

RIL, Adani, JSW group, L&T enter race for green H2, electrolyser

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For the Centre's first tender on green hydrogen and electrolyser manufacturing, around a dozen companies, including Reliance Industries (RIL), Larsen & Toubro (L&T), Adani New Energy, and JSW Energy, have shown interest.

The tenders were floated by Solar Energy Corporation of India (SECI) under the flagship Strategic Interventions for Green Hydrogen Transition (SIGHT) programme, aimed at setting up green hydrogen and electrolysers (the key component to produce hydrogen).

The tender for producing green hydrogen received technical bids from 10 companies, including RIL, state-owned Bharat Heavy Electricals, Torrent Power, Greenko ZeroC, JSW Neo Energy, Sembcorp Green Hydrogen India, etc. These companies have submitted the amount of green hydrogen that they aim to manufacture from their facilities. In the second round of the tender, these bidders will submit the amount of incentive they would require from the Centre allocated to the SIGHT programme.

The other tender, which is for supporting the manufacturing of electrolysers, has received technical bids from eight players, including RIL, L&T Electrolysers, Adani New Industries, Matrix Gas & Renewables (promoted by Gensol), and Nutech Contracts, among others. These companies have submitted the capacity for green energy generation in this bidding round. In the second round, they will submit the financial incentive required from the government.

Most of the companies participating in the SECI tenders have already chalked out plans for the green hydrogen business and would use this tender as an initial plank. The focus for many remains on building the backward and forward supply chains around green hydrogen. Adani Enterprises, for instance, has started producing solar modules, which is part of its larger green hydrogen value chain plans, including an electrolyser manufacturing unit.

For JSW Energy, the green hydrogen plans are to meet its group company JSW Steel's green energy requirements. Adani has also expressed plans to blend green hydrogen as part of its city-gas distribution supply at a later stage and also use green ammonia to partially power its Mundra power plant.

Manufacturing major L&T is approaching green hydrogen with a two-pronged approach — going solo

GREEN AMBITIONS

GREEN HYDROGEN MANUFACTURING

■ Bid capacity (in tonnes)

RIL	90,000	
Torrent Power	18,000	
JSW Neo Energy	10,000	
ACME Cleantech Solution	10,000	

Sembcorp Green H2 Ltd, BHEL, Greenko ZeroC, CESC Projects, GH4 India, HHP Two also bid but their capacity submission is not available

ELECTROLYSER MANUFACTURING

● Bid capacity (in megawatt)



L&T Electrolysers, Adani New Industries, HHP Seven, Nutech also bid but their capacity submission is not available

Sources: Industry, govt sources

on plans to manufacture electrolysers from its Hazira unit and partnering Indian Oil Corporation and ReNew to manufacture green hydrogen. Oil-to-telecommunications conglomerate RIL has plans for both electrolyser manufacturing and green hydrogen production. In its 2022-23 annual report, the company stated, "After proving cost and performance targets, the company aims to progressively commence the transition from grey to green hydrogen by 2025."

Several companies have publicly announced their hydrogen manufacturing plans as well. State-owned oil refining companies lead the pack with 30.8 KTA (thousand tonnes per annum) of green hydrogen production planned. Electrolyser manufacturing, however, remains nascent in the country, with most of the hydrogen makers depending on imports for sourcing electrolysers.