

## India approves \$2.3 billion to develop green hydrogen

January 5 2023, by Sibi Arasu



A thick blanket of smoke envelops young ragpickers searching for reusable material at a garbage dump in New Delhi, India. Marking its biggest effort yet to make India a global hub for production, use and export of green hydrogen, the Indian federal government on Wednesday, Jan. 4, 2023, approved \$2.3 billion funding with an aim to grow various segments of the green hydrogen sector in India. India hopes that this investment will abate 50 million metric tons of greenhouse gas emissions. Credit: AP Photo/Altaf Qadri, File



The government has approved \$2.3 billion to support production, use and exports of green hydrogen, aiming to make India a global hub for the nascent industry.

The funding, <u>announced late Wednesday, i</u> s a first step toward establishing the capacity to make at least 5 million metric tons of green hydrogen by the end of this decade.

Green hydrogen is hydrogen that is produced through the electrolysis of water, powered by electricity generated from <u>renewable sources of energy</u>. Most of the world's hydrogen is produced using <u>fossil fuels</u>, especially <u>natural gas</u>.

The aim of the funding initiative is "to make green hydrogen affordable and bring down its cost over the next five years. It will also help India reduce its emissions and become a major exporter in the field," said Anurag Thakur, India's minister for information and broadcasting.

He said the financing would also help add about 125 gigawatts of renewable energy capacity by 2030. As of October, India had about 166 gigawatts of renewable energy capacity.

Other aims are to create more than a half million new jobs, attract more <u>private investment</u> into the sector, reduce fossil fuel imports and cut <u>greenhouse gas emissions</u> by 50 million metric tons.

Many of India's leading renewable energy companies, including companies owned by the Adani Group, Reliance Industries and JSW Energy; public sector companies like Indian Oil and NTPC Limited; and renewable-only companies such as Renew power are investing in production of green hydrogen.





Traffic moves on an expressway on the outskirts of New Delhi, India, Wednesday, March 23, 2022 file photo. Marking its biggest effort yet to make India a global hub for production, use and export of green hydrogen, the Indian federal government on Wednesday, Jan. 4, 2023, approved \$2.3 billion funding with an aim to grow various segments of the green hydrogen sector in India. India hopes that this investment will abate 50 million metric tons of greenhouse gas emissions. Credit: AP Photo/Altaf Qadri

Green hydrogen now amounts to a small fraction of global hydrogen use, estimated to be about 70 million tons per year. Most commercially produced hydrogen is grey hydrogen, produced using fossil fuels, and blue hydrogen that is also made using fossil fuels but with the use of carbon capture systems to reduce emissions. The production of green hydrogen results in the emission of little to no greenhouse gases.



In providing policy incentives for green hydrogen production, India is following the lead of many other countries such as China, the European Union and the United States. Energy analysts expect manufacturing costs for green hydrogen to fall significantly in the next few years and estimate the green hydrogen market will grow 20-fold to \$80 billion by the year 2030.

"A robust policy framework, requisite financial support and an enabling ecosystem for <u>technology development</u> are essential to displace the country's conventional fuel mix with green hydrogen and enhance its industrial competitiveness in an increasingly decarbonizing world," said Shreyans Jain, an India-based sustainable business strategy consultant who closely tracks developments in the green hydrogen industry.

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