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The environmental benefits of hydrogen are also outstanding. When used as an energy source, hydrogen produces no emissions besides water. Zero Polluting emissions, an amazing advance over the current sources of energy that we use.

-Dan Lipinski

Climate change imminent, focus on areas like Green Hydrogen needed: PM Modi

Prime Minister Narendra Modi stressed on the need to focus on new areas of energy transition like Green Hydrogen to deal with climate change saying it is not a matter of future rather it calls for an action now. Addressing through a video message the 2nd International Conference on Green Hydrogen India 2024, Modi said, "There is a growing realisation that climate change is not just a matter of the future. The impact of climate change is being felt here and now. The time for action is also here and now. He noted that Green Hydrogen is emerging as a promising addition to the world's energy landscape, and it can help in decarbonizing industries that are difficult to electrify. Refineries, fertilizers, steel, heavy-duty transportation - many such sectors will benefit, he pointed out."We want to make India a global hub for the production, utilization and export of Green Hydrogen," Modi said.

Ref: https://www.business-standard.com

SECI invites proposals for setting up green hydrogen hubs

Solar Energy Corporation of India (SECI) has put out a Call for Proposals for setting up green hydrogen hubs in India under the National Green Hydrogen Mission. The scope of the work is selection of executing agency for construction of two hydrogen hubs. The deadline for the bid submission is October 7, 2024. The bidders must submit a non-refundable document fee of Rs 50,000 and GST. There is also a tender management fee of Rs 450,000 for each applicant. Under this call for proposals, SECI will provide central financial assistance (CFA) of up to Rs 1 billion for setting up two green hydrogen hubs of 100,000 MTPA capacity each. If the work is not completed by March 31, 2026, a six-month grace period will be provided. Beyond that, penalty will be imposed, a maximum of 0.5 per cent of CFA. The tender also covers storage and transportation facilities for green hydrogen/its derivatives, development or upgradation of pipeline infrastructure, development of green hydrogen vehicle re-fuelling facility, and utilisation of hydrogen compression and/or liquefaction technologies

Ref: https://renewablewatch.in

Jindal Steel and Jindal Renewables to collaborate for green hydrogen generation

Jindal Steel (JSPL) and Jindal Renewables (JRPL) have announced a landmark Memorandum of Understanding (MOU) to implement India's biggest investment in green hydrogen by any Indian steelmaker till date. This collaboration underscores a major commitment by both companies towards decarbonisation and green energy leadership in India's steel industry.The MOU outlines JSPL's plan to integrate green hydrogen into its Direct Reduced Iron (DRI) units in Angul, Odisha. This initiative represents a significant leap towards low emission steel production. In the first phase, Jindal Renewables will develop a green hydrogen generation capacity of up to 4,500 tons per annum set to commence by December 2025. In addition, the project will also entail supply of 36,000 tons of oxygen per annum that will be used in the Angul steelworks. JRPL will also be supplying ~3GW of renewable energy to JSPL's facilities reducing the steelmaker's dependence on coal fired energy by 50% in the next 2-3 years. This integration of green energy is expected to drastically lower the company's carbon footprint.

Ref: https://www.business-standard.com

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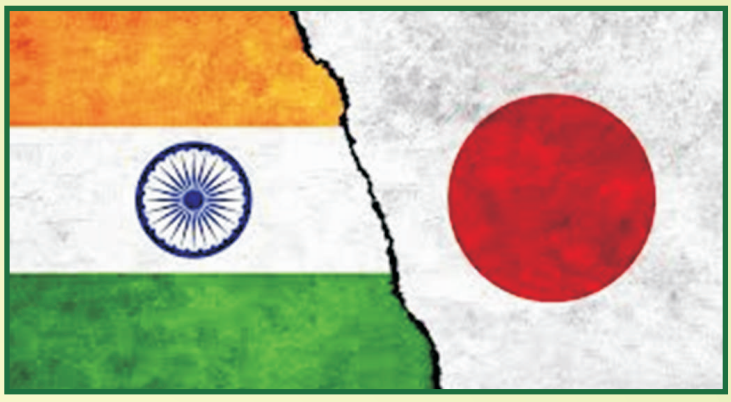
Gensol and Matrix Gas consortium to develop green hydrogen valley in Pune

The Gensol Engineering Limited and Matrix Gas and Renewables Limited Consortium has been chosen to develop a green hydrogen valley in Pune, Maharashtra. It will be India's first ever green hydrogen valley. The project will be developed on a build-and-operate basis and is supported by the Department of Science and Technology and National Chemicals Laboratories. They will also provide financial help of Rs 2.5 million for the project. The main objective is to supply green hydrogen to Pune's specialty chemicals sector. This project falls under the National Green Hydrogen Mission.Gensol Engineering and Matrix Gas consortium bagged a contract to develop India's first bio-hydrogen project. The project is worth Rs 1.64 billion and once operational, is expected to produce 1 tonne of hydrogen per day from converting 25 tons of bio-waste.

Ref: https://renewablewatch.in

India signs green ammonia offtake with Japan



India has signed its first agreement for the export of green ammonia from India to Japan marking a key milestone in its green hydrogen, ammonia and decarbonisation strategy. The Heads of Terms (HoT) agreement was signed between Sembcorp Industries, Sojitz Corporation, Kyushu Electric Power Co., and NYK Line.Singapore-headquartered Sembcorp Industries will lead the production of green ammonia in India, using renewable energy.Kyushu Electric Power Co. has committed to integrating green ammonia into its energy mix, partially replacing coal consumption at their thermal power plants in Japan, while Sojitz Corporation will act as the business intermediary, facilitating the connection between the ammonia producer and the offtaker. NYK Line will oversee the maritime transport between the two countries.

https://www.gasworld.com/

1.5 GW Electrolyser auction complete

Solar Energy Corporation of India Limited (SECI) has released the list of winners for tranche 2 (Envelope-2 opening) of the electrolyser manufacturing auction, having a total capacity of 1,500 MW. The projects will be developed under the SIGHTscheme. A total of thirteen companies have won under three different buckets.The largest category is bucket 1 with 1,100 MW of electrolyser manufacturing capacity based on any stack technology. In this bucket, Waaree Energies secured 300 MW, followed by Matrix Gas and Renewables at 237 MW, and Advait Infratech at 200 MW. The remaining winners in this bucket were Ohmium with 137 MW, GH2 Solar with 105 MW, Newage Green Electro with 71.5 MW, and Avaada with 49.5 MW.Meanwhile, Adani Enterprises was awarded 71.5 MW, with Newage Green Electro bagging 228.5 MW in bucket 2A. The total capacity for this bucket was 300 MW.In bucket 2B, the maximum capacity awarded was 100 MW. Of this, Adani Enterprises, Eastern Electrolyser, and Newtrace, were awarded 30 MW each, while Suryaashish KA1 Solar Park was awarded 10 MW.

Ref: https://renewablewatch.in/

Tamil Nadu to establish green hydrogen plant with Sembcorp industries:

Singapore-based energy and urban solutions provider, Sembcorp Industries is set to establish India's first commercial large-scale green hydrogen and green ammonia manufacturing unit in Tuticorin, Tamil Nadu. The plant will cover 160 acres and initially produce 200,000 metric tons of green ammonia annually for export to Japan. The foundation stone for the facility was laid by Chief Minister M.K. Stalin during the Tamil Nadu Investment Conclave 2024.India's first commercial production of large-scale green hydrogen molecules will be rolled out from Tamil Nadu's Tuticorin district. Singapore-based energy and urban solutions provider Sembcorp Industries is investing Rs 36,238 crore for setting up the green hydrogen/green ammonia manufacturing unit in the port city of south Tamil Nadu.

Ref: https://timesofindia.indiatimes.com/

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Tata Steel and Welspun Corp produce Pipes for Hydrogen Transportation:

Tata Steel and Welspun Corp achieved significant milestone through their partnership by developing Electric Resistance Welded (ERW) pipes for the transportation of pure hydrogen. They developed hydrogen-compliant API X65 grade pipes that successfully passed critical sour service and fracture qualification tests for transporting 100% pure hydrogen at high pressure (100 bar) in RINA, Italy. This partnership began in 2022 when Tata Steel and Welspun Corp enteredan MOU to develop hydrogen-compliant API grade pipes through the ERW Pipe route.The Green Energy Strategic Partnership between Tata Steel and Welspun Corp was set up to assess the suitability of a variety of pipes manufactured by Welspun Corp for the transportationof Hydrogen. This partnership is synchronous with the Government of India's (GOI) green hydrogen policy.

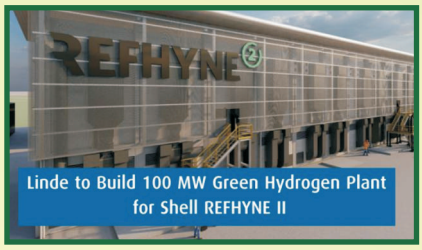
Ref: https://www.indianchemicalnews.com/

Technip Energies to develop low-carbon hydrogen facility for BP in the UK:

Technip Energies has been awarded the Front-End Engineering Design (FEED) contract by BP, which aims to establish one of the largest low-carbon hydrogen production facilities in the UK, located in the Northeast. The project will incorporate advanced carbon capture technology, and Technip Energies will deliver a detailed design by integrating hydrogen production with carbon capture. A final investment decision is expected in 2025. Technip Energies has secured the Front-End Engineering Design (FEED) contract from bp for the H2Teesside project, located in the North East of the United Kingdom. H2Teesside is projected to become one of the largest low-carbon hydrogen production facilities in the UK, incorporating advanced carbon capture technology. As part of the FEED study, Technip Energies will be responsible for delivering a comprehensive and detailed design for this large-scale project by integrating hydrogen production with carbon capture, leveraging their in-house expertise and global best practices. This strategic approach is crucial in setting the foundation for a final investment decision expected in 2025. Should Technip Energies be selected for the subsequent phases, they would oversee the full Engineering, Procurement, Construction, and Commissioning (EPCC) of the facility.

Ref: https://www.chemanalyst.com/

Linde Engineering to construct 100 MW green hydrogen facility for Shell's REFHYNE II



Linde Engineering has announced that it has entered into an agreement with Shell Deutschland GmbH to construct a 100 MW green hydrogen plant for the REFHYNE II project at the Shell Energy and Chemicals Park Rheinland in Wesseling, Germany. Linde Engineering will handle the engineering, procurement, and construction of the new proton-exchange membrane (PEM) hydrogen electrolysis facility, with electrolyzer stacks supplied by ITM Power.Furthermore, the facility is expected to commence operations in 2027. REFHYNE II is projected to generate up to 44,000 kg of renewable hydrogen daily, aiming to partially decarbonise the operations at the site. This hydrogen will be utilised to produce cleaner energy products, such as low-carbon transport fuels. As the demand for renewable hydrogen grows, REFHYNE II could also supply industrial customers in the region, aiding them in reducing their emissions. The REFHYNE II project is supported by financial backing from both the European Union and the Federal Government and benefits from a regulatory framework that promotes the use of renewable hydrogen. REFHYNE II builds on the success of the 10 MW PEM electrolyzer REFHYNE I, which began operations in 2021 and utilises PEM electrolyzer technology.

Ref: https://renewablewatch.in

German Steel industry's hydrogen demand to reach 850,000 tons by 2030:

The European steel industry will become a major consumer of renewable hydrogen, with German steelmakers having aspirational plans in the region for its use. The future potential demand of the German steel industry by 2030, according to the industry association WV Stahl, could reach 850,000 tons of hydrogen per year. Major steel producers like Salzgitter, Stahl-Holding-Saar, and Thyssenkrupp have announced tenders for low-carbon hydrogen and received public funding commitments under EU's important projects of Common European Interest program.The European steel industry will become a major consumer of renewable hydrogen, with German steelmakers having some of the most ambitious plans in the region for its use.The future potential demand of the German steel industry by 2030, according to the industry association WV Stahl, could reach 850 thousand tons of hydrogen per year. Steel producers plan to connect to the national hydrogen network that is currently being created, as well as produce their own green hydrogen from electrolysers.The German government expects total hydrogen demand to reach 95-130 TWh (2.85-3.9 million tons per year) by 2030, of which 40-75 TWh will be new demand.

Ref: https://gmk.center/

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Siemens Energy wins 100 MW Electrolyser contract for Hamburg Hydrogen Hub

The Hamburg Green Hydrogen Hub (HGHH) is building a 100 MW green hydrogen electrolysis plant at the former Moorburg coal site. For this hub, Siemens Energy will supply and install six electrolyser units. Construction will start next year, with full operation expected by 2027, producing 10,000 tons of green hydrogen annually.The deal includes a ten-year maintenance agreement. The stacks of the electrolyser, will be manufactured at Siemens Energy's new gigafactory in Berlin and assembled in Mühlheim and another European location.In May 2024, Siemens Energy won a $1.52 billion deal with Energinet to enhance Denmark's electrical grid. Over the next eight years, Siemens plans to provide transformers and switchgear for about fifty high-voltage substations. The project includes an initial phase valued at $883.29 million and it also plans to support Denmark's goal of reaching net-zero emissions by 2045 while boosting renewable energy output by 2030.

Ref: https://renewablewatch.in/

Australian government renews support for 26 GW green hydrogen hub:

The Australian government has reaffirmed its commitment to the 26 GW renewable energy and green hydrogen hub, which could produce 1.6 million tonnes of green hydrogen a year once fully built. The hub is expected to generate significant economic benefits in the region. Australian Renewable Energy Hub (AREH) in which oil major BP holds the largest stake (40.5%) will feature 26GW of wind and solar capacity across 6,500sq km of coastal desert land in western Australia, as well as a hydrogen and ammonia production facility.The Australian federal government has renewed "major project status" for the Australian Renewable Energy Hub (AREH), which could produce 1.6 million tonnes of green hydrogen a year once fully built.AREH — in which oil major BP holds the largest stake (40.5%) — will, at full scale, feature 26GW of wind and solar capacity across 6,500sq km of coastal desert land in Western Australia, as well as a hydrogen and ammonia production facility in a separate site within the state's Boodarie Strategic Industrial Area.However, the size of AREH's first phase and the timeline for development to reach the full scale has not yet been announced.

Ref: https://renewablewatch.in/

Up Coming Events

3rd Edition of Green Hydrogen India
Sustainable Development Leaders Council (SDLC)
4-5 October, 2024
New Delhi - India

Net Zero Festival 2024
22-23 October 2024.
Business Design Centre, London

Hydrogen Technology Expo Europe 2024
23-24 October 2024.
Hamburg Messe, Germany

Hydrogen Conference 2024
6 - 7 November 2024
City of London, UK

11th International Hydrogen & Fuel Cell
Conference (IHFC 2024)
25 - 26November 2024
Hotel Le Meridien
New Delhi, India

Climate Technology Show, London
27 - 28November 2024
ExCeL London, UK

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