
CONCEPT NOTE

SEMINAR ON “GREEN HYDROGEN”

Hosts: Indian National Academy of Engineering and International Solar Alliance

Date and Time: 22 APRIL 2024, 11:30 – 17:00 hours IST | **Mode:** Hybrid (Physical and Virtual)

Background

International Solar Alliance (ISA) and the Indian National Academy of Engineering (INAE) are jointly organizing a Seminar on “Green Hydrogen”.

ISA under the G20 2023 India Presidency has created a virtual Green Hydrogen Innovation Centre (GHIC; www.isa-ghic.org). This Centre of Excellence will support the production, utilization, and trade of GH, besides providing a platform for knowledge sharing and building competency across the GH value chain. The GHIC will also provide opportunities to incubate Start-Ups, provide certified training, and host Expert Working Groups to support the scale-up of the GH ecosystem in member countries. This AI-integrated platform will serve as a dynamic One-Stop Gateway to provide access to the GH knowledge repository, country insights, developments in hydrogen space, global initiatives and missions, skill development, and community engagement.

The GHIC platform was launched at the Energy Transitions Ministerial Meeting (ETMM), under the G20 India Presidency in July 2023, and subsequently, was included in the G20 Leaders’ Summit Delhi Declaration in September 2023. ISA is being supported by the Asian Development Bank under ADB’s Knowledge and Support Technical Assistance, in developing this Knowledge Platform.

Seminar Objectives and Potential Outcomes

Harnessing renewable energy potential and the green hydrogen economy offers opportunities to develop clean energy-intensive industries while helping decarbonize hard-to-abate sectors. India has established the green hydrogen as a core pillar of its decarbonization and net zero strategy. India’s National Green Hydrogen Mission (NGHM) sets out a roadmap for using hydrogen to meet its climate targets and make India a green hydrogen hub. This mission aims to enable India to become a global hub for the production, usage, and export of green hydrogen and its derivatives.

This seminar will delve into the current landscape of green hydrogen in India, focusing on below objectives :

- Assess policy and regulatory frameworks and incentives that can accelerate green hydrogen ecosystem readiness.
- Evaluate approach for market creation and harmonization of global standards for domestic consumption and export.
- Analyze existing and emerging business models for off-take of green hydrogen in India.

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- Identify key economic factors and policy instruments that can drive down green hydrogen costs.
 - Understand the emerging demands of green hydrogen in various sectors across India.
 - Examine effective strategies to accelerate green hydrogen demand in India.

About the International Solar Alliance (ISA)¹

The International Solar Alliance (ISA) is an inter-governmental organization headquartered in India. Founded jointly by India and France in 2015, currently 119 Countries have signed the ISA Framework Agreement. The vision and mission of the ISA is to provide a dedicated platform to help achieve the common goals of increasing the use of solar energy in meeting the energy needs of ISA Member Countries. ISA has a dedicated programme – Solar for Green Hydrogen – to support green hydrogen production, utilization, and trade. As an international organization partner of India’s G20 Presidency, ISA has developed the Green Hydrogen Innovation Centre (GHIC; www.isa-ghic.org), a dynamic catalyst for advancing all aspects of the green hydrogen value chain.

About the Indian National Academy of Engineering (INAE)²

The Indian National Academy of Engineering (INAE) is an autonomous professional body partly supported by the Department of Science & Technology, Government of India. The INAE, founded in 1987 comprises India’s most distinguished engineers, engineer-scientists, and technologists covering the entire spectrum of engineering disciplines. INAE functions as an apex body and promotes the practice of engineering & technology and the related sciences for their application to solving problems of national importance. The Academy also provides a forum for futuristic planning for the country’s development requiring engineering and technological inputs. It brings together specialists from such fields as may be necessary for comprehensive solutions to the needs of the country.

¹ <https://isolaralliance.org/>

² <https://www.inae.in/>