BUSINESS UNIT |

SBU cannot be formed until all resources are embedded in it strategically, or else business won't run effectively. ONGC activities have multidisciplinary interdependence



GAS SUBSIDIARY |

You create a subsidiary only if you see great gains. Subsidiaries bring their own problems

— ARUN KUMAR SINGH | ONGC CHAIRMAN



back of our hands. But if a party can add value to our business (in any field), they are welcome.

There is a fear that private partners will flog the ageing fields to quickly maximising return on investment at the cost of their long-term health...

The focus is to enhance the percentage of recovery and not increasing the rate of production in one year or so. We are talking, say, over 10-15 years. ONGC has to work in the national interest, unlike others who have only commercial interests. We have to figure out ways that cater to the national interest and that is one reason we are looking at collaboration and partnerships in difficult fields.

Last year, ONGC was asked to hive off technical &

the delivery level. We need to have 100% control over all resources and functions.

Will the windfall gains tax impact ONGC's capex plan?

The additional duty has lowered our net realisation from crude and prices. But ONGC will continue to invest around Rs 30,000 crore annually in development and redevelopment of fields.

What is the status of the proposed gas subsidiary?

The Kirit Parikh committee report (on gas pricing) says explicitly that the market will get deregulated in January 2026. Our readings says that the need for a subsidiary will not exist if the government accepts the report. You create a subsidiary only if you see great gains. Subsidiaries bring their own problems.

30 The percentage by which price caps on Russian oil likely hit Moscow's revenues from oil and gas exports, from a year ago period, according to International Energy Agency (IEA) chief Fatih Birol. He said the growth in global oil demand this year will come from China and that may need the OPEC+ countries to look at their (output) policies. Reuters

As EU ban on Russian fuel kicks in, Indian refiners to tap opportunity, sustain imports

Rishi Ranjan Kala
New Delhi

Refiners are likely to continue importing higher volumes of Russian crude oil in 2023 to benefit from the EU ban on importing diesel and other refined oil products from Russia that kicks in from Sunday.

Industry sources and analysts pointed out that State-run and private refiners imported an average of 1.2 million barrels per day (mbd) of crude oil from Russia in January 2023.

"The February 5 ban on Russian petroleum products is expected to tighten markets and provide support to diesel in the coming months. There is an opportunity as the EU imported around 6,50,000 barrels per day of diesel from Russia last year. Some of this will go to China,

Crude oil imports

December 2022	
Russia	1.4 mbd*
Iraq	1 mbd
Saudi Arabia	670 kbd**
UAE	370 kbd
US	290 kbd
January 2023	
Russia	1.2 mbd
Saudi Arabia	760 kbd
Iraq	660 kbd
UAE	340 kbd
Angola	130 kbd

*mbd - million barrels per day
**kbd- thousand barrels per day
Source: Kpler

but Indian refiners also stand to gain, particularly Reliance Industries and Nayara Energy," a top official with an oil marketing company explained. The domestic refinery margins are

likely to be elevated by higher domestic consumption due to increased industrial and mining activity, stretched global inventory, particularly of diesel, and some refinery maintenance shutdowns, the official added.

NEW TRADE NARRATIVE

A senior government official said that Russia is increasingly moving towards its new major consumers, China and India. On the other hand, Europe is moving towards Middle East for crude oil and the US and India for refined oil products.

Kpler's Lead Analyst Andon Pavlov told *businessline*, "This is our base case as well. The world as a whole is generally going into a situation of tighter availability of medium and heavy crude, generally needed for conversion operations. Now that Europe is shunning away from

Russian medium crude, the next best thing for Europe would be to turn to Middle Eastern crude, which generally has comparable characteristics to Urals."

"In this sense, China and India, also operating pretty complex systems, are likely to capitalise on the discounted Russian medium crude and buy sizeable volumes. Whether this will be enough to compensate for the totality of European crude exports for the Russian budget remains an open question. For now, it seems that a lot of players are in a 'wait and see' mode of operations, with the upside to Russian buying clearly visible further down the line due to the above-mentioned factors," he added.



Centre hikes windfall tax on oil again

MADHUSUDAN SAHOO
NEW DELHI, FEB. 5

In line with international crude oil prices, the Centre has raised the windfall profit tax levied on domestically-produced crude oil as well as on the export of diesel and aviation turbine fuel (ATF).

As of today, the new tax or windfall tax has become seven-month-old and the levy is expected to continue for now onwards as global oil prices are up again. The new revised tax rates came into effect from February 4, the government said.

According to an official order issued on late Saturday evening, the levy on crude oil produced by companies such as Oil and Natural Gas Corporation (ONGC) has been hiked to ₹5,050 per tonne from ₹1,900 per tonne. "Besides, the Centre has also raised the tax on export of diesel to ₹7.5 per litre from ₹5, and the same on overseas shipments of ATF to ₹6 a litre from ₹3.5 a litre," the order said.

Generally, the crude oil pumped out of the ground and from below the seabed is refined and converted into fuels such as petrol, diesel and ATF.

The government imposes tax on windfall profits made by oil producers on any price they get above a threshold of \$75 per barrel. And the levy on fuel exports is based on cracks or margins that refiners earn on overseas shipments. These margins are primarily a difference

● ON JULY 1 last year, India imposed its first windfall profit taxes, joining a growing number of nations that tax super normal profits of energy companies. The levy on crude oil producers has been hiked to ₹5,050 per tonne from ₹1,900 per tonne.

between the international oil price realised and the cost involved therein.

However, top officials said that the windfall profit tax on domestically produced crude oil and export of fuel will continue and is expected to give about ₹25,000 crore in the current fiscal ending 31 March, 2023. "The levy on both domestic crude oil and fuel exports is now off the lows it had hit last month," they said.

It is also expected that the windfall tax will impact many big oil producers, including RIL as it is the primary exporters of fuel in the country. It operates the world's largest single-location oil refinery complex at Jamnagar in Gujarat and Rosneft-backed Nayara Energy as well.

The tax rates are generally reviewed every fortnight, based on average oil prices in the previous two weeks of a month. The last tax rates were cut at its fortnight review on January 17, following softening in global oil prices. Thereafter, oil prices have firmed, necessitating the hike of a windfall tax.

Centre likely to build strategic gas reserve via JV or PPP deal

Rituraj Baruah & Subhash Narayan

rituraj.baruah@livemint.com

NEW DELHI: India's planned strategic gas reserve may come up as a joint venture of public sector companies or as a public-private partnership (PPP), two people familiar with the discussions said.

The reserve may be set up as a separate entity on the lines of the Indian Strategic Petroleum Reserve Ltd (ISPRL), which can store 5.33 million tonnes of crude oil at its underground facilities at Visakhapatnam, Mangaluru and Padur. Talks for a strategic gas reserve have gained momentum after the Russian invasion of Ukraine last year snapped supplies and drove up prices.

"It may be given to a public sector unit in the E&P (exploration and production) space to manage, which may form a joint venture. Public-private partnership is also being looked at," one of the two people cited above said on the condition of anonymity.

Exhausted oil wells may be used as reserves to store liquified natural gas (LNG), or entirely new LNG infrastructure may be constructed, the second person added.

New infrastructure would include more LNG terminals and large underground salt caverns.

"Either we can create a new LNG facility for storing the gas or use exhausted gas wells,

where production has been stopped. But the problem with those wells is that there is a loss of efficiency. Only about 60% of the gas-filled into the well is recovered at the most," the second person said.

Several countries have built gas storage systems to ensure supply security. The US accounts for nearly a third of global gas storage, while Russia, Ukraine, Canada and Germany together account for another major portion. China also has gas storage facilities.

Queries sent to a spokesperson for the Union petroleum ministry remained unanswered till press time.

India is likely to see a few more terminals come up, and locations around Haldia and Paradip ports on the east coast, among others, are being considered, the second person added. Currently, India has five LNG terminals at Dahej, Hazira, Dabhol, Kochi and Ennore. A floating LNG terminal is also coming up at Jaigarh in Maharashtra. The Kochi LNG terminal is yet to be connected to others through the national gas grid, and once connected, that would also boost LNG supplies across the country, the person added.

Developing a strategic LNG reserve would take several years, and gas companies would also wait for international prices to cool before filling these reserves. Indian companies have long-term LNG contracts amounting to 22 million tonnes per annum.

Centre likely to build strategic gas reserve via JV or PPP deal

Rituraj Baruah & Subhash Narayan

rituraj.baruah@livemint.com

NEW DELHI: India's planned strategic gas reserve may come up as a joint venture of public sector companies or as a public-private partnership (PPP), two people familiar with the discussions said.

The reserve may be set up as a separate entity on the lines of the Indian Strategic Petroleum Reserve Ltd (ISPRL), which can store 5.33 million tonnes of crude oil at its underground facilities at Visakhapatnam, Mangaluru and Padur. Talks for a strategic gas reserve have gained momentum after the Russian invasion of Ukraine last year snapped supplies and drove up prices.

"It may be given to a public sector unit in the E&P (exploration and production) space to manage, which may form a joint venture. Public-private partnership is also being looked at," one of the two people cited above said on the condition of anonymity.

Exhausted oil wells may be used as reserves to store liquified natural gas (LNG), or entirely new LNG infrastructure may be constructed, the second person added.

New infrastructure would include more LNG terminals and large underground salt caverns.

"Either we can create a new LNG facility for storing the gas or use exhausted gas wells,

where production has been stopped. But the problem with those wells is that there is a loss of efficiency. Only about 60% of the gas-filled into the well is recovered at the most," the second person said.

Several countries have built gas storage systems to ensure supply security. The US accounts for nearly a third of global gas storage, while Russia, Ukraine, Canada and Germany together account for another major portion. China also has gas storage facilities.

Queries sent to a spokesperson for the Union petroleum ministry remained unanswered till press time.

India is likely to see a few more terminals come up, and locations around Haldia and Paradip ports on the east coast, among others, are being considered, the second person added. Currently, India has five LNG terminals at Dahej, Hazira, Dabhol, Kochi and Ennore. A floating LNG terminal is also coming up at Jaigarh in Maharashtra. The Kochi LNG terminal is yet to be connected to others through the national gas grid, and once connected, that would also boost LNG supplies across the country, the person added.

Developing a strategic LNG reserve would take several years, and gas companies would also wait for international prices to cool before filling these reserves. Indian companies have long-term LNG contracts amounting to 22 million tonnes per annum.

Centre may build strategic gas reserve via JV or PPP deal

Rituraj Baruah & Subhash Narayan

NEW DELHI

India's planned strategic gas reserve may come up as a joint venture of public sector companies or as a public-private partnership (PPP), two people familiar with the discussions said.

The reserve may be set up as a separate entity on the lines of the Indian Strategic Petroleum Reserve Ltd (ISPRL), which can store 5.33 million tonnes of crude oil at its underground facilities at Visakhapatnam, Mangaluru and Padur. Talks for a strategic gas reserve have gained momentum after the Russian invasion of Ukraine last year snapped supplies and drove up prices.

"It may be given to a public sector unit in the E&P (exploration and production) space to manage, which may form a joint venture. Public-private partnership is also being looked at," one of the two people cited above said on the condition of anonymity.

Exhausted oil wells may be used as reserves to store liquefied natural gas (LNG), or entirely new LNG infrastructure may be constructed, the second person added. New

TURN TO PAGE 6

Changed geo-politics making India more central to a global oil route

Bloomberg

feedback@livemint.com

India is playing an increasingly important role in global oil markets, buying more and more cheap Russian oil and refining it into fuel for Europe and the US.

Yet New Delhi has faced little public blowback because it's meeting the West's twin goals of crimping Moscow's energy revenue while preventing an oil supply shock.

And as Europe ramps up sanctions, India is only going to become more central to a global oil map that's been redrawn by Vladimir Putin's

year-long war in Ukraine.

"US treasury officials have two main goals: keep the market well supplied, and deprive Russia of oil revenue," said Ben Cahill, a senior fellow with the Centre for Strategic and International Studies, a Washington think tank.

"They are aware that Indian and Chinese refiners can earn bigger margins by buying discounted Russian crude and exporting products at market prices. They're fine with that."

India shipped about 89,000 barrels a day of petrol and diesel to New York last month, the most in nearly four years, according to data intelligence



India shipped about 89,000 barrels a day of petrol and diesel to New York last month.

firm Kpler.

Daily low-sulphur diesel flows to Europe were at 172,000 barrels in January, the most since October 2021.

The Asian nation's importance is expected to expand after fresh European Union sanctions on Russian petroleum exports take effect on

Sunday.

The ban will remove a huge volume of diesel from the market and see more consumers, especially in Europe, tap Asia to fill the supply gap.

That will make cheap Russian oil even more attractive to India, which relies on imports to meet around 85% of its crude needs.

The nation's refiners, including state-run processors that are responsible for meeting domestic demand, ramped up exports last year in order to profit from higher international prices.

"India is a net exporter of refined product and much of

this will be going to the West to help ease current tightness," said Warren Patterson, Singapore-based head of commodities strategy at ING Groep NV. "It's pretty clear that a growing share of the feedstock used for this product originates from Russia."

Under EU guidelines, India is likely operating within the rules.

When Russian crude is processed into fuels in a country outside of the bloc such as India, the refined products can be delivered into the EU because they're not deemed to be of Russian origin.

The Group of Seven nations

are keen to cut Moscow's revenue as much as possible, but they also have an interest in ensuring that Russia's oil and refined products continue to flow to avoid a global supply crunch, said Serena Huang, lead Asia analyst at Vortexa Ltd.

A key facet of the mechanism to crimp revenues to the Kremlin and keep some oil on the market has been a price cap on Russian crude, a measure that was spearheaded by the US. India hasn't publicly said if the nation does or doesn't adhere to the limit, but sanctions have driven oil from the OPEC+ producer below the \$60 a barrel cap.

Europe slaps ban on Russia diesel, other oil products

Price caps hit Russia's export revenue by about \$8 billion in January: IEA

AGENCIES

5 February

Europe imposed a ban Sunday on Russian diesel fuel and other refined oil products, slashing energy dependency on Moscow and seeking to further crimp the Kremlin's fossil fuel earnings as punishment for invading Ukraine.

The ban comes along with a price cap agreed by the Group of Seven allied democracies. International Energy Agency (IEA) chief, Fatih Birol, on Sunday said: Price caps on Russian oil likely hit Moscow's revenues from oil and gas exports by nearly 30 per cent in January, or about \$8 billion, from a year ago period.

He said the growth in oil demand this year will come from China and that may need the OPEC+ countries to look at their policies.

The goal is allowing Russian diesel to keep flowing

to countries like China and India and avoiding a sudden price rise that would hurt consumers worldwide, while reducing the profits funding Moscow's budget and war.

Diesel is key for the economy because it is used to power cars, trucks carrying goods, farm equipment and factory machinery.

Diesel prices have been elevated due to recovering demand after the Covid-19 pandemic and limits on refining capacity, contributing to inflation for other goods worldwide.

The new sanctions create uncertainty about prices as the 27-nation European Union finds new supplies of diesel from the US, Middle East and India to replace those from Russia, which at one point delivered 10 per cent of Europe's total diesel needs.

Those are longer journeys than from Russia's ports, stretching available tankers.

G20 Presidency: Weaving Inclusive Growth and Universal Togetherness



Alok Kumar
Power Secretary

The central theme of India's G20 presidency – *Vasudhaiva Kutumbakam* – affirms the value of all living beings – human, animal, plant and microorganisms – and the interconnectedness on planet Earth. In the words of Prime Minister Narendra Modi, India's G20 presidency will strive to foster this universal togetherness and hence the motto "One Earth, One Family, One Future".

The opportunity to lead G20 comes at a time when existential threats are escalating and there is an urgency to find sustainable solutions. Addressing the climate change issue is a top priority for India's presidency, with an emphasis on just energy transitions for the developing countries by supporting them through climate financing and technology.

To derive meaningful and sustainable solutions for the world, it is imperative to give voice to Global South as well, highlighting their aspirations and issues.

The challenges facing the world today in the energy sector are manifold – from access, security and affordability to the global issue of climate change. It is important to look at these issues holistically.

India, on its part, is deeply committed to a low-carbon development strategy. Its energy generation mix is rapidly shifting towards an increasing share of renewable energy. Today, India is the world's third largest producer of renewable energy, with 42.25% of installed power capacity from non-fossil fuel sources.

We are also the fourth largest in terms of installed capacity and one of the fastest-

growing renewable energy destinations in the world. India recorded one of the fastest levels of growth (70%) globally in renewable capacity in 2021 with investments in renewables touching \$11.3 billion in that year alone. The emissions intensity of India's GDP has also gone down by 28% from 2005 levels.

India is taking rapid strides in finding a sustainable solution to issues pertaining to climate change. This follows PM's commitment at Glasgow Summit in 2021 to reduce total projected carbon emissions by 1 billion tonnes till 2030. In the CCPI Index (Climate Change Performance Index), India has been ranked among top-performing large countries.

It is projected that our energy demand will more than double by 2040. With this, comes the responsibility of sustainably producing power, reducing carbon emissions, energy conservation and mitigating climate change.

The Saubhagya scheme achieved universal electricity in record time by the end of 2019, with a total of 28.6 million households electrified.

Energy efficiency has received high priority in India. Schemes like UJALA (Unnat Jyoti by Affordable LEDs for All), launched in 2015, aimed at providing LED bulbs to consumers with a target to replace 770 million incandescent bulbs with LED bulbs, making it the largest LED distribution program in the world. The program targets energy efficiency in lighting as it offers enormous opportunity to save energy.

Another hugely successful scheme is Ujjwala – providing LPG connections to families and households. The scheme has particularly been empowering for women, reducing their drudgery, and the time spent in the kitchen and overall improving their health.

Under Energy Conservation Act, we also launched PAT (Program, Achieve and Trade) scheme aimed at reducing specific energy consumption (SEC) i.e., energy

use per unit of production for designated consumers (DCs) in energy-intensive sectors, with an associated market mechanism to enhance the cost effectiveness through certification of excess energy saving which can be traded.

The excess energy savings are converted into tradable instruments called Energy Saving Certificates (ESCs) that are traded at the power exchanges.

Recently, Parliament passed the Energy Conservation (Amendment) Bill, 2022. The Bill promotes energy efficiency and conservation and stipulates that designated consumers can be obligated to meet a proportion of their energy or feedstock needs from non-fossil sources. The Energy Conservation Code for buildings will now apply to large offices and residential buildings with a connected load of 100 kilowatt or above. The Act also now includes provisions for putting in place a carbon market. Carbon credit will be used on priority within the country to meet our NDCs.

India has gradually decoupled economic growth from greenhouse gas emissions. To support these continuing initiatives, India recently launched the National Hydrogen Mission with the objective to make India the world's largest hydrogen hub.

India pledged a 40% share of power generation from non-fossil fuel sources at COP-21 in Paris in 2015. We achieved this goal in 2021, way ahead of 2030 timeline.

The country's vision is to reach net zero emissions by 2070. In the short term, the aim is to increase non-fossil electricity generation capacity to 500 GW by 2030.

At the G20 presidency, India has planned to focus on areas that have the potential to bring about a new approach to a sustainable lifestyle. We look forward to demonstrating our belief in a human-centered approach to technology and in promoting greater knowledge sharing in priority areas such as digital public infrastructure, financial inclusion, and technology-enabled development in sectors from agriculture to education. We earnestly wish to use the G20 forum to highlight inclusive growth and development.



Kumari.Rajnigandha
@timesgroup.com

In its first year under India's G20 presidency, India Energy Week, organised by the Ministry of Petroleum & Natural Gas, supported by FIPI and managed by DMG events, is slated to be held in Bengaluru from February 6 to 8, 2023. The event will take place at the Bangalore International Exhibition Centre (BIEC).

Global minds meet at IEW

India Energy Week (IEW) offers a platform to world leaders and experts to deliberate on finding better energy solutions

EXHIBITIONS AND CONFERENCES

This event comes at a crucial time when energy security and environmental sustainability

have been impacting long-term energy transition. Deliberations between global policymakers and energy leaders shall take place during the event. Keeping

in mind India's increasingly growing energy demands, discussions shall also take place on the measures that can be undertaken to tackle the energy needs

of the country in a sustainable manner. Moreover, the event will witness more than 30,000 global energy leaders, 8000 conference delegates, 1000

exhibitors, and 500 eminent speakers from across the world.

NET-ZERO EMISSIONS

India has stepped up its game to secure energy and power by investing in three major areas, which include infrastructure, exploration and production. India Energy Week will prove to be an indispensable platform for the decision-makers to create synergies between stakeholders and find growth



“India Energy Week is important for global growth, as it is the world's fastest growing economy. We must not promote any restrictions on the supply of energy and stability in the energy market should be ensured. India is committed to clean energy and environment.”

— Narendra Modi,
Prime Minister of India

“India Energy Week will enable all of us to get together to innovate and devise solutions to solve the global energy trilemma of security, affordability and availability as well as devise solutions for the future global energy transition.”

— Hardeep Singh Puri,
Minister of Petroleum and Natural Gas and Housing and Urban Affairs

prospects. In the next two decades, our country's energy demand is estimated to rise exponentially owing to the fact that ours is a rapidly growing economy.

While we continue to ride on our growing economy to create novel opportunities for our people as well as the global value chain, the aim is to tread ahead sustainably. India is slowly and steadily inching towards becoming a gas-based economy. It also aims towards achieving its ambitious goal of net-zero emissions by the year 2070. Progress in this direction has already been made as \$60 billion worth of investments is being utilised in establishing the required infrastructure including pipelines, terminals, regasification facilities, etc. Some of the major themes of the event include making energy

accessible, secure, and affordable for all, and making way for net-zero emissions. The event is also expected to address some of the key concerns and challenges that lie in the way of energy transition.

INDIA ENERGY WEEK CURTAIN RAISER

Last year on December 16, a curtain raiser event took place at Bangalore Palace in Bengaluru. Minister of Petroleum and Natural Gas and Housing & Urban Affairs, Hardeep Singh Puri, inaugurated the event. Attendees of the curtain raiser event included representatives of global energy majors, corporate maestros from Karnataka including energy, IT, financial companies, members of the international diplomatic community, etc.

Government hikes windfall tax on crude oil, export of diesel, ATF

Press Trust of India

New Delhi

The government has hiked windfall profit tax on domestically-produced crude oil as well as on the export of diesel and ATF in line with firming international oil prices, according to an official order.

The levy on crude oil produced by companies such as Oil and Natural Gas Corporation (ONGC) has been increased to ₹5,050 per tonne from ₹1,900, the order dated February 3, said.

The government has also hiked the tax on export of diesel to ₹7.5 per litre from ₹5, and the same on overseas shipments of ATF to ₹6 from ₹3.5.

The new tax rates came into effect from February 4.

The levy on both domestic crude oil and fuel exports is now off the lows it had hit last month. Tax rates were cut at the last fortnightly review on January 17, following soften-

ing in global oil prices. International oil prices have since then firmed.

India first imposed windfall profit taxes on July 1, joining a growing number of nations that tax super normal profits of energy companies. At that time, export duties of ₹6 per litre (\$12 per barrel) each were levied on petrol and ATF and ₹13 a litre (\$26 a barrel) on diesel.

A ₹23,250 per tonne (\$40 per barrel) windfall profit tax on domestic crude production was also levied.

PRIMARY EXPORTERS

The export tax on petrol was scrapped in the very first review. The tax rates are reviewed every fortnight based on average oil prices in the previous two weeks.

Reliance Industries, which operates the world's largest single-location oil refinery complex at Jamnagar in Gujarat, and Rosneft-backed Na-

yara Energy are primary exporters of fuel. The government levies tax on windfall profits made by oil producers on any price they get above a threshold of \$75 per barrel.

The levy on fuel exports is based on cracks or margins that refiners earn on overseas shipments. These margins are primarily a difference between the international oil price realised and the cost.

TO ADVERTISE PLEASE CONTACT

Chennai : 044 - 28575711

Coimbatore : 0422 - 2212572

Madurai : 0452 - 2528497

Trichy : 0431 - 2302801

Puducherry : 0413 - 2224111

businessline®



Govt hikes windfall tax on crude oil, export of diesel, ATF

PTI ■ NEW DELHI

The Government has hiked windfall profit tax levied on domestically-produced crude oil as well as on the export of diesel and ATF, in line with firming international oil prices, according to an official order.

The levy on crude oil produced by companies such as Oil and Natural Gas Corporation (ONGC) has been increased to ₹5,050 per tonne from ₹1,900 per tonne, the order dated February 3, said.

Crude oil pumped out of the ground and from below the seabed is refined and converted into fuels like petrol, diesel and aviation turbine fuel (ATF).

The Government has also hiked the tax on export of diesel to ₹7.5 per litre from ₹5, and the same on overseas shipments of ATF to ₹6 a litre from ₹3.5 a litre.

NEW TAX RATES CAME INTO EFFECT ON FEBRUARY 4

Govt hikes windfall tax on crude oil, export of diesel, ATF



MPOST BUREAU

NEW DELHI: The government has hiked windfall profit tax levied on domestically produced crude oil as well as on the export of diesel and ATF, in line with firming international oil prices, according to an official order.

The levy on crude oil produced by companies such as Oil and Natural Gas Corporation (ONGC) has been increased to Rs 5,050 per tonne from Rs 1,900 per tonne, the order dated February 3, he said.

Crude oil pumped out of the ground and from below the seabed is refined and converted into fuels like petrol, diesel and aviation turbine fuel (ATF).

The government has also hiked the tax on the export of diesel to Rs 7.5 per litre from Rs 5, and the same on overseas shipments of ATF to Rs 6 a litre from Rs 3.5 a litre.

The new tax rates came into effect from February 4. The levy on both domestic crude oil and fuel exports is now off the lows it hit last month.

Turn to P4

ATF

Tax rates were cut at the last fortnightly review on January 17, following softening in global oil prices. International oil prices have since then firmed, necessitating the hike of a windfall tax.

India first imposed windfall profit taxes on July 1, joining a growing number of nations that tax super normal profits of energy companies. At that time, export duties of Rs 6 per litre (USD 12 per barrel) each were levied on petrol and ATF and Rs 13 a litre (USD 26 a barrel) on diesel.

A Rs 23,250 per tonne (USD 40 per barrel) windfall profit tax on domestic crude production was also levied.

The export tax on petrol was scrapped in the very first review.

The tax rates are reviewed every fortnight based on average oil prices in the previous two weeks.

Reliance Industries Ltd, which operates the world's largest single-location oil refinery complex at Jamnagar in Gujarat, and Rosneft-backed Nayara Energy are primary exporters of fuel in the country.

The government levies tax on windfall profits made by oil producers on any price they get above a threshold of USD 75 per barrel.

The levy on fuel exports is based on cracks or margins

that refiners earn on overseas shipments. These margins are primarily a difference between the international oil price realised and the cost.

Govt hikes windfall tax on crude, diesel, ATF

Tax rates were cut at the last review. Since then, global oil prices have firmed up, necessitating the hike

PTI / New Delhi

The government has hiked windfall profit tax levied on domestically-produced crude oil as well as on the export of diesel and ATF, in line with firming international oil prices, according to an official order.

The levy on crude oil produced by companies such as Oil and Natural Gas Corporation (ONGC) has been increased to Rs 5,050 per tonne from Rs 1,900 per tonne, the order dated February 3, said.

Crude oil pumped out of the ground and from below the seabed is refined and converted into fuels like petrol, diesel and aviation turbine fuel (ATF).

The government has also hiked the tax on export of diesel to Rs 7.5 per litre from Rs 5, and the same on overseas shipments of ATF to Rs 6 a litre from Rs 3.5 a litre. The new tax rates came into effect from February 4.

The levy on both domestic



crude oil and fuel exports is now off the lows it had hit last month.

Tax rates were cut at the last fortnightly review on January 17, following softening in global oil prices. International oil prices have since then firmed, necessitating the hike of a windfall tax.

India first imposed windfall profit taxes on July 1, joining a growing number of nations that tax super normal profits of energy companies. At that time, export duties of Rs 6 per litre (USD 12 per barrel) each were levied on petrol and ATF and Rs 13 a litre (USD 26 a barrel) on diesel.

A Rs 23,250 per tonne windfall profit tax on domestic crude production was also levied.



Green growth push

New initiatives have long-term potential

“Green growth” has been listed among the seven priorities of the Budget for 2023-24. This is a welcome move, considering that acceleration in economic development is as vital as ensuring energy security and meeting climate-action goals. These objectives, obviously, are hard to meet without transition to clean and renewable energy and improvement in energy-use efficiency in all sectors — industry, agriculture, services, transportation, buildings, equipment, and others. Fortunately, the Budget seems to make an earnest bid to take care of most of these imperatives, aiming ultimately to foster an environmentally conscious lifestyle.

The strategies outlined for this purpose aim at incentivising the use of green hydrogen and biofuels; conserving natural ecological safeguards like mangroves and wetlands; introducing concepts like green credit; and striving for an appreciable reduction in sources of pollution through measures like replacing polluting vehicles with non-polluting ones and chemical fertilisers with organic manures. While the immediate goal, evidently, is to slash the emission intensity of the economy by 45 per cent over that in 2005, and meeting 50 per cent of the energy requirement from non-fossil sources of fuels by 2030, the longer-term objective is to move towards the net zero-emission economy by 2070.

Interestingly, many of the programmes mooted in the Budget for this purpose have been assigned aptly coined vernacular epithets, as is this government's wont. These include the likes of GOBARDhan (galvanising organic bio-agro resources dhan), MISHTI (mangrove initiative for shoreline habitats and tangible incomes), Amrit Dharohar (for preserving wetlands and other vital biodiversity-sustaining ecosystems), and PM-PRANAM (PM programme for restoration, awareness, nourishment and amelioration of mother earth). A good deal of emphasis has rightly been laid on the development and use of novel sources of clean energy by setting apart a sizeable sum of ₹35,000 crore for it. The bulk of this Energy Transition Fund would be at the disposal of the oil-marketing companies to enable them switch to new and renewable sources of energy. Though the detailed guidelines for the utilisation of this fund are yet to be framed, the indications are that this would be invested largely in promoting green hydrogen and biofuels and providing charging facilities at fuel outlets. The setting up of a National Green Hydrogen Mission was announced last month to create a hydrogen production capacity of at least 5 MMT (million metric tonnes) per annum with an associated renewable energy capacity addition of 125 Giga watts. This mission, with an allocation of ₹19,700 crore, is expected to make India a net exporter of green hydrogen.

Although the government's green initiatives would entail heavy expenses, these would be paid back sooner rather than later. In fact, going by the experience in the solar-energy sector, the payback time in the case of alternative sources of energy is rapidly shrinking, thanks to the constant inflow of cost-effective and more efficient technologies. Significantly, the Budget also envisages a green credit system to meet the financial needs of the transition to green energy. Going a step further, adequate funds have been provided for the development of battery-storage systems with a capacity of 4,000 MWh, as also for the evacuation and inter-state transmission of non-conventional energy. On the whole, the Budget's green push, per se challenging, has the potential to pay lasting dividends.

● OIL'S NEW MAP

How India turns Russia crude into West's fuel

YONGCHANG CHIN &
RAKESH SHARMA
February 5

INDIA IS PLAYING an increasingly important role in global oil markets, buying more and more cheap Russian oil and refining it into fuel for Europe and the US.

Yet New Delhi has faced little public blowback because it's meeting the West's twin goals of crimping Moscow's energy revenue while preventing an oil supply shock. And as Europe ramps up sanctions, India is only going to become more central to a global oil map that's been redrawn by Vladimir Putin's year-long war in Ukraine. "US treasury officials have two main goals: keep the market well supplied, and deprive Russia of oil revenue," said Ben Cahill, a senior fellow with the Center for Strategic and International Studies, a Washington think-tank.

"They are aware that Indian and Chinese refiners can earn bigger margins by buying discounted Russian crude and exporting products at market prices. They're fine with that." India shipped about 89,000 barrels a day of gasoline and diesel to New York last month, the most in nearly four years, according to data intelligence firm Kpler. Daily low-sulfur diesel flows to Europe were at 172,000 barrels in January, the most since October 2021. India's importance is expected to expand after fresh European Union sanctions on Russian petroleum exports take effect on Sunday.

The ban will remove a huge volume of diesel from the market and see more consumers, especially in Europe, tap Asia to



fill the supply gap. That will make cheap Russian oil even more attractive to India, which relies on imports to meet around 85% of its crude needs. The nation's refiners, including state-run processors that are responsible for meeting domestic demand, ramped up exports last year in order to profit from higher international prices.

"It's pretty clear that a growing share of the feedstock used for this product originates from Russia." Under EU guidelines, India is likely operating within the rules. When Russian crude is processed into fuels in a country outside of the bloc such as India, the refined products can be delivered into the EU because they're not deemed to be of Russian origin.

The Group of Seven nations are keen to cut Moscow's revenue as much as possible, but they also have an interest in ensuring that Russia's oil and refined products continue to flow to avoid a global supply crunch, said Serena Huang, lead Asia analyst at Vortexa Ltd.

— BLOOMBERG



India moving towards gas-based economy

The consumption of natural gas in India is expected to grow by 25 billion cubic meters. To meet the rising demand, the government aims to boost the share of natural gas in its primary energy from 6 per cent to 15 per cent by 2030



Vibha Singh

The Indian economy at present is believed to have established itself on a healthy growth path and this would increase the energy consumption in the country as the growth catches pace. This increase in consumption is expected to be supplemented by an alteration in the primary energy mix of India on account of the substitution of oil by natural gas. The transport sector, which is considered to be one of the biggest CO₂ emitters, stands to benefit from the higher penetration of natural gas in India.

According to the India Brand Equity Foundation (IBEF) report on the oil and gas industry, the consumption of natural gas in India is expected to grow by 25 billion cubic meters (BCM). As a result, to keep pace with the changes, the Indian government announced that it plans to increase its share of gas consumption, and transform the country into a "gas-based economy". There are increasing investment opportunities for business entrepreneurs under the Make in India campaign.

In the coming years, the demand for natural gas consumption is expected to grow aided by rising industrial usage and as more households switch to gaseous fuel for cooking and transportation. This is keeping in line with the United Nation's sustainable development goal as natural gas is believed to offer a solution to ensure modern and clean energy is accessible at an affordable price in India.



KEY POINTS

>> India is divided into six major regional natural gas markets namely Northern, Western, Central, Southern, Eastern and North-Eastern market, out of which the western and northern markets currently have the highest consumption due to better pipeline connectivity

>> The demand for natural gas in India has increased significantly due to its higher availability, development of transmission and distribution infrastructure

>> Energy availability is key to economic growth and therefore, going forward high economic growth would lead to increase in the energy consumption of the country



FOCUS AREAS

The government plans for expansion of natural gas supply in the country with the help of additional regasified liquefied natural gas (RLNG)

At present, liquefied natural gas (LNG) supply is forging ahead on both coasts with six operational LNG terminals with a total capacity of 42.7 MMTPA

terminals, nationwide transmission pipeline network, and transnational pipelines are expected to materialise by 2025. The other focus area has been 'One Nation One Gas Grid' under which a total

2027. As on 30 September 2022, 221 geographical areas have been operationalised for the supply of CNG.

Even industrial gases have become important in the past few years and they are an important part of the manufacturing and industrial sectors. Most of the domestic companies are working on the dynamics that are offered by international markets in an effort to accelerate production since they have aspirations to go global. The demand for oxygen gas has also increased as a result of COVID-19.

INCREASING DEMAND

Due to its higher availability, and the development of transmission and distribution infrastructure, the environment-friendly characteristics of natural gas as a fuel has increased the demand for natural gas. Nitesh Chavan, a



PICS: ISTOCK

of 22,306 km of the natural gas pipeline is operational and about 13,029 km are under construction as on June 2022, as part of the gas grid. At present, the government's target is to increase the pipeline coverage by 54 per cent to 34,500 km by 2024-25. The plan is to connect all the states by a trunk national pipeline network by

research analyst with leading natural gas company, says, "The oil and gas industry is one of the leading industries in the application of technology. The sector was also least affected by the effects of the Covid-19 pandemic in 2020."

At present, liquefied natural gas (LNG) supply is forging ahead on both coasts with six operational LNG terminals with a total capacity of 42.7 MMTPA.

GOVERNMENT POLICIES HELPING THE SECTOR

The Government of India has strengthened the oil and gas sector through the introduction of the New Exploration Licensing Policy (NELP), which allowed 100 per cent of foreign direct investment (FDI) in many segments, including natural gas, petroleum products, and refineries, among others. In addition, the government has also launched the Hydrocarbon Exploration and Licensing Policy (HELP) to address issues of the sector, thus allowing a stipulated revenue-sharing model and marketing and pricing freedom for gas discoveries.

Resp.Edit@timesgroup.com

ABOUT 'ONE NATION, ONE GAS GRID' PROJECT

>> The ambitious national gas grid project, 'One Nation, One Gas Grid' aims to provide stability and better gas connectivity across the nation. The project was officially opened by the Prime Minister Narendra Modi in January 2021

>> A total of 22,306 km of the natural gas pipeline is operational and about 13,029 km are under construction as of June 2022, as part of the gas grid

>> At present, the government's target is to increase the pipeline coverage by 54 per cent to 34,500 km by 2024-25. The plan is to connect all the states by a trunk national pipeline network by 2027

>> As on 30 September 2022, 221 geographical areas have been operationalised for the supply of CNG



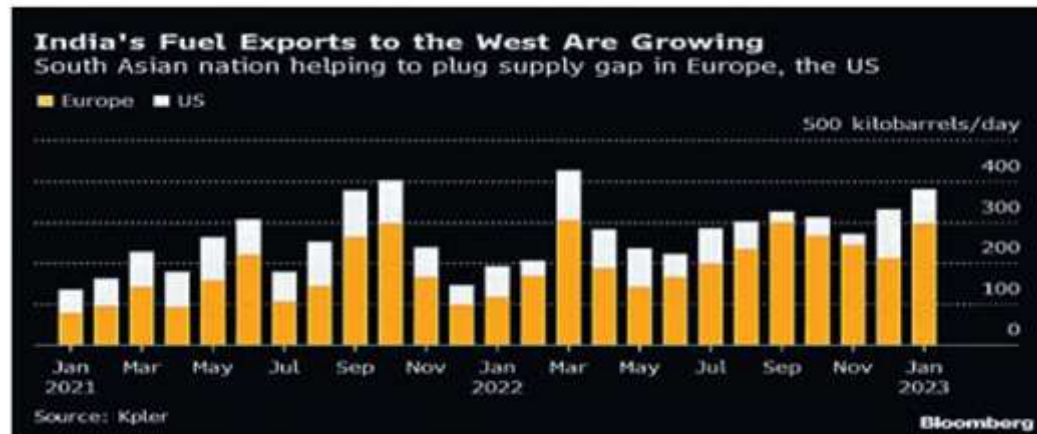
New Delhi buys Russian crude, refines it into fuel for Europe and US

India turns fuel seller for West

New Delhi, Feb. 5: India is playing an increasingly important role in global oil markets, buying more and more cheap Russian oil and refining it into fuel for Europe and the US.

Yet New Delhi has faced little public blowback because it's meeting the West's twin goals of crimping Moscow's energy revenue while preventing an oil supply shock. And as Europe ramps up sanctions, India is only going to become more central to a global oil map that's been redrawn by Vladimir Putin's year-long war in Ukraine.

"US treasury officials have two main goals: keep the market well supplied, and deprive Russia of oil revenue," said Ben Cahill, a senior fellow with the Center for Strategic and International Studies, a Washington think tank. "They are aware that Indian and Chinese refiners can earn bigger margins by buying discounted



Russian crude and exporting products at market prices. They're fine with that."

India shipped about 89,000 barrels a day of gasoline and diesel to New York last month, the most in nearly four years, according to data intelligence firm Kpler.

Daily low-sulfur diesel flows to Europe were at 172,000 barrels in January, the most since October 2021.

India's importance is

expected to expand after fresh European Union sanctions on Russian petroleum exports take effect on Sunday. The ban will remove a huge volume of diesel from the market and see more consumers, especially in Europe, tap Asia to fill the supply gap.

That will make cheap Russian oil even more attractive to India, which relies on imports to meet around 85 per cent of its crude needs. The nation's

refiners, including state-run processors that are responsible for meeting domestic demand, ramped up exports last year in order to profit from higher international prices.

"India is a net exporter of refined product and much of this will be going to the West to help ease current tightness," said Warren Patterson, Singapore-based head of commodities strategy at ING Groep NV.

"It's pretty clear that a

growing share of the feedstock used for this product originates from Russia."

Under EU guidelines, India is likely operating within the rules. When Russian crude is processed into fuels in a country outside of the bloc such as India, the refined products can be delivered into the EU because they're not deemed to be of Russian origin.

The Group of Seven nations are keen to cut Moscow's revenue as much as possible, but they also have an interest in ensuring that Russia's oil and refined products continue to flow to avoid a global supply crunch, said Serena Huang, lead Asia analyst at Vortexa Ltd.

A US National Security Council spokesperson said a price cap had been put in place that countries including India could leverage to keep energy markets stable, while limiting the Kremlin's revenue.

— Bloomberg



New Oil map: How India turns Russian crude into fuel for the West

'India shipped about 89,000 barrels a day of gasoline and diesel to New York last month, the most in nearly four years'

NEW DELHI: India is playing an increasingly important role in global oil markets, buying more and more cheap Russian oil and refining it into fuel for Europe and the US.

Yet New Delhi has faced little public blowback because it's meeting the West's twin goals of crimping Moscow's energy revenue while preventing an oil supply shock. And as Europe ramps up sanctions, India is only going to become more central to a global oil map that's been redrawn by Vladimir Putin's year-long war in Ukraine, *Bloomberg* reported.

"US treasury officials have two main goals: keep the market well supplied, and deprive Russia of oil revenue," said Ben Cahill, a senior fellow with the Center for Strategic and International Studies, a Washington think tank. "They are aware that Indian and Chinese refiners can earn bigger margins by buying discounted Russian crude and exporting products at market prices. They're fine with that."

India shipped about 89,000 barrels a day of gasoline and diesel to New York last month, the most in nearly four years, according to data intelligence

firm Kpler. Daily low-sulfur diesel flows to Europe were at 172,000 barrels in January, the most since October 2021.

The Asian nation's importance is expected to expand after fresh European Union sanctions on Russian petroleum exports take effect Sunday. The ban will remove a huge volume of diesel from the market and see more consumers, especially in Europe, tap Asia to fill the supply gap.

That will make cheap Russian oil even more attractive to India, which relies on imports to meet around 85 per cent of its crude needs. The nation's

refiners, including state-run processors that are responsible for meeting domestic demand, ramped up exports last year in order to profit from higher international prices.

"India is a net exporter of refined product and much of this will be going to the West to help ease current tightness," said Warren Patterson, Singapore-based head of commodities strategy at ING Groep NV. "It's pretty clear that a growing share of the feedstock used for this product originates from Russia."

Under EU guidelines, India is likely operating within the

rules. When Russian crude is processed into fuels in a country outside of the bloc such as India, the refined products can be delivered into the EU because they're not deemed to be of Russian origin.

The Group of Seven nations are keen to cut Moscow's revenue as much as possible, but they also have an interest in ensuring that Russia's oil and refined products continue to flow to avoid a global supply crunch, said Serena Huang, lead Asia analyst at Vortexa Ltd.

A key facet of the mechanism to crimp revenues to the Kremlin and keep some oil on

the market has been a price cap on Russian crude, a measure that was spearheaded by the US. India hasn't publicly said if the nation does or doesn't adhere to the limit, but sanctions have driven oil from the OPEC+ producer below the \$60 a barrel cap.

A US National Security Council spokesperson said a price cap had been put in place that countries including India could leverage to keep energy markets stable, while limiting the Kremlin's revenue.

"India's willingness to buy more Russian crude at a steeper discount is a feature, not a bug,

in the plan of Western nations to impose economic pain on Putin without imposing it on themselves," said Jason Bordoff, founding director of the Center on Global Energy Policy at Columbia University and a former adviser in the Obama administration.

Executives and officials from nations and companies including Saudi Arabia, United Arab Emirates, the US, and Abu Dhabi National Oil Co. are gathering in Bangalore Monday for a three-day energy forum organized with India's petroleum and natural gas ministry.

AGENCIES

Oil PSUs on the long road to net zero

With India burning more fossil fuel to grow, state-owned refiners may struggle to meet targets



S DINAKAR
Bengaluru, 5 February

Today, Prime Minister Narendra Modi will inaugurate India Energy Week 2023, the country's biggest energy event, in Bengaluru — by launching uniforms made of recycled plastic, dedicating refiner IOC's solar cooker to the nation, launching a petrol pump laden with 20 per cent blended ethanol, and flagging off an e-vehicle (EV) race. Optics apart, in a state going to the polls this year, such symbolic gestures to reduce emissions will need a lot more reinforcement — especially for a country that recorded the highest growth rate in carbon emissions last year. The Global Carbon Budget said India's emissions grew 6 per cent last year to around 3 billion tonnes CO₂e (carbon dioxide equivalent) compared to a reduction of 0.9 and 0.8 per cent by China and the European Union respectively. India grew emissions faster than any major economy in the last 10 years.

The transport sector is the fourth biggest emitter after power, industry and agriculture, McKinsey says, accounting for around a tenth of emissions. That makes state oil companies responsible for containing them.

This will be tough, especially with India growing at over 6 per cent annually by burning more fossil fuels. Diesel and gasoline consumption surged around 18 per cent in January from a year earlier, led by state oil companies. For the first time, the Modi government earmarked around ₹30,000 crore as capital expenditure for state refiners. But there were no details on where or how those funds would be spent.

What is, however, clear, is that India will grow its refining capacity to 300-400 million tonnes (MT) from 250 MT now by 2030, said Ranjit Rath, chairman, Oil India. Therefore, crude oil demand would always trend upward, he added. Rath has set a 2040 net zero date for the state explorer by deploying a mix of renewables, plantations and carbon capture.

IOC, BPCL and HPCL together emit a combined 40 MT of CO₂e in Scope 1 and Scope 2 emissions, which may grow by at least 50 per cent by 2030 as India's oil use expands in line with GDP growth, according to data by CRISIL Research and state oil companies. IOC, the country's biggest refiner and marketer of fuels, accounts for over half the emissions, which are expected to double by 2030, as it expands refineries and adds chemical units.

Scope 1 covers emissions generated by a

Charting the emissions path

- India grew emissions faster than any major economy in the last 10 years
- The transport sector is the biggest emitter after power, industry and agriculture, accounting for around a tenth of emissions
- For the first time, the Modi govt has earmarked around ₹30,000 crore, but has given no details of how the money will be spent
- Nearly 60% of emission reduction will come from renewables and green hydrogen, and around 30 per cent from carbon capture and storage
- IOC has announced investments of ₹2 trillion to reach net zero by 2046, expanding on business lines related to green hydrogen, biofuels, renewables, and carbon capture

company's facilities; Scope 2 are indirect emissions from consumption of power, heat or steam; and Scope 3 damages the planet the most, being emissions generated by consumers or other third parties from use of the company's products and services — in case of oil companies it is petrol, diesel, jet fuel and LPG you burn to cook, heat and travel, releasing carbon in the process.

"Oil companies have planned their activities to meet this specific goal of net zero by 2040 (2046 for IOCL)," said Rahul Prithiani, senior director — consulting, CRISIL Market Intelligence and Analytics. "Key activities include enhancing energy efficiency, raising renewable production, and investments in CBG (compressed biogas) and green hydrogen, as technologies mature."

The focus, said M K Surana, CEO, Ratnagiri Refinery & Petrochemicals, is to "eliminate, reduce or replace". During his previous stint as HPCL's chairman, Surana kick-started the refiner's environment, social and governance (ESG) strategy.

At BPCL, the focus is to "replace all the (fossil fuel) power that we are consuming in our refineries and in our processes with renewables", said Shelly Abraham, head, renewable energy, at the Mumbai-based refiner. BPCL's three refineries and other facilities consume about 500 megawatt (Mw) hours, and the company has agreed with the Rajasthan government to

build 1 gigawatt (Gw) of renewables in phases by 2026, eventually aiming for 10 Gw by 2040, the year BPCL plans to achieve net zero.

"A more cost-effective solution would be to enhance energy efficiency," Surana said. For instance, HPCL combined two vacuum distillation units at its Mumbai plant into one, and commissioned a large distillation unit for its Vizag expansion programme. HPCL accelerated the construction of product pipelines to evacuate transport fuels, generating fewer emissions compared to road transportation. "Our idea was not to burn but to transport fuel," he added.

Abraham explained that there are four to five ways of offsetting emissions for any oil company. For the Shells and Glencores of the world, buying plantation or forestry offsets is an easy way out, though some scientists allege this practice is a huge scam to greenwash businesses. Not so, for Indian refiners, Abraham said. "We are trying to not increase offsets beyond 10 per cent, if at all."

Refineries are large consumers of hydrogen, currently extracted from fossil fuels. BPCL's facilities, for instance, consume around 1,000 tonnes a day of hydrogen, and after excluding nearly half generated by production processes, it still needs to separately produce around 550 tonnes. BPCL is setting up a 20-Mw electrolyser unit at its Bina refinery in Madhya Pradesh, which will produce around 9 tonnes a day of green hydrogen. "Nearly 60 per cent of abatement or emission reduction will come from renewables and green hydrogen", and around 30 per cent will come from carbon capture and storage technologies, he added.

"Today, carbon capture is in the first position in terms of producing lower-cost electricity," said Deepesh Nanda, CEO, GE Gas Power, South Asia. "It is possible to integrate carbon capture technology at the exhaust of a gas-based power plant, aim a shower of amine at the exhaust fuel and convert 90 per cent of carbon coming out into liquid." The CO₂ is removed from the liquid, compressed, transported or stored.

But just as today's green hydrogen costs three times that of the grey variety, making it unviable for refiners, so does carbon capture. The technology requires a lot of space, and increases total capital expenditure in a combined cycle gas power plant by 60-70 per cent. Plant efficiencies drop. But the levelised cost of electricity (LCOE) increases only 30 per cent, Nanda said, which is cheaper than burning green hydrogen in a gas turbine at today's prices. The LCOE is the lifetime cost of an electricity plant, divided by the amount of electricity it is expected to generate over its lifetime. By calculating the cost of generating electricity throughout the lifespan of the plant, the LCOE tells you the average cost per unit generated.

Meanwhile, IOC has announced investments of ₹2 trillion to reach net zero by 2046, expanding on business lines related to green hydrogen, biofuels, renewables and carbon capture; HPCL is installing a 2.6-Mw electrolyser to produce 370 tonnes a year of hydrogen at its Vizag refinery; BPCL aims to have 7,000 EV charging stations. And all three refiners are building advanced waste-to-ethanol plants, to double blending ratios to 20 per cent, the kind that Modi is launching today.

But these are baby steps towards abatement of Scope 1 and Scope 2 emissions. The real challenge comes with tackling Scope 3, something refiners are yet to ascertain, let alone come to terms with.

Oil's new map: How India turns Russian crude into West's fuel

Delhi's Role In Oil Market Set To Expand After Fresh EU Sanctions

India is playing an increasingly important role in global oil markets, buying more and more cheap Russian oil and refining it into fuel for Europe and the US.

Yet New Delhi has faced little public blowback because it's meeting the West's twin goals of crimping Moscow's energy revenue while preventing an oil supply shock. And as Europe ramps up sanctions, India is only going to become more central to a global oil map that's been redrawn by Vladimir Putin's year-long war in Ukraine.

"US treasury officials have two main goals: keep the market well supplied, and deprive Russia of oil revenue," said Ben Cahill, a senior fellow with the Center for Strategic and International Studies, a Washington think tank. "They



A view of a building of the National University of Urban Economy heavily damaged by a Russian missile strike, amid Russia's attack on Ukraine, in the centre of Ukraine's Kharkiv on Sunday

are aware that Indian and Chinese refiners can earn bigger margins by buying discounted Russian crude and exporting products at market prices. They're fine with that."

India shipped about 89,000 barrels a day of gasoline and diesel to New York last month, the most in nearly four years, according to

data intelligence firm Kpler. Daily low-sulfur diesel flows to Europe were at 172,000 barrels in January, the most since October 2021.

The Asian nation's importance is expected to expand after fresh European Union sanctions on Russian petroleum exports take effect Sunday. The ban will remove a huge volume of diesel from

the market and see more consumers, especially in Europe, tap Asia to fill the supply gap.

That will make cheap Russian oil even more attractive to India, which relies on imports to meet around 85% of its crude needs.

Under EU guidelines, India is likely operating within the rules. When Russian crude is processed into fuels in a country outside of the bloc such as India, the refined products can be delivered into the EU because they're not deemed to be of Russian origin. Executives and officials from nations and companies including Saudi Arabia, United Arab Emirates, the US, and Abu Dhabi National Oil Co. are gathering in Bangalore Monday for a three-day energy forum organised with India's petroleum and natural gas ministry. AGENCIES

‘ONGC to raise exploration for oil & gas, looks for partnerships’

OUR CORRESPONDENT

NEW DELHI: India's top oil and gas producer ONGC is pivoting a four-pronged strategy of ramping up exploration efforts, quickly bringing discovered resources to production, raising recovery from existing fields and increasing collaborations with experts to reverse years of decline in output, its new chairman Arun Kumar Singh said.

Oil and Natural Gas Corporation (ONGC) is keen to induct internationally renowned exploration firms as strategic partners in difficult areas such as deepsea and bring-in experts who can help raise productivity from ageing and mature fields such as prime Mumbai High, Singh said. ONGC, which contributes around 71 per cent to India's domestic production, has reported a gradual decline in output for over a decade now primarily because its fields are old and ageing.

It produced 21.707 million tonnes of crude oil, which is refined to produce petroleum products like petrol and diesel, and 21.68 billion cubic meter (bcm) of natural gas, which is used to produce electricity, manufacture fertilizer and as CNG in automobiles.

“We are focusing on three key areas: deepwater exploration, monetising the discovered fields on fast-track and enhancing production from producing fields through enhanced

oil recovery and improved oil recovery techniques.

“We are looking for collaborations mainly for deepwater exploration. We are also open to partnerships in the other two areas, if substantial value additions are brought by the partners,” he said.

Technologically, ONGC is strong in shallow waters. “We know Mumbai High like the back of our hands. However, if partners can add value to our business, they are welcome. We are looking forward to all such collaborations in the India Energy Week in Bengaluru during February 6-8, 2023,” he said.

While its legacy fields continue to be the mainstay of base production, ONGC is looking to provide traction to the development of new fields as well as new schemes for maximizing recovery in mature areas.

The firm believes that Indian Basins have a lot more to offer and the recent successes with Bengal Basin and Vindhyan have reinforced that belief.

Singh said there is a need for undertaking better exploration, quick appraisal of the field followed by quicker development so as to monetise the find in the shortest possible time. “Globally, all massive discoveries are happening recently in the Deep Seas. Last week, there was a big discovery in Namibia in Africa and Guyana in South America. Our deepwater is not well explored. So, we hope that we will soon

have some major finds in deep waters. We have to discover and that too in a very aggressive way,” he said. Aiding exploration are the right prices.

“Secondly, since prices are good we can bring into production whatever we have discovered; either we do it ourselves or through some private party, we have to figure out a way so that it is done in the common interest of the country,” he said. “We need to develop whatever we have discovered.”

Singh, who is the second person from downstream oil refining and marketing to head ONGC in two decades (the last one was Subir Raha), brings a fresh perspective to the company that has traditionally been plagued by slow decision making given its size.

ONGC is open to giving equity stake in difficult fields, he said adding giving stake will de-risk and bring capital.

“Third, we have to focus on how to maximize the production of whatever we are producing currently through collaboration,” he said.

“At present, the one big part we have to ramp up, according to me, is exploration as well as collaboration. You explore more and you collaborate in all the spheres where there is more potential like deepsea exploration in the eastern offshore,” he added. Singh said it is only for deepwater or difficult fields that some technology experts can help ONGC.

ONGC to ramp up exploration for oil and gas



ONGC is pivoting a four-pronged strategy of ramping up exploration efforts, quickly bringing discovered resources to production, raising recovery from existing fields and increasing collaborations with experts to reverse years of decline in output, its new chairman Arun Kumar Singh said. ONGC is keen to induct globally renowned exploration firms as strategic partners in difficult areas such as deepsea.

ONGC to ramp up exploration for oil, gas



INDIA'S TOP OIL and gas producer ONGC is pivoting a four-pronged strategy of ramping up exploration efforts, quickly bringing discovered resources to production, raising recovery from existing fields and increasing collaborations with experts to reverse years of decline in output, its new chairman Arun Kumar Singh said.

PTI

FINANCIAL EXPRESS
READ TO LEARN



ONGC to ramp up exploration for oil, gas

PTI
feedback@livemint.com

India's top oil and gas producer ONGC is pivoting a four-pronged strategy of ramping up exploration efforts, quickly bringing discovered resources to production, raising recovery from existing fields and increasing collaborations with experts to reverse years of decline in output, its new chairman Arun Kumar Singh said.

Oil and Natural Gas Corporation (ONGC) is keen to induct internationally renowned exploration firms as

strategic partners in difficult areas such as deepsea and bring-in experts who can help raise productivity from ageing and mature fields such as prime Mumbai High, Singh told PTI in an interview here. ONGC, which contributes around 71% to India's domestic production, has reported a

gradual decline in output for over a decade now primarily because its fields are old and ageing. It produced 21.707

million tonnes of crude oil, which is refined to produce petroleum products like petrol and diesel, and 21.68 billion cubic meter (bcm) of natural gas, which is used to produce electricity, manufacture fertilizer and as CNG in automobiles.

"We are focusing on three key areas: deepwater exploration, monetising the discovered fields on fast-track and enhancing production from producing fields through

enhanced oil recovery and improved oil recovery techniques. "We are looking for collaborations mainly for deepwater exploration. We are also open to partnerships in the other two areas, if substantial value additions are brought by the partners," he said.

"We know Mumbai High like the back of our hands. However, if partners can add value to our business, they are welcome. We are looking forward to all such collaborations in the India Energy Week in Bengaluru during February 6-8, 2023," he said.

ONGC has reported a gradual dip in output for over a decade now because its fields are old

ONGC to ramp up exploration for oil, gas; looks for collaborations

Press Trust of India

feedback@livemint.com

NEW DELHI: India's top oil and gas producer ONGC is pivoting a four-pronged strategy of ramping up exploration efforts, quickly bringing discovered resources to production, raising recovery from existing fields and increasing collaborations with experts to reverse years of decline in output, its new chairman Arun Kumar Singh said.

Oil and Natural Gas Corporation (ONGC) is keen to induct internationally renowned exploration firms as strategic partners in difficult areas such as deepsea and bring in experts who can help raise productivity from ageing and mature fields such as prime Mumbai High, Singh told PTI in an interview.

ONGC, which contributes around 71% to domestic production, has reported a gradual decline in output for over a decade now primarily because its



ONGC has reported a gradual decline in output for over a decade now.

fields are old and ageing.

It produced 21.707 million tonnes of crude oil, which is refined to produce petroleum products like petrol and diesel, and 21.68 billion cubic meter (bcm) of natural gas, which is used to produce electricity, manufacture fertilizer and as CNG in automobiles.

"We are focusing on three key areas: deepwater exploration, monetising the discovered fields

on fast-track and enhancing production from producing fields through enhanced oil recovery and improved oil recovery techniques. We are looking for collaborations mainly for deepwater exploration. We are also open to partnerships in the other two areas, if substantial value additions are brought by the partners," he said.

Technologically, ONGC is strong in shallow waters. "We know Mumbai High like the back of our hands. However, if partners can add value to our business, they are welcome. We are looking forward to all such collaborations in the India Energy Week in Bengaluru during February 6-8, 2023," he said.

While its legacy fields continue to be the mainstay of base production, ONGC is looking to provide traction to the development of new fields as well as new schemes for maximizing recovery in mature areas.

ONGC to ramp up exploration for oil, gas; looks for collaborations

Press Trust of India

feedback@livemint.com

NEW DELHI: India's top oil and gas producer ONGC is pivoting a four-pronged strategy of ramping up exploration efforts, quickly bringing discovered resources to production, raising recovery from existing fields and increasing collaborations with experts to reverse years of decline in output, its new chairman Arun Kumar Singh said.

Oil and Natural Gas Corporation (ONGC) is keen to induct internationally renowned exploration firms as strategic partners in difficult areas such as deepsea and bring in experts who can help raise productivity from ageing and mature fields such as prime Mumbai High, Singh told *PTI* in an interview.

ONGC, which contributes around 71% to domestic production, has reported a gradual decline in output for over a decade now primarily because its



ONGC has reported a gradual decline in output for over a decade now.

fields are old and ageing.

It produced 21.707 million tonnes of crude oil, which is refined to produce petroleum products like petrol and diesel, and 21.68 billion cubic meter (bcm) of natural gas, which is used to produce electricity, manufacture fertilizer and as CNG in automobiles.

"We are focusing on three key areas: deepwater exploration, monetising the discovered fields

on fast-track and enhancing production from producing fields through enhanced oil recovery and improved oil recovery techniques. We are looking for collaborations mainly for deepwater exploration. We are also open to partnerships in the other two areas, if substantial value additions are brought by the partners," he said.

Technologically, ONGC is strong in shallow waters. "We know Mumbai High like the back of our hands. However, if partners can add value to our business, they are welcome. We are looking forward to all such collaborations in the India Energy Week in Bengaluru during February 6-8, 2023," he said.

While its legacy fields continue to be the mainstay of base production, ONGC is looking to provide traction to the development of new fields as well as new schemes for maximizing recovery in mature areas.

ONGC to ramp up exploration for oil, gas; looks for collaborations

PTI ■ NEW DELHI

India's top oil and gas producer ONGC is pivoting a four-pronged strategy of ramping up exploration efforts, quickly bringing discovered resources to production, raising recovery from existing fields and increasing collaborations with experts to reverse years of decline in output, its new chairman Arun Kumar Singh said.

Oil and Natural Gas Corporation (ONGC) is keen to induct internationally renowned exploration firms as strategic partners in difficult areas such as deepsea and bring-in experts who can help raise productivity from ageing and mature fields such as prime Mumbai High, Singh told PTI in an interview here.

ONGC, which contributes around 71 per cent to India's domestic production, has reported a gradual decline in output for over a decade now primarily because its fields are old and ageing.



It produced 21.707 million tonnes of crude oil, which is refined to produce petroleum products like petrol and diesel, and 21.68 billion cubic meter (bcm) of natural gas, which is used to produce electricity, manufacture fertilizer and as CNG in automobiles.

"We are focusing on three key areas: deepwater exploration, monetising the discovered fields on fast-track and enhancing production from producing fields through enhanced oil recovery and improved oil recovery techniques.

"We are looking for collaborations mainly for deep-water exploration", he said.

PM Modi to inaugurate India Energy Week, launch E20 fuel

‘The India Energy Week 2023, being held from February 6 to 8, is aimed to showcase India’s rising prowess as an energy transition powerhouse’

OUR CORRESPONDENT

NEW DELHI: Prime Minister Narendra Modi will on Monday launch petrol blended with 20 per cent ethanol, unveil a solar and conventional energy powered cooking system and inaugurate the India Energy Week in Bengaluru.

The India Energy Week (IEW) 2023, being held from February 6 to 8, is aimed to showcase India’s rising prowess as an energy transition powerhouse, an official statement said.

“The event will bring together leaders from the traditional and non-traditional energy industry, governments, and academia to discuss the challenges and opportunities that a responsible energy transition presents,” the statement added.

Modi will also launch petrol blended with 20 per cent ethanol.

“In line with the ethanol blending roadmap, Prime Minister will launch E20 fuel at 84 retail outlets of Oil Marketing Companies in 11 States/UTs. E20 is a blend of 20 per cent ethanol with petrol.



Prime Minister Narendra Modi

‘The event will bring together leaders from the traditional and non-traditional energy industry, governments, and academia to discuss the challenges and opportunities that a responsible energy transition presents,’ the statement added

“The government aims to achieve a complete 20 per cent blending of ethanol by 2025, and oil marketing companies are setting up 2G-3G ethanol plants that will facilitate the

progress,” it said.

The Prime Minister will also flag off the Green Mobility Rally. The rally will witness participation of vehicles running on green energy sources and will

help create public awareness on green fuels.

He will launch uniforms under the ‘Unbottled’ initiative of IndianOil. Guided by the vision of the Prime Minister to phase out single-use plastic, IndianOil has adopted uniforms for retail customer attendants and LPG delivery personnel made from recycled polyester (rPET) and cotton.

Each set of uniform of IndianOil’s customer attendants shall support recycling of around 28 used PET bottles. IndianOil is taking this initiative further through ‘Unbottled’ - a brand for sustainable garments, launched for merchandise made from recycled polyester.

Under this brand, IndianOil targets to meet the requirement of uniforms for the customer attendants of other oil marketing companies, non-combat uniforms for Army, uniforms/dresses for institutions and sales to retail customers.

The Prime Minister will also dedicate a twin-cooktop model of the IndianOil’s Indoor Solar Cooking System and flag-off its commercial roll-out.

IndianOil had earlier

developed an innovative and patented Indoor Solar Cooking System with single cooktop. On the basis of feedback received, twin-cooktop Indoor Solar Cooking system has been designed offering more flexibility and ease to the users. It is a revolutionary indoor solar cooking solution that works on both solar and auxiliary energy sources simultaneously, making it a reliable cooking solution for India.

“To ensure smooth supply of green energy, the government has announced an allocation of Rs 35,000 crore in the country’s 2023-24 Budget. The government is implementing many programmes for green fuel, green energy, green farming, green mobility, green buildings, and green equipment, and policies for efficient use of energy across various economic sectors.

“We are adopting several initiatives and next generation infrastructure for energy transition and security,” Oil Minister Hardeep Puri said, adding that the growing energy appetite will be met through a healthy mix of energy sources.

PM to inaugurate India Energy Week today

Our Bureau

New Delhi

Prime Minister Narendra Modi will inaugurate the India Energy Week (IEW) 2023 in Bengaluru on Monday.

Being held from February 6-8, IEW is aimed to showcase India's rising prowess as an energy transition powerhouse, the Min-

istry of Petroleum & Natural Gas (MoPNG) said in a statement. Over 30,000 delegates, 1,000 exhibitors and 500 speakers will gather to discuss the challenges and opportunities of India's energy future, it added.

During the programme, the Prime Minister will participate in a roundtable interaction with global oil & gas CEOs. He will

also launch multiple initiatives in the field of green energy. In line with the ethanol blending roadmap, he will launch E20 fuel at 84 retail outlets of oil marketing companies in 11 States/UTs.

Modi will also flag off the green mobility rally, which will witness participation from vehicles running on green energy sources.



PM to inaugurate India Energy Week, launch E20 fuel

Prime Minister Narendra Modi will on Monday launch petrol blended with 20 per cent ethanol, unveil a solar and conventional energy powered cooking system and inaugurate the India Energy Week in Bengaluru. The

India Energy Week (IEW) 2023, being held from February 6 to 8, is aimed to showcase India's rising prowess as an energy transition powerhouse, an official statement said.

THE
FREE PRESS JOURNAL

Mon, 06 February 2023

<https://epaper.freepressjournal.in>





PM to launch E20 fuel today

Prime Minister Narendra Modi will on Monday launch petrol blended with 20 per cent ethanol, unveil a solar and conventional energy powered cooking system and inaugurate the India Energy Week in Bengaluru. **PTI**

PM to launch India Energy Week, E20 fuel

New Delhi, Feb. 5: Prime Minister Narendra Modi will on Monday launch petrol blended with 20 per cent ethanol, unveil a solar and conventional energy powered cooking system and inaugurate the India Energy Week in Bengaluru. The India Energy Week (IEW) 2023, being held from February 6 to 8, is aimed to showcase India's rising prowess as an energy transition powerhouse, an official statement said.

"The event will bring together leaders from the traditional and non-traditional energy industry, governments, and academia to discuss the challenges and opportunities that a

responsible energy transition presents," it added.

Mr Modi will also launch petrol blended with 20 per cent ethanol.

"In line with the ethanol blending roadmap, Prime Minister will launch E20 fuel at 84 retail outlets of Oil Marketing Companies in 11 States/UTs. E20 is a blend of 20% ethanol with petrol.

"The government aims to achieve a complete 20% blending of ethanol by 2025, and oil marketing companies are setting up 2G-3G ethanol plants that will facilitate the progress," it said.

The Prime Minister will also flag off the Green

Mobility Rally. The rally will witness participation of vehicles running on green energy sources and will help create public awareness on green fuels.

He will launch uniforms under the 'Unbottled' initiative of IndianOil. Guided by the vision of the Prime Minister to phase out single-use plastic, IndianOil has adopted uniforms for retail customer attendants and LPG delivery personnel made from recycled polyester (rPET) and cotton.

Each set of uniform of IndianOil's customer attendants shall support recycling of around 28 used PET bottles. IndianOil is

taking this initiative further through 'Unbottled' - a brand for sustainable garments, launched for merchandise made from recycled polyester.

Under this brand, IndianOil targets to meet the requirement of uniforms for the customer attendants of other oil marketing companies, non-combat uniforms for Army, uniforms/ dresses for institutions and sales to retail customers.

The Prime Minister will also dedicate a twin-cook-top model of the IndianOil's Indoor Solar Cooking System and flag-off its commercial roll-out.

—PTI



PM to open energy week, launch E20 fuel today

PRIME MINISTER NARENDRA Modi will on Monday launch petrol blended with 20% ethanol, unveil a solar and conventional energy powered cooking system and inaugurate the India Energy Week in Bengaluru. The India Energy Week (IEW) 2023, being held from February 6 to 8, aims to showcase India's rising prowess as an energy transition powerhouse, a statement said.

PTI

Price cap, energy geo-politics

US petro firms have benefited most from sanctions on Russia. Europe has been pushed into a relationship of energy dependency with US



OVER THE BARREL
BY VIKRAM S MEHTA

LAST WEEK, THE US and the EU banned the purchase of petroleum products from Russia. Two months earlier, on December 5, they had imposed a similar ban on Russian crude oil. At that time they had announced that any third-party buyer that paid more than \$60/bbl for Russian crude oil would be denied access to Western insurance, finance and brokerage services. The ban on petroleum products will also be accompanied by a price cap, albeit at two levels. One level will be for commodities like diesel that sell at a premium to crude oil and the other for commodities that sell at a discount like fuel oil. The precise numbers have yet to be announced.

The idea of a cap was first put on the table when the price of oil was in triple digits and Russia was earning more from its exports than it had earned prior to the Ukraine invasion. This was galling for the US as it negated the impact of the sanctions. The purpose of the cap was two fold. One, to keep Russian oil flowing into the international market. This is because Russia accounted for 10 per cent of global supplies and a complete cut off would send prices into the stratosphere. And two, to reduce Russian export earnings by pushing down production and compelling buyers to pay less than the international price.

The price cap accompanied by the sanction was conceptualised to achieve both objectives. The former was above the average cost of production of Russian oil of between \$25-40/bbl, and therefore, an incentive for Russian companies to continue producing. The latter complicated access to essential services and constrained, therefore, the trade and shipment of Russian oil.

Ever since this idea was first mooted, I have wondered about its viability. For it is a well-known economic precept that administrative price (and income) controls do not work and that, if anything, they provide profitable arbitrage opportunities for wily traders. I am not one for conspiracy theories but I have asked myself why a world class economist like Janet Yellen would put her weight behind such an idea when in a different avatar as an economics professor, she would, most likely, critique it as a blunt and ineffective instrument. I have reflected whether the progenitors of this idea had objectives other than those publicly stated.

Two months into this cap, I see trends — some unexpected — that give partial credence to my reflections. First, as was anticipated by all experts, the cap does not work. It contains too many loopholes. Thus, for instance, one easy way of circumnavigating the cap would be for the seller to state a price in the bill of lading at the port of loading that is at or below the cap price and then adjust it upwards vide freight and other charges. Buyers pay on the basis of the delivered price. More pertinently, Russia is rumoured to have gathered a shadow fleet of

tankers to bypass the western insurers.

Second, Russia's production has fallen by between 800k bpd to 1 mbd which is approximately 25 per cent of the country's exports. This has reduced export earnings. But hardened traders are still transacting in Russia. Several have (re)registered their offices in countries that are not subject to sanctions like the UAE and have exploited the arbitrage opportunity to buy "low" and sell "high".

Third, the cut back in Russian crude (and products) has tightened the market. Prices are currently holding because winter has been relatively mild — the US has released more barrels from their strategic petroleum reserve than expected and the Chinese demand has been laggard. This trend might, however, reverse. Saudis and the UAE are not likely to draw on their surplus producible capacity to offset the gap created by the reduction in Russian exports. And China is determined to return to the high economic growth trajectory. If and when prices do spike, the progenitors of the cap might well find themselves hoisted by their own petard.

Four, Saudi Arabia must be discomfited by the knowledge that a price cap has acquired shape and that the US may be tempted to apply it against them if prices ever reached politically uncomfortable levels. There are many reasons why the Saudis are looking to place their relations with the US on a transactional base and why India is regarded as an increasingly important strategic market. But one reason may well flow from this discomfiture.

Five, Europe has been adversely impacted by the price cap. This is because they are disproportionately dependent on Russian crude and products. They have had to turn to the US, Middle East and India to meet their shortfall and in response the suppliers from these countries have redirected their cargoes to the European market at a premium. In an ironic twist, Indian refiners are sourcing crude from the eastern seaboard of Russia, shipping it to their refineries — predominantly in Jamnagar — and then moving the products, mainly diesel, to Europe. The extended trading distances have tightened the shipping markets. Tanker freight rates have ratcheted up and the stock price of shipping companies are close to historic highs.

Finally, and perhaps the reason I used the word "conspiracy" earlier, US petroleum companies have benefited most from Europe's plight. In a flourish of commercial opportunism, the US administration has allowed Chevron to return to their concessions in Venezuela but on condition that the crude oil produced by them will be sold only into the US. They have done this notwithstanding that they still do not recognise President Nicolas Maduro. This decision will allow US companies to convert a relatively inexpensive heavy crude oil into higher value added, lighter products like diesel for export at a premium to Europe. Combined with the fact that US LNG has already predominately replaced Russian gas, it would be no exaggeration to suggest that Europe has been pushed into a relationship of energy dependency with the US. The price cap has redesigned the contours of energy geopolitics.

The writer is chairman and distinguished fellow, Centre for Social and Economic Progress

Sanctions, underinvestment may cause energy shortages: Saudi Energy Minister

DUBAI: Saudi Energy Minister Prince Abdulaziz bin Salman warned on Saturday that sanctions and underinvestment in the energy sector could result in a shortage of energy supplies, *Reuters* reported.

The European Union has imposed a series of sanctions against Russia, reducing Russian energy exports, and other Western powers have also imposed measures as they seek to further limit Moscow's ability to fund its war in Ukraine.

In response to a question on how the sanctions environment would affect the energy market, bin Salman told an industry conference in Riyadh: "All of those so-called sanctions, embargoes, lack of investments, they will convolute



Saudi Energy Minister Prince Abdulaziz bin Salman

into one thing and one thing only, a lack of energy supplies of all kinds when they are most needed".

The prince did not specifically mention Russia in his remarks. He said Saudi Arabia was working to send Ukraine liquefied petroleum gas (LPG), which is most commonly used as a cooking fuel

He said Saudi Arabia was working to send Ukraine liquefied petroleum gas (LPG), which is most commonly used as a cooking fuel and in heating

and in heating.

Asked what lessons had been learnt from energy market dynamics in 2022, Prince Abdulaziz said the most important one was for the rest of the world to "trust OPEC+".

"We are a responsible group of countries, we do take policy issues relevant to energy and oil markets in a total silo

and we don't engage ourselves in political issues," the prince said.

The minister said he remains cautious on any increase in production.

OPEC+, an alliance that includes members of the Organization of the Petroleum Exporting Countries (OPEC) and others including Russia, agreed last year to cut its production target by 2 million barrels per day, about 2 per cent of world demand, from November until the end of 2023 to support the market.

An OPEC+ panel that met last Wednesday endorsed the decision, and the main message throughout the meeting was that the group would stay the course until the end of the agreement.

AGENCIES

Windfall Tax on Crude Hiked to ₹5,050/t

Our Bureau

New Delhi: The government has increased windfall tax on local crude oil more than two and a half times to ₹5,050 per tonne from ₹1,900 per tonne, following firming up of international crude oil prices. Tax on export of diesel has been raised to ₹7.5 per litre from ₹5, and duty on aviation turbine fuel (ATF) to ₹6 a litre from ₹3.5 a litre. The new tax rates will be effective from February 4.

The Centre slashed windfall tax to ₹1,900 from ₹2,100 per tonne in the last fortnightly review on January 17.

India first imposed windfall taxes on July 1, joining a growing number of nations that tax super normal profits of energy companies, by levying ₹23,250 per tonne on domestic companies and export duties of ₹6 per litre on petrol and ATF, and ₹13 a litre on diesel.

Officials said windfall tax will continue for some more time as oil prices remain volatile.

Windfall tax on crude oil, export of ATF hiked

FE BUREAU

New Delhi, February 5

THE FINANCE MINISTRY has hiked windfall profit tax levied on domestically-produced crude oil as well as on the export of diesel and ATF, in line with firming international oil prices.

The windfall tax on domestically produced crude oil has been hiked to ₹5,050 per tonne from ₹1,900 per tonne, in the latest fortnightly review.

The tax on export of aviation turbine fuel has been raised to ₹6 per litre from the previous ₹3.5 per litre while that on diesel exports has been increased to ₹7.5 per litre (inclusive of cess) from ₹5 per litre earlier.

The revision is effective from February 4, according to recent

notifications by the Central Board of Indirect Taxes and Customs.

The windfall tax is expected to fetch the Centre about ₹25,000 crore this fiscal and officials have said it will continued to be levied until crude oil prices remain high. They expect the tax to fetch about ₹25,000 crore in the next fiscal as well. According to PPAC data, the crude oil price of the Indian basket has been rising after it touched a low of \$78.1 per barrel in December. In January, it was up at \$ 80.92 per barrel and has risen further to \$82.17 per barrel in February.

The Centre had imposed special additional excise duty of ₹23,250/tonne on crude and export taxes on petrol, diesel and ATF at ₹6/ litre, ₹13/ litre and ₹6/ litre, respectively from July 1, 2022. It subsequently removed the tax on petrol.

FINANCIAL EXPRESS
READ TO LEAD

Mon, 06 February 2023

<https://epaper.financialexp>



ऊर्जा में बदलाव के लिए 10 लाख करोड़ डॉलर की जरूरत

शुभायन चक्रवर्ती
बेंगलूरु, 5 फरवरी

ऊर्जा के बदलाव पर जी-20 की समिति की पहली बैठक में शीर्ष अधिकारियों ने कहा कि भारत को ऊर्जा में बदलाव के लिए 2070 तक 10 लाख करोड़ डॉलर की जरूरत होगी। संवाददाताओं को संबोधित करते हुए बिजली सचिव आलोक कुमार ने कहा कि बेंगलूरु में आयोजित बैठक में प्रमुख रूप से सस्ते वित्तपोषण पर ध्यान था। कुमार ने कहा कि सर्वसम्मति से यह फैसला लिया गया कि निजी क्षेत्र की पूंजी को आगे आने की जरूरत है, वहीं जोखिम कम करने के लिए सार्वजनिक व्यय को भी सहायता देनी होगी।

उन्होंने कहा कि बिजली मंत्रालय को वित्तपोषण की जरूरतों का अनुमान लगाने की जिम्मेदारी दी गई है, वहीं वित्त मंत्रालय को विदेश के हिस्सेदारों से बात करनी है और वित्त का इंतजाम करना है। कुमार ने कहा कि एशियन डेवलपमेंट बैंक और विश्व बैंक जैसे बहुपक्षीय संस्थानों ने बिजली संयंत्रों और अपतटीय पवन उर्जा इकाइयों जैसी विशेष ऊर्जा बदलाव परियोजनाओं को समर्थन देने का प्रस्ताव किया है।

सूत्रों ने बिजनेस स्टैंडर्ड से कहा कि सरकार अगले 3 महीने में कार्बन कैप्चर पर नई नीति लाने पर काम कर रही है। इस सम्मेलन में कार्बन कैप्चर, इस्तेमाल और इसके भंडारण पर एक अलग सेमिनार का भी आयोजन हुआ। अमेरिका की कार्बन कैप्चर फर्म दस्तूर एनर्जी, जिसने इसके पहले नीति आयोग के हवाले से रिपोर्ट जारी की थी, इस सेमिनार में मौजूद थी। एनटीपीसी की फ्लू गैस सीओ2 से मेथनॉल सिंथेसिस पर एक 3-डी मॉडल भी एनटीपीसी के कार्यक्रम में दिखाया गया। यह संयंत्र जीवाश्म ईंधन पर आधारित बिजली संयंत्रों से सीओ2 उत्सर्जन घटाने और इसे उपयोगी हाइड्रोकार्बन या मेथनॉल में बदलने के लिए प्रस्तुत किया गया है।

तीन दिन के आयोजित कार्यक्रम में पहले दिन भारत के जी20 ऊर्जा बदलाव योजना के प्राथमिकता वाले क्षेत्रों के तकनीकी पहलुओं पर चर्चा हुई। इसमें तकनीकी अंतर खत्म करने, ऊर्जा में बदलाव के लिए सस्ते



■ बिजली मंत्रालय को वित्तपोषण की जरूरतों का अनुमान लगाने की जिम्मेदारी दी गई है, वहीं वित्त मंत्रालय को विदेश के हिस्सेदारों से बात करनी है और वित्त का इंतजाम करना है

वित्तपोषण, भविष्य के ईंधन जैसे एथेनॉल और ग्रीन हाइड्रोजन जैसे बायोफ्यूएल पर बातचीत हुई। इसके साथ ही उच्च क्षमता के ईंधन सेल, इलेक्ट्रोलाइजर, एडवांस्ड केमिस्ट्री सेल, स्माल मॉड्यूल रियेक्टरों पर चर्चा हुई। ग्रीन हाइड्रोजन के बारे में कुमार ने कहा कि भारत का मकसद ग्रीन हाइड्रोजन पर अंतरराष्ट्रीय सहयोग के लिए उच्च स्तर के सिद्धांत तैयार करना है। इसके साथ ही ग्रीन हाइड्रोजन के लिए भारत में एक उत्कृष्टता केंद्र का प्रस्ताव दिया गया है।

उन्होंने कहा, 'कुछ देशों ने प्रस्ताव किया है कि नीतिगत चर्चा में नाभिकीय ऊर्जा से ग्रीन हाइड्रोजन के उत्पादन पर भी विचार होना चाहिए।' बहरहाल उन्होंने कहा कि भारत ने इस बात पर जोर दिया कि नाभिकीय ऊर्जा अभी भी ऊर्जा के लिए गैर अक्षय स्रोत बना हुआ है। इसके पहले बिजली मंत्री आरके सिंह ने कहा कि भारत मौजूदा ऊर्जा आधार की उपलब्धता से कोई समझौता नहीं करेगा और ऊर्जा सुरक्षा के सभी व्यावहारिक स्रोतों की संभावना तलाशेगा। उन्होंने कहा कि ऊर्जा में बदलाव के लिए कार्यसमूह की बैठक इस दिशा में एक खाका तैयार करने के शुरुआती मंच के रूप में काम करेगी। मंत्री ने कहा कि 2020 में भारत का प्रति व्यक्ति ग्रीन हाउस गैस उत्सर्जन 6.3 टी सीओ2 ई के वैश्विक औसत की तुलना में कम रहा है।

ओएनजीसी तेल एवं गैस अन्वेषण का काम तेज करेगी, भागीदारों की भी तलाश : चेयरमैन

नई दिल्ली, (भाषा)। देश की शीर्ष तेल एवं गैस उत्पादक कंपनी ओएनजीसी के चेयरमैन अरुण कुमार सिंह ने कहा है कि कंपनी खोज या अन्वेषण कार्यों में तेजी लाने के लिए चार-आयाम वाली रणनीति पर चल रही है।

सिंह ने पीटीआई-भाषा के साथ बातचीत में कहा कि ऑयल एंड नैचुरल गैस कॉरपोरेशन ने खोजे गए संसाधनों को उत्पादन स्तर तक तेजी से पहुंचाने, मौजूदा तेल-गैस क्षेत्रों से उत्पादन बढ़ाने और उत्पादन में गिरावट के रुझान पर काबू पाने के लिए विशेषज्ञों के साथ सहयोग बढ़ाने की रणनीति अपनाई है। इसके साथ ही उन्होंने कहा कि अंतरराष्ट्रीय स्तर की अग्रणी तेल एवं गैस खोज फर्मों को गहरे समुद्र जैसे मुश्किल इलाकों में रणनीतिक भागीदार बनाने की भी मंशा है। इसके अलावा ओएनजीसी मुंबई हाई

जैसे पुराने क्षेत्रों से उत्पादन बढ़ाने में मदद के लिए भी जानकारों को अपने साथ जोड़ने की योजना बनाई है। देश के कुल घरेलू तेल एवं गैस उत्पादन में करीब 71 प्रतिशत का योगदान देने वाले सार्वजनिक उपक्रम ओएनजीसी का उत्पादन पिछले एक दशक में लगातार गिरता गया है। इसकी मुख्य वजह मौजूद तेल एवं गैस क्षेत्रों का पुराना पड़ना है। ओएनजीसी ने 2.17 करोड़ टन कच्चे तेल का उत्पादन किया, जबकि उसका प्राकृतिक गैस उत्पादन 21.68 अरब घन फुट रहा। कंपनी के नए मुखिया के तौर पर सिंह ने कहा कि अब इसके उत्पादन को बढ़ाने के तौर-तरीकों पर खास ध्यान दिया जा रहा है। उन्होंने कहा, हम गहरे समुद्र में अन्वेषण, खोजे जा चुके क्षेत्रों के मौद्रिकरण और उत्पादक क्षेत्रों से उत्पादन बढ़ाने पर ध्यान दे रहे हैं।

ओएनजीसी तेल एवं गैस की खोज का काम करेगी तेज

एजेसी ► नई दिल्ली

देश की शीर्ष तेल एवं गैस उत्पादक कंपनी ओएनजीसी के चेयरमैन अरुण कुमार सिंह ने कहा है कि कंपनी खोज या अन्वेषण कार्यों में तेजी लाने के लिए चार-आयाम वाली रणनीति पर चल रही है।

सिंह ने कहा कि ऑयल एंड नैचुरल गैस कॉरपोरेशन (ओएनजीसी) ने खोजे गए संसाधनों को उत्पादन स्तर तक तेजी से पहुंचाने, मौजूदा तेल-गैस क्षेत्रों से उत्पादन बढ़ाने और उत्पादन में गिरावट के रुझान पर काबू पाने के लिए विशेषज्ञों के साथ सहयोग बढ़ाने की रणनीति अपनाई है। इसके साथ ही उन्होंने कहा कि अंतरराष्ट्रीय स्तर की अग्रणी

उत्पादन बढ़ाने के तौर-तरीकों पर दिया जाएगा ध्यान

ओएनजीसी ने 2.17 करोड़ टन कच्चे तेल का उत्पादन किया, जबकि उसका प्राकृतिक गैस उत्पादन 21.68 अरब घन फुट रहा। कंपनी के नए मुखिया के तौर पर सिंह ने कहा कि अब इसके उत्पादन को बढ़ाने के तौर-तरीकों पर खास ध्यान दिया जा रहा है।



तेल एवं गैस खोज फर्मों को गहरे समुद्र जैसे मुश्किल इलाकों में रणनीतिक भागीदार बनाने की भी मंशा है। इसके अलावा ओएनजीसी मुंबई हाई जैसे पुराने क्षेत्रों से उत्पादन बढ़ाने में मदद के लिए भी जानकारों को अपने साथ जोड़ने की योजना बनाई है।

देश के कुल घरेलू तेल एवं गैस उत्पादन में करीब 71 प्रतिशत का योगदान देने वाले सार्वजनिक उपक्रम ओएनजीसी का उत्पादन पिछले एक दशक में लगातार गिरता गया है। इसकी मुख्य वजह मौजूद तेल एवं गैस क्षेत्रों का पुराना पड़ना है।

देश में उत्पादित कच्चे तेल व डीजल के निर्यात पर अप्रत्याशित लाभ कर बढ़ा

नई दिल्ली (भाषा)।

सरकार ने कच्चे तेल की अंतरराष्ट्रीय कीमतों में तेजी के अनुरूप घरेलू स्तर पर उत्पादित कच्चे तेल के साथ डीजल और विमान ईंधन (एटीएफ) के निर्यात पर अप्रत्याशित लाभ कर में वृद्धि कर दी है। सरकार की ओर से तीन फरवरी को जारी आदेश में कहा गया है कि आयल एंड नैचुरल गैस कारपोरेशन (ओएनजीसी) जैसी कंपनियों द्वारा उत्पादित कच्चे तेल पर इस कर को 1,900 रुपए प्रति टन से बढ़ाकर 5,050 रुपए प्रति टन कर दिया गया है।

कच्चे तेल को जमीन और समुद्र के नीचे से निकाला जाता है। इसे बाद में पेट्रोल, डीजल और विमान ईंधन में बदला जाता है। सरकार ने डीजल के निर्यात पर अप्रत्याशित लाभ कर पांच रुपए प्रति लीटर से बढ़ाकर 7.5 रुपए प्रति लीटर कर दिया है। एटीएफ के निर्यात पर अप्रत्याशित लाभ कर 3.5 रुपए प्रति लीटर से बढ़ाकर छह रुपए प्रति

लीटर किया गया है। नई दरें चार फरवरी से प्रभाव में आ गई हैं। इस तरह घरेलू कच्चे तेल और ईंधन के निर्यात पर कर की दरें अपने निचले स्तर से ऊपर आ गई हैं। पिछले महीने कर की दरें अपने सबसे निचले स्तर पर पहुंच गई थीं।

पिछले पखवाड़े समीक्षा में 17 जनवरी को कर दरों में कटौती की गई थी। उस समय वैश्विक स्तर पर कच्चे तेल के दाम नीचे आए थे। अब अंतरराष्ट्रीय स्तर पर कच्चे तेल के दाम फिर चढ़ने लगे हैं। भारत ने पहली बार पिछले साल एक जुलाई को अप्रत्याशित लाभ कर लगाया था। इसके साथ ही भारत उन देशों में आ गया था जो ऊर्जा कंपनियों के अप्रत्याशित लाभ पर कर लगाते हैं। उस समय पेट्रोल और एटीएफ पर छह रुपए प्रति लीटर और डीजल पर 13 रुपए प्रति लीटर का निर्यात शुल्क लगाया गया था। घरेलू कच्चे तेल के उत्पादन पर 23,250 रुपए प्रति टन (40 डालर प्रति बैरल) का अप्रत्याशित लाभ कर लगाया गया था।

प्रधानमंत्री आज बेंगलुरु में करेंगे भारत ऊर्जा सप्ताह का उद्घाटन

■ विनोद श्रीवास्तव

बेंगलुरु। एसएनबी

प्रधानमंत्री नरेंद्र मोदी कल छह फरवरी सोमवार को यहां भारत ऊर्जा सप्ताह 2023 का उद्घाटन करेंगे। इस कार्यक्रम में प्रधानमंत्री 20 प्रतिशत एथेनॉल मिश्रित पेट्रोल (ई-20) की शुरुआत करेंगे। इसी के साथ देश के चुनिंदा पेट्रोल पम्पों पर ई-20 पेट्रोल मिलने लगेगा। इससे वाहन चालकों को ईंधन उपयोग में घन की बचत होगी। तीन दिवसीय भारत ऊर्जा सप्ताह-2023 में उद्योग और ऊर्जा जगत की हस्तियां जुटेंगी। इसमें कई देशों के प्रतिनिधि भी शामिल हो सकते हैं। हालांकि प्रधानमंत्री कल के अपने कर्नाटक दौर में तुमकुरु में एचएएल हेलीकॉप्टर कारखाने को राष्ट्र को समर्पित करेंगे और विभिन्न विकास परियोजनाओं की आधारशिला भी रखेंगे।

भारत ऊर्जा सप्ताह 2023 का आयोजन 6 से 8 फरवरी तक होगा। इसका उद्देश्य ऊर्जा अंतरण महाशक्ति के रूप में भारत की बढ़ती क्षमता को प्रदर्शित करना है। इस आयोजन में पारंपरिक और गैर-पारंपरिक ऊर्जा उद्योग, सरकारों और अकादमिक जगत की हस्तियां एकत्र होंगी। कार्यक्रम के दौरान प्रधानमंत्री वैश्विक तेल व गैस संस्थानों के सीईओ के साथ गोलामेज संवाद करेंगे। वे हरित ऊर्जा के क्षेत्र में अनेक पहलों का शुभारंभ भी करेंगे। एथेनॉल मिश्रण रोडमैप के अनुरूप प्रधानमंत्री 11 राज्यों/केन्द्र शासित प्रदेशों में तेल विपणन

20 प्रतिशत एथेनॉल मिश्रित ई-20 पेट्रोल की होगी शुरुआत

भारत ऊर्जा सप्ताह-2023 में जुटेंगे उद्योग और ऊर्जा जगत की हस्तियां

हरित ईंधन के प्रति लोगों में जागरूकता के लिये दिखाएंगे ग्रीन मोबिलिटी रैली को हरी झंडी

कंपनियों के 84 रिटेल आउटलेट में ई-20 ईंधन की शुरुआत करेंगे। ई-20 ईंधन के तहत पेट्रोल में 20 प्रतिशत एथेनॉल का मिश्रण किया गया है। सरकार का उद्देश्य है कि 2025 तक एथेनॉल का मिश्रण पूरी तरह 20 प्रतिशत तक पूरा कर लिया जाये। इसके साथ ही तेल विपणन कंपनियां 2जी-3जी एथेनॉल संयंत्र लगा रही हैं, जिससे इस कार्य में प्रगति होगी।

प्रधानमंत्री ग्रीन मोबिलिटी रैली को भी झंडी दिखाकर खाना करेंगे। रैली में वे वाहन भाग लेंगे, जो हरित ऊर्जा स्रोतों से चलते हैं। रैली से हरित ईंधन के प्रति लोगों को जागरूक करने में मदद मिलेगी।

प्रधानमंत्री इंडियन ऑयल की 'अनबॉटल्ड' पहल के तहत वर्दी लॉन्च करेंगे। सिंगल यूज प्लास्टिक को चरणबद्ध

तरीके से समाप्त करने के प्रधानमंत्री की परिकल्पना के अनुरूप, इंडियन ऑयल ने खुदरा ग्राहक परिचारकों और एलपीजी डिलीवरी कर्मियों के लिए वर्दी तैयार की है, जो री-साइकिल किये हुए पॉलियस्टर (आरपीईटी) और कपास से बनी है।

प्रधानमंत्री इंडियन ऑयल के इंडोर सोलर कुकिंग सिस्टम के ट्विन-कुकरटॉप मॉडल का भी लोकार्पण करेंगे और इसके वाणिज्यिक रोल-आउट का शुभारंभ करेंगे। इंडियन ऑयल ने इससे पहले एकल कुकरटॉप के साथ एक अभिनव और पेटेंट इनडोर सोलर कुकिंग सिस्टम विकसित किया था। प्राप्त फीडबैक के आधार पर, ट्विन-कुकरटॉप इंडोर सोलर कुकिंग सिस्टम को उपयोगकर्ताओं के लिये अधिक सुविधाजनक और सरल बनाया गया है।

इसके अलावा प्रधानमंत्री रक्षा क्षेत्र में आत्मनिर्भरता की दिशा में एक और कदम बढ़ते हुए प्रधानमंत्री तुमकुरु में एचएएल हेलीकॉप्टर फैक्टरी राष्ट्र को समर्पित करेंगे। इसकी आधारशिला भी 2016 में प्रधानमंत्री ने ही रखी थी। यह एक समर्पित नया ग्रीनफील्ड हेलीकॉप्टर कारखाना है, जो हेलीकॉप्टर बनाने की क्षमता और इको-प्रणाली को बढ़ाएगा। प्रधानमंत्री तुमकुरु औद्योगिक टाउनशिप की आधारशिला भी रखेंगे। प्रधानमंत्री तुमकुरु में तिपटूर और चिक्कनायकन हल्ली में दो जल जीवन मिशन परियोजनाओं की आधारशिला भी रखेंगे।

प्रधानमंत्री इंडिया एनर्जी वीक का करेंगे उद्घाटन

नई दिल्ली, (पंजाब केसरी) प्रधानमंत्री नरेंद्र मोदी सोमवार को बेंगलुरु में 'इंडिया एनर्जी वीक' का उद्घाटन करने के साथ पेट्रोल में 20 प्रतिशत इथेनॉल मिश्रण की भी शुरुआत करेंगे। एक आधिकारिक बयान के मुताबिक, छह से आठ फरवरी तक आयोजित हो रहे 'इंडिया एनर्जी वीक' (आईईडब्ल्यू) में प्रधानमंत्री सौर एवं परंपरागत ऊर्जा से चलने वाली एक रसोई प्रणाली को भी पेश करेंगे। इस सम्मेलन के माध्यम से नवीकरणीय ऊर्जा की तरफ भारत के बढ़ते कदम को रेखांकित करने का इरादा है। इस दौरान प्रधानमंत्री 20 प्रतिशत इथेनॉल मिश्रण वाले पेट्रोल ई20 की पेशकश करेंगे। ई20 पेट्रोल की बिक्री 11 राज्यों एवं केंद्रशासित प्रदेशों के 84 खुदरा बिक्री केंद्रों पर होगी। सरकार ने वर्ष 2025 तक सिर्फ ई20 पेट्रोल की ही बिक्री का लक्ष्य रखा है। अभी तक पेट्रोल में 10 प्रतिशत इथेनॉल का ही मिश्रण करने की मंजूरी है। सरकार पेट्रोल में 20 प्रतिशत इथेनॉल मिश्रण के माध्यम से पेट्रोल के आयात बिल में कटौती करना चाहती है। इसके अलावा प्रधानमंत्री पेट्रोल पंप पर तैनात कर्मचारियों के लिए बनाई गई खास पोशाक 'अनबॉटल्ड' को भी पेश करेंगे। इंडियन ऑयल ने प्लास्टिक बोतलों को रिसाइकल कर इस पोशाक को तैयार किया है।

ई20
पेट्रोल की
होगी
शुरुआत



रूस से डीजल खरीदने पर यूरोपीय देशों ने रोक लगाई

फ्रैंकफर्ट, (एपी)। यूरोपीय देशों ने रूस से डीजल एवं अन्य शोधित तेल उत्पादों पर रविवार को प्रतिबंध लगाने के साथ ही यूक्रेन पर हमला करने के लिए उसकी आर्थिक रूप से घेराबंदी तेज कर दी।

रूसी डीजल पर यह पाबंदी पेट्रोलियम उत्पादों की अधिकतम सीमा के साथ लगाई गई है। डीजल की अधिकतम मूल्य सीमा पर सात मित्र देशों ने सहमति जताई थी। हालांकि यह मूल्य सीमा तात्कालिक तौर पर रूस के आर्थिक हितों को अधिक प्रभावित नहीं करेगी। इसकी वजह यह है कि रूस इस समय कमोबेश इसी स्तर पर डीजल की

आपूर्ति कर रहा है। लेकिन यूरोपीय देशों की पाबंदी लगने के बाद उसके लिए डीजल के ग्राहकों की तलाश कर पाना खासा मुश्किल हो जाएगा। यूक्रेन पर पिछले साल फरवरी में हमला करने वाले रूस को आर्थिक रूप से अलग-थलग करने के लिए अमेरिका एवं यूरोपीय देश उस पर कई पाबंदियां लगा चुके हैं। डीजल पर यूरोपीय देशों की रोक इसी दिशा में उठाया गया अगला कदम है। इस पाबंदी और मूल्य सीमा के पीछे मकसद यह है कि रूस को शोधित तेल उत्पादों की कीमतों में होने वाली किसी भी बढ़ोतरी का लाभ न मिले।

सरकार ने कच्चे तेल के निर्यात पर अप्रत्याशित लाभ कर बढ़ाया

नई दिल्ली। सरकार ने कच्चे तेल की अंतरराष्ट्रीय कीमतों में तेजी के अनुरूप घरेलू स्तर पर उत्पादित कच्चे तेल के साथ डीजल और विमान ईंधन (एटीएफ) के निर्यात पर अप्रत्याशित लाभ कर में वृद्धि कर दी है। सरकार की ओर से तीन फरवरी को जारी आदेश में कहा गया है कि ऑयल एंड नैचुरल गैस कॉरपोरेशन (ओएनजीसी) जैसी कंपनियों द्वारा उत्पादित कच्चे तेल पर इस कर को 1,900 रुपये प्रति टन से बढ़ाकर 5,050 रुपये प्रति टन कर दिया गया है। कच्चे तेल को जमीन और समुद्र के नीचे से निकाला जाता है। इसे बाद में पेट्रोल, डीजल और विमान ईंधन में बदला जाता है। सरकार ने डीजल के निर्यात पर अप्रत्याशित लाभ कर पांच रुपये प्रति लीटर से बढ़ाकर 7.5 रुपये प्रति लीटर कर दिया है। एटीएफ के निर्यात पर अप्रत्याशित लाभ कर 3.5 रुपये प्रति लीटर से बढ़ाकर छह रुपये प्रति लीटर किया गया है। नई दरें चार फरवरी से प्रभाव में आ गई हैं। इस तरह घरेलू कच्चे तेल और ईंधन के निर्यात पर कर की दरें अपने निचले स्तर से ऊपर आ गई हैं। पिछले महीने कर की दरें अपने सबसे निचले स्तर पर पहुंच गई थीं। पिछली पखवाड़ा समीक्षा में 17 जनवरी को कर दरों में कटौती की गई थी।

सरकार ने घरेलू स्तर पर उत्पादित कच्चे तेल, डीजल, एटीएफ निर्यात पर अप्रत्याशित लाभ कर बढ़ाया

एजेंसी ■ नई दिल्ली

सरकार ने कच्चे तेल की अंतराष्ट्रीय कीमतों में तेजी के अनुरूप घरेलू स्तर पर उत्पादित कच्चे तेल के साथ डीजल और विमान ईंधन (एटीएफ) के निर्यात पर अप्रत्याशित लाभ कर में वृद्धि कर दी है। सरकार की ओर से तीन फरवरी को जारी आदेश में कहा गया है कि ऑयल एंड नैचुरल गैस कॉर्पोरेशन (ओएनजीसी) जैसी कंपनियों द्वारा उत्पादित कच्चे तेल पर इस कर को 1,900 रुपये प्रति टन से बढ़ाकर 5,050 रुपये प्रति टन कर दिया गया है। कच्चे तेल को जमीन और समुद्र के नीचे से निकाला जाता है। इसे बाद में पेट्रोल, डीजल और



विमान ईंधन में बदला जाता है। सरकार ने डीजल के निर्यात पर अप्रत्याशित लाभ कर पांच रुपये प्रति लीटर से बढ़ाकर 7.5 रुपये प्रति लीटर कर दिया है। एटीएफ के निर्यात पर अप्रत्याशित लाभ कर 3.5 रुपये प्रति लीटर से बढ़ाकर छह रुपये प्रति लीटर किया गया है। नई दरें चार फरवरी से

प्रभाव में आ गई हैं। इस तरह घरेलू कच्चे तेल और ईंधन के निर्यात पर कर को दरें अपने निचले स्तर से ऊपर आ गई हैं। पिछले महीने कर की दरें अपने सबसे निचले स्तर पर पहुंच गई थीं। पिछली पखवाड़ा समीक्षा में 17 जनवरी को कर दरों में कटौती की गई थी।