



[भारत सरकार](#)

[GOVERNMENT OF INDIA](#)



नवीन एवं नवीकरणीय ऊर्जा मंत्रालय

MINISTRY OF NEW AND RENEWABLE ENERGY

सत्यमेव जयते

[Home](#) [About Us](#) [Institutes & Organizations](#) [Programmes & Divisions](#) [Notices](#) [Statistics](#)
[Knowledge Center](#) [Resources](#) [Portals](#)

[Home](#) > National Green Hydrogen Mission



National Green Hydrogen Mission

Overarching Objective

"To make India the Global Hub for production, usage and export of Green Hydrogen and its derivatives. This will contribute to India's aim to become Aatmanirbhar through clean energy and serve as an inspiration for the global Clean Energy Transition. The Mission will lead to significant decarbonisation of the economy, reduced dependence on fossil fuel imports, and enable India to assume technology and market leadership in Green Hydrogen."

Demand Creation



Exports: Mission will facilitate export opportunities through supportive policies and strategic partnerships.

Domestic Demand: The Government of India will specify a minimum share of consumption of green hydrogen or its derivative products such as green ammonia, green methanol etc. by designated consumers as energy or feedstock. The year wise trajectory of such minimum share of consumption will be decided by the Empowered Group (EG).



Domestic Demand



Certification Framework



Competitive Bidding



Export

Competitive Bidding: Demand aggregation and procurement of green hydrogen and green ammonia through the competitive bidding route will be undertaken.

Certification framework: MNRE will also develop a suitable regulatory framework for certification of Green Hydrogen and its derivatives as having been produced from RE sources.

Strategic Interventions for Green Hydrogen Transition (SIGHT)

In the initial stage, two distinct financial incentive mechanisms proposed with an outlay of ₹ 17,490 crore up to 2029-30:

- Incentive for manufacturing of electrolyzers
- Incentive for production of green hydrogen.

Depending upon the markets and technology development, specific incentive schemes and programmes will continue to evolve as the Mission



Supports Domestic Manufacturing of Electrolyzers



Offers Incentives on Production

progresses.

To ensure quality and performance of equipment, the eligibility criteria for participation in competitive bidding for procurement of Green Hydrogen and its derivatives will specify that the project must utilize equipment approved by Government of India as per specified quality and performance criteria.

Pilot Projects



**Long Range
Heavy Mobility**



**Port &
Shipping**



Steel



**Biomass to
Hydrogen**

Outlay of ₹ 455 crore up to 2029-30 for **low carbon steel projects**

Outlay of ₹ 496 crore up to 2025-26 for **mobility pilot projects**

Outlay of ₹ 115 crore up to 2025-26 for **shipping pilot projects.**

Other target areas include: decentralized energy applications, hydrogen production from biomass, hydrogen storage technologies, etc.

Green Hydrogen Hubs

The Mission will identify and develop regions capable of supporting large scale production and/or utilization of Hydrogen as Green Hydrogen Hubs.

Development of necessary infrastructure for such hubs will be supported under the Mission.

It is planned to set up at least two such Green Hydrogen hubs in the initial phase.

Outlay of **₹ 400 crore** up to 2025-26 for Hubs and other projects.



Resources



**Research &
Development**



**Ease of doing
business**



**Infrastructure &
Supply Chain**



**Regulations &
Standards**



**Public
Awareness**

Enabling Policy Framework

To facilitate delivery of RE for Green Hydrogen production, various policy provisions including inter-alia waiver of Interstate transmission charges for renewable energy used for Green Hydrogen production;

facilitating renewable energy banking; and time bound grant of Open Access and connectivity, will be extended for Green Hydrogen projects.

Infrastructure Development

The National Green Hydrogen Mission, which aims to accelerate the deployment of Green Hydrogen as a clean energy source, will support the development of supply chains that can efficiently transport and distribute hydrogen. This includes the use of pipelines, tankers, intermediate storage facilities, and last leg distribution networks for export as well as domestic consumption.

Regulations and Standards

The Mission will coordinate the various efforts for regulations and standards development in line with the industry requirements for emerging technologies. Work has commenced on establishing a framework of regulations and standards to facilitate growth of the sector and enable harmonization and engagement with international norms.

Research and Development

A public-private partnership framework for R&D (Strategic Hydrogen Innovation Partnership – SHIP) will be facilitated under the Mission. The framework will entail creation of a dedicated R&D fund, with contributions from Industry and respective Government institutions. These institutions will pool resources to build a comprehensive goal-oriented Research and Innovation programme in collaboration with the private sector.

Skill Development

A coordinated skill development programme, that covers requirements in various segments, will be undertaken in coordination with the Ministry of Skill Development & Entrepreneurship.

Other Components

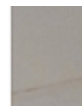
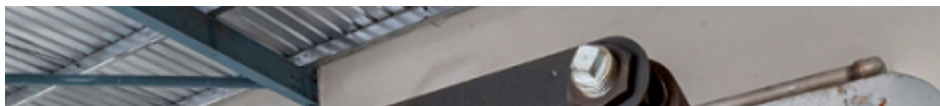
In addition to the above, the Mission will also cover Public Awareness, Stakeholder Outreach and International Cooperation.

Mission Governance Structure

An Empowered Group (EG) chaired by the Cabinet Secretary and comprising Secretaries of Government of India and experts from the industry will guide the Mission; an Advisory Group chaired by the PSA and comprising experts will advise the EG on scientific and technology matters; and a Mission Secretariat headquartered in MNRE will undertake the programme implementation.

Mission Outlay

The initial outlay for the Mission will be ₹ 19,744 crore, including an outlay of ₹ 17,490 crore for the SIGHT programme, ₹ 1,466 crore for pilot projects, ₹ 400 crore for R&D, and ₹ 388 crore towards other Mission components. MNRE will formulate schemes guidelines for implementation of the respective components.



NATIONAL GREEN HYDROGEN MISSION OUTCOMES



5 MMT of green
hydrogen by 2030



60-100 GW electrolyzer
installations



6 lakh new
green jobs



125 GW renewable
energy for green
hydrogen production



50 MMT of
carbon abatement
cumulatively



Over ₹ 8 lakh crore
investments

National Green Hydrogen Mission

Title	Date	View / Download
National Green Hydrogen Mission	23/01/2023	<u>View</u>  (633 KB) Accessible Version : <u>View</u>  (633 KB)

[Feedback](#) | [Visitor Summary](#) | [Website Policies](#) | [Contact Us](#) | [Help](#) | [Web Information Manager](#) | [Terms and Conditions](#)

Content Owned by MINISTRY OF NEW AND RENEWABLE ENERGY
Developed and hosted by **National Informatics Centre**,
Ministry of Electronics & Information Technology, Government of India

Last Updated: **August 14, 2023**



Certified
Quality
Website

Powered By
SWaaS

NIC एनआईसी
National
Informatics
Centre

 **Digital India**
Power To Empower

