

# **Global Hydrogen Energy Storage Market Size study & Forecast, by Product Type (Liquid, Solid, Gas), by Application (Stationary Power, Transportation), by End User (Industrial, Commercial) and Regional Analysis, 2023-2030**

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## **Abstracts**

Global Hydrogen Energy Storage Market is valued at approximately USD XX billion in 2022 and is anticipated to grow with a healthy growth rate of more than XX% over the forecast period 2023-2030. Hydrogen energy storage refers to the process of storing excess energy in the form of hydrogen for later use. It is a method of storing renewable energy generated from sources such as solar and wind power, as well as surplus electricity from the grid. Hydrogen can be produced through the process of electrolysis, where water is split into hydrogen and oxygen using an electrical current. The hydrogen gas produced can then be stored in tanks or other storage systems. The key factors driving the market growth is the rising demand for hydrogen in the industrial sector, growing demand for hydrogen in stationary and mobile power applications, rising development of hydrogen infrastructure across various countries, rising application as an alternative to fossil fuel, rise in demand for a sustainable power source is anticipated to create the lucrative demand for the market over the forecast period.

Moreover, rising hydrogen production plays a crucial role in supporting the growth of the Hydrogen Energy Storage market. As hydrogen production increases, there is greater availability of this clean and versatile energy carrier. Hydrogen can be produced through various methods, including steam methane reforming, electrolysis, and biomass gasification. With increased production, there is a larger supply of hydrogen that can be used for energy storage purposes. According to Statista, in 2018, worldwide hydrogen production was 60 million metric tons, and it is anticipated to reach 300 million metric

tons by 2030. As a result, rising hydrogen production is anticipated to support market growth. Additionally, cohesive government initiatives to support the development of a hydrogen economy and rising demand for hydrogen as vehicle fuel is anticipated to create the lucrative opportunities for the market. However, the technical challenges related to the production of energy from hydrogen stifle market growth throughout the forecast period of 2023-2030.

The key regions considered for the Global Hydrogen Energy Storage Market study includes Asia Pacific, North America, Europe, Latin America, and Middle East & Africa. North America dominated the market in 2022 owing to the rising usage of hydrogen in oil refineries and chemicals industry, ongoing oil sand processing, gas to liquids, and coal gasification projects, and growing demand for sustainable power sources in the region. Whereas, the Asia Pacific is expected to grow with the highest CAGR during the forecast period, owing to factors such as the rising investments in the hydrogen economy, growing focus on the transition to renewable energy, increase in the use of hydrogen fuel cell vehicles, and supportive government initiatives in the region.

Major market player included in this report are:

Cummins Inc.

Nel Hydrogen

Hexagon Composites ASA

Plug Power Inc

ITM Power plc

Worthington Industries, Inc

LINDE PLC

FuelCell Energy Inc

Air Products and Chemicals Inc

HPS Home Power Solutions GmbH

Recent Developments in the Market:

In Jan. 2020, the Los Angeles Department of Water and Power is an original founding member of the Green Hydrogen Coalition, an institute dedicated to advancing green energy production laws and practises to expedite the establishment of a carbon-free energy future.

Global Hydrogen Energy Storage Market Report Scope:

Historical Data – 2020 - 2021

Base Year for Estimation – 2022

Forecast period - 2023-2030

Report Coverage - Revenue forecast, Company Ranking, Competitive Landscape,

Growth factors, and Trends

Segments Covered – Product Type, Application, End User, Region

Regional Scope - North America; Europe; Asia Pacific; Latin America; Middle East & Africa

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 Product Type:

Liquid

Solid

Gas

By Application:

Stationary Power

Transportation

By End User:

Industrial

Commercial

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

Middle East & Africa  
Saudi Arabia  
South Africa  
Rest of Middle East & Africa

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