

The Hydrogen Gas Market is anticipated to register a CAGR of less than 4% during 2023 – 2028 - Market Size, Share, Forecasts, & Trends Analysis Report by Mordor Intelligence.

According to a new market research report titled "Hydrogen Gas Market - (2023 - 2028)", the market is expected to grow at a CAGR of <4%. Due to the pandemic and its associated restrictions, hydrogen gas production took a hit. However, with recent advancements in regulations and global health, output slightly increased in 2021. The medium term looks favorable for the market, with increasing demand from chemical industries and related refineries counteracting the downside of high production costs and heightened transportation/storage costs.

Hydrogen Gas Market - Some of the major trends shaping the market:

Ammonia is one of the world's top-produced chemicals, and its industrial production relies on the Haber-Bosch process - or, as it is often known, abiotic, artificial, or industrial nitrogen fixation. Developed by Fritz Haber and Carl Bosch at the start of the 20th century, it is the most employed industrial method for producing ammonia through a chemical reaction with atmospheric nitrogen and hydrogen in combination with a metal-based catalyst like uranium or osmium at high heat and pressure.

- Hydrogen used in the Haber-Bosch process is typically derived from fossil fuel feedstocks.
- The most prevalent technique for sourcing hydrogen is the reaction of natural gas feedstocks with steam in a steam reforming unit for deriving hydrogen.
- Hydrogen is also produced from cracking crude oil fractions or subjecting coal to partial oxidation processes.
- In 2021, global ammonia production amounted to around 150 million metric tons, registering an increase of about 2% compared to the previous year.
- East Asia had the highest ammonia production in 2021, with approximately 64.6 million metric tons.
- China is the top ammonia producer globally, producing around 39 million metric tons in 2021.
- According to the US geological survey, the United States is one of the largest ammonia producers, producing 14 million metric tons at 35 facilities belonging to 16 companies.
- The agriculture industry, with an estimated share of 80% in the ammonia market, is the primary driver of the rising ammonia consumption in fertilizers.
- Southeast Asia is the major fertilizer consumer in Asia-Pacific, with China representing a 42.5% share in the Asia-Pacific fertilizer market in 2021.
- In July 2022, the Brazilian company Unigel began constructing the world's most significant integrated green hydrogen and ammonia plant in the Camaçari Industrial Complex.
- The plant will have an initial production capacity of 10,000 tons per year of green hydrogen and 60,000 tons per year of green ammonia.
- Costing around USD 120 million, the project will come on stream by the end of 2023.

Therefore, the above factors are expected to impact the market in the coming years significantly.

Asia-Pacific accounts for an enormous demand for Hydrogen Gas:

The Asia-Pacific region has an immense demand for hydrogen gas, which is forecasted to be the quickest expanding area and continue leading the world in total hydrogen gas consumption at more than 45%. China and India are two of the largest countries in the world that have the highest demand. China is particularly dominant due to various initiatives in the country.

In March 2022, the Chinese government released the country's first-ever long-term plan for hydrogen, covering the period of 2021-2035. The program is focused on a phased approach to developing a domestic hydrogen industry and mastering technologies and manufacturing capabilities.

In February 2022, the government of India announced a new green hydrogen policy. The policy aims to help the government meet its climate targets and make India a green hydrogen hub by reaching the production target of 5 million tons of green hydrogen by 2030.

According to the Ministry of New and Renewable Energy, India will spend USD 200 million over the next five to seven years to promote the use of low-carbon hydrogen.

Who are the key players in the Hydrogen Gas Market?

The hydrogen gas market is consolidated, where major players hold a significant share of the market demand. Some of the major players in the market include:

- Air Liquide
- Linde PLC
- Air Products and Chemicals Inc.
- Aditya Birla Chemicals
- Messer SE & Co. KGaA
- Equinor ASA
- Gujarat Alkalies and Chemicals Limited
- Gulf Cryo
- Lords Chloro Alkali Limited
- Matheson Tri-Gas Inc.
- PAO NOVATEK
- TAIYO NIPPON SAN SO CORPORATION
- Universal Industrial Gases Inc.

Recent developments in the Hydrogen Gas Market:

- In July 2022: Air Products and VPI (a power generator company) signed a joint development agreement for driving the "Humber Hydrogen Hub" or "H3", which seeks to develop an 800 MW low-carbon hydrogen production facility in Immingham, United Kingdom.
- In June 2022: BASF and Shell evaluated and de-risked BASF's Puristar R0-20 and Sorbead Adsorption Technology for green hydrogen production.
- In June 2022: Equinor and SSE Thermal jointly acquired Triton Power by purchasing the company from Energy Capital Partners (ECP) to contribute to decarbonization in the United Kingdom.

Concisely, the Mordor Intelligence Hydrogen Gas Market Research Report is a must-read for start-ups, industry players, investors, researchers, consultants, business strategists, and all those who are looking to understand the Hydrogen Gas industry. Get a glance at the

<https://www.mordorintelligence.com/industry-reports/hydrogen-gas-market>

About Mordor Intelligence:

Mordor Intelligence is a market intelligence and advisory firm. At Mordor Intelligence, we predict butterfly effects that could change or significantly impact market dynamics.

Our market research reports are comprehensive and provide exclusive data, facts and figures, trends, and the competitive landscape of the industry.

Other trending reports you may like:

- <https://www.mordorintelligence.com/industry-reports/hydrogen-cyanide-market>
- <https://www.mordorintelligence.com/industry-reports/hydrogen-peroxide-market>
- <https://www.mordorintelligence.com/industry-reports/hydroquinone-market>
- <https://www.mordorintelligence.com/industry-reports/liquid-hydrogen-market>
- <https://www.mordorintelligence.com/industry-reports/liquid-nitrogen-market>