



Powering  
Industry with  
**SOLAR &  
GREEN  
HYDROGEN**

[www.gh2solar.com](http://www.gh2solar.com)

# Who We Are

GH2 Solar Limited is building India's green hydrogen economy end to end from electron to molecule and molecule to mobility as an integrated clean-energy company spanning electrolyzer manufacturing, large scale green hydrogen production, hydrogen refuelling infrastructure, and downstream green derivatives including green ammonia, green methanol, and other hydrogen-based fuels. The company is establishing a 105 MW electrolyzer manufacturing facility in Madhya Pradesh and developing a 10,500 TPA green hydrogen plant under India's National Green Hydrogen Mission,

powered by renewable energy, while simultaneously advancing hydrogen refuelling stations to drive adoption across mobility, logistics, and industrial transport. Backed by in-house technology development, strategic global partnerships, and a strong solar and BESS foundation, GH2 Solar aims to make green hydrogen and its derivatives affordable, scalable, and integral to India's decarbonization and energy-security goals.



## What We Do

### Integrated Clean Energy Solutions

#### GREEN HYDROGEN

- **ELECTROLYSER MANUFACTURING**
  - Alkaline Electrolyser
- **EPC - PROJECT DEVELOPER**
  - Green Hydrogen Plant
  - Fuel Cell and Refueling Station
- **GREEN HYDROGEN PRODUCER**
  - Green Hydrogen Production and Supply
  - Green Ammonia, Methanol and SAF Production

#### SOLAR

- **ON - SITE SOLAR ROOFTOP BUSINESS MODELS**
  - RESCO - Net Metering
  - BTM ( Behind the meter )
- **OFF - SITE OPEN ACCESS BUSINESS MODELS**
  - Third Party Power Purchase
  - Group Captive Power Purchase
  - CAPEX Project Development

# ELECTROLYSER MANUFACTURING

GH2 Solar designs and manufactures alkaline electrolyser systems for continuous green hydrogen production, engineered for safe, stable, and long-life operation under variable renewable power conditions with high lifecycle efficiency.

Through a strategic joint venture with South Korean technology partner AHES, the company is establishing a state-of-the-art manufacturing facility in Morena, Madhya Pradesh, combining proven global technology, rigorous quality systems, and phased localisation of critical components to deliver reliable, scalable electrolyser solutions for India's green hydrogen market.

High Stack Efficiency - 83%

Low Power Consumption 4.2 KWh/Nm<sup>3</sup>

Design Life upto 25 years

Capacity Range upto 7MW



# FACILITATING GREEN HYDROGEN DERIVATIVES



## Green Ammonia

At GH2 Solar, we develop and execute green ammonia projects as an integrated extension of green hydrogen production. Leveraging the ~180 million TPA global ammonia market and its established storage, shipping, and handling infrastructure, we deliver end-to-end solutions covering renewable power integration, electrolyser selection and sizing, hydrogen conditioning, Haber-Bosch synthesis, utilities, and balance-of-plant systems. Our capability extends across FEED, detailed engineering, EPC execution, and commissioning, enabling efficient hydrogen conversion, large-scale storage, and export-ready green ammonia facilities that directly replace grey ammonia in fertilisers, industrial processes, and emerging maritime fuel applications.

## Green Methanol

At GH2 Solar, we execute green methanol projects through tightly integrated power-to-molecule system design. Green methanol's liquid state allows seamless utilisation of existing storage, pipeline, and bunkering infrastructure, reducing deployment complexity. We provide end-to-end project delivery encompassing renewable energy sourcing, green hydrogen generation, CO<sub>2</sub> integration, methanol synthesis process design, and downstream fuel handling infrastructure. Our scope includes FEED, EPC, and plant integration, enabling scalable production of green methanol for marine fuel applications and chemical feedstock use across energy and industrial value chains.



## e-SAF (Electro-Sustainable Aviation Fuel)

At GH2 Solar, we enable e-SAF as a core power-to-liquid (PtL) pathway for aviation decarbonisation, recognising its full drop-in compatibility with existing aircraft and airport fuel systems. We develop and execute e-SAF projects on an end-to-end basis, integrating low-cost renewable power, green hydrogen production, CO<sub>2</sub> capture or sourcing, and PtL fuel synthesis units. Our capabilities span system configuration, FEED, EPC execution, utilities integration, and commissioning, ensuring technically robust, scalable e-SAF facilities aligned with aviation fuel quality standards and long-term offtake requirements.

# GREEN HYDROGEN PROJECTS AND CAPABILITIES

## Overview

GH2 Solar has executed green hydrogen projects under EPC and BOO models. Projects cover end-to-end from concept to commissioning of hydrogen production, storage, and utilisation. Our built assets operate across ports, remote regions, and industrial facilities.

## Key Projects

### ➤ VOC Port, Tuticorin | Green Hydrogen Demonstration ( Government of India )

Turnkey EPC and O&M project delivering 10 Nm<sup>3</sup>/hr on site green hydrogen using renewable-powered alkaline electrolysis, with integrated storage and fuel cell power for port decarbonisation, awarded by Government of India.



### ➤ NHPC, Leh | Hydrogen Fuel Cell Microgrid ( Government of India )

High-altitude hydrogen microgrid with 20 Nm<sup>3</sup>/hr alkaline electrolysis (99.99% purity, 30 bar) feeding a 25 kW fuel cell, engineered for extreme cold and remote operations.

### ➤ Commercial & Industrial Fuel Cell Systems

Hydrogen fuel cell-based backup power systems deployed for a leading e-commerce facility, replacing diesel gensets and enabling silent, low-emission, uninterrupted power.



### ➤ KP Group | Green Hydrogen & Refuelling Infrastructure

1 MW green hydrogen production plant with integrated hydrogen refuelling station supporting heavy-duty captive mobility applications.

### ➤ Green Ammonia Project | GH2 Solar, AHES & KP Group

Integrated green hydrogen-to-ammonia project targeting 100,000 TPA green ammonia capacity for industrial and export markets.



# SOLAR & BESS (RTC)

GH2 Solar delivers end-to-end Solar and BESS solutions across design, EPC, operations, and intelligent storage, enabling reliable, scalable, and round-the-clock clean energy for C&I consumers.

## MARQUEE CLIENTS



## IMPACT AT SCALE

- 175+ MW under development
- 1GW+ in active pipeline
- 2GW+ portfolio target by 2030

## Major Open Access Projects

### Maharashtra – Jalgaon (20 MW, 33 kV):

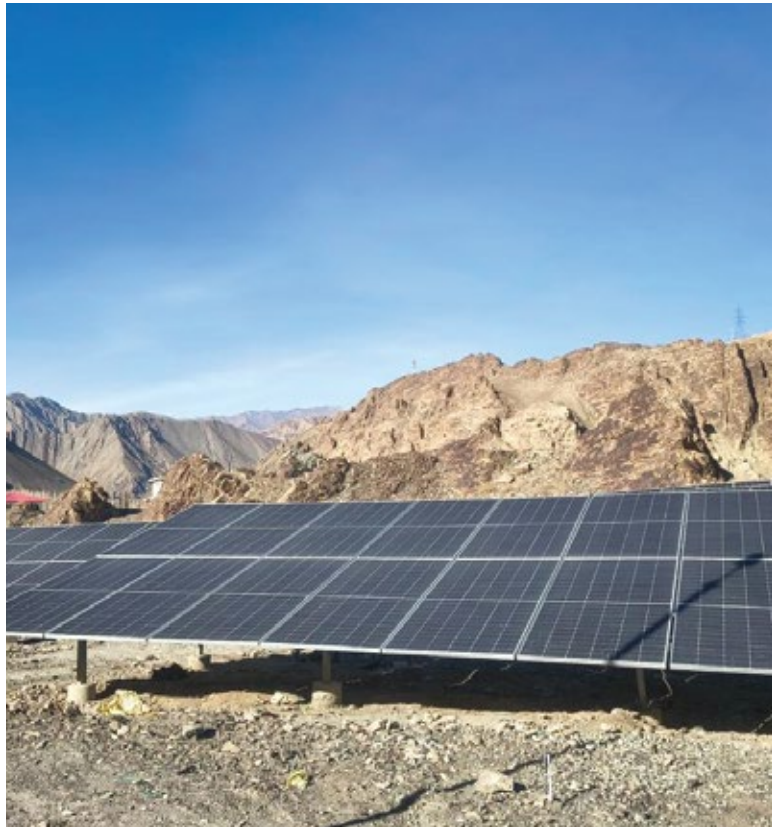
Shovel-ready Open Access solar park enabling long-term, fixed-tariff Corporate PPAs with zero transmission charges, supporting RE100 and cost-efficient green power.

### Karnataka – Yadgir (10 MW, 33 kV):

Flexible bucket-filling Open Access project in GESCOM region, allowing C&I consumers to scale capacity progressively under long-term Corporate PPAs.

### Rajasthan – Bapini & Shekhala (80 MW, 132 kV):

High-generation, shovel-ready Open Access solar project offering tariff stability and long-term savings under Rajasthan's favorable solar policy.



### SECI ISTS Project Awarded:

50 MW Solar + 25 MW / 100 MWh BESS Project, enabling round-the-clock renewable power, grid stability, and long-term ESG-aligned returns.

# INDUSTRIES WE SERVE

At GH2 Solar, industrial progress is driven by responsible execution, not scale alone.

We deliver practical solar and clean energy solutions designed to decarbonize industries with engineering rigor and economic realism. Every project is built for long-term operability, guided by resource availability, cost efficiency, and market dynamics. Beyond infrastructure, we remain committed to creating lasting value for industries, communities, and the environment.



**Commercial &  
Industrial Campuses**



**Manufacturing &  
Warehousing**



**Refineries &  
Petrochemicals**



**CGD  
Blending**



**Fertilizers (Green  
Ammonia)**



**Steel & Metal  
Processing**



**Ports & Green  
Shipping**



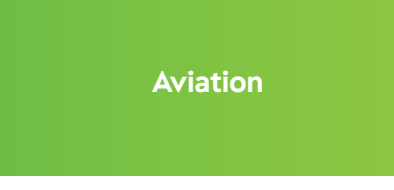
**Data Centers &  
Backup Power**



**Green Mobility &  
Hydrogen Refuelling**



**Glass**



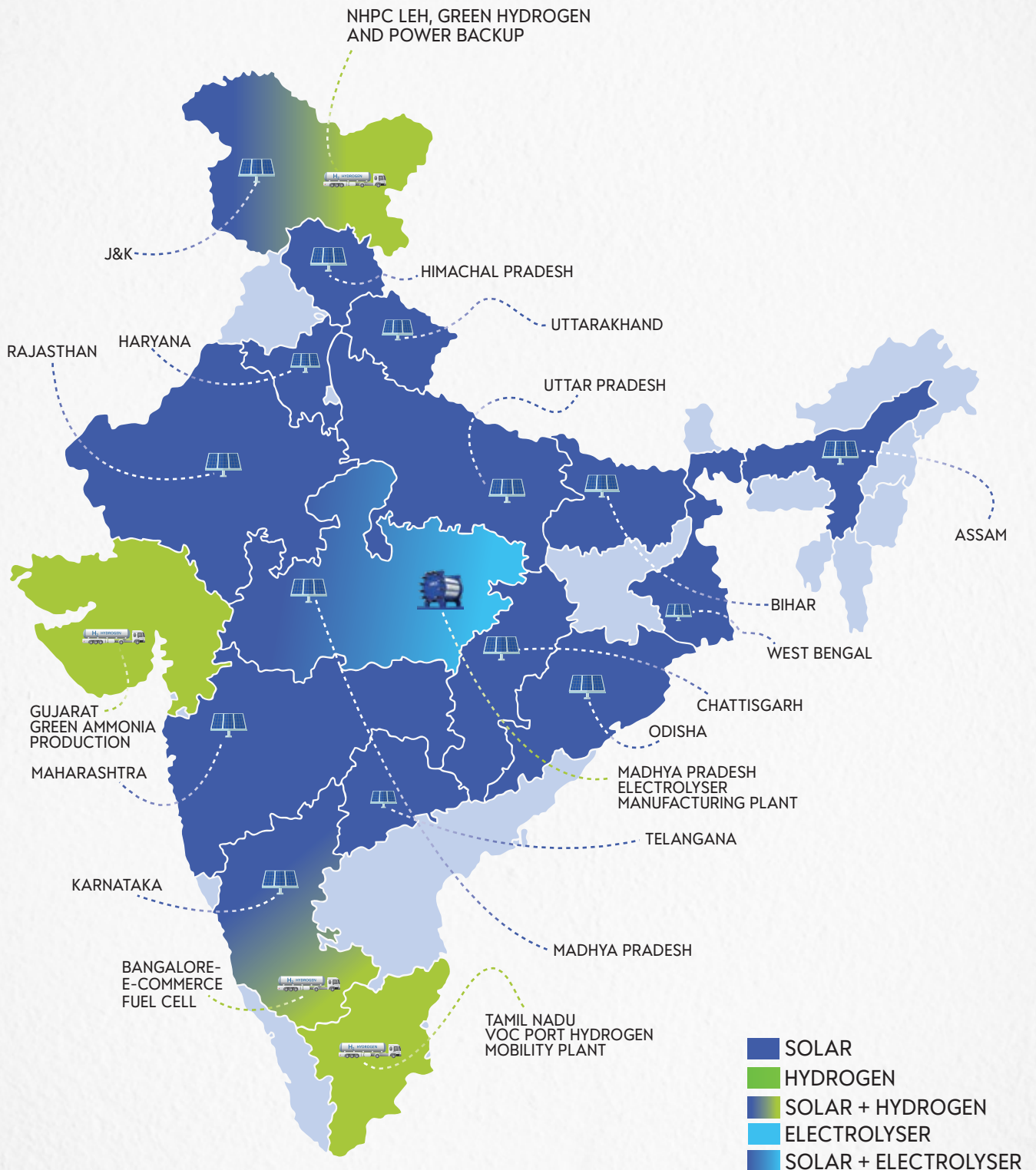
**Aviation**



**Cement**



# OUR PRESENCE



## Reach out to us

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