BUSINESS LINE, Delhi, 17.10.2023
Page No. 3, Size:(20.62)cms X (15.81)cms.

# 'Share of natural gas in India's energy mix set for a leap'

**Rishi Ranjan Kala**
New Delhi

The Organization of the Petroleum Exporting Countries (OPEC) in its latest world oil outlook has projected that the share of natural gas in India's total energy mix will reach 10.6 per cent by 2045 compared with the government's target of 15 per cent by 2030.

According to the Petroleum and Natural Gas Regulatory Board (PNGRB), India's current share of gas in the energy mix stands at 5.78 per cent.

OPEC's projections are close to those made by bp in its last annual outlook. "The share of natural gas in total primary energy grows in all scenarios, increasing from 5 per cent in 2019 to 7-11 per cent in 2050, supported by industry and heavy road transport demand," the 2023 bp Energy Outlook report said.

However, the OPEC report notes that natural gas is also expected to expand strongly in the medium- and long-term in the world's fourth largest liquefied natural gas (LNG) importer.

Increasing the share of gas in the mix will help reduce coal usage, curb CO2 emissions, and support the deployment of intermittent renewables, such as wind and solar.

**CITY GAS DISTRIBUTION**

Furthermore, the government supports the gasification of the country (City Gas distribution), which aims to reduce the usage of traditional cooking fuels in the residential sector, it added.

"India is active in the continued gasification of its energy system.

Expanding city gas distribution (CGD) systems are set to increase gas usage in the residential and commercial sectors. Gas can help reduce the traditional use of biomass, as well as potentially substitute some liquefied petroleum gas (LPG) demand," the report projected.

The country's CGD sector, which at present consumes around 35 million standard cubic meters per day (MSCMD) of gas, is expected to consume around 150 MSCMD by 2028.

**LNG-POWERED VEHICLES**

The OPEC report projected that the initiatives that encourage natural gas vehicles may bring additional support.

Currently, players such as Essar Group-led GreenLine are offering LNG-powered trucks for long-range heavy-haul logistics, which is more affordable and environment-friendly compared to diesel.

Assuming its strong long-term competitiveness, the report expects gas to play a more important role in power generation. India's gas-fired installed power capacity is close to 18 gigawatts (GW), which is in general operated at a plant load factor (PLF), or capacity utilisation, of less than 20 per cent in the last 2-3 years due to high LNG prices.

"Currently, India's gas-powered power plants are used sub-optimally due to a lack of (domestic) gas supplies and have the potential to be ramped up in the future. In the Reference Case, India's gas demand more than triples in the outlook period, reaching levels of 4.1 million barrels of oil equivalent per day (mboe/d) in 2045," it added.

ECONOMIC TIMES, Delhi, 17.10.2023
Page No. 5, Size:(7.00)cms X (14.29)cms.

TRADERS SAY WAR UNLIKELY TO SPREAD

# Crude Falls Below $90 on US-Venezuela Deal

**Reuters**

Oil futures fell on Monday on a report the US and Venezuela could soon reach a deal to ease sanctions on Venezuela if a presidential election date is set, while traders see the Israel-Hamas conflict not affecting crude supplies in the short term. Brent futures were down 59 cents, or 0.67%, at $90.27 a barrel. US West Texas Intermediate (WTI) crude fell by 0.29 cents, or 0.37%, to $87.30 a barrel.

The US and Venezuelan governments were getting ready to sign a pact in Barbados as early as on Tuesday to ease US sanctions on Venezuela's oil industry in return for a competitive, monitored presidential election in Venezuela next year, according to media reports. Easing sanctions on Venezuela's oil industry could result in increased oil supply.

Traders were optimistic the war between Israel and Hamas would remain confined to Gaza.

"It's more of the same on Monday in terms of the conflict in the Middle East being contained from affecting crude oil supplies," said John Kilduff, partner with Again Capital LLC.

Both oil benchmarks had climbed nearly 6% on Friday, taking Brent 7.5% higher on the week and WTI up 5.9%.

Israeli strikes on Gaza intensified Monday, after diplomatic efforts to arrange a ceasefire failed.

The White House said it hopes the Rafah crossing at the Gaza-Egypt border could open for a few hours on Monday to allow some people to leave ahead of Israel's suspected ground offensive.

U.S. Secretary of State Antony Blinken returned to Israel on Monday, where he discussed humanitarian aid with Israeli Prime Minister Benjamin Netanyahu.

Russia has also entered the fray, with Vladimir Putin set to hold talks with Iran, Israel, Palestinians, Syria and Egypt.

Heightened tensions in the Middle East may have compounded other risk factors to push prices higher last week.

The United States last week imposed the first sanctions on owners of tankers carrying Russian oil priced above the G7's price cap of $60 a barrel, an effort to close loopholes in the mechanism designed to deprive Moscow of revenue for its energy sales.

"The sudden decision on tightening up of sanctions on ship owners carrying Russian crude over the $60/barrel limit by the US started to niggle," PVM analyst John Evans said on price rises at the end of last week.

# Crude oil prices steady above $90

**London:** Brent crude oil futures steadied above $90 a barrel on Monday after topping that level on Friday, as investors waited to see if the Israel-Hamas conflict escalates further. Brent futures were down 4 cents, or 0.04 per cent, at $90.85 a barrel at 1120 GMT. U.S. West Texas Intermediate (WTI) crude rose by 12 cents, or 0.14 per cent, to $87.81 a barrel. REUTERS

MILLENNIUM POST, Delhi, 17.10.2023
Page No. 9, Size:(16.40)cms X (11.71)cms.

# Fuel sales fall ahead of start of festive season

**NEW DELHI:** Petrol and diesel sales fell in the first half of October ahead of the start of festival season that is expected to boost consumption, preliminary data of state-owned firms showed.

Last year, Durga Puja/Dussehra as well as Diwali fell in October. This year the festival season, when consumption picks up, starts in the second half of October.

Petrol sales by three state-owned fuel retailers fell 9 per cent year-on-year, the first drop in two months. Diesel consumption dropped 3.2 per cent.

The decline was largely because of the larger base of last year.

Petrol sales dropped to 1.17 million tonnes during the first half of October from 1.29 million tonnes a year back.

Sales dropped 9 per cent month-on-month as well.

Consumption of diesel,

the most consumed fuel in the country — accounting for about two-fifths of the demand, dropped to 2.99 million tonnes during October 1 to 15 from 3.09 million tonnes a year back. Month-on-month sales were, however, up 9.6 per cent when compared with 2.73 million tonnes in the first half of September.

Diesel sales typically fall in monsoon months as rains lower demand in the agriculture sector which uses the fuel for irrigation, harvesting and transportation. Also, rains slow vehicular movements. This had led to a fall in diesel consumption in the last three months. And once the monsoon ended, consumption has risen month-on-month.

Consumption of diesel had soared 6.7 per cent and 9.3 per cent in April and May, respectively, as agriculture demand picked up and cars yanked up air-conditioning to beat the summer heat. It started to taper in the second half of June after the monsoon set in. It has continued to fall since.

Suppliers' group OPEC sees India's oil demand expanding on average by 2,20,000 barrels per day on the back of vigorous economic growth.

Consumption of petrol during October 1-15 was 12 per cent more than in the COVID-marred October 2021 and 21.7 per cent more than in pre-pandemic October 2019.

Diesel consumption was up 23.4 per cent over October 1-15 in 2021 and 23.1 per cent compared to October 2019.

With the continuing rise in passenger traffic at airports, jet fuel (ATF) demand rose 5.7 per cent to 2,95,200 tonnes during first fortnight of October against the same period last year.

It was 36.5 per cent more than in October 1-15, 2021, but 6.6 per cent lower than pre-COVID October 2019.

Month-on-month jet fuel sales were almost 2 per cent lower compared to 3,00,900 tonnes in September 1-15, 2023.

Cooking gas LPG sales were up 1.2 per cent year-on-year at 1.25 million tonnes in the first half of October. LPG consumption was 10.6 per cent higher than in October 1-15, 2021 and 153 per cent more than in pre-COVID October 2019.

Month-on-month, LPG demand fell 7.5 per cent against 1.36 million tonnes of LPG consumption during September 1-15, the data showed. PTI

BUSINESS LINE, Delhi, 17.10.2023
Page No. 11, Size:(20.43)cms X (16.62)cms.

# Green Hydrogen Mission allots ₹1,906 cr across three Ministries, supported projects

**Abhishek Law**
New Delhi

India's National Green Hydrogen Mission has so far allocated over ₹1,906 crore – which includes ₹1,506 crore across three Ministries and other supported projects; and ₹400 crore for R&D purposes.

The R&D scheme guidelines under the National Green Hydrogen Mission are to be finalised by October, while calls for proposals are likely to be issued by November. A National Centre for Hydrogen Safety has also been proposed.

Allotments made across Ministries include ₹455 crore to the Ministry of Steel, till 2029-30; around ₹155 crore to the Ministry of Ports, Shipping and Waterways (MoPSW) till 2025-26, and ₹400 crore to the Ministry of Road Transport and Highways (MoRTH) also till 2025-26. For other supported projects, the allotment has been ₹400 crore.

According to a report of the Empowered Group of the National Green Hydrogen Mission, accessed by *businessline*, the themes and structure of the pilot projects are awaited from the Ministry of Steel and MoPSW. The second meeting of the Empowered Group was held earlier this month.

**ALLOCATION**

Allotments made include ₹455 crore to the Ministry of Steel, till 2029-30; around ₹155 crore to the Ministry of Ports, Shipping and Waterways till 2025-26, and ₹400 crore to the Ministry of Road Transport and Highways also till 2025-26

**RESPONSIBILITIES**

"MoPSW has communicated a fund requirement of ₹2,140 crore for developing common user facilities near three ports, namely Kandla, Paradip, and Tuticorin. TheMinistry of New and Renewable Energy (MNRE) will formulate the scheme guidelines as per MoPSW's requirements," the report mentioned.

Other actions that are being taken by the MoPSW include upgrading ports for development as hydrogen hubs. In the case of MoRTH, the Ministry is conducting discussion on route selection in accordance with availability of hydrogen fuelling stations with IOCL; and these are to be conducted by October-end. "First phase of the pilots are to be rolled out by the end of 2023-24 and guidelines are to be formulated as per MoRTH's requirements," the report mentioned.

Earlier this year, the Union Cabinet had approved the National Green Hydrogen Mission with an allocation of ₹19,744 crore, aimed at procuring 5 million tonne (mt) of green hydrogen annually by 2030. Of this, the centre has earmarked an outlay of ₹17,490 crore for the SIGHT (Strategic Interventions for Green Hydrogen Transition) programme.

BUSINESS STANDARD, Delhi, 17.10.2023
Page No. 4, Size:(12.33)cms X (18.26)cms.

# Green hydrogen mission is high on ambition, low on resources

**S DINAKAR**
Amritsar, 16 October

ILLUSTRATION: BINAY SINHA

## KEY ROADBLOCKS

**DELAYED TENDERS:** The tendering process has been plagued by delays, potentially impacting India's ability to meet its ambitious H2 production targets

**MEAGRE INCENTIVES:** The subsidies offered per unit of green hydrogen output pale in comparison to those provided by Western nations

**DOMESTIC DEMAND:** Domestic industries, such as fertiliser and refineries, present major demand, but cost-effectiveness remains a hurdle

India's green hydrogen journey is fuelled by ambition but hampered by limited resources.

Consider the country's first federal-level green hydrogen tender, designed to incentivise fuel production under the government's ₹19,744 crore hydrogen mission. The goal was to transform India into a global hydrogen hub, a super-supplier of clean, affordable fuels worldwide and achieve a target of 5 million tonnes (mt) of green hydrogen production annually by 2030.

But then you can't run a bullet train on an old narrow-gauge track.

However, the subsidies offered per unit of green hydrogen output pale in comparison to those provided by Western nations. This, coupled with unconvincing domestic offtake, poses significant challenges.

Furthermore, the tendering process faced repeated delays, with bids sought 18 months after the announcement of the National Green Hydrogen Mission in January 2022. Even after these delays, the tenders were undercooked, leading to further clarifications and bid submission extensions, with the latest deadline set for October 31.

NEWS ANALYSIS

But even if that can be explained away as a fallout of new technology, the incentives given by the government under the tender to produce green hydrogen are perverse: in the first year, producers receive a maximum of ₹50 (60 cents)/kilogram (kg) for up to 450,000 tonnes of clean fuel. This cap drops to ₹40/kg in the second year and ₹30/kg in the third year.

In the first phase, the government plans to fund 1.35 mt of green hydrogen over three years, costing about ₹5,400 crore, constituting 40 per cent of the total fuel production outlay. It remains uncertain whether such modest allocations will generate the proposed ₹8 trillion in investments throughout the green hydrogen value chain.

In contrast, the US offers up to $3/kg in base tax credit under the Inflation Reduction Act (IRA), with an additional $8 billion committed for hydrogen hub development. By 2030, the production cost of US green hydrogen, including IRA tax benefits, is expected to range from $0.5-1.5/kg, making it the most cost-effective region globally, consultant EY said, carrying a high export potential.

Europe, with numerous green hydrogen initiatives, offers around €4/kg. The Indian Hydrogen Alliance (IH2A), which includes Reliance among its members, has demanded a price support of $2/kg for first-generation green hydrogen projects.

"I don't think India will ever be able to match what Europe and the US can do," says Hemant Mallya, Fellow, Council on Energy, Environment and Water. "They can take on a debt burden but we cannot. We don't have that luxury. But then one could argue that you could go for a lower volume with a higher subsidy," he adds.

Despite Indian fertiliser makers and refiners consuming 6 mt of hydrogen annually (expected to rise to 28 mt by 2050), achieving the 5 mt/annum (mtpa) green hydrogen target by 2030 remains challenging.

The programme has an initial budget of about ₹19,744 crore until 2030, of which ₹13,050 crore is earmarked for fuel production. "While 5 mtpa target may still appear ambitious, and export competitiveness a monitorable ability, to enable transition for the domestic value chain itself will be a big step," says Hetal Gandhi, director at CRISIL Research. Grey hydrogen at $1.5-2.5/kg costs half of what it costs to produce green hydrogen.

Green hydrogen production costs in India are around $3.5/kg, but risk premiums drive it up to $6-7/kg, making the economics unviable.

Industry insiders, including Simarpreet Singh, chief executive officer of Hartek Group (an engineering, procurement, and construction contractor for power and renewables), emphasise that viability is unlikely in the initial three to four years. "Right now, the economics for green hydrogen doesn't make sense," he observes.

India's underfunded green hydrogen tenders lack purpose without procurement mandates or carbon taxes. A lower incentive structure could work if industries were obligated to purchase green hydrogen, but resistance from fertiliser and petroleum ministries hindered progress.

Moreover, the focus on exports raises concerns that the subsidies provided may end up subsidising consumers in Western nations.

FINANCIAL EXPRESS, Delhi, 17.10.2023
Page No. 2, Size:(3.00)cms X (10.05)cms.

# India resists yuan for Russian oil

**THE INDIAN GOVERNMENT'S** discomfort over letting state-controlled refiners pay for Russian oil imports with Chinese currency has held up the payment for at least seven cargoes, people with direct knowledge of the matter said.

The tussle over payment has not disrupted deliveries so far, with Russian firms such as Rosneft continuing to supply state-controlled Indian refiners, who are seeking alternative ways for settlement.

India emerged as the top importer of Russian seaborne oil this year, with refiners snapping up the crude sold at a discount after some western nations suspended imports from Moscow over its invasion of Ukraine.

But refiners often face problems in settling oil trade with Moscow after the United States and European Union imposed a price cap of $60 a barrel on Russian oil, forcing buyers to use alternatives such as Emirati dirhams for cargoes that have gone above the cap as oil prices have risen.

Reuters reported in July that Indian refiners began using yuan to pay for some oil from Russian sellers, while continuing to use dollars and dirhams to settle most of their Russian oil purchases.

—REUTERS

FINANCIAL EXPRESS
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TIMES BUSINESS
THE TIMES OF INDIA, NEW DELHI | TUESDAY, OCTOBER 17, 2023

## Israel Energy Sites Shut, Oil Slips As US Diplomacy, Venezuela Calm Mkts

Israel, which has become a major gas exporter in recent years, has shut down several major energy sites since the Hamas attack. Oil edged lower as the **US stepped up diplomatic efforts** to stop the conflict from spreading and reportedly neared a deal to **increase crude exports from Venezuela**. **Brent** surged almost **6%** on Friday to cap a large weekly gain. **European gas prices** eased after rallying more than **40%** last week, with traders weighing milder weather forecasts and international efforts to contain the conflict

## Gas Fields & Ports Hit As War Escalation Looms

- Israel has suspended the **Tamar gas field**, 25km off the city of Ashdod, along the country's southern Mediterranean coast
- While 85% of the gas was used in the domestic market, the rest was exported to **Egypt** and **Jordan**

- **Chevron**, the second-largest US oil co, has halted gas exports via a 90km pipeline between Israel and Egypt. It is supplying gas through an alternative pipeline through Jordan
- The port of Ashkelon and its oil terminal have been shut. The port is located just over **10km from the Gaza Strip**

## Shekel Hits 8-Year Low

- Israeli shekel fell further on Monday testing the central bank's resolve to contain the fallout... PM **Benjamin Netanyahu** said Israelis should prepare for a long battle

Source: Reuters, Bloomberg

# Jittery oil markets

## Import-dependent India will seriously be concerned with elevated energy prices

**OIL PRICES REMAINED** elevated at over $90 a barrel last weekend following the bloody incursion of Hamas forces into Israel that triggered an ongoing war between the former and Israel's army. This reflects a so-called "fear premium" or market jitters over potential disruption in oil supplies as there is considerable uncertainty if the conflict engulfs the region beyond Israel to Lebanon and ultimately involves Iran for supporting Hamas and other militias like Hezbollah in Lebanon. Currently, there is intense shelling from Israel into southern Lebanon with Iran sternly warning that the militias it supports could open a new front in the ongoing conflict if Israel's "war crimes" continue with the intense bombardment and loss of lives in Gaza. As yet, there is no evidence of Iran's direct involvement behind Hamas's attacks in Israel but the probability of further US-led sanctions cannot be ruled out, including curbs on its sale of oil as it is the third largest Opec producer generating 2.93 million barrels per day in July-September. These sanctions would straightaway take out 2.9% of global crude supplies and prices could zoom to $100 a barrel or more.

More so, if Iran chooses to retaliate by blocking the Strait of Hormuz, through which 30% of the world's sea borne oil passes through every day, threatening the world economy with stagflation as in the 1970s. Market experts and commodity analysts reckon that the crude oil market remains hyper-alert to any indication that the conflict is poised to expand into the oil-producing region in West Asia. An import-dependent India is bound to be seriously concerned as geopolitical tensions in West Asia support higher oil prices. Union petroleum minister Hardeep Singh Puri said last week that "the place where action is taking place is in many respects the centre of global energy," adding that $100 a barrel was unsustainable. All of this is a recipe for costlier imports and build-up of inflation in the economy if global oil prices pass-through to higher domestic prices.

This is most unwelcome ahead of crucial state and national elections as the government is keen to insulate the vocal urban middle class from rising fuel prices. Elevated global oil prices are also bad news for the country's external accounts. A rule of thumb is that every increase in global oil prices by $10 a barrel raises the current account deficit—which is the broadest measure of India's goods and services transactions—by $9 to 10 billion. The deficit this fiscal may thus widen to much more than 1.1% of GDP in the first quarter and 2% of GDP in FY 23. Unfortunately for India there is no respite from costlier energy even if the Israel-Hamas war does not spill over to West Asia. Oil has been on the boil before these hostilities began due to the relatively tight market conditions and Saudi Arabia and Russia's decision to unilaterally extend their cuts of 1 million barrels per day and 300,000 bpd respectively till December.

Such a significant reduction in oil supplies led to oil prices breaching $97 a barrel in late September. Even without the ongoing conflict, prices were expected to average $90.95 a barrel in the October-December quarter and $95 a barrel in 2024 according to the US Energy Information Administration. To reduce its vulnerability to higher oil prices, India must aim for greater relative self-sufficiency through higher domestic oil and gas production over the medium-term.

BUSINESS STANDARD, Delhi, 17.10.2023
Page No. 4, Size:(41.80)cms X (42.28)cms.

# OMCs to draw up joint green H2 road map

SUBHAYAN CHAKRABORTY
New Delhi, 16 October

Oil-marketing companies (OMCs) may soon submit a joint road map for the adoption of green hydrogen to accelerate their energy transition plans, officials said.

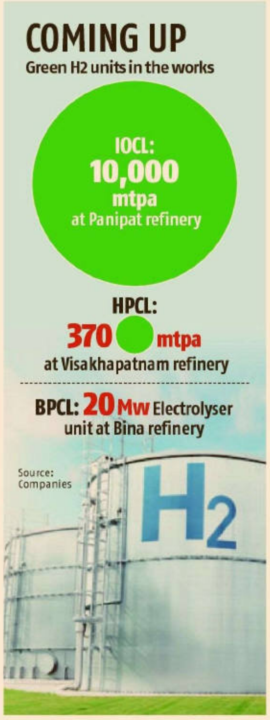
The Ministry of Petroleum and Natural Gas Ministry has asked OMCs to submit a detailed plan to increasingly adopt green hydrogen and provide a leg-up to their energy transition plans, the officials said.

Public-sector undertakings (PSUs) under the ministry target to produce more than 1 million tonnes (mt) of green hydrogen by 2030.

"The ministry has been meeting OMCs to ensure ways to boost green hydrogen production in the country. A joint road map will not only ensure better coordination in mapping demand but also enable OMCs to help each other in technical assistance," the official said.

Refineries in the country already utilise hydrogen for internal consumption, which has the potential to be converted into green hydrogen. The ministry plans to ensure uptake through city gas distribution (CGD) where it will be blended green hydrogen (GH2) with natural gas.

Indian Oil Corporation Limited (IOCL) is testing hydrogen-enriched natural gas, or HENG, to be carried in natural gas pipelines. In theory, the two can be mixed in any proportion, but typically, HENG in the range of 10 per cent to 20 per cent hydrogen by volume represents the most-promising near-term option.




**Slow rollout**

In August, IOCL invited global tenders to establish its first green hydrogen generation plant at the Panipat refinery. At 10 KTA (thousands tonnes per annum) capacity, the project is envisaged to be created over the next 30 months.

Back in 2021 as well, IOCL had released bids to set up green hydrogen units at its refineries in Panipat and Mathura refineries. With planned installed capacities of 2,000 million tonnes per annum (mtpa) and 5,000 mtpa, respectively, the units were planned to be set up on a build-own-operate basis. The period of operation was up to 24 years and the new units had a target deadline of 28 months.

However, the plans did not fructify, and the company has now decided to refocus its efforts on the Panipat refinery, its largest in India with 15 mtpa capacity.

IOCL plans to mix the green hydrogen produced with grey hydrogen that is produced during naptha or natural gas for captive purposes in secondary processing units.

Meanwhile, Bharat Petroleum Corporation Limited is setting up a 20-megawatt green hydrogen unit at its refinery in Bina, Madhya Pradesh, to meet its captive hydrogen requirements.

Hindustan Petroleum Corporation (HPCL) is reportedly setting up a 370 mtpa green hydrogen plant at its Visakhapatnam refinery in Andhra Pradesh.

In July, Petroleum Minister Hardeep Singh Puri had said the PSUs had not restricted themselves to activities only within India. Case in point, a consortium of HPCL and green energy provider ACME has submitted bids in response to green hydrogen/ammonia-related tenders in Germany and Oman.

ECONOMIC TIMES, Delhi, 17.10.2023
Page No. 9, Size:(7.78)cms X (16.62)cms.

# ONGC Focuses on Lowering Operating Costs

## Oilfield services rates surge, maintenance costs rise for old capital equipment

Sanjeev.Choudhary
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**New Delhi:** Oil and Natural Gas Corporation (ONGC) is facing operating cost escalation as oilfield services rates have surged by about a quarter in just a year and the company's old capital equipment such as compressors and turbines impose increased maintenance cost, its finance chief said.

"The cost of operation has gone up, and as director (finance), my main focus now is how we can reduce the cost," Pomila Jaspal, ONGC's finance chief, told **ET**. "Of course, we can't reduce on repair and maintenance. At the same time, we can reduce on unwanted costs like idle time of the rigs, and vessels. We are trying to reduce that."

The company is planning to keep operating expenditure in check by bringing in more efficiency through "economies of scale, reducing manpower cost and general administration cost", she said.

"The operating cost is also high because our capital equipment has been very old," said Jaspal, adding that around 28-32 compressors and turbines are sent over to proprietary vendors for overhauling every year.

Oilfield services rates, including those of rigs, barges, helicopters and other services, have risen sharply over the past year. Gulf producers, led by Saudi Arabia, have attracted a record number of rigs. Brazil too has gathered a large number of deep-sea rigs. This has left Indian explorers struggling to find enough rigs, let alone at affordable rates.

"Every time we open the bids for rigs, they come at a very escalated price," said Jaspal.

Oilfield services rates usually follow the oil price trajectory. High oil prices energise exploration and development activity, pushing up demand for services and escalating their costs. For ONGC, finding offshore rigs is a bigger challenge than onshore rigs as the latter is well supplied.

**ONGC** is going to carry out a controlled reopening of a relief well (Well PD#2) in Periyakudi, Kariyamangalam village, Tiruvarur district. This is being done using a drilling rig to protect the well & the surrounding community. It is a safer option compared to abandonment of the well. With support of the District Administration & the State Govt., ONGC is hopeful of the necessary permissions for well intervention. There is absolutely no reason for alarm, as ONGC is continuously & diligently monitoring the situation at Well PD#2. ONGC's operations strictly adhere to Standard Operating Procedures & int'l safety standards. Since the enactment of the "Tamil Nadu Protected Agricultural Zone Development Act 2020," ONGC has not drilled any new wells, ensuring strict compliance with the Act. In 2012, ONGC commenced the spudding of this Well PD#2 after securing all necessary statutory clearances from the Tamil Nadu Pollution Control Board. The well's construction was completed in 2013, & during production testing, a high-pressure flow necessitated the well's temporary closure. Despite earnest attempts in 2014 & 2016 to explore alternative zones within the well, technical challenges hindered progress.

ECONOMIC TIMES, Delhi, 17.10.2023
Page No. 10, Size:(25.33)cms X (9.06)cms.

# Petronas, 2 Others Eye Green Energy Co Fourth Partner

**FUNDS FOR GROWTH** Cos in talks to acquire TPG Capital's stake, a deal likely to value equity base of renewables firm at about $500 m

**Swaraj.Dhanjal**@timesgroup.com

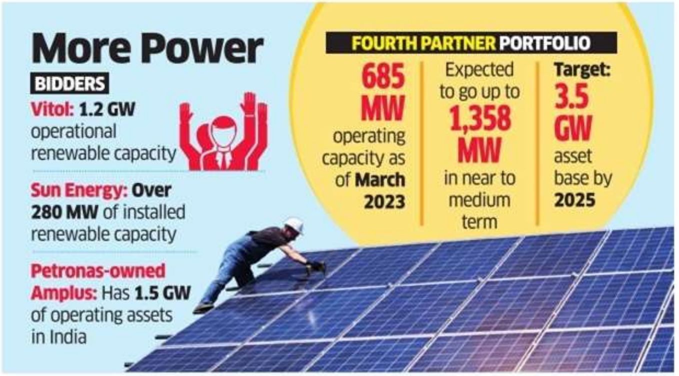
**Mumbai:** Malaysian energy major Petronas, Indonesia's renewables firm Sun Energy and global commodities company Vitol are in talks to acquire TPG Capital's Rise Fund-backed Fourth Partner Energy, a renewables company that supplies green energy to commercial and industrial establishments, said two sources aware of the development. The majority stake sale is likely to value the company's equity base at around $450-$500 million, the sources said.

TPG, which owns close to 50% stake in the business, is looking to completely exit the company through this transaction, the sources added. The incoming investor will also bring in some fresh capital to fund the growth plans of the company, which include growing its asset base to up to 3.5 gigawatts (GW) by 2025.

"Petronas, Sun Energy and Vitol have submitted non-binding offers and are doing diligence on the company's assets. A few other investors had also looked at the asset earlier, but these three are the ones left in the race now," said one of the sources cited above.

**Petronas, Sun Energy and Vitol said to have submitted non-binding offers and are doing diligence on co's assets**

Petronas owns Amplus Solar in India that has an operating portfolio of 1.5 GW of renewable assets. Vitol owns around 1.2 GW of renewable assets, while Indonesia-based Sun Energy has installed over 280 MW of renewable power capacity for corporate clients.




Norfund, a Norway government sponsored investment fund, which invested $100 million in the company in 2021, will continue to hold its stake, the source added.

In August, Norfund invested ₹350 crore into the company. TPG first entered the company in 2018 investing $70 million.

Fourth Partner Energy had an operating portfolio of 685 megawatts (MW) as of March 2023 growing from 248 MW as of September 2021, according to a report by credit rating agency Icra.

The operating portfolio is expected to reach 1,358 MW in the near to medium term, the report noted.

Fourth Partner Energy posted revenues of ₹1,018 crore in FY22, up from ₹459 crore in the previous year. It reported a net profit of ₹7 crore in FY22, rising from ₹53 lakh in the previous year. TPG, Norfund and Vitol declined to comment. Emails sent to Petronas and Sun Energy did not elicit a response.

"Fourth Partner Energy is in the midst of fund-raising and as it is an on-going process — we will not be able to comment on any particulars at this juncture," said a spokesperson for Fourth Partner Energy. Renewable energy companies that supply clean energy to commercial and industrial (C&I) establishments have been attracting strong investor interest lately.

In June, Canadian investor Brookfield invested $360 million in CleanMax Enviro Energy Solutions, a Mumbai-based C&I renewable energy company, acquiring a majority stake in the company. At the time, the company managed 1.6 GW of operating wind and solar projects and supplied clean energy to over 350 corporate customers.

ET reported on August 31 that Australian investor Macquarie-owned C&I platform Vibrant Energy has seen acquisition interest from Sun Energy and Vitol, among others. The deal is likely to value Vibrant at an equity value of around $200 million, ET reported.

The C&I renewables market in India is expected to grow by 47GW over the next five years, said a recent report from energy analyst firm Bridge To India. Corporate customers account for 51% of the country's total consumption, the report said.

HINDU, Delhi, 17.10.2023
Page No. 8, Size:(4.31)cms X (3.89)cms.

# Saudi Arabia's crude exports for the month of August

**5.58** in million barrels per day (bpd). Crude exports from the world's largest oil exporter hit its lowest in 28 months. Saudi and Russia have agreed to combine voluntary oil supply cuts of 1.3 million bpd until the year end. REUTERS

HINDU, Delhi, 17.10.2023
Page No. 13, Size:(9.47)cms X (7.73)cms.

# Some Russia-oil payments said to be held up over yuan issue

**Reuters**
NEW DELHI

The Indian government's discomfort over letting state-controlled refiners pay for Russian oil imports with Chinese currency has held up the payment for at least seven cargoes, people with direct knowledge of the matter said.

The tussle over payment has not disrupted deliveries so far, with Russian firms such as Rosneft continuing to supply state-controlled Indian refiners, who are seeking alternative ways for settlement.

India emerged as the top importer of Russian seaborne oil this year, with refiners snapping up the crude sold at a discount after some western nations suspended imports over Ukraine invasion.

## Settlement issues

But refiners often face problems in settling oil trade with Moscow after the U.S and the European Union imposed a price cap of $60 a barrel on Russian oil, forcing buyers to use alternatives such as Emirati dirhams for cargoes that have gone above the cap as oil prices have risen. Reuters reported in July that Indian refiners began using yuan to pay for some oil from Russian sellers.

The Centre, however, has become uncomfortable with using the yuan for settlement, Finance Ministry officials said. It is unclear if the Centre instructed state refiners to stop paying in yuan, but New Delhi's disapproval is plain. "It is not banned and if a private firm has yuan to settle trade, the government will not stop it, but will neither facilitate the trade," said an official.

## तेल विपणन कंपनियां बना रहीं साझा रणनीति

# ग्रीन हाइड्रोजन को गति देंगी ओएमसी

शुभायन चक्रवर्ती
नई दिल्ली, 16 अक्टूबर

तेल विपणन कंपनियां (ओएमसी) जल्द ही ग्रीन हाइड्रोजन को बढ़ावा देने के लिए एक साझा रणनीति तैयार कर रही हैं ताकि पर्यावरण के अनुकूल ईंधन के बाजार को भुनाने के वास्ते किए जा रहे प्रयासों को सुदृढ़ किया जा सके। अधिकारियों ने बताया कि जल्द ही साझा रणनीति सरकार के समक्ष प्रस्तुत की जाएगी। उन्होंने कहा कि पेट्रोलियम एवं प्राकृतिक गैस मंत्रालय ने तेल विपणन कंपनियों को ग्रीन हाइड्रोजन के कारोबार को बढ़ावा देने के लिए एक विस्तृत योजना जमा करने के लिए कहा था। पेट्रोलियम और प्राकृतिक गैस मंत्रालय के तहत सार्वजनिक क्षेत्र की कंपनियों ने साल 2030 तक 10 लाख टन (एमटी) से अधिक ग्रीन हाइड्रोजन का उत्पादन करने का लक्ष्य रखा है।

अधिकारी ने कहा, 'देश में ग्रीन हाइड्रोजन उत्पादन को बढ़ावा देने के तरीके सुनिश्चित करने के लिए तेल विपणन कंपनियों के साथ मंत्रालय लगातार बैठकें कर रहा है। एक साझा रणनीति से न केवल मांग के बारे में में बेहतर होगा बल्कि तेल विपणन कंपनियों को तकनीकी सहायता में एक-दूसरे की सहायता करने में भी सक्षम बनाएगा।'


### कवायद जारी

- रिफाइनरियों के निजी उपयोग के इतर ग्रीन हाइड्रोजन की मांग का हो रहा आकलन
- ग्रीन ईंधन के बाजार को भुनाने के लिए किए जा रहे प्रयासों को सुदृढ़ करने की कवायद
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देश में रिफाइनरियां पहले से ही आंतरिक खपत के लिए हाइड्रोजन का उपयोग करती हैं जिसे ग्रीन हाइड्रोजन में परिवर्तित करने की क्षमता है। मंत्रालय शहरी गैस वितरण (सीजीडी) के माध्यम से उठाव सुनिश्चित करने की भी योजना बना रहा है जहां प्राकृतिक गैस के साथ ग्रीन हाइड्रोजन (जीएच2) मिलाया किया जाएगा। इंडियन ऑयल प्राकृतिक गैस पाइपलाइनों के जरिये परिवहन के लिए हाइड्रोजन-समृद्ध प्राकृतिक गैस (एचईएनजी) का परीक्षण कर रही है। सैद्धांतिक तौर पर दोनों को किसी भी अनुपात में मिलाया जा सकता है मगर आम तौर पर 10 से 20 फीसदी के दायरे में एचईएनजी की मात्रा निकट भविष्य के लिए बेहतर विकल्प हो सकता है।

### धीरे-धीरे हो रहा है काम

अगस्त में इंडियन ऑयल ने पानीपत रिफाइनरी में अपना पहला ग्रीन हाइड्रोजन उत्पादन संयंत्र स्थापित करने के लिए वैश्विक निविदाएं आमंत्रित कीं। 10 केटीए (हजार टन प्रति वर्ष) क्षमता पर इस परियोजना को अगले 30 महीनों में बनाने की योजना है। इस परियोजना को पानीपत में मौजूदा हाइड्रोजन नेटवर्क के साथ जोड़ने की भी तैयारी है।

इससे पहले साल 2021 में भी इंडियन ऑयल ने पानीपत और मथुरा रिफाइनरियों में अपनी रिफाइनरियों में ग्रीन हाइड्रोजन संयंत्र लगाने के लिए निविदा निकाली थी। क्रमशः 2000 मीट्रिक टन प्रति वर्ष (एमटीपीए) और 5000 एमटीपीए की नियोजित स्थापित क्षमताओं के साथ इन संयंत्रों को स्थापित किया जाना था। हालांकि, योजनाएं फलीभूत नहीं हुईं और कंपनी ने अब अपने प्रयासों को 1.5 करोड़ मीट्रिक टन प्रति वर्ष क्षमता के साथ भारत में सबसे बड़ी पानीपत रिफाइनरी पर केंद्रित करने का निर्णय लिया है।

इस बीच, भारत पेट्रोलियम अपने इस्तेमाल के लिए हाइड्रोजन आवश्यकताओं को पूरा करने के लिए मध्यप्रदेश के बीना में अपनी रिफाइनरी में 20 मेगावाट की ग्रीन हाइड्रोजन इकाई स्थापित कर रही है। हिंदुस्तान पेट्रोलियम भी कथित तौर पर आंध्र प्रदेश में अपनी विशाखापत्तनम रिफाइनरी में 370 एमटीपीए ग्रीन हाइड्रोजन संयंत्र स्थापित कर रही है।

HINDUSTAN, Delhi, 17.10.2023
Page No. 13, Size:(5.65)cms X (2.12)cms.

# पेट्रोल और डीजल की बिक्री में गिरावट

नई दिल्ली। त्योहारी सीजन की शुरुआत से पहले अक्टूबर के पहले पखवाड़े में पेट्रोल और डीजल की बिक्री में गिरावट आई है। इस साल अक्टूबर के दूसरे पखवाड़े में खपत बढ़ने का अनुमान है। पेट्रोल की बिक्री में सालाना आधार पर नौ प्रतिशत की गिरावट आई। दो महीने में पहली बार पेट्रोल की बिक्री गिरी है। वहीं डीजल की मांग भी 3.2 प्रतिशत घट गई।