

# How electric vehicles are accelerating end of the oil age

REUTERS  
6 December

There is plenty of hand-wringing on display at the COP28 climate conference in Dubai about the slow pace of reducing the consumption of fossil fuels to fight climate change. But one positive that delegates can point to is the growing fleet of electric vehicles worldwide that is already making a surprisingly big dent in demand.

Growing sales of electric vehicles in recent years have led forecasters to speed their projections for when global oil use will peak, as public subsidies and improved technology help consumers overcome the sometimes eye-popping sticker prices for battery-powered cars, according to industry experts.

The Paris-based International Energy Agency (IEA), a grouping of 29 industrialised nations, expects world oil consumption to hit its zenith at the end of this decade at 103 million barrels per day, after making regular adjustments from its 2017 forecast of a nearly 105 million bpd peak in 2040.

"The game-changer has been the policy support for the shift to electrification quite substantially reducing oil demand from transportation sector, which has been the key driver of global oil demand

growth," said Apostolos Petropoulos, an energy modeler at the IEA.

Oil giant BP has pushed forward its global peak oil demand projections, while the governments of both the United States and China - the world's two biggest oil users - have ratcheted back their domestic consumption forecasts.

Transportation is responsible for about 60 per cent of world oil demand, with the United States alone accounting for around 10 per cent, according to the IEA. That share should fall, as the IEA expects EVs will have erased some 5 million barrels per day of world oil demand by 2030.

Global EV sales now make up about 13 per cent of all vehicle sales and are likely to rise to between 40 per cent-45 per cent of the market by the end of the decade, according to the IEA. That is thanks

to a blend of increasingly stringent efficiency standards and subsidies introduced by various governments about the world since the 2015 Paris Agreement to hold global warming to within 1.5 degrees Celsius (2.7 degrees Fahrenheit) above pre-industrial temperatures.

The latest subsidy measures include the U.S. Inflation Reduction Act's \$7,500 tax credit for purchasing a new EV, passed last year and intended to help offset high sticker prices. While those numbers



**GLOBAL EV SALES NOW MAKE UP ABOUT 13% OF ALL VEHICLE SALES AND ARE LIKELY TO RISE TO BETWEEN 40-45% OF THE MARKET BY THE END OF THE DECADE, ACCORDING TO THE INTERNATIONAL ENERGY AGENCY**

are big, the IEA has said EV sales would need to be even higher on the order of 70 per cent of the market by 2030 -to keep to the Paris Agreement target for limiting warming.

Whether sales can scale those heights is uncertain. EV makers including General Motors, Ford and Stellantis in recent weeks have delayed or scrapped plans to accelerate production.

## The elephant in the expo centre: Who's hosting COP29?

There's an unprecedented deadlock at this year's COP28 UN climate summit over who will host next year's event.

The conference's opening days saw scant reference to COP29, unlike in previous years, when speakers usually namecheck the next COP presidency to show that the world's climate fighting strategy is mapped out for years to come.

By this stage, the next host is normally planning the summit and laying the diplomatic groundwork for their presidency.

Under UN rules, it is the turn of eastern Europe to host a COP, and the decision must be unanimous by all countries in the region. The Ukraine war, however, has made that all but impossible.

Russia, which is being sanctioned by the European Union for invading Ukraine, has opposed holding COP29 in an EU member state and is blocking Bulgaria's bid. **REUTERS**

## EU scientists say 2023 will be warmest year on record globally

European Union scientists said on Wednesday that 2023 would be the warmest year on record, as global mean temperature for the first 11 months of the year hit the highest level on record, 1.46°C (2.63°F) above the 1850-1900 average. The record comes as governments are in marathon negotiations on whether to, for the first time, phase out the use of carbon dioxide-emitting coal, oil and gas, the main source of warming emissions, at the COP28 summit in Dubai.

The temperature for the January-November period was 0.13°C higher than the average for the same period in 2016, currently the warmest calendar year on record, the Copernicus Climate Change Service said. November 2023 was the warmest November on record globally, with an average surface air temperature of 14.22°C, Copernicus added.

**REUTERS**

## ● DECARBONISATION PROGRAMME

# ONGC mulls replacing natural gas with green power at oil wells

To reduce methane emissions, gas flaring: Chairman

FE BUREAU  
New Delhi, December 6

**STATE-CONTROLLED OIL AND** Natural Gas Corporation (ONGC) plans to replace natural gas with green electricity in oil wells operations at its installations in the Arabian Sea as part of its ambitious decarbonisation programme, chairman Arun Kumar Singh said.

While speaking at the ongoing CoP28 summit in Dubai, Singh said the company has substantially cut gas flaring and would look to bring it down to nil as part of ONGC's environmental commitments.

ONGC, the country's largest oil and gas producer, also intends to replace gas it uses to generate electricity with green power wheeled at installations as far as 160 km from the west coast by 2028. The gas thus freed will be sold to industries like fertiliser and power plants, according to the company.

Companies across the world have committed to work towards cutting down methane emissions and have pledged to slash it down by 30% from 2020 levels by 2030.

"We have been working very consistently on reducing methane emissions," Singh said. "Because of the (Indian) geography and population, we hardly have any scope to flare."

However, a very small amount leaked unintentionally because of the prohibitive cost of capturing it, is something ONGC is working with technology providers to check, the chairman said.



Earlier, we used to flare 14-15 million standard cubic meters per day, but now we are hardly flaring (gas)

**ARUN KUMAR SINGH,**  
CHAIRMAN, ONGC



Controlling emission of methane has always been seen as one of the easiest and the most economical ways to limit greenhouse gas emissions into the environment.

Flaring, which used to be done in the past because of lack of customers for gas, has been reduced by almost 80%, Singh said.

"Earlier, we used to flare 14-15 million standard cubic meters per day, but now we are hardly flaring... now it is around 2%," he said. "Still 2% needs to go down." He said this gas can be mobilised for use in industries.

The company consumes 20% of the gas produced for its internal purposes and plans to take a substantial portion of it to green electricity for electrification of rigs.

It also aims to put up 11 GW of plants to generate electricity from solar & wind and construct a 1 million tonne per annum green ammonia plant on the west coast as a part of its decarbonisation drive.

ONGC plans to invest ₹2 trillion on clean energy projects to meet its 2038 net-zero

carbon emission goal and is looking to set up pump storage projects at river dams to meet power demand at night.

It will also set up compressed biogas plants to convert agri waste into gas that can be used to generate electricity, make fertiliser or turn into CNG to run automobiles.

"During the first quarter of 2022-23, gas flaring has been 2.32% of total gas production. ONGC makes continuous efforts to minimise gas flaring," Singh said. "This gas flaring is a technical necessity for processing of oil and gas at installations to maintain pilot flares for avoiding escape of unburned hydrocarbons into the atmosphere... in order to ensure safety and environmental protection."

As per the CAG report in 2021, a total of 1,227.343 million metric standard cubic metres of high pressure gas valued at ₹1,021.08 crore was flared during 2012-13 to 2019-20.

The oil and gas sector alone accounts for 25% of global methane emissions.





# Opec+ output cuts do not faze OMC stocks

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**S**hares of state-run oil marketing companies (OMCs) including Bharat Petroleum Corp. Ltd (BPCL), Hindustan Petroleum Corp. Ltd (HPCL) and Indian Oil Corp. Ltd (IOCL), have risen 20-47% in the past one month, beating the benchmark Nifty 50 index.

Investors are optimistic about the muted outlook for crude oil prices and anticipate a robust December quarter (Q3FY24), driven by resilient marketing margins even as outlook for refining margins appears muted. Brent crude oil prices have come off from the recent highs of around \$95 per barrel in September to hover around \$76.3 per barrel at present.

For now, concerns about near-term surge in crude oil prices have been mitigated. In a meeting on 30 November, Opec+ (Organization of the Petroleum Exporting Countries and allies, including Russia) agreed to lower oil production by 2.2 million barrels per day in the first quarter of 2024. Oil prices have not reacted meaningfully to the news, even as the cuts amount to around 2% of global supply. One reason could be it is insufficient to counter the growth in non-Opec output. Besides, concerns over a weakening global economy continue to weigh on the markets.

Declining crude prices have a positive influence on OMCs' profitability as it reduces the cost of buying oil, pushing margins up. Expectation of robust earnings this fiscal year is also contributing to the positive outlook.

"FY24 is turning out to be a blockbuster year for OMCs with strong dividends. After a robust H1, H2 so far has been better than expected for OMCs, except for some intermediate inventory losses likely in Q3, if oil prices stabilize at \$80-85 a barrel, which would, however, mean strong core earnings in Q4," said Emkay Global Financial Services analysts in a 24 November report.

In the half-year ended 30 September



Weakening global economy continue to weigh on the markets. REUTERS

(HIFY24), HPCL and BPCL profits surpassed all previous annual earnings led by higher refining margin. IOCL's performance exceeded market estimates.

HPCL's management indicated that its leverage is approaching peak levels as large expansion projects are set to start within six months. The new projects are crucial to support the firm's \$9-billion expansion initiative for the next five years. BPCL will spend about ₹1.5 trillion

## Energized

Shares of HPCL, BPCL and IOCL have sharply beaten the Nifty 50 index recently.



PRANAY BHARDWAJ/MINT

## UNPACKING THE DYNAMICS

**INVESTORS** are optimistic about the muted outlook for crude oil prices and expect a robust Q3

**EXPECTATION** of better marketing margins sets the stage for near-term growth for OMCs

**THE** recent rally in OMC stocks suggests that investors are adequately factoring in the brighter picture

potential long-term risk to returns.

For now, expectation of better marketing margins sets the stage for near-term growth for OMCs. "Gross marketing margin (GMM) on petrol stands at ₹8.2 a litre in Q3-to-date, while there is a gross marketing loss of ₹0.6 a litre on diesel. In the week ended 28 November, GMMs on petrol and diesel stood at ₹9.7 a litre and ₹4.7 a litre, respectively," Prabhudas Lilladher analysts said in a report dated 30 November.

"However, sustainability of higher-than-normalized GMMs is questionable in the light of upcoming elections," it added.

To be sure, there is speculation about potential cuts in retail prices of auto fuels

before the general elections. If it happens, it would dampen marketing margin prospects. The recent rally in OMC stocks suggests that investors are adequately factoring in the brighter picture. "The market's optimism on OMCs will depend on whether crude sustains below \$80 a barrel," JM Financial Institutional Securities analysts said.

in the next five years to expand its refinery and petrochemicals capacity, exploration, production city gas distribution as well as renewables business.

The management anticipates executing a substantial part of this capital expenditure between FY26-28, leading to an increase in the use of borrowed capital during those years. Note, initiating leverage through the expansion plans poses a



# RIL Turns to Sugar Mills to Fuel Green Energy Plans

In talks with cos for supply of thousands of tonnes of sugarcane press mud a day

**Kalpana Pathak**

**Mumbai:** Reliance Industries (RIL), the country's most valuable company, is in talks with sugar mill operators for supply of sugarcane press mud, a feedstock for the production of compressed biogas, said two people aware of the development.

"For their compressed biogas plants, RIL is seeking press mud from sugar mills. It has reached out to large sugar mills which can supply thousands of tonnes of press mud to the company on a daily basis for its biogas plants," said an executive aware of the development, adding that RIL has reached out to companies operating sugar mills in different locations across the country.

RIL did not immediately reply to an email seeking comment.

In September, RIL chairman Mukesh Ambani had announced plans to set up 100 CBG plants over the next five years. These plants are expected to consume 5.5 million

A photograph showing a pair of hands holding a large amount of dark, moist, granular material, which is sugarcane press mud. The background is dark and out of focus.

## What Is Press Mud

**It is the residue produced after the filtration of sugarcane juice**

Press mud is an important resource for **compressed biogas**

**Also used as a fertiliser**

tonnes of agri-residue and organic waste.

RIL already operates one CBG plant at Barabanki in Uttar Pradesh.

Industry executives said that assuming RIL sets up a plant of an average capacity of 10 million tonnes per day of biogas, it will need 250,000 tonnes of press mud to be supplied on a daily basis. The cost of press mud is between ₹200 and ₹500 per tonne, depending on the location of the sugar mill and the quality of press mud.

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# Science clear on the need to 'phase out' fossil fuel, says U.S. climate envoy John Kerry

**Jacob Koshy**  
DUBAI

"The science was clear on the need to phase out some fossil fuel," the U.S. lead climate negotiator, John Kerry, said at a press conference on Wednesday.

"Else we are not going to be able to make the goal of being net zero by 2050 or have a shot at keeping temperatures below 1.5 degrees Celsius."

On Tuesday, a draft text of the Global Stock Take (GST), said to be the most

important and contentious element of the climate talks ongoing here, for the first time mentioned that countries ought to be undertaking a "just and orderly phase out of fossil fuels".

While this could mean all of the major fossil fuels – coal, oil and gas – that are responsible for human-led greenhouse gas emissions, Mr. Kerry said that there would be some "tough negotiations" in the week ahead. He said that the U.S. and China had

reached agreements on reducing methane emissions and the position of both countries as the "number one and two economies" of the world was critical to achieving these goals.

He endorsed the need for the use of "carbon capture and storage", a contested and largely unproven technology, to capture carbon emissions as necessary towards achieving the 1.5 degrees Celsius target. "You can raise some very legitimate questions around it, [but] I believe it

is working to some extent," he said.

Mr. Kerry, however, refrained from commenting on what potential roadblocks to a deal on fossil fuels existed. In COP-26 at Glasgow, countries had veered close to a commitment to phase out coal until India objected to it and proposed instead that all fossil fuels be phased out. Ultimately, it was agreed that all countries would 'phase down' coal and "inefficient fossil fuel subsidies."



**EVEN AS INDIA'S DEPENDENCE ON OIL IMPORTS CLIMBS TO 87% OF ITS CONSUMPTION...**

# Rigs Shortage Delays Oil & Gas Exploration Projects

**CRUDE REALITY** Explorers find it hard to source drilling rigs as high oil prices push up exploration activity globally

**Sanjeev Choudhary**

**New Delhi:** A global shortage of drilling rigs is delaying India's oil and gas exploration projects at a time when the country's dependence on oil imports has grown to 87% of its consumption, up 10 percentage points in a decade, increasing its vulnerability to the volatility in the international markets.

Indian explorers are finding it hard to source rigs, especially jack-up rigs, for their projects, as high oil prices have pushed up exploration activity globally, leaving more players fighting for fewer rigs, said government officials and industry

## Digging Deep

**High oil** prices have pushed up upstream activity globally, boosting rigs demand

**Utilisation of marketed rigs** globally has risen from 66% in 2018 to 93% in 2023

executives.

Crude oil has traded above \$70 for almost all of 2023.

Many exploration blocks auctioned in 2018 and 2019 in the first three rounds of the new Open Acreage Li-

**Rig rates** have increased to one of the highest levels in last 7 yrs

**Demand from Mideast,** India expected to further tighten rig mkt

**Rigs shortage** can impact new exploration blocks awarded in planned auctions

censing Policy (OLAP) are getting affected by

the rigs shortage. Vedanta had won 51 exploration blocks while Oil India and ONGC had won 21 and 10 blocks respectively in three rounds. "As

part of the exploration activity, hiring of high-performance drilling rigs and associated services are the most critical resources and thus is of paramount importance," Oil India told ET in an email. It cited cases of delays in its exploration blocks in the Northeast, KG Basin and Kerala Konkan Basin due to the unavailability of rigs.

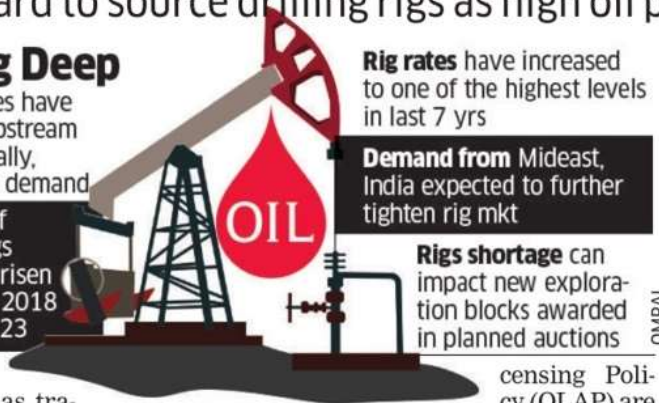
"A number of offshore blocks are further likely to come up in the near future in OALP IX and X bidding rounds, for which availability of rig is once again expected to play a critical role in achieving exploration success in the country," Oil India said.

ONGC said it hasn't been able to attract enough rigs in its recent

tenders. "The utilisation of marketed rigs has increased from 66.1 % in 2018 to 92.7 % in 2023, and the rig day rates have reached one of the highest levels in the last seven years," ONGC said in an email to ET.

The market for rigs is only going to get tighter as producers in West Asia are expected to hire more than 40 rigs by June 2024, ONGC warned, citing data from market sources and the consultancy IHS. "This is expected to have a significant bearing on the availability of rigs for the ONGC tendering process both in terms of participation of rigs as well as prices offered," it said.

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OMPAL

# After Week-long Talks, Fossil Fuel Faultline Leaves COP28 Divided

Broad acceptance on increasing green energy capacity, but many countries against numerical targets

Urmi Goswami

**Dubai:** As the first week of the COP28 summit draws to a close, the issue of energy transition is dominating the talks. Fossil fuels, the principal driver of human-induced climate change, is the main faultline. There is broad acceptance on increasing renewable energy capacity to underwrite the transition. But differences exist on detailing out the transition.

There is a growing consensus on tripling global renewable energy capacity to 11,000 GW and doubling the rate of energy efficiency by 2030. The Global Renewables and Energy Efficiency Pledge, launched on Saturday, has now signed up 123 countries. This growing support is reflected in the negotiations on the global stock take (GST). There are, however, some countries that would not like clear numerical targets for renewable energy.

India did not sign up to the pledge despite its aggressive domestic renewable energy programme because of the call for no new investment in coal. India is concerned about the efforts by some countries to introduce time-bound and quantified phase-out of coal



REUTERS

## 'Climate Conscious' Banks Lend More to Polluters: ECB



**FRANKFURT** Eurozone banks that portray themselves as more conscious about environmental issues lend more than others to polluting industries, a group of European Central Bank economists said on Wednesday. The four ECB economists looked at investor reports and releases from major banks in the single currency area over the period from 2014 to 2020. Their research highlighted a "discrepancy about how banks talk about environmental intentions, and how they lend", they said in a blog post **AFP**

as part of the GST text. Those privy to the negotiations said that India was among the countries that opposed the option that called for an "immediate cessation" of new unabated coal power generation and the reference to IPCC pathway which requires "a reduction

of unabated coal use by 75 per cent from 2019 levels by 2030". "Unabated" refers to coal power generation units without carbon capture and storage or carbon capture, utilization and storage. Effectively that is all of India's coal power generation capacity. The most re-

cent version of the GST text that is publicly available does not include any alternate language for the clause that focuses on coal.

Through Tuesday and Wednesday, countries have provided their responses on the text, a fresh text is only expected on Friday. But how the clause on accelerating renewable energy and the fossil fuel phase out is addressed will be critical.

There is also a growing demand for the phase out of all fossil fuels, that would include oil and gas as well. Unlike in Sharm El-Sheikh, where India initiated the call for phasing out all fossil fuels, it has been silent in Dubai. The UAE presidency has described the phase out of all fossil fuels as "inevitable" but while it has been clearer about phasing out coal.

Adding a layer of complexity is the growth in global fossil carbon dioxide emissions—projected to increase by 1.1 per cent in 2023. Increase in coal use in India and China is the major driver of this rise fossil carbon dioxide emissions.

Talks on how the energy transition will be reflected in the Dubai agreement will be taken up at the ministerial level from Friday.

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# Oil falls below \$70 on excess supply concerns

Oil fell to the lowest in more than five months as concerns that the market has excess supplies overshadowed a report showing shrinking US inventories.

US benchmark West Texas Intermediate slipped as much as 4% to break below \$70 a barrel and reach the lowest intraday price since June 29. Global benchmark Brent retreated as much as 3.5%, slipping below \$75. WTI futures have now dropped by more than a quarter from this year's

peak in late September.

Crude has plummeted in recent weeks amid signs of swelling global supplies, including estimates from ship-tracking firms that

**AT 5-MTH LOW**

American crude exports are nearing a record 6 million barrels a day. The Organization of Petroleum Exporting Countries and its allies announced deeper output cuts on Thursday in a bid to stabilise markets, but the move failed to arrest the slide as traders remained

skeptical the cartel's members will follow through on the curbs.

Even a US government report on Wednesday that showed the country's crude stockpiles falling 4.63 million barrels couldn't prevent oil from dropping even further. Traders are also partly ignoring the Energy Information Administration data showing a decrease in US crude exports last week because the figure's so-called adjustment factor — akin to a margin of error — was the biggest move on record. BLOOMBERG





## देशभर में एथेनॉल पेट्रोल पंप शुरू होंगे

**1** सड़क परिवहन व राजमार्ग  
मंत्री नितिन गडकरी ने  
कहा है कि केंद्र सरकार  
आगे साल तक देशभर में  
एथेनॉल पेट्रोल पंप शुरू  
करने जा रही है। **P12**

# देशभर में एथेनॉल पेट्रोल पंप खुलेंगे : नितिन गडकरी

नई दिल्ली, विशेष संवाददाता। पेट्रोल-डीजल पर निर्भरता कम करने और वैकल्पिक ईंधन के उत्पादन को बढ़ाने की दिशा में तेजी से काम कर रही केंद्र सरकार अगले साल तक देशभर में एथेनॉल पेट्रोल पंप शुरू करने जा रही है। सड़क परिवहन व राजमार्ग मंत्री नितिन गडकरी ने बुधवार को राज्यसभा में प्रश्नकाल के दौरान एक सवाल के जवाब में उपरोक्त बात कही।

गडकरी ने कहा, सरकार सीएनजी, बायो फ्यूल, इलेक्ट्रिक वाहनों को भी बढ़ावा दे रही है। सरकार के इस प्रयास से लोगों को मंहगे पेट्रोल से राहत मिलेगी, पेट्रोलिमय आयात कम होगा, कार्बन उत्सर्जन में कमी आएगी, जिससे पर्यावरण को नुकसान कम होगा।

गडकरी ने कहा कि सरकार ने वैकल्पिक ईंधन को लेकर तमाम प्रयोग किए हैं। इसके तहत पेट्रोलियम मंत्रालय के सहयोग से देशभर में जल्द ही एथेनॉल पेट्रोल पंप खोले जाएंगे। कार निर्माता कंपनियां ने फ्लेक्स इंजन वाले वाहनों

## किसानों की आय बढ़ेगी



गडकरी ने कहा, वनस्पति, गन्ना, गेहूं, कृषि अवशेष से जैविक ईंधन बनने से किसानों की

आय में बढ़ोत्तरी होगी। वहीं उपभोक्ताओं को सस्ता ईंधन मिलेगा। गडकरी ने बताया कि देश में हर साल 330 मिलियन टन उत्सर्जन होता है। इसमें 80% उत्सर्जन पेट्रोल-डीजल ईंधन के कारण होता है। सरकार ने जी-20 शिखर सम्मेलन में ग्लोबल बायो फ्यूल गठबंधन में 2070 तक उत्सर्जन को शून्य स्तर पर लाने का संकल्प लिया है।

का निर्माण पहले ही शुरू कर दिया है। कुछ कारें तो 100% एथेनॉल पर चल रही हैं। एथेनॉल से चलने वाली फ्लेक्स कारें 60% विद्युत का उत्पादन भी करती हैं। जिससे माइलेज भी बेहतर होता है।