

POWERED BY

CoinDCX

ASSOCIATE PARTNER

intel. + Lenovo

BUDGET BIG BITES
DOWNLOAD YOUR COPY

News / LATEST / Trends / Geopolitical uncertainties make green hydrogen adoption ever more relevant

Feedback

Geopolitical uncertainties make green hydrogen adoption ever more relevant

A successful rollout of the recently announced Green Hydrogen Policy after onboarding all stakeholders will greatly help India achieve energy security feel experts.

**Manish Pant**

Mar 09, 2022, Updated Mar 09, 2022, 4:17 PM IST



As Brent Crude prices touched \$130.7 barrel on Wednesday, the country's push towards green hydrogen has become even more relevant. India had announced the first phase of its Green Hydrogen Policy on February 17 as part of the strategy to boost its production and reduce dependence on fossil fuels and crude oil imports.

"The ongoing Russia-Ukraine conflict and the increased energy prices accentuate the need for energy security. The green hydrogen policy has been made more relevant towards building India's energy security and self-sufficiency," Tushar Shah, Director, CareEdge Research, told Business Today.

Amid the geopolitical uncertainties, concerns over oil touching new highs have been growing. India is the third-largest importer of crude after China and the US, with the commodity accounting for 20 per cent of the country's total import bill.

It paid \$82.4 billion for crude oil imports in the nine months through December 2021, a 108 per cent rise over \$39.6 billion paid over the same period in 2020. The country currently imports more than 80 per cent of its crude oil and 50 per cent of its natural gas requirements.



The green hydrogen policy is aimed at facilitating the production of 5 million tonnes of green hydrogen by 2030.

The policy also envisages the country to achieve carbon neutrality by reducing CO2 emissions and creating a robust hydrogen production ecosystem. Experts, however, felt that a successful rollout of the policy framework will be key to ensuring delivery on targets.

“The policy is issued to promote the manufacture of green hydrogen and green ammonia and is a good beginning. It, however, does not cover the much-awaited production-linked incentive (PLI) scheme for units, electrolysers, fuel cells, etc., which holds the key to bringing the cost of green hydrogen to competitive rates. Perhaps a separate policy will be issued later,” avers energy analyst at financial services firm IIFL Securities, Harshvardhan Dole.

Currently, the cost of manufacturing green hydrogen works out to nearly \$6 a kilo, which makes it unviable for any commercial application. This needs to be brought down by more than 50 per cent to \$2-3 kilo for it to be able to compete with manufacturing hydrogen using gas cracking.

Mukesh Ambani-led Reliance Industries Ltd (RIL) is planning to lower the cost of hydrogen to \$1 per kilo in the next ten years by investing in an integrated mega-production facility comprising solar panels, green energy, electrolysers and fuel cells.



While the economies of scale are expected to bring down costs, additional support may be required through the PLI scheme.

Developing India as production hub

Green hydrogen has also found a strong proponent in roads & highways minister Nitin Gadkari, who has often referred to it as “the fuel of the future” in the recent past. Gadkari not only wants to run passenger and commercial vehicles using it but also sees a huge export opportunity in the area.

“India has great potential to emerge as a global player here. The new policy has correctly adopted a panoramic perspective to ease green hydrogen manufacturing, transportation, storage and distribution. A single portal project clearance with a 30-day timeline will further attract fresh investors who can bring new technology to the country,” remarks CEO GE Gas Power for south Asia, Deepesh Nanda.

In the medium and long term, ramping up green hydrogen production will help India attain energy self-sufficiency.

“Hydrogen as an energy carrier in the country’s energy portfolio is likely to present a unique opportunity to address requirements such as the power to gas, power to power, power to mobility and even transport and grid applications. Usage of hydrogen will help reduce global warming by replacing fossil fuels either by being used in fuel cells or by being burnt to produce heat,” says CareEdge’s Shah.

Once the production ecosystem is established, a variety of industrial sectors are expected to drive demand for fuel.

“Over the next decade, the primary pickup in demand for green hydrogen is expected from existing users of hydrogen such as fertilisers and refineries, while demand from other sectors such as iron and steel would also pick up gradually. Hence retrofitting existing capacities needs to be encouraged to enable the transition to green hydrogen over the long term,” observes Shah.

The policy’s success is also dependent on developing synergies between the Centre and states to make its benefits more extensive.

“Some of the proposals may require further policy advocacy between the centre and states, as these remain concurrent issues. For example, open access to renewable energy (RE) power. Over the years it has been seen that states are often unwilling to give open access for any industrial units, while the policy’s success would rest on seamless open access,” observes IIFL’s Dole.

To that end, the involvement of various stakeholders is critical to the initiative’s success.

[POST A COMMENT](#)

--be the first to Comment--



Economy
Corporate
Markets

Trending
Magazine
COVID-19

Infra
Pharma
Real
Estate

Stocks
Auto
World

Education
Jobs
Lifestyle

[About us](#)

[Contact us](#)

[Advertise with us](#)

[Privacy Policy](#)

[Terms and Conditions](#)

[Partners](#)

[Press Releases](#)

Copyright©2022 Living Media India Limited. For reprint rights: Syndications Today