

# Global Green Hydrogen Market Size study & Forecast, by Technology (Alkaline Electrolyzer, Polymer Electrolyte Membrane (PEM) Electrolyzer), by Application (Power Generation, Transportation, Others), by Distribution Channel (Pipeline, Cargo) and Regional Analysis, 2022-2029

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# **Abstracts**

Global Green Hydrogen Market is valued at approximately USD 3.2 billion in 2021 and is anticipated to grow with a healthy growth rate of more than 39.5% over the forecast period 2022-2029. Green hydrogen is a type of hydrogen that is produced from low-carbon power or renewable energy. Green hydrogen has substantially reduced carbon emissions than grey hydrogen, which is formed by steam reforming of natural gas. Green hydrogen is a significant circular carbon economy (CCE) approach as it is generated using solar energy. The surging demand for FCEVs and the power industry, rising technological advancements, and increasing government investments are some prominent factors that are attributing to market growth across the globe.

For instance, in August 2022, Globeleq- a leading independent power company in Africa entered into a partnership agreement with the government of Egypt to develop a large-scale green hydrogen facility within the Suez Canal Economic Zone. This new facility is planned to be developed in 3 phases, totaling 3.6 GW of electrolyzers and around 9 GW of solar PV and wind power generation. Thereby, the rising government initiatives for Green Hydrogen are accelerating the market growth globally. In addition, available favorable policies for green hydrogen, as well as decreasing costs of electrolyzers are creating various lucrative growth prospects for the market growth over the forecasting years. However, high initial investment requirements for setting up hydrogen infrastructure and a lack of transportation infrastructure stifle market growth throughout



the forecast period of 2022-2029.

The key regions considered for the Global Green Hydrogen Market study include Asia Pacific, North America, Europe, Latin America, and Rest of the World. North America dominated the space in terms of revenue, owing to the rising government support and growing focus on clean energy policies. Whereas, Asia Pacific is expected to grow significantly during the forecast period. Factors such as flourishing development of emerging economies, geographic expansion of key players, and active participation of government and nonprofit organizations in the market space are burgeoning the regional market growth in the estimated years.

Major market players included in this report are:

Air Liquide

Air Products Inc.

**Bloom Energy** 

Cummins Inc.

Engie

Linde plc.

Nel ASA

Siemens Energy

Toshiba Energy Systems & Solutions Corporation

Uniper SE

# Recent Developments in the Market:

In April 2020, Siemens Gas and Power and Uniper SE announced the companies' joint agreement on implementing projects that emphasize on the production and usage of green hydrogen from renewable energy sources. The objective of this agreement is to enable the commercialization of green hydrogen as an alternative to fossil fuels. In January 2020, ITM Power- a U.K.-based company declared the company's joint venture with ITM Linde Electrolysis GmBH. The companies aim to offer green hydrogen at an industrial scale by using its PEM electrolyzer capacity of more than 10 MW. In August 2019, U.K. government declared a total investment of USD 14.8 billion plan in order to use 4 GW of offshore wind for green hydrogen production by the year 2030.

Global Green Hydrogen Market Report Scope:

Historical Data 2019-2020-2021

Base Year for Estimation 2021

Forecast period 2022-2029

Report Coverage Revenue forecast, Company Ranking, Competitive Landscape, Growth factors, and Trends



Segments Covered Technology, Application, Distribution Channel, Region Regional Scope North America; Europe; Asia Pacific; Latin America; Rest of the World Customization Scope Free report customization (equivalent up to 8 analyst's working hours) with purchase. Addition or alteration to country, regional & segment scope\*

The objective of the study is to define market sizes of different segments & countries in recent years and to forecast the values to the coming years. The report is designed to incorporate both qualitative and quantitative aspects of the industry within countries involved in the study.

The report also caters detailed information about the crucial aspects such as driving factors & challenges which will define the future growth of the market. Additionally, it also incorporates potential opportunities in micro markets for stakeholders to invest along with the detailed analysis of competitive landscape and product offerings of key players. The detailed segments and sub-segment of the market are explained below: By Technology:

Alkaline Electrolyzer

Polymer Electrolyte Membrane (PEM) Electrolyzer

By Application:

**Power Generation** 

**Transportation** 

Others

By Distribution Channel:

Pipeline

Cargo

By Region:

North America

U.S.

Canada

Europe

UK

Germany

France

Spain

Italy

ROE

Asia Pacific

China



India

Japan

Australia

South Korea

**RoAPAC** 

Latin America

Brazil

Mexico

Rest of the World



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