

Thumbs up by industry to National Hydrogen Mission policy 1st phase, eyes more concrete steps in round two

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Hydrogen (Representative image)

Industry players who have already announced plans to enter the green hydrogen sector and experts tracking the sector closely believe that the first tranche of policy initiatives announced by the

government towards the National Hydrogen Mission is in the right direction, but they want more.

All eyes will now be on the second round of announcements, which may require approval from the Union Cabinet, in hopes that the government will provide economic incentives to boost growth in the sector. They also seek more clarity on how the government could facilitate demand by measures like hydrogen and ammonia purchase obligations.

On Thursday, the ministry of power notified the first part of the National Hydrogen Mission policy on green hydrogen and green ammonia, aimed to boost the production of hydrogen and ammonia using renewable energy. Green hydrogen could potentially be the enabler for the global transition towards sustainable energy with net-zero emissions economies.

Read More: **Govt announces step one of National Hydrogen mission to boost green hydrogen, ammonia manufacturing**

Green hydrogen refers to the hydrogen generated from the electrolysis of water when the entire process is run on renewable energy. Similarly, green ammonia is the ammonia produced by using renewable energy.

Here are the comments from companies looking to invest in the sector and experts:

Mahesh Palashikar, President, GE South Asia

“In our current quest for sustainable solutions for power generation, green hydrogen is an important part of a clean and secure energy future. I applaud and welcome MNRE’s initiative in releasing India’s Green H2 policy aligned with the National Hydrogen Mission launched by the Prime Minister in 2021. The policy covers several strategic enablers for growing India’s Green Hydrogen output, including waiver of inter-state transmission charges, allotment of land in renewable energy parks and credit towards renewable RPO compliance.

Green Hydrogen has an important role to play in the global energy transition and in diversifying energy sources worldwide. At GE, we have proven Hydrogen technologies and we continue to invest in new ones. We are a leading provider for delivering end-to-end green electricity solutions to power electrolyzers making Green Hydrogen for the marketplace. GE reiterates its strong commitment and support to enable India’s march towards a decarbonized future.”

Mayank Bansal, Chief Commercial Officer, ReNew Power

“ReNew Power welcomes Phase 1 of India’s green hydrogen policy. It’s a very good step in the right direction as India looks to become a net zero economy by 2070 and will add to the momentum to that crucial goal.

Currently, manufacturing green hydrogen is a costly proposition and in cognizance of this, the government has correctly waived off ISTS charges for a period of 25 years, which will help in bringing down the cost of Green Hydrogen.

The Government has also allowed banking of power for 30 days, which will help improve the utilization of capital-intensive Electrolyser assets. We believe that more clarity is needed on the application of cross-subsidy surcharge and additional cross-subsidy surcharge since the policy allows production at different locations by different parties. Further, the decision to include biomass as a fuel for the generation of green hydrogen is a step in the right direction.

Overall, it's a much-needed initiative and we expect state governments to take the cue from this policy and extend benefits such as waiver of Intra State Transmission charges and Electricity Duty. This will help the cause of making India a Green Hydrogen hub.”

Rajat Seksaria, chief executive officer, ACME Group

“This is a new and unique subject and it seems that the government was not able to pin down all aspects at once but the Minister (of power) was very keen that at least some version of it should come out, hence the first phase. They have come out with policy direction on matters which were within the purview of the ministry.

The inter-state transmission charges waiver for a period of 25 years is a big thing. They have given a banking facility for 30 days right within 30 days. But what is not clear is if they will come out with a formula for banking charges; that is something we need to study.

This is the first phase of the policy that makes one thing clear, they are really putting the skin in the game. For example, providing the

waiver for 25 years on the transmission charges is a very unique move; not many countries in the world have done this.

The other thing they have done is create enabling provisions, which are not yet concrete-like port authorities providing land for storage facilities. These are good directional steps, not concrete, but it certainly creates excitement for us. This has to be followed up by more very specific policy measures.

There are two major things that should be addressed in the follow-up policy. Number one, creating a very specific demand trajectory. We have suggested that this can be done by introducing green hydrogen purchase obligation and ammonia purchase obligation. This has not been done so far.

The second is taking measures to create an export incentive. While we are looking at India as a market, there is a big market in Europe and Japan where the demand is predicted to increase faster.

ACME has suggested that there should be production linked incentives for the production of green hydrogen and not on the intermediary parts of the electrolyzer and other components. This is a better way to achieve the eventual goal of becoming an export hub. Although there are others who are seeking PLI on electrolyzers and components.”

Anvesha Thakker, Partner and Lead, Renewable Energy, KPMG in India

Green Hydrogen is one of the most critical clean energy sources for decarbonizing India’s energy needs and enhancing India’s energy security in a sustainable manner.

India can be amongst global leaders in this space given the country's rich RE potential, strong developer base and huge hydrogen demand. What is required is to give the right fillip to bring down costs, create demand side measures and improve implementation ease.

In the newly announced Green Hydrogen Policy, the Government has touched upon several factors to bring down costs and improve ease of implementation of green hydrogen/ green ammonia projects.

Some of the notable points are waiver of inter-state transmission charges, Open Access ease, priority access to interstate transmission system (ISTS), banking provisions, which will all improve the ease and bring down cost of transfer of electrons from renewable energy rich states to demand centers for production of green hydrogen/ green ammonia.

The move towards single portal clearances with time bound addressal as well as allotment of land in renewable energy parks for production of green hydrogen/green ammonia etc. are also welcome steps.

However, the policy needs to address the expectations of hydrogen producers by providing clarity on demand side measures such as hydrogen purchase obligations.

Similarly, there is no clarity as yet on measures to facilitate localization of electrolyzer manufacturing. Further, there is no mention of derivatives of green hydrogen other than green ammonia, such as methanol. Additionally, implementation of banking provisions will also require consent from the State

utilities, where we may see some resistance by State Regulatory Commissions.

However, Power Minister Shri RK Singh has affirmed that this is the first phase of policy rollout. We can expect other levers to be addressed as the policies evolve, and after industry reacts to today's announcements, to further support India's green hydrogen ambitions.

Hemant Mallya, Senior Programme Lead, Council on Energy, Environment and Water (CEEW)

“According to CEEW analysis, about 50-70 per cent 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 INR 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.

Banking of renewable energy is a significant enabler for green hydrogen production as it will increase the capacity utilisation of electrolysers used to produce hydrogen as solar and wind are only intermittently available. According to CEEW analysis, this will also lead to a lower production cost by up to 40 per cent if there are no banking charges.”

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