

UP-Japan collaboration advances plans for Centre of Excellence to drive Green Hydrogen innovation

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In a significant stride toward building a sustainable and self-reliant energy future, the government of Uttar Pradesh is proposing the establishment of a 'Centre of Excellence (CoE)' for an Innovative and Integrated Ecosystem on Green Hydrogen in collaboration with Japan's Yamanashi Prefecture.

The initiative aims to promote research, innovation, and industrial application of green hydrogen technologies through strong international and academic partnerships.

A high-level virtual meeting was held on Thursday between senior officials from Invest UP, the University of Yamanashi, and the Yamanashi Prefecture Government to deliberate on the proposed CoE.

The discussions centered on developing a clear roadmap to advance clean energy research, foster innovation, and create scalable hydrogen technologies. Both sides agreed to meet again soon to finalize the implementation framework and strengthen collaboration.

Officials said that the proposed CoE will serve as a multidisciplinary hub engaging experts from leading Indian institutions and co-opted faculty from various technical universities. The University of Yamanashi will act as the technology partner, while several industry stakeholders and start-ups—four of whom have already shown interest—will contribute to prototyping, testing, and pilot-scale deployment.

The centre will focus on demonstrable hydrogen generation, storage, and distribution systems; renewable-energy-based microgrids; and comprehensive techno-economic analysis of the hydrogen value chain. It will also facilitate training, research, and entrepreneurship to drive industrial decarbonisation and support sustainable development.

This Indo-Japan collaboration will further deepen bilateral ties, promote technology indigenisation, and foster start-up ecosystems under the vision of Atmanirbhar Bharat. With its strong policy support and growing clean energy ecosystem, Uttar Pradesh is poised to emerge as a national hub for innovation and leadership in green hydrogen and sustainable technologies, officials stated.