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# GLOBAL **HYDROGEN** MARKET STUDY

## Opportunities and Forecast 2030

By SN Global Infra Research

# Global Hydrogen Market Study: Opportunities and Forecast 2030

Hydrogen is produced as both a principal product and as a by-product from a variety of primary energy sources (such as wind, solar, coal, natural gas, and nuclear) and it deliver and store energy. Hydrogen is used to deliver power for various applications like fuel cell combined heat and power etc.

Hydrogen is being produced by various technologies such as steam reforming methane, partial oxidation of oil, gasification of coal, or electrolysis where steam reforming leads the market globally.

Hydrogen is used in various end-user applications like Petroleum refinery, ammonia production, methanol production, transportation, power generation.

The adoption of renewable generation across geographies has resulted in adoption of various pilot hydrogen projects as hydrogen is good source of storing energy produced by increasing renewable generation.

Regulations of governments for desulphurization and reduction for greenhouse gas emissions along with increasing demand for carbon-free fuels for power generation and transportation has been major driver for hydrogen market in Asia Pacific.

The hydrogen market is estimated as the sum of the revenue generated by companies such as Siemens, Air Liquide, Cummins, NEL Hydrogen, ITM Power, which are producing hydrogen through use of various technologies such as electrolysis, steam methane reforming (SMR), partial oxidation (POX), etc.

Grey hydrogen which has got the maximum share in current scenario is produced using fossils fuels such as coal and natural gas and the cost of production of grey hydrogen is lower than both blue hydrogen and green hydrogen.

The use of hydrogen will significantly help the global energy transition from fossil fuel, but major restraint lies in efficient and safe production, storage, and distribution of hydrogen. Due to very unique chemical properties, direct replacement of natural gas infrastructure for Hydrogen poses a major challenge. Hydrogen is highly reactive and therefore its relative flame temperatures and flame speed is entirely different than natural gas therefore companies globally are planning on blending hydrogen into existing natural gas plants for a more gradual approach.

## Key queries addressed in the report

- What is the Value Chain of Hydrogen production and what are the leading drivers, opportunities, and restraints globally?
- What is the size of the hydrogen markets globally in 2022 and what is the forecast for Hydrogen market from 2023-2030?
- What is the market for Hydrogen by different production technologies and its forecast till 2030?
- Which end-use application generates the maximum demand for hydrogen?
- Which region has got the maximum potential for hydrogen production and consumption?
- Who are the leading players in hydrogen production market? What were their estimated market shares in 2022 across regions?

## Must Buy for:

- Power Generation Companies, Renewable Generation Companies etc
- Players involved in Fuel Cell, Transportation, Ammonia players
- Hydrogen Generation Market players like
  - Siemens
  - Air Liquide
  - Cummins
  - NEL Hydrogen
  - ITM Power
  - Linde
  - Iwatani
  - Iberdrola
- Financial Institutions
- FIIs
- Other Lending Bodies
- Banks
- Government Institutions
- Vendors
- Consultants

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**Note: e : Estimated, F : Forecasted**  
(List of Companies will be changed and more companies will be profiled during course of study)

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