

Hydrogen Generation Market by Technology (SMR, POX, Coal Gasification, Electrolysis), Application (Refinery, Ammonia Production, Methanol Production, Transportation, Power Generation), Source (Blue, Green, Gray), Generation Mode, Region - Forecast to 2027

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Report description:

Hydrogen has long been recognized as a possible low-carbon transportation fuel. The market has a promising growth potential due to several factors, including the role of hydrogen generation playing in carbon emission reduction and Increase in fuel cell based electric vehicles and hydrogen based economy are driving the hydrogen generation market. The global hydrogen generation market is projected to reach USD 263.5 Billion by 2027 from an estimated market size of USD 160.0 Billion in 2022, at a CAGR of 10.5% during the forecast period.

"Electrolysis : The fastest growing segment of hydrogen generation market, by technology"

Electrolysis might be a promising technique for hydrogen production in the future. The simplest electrolysis method transforms water into hydrogen and oxygen by placing two electrodes in it and running an electrical current through them. Other than hydrogen and oxygen, electrolysis does not emit or produce any by-products

"Gray hydrogen: The fastest growing segment of hydrogen generation market, by source"

Today, gray hydrogen makes up most of the hydrogen produced. Natural gas is reformatted to create grey hydrogen, which is utilized to reorganize the molecular structure of hydrocarbons. The cost of producing grey hydrogen is lower than both blue hydrogen and green hydrogen. Gray hydrogen covers most of the market comparing to blue and green hydrogen.

"The petroleum refinery segment is expected to be the most significant hydrogen generation market, by application"

The hydrogen generation market, by application, is segmented into Refinery, Ammonia Production, Methanol Production, Transportation, Power Generation. The petroleum refinery segment accounted for the largest share of 50.8% of the hydrogen generation market in 2021. The rising applications of hydrogen in oil refineries to foster demand for hydrogen is expected to drive

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the petroleum refineries segment during the forecast period.

"Asia Pacific: The fastest-growing region in the hydrogen energy storage market."

The Asia Pacific region is projected to be the fastest-growing market during the forecast period. The growth of the Asia Pacific hydrogen generation market is expected to be driven by Increase in fuel cell based electric vehicles and hydrogen based economy.

Breakdown of Primaries:

The study contains insights from various industry experts, ranging from component suppliers to Tier 1 companies and OEMs. The break-up of the primaries is as follows:

By Company Type: Tier I-65%, Tier II-24%, and Tier III-11%

By Designation: C-Level Executives-30%, Director Level-25%, and Others-45%

By Region: Asia Pacific - 36%, North America - 30%, Europe - 21%, Middle East - 7%, Africa - 6%

The hydrogen generation market is dominated by a few globally established players such as Siemens (Germany), Linde plc (Ireland), ENGIE (France), Air Liquide (France), and Air Products Inc. (US).

Research Coverage:

The report segments the hydrogen generation market and forecasts its size, based on Technology (SMR, POX, Coal Gasification, Electrolysis), Generation (Captive, Merchant), Source (Blue, Green, Gray), Application(Refinery, Ammonia-Methanol Production, Transportation, Power Generation) and region (Europe, Asia Pacific, South America, North America, Middle East, Africa)

The report also provides a comprehensive review of market drivers, restraints, opportunities, and challenges in the hydrogen generation market. The report also covers qualitative aspects in addition to the quantitative aspects of these markets.

Key Benefits of Buying the Report

The report will help the leaders/new entrants in this market with information on the closest approximations of the revenue numbers for the overall market and the sub-segments. This report will help stakeholders understand the competitive landscape and gain more insights to better position their businesses and plan suitable go-to-market

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Hydrogen Generation Market by Technology (SMR, POX, Coal Gasification, Electrolysis), Application (Refinery, Ammonia Production, Methanol Production, Transportation, Power Generation), Source (Blue, Green, Gray), Generation Mode, Region - Forecast to 2027

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