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\$164.32	-1.78%	\$3003.95	-1.58%	\$132.97	-5.26%	\$17.26	-4.35%	\$202.16	-1.94%	\$2586

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## Govt unveils first phase of green hydrogen policy

Power and new & renewable energy minister Raj Kumar Singh said the policy will help lower the cost of producing carbon-free green hydrogen, adding that green hydrogen produced in India will be globally competitive.

Written by [FE Bureau](#)



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Electrolysers are used to make green hydrogen using electricity generated from renewable sources. (File)

The government on Thursday unveiled the first part of the National Hydrogen Policy, offering waiver of inter-state transmission charges for 25 years for projects commissioned until June 30, 2025, and grid transmission connectivity on priority basis.

Power and new & renewable energy minister Raj Kumar Singh said the policy will help lower the cost of producing carbon-free green hydrogen, adding that green hydrogen produced in India will be globally competitive. “We want India to emerge as the export hub for green hydrogen and green ammonia,” he said.

Singh also hinted at a viability gap funding mechanism for the sector. The Union power ministry had said earlier that it intended to put green hydrogen consumption obligations on fertiliser producers and petroleum refiners to create a hydrogen value-chain in the country, and bring down the costs of hydrogen production. These incentives could be part of the Part-2 of the policy, which is likely to be cleared by the Cabinet soon.

As per the first part of the policy, companies will have the liberty to set up capacity to generate electricity from renewable sources such as solar or wind anywhere in the country, by themselves or through a developer. This electricity will be allowed to be wheeled, free of cost, through open access of the transmission grid, to the plant where hydrogen is to be produced.

The government will also allow banking (storage) of excess green hydrogen produced by any company for up to 30 days, in case of capacities which are set up before 2025.

Singh had earlier said that as much as 8,800 megawatt (MW) of electrolyser capacity is required to meet the demand of the obligated industries, if they are mandated to source even 10% of their requirements through domestic green hydrogen. The purchase obligation would be later increased to 20-25%, he had said.

The government is also planning to come up with a PLI scheme for setting up electrolyser-manufacturing capacities to expedite the uptake of green hydrogen. According to experts, such capacity may require investments between 15,000 crore to 20,000 crore.

Electrolysers are used to make green hydrogen using electricity generated from renewable sources. Prime Minister [Narendra Modi](#) had on August 15 last year announced the National Hydrogen Mission as the government explores ways to reduce dependence on imported products such as crude oil and natural gas.

The country currently consumes about around 6 million tonne of hydrogen annually and the government is looking for ways to increase the penetration of domestic green hydrogen in industries which otherwise import natural gas and ammonia to produce hydrogen.

According to an analysis by the Council on Energy, Environment and Water (CEEW), 50-70% of the cost of green hydrogen comes from the renewable power input costs, a substantial share being from open access charges. “The waiving-off of central open access charges is a good first step in enabling lower cost distributed production of green hydrogen. However, states have their own open access charges ranging from 0.27 to 3.8 per unit (kWh), also depending on whether it is solar or wind. Therefore, a concerted effort is required to remove the disparity in these charges to avoid a distorted green hydrogen market,” Hemant Mallya, senior programme lead at CEEW, said.

Chandan Kumar Mondol, director commercial of [NTPC](#), told FE: “The waiver of transmission charges for 25 years and the benefits similar to renewable purchase obligations will lead to faster adoption of green hydrogen in the country. However, a lot will depend on how soon the price of green hydrogen comes down from its current \$4.5 to \$5 levels.”

State-run NTPC is evaluating a plan to set a \$2/kg benchmark cost for production of hydrogen by 2025-26, said Mohit Bhargava, CEO of NTPC Renewable Energy, at a virtual event ET Solar Power [Congress](#). He, however, added that cost of renewable power and electrolysers will be important determinants.

Manoj K Upadhyay, founder & chairman of ACME Group, said: “The government would do well to come up with policy measures for initial demand creation by means of mandatory green hydrogen and ammonia purchase obligations and at the same time, an equivalent of PLI scheme for green ammonia to make India competitive globally.”

According to Anish De, national head—energy, natural resources & Chemicals, KPMG in India, said: “Though discom-based supply is spoken about, the entire emphasis is on open access. Transmission charges waiver till 2025 is open-ended in terms of capacity”. He added that cross subsidy surcharge implications need to be understood especially for third-party developers.