

COP28 nears deal on fossil fuel

REUTERS

New draft text of final agreement expected

JOHN AINGER, LAURA MILLAN &
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December 12

FINAL NEGOTIATIONS AT COP28 are going late into Tuesday night in Dubai, but there's suddenly more confidence negotiators are close to bridging divisions on the future of fossil fuels.

Officials milling around the Expo centre, where COP28 is being held, weren't giving details, but were optimistic that a deal could

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5 big promises made at annual UN climate talks **PAGE 7**

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be reached. A first draft agreement on Monday drew criticism from the US and European Union for not going far enough on the phase out of fossil fuels. Diplomats have been running between bilateral meetings as the host, the United Arab Emirates, tries to broker a new draft, expected within hours.

Continued on Page 7



Activists protest against fossil fuels at the COP28 summit in Dubai on Tuesday

COP28 nears fossil fuel deal

"I'M CONFIDENT THAT we are going to see a different text," US climate envoy John Kerry said on Tuesday evening. A 21-page document released on Monday pitched a cut in consumption and production of fossil fuels the UAE tried to craft a compromise. The US and the EU were among those that opposed that version, saying it didn't go far enough with a phase out of polluting energy, and instead allows nations loopholes and opt-outs. On the other side, Saudi Arabia and some other major oil-producing nations have been opposing a phase down of fossil fuels because their economies depend on it. Tuesday was meant to be the last day of COP28.

The first text proposed a "just" and "orderly" reduction of fossil fuel use — adjectives designed to appease more cautious countries. But it presented those reductions, along with boosting efficiency and renewable power, as merely options.

Sultan Al Jaber, the Emirati oil executive running COP28, has the task of getting almost 200 countries to agree to a text that will govern the global fight against climate change. A broad coalition wants stronger language calling for the phase out of fossil fuels, but that's adamantly

opposed by Saudi Arabia, other OPEC+ nations and some developing nations.

For some, the inclusion of fossil fuels in the draft text and getting countries like Saudi Arabia, whose economies depend heavily on oil, engaged in discussions about it already goes a long way. But that praise was mixed with pushback from others for stronger action, showing an agreement was somewhat off. The text also presents some actions — from tripling renewable to reducing the consumption and production of fossil fuels — as options, rather than prescribed steps.

Developing and poor countries have deplored the latest draft of the global stocktake, calling for major changes, including in the section offering options to slash planet-warming greenhouse gas emissions, negotiators from the Global South said on Tuesday.

The latest global stocktake (GST) draft, which will be the centrepiece of the final deal document, does not mention the "phase-out of fossil fuels". However, it includes stronger language on coal usage, which is problematic for heavily coal-dependent countries like India and China.

(With inputs from PTI)

Crude oil rises ahead of interest rate decisions



Singapore: Oil prices ticked up on Tuesday as investors played cautious ahead of key interest rate decisions and inflation data releases, but concerns over supply surplus and slower demand growth kept a lid on gains. Brent crude futures for February were up 26 cents, or 0.3 per cent, to \$76.29 a barrel, while US West Texas Intermediate crude futures for January delivery gained also gained 26 cents, or 0.4 per cent, at \$71.58 a barrel. REUTERS

EVERYDAY ECONOMICS

Food vs fuel: case of sugar

Blending of ethanol with petrol has risen sharply in the last decade. But low sugar stocks and uncertainties over production this year have forced the government to go slow on its successful blending programme



HARISH DAMODARAN

AFTER BANNING the export of sugar, the Centre has taken the next step towards augmenting its domestic availability — by restricting the diversion of the sweetener for the production of ethanol.

On December 7, the Ministry of Consumer Affairs, Food and Public Distribution directed all mills and distilleries not to use sugarcane juice/ syrup for making ethanol "with immediate effect".

Ethanol is 99.9% pure alcohol that can be blended with petrol. The ethanol blended petrol (EBP) programme has been a significant accomplishment of the Narendra Modi government. The all-India average blending of ethanol with petrol has risen from 1.6% in 2013-14 to 11.8% in 2022-23.

Alternative feedstocks

Key to this has been feedstock diversification in India.

Ethanol — or even 94% pure industrial-grade rectified spirit and 96% extra neutral alcohol for potable liquor — is normally made from so-called 'C-heavy' molasses.

Mills typically crush cane with 13.5-14% total fermentable sugars (TFS). Around 11.5% can be recovered from the juice as sugar. The uncrystallised, non-recoverable 2-2.5% TFS goes into C-heavy molasses. Every tonne of this liquid, containing 40-45% sugar, gives 220-225 litres of ethanol on fermentation and distillation.

But mills, instead of recovering 11.5% sugar, can extract just 9.5-10%, and divert the balance 1.5-2% TFS to an earlier stage of 'B-heavy' molasses. This molasses, having 50%-plus sugar, yields 290-320 litres of ethanol per tonne.

A third option is not to produce any sugar, and to instead ferment the entire 13.5-14% TFS into ethanol. Thus, from one tonne of cane, 80-81 litres of ethanol can be obtained, as against 20-21 litres and 10-11 litres through the B-heavy and C-heavy molasses routes respectively.

The increase in India's ethanol production happened largely after 2017-18, when mills started making it from B-heavy molasses and concentrated sugarcane juice/ syrup (See Table 1).

In addition, new substrates — surplus rice from Food Corporation of India (FCI) stocks, broken/ damaged foodgrains, and maize — were used. Grains contain starch, which has

TABLE 1

ETHANOL SUPPLIED TO OIL MARKETING COMPANIES

In crore litres

| Supply Year | C-Heavy Molasses | B-Heavy Molasses | Sugarcane Juice | Surplus Rice | Damaged Grains | Maize | TOTAL |
|-------------|------------------|------------------|-----------------|--------------|----------------|-------|------------|
| 2013-14 | 38 | 0 | 0 | 0 | 0 | 0 | 38(1.60) |
| 2014-15 | 67 | 0 | 0 | 0 | 0 | 0 | 67(2.33) |
| 2015-16 | 111 | 0 | 0 | 0 | 0 | 0 | 111(3.51) |
| 2016-17 | 67 | 0 | 0 | 0 | 0 | 0 | 67(2.07) |
| 2017-18 | 151 | 0 | 0 | 0 | 0 | 0 | 151(4.22) |
| 2018-19 | 146 | 33 | 1 | 0 | 10 | 0 | 189(4.92) |
| 2019-20 | 74 | 68 | 15 | 0 | 16 | 0 | 173(5.00) |
| 2020-21 | 39 | 183 | 39 | 2 | 39 | 0 | 302(8.10) |
| 2021-22 | 11 | 265 | 85 | 49 | 24 | 0 | 434(10.02) |
| 2022-23 | 5 | 224 | 126 | 72 | 21 | 18 | 467(11.80) |
| 2023-24* | 2 | 130 | 135 | 45 | 159 | 89 | 559 |

Supply years are Dec-Nov, Dec-Oct for 2022-23 and Nov-Oct for 2023-24;

*As per offers received in cycle 1 (Nov 2023) of bids invited by OMCs;

Figures in brackets are average ethanol blending with petrol in per cent. Source: Industry estimates.

TABLE 2

SUGAR BALANCE SHEET

In lakh tonnes

| | 2019-20 | 2020-21 | 2021-22 | 2022-23 |
|-----------------------|---------|---------|---------|---------|
| Opening Stocks | 143.33 | 104.78 | 83.98 | 71.23 |
| Gross Production | 282.85 | 333.2 | 393.25 | 375 |
| Diversion to Ethanol | 9 | 22 | 34 | 45 |
| Net Production | 273.85 | 311.2 | 359.25 | 330 |
| Availability (1+4) | 417.18 | 415.98 | 443.23 | 401.23 |
| Consumption | 253 | 260 | 262 | 280 |
| Exports | 59.4 | 72 | 110 | 64 |
| Ending Stocks (5-6-7) | 104.78 | 83.98 | 71.23 | 57.23 |

Source: National Federation of Cooperative Sugar Factories Ltd.

to be converted into sucrose and simpler sugars (glucose and fructose) before their fermentation by yeast.

The longer process notwithstanding — molasses already have fermentable sugars — ethanol yields from grain are higher, at 380-480 litres per tonne.

The real fillip to the EBP programme came with the Modi government paying mills more for ethanol produced from feedstocks other than C-heavy molasses. For 2022-23, the ex-distillery price of ethanol payable by state-owned oil marketing companies (OMCs) was fixed at Rs 49.41 per litre if made from C-heavy molasses, but at Rs 60.73, Rs 65.61, Rs 58.50, Rs 55.54, and Rs 56.35 if made from B-heavy molasses, sugarcane juice/ syrup, surplus FCI rice, broken/ damaged grain and maize respectively.

In previous supply years (December-November) until 2017-18, the OMCs paid a uniform price for ethanol irrespective of feedstock.

Tarun Sawhney, vice chairman of Triveni Engineering & Industries Ltd (TEIL), credited the EBP programme's success to the differential pricing policy.

TEIL's distilleries in Uttar Pradesh run on multiple feedstocks — B-heavy molasses during the cane crushing season (November-April), and grain in the off-season (May-October). The latter mainly comprised FCI rice, the supply of which was stopped from July 2023 on concerns over depleting stocks. The company then switched to damaged/ broken rice and maize sourced from the open market at higher prices. On its part, the Centre too, raised the procurement price of ethanol produced from damaged grain and maize to Rs 64 and Rs 66.07 per litre respectively in August.

"The government's ethanol policy has been very supportive, especially with regard to pricing and use of alternative feedstocks. The EBP programme no longer relies on a sin-

gle feedstock or crop. Earlier, 100% of ethanol was from sugarcane-based feedstocks (it fell to 76% in 2022-23). I see that share dropping below 50%, and going up correspondingly for grain, in the coming year," Sawhney said.

Not-so-sweet directive

The December 7 directive is nevertheless a setback for the industry — especially for companies such as Balrampur Chini Mills, Shree Renuka Sugars, Ugar Sugar Works and Nirani Sugars, which have set up capacities to produce ethanol directly from cane juice/ syrup.

The OMCs had floated a tender for the supply of around 825 crore litres of ethanol for 2023-24, translating into a 15% blending target. In the first cycle of bids early last month, they received offers for some 559 crore litres, out of which ethanol produced from sugarcane juice/ syrup accounted for 135 crore litres.

The December 7 order could impact the bulk of the latter supplies, leading to stranded capacities.

The Centre has for now said that the supply of ethanol from B-heavy molasses against "existing offers received by OMCs... will continue". However, it is yet to announce prices for ethanol from various feedstocks payable to mills in 2023-24. This is despite the ethanol supply year being moved from December-November to November-October now, closer to the sugar year from October when mills commence crushing.

Sugar supply concerns

The reason for the Centre seemingly going slow on ethanol blending is simple. The 2022-23 sugar year ended with stocks of just over 57 lakh tonnes (lt), the lowest since the 39.4 lt of 2016-17, and way below the record 143.3 lt of 2018-19 (See Table 2).

Six-year-low opening stocks apart, there is uncertainty over production for the current 2023-24 year itself. The National Federation of Cooperative Sugar Factories has estimated this year's output at 291.50 lt, down from 330.9 lt and 359.25 lt in 2022-23 and 2021-22 respectively.

Maharashtra and Karnataka are expected to record particularly sharp declines, following sub-par rains and low reservoir water levels in their major cane-growing areas.

The December 7 order is likely to result in roughly 15 lt of additional sugar, which would have otherwise gone for ethanol production through the cane juice/ syrup route. This extra sugar coming into the market will, more than boosting physical availability, help douse any bullish price sentiment.

The latest decision, taken together with the ban on sugar shipments since May 2023, makes one thing clear: when it comes to domestic supply over exports, consumers over producers and food over fuel, governments privilege the former.

Green Hydrogen Mission: ₹11 lakh spent to date: Govt tells Parliament

‘Revised estimates for the Mission for FY 2023-24 are Rs 100 crore’

OUR CORRESPONDENT

NEW DELHI: The government has incurred an expenditure of Rs 11 lakh under the National Green Hydrogen Mission to date against the revised estimates of Rs 100 crore for 2023-24, Parliament was informed on Tuesday.

The Ministry of New & Renewable is implementing the National Green Hydrogen Mission, approved by the Union Cabinet on January 4, 2023, with an outlay of Rs 19,744 crore from 2023-24 to 2029-30, Union Power and New & Renewable Energy Minister R K Singh said in a written reply to the Rajya Sabha.

The overarching objective of the Mission is to make India a Global Hub for the production, usage and export of Green Hydrogen and its derivatives.

Revised estimates for the Mission for FY 2022-23 were Rs 1,00,000 and there was no expenditure in FY 2022-23, he stated.

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100 crore and expenditure is Rs 11 lakh to date, the minister told the House.

The expected outcomes of the Mission, by 2030, are that India's Green Hydrogen production capacity is likely to reach 5 MMT per annum, contributing to reduction in dependence on import of fossil fuels.

Achievement of Mission

targets is expected to reduce a cumulative Rs 1 lakh crore worth of fossil fuel imports by 2030.

This Mission is likely to leverage over Rs 8 lakh crore in total investments and create over 6 lakh jobs.

Nearly 50 MMT per annum of CO2 emissions are expected to be averted through the pro-

Highlights

» 'Revised estimates for the Mission for FY23 were Rs 1,00,000 and there was no expenditure in FY23'

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» Achievement of Mission targets is expected to reduce a cumulative Rs 1 lakh cr worth of fossil fuel imports by 2030

issued by Ministry of Power on October 25, 2023, however, the actual implementation of URET is yet to be initiated and hence Government has not conducted any such assessment.

Singh further explained that the intermediary procurer is a trader, buying RE power from the RE Power Generators as per the tariff-based competitive bidding (TBCB) guidelines and selling the same to one or more distribution licensees, who in turn supply power to consumers in their area of jurisdiction and have public service obligation.

Therefore, the minister stated that the intermediary procurer does not have any direct public service obligation.

In another reply to the House, Singh stated that so far, 72.02 GW of Solar Power Projects have been installed.

The government has set a target of achieving 500 GW of installed capacity from nonfossil fuels by 2030, in line with the Prime Minister's announcement at CoP-26, including from solar energy, he stated.

duction and use of the targeted quantum of Green Hydrogen, the minister told the House.

About assessment regarding the impact on cost escalation resulting from the implementation of a Uniform Renewable Energy Tariff (URET), Singh told the House in another written reply that the procedure for implementation of URET was

In Oct, India bought Russian oil at highest rate since Dec '22

Indian refiners also get Russian oil supplied from ports in Greece, Spain and Korea

Reuters
feedback@livemint.com

The average price of Russian oil delivered to a top buyer India in October rose to \$84.20 per barrel, way above the \$60 price cap set by the Group of Seven nations in December last year, preliminary Indian government data showed.

India paid the highest prices for Russian oil in October since the price cap was imposed, providing a boost to Moscow's revenues despite efforts by western nations to curb the producer's income and funding for the Ukraine war.

India, the world's third-biggest oil importer and consumer, has emerged as the biggest buyer of seaborne Russian crude as western nations cut purchases after Moscow's invasion of Ukraine more than a year ago.

India purchased Russian oil at an average price of about \$81.24 per barrel in September, according

to Reuters' calculations based on the latest data posted on the Indian trade ministry's website. India's intake of Russian oil could rise on softening prices, a government official said last week.

The price of Russia's flagship grade Ural in Baltic ports has plunged since late November below the \$60/barrel ceiling. New Delhi wants to cut its crude import bill and the average cost of Russian oil is lower than that from Iraq and Saudi Arabia, the second and third-biggest oil suppliers to India.

The price of a barrel of oil from Iraq and Saudi Arabia in October averaged \$85.97 and \$98.77, respectively, the data showed.

Apart from direct supplies from Russia, Indian refiners also get Russian oil supplied from ports in

Greece, Spain and Korea.

Refiners in India largely buy Russian oil on a delivered basis, with sellers arranging for shipping and insurance.

Adherence to the G7-fixed ceiling allows the use of Western services such as shipping and insurance

India has emerged as the biggest buyer of seaborne Russian crude as western nations cut purchases after Moscow's invasion of Ukraine

in transactions involving Russian oil. The Indian government data does not specify freight, insurance, or other charges paid by Indian refiners but it is significantly

higher than the \$60 per barrel price cap. To curtail Moscow's revenue and close loopholes in the mechanism designed to punish Moscow for invading Ukraine, the US last month imposed sanctions on maritime companies and vessels for shipping Russian oil sold above the \$60 price cap.

India paid \$84.2/bbl in Oct. for Russia oil

Reuters

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Lopsided COP28 boon for India's growing coal and oil appetite

SHREYA JAI & SUBHAYAN CHAKRABORTY
New Delhi, 12 December

Even as the majority of countries, ranging from rich to developing islands, strongly condemn the weak language around fossil fuel phase-out in the penultimate draft of the Global Stocktake at 28th Conference of the Parties of the United Nations (UN) Framework Convention on Climate Change (COP28), India would stand to benefit from the fine print around brown and green fuels.

The draft text released on Monday has remained silent on the phase-out of fossil fuels, which is a crucial negotiation point for the first time at COP.

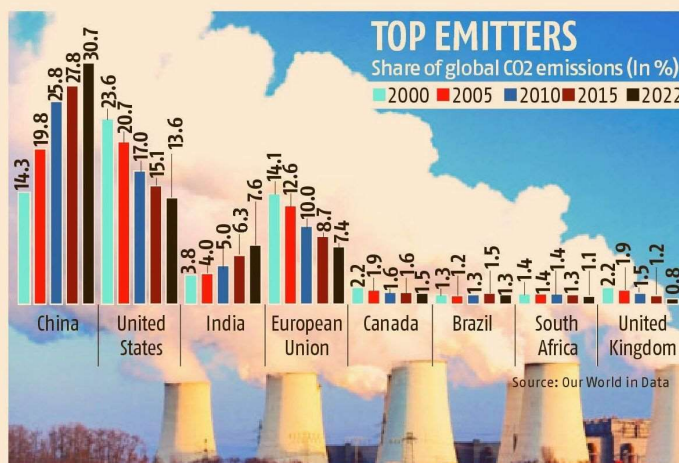
Climate justice and energy security

The draft's language around fossil fuel is extremely lopsided towards oil-producing nations, including the host United Arab Emirates (UAE). India has been vociferously demanding that the phase-out should cover all fossil fuels, including oil and gas, and not just coal.

"Reducing both consumption and production of fossil fuels, in a just, orderly, and equitable manner to achieve net zero by, before, or around 2050 in keeping with the science," says the draft. But for coal, it says, "Rapidly phasing down unabated coal and limitations on permitting new and unabated coal power generation."

The draft does not have a single mention of oil/natural gas separately.

Negotiators representing the Global



South, including India, said the country, along with Group of 77 (G77) and BASIC (Brazil, South Africa, India, and China) groups, has objected to singling out coal in the draft. "The Global South is united in its demand that the Global Stocktake cannot be outside the purview of the Paris Agreement and CBDR-RC (common but differentiated responsibilities and respective capabilities) principles," said an official.

CBDR-RC calls for climate action and financing according to the economic status and emission levels of the nations. "UAE as a host is not capable of attacking the fossil fuel industry. For India, this is a chance. We have always supported CBDR-RC. Under that, we continue to accelerate green energy-led

growth, but the energy security of 120 billion people requires coal and oil," said a senior official.

The Ministry of Petroleum and Natural Gas had been keen that the Indian delegation at COP should stick to its position that further investment in developing and extracting oil and gas resources is needed in tandem with the exploration of carbon-free alternatives.

"The economic realities of developing countries like India and least developed nations have to be evaluated carefully. A blanket push to phase out fossil fuels at this point may not be the best approach," a senior official said.

According to the International Energy Agency, India's share in global oil demand is 5.5 per cent in 2023, much

below the US' and China. However, it is rising at a fast clip and is set to hit 6.6 per cent over the next five years.

Coal, which is the main driver of India's electricity supply, will also remain a mainstay in the energy basket. India signed for a tripling of renewable energy at the Group of Twenty (G20) but abstained on the same at COP28 as it involved committing to the expiry date of coal. After China, India is the world's largest coal consumer. India's annual coal demand is due to cross the 1-billion mark soon. Thermal power accounts for close to 75 per cent of India's electricity generation despite rapid growth in renewable energy sources. "India's RE push does not mean the end of coal. Rich countries have left little carbon space for us. We need a fair share of the carbon budget and meet our energy needs," said a senior negotiator representing G77.

New green economy

The language around green fuels is also a plus for India and its plan on biofuels. India has been crucial in drumming up support for biofuels and has pitched the Global Biofuel Alliance (GBA), on the sidelines of COP28.

The draft text has also called for adoption of carbon removal technologies, including carbon capture, energy storage, and low carbon hydrogen production, to substitute fossil fuel. Both technologies are finding investment lately in India. It also signed a global deal for the growth of battery storage.

Most LNG Import Terminals in India Underutilised

Capacity expansion faster than domestic gas demand

Sanjeev Choudhary

New Delhi: Most of India's liquefied natural gas (LNG) import terminals are deeply underutilised as capacities have expanded at a far faster pace than the domestic gas demand.

Of the seven LNG terminals, three have operated below 20% of their capacity and another three below 40% in the first half of the current fiscal year, according to the oil ministry data. Just one terminal at Dahej in Gujarat has operated above 90%.

Dahej terminal is India's largest facility with a capacity of 17.5 million tonnes per annum. Five other terminals have a capacity of about 5 million tonnes a year each while one has about 3 million tonnes capacity.

Dahej terminal is operated by Petronet LNG, a company controlled by state-run oil and gas companies, which are also its long-term customers.

Some terminals have been affected by the inadequacy of the pipelines connecting them to demand centres

This terminal has been a beneficiary of the long-term contract Petronet has with Qatar for the import of 8.5 million tonnes of LNG annually. Prices have been less volatile under long-term contracts and ensured buyers for such gas.

Dhamra terminal, the youngest terminal, also has long-term contracts with some state-run companies. Under long-term contracts, customers must pay terminals for the capacity they have booked even if they are not using it.

Some terminals have been affected by the inadequacy of the pipelines connecting them to demand centres. Industry executives feel capacity utilisation will rise once the pipelines are in place.

The bigger reason for inadequate business for terminals is the slow rise in domestic gas demand compared to the doubling of LNG terminal capacity. Import terminals have expanded from about 21 million tonnes a year at the beginning of 2015 to about 46 million tonnes a year now. Over the next few years, the overall LNG terminal capacity is expected to rise to 65 million tonnes a year.

In eight years between 2013-14 and 2021-22, domestic gas consumption rose 23% while LNG imports rose 75%.

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No Israel War Impact on Economy via Oil Prices



New Delhi: The finance ministry on Tuesday said the Israel-Hamas war has no impact on the economy through the global crude oil prices, which have receded to the pre-conflict levels. Minister of state for finance Pankaj Chaudhary also said the Centre has been adopting measures to mitigate global shocks on the domestic economy. **Our Bureau**

Over 1,000 'opaque fleet' tankers involved in Russian oil trade

SUKALP SHARMA
NEW DELHI, DECEMBER 12

NEARLY 1,100 tankers operated in Russia's crude oil and petroleum products trade since price caps were imposed by the Group of Seven (G7) countries and their allies on Moscow's oil and petroleum products from December 5, 2022 and February 5, 2023, respectively, as per an analysis of ship tracking data till November 15 by energy cargo tracker Vortexa.

Given India's newfound status as the largest destination of Russian crude following Moscow's February 2022 invasion of Ukraine, a sizable number of these tankers would have been involved in transporting oil from Russia to Indian refiners. India now accounts for nearly half of Russia's crude oil exports. Similarly, Russia is now India's largest source of crude as Moscow accounted for over 35 per cent of New Delhi's oil imports so far in 2023. "Tankers (totalling 1,089) in the Russian trade

EXPLAINED **E** What are 'opaque fleet'?

THE OPAQUE tanker fleet refers to vessels involved in Russian, Iranian, and Venezuelan crude oil and petroleum products trade. The oil and gas industries of these countries have been under sanctions from international powers, particularly the US.

account for 75 per cent of the opaque fleet; this includes tankers which have operated in more than one market. Tankers exclusively in the Russian trade (not in Iran and Venezuela) account for 66 per cent of the opaque fleet," Vortexa said in a recent report, adding that overall, 1,649 unique tankers operated in the opaque oil and petroleum products market since January 2021.

The opaque tanker fleet

refers to vessels involved in Russian, Iranian, and Venezuelan crude oil and petroleum products trade. With Western fleet operators loath to get involved in the oil trade of these countries due to sanctions of varying degrees, operators from countries like Greece, Russia, and China, and tax havens like Marshall Islands, Liberia, and Panama have emerged as the major players. The oil and gas industries of Russia, Iran, and Venezuela have been under sanctions or restrictions from international powers, particularly the United States (US). Recently, the US eased sanctions on Venezuela's oil sector, authorising oil exports without limitation for six months.

A large number of opaque fleet tankers have complex and obscure ownership structures and are registered in geographies with lax regulatory oversight. Often, such vessels, which are usually quite old, operate with substandard insurance and certifications.

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GOES DOWN TO THE WIRE

Pact elusive amid deep divisions over fossil fuel phase-out

Saudi Arabia leads fight to keep it out, gets support from India and China

**EXPRESS AT COP28****AMITABH SINHA**

DUBAI, DECEMBER 12

CLIMATE CHANGE conferences are quite used to stalemates, especially in the final days, and a familiar one existed at the Dubai Expo Centre, the venue of COP28, on Tuesday, as the conference went into extra-time. But never has the division been so sharp, the gap seemingly so unbridgeable. On the issue of fossil fuel phase-out, almost every country has a strong opinion, with no meeting ground currently in sight.

Yet, an agreement was being drafted, for all to agree on, be-

cause a COP has to have an outcome decision. A previous draft, that came Monday evening, had made everyone unhappy and was immediately rejected by many. A new one, possibly the final, is being worked upon and expected to be finalised in the early hours of Wednesday.

There are countries like Saudi Arabia that have made it clear that they would not agree to a fossil fuel phase-out in the final decision of the COP28 climate meeting. There are others like the European Union who insist that any decision that does not mention fossil fuel phase-out would be unacceptable. Then there are climate groups, activists and observers who have declared that COP28 would be a failure if it did not call for a fossil fuel phase-out.

At this point, no one is expecting any "ambition" in the new one — provisions strong enough to galvanise greater climate

CONTINUED ON PAGE 2

● Pact elusive amid divisions over fossil fuel phase-out

action, which is what the ask from this meeting was. The question only is whether there are adequate face-savers for everyone.

To be sure, fossil fuel phase-out is not the only point of contention. There are a whole range of issues, most of them old, some new, over which countries have strong disagreements. But it is quite evident now that COP28 would be judged largely on what it delivers on this single issue. Not without reason.

The issue of a phase-out of fossil fuels, and the way it has been dealt with by countries over the years, broadly sums up the global response to climate change so far.

Fossil fuels -- oil, natural gas, coal and their derivatives -- contribute about 80 per cent of all greenhouse gas emissions, and yet, have never found any mention in the hundreds of decisions that COPs have produced in the last three decades. The Paris Agreement, for example, seeks to restrict global rise in temperatures to well within 2 degrees Celsius from pre-industrial times, and calls upon countries to reduce their greenhouse gas emissions, but is totally silent on fossil fuels.

In fact, this was the argument used by Saudi Arabia, speaking on behalf of the Arab group on Monday night at a meeting called by COP28 hosts UAE following the uproar caused by the previous draft agreement text.

Preserve Paris (Agreement), don't cherry pick from it or distort it, Saudi Arabia is learnt to have said, adding that there was no science that said fossil fuels needed to be eliminated to achieve the 1.5 degree Celsius target.

Saudi Arabia is right in the sense that the reports of the Intergovernmental Panel on Climate Change (IPCC), the most comprehensive and authoritative scientific information on the subject, do not explicitly mention the necessity of a fossil fuel phase-out.

But the same IPCC does say that a minimum 43 per cent reduction in greenhouse gas emissions by 2030 from 2019 was a pre-requisite to keep alive hopes of achieving the 1.5 degree target. There is no scenario in which this 43 per cent cut in emissions can be made without a rapid reduction in fossil fuel use.

This attempt to focus on emission cuts without tackling the sources of emissions has not

worked out well till now. Annual global emissions are still on the rise, and so are production and consumption of fossil fuels.

COP28 was meant to provide a course correction in this regard, with a decision that asked countries to phase out fossil fuels. But the resistance has been stiff. Saudi Arabia might be leading the fight, but it is certainly not alone.

It has the backing of large number of countries whose economies are heavily dependent on either production or consumption of fossil fuels.

Besides its partners in the Arab Group, it received open support from the Like Minded Developing Countries (LMDC) group, of which India and China are a part.

India can live with the fossil fuel phase-out provision as long as this does not apply to everyone. The international climate change architecture makes a distinction between the developed and developing countries, with the developed world mandated to take the lead role in all climate actions. This principle is enshrined in all the COP agreements but was not clearly mentioned in Monday's draft text.

Thermax Firm Gets ₹500-cr Order to Set Up 5 Bio-CNG Plants

Our Bureau

Mumbai: Energy and environment solutions provider Thermax on Tuesday said one of its subsidiaries has bagged an order worth more than ₹500 crore from a leading energy conglomerate to set up five bio-CNG plants across the country. These plants will be set up in Rajasthan, Madhya Pradesh, Maharashtra and Uttar Pradesh, it said.

Thermax also plans to deploy 1 GW of hybrid renewable energy solutions by 2026-27 and is venturing into gasification plants with carbon capture capabilities to process 100-500 tonnes per day (TPD) coal, the company said, adding that these will be intra-state and inter-state projects helping industries with a variety of offerings, including round-the-clock clean electricity requirements.

With the capacity to produce 110 TPD of bio-CNG, these plants will utilise local feedstock exceeding 1,000 TPD, including rice straw, napier grass, cane trash and soya trash. The bio-CNG generated from these plants will be employed for commercial and captive use by the customer.

The company said this is part of Thermax's broader initiative to introduce biochemicals and bio-energy solutions.

Thermax is the country's largest provider of biomass-based green energy solutions for fuel flexibility. It has also invested in a biomass-sourcing supply chain for captive consumption to ensure a consistent biomass fuel supply.



थर्मक्स को मिला ठेका

नई दिल्ली। थर्मक्स की इकाई को देश भर में पांच जैव-सीएनजी संयंत्र स्थापित करने के लिए एक प्रमुख ऊर्जा समूह से 500 करोड़ रुपये से अधिक का ठेका मिला है। कंपनी की ओर से जारी बयान के अनुसार, ये संयंत्र राजस्थान, मध्य प्रदेश, महाराष्ट्र और उत्तर प्रदेश में स्थापित किए जाएंगे। यह घोषणा पुणे में मंगलवार से शुरू हुए चार दिवसीय 'थर्मक्स फेस्ट' में की गई। बयान में कहा गया, कंपनी की एक अनुषंगी कंपनी को भारत में पांच जैव-सीएनजी संयंत्र स्थापित करने के लिए एक अग्रणी ऊर्जा समूह से 500 करोड़ रुपये से अधिक का ठेका मिला है। ऊर्जा समूह से जुड़ी जानकारी साझा नहीं की गई।

वाहनों के लिए ईंधन की नहीं रहेगी कमी

जनसत्ता ब्यूरो



श में वाहनों की लगातार बढ़ती संख्या को देखते हुए केंद्र सरकार ने वैकल्पिक ईंधन के इस्तेमाल को लगातार प्रोत्साहित कर रही है। जीवाश्म ईंधन की सीमित उपलब्धता और अंतरराष्ट्रीय परिदृश्य में होने वाले हालिया बदलाव को देखते हुए संपीड़ित प्राकृतिक गैस (सीएनजी), इथेनाल, जैव ईंधन सहित इलेक्ट्रिक वाहन (ईवी) के इस्तेमाल को भी प्रोत्साहित किया जा रहा है। इसके साथ ही सरकार देश में कच्चे तेल की शोधन क्षमता में बढ़ोतरी कर रही है ताकि उपभोक्ताओं की जरूरतों के मुताबिक ईंधन की आपूर्ति की जा सके। 2028 तक देश की रिफाइनरी में शोधन क्षमता में 5.6 करोड़ टन बढ़ोतरी का अनुमान है।

पेट्रोलियम और प्राकृतिक गैस मंत्रालय में राज्य मंत्री ने राज्यसभा में एक सवाल के जवाब में बताया कि भारत में रिफाइनरियों की मौजूदा शोधन क्षमता 25.39 करोड़ मीट्रिक टन प्रति वर्ष (एमएमटीपीए) है।

मंत्रालय की तकनीकी शाखा, सेंटर फार हाई टेक्नोलॉजी की ओर से संकलित आंकड़ों के मुताबिक भारतीय रिफाइनरियों की शोधन क्षमता में वर्ष 2028 यानी पांच साल बाद करीब 5.6 करोड़ टन बढ़ोतरी का अनुमान है। वर्ष 2022-23 में देश के शोधन संयंत्रों की क्षमता 25.39 करोड़ मीट्रिक टन की तुलना में इस वर्ष पेट्रोलियम उत्पादों की घरेलू खपत करीब 22.3 करोड़ मीट्रिक टन थी। क्षमता में बढ़ोतरी से पांच साल बाद भी देश में मांग में बढ़ोतरी को भी पूरा करने की दिशा में सरकार की इस पहल से वाहन मालिकों को दिक्कत नहीं होगी।

