

India Poised to Emerge as Global Hub for Green Hydrogen Innovation: Union Minister of State Shri Shripad Yesso Naik

Shri Shripad Yesso Naik Calls on Scientists, Startups and Industry to Transform India into a Green Hydrogen Powerhouse at First R&D Conference

First R&D Green Hydrogen Conference Concludes with Call to Accelerate Research, Innovation and Startup Ecosystem in Green Hydrogen Sector

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India's quest to achieve Net Zero by 2070 gained fresh momentum today as Union Minister of State for New & Renewable Energy, Shri Shripad Yesso Naik, called upon scientists, industry leaders, startups and young researchers to make India a global hub of green hydrogen innovation. Addressing the valedictory session of the first Green Hydrogen R&D Conference organised by the Ministry of New & Renewable Energy (MNRE) under the National Green Hydrogen Mission, Shri Naik said the two-day event had brought together the finest minds to chart the country's path towards a clean, secure and self-reliant energy future.



Green Hydrogen at the Heart of India's Net Zero Journey

Shri Naik said that India has embarked on an ambitious journey to achieve Net Zero by 2070 and to position itself as a global leader in clean energy. "At the heart of this journey lies green hydrogen, a fuel that promises to decarbonise our hardest-to-abate sectors, open new trade frontiers, and create a cleaner and more secure future," he said. He noted that through the National Green Hydrogen Mission, launched by the Hon'ble Prime Minister, the Government is laying the foundations for India to emerge not just as a consumer, but as a global hub of innovation, manufacturing and deployment in hydrogen technologies.

Strengthening India's R&D Ecosystem

MNRE has already supported more than 200 R&D projects in renewable energy, fuel cells, hydrogen, and storage technologies. Dedicated funding, testing facilities, and incubation programmes have been created so that Indian researchers and innovators have the ecosystem to translate ideas into breakthrough solutions. "This very conference is a testimony to our collective resolve, to make India's laboratories into launchpads, and our startups into global champions," Shri Naik said.

Wide-Ranging Deliberations Over Two Days

Shri Naik said that over the last two days, the conference witnessed stimulating discussions, bold ideas, and visionary debates, bringing together the finest minds from research institutions, industry, startups, and government. Participants deliberated on crucial themes including India's vision as an R&D and innovation leader in green hydrogen; cutting-edge production pathways such as electrolysis, thermochemical, and biological routes; challenges of storage, transport and fuel-cell applications; and the need to balance safety with scalability. They also discussed governance frameworks, prototyping and commercialization, infrastructure, testing facilities, and talent development as essential pillars of a strong R&D ecosystem.

He said the sessions on blue-sky research and biological hydrogen production reminded participants to pursue long-term, curiosity-driven science even as near-term applications are advanced. Roundtables on safety, novel end-use applications, and testing infrastructure highlighted how collaborative innovation can ensure reliability, affordability, and trust in green hydrogen technologies.

Empowering Young Researchers and Startups

The Minister emphasised that research cannot remain confined to academic silos and must move seamlessly to

pilots, prototypes, and commercial deployment to achieve scale and make hydrogen cost-competitive and accessible. Congratulating young researchers and startups who presented their pioneering work, Shri Naik said their energy, imagination and passion embody the spirit of Amrit Kaal and the vision of a developed India by 2047. He noted that the launch of the call for proposals for hydrogen startups during the conference is yet another step to empower them, reduce barriers, and fast-track innovation. “For our youth, I have a simple message: think beyond incremental change. Aspire to design disruptive solutions that can shape the world’s energy future,” he said, urging institutions to nurture interdisciplinary hubs where academia, industry and entrepreneurship converge.



Driving Economic Growth, Competitiveness and Clean Energy

Shri Naik said this mission is about more than clean energy, it is about economic growth, industrial competitiveness, and environmental responsibility. Green hydrogen will power the steel, cement, fertilizer, mobility, and shipping sectors, help reduce import dependence, create high-value jobs, and establish India as a key exporter in the emerging global hydrogen economy. “At a time when countries are designing cross-border carbon regulations, India’s leadership in green hydrogen will ensure that our industries remain competitive and future-ready,” he added.

India Ready to Transform Challenges into Opportunities

Acknowledging the challenges in the journey from research to commercialization, Shri Naik said it requires patience, perseverance, and precision. “But with the ecosystem we are building, state-of-the-art R&D infrastructure, a supportive policy framework, international partnerships, and the extraordinary talent of our scientists and entrepreneurs, I am confident that India will not only meet these challenges, but transform them into opportunities,” he said.



Union Minister of State Shri Shripad Naik also visited the start up exhibition organised as part of the conference.

Mission Director, National Green Hydrogen Mission (NGHM), Shri Abhay Bhakre highlighted that green hydrogen is the fuel for the future and under the NGHM, concerted efforts are being made to position India as a global leader and export hub for green hydrogen. He informed that the Mission is receiving strong support from various state agencies, and over 140 standards have already been published to facilitate the growth of the sector.

Shri Sujit Pillai, Scientist 'F', MNRE, informed that the conference witnessed an overwhelming response from the scientific and industry community, with 1,347 registrations. Over the two days, 17 technical sessions including 5 panel discussions, and 8 roundtable meetings were organised, alongside a dedicated startup expo showcasing cutting-edge innovations in green hydrogen technologies.

Director General of the National Institute of Solar Energy (NISE), Dr. Mohammad Rihan, underlined that green hydrogen will play an important role in managing the grid more efficiently as renewable energy capacity expands. He said NISE, as the implementing agency for the startup support programme under the Mission, will work to forge strong partnerships and drive innovation to help India move forward and become a global green hydrogen hub.

Shri Akash Tripathi, Managing Director of SECI, said that India has a real opportunity to move forward rapidly in emerging technologies such as electrolyzers and the broader hydrogen sector. He emphasised that in addition to providing startup funding, there is also a strong need to build robust mentoring support systems to guide innovators and entrepreneurs in this domain.

About First Green Hydrogen R&D Conference

The conference, organised by the Ministry of New & Renewable Energy under the National Green Hydrogen Mission, was held from 11–12 September 2025 at the Dr. Ambedkar International Centre, New Delhi. The two-day event brought together leading scientists, industry experts, startups, researchers, and policymakers to deliberate on advancing India's green hydrogen ecosystem through cutting-edge research, innovation, and collaborative partnerships.

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