

Hydrogen Market Analysis, Competitive Landscape, Growth Factors, Revenue & Forecasts, 2023-2032

Hydrogen is highly favored as a fuel due to several key advantages. Electrolysis enables the conversion of renewable energy into hydrogen.

WILMINGTON, DELAWARE, UNITED STATES, July 9, 2024 /

EINPresswire.com/ -- Allied Market Research has recently published a comprehensive report titled "[Hydrogen Market](#) by Delivery Mode, Type, End Use, and Region: Global Opportunity Analysis and Industry Forecast, 2023-

2032". The global hydrogen market, valued at \$155.9 billion in 2022, is projected to reach \$292.0 billion by 2032, growing at a CAGR of 6.5% during the forecast period.



Hydrogen Industry Analysis

Hydrogen plays a pivotal role in both the chemicals and oil & gas industries, sourced through various methods and classified into three primary types: blue hydrogen, grey hydrogen, and green hydrogen.

Request a sample of the report:

<https://www.alliedmarketresearch.com/request-sample/16956>

Grey hydrogen is derived from fossil fuels without carbon capture or storage processes. Blue hydrogen, on the other hand, involves extracting hydrogen from natural gas with integrated carbon capture and storage (CCS) technology. Green hydrogen represents a sustainable form, produced without emitting carbon during its generation process.

One of the most notable applications of hydrogen is in fuel cells, where its chemical energy is converted directly into electricity. These cells find extensive use in warehouse logistics, backup power generation, public transportation (like buses), unmanned aerial vehicles, boats, submarines, and more.

Hydrogen is highly favored as a fuel due to several key advantages. Electrolysis enables the conversion of renewable energy into hydrogen, facilitating efficient energy storage and grid stabilization. This stored energy can be utilized at times of peak demand or when renewable sources are unavailable, contributing to grid stability.

In power generation, hydrogen is prominently employed for renewable energy storage. Unlike other energy storage methods, hydrogen can be stored for extended periods without significant energy loss, making it a reliable option for maintaining grid stability.

Moreover, when hydrogen reacts with oxygen in fuel cells, the only byproducts produced are electricity, water, and heat. Since hydrogen lacks carbon, this process generates no CO₂ emissions, supporting efforts to reduce greenhouse gases. This shift from fossil fuels to hydrogen in gas turbines, fuel cells, boilers, and engines enables power and heat generation without direct CO₂ emissions.

Notably, industries are increasingly adopting hydrogen technologies like hydrogen gas turbines, exemplified by Mitsubishi Heavy Industries' (MHI) brand Mitsubishi Power, which incorporates hydrogen co-firing and aims for complete hydrogen firing. These advancements demonstrate a proactive approach towards reducing environmental impact while enhancing energy efficiency.

Key drivers of market growth include the increasing adoption of hydrogen in power generation and its use in electric vehicles for fuel cells. However, the market faces challenges such as high production costs. On the upside, there are significant opportunities driven by the rising demand for clean energy solutions.

The report segments the market by delivery mode (captive, merchant), type (blue hydrogen, grey hydrogen, green hydrogen), end use (refining, power generation, transportation, food processing, others), and region. Notably, the merchant segment is expected to grow rapidly, driven by diverse applications in various industries. Green hydrogen, which emits no carbon during production, is forecasted to experience the fastest growth among hydrogen types.

Regionally, Asia-Pacific led the market in 2022 and is anticipated to maintain its dominance, supported by renewable energy potential and substantial government initiatives. Key players in the global hydrogen market include Indian Oil Corporation Ltd., Reliance Industries Ltd., Shell PLC, and others, who are employing strategic initiatives to enhance their market presence.

For a comprehensive analysis, strategic actions of market players, and detailed operational segments, the complete report provides valuable insights and is essential for stakeholders and investors in the hydrogen sector.

□□□□□□□□□□ □□ □□□□□□□□□□ □□□□ □□□□□□□? □□□□□□ □□□□□:

<https://www.alliedmarketresearch.com/hydrogen-market/purchase-options>

About Us

Allied Market Research (AMR) is a full-service market research and business-consulting wing of Allied Analytics LLP based in Portland, Oregon. Allied Market Research provides global enterprises as well as medium and small businesses with unmatched quality of "Market Research Reports" and "Business Intelligence Solutions." AMR has a targeted view to provide business insights and consulting to assist its clients to make strategic business decisions and achieve sustainable growth in their respective market domain.

Pawan Kumar, the CEO of Allied Market Research, is leading the organization toward providing high-quality data and insights. We are in professional corporate relations with various companies and this helps us in digging out market data that helps us generate accurate research data tables and confirms utmost accuracy in our market forecasting. Each and every data presented in the reports published by us is extracted through primary interviews with top officials from leading companies of domain concerned. Our secondary data procurement methodology includes deep online and offline research and discussion with knowledgeable professionals and analysts in the industry.

David Correa

Allied Market Research

+1 800-792-5285

[email us here](#)

Visit us on social media:

[Facebook](#)

[X](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/726154166>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2024 Newsmatics Inc. All Right Reserved.