

Hydrogen Generation Market Forecasts to 2028 – Global Analysis By Technology (Partial Oxidation, Electrolysis, Steam Methane Reforming (SMR), Coal Gasification, Solar Hydrogen, Thermochemical), Type (Portable, On-Site), and By Geography

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Abstracts

According to Statistics MRC, the Global Hydrogen Generation market is accounted for \$130.00 billion in 2020 and is expected to reach \$306.13 billion by 2028 growing at a CAGR of 11.3% during the forecast period. Some of the key factors propelling the market growth include rising government regulations to control and curb the sulfur content in fuels, rising awareness toward energy efficiency, technical development in hydrogen fuel cell technology for reducing dependency on fossil fuels, and growing application of hydrogen in various industries. However, high capital cost of hydrogen energy storage is hindering the market growth.

Hydrogen is clean, multipurpose, and effective zero emission carrier of energy. Water is a raw material used for hydrogen generation. It efficiently manufactures and transforms into electricity to fulfill need of energy. It can be produced by biological processes from microorganisms such as bacteria and algae. Hydrogen release from organic materials such as coal and biomass by thermochemical processes uses heat and chemical reactions.

By application, the petroleum refining & recovery segment is projected to grow at a highest rate due to the continuous requirement of H to desulfurize the diesel fuel and increasing government regulations to encourage desulphurization of fuels to conserve the environment.

On the basis of geography, Asia Pacific region is expected to have considerable market

growth during the forecast period, owing to growing refinery operations in countries including China and India, increasing investments in hydrogen refuelling infrastructure, rising demand for petroleum and petroleum products, large-scale investments in R&D in developing countries of Asia Pacific, and favorable government policies.

Some of the key players in Hydrogen Generation Market include Air Products and Chemicals, Inc., Linde plc, Messer Group GmbH, Cummins Inc., Teledyne Technologies Inc., Praxair Inc., Air Liquide International S.A., Weldstar, Inc., Ballard Power Systems, Parker Hannifin Corp., Showa Denko K.K., Iwatani Corporation, Mahler AGS GmbH, Xebec Adsorption Inc., Taiyo Nippon Sanso Corporation, McPhy Energy S.A., and INOX Air Products Ltd.

Technologies Covered:

Partial Oxidation

Electrolysis

Steam Methane Reforming (SMR)

Coal Gasification

Solar Hydrogen

Thermochemical

Types Covered:

Portable

On-Site

Sources Covered:

Green Hydrogen

Blue Hydrogen

Grey Hydrogen

Natural Gas

Oil

Coal

Productions Covered:

Water

Fossil Fuels

Dissociation of Hydrocarbons

Steam Reforming of Hydrocarbons

Alkaline

High Temperature

Other Productions

Generation & Delivery Modes Covered:

Merchant Production

Liquid Production

Captive Production

Gaseous Production

By-Product Production

Capacities Covered:

3kW & Above

1kW – 3kW

700W – 1kW

300W – 700W

100W – 300W

1W – 100W

Storages Covered:

Subterranean/Underground Storage

Crystalline Onboard Storage

Power-to-Gas Storage

Electroliser Types Covered:

Polymer Electrolyte Membrane (PEM) Electroliser

Traditional Alkaline Electroliser

Applications Covered:

Ammonia Production

Power Generation

Methanol Production

Transportation

Petroleum Refining & Recovery

Industrial Gases

Steel Plant

Photovoltaics

Power Plants

Energy Storage or Fueling for Fuel Cell Electric Vehicles (FCEVs)

End Users Covered:

Chemical Processing

Metal Processing Industry

Refinery Industry

Automotive Fuels

Other End Users

Regions Covered:

North America

US

Canada

Mexico

Europe

Germany

France

Italy

UK

Spain

Rest of Europe

Asia Pacific

Japan

China

India

Australia

New Zealand

South Korea

Rest of Asia Pacific

South America

Argentina

Brazil

Chile

Rest of South America

Middle East & Africa

Saudi Arabia

UAE

Qatar

South Africa

Rest of Middle East & Africa

What our report offers:

Market share assessments for the regional and country-level segments

Strategic recommendations for the new entrants

Covers Market data for the years 2019, 2020, 2021, 2025 and 2028

Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)

Strategic analysis: Drivers and Constraints, Product/Technology Analysis, Porter's five forces analysis, SWOT analysis, etc.

Strategic recommendations in key business segments based on the market estimations

Competitive landscaping mapping the key common trends

Company profiling with detailed strategies, financials, and recent developments

Supply chain trends mapping the latest technological advancements

Free Customization Offerings:

All the customers of this report will be entitled to receive one of the following free customization options:

Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

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