

# Hydrogen Generation Market: Global Industry Trends, Share, Size, Growth, Opportunity and Forecast 2022-2027

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## Abstracts

The global hydrogen generation market reached a value of US\$ 143 Billion in 2021. Looking forward, IMARC Group expects the market to reach US\$ 211 Billion by 2027, exhibiting a CAGR of 7.1% during 2022-2027. Keeping in mind the uncertainties of COVID-19, we are continuously tracking and evaluating the direct as well as the indirect influence of the pandemic on different end use industries. These insights are included in the report as a major market contributor.

Hydrogen can be generated using different processes and diverse resources. For instance, the thermochemical process requires the utilization of fossil fuels to release hydrogen, while in other processes, water is split into hydrogen and oxygen via electrolysis or solar energy. At present, new methods are being introduced using bacteria and algae, which are also economical, efficient, and environment friendly. Nowadays, the demand for hydrogen generation is escalating in refining petroleum, treating metals, producing fertilizers, and processing food products. Besides this, it is also gaining traction as a fuel in electric vehicles (EVs) worldwide.

The rising energy demand, in confluence with the growing environmental concerns, represents one of the main factors fueling the need for sustainable energy sources like hydrogen. Moreover, governing authorities of numerous countries are implementing stringent regulations to reduce carbon emissions in the automotive sector, which is boosting the sales of EVs worldwide. This, in confluence with the extensive application of hydrogen as a coolant in power plant generators, is propelling the market growth. Apart from this, several projects are being funded to decrease costs as well as the environmental impacts of hydrogen production technologies. For instance, hydrogen generation using nuclear energy is considered an economical solution for minimizing

carbon footprint and meeting the critical global climate challenge. This, in turn, is anticipated to catalyze the demand for hydrogen generation in glass purification, fertilizer production, and semiconductor manufacturing across the globe.

#### Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each sub-segment of the global hydrogen generation market, along with forecasts at the global, regional and country level from 2022-2027. Our report has categorized the market based on technology, application and systems type.

#### Breakup by Technology:

- Coal Gasification
- Steam Methane Reforming
- Others

#### Breakup by Application:

- Methanol Production
- Ammonia Production
- Petroleum Refinery
- Transportation
- Power Generation
- Others

#### Breakup by Systems Type:

- Merchant
- Captive

#### Breakup by Region:

- North America
  - United States
  - Canada
- Asia-Pacific
  - China
  - Japan
  - India

South Korea  
Australia  
Indonesia  
Others  
Europe  
Germany  
France  
United Kingdom  
Italy  
Spain  
Russia  
Others  
Latin America  
Brazil  
Mexico  
Others  
Middle East and Africa

#### Competitive Landscape:

The competitive landscape of the industry has also been examined along with the profiles of the key players being Air Liquide International S.A., Air Products Inc, CLAIND srl, INOX Air Products Ltd., Linde plc, Mahler AGS GmbH, McPhy Energy S.A., Messer Group GmbH, NEL Hydrogen, Taiyo Nippon Sanso Corporation, Weldstar Inc. and Xebec Adsorption Inc.

#### Key Questions Answered in This Report:

How has the global hydrogen generation market performed so far and how will it perform in the coming years?

What has been the impact of COVID-19 on the global hydrogen generation market?

What are the key regional markets?

What is the breakup of the market based on the technology?

What is the breakup of the market based on the application?

What is the breakup of the market based on the systems type?

What are the various stages in the value chain of the industry?

What are the key driving factors and challenges in the industry?

What is the structure of the global hydrogen generation market and who are the key players?

What is the degree of competition in the industry?

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