

Gujarat Green Hydrogen Policy – 2025

1. Preamble

India stands at a pivotal moment in its developmental journey. As the largest democracy in the world, the Nation aspires to become a Viksit Bharat and Aatmanirbhar Bharat by 2047. However, as a climate leader, India is also committed to achieving net-zero emissions by 2070, in line with the Panchamrit goals announced by the Honourable Prime Minister at COP26. In the near term, India must also meet its Nationally Determined Contributions (NDCs) for 2030. Therefore, as one of the fastest-growing major economies, India faces the unique challenge of responsible decarbonization along with unhindered all-round economic growth. In this context, green hydrogen emerges as a key enabler, offering a clean, flexible, and scalable energy solution that addresses economic development, strategic goals and climate concerns.

The National Green Hydrogen Mission (NGHM), launched by the Ministry of New and Renewable Energy (MNRE), Government of India (GoI) in 2023, has set a target of producing 5 MMTPA of green hydrogen by 2030. Achieving this will necessitate the addition of 125 GW of renewable energy capacity and a total investment of INR 8 lakh crores in the green hydrogen ecosystem, which is expected to create 6 lakh jobs and mitigate 50 million tonnes of emissions. Earlier, in February 2022, the Ministry of Power, Government of India, introduced the Green Hydrogen Policy, which focused on supply-side interventions and streamlined regulatory processes to accelerate the growth of the green hydrogen economy in India.

As one of India's most industrialized states and a major manufacturing hub, Gujarat has developed the Aatmanirbhar Gujarat Scheme in 2022 and Viksit Gujarat @2047 Roadmap to support industries and contribute to the national goals. In the energy sector, the State of Gujarat has declared a slew of policies aligned with the country's ambitious goals and priorities. As one of the leading producer and consumer of renewable energy as well as hydrogen commodity, the State is committed to contributing significantly towards the fulfillment of the targets set under the NGHM for green hydrogen. To achieve this, the Government of Gujarat (GoG) has formulated this Policy, adopting a holistic approach to build a robust green hydrogen ecosystem across the entire value chain within the State.

This Policy document, inter alia, articulates Gujarat's vision, mission, and targets regarding green hydrogen production and ecosystem development. It outlines key enablers, including renewable energy and power tariffs, production and manufacturing incentives, demand creation, establishment of green hydrogen hubs and supporting infrastructure. Additionally, the Policy emphasizes initiatives in Research & Development (R&D), skill development, and capacity building. It also details the governance framework for green hydrogen projects within the State, ensuring effective implementation and oversight. With the implementation of this Policy, the Government of Gujarat is poised to become a leader in green hydrogen production and exports, technology development and innovation, thus helping India achieve its national goals of energy security and climate change.

2. Definitions

Definitions in this Policy, unless the context otherwise requires,

- i. **“Banking¹”** means the surplus green energy injected in the grid and credited with the distribution licensee and that shall be drawn along with charges to compensate additional costs; if any.
- ii. **“Beneficiary”** shall mean project developer including its Parent, Affiliate or Ultimate Parent or any Group Company or any Special Purpose Vehicle (SPV)/Joint Venture (JV) formed by the beneficiary or its Parent, Affiliate or Ultimate Parent or any Group Company or Government Department or Local Authority eligible for availing incentives under this Policy subject to applicable terms and conditions.
- iii. **“Co-located Renewable Energy Project”** means renewable energy plants and green hydrogen projects located within the same premise.
- iv. **“Differently located Renewable Energy Project”** means renewable energy plants and green hydrogen projects located in different premise.
- v. **“Electrolysis”**: Electrolysis is the process of using electricity to split water into hydrogen and oxygen.
- vi. **“Electrolyser”**: An "Electrolyser" is a system or device that uses electricity to split water into hydrogen and oxygen, thereby producing hydrogen as a sustainable source of clean energy.
- vii. **“Green Hydrogen²”**: “Green Hydrogen” shall mean Hydrogen produced using renewable energy, including, but not limited to, production through electrolysis or conversion of biomass as notified by MNRE and central government from time to time.
- viii. **“Green Hydrogen Application Unit”** or **“Project”** means project utilizing green hydrogen, including industrial use, blending with CNG/PNG, refueling stations, passenger buses, and other applications specified under Sections 9.4, 9.5, 9.6, 9.7 and 9.8 of this Policy for availing benefits and incentives.
- ix. **“Green Hydrogen Derivatives”** shall mean the chemical compounds that are produced using green hydrogen and include green ammonia, green methanol etc. as specified by the MNRE from time to time.
- x. **“Green Hydrogen Hub”**: “Green Hydrogen Hub” is a geographical area where production and/or utilization of hydrogen exist together with the support infrastructure within the identified geographical area to enable the development of a green hydrogen ecosystem at scale.
- xi. **“Green Hydrogen Project”** or **“Project”** means project set-up for the production of green hydrogen, conversion of green hydrogen to its derivatives, storage, and transportation of green hydrogen etc.
- xii. **“Local Authority³”** means any Nagar Panchayat, Municipal Council, Municipal Corporation, Panchayat constituted at the village, intermediate and district levels, body or port commissioners or other authority legally entitled to or entrusted by the Union or any State Government with the control or management of any area or local fund.
- xiii. **“Nodal Agency”**: A “Nodal Agency” is a designated organization responsible for coordinating and implementing a specific program or policy.
- xiv. **“Refuelling Station”** means a facility for the dispensing of compressed hydrogen vehicle fuel, often referred to as a hydrogen refuelling station or hydrogen filling station.

¹ As specified under GERC's Green Open Access Regulations 2024

² As per OM No. 353/35/2022-NT dated 18 August 2023 by MNRE

³ As per Electricity Act 2003

- xv. **“Renewable Energy Sources”** means sources of renewable energy such as hydro, wind, solar, biomass and such other sources as recognized or approved by MNRE. This will also include electrical energy from energy storage system such as Pumped Hydro Storage Plants (PSP), or Battery Energy Storage Systems (BESS) etc., only if charged from renewable energy sources.
- xvi. **“Renewable Energy Plant”**: “Renewable Energy Plant” also known as a renewable energy facility or renewable power plant, is a facility that generates electricity by harnessing renewable energy sources.

3. Title and Operative Period

- a) The Policy shall be called “Gujarat Green Hydrogen Policy-2025”.
- b) The Policy shall come into operation with effect from the date of its Notification in the Official Gazette of the State and shall remain in force till 31st December 2035 or until a new Policy is announced by the Government of Gujarat, whichever is earlier.

4. Vision

Driving sustainable economic growth, enhancing energy security, and enabling the production, consumption, and export of green hydrogen and its derivatives.

5. Mission

To position Gujarat as a leading hub in the green energy ecosystem by achieving green hydrogen production capacity of 3 MMTPA by 2035 in alignment with Panchamrit Commitments.

6. Goals and Objectives

6.1 Goals

- a) Promote sustainable development by aligning with Panchamrit Commitments, NDCs, SDGs, ensuring socio-economic well-being and along-side environmental protection.
- b) Decarbonize Gujarat’s economy by increasing the share of green and renewable energy sources in the State’s energy mix.
- c) Facilitate the transition from fossil fuel-based feedstock and energy sources to green fuels resulting in reduction of carbon footprint and energy security.

6.2 Objectives

- a) Achieve approximately 30 GW of electrolyser capacity and 75 GW of renewable energy capacity.
- b) Facilitate approximately INR 5,00,000 crore in investments across the green hydrogen and renewable energy sectors.
- c) Create around 6,00,000 direct and indirect green jobs.
- d) Reduce, at least, 2 MMTPA of natural gas consumption through the adoption of green hydrogen and eliminate 5 MMTPA of CO₂ emissions within the State.