

# India's Clean Energy Shift Holds \$25B Potential'

## Green hydrogen will be the next big wave, says Avendus survey

#### **Our Bureau**

Mumbai: India's energy transition landscape provides a \$25-billion, or about ₹2 lakhcrore, annual investment opportunity for investors, led by green hydrogen, energy storage, electric vehicle charging, carbon capture and utilisation, and energy efficiency, a study by Avendus Capital has said.

The investment banking firm unveiled the research report in collaboration with Clean Energy Pipeline, an independent research firm based in the UK. "Over the last few decades, any mention of the cleantech sector has become synonymous with renewable power producers," Prateek

Jhawar, managing director of Avendus Capital, said. "The fact is that only 20% of final energy consumed is in electrified form. Investments in decarbonisation of the balance 80% share will require participation from a multitude of players in addition to renewable power producers and its current ecosystem."

Despite the global economic slowdown, investment interest in the Indian energy transition sector swelled in 2022 and will continue to be at the forefront of global decarbonisation efforts, said Jhawar who also heads infrastructure and real assets investment banking at Avendus.

As part of the study, Clean Energy Pipeline conducted a survey to gauge global investor interest in India's clean energy industry, which garnered over 2,000 responses. It indicated that high economic growth and a stable commitment to decarbonisation have drawn the attention of major organisations and

### RISING INVESTMENTS

### Investment interest in Indian energy transition sector swelled in 2022, said Avendus executive

investors around the world.

The report also interviewed some companies and investors that participated in the survey, including SUSI Partners, Actis, ABB, and Ikigai Capital.

Avendus believes green hydrogen will be the next big wave in energy transition globally, while green ammonia will provide viable end-use in the short term. "We believe green hydrogen, energy storage, EV charging, carbon capture and utilisation, and energy efficiency are the segments that will create a mark for themselves over this decade,"

said Akhil Dokania, director, infrastructure and real assets investment banking, at Avendus Capital.

While grid load management is critical, the firm expects investments will go into both pump storage hydro and batterybased storage projects. EV charging infrastructure will require large-scale investments to support the growing EV penetration in India, it said. Carbon capture, utilisation and storage industry is still in its nascent stages; commercially viable business models will have to be developed for it to become an attractive investment pro position, the report said.

"Indian companies are coming up with service-oriented solutions for energy delivery as well as management, which further creates a significant value creation opportunity for early investors in the emerging energy transition segments,"

Dokania said.



# Cabinet to consider Kirit Parikh panel inputs on natural gas pricing this week

### Rishi Ranjan Kala

New Delhi

The Cabinet Committee on Economic Affairs (CCEA) is set to consider this week the suggestions made by the Kirit Parikh committee on fair pricing of natural gas.

The Ministry of Petroleum & Natural Gas (MoPNG) bi-annually revises the price of natural gas. Next revision will become effective from April 1, 2023.

"MoPNG has accepted the Parikh committee recommendation and the Cabinet is likely to be take it up on Friday," a senior government official said.

If the Cabinet accepts the suggestions, the price from old fields will be fixed at 10



per cent of the monthly average of India's crude oil basket.

Besides, this price will also have a floor of \$4 per million British thermal units (mBtu) and ceiling of \$6.5 per mBtu.

### BENEFITS

If the Cabinet decision is delayed, the present mechanism for calculating the price will be applicable. Industry has welcomed the Parikh committee recommendations as this will boost realisations of upstream companies with graded increases over next five years and moving to full decontrol from January 1, 2027.

From a consumer's perspective, the price cut should result in a decline in CNG and PNG (domestic) prices and would benefit end consumers thereby stimulating demand.

Lower domestic gas prices would also reduce the government's subsidy burden for fertilisers. Also, lower prices would lead to a more competitive cost of generation for domestic gas-based power generation projects.

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# Ensuring stability in energy supplies vital



SUSHMA RAMACHANDRAN SENIOR FINANCIAL JOURNALIST

HE manmade equivalent of a natural disaster is shaking the global banking system. For a change, the impact on India is not adverse. The oil markets are reflecting concerns over the banking crisis by pushing prices downwards. So, after a year of high rates. the benchmark Brent crude is now ruling at \$75-78 per barrel. This is roughly the same level as before the Ukraine conflict broke out last February. It is unalloyed good news for an exchequer that has had to cope with a rising import bill for the 2022-23 fiscal.

What is even more encouraging is that predictions for 2023-24 are now moderating from earlier forecasts of \$100 per barrel made by Goldman Sachs. The investment bank has lowered its sights and is now talking about a level of \$94 by the end of the year. While this is still not comfortable for a country that imports 85 per cent of its crude oil needs, it indicates that a softening trend is expected to continue for the rest of the year.

Forecasts of oil prices, however, are notoriously unreliable.

No one would have anticipated a black swan event like the Ukraine war to occur and reverberate in oil markets to such an extent that prices would touch \$139 per barrel. Neither would oil industry experts have expected a zero-Covid policy in China to reduce global demand to such an extent that prices begin to slide from October last year.

The current banking crisis was also unforeseen given that the 2008 financial crash is considered a distant memory that is not likely to be repeated. The argument given is that newer stringent regulations have been put in place for banks all over the world. And yet, California-based SVB collapsed, while Swiss flagship Credit Suisse had to be taken over by UBS. Still more chaos could be in the offing as shares of Deutsche Bank are reported to be tumbling.

The net result is that the prospect of recessionary conditions depressing demand has made oil prices fall over a 10-day period from \$86 to \$73 per barrel. Yet, the dip in prices has not come soon enough to reduce the oil import bill in any significant way for the 2022-23 financial year. Oil purchases are likely to touch \$200 billion, nearly double of the \$118 billion recorded in 2021-22. The pandemic fiscal - 2020-21 - had an unusually low import bill of \$63.5 billion owing to the crash in prices following the advent of Covid.

The burden on the exchequer would have been even higher during the 2023 fiscal but for the availability of Russian crude oil at discounted rates. When supplies began to be sourced from that country, it was offering crude oil at rates \$16 cheaper than the then average price of \$110 per barrel. The discounts continued since then, ranging from \$8 to \$12 per barrel.



In the case of volatile oil markets, India needs to keep a close watch on developments such as decisions being taken by oil cartel Organisation of the Petroleum Exporting Countries (OPEC). This dominating group has ioined hands with Russia and other allies to form OPEC+ but continues to restrict oil supplies by fixing production quotas. Russia may be the outlier in the system and is now offering discounted rates. But it remains a part of the cartel which has a vested interest in hardening world oil prices.

CAUTIONARY: The sanctions on Russian oil were meant more for the rest of the world than the western countries. REUTERS

Rough estimates are that the country has saved over \$3 billion by buying Russian oil rather than relying on traditional suppliers in West Asia.

This policy decision was taken despite pressure from western countries to join the ban being sought on buying Russian oil supplied via the sea route.

One of the ways to prevent countries from buying it was to direct insurance and shipping companies to abstain from dealing with Russian supplies. These efforts did not succeed, however, and were followed by the move to put a cap on prices of Russian oil. But the ceiling of \$60 per barrel was not an issue for India and China which were anyway buying it at lower rates.

India will need to continue to follow an independent policy on oil purchases as it cannot afford to get boxed in by western sanctions on Russia, Incidentally, the curbs on buying hydrocarbons from that country did not apply to supplies going overland by pipeline since that would have affected Europe's energy requirements. These were already constrained by Russia's cutbacks in gas supplies through the Nord Stream pipeline as well as the subsequent damage to the pipeline.

But the ban on maritime imports of Russian oil and gas came into effect nine months after the conflict began

in Ukraine. Imports of crude and petroleum products via pipeline continued to be exempt. The sanctions on Russian oil were thus evidently meant more for the rest of the world than the western countries.

At the same time, India needs to accept that it is more intertwined than ever before with the global economy. The latest international banking crisis is not expected to impact banks here, but there are other ramifications of such developments. These could be positive as in the case of falling crude oil prices but could also be negative in terms of affecting Indian investments abroad.

Even in the case of volatile oil mar-

kets, the country needs to keep a close watch on developments such as decisions being taken by oil cartel Organisation of the Petroleum Exporting Countries (OPEC). This dominating group has joined hands with Russia and other allies to form OPEC+ but continues to restrict oil supplies by fixing production quotas. Russia may be the outlier in the system and is now offering discounted rates. But it remains a part of the cartel which has a vested interest in hardening world oil prices.

Going forward, the country needs to remain watchful and cautious in dealing with all external entities in order to ensure stability of energy supplies.





# Govt sanctions ₹800 cr for setting up of 7,432 EV fast charging stations

NEW DELHI: The Ministry of Heavy Industries on Tuesday said Rs 800 crore under FAME India Scheme Phase II has been sanctioned to three PSU oil marketing companies (OMC) for setting up 7,432 public fast charging EV stations across the country. The amount has been sanctioned under FAME Scheme Phase II.

The ministry has released Rs 560 crore or 70 per cent of the total amount to three OMCs — Indian Oil (IOCL), Bharat Petroleum (BPCL), and Hindustan Petroleum (HPCL) — as the first installment for the installation and commissioning of upstream infrastructure and charging equipment of EV public charging stations at respec-



tive retail outlets in the country.
The installation is expected

The installation is expected to be completed by March 2024, the ministry said in a statement.

At present, there are 6,586 charging stations across the country.

"The addition of the new 7,432 public charging stations will be a significant push to EV charging ecosystem," the release said, and added the charging capacity would be used for charging electric 2-wheelers,

4-wheelers, light commercial vehicles, and mini-buses.

Mahendra Nath Pandey, Minister of Heavy Industries said the move will give a boost to the electric vehicle ecosystem in India and encourage more people to switch to cleaner modes of transportation.

He also added that the government is committed to promoting sustainable green mobility solutions and reducing the country's carbon emissions, working towards Prime Minister Narendra Modi's Net Zero mission.

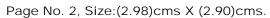
The minister further said the move will create a robust charging infrastructure network in India that is more accessible to the public.



# Russia says oil sales to India saw 22-fold surge in 2022

Russian Deputy Prime Minister Alexander Novak said on Tuesday that Russia needed to focus on boosting energy exports to so-called 'friendly' countries, as he said Russian oil supplies to India jumped 22-fold last year. Novak said energy revenues accounted for 42 per cent of the federal budget in 2022 and that the energy industry was sustainable, despite Western sanctions. **REUTERS** 







### Russia: India oil sales up 22-fold last year

RUSSIAN DEPUTY PRIME minister Alexander Novak said on Tuesday that Russia needed to focus on boosting energy exports to so-called "friendly" countries, as he said Russian oil supplies to India jumped 22-fold last year. PTI





# तेल कंपनियां बनाएंगी इलेक्ट्रिक वाहनों के चार्जिंग स्टेशन

#### 🏿 संजय ट्रेजा

#### नई दिल्ली। एसएनबी

फेम इंडिया के दूसरे चरण में देशभर में आम जनता के लिए इलेक्ट्रिक वाहनों के 7432 चार्जिंग स्टेशन स्थापित किए जाएंगे। इलेक्ट्रिक वाहनों चार्जिंग स्टेशन के लिए सरकार ने 800 करोड़ रुपये मंजूर किए हैं। इलेक्ट्रिक चार्जिंग स्टेशन स्थापित करने की जिम्मेदारी तेल विपणन कंपनियां संभालेंगी। वह पूरे देश में इलेक्ट्रिक चाहन चार्जिंग स्टेशनों का एक विस्तृत नेटवर्क तैयार करेंगी।



- इलेक्ट्रिक वाहनों के 7432 व्यक्तिंग स्टेशन लगेंगे, सरकार ने विए 800 करोड़ कपार
- तेल विपणन कंपनियां पूरे वेश में इलेक्ट्रिक वाहन वार्जिंग स्टेशनों का विस्तृत नेटवर्क तैनात करेंगी

देश में इलेक्ट्रिक वाहनों को बढावा देने के लिये सरकार जहां इलेक्ट्रिक वाहनों पर सब्सिडी दे रही है वही देशभर में इन वाहनों की चार्जिंग की व्यवस्था करने पर प्रमुख ध्यान दे रही है ताकि अधिक से अधिक लोग इलेक्टिक वाहनों के प्रयोग के प्रति प्रेरित हों। ब्युरो ऑफ एनर्जी इफीसिएंशी के महानिदेशक की अध्यक्षता में एक समिति ने भी सार्वजनिक चार्जिंग बनियादी ढांचे के विकास की व्यवहार्यता में सुधार के लिए कुछ बदलावों की सिफारिश की है और सरकार इस समिति की सिफारिशें को भी गंभीरता से ले रही है। समिति की सिफारिश के आधार पर सरकार ने बनियादे ढांचे की स्थापना के लिए वित्तीय सहायता को मंजुरी दी है।

सरकार का मानना है कि चार्जिंग स्टेशनों के लिये वित्तीय सहायता देने से चार्जिंग स्टेशनों की स्थापना आसान होगी। इसके अलावा इलेक्ट्रिक वाहनों के

आपूर्ति उपकरणों पर पहले की तरह 70 फीसद की सब्सिडी पहले की तरह जारी रहेगी। चार्जिंग स्टेशनों के लिए भूमि की समस्या से निपटने के लिए ही तेल कंपनियों को इसकी जिम्मेदारी दी जाती है ताकि तेल कंपनियां अपने परिसरों में चार्जिंग स्टेशन स्थापित कर सकें।

इंडियन ऑयल, भारत पेट्रोलियम व हिंदुस्तान पेट्रोलियम को 800 करोड़ रुपये देश में 7432 सार्वजनिक फास्ट चार्जिंग स्टेशन स्थापित करने के लिए मंजूर किए गए हैं। इंडियन आयल 3,438, भारत पेट्रोलियम 2,334 व हिंदुस्तान पेट्रोलियम द्वारा 1,660 चार्जिंग स्टेशनों की स्थापना की जाएगी। मार्च 2024 तक सभी चार्जिंग स्टेशन लगाने का का पूरा होने की उम्मीद है। इस समय देशभर में लगभग 6,586 चार्जिंग स्टेशन हैं।

## RASHTRIYA SAHARA, Delhi, 29.3.2023

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