

# Hydrogen Fuel Cell Market Growth: Powering the Future of Clean Energy

*Hydrogen Fuel Cell Market: Sustainable Power Generation | APAC 8.7% Growing by Japan, South Korea, China, Singapore, India, Taiwan, Malaysia, Hong Kong*

WILMINGTON, DE, UNITED STATES, March 19, 2025 /EINPresswire.com/ --

According to a new report published by Allied Market Research, The global [hydrogen fuel cell market](#) size was valued at \$2.7 billion in 2021, and projected to reach \$5.7 billion by 2031, with a CAGR of 8.1% from 2022 to 2031.



A fuel cell is a type of device consisting of a cathode and an anode immersed in an electrolyte medium to effectively conduct and generate electricity. The system works on the basic electromechanical mechanism to convert chemical energy into electrical energy.

“

Hydrogen fuel cells are expected to provide an alternative to battery-powered solutions for heavy-duty and long-distance truck transportation.”

*Allied Market Research*

Download Sample Pages:

<https://www.alliedmarketresearch.com/request-sample/4894>

Asia-Pacific is expected to exhibit CAGR of 8.7% during 2021-2031.

The major companies profiled in [hydrogen fuel cell](#)

[industry](#) include AFC Energy plc, Ballard Power Systems, Bloom Energy, Ceres, Doosan Fuel Cell Co. Ltd, FuelCell Energy, Inc., Intelligent Energy, Nedstack Fuel Cell Technology, Plug Power Inc and SFC Energy AG.

Rising adoption of electric and hybrid vehicles, increasing demand in the telecommunications, automotive & residential micro-CHP sector, and diminishing dependence on non-renewable

energy sources are some of the factors boosting the market growth.

As the fuel is broken up into protons and electrons at the anode and oxygen is available at the cathode, hydrogen is formed. These electrons complete a circuit between the electrodes, meanwhile the protons travel through the electrolyte medium.

After completing this chemical reaction, all the negative and positive ions and oxygen combine at the cathode to generate electricity as the final product, coupled with water and heat as byproducts.

The automobile sector has experienced remarkable expansion as a result of rising vehicle demand. However, in recent years, there has been a growing awareness and issue about the negative environmental impact of fossil fuel engines, which produce considerable amounts of greenhouse gases.

Buy This Report (437 Pages PDF with Insights, Charts, Tables, and Figures):

<https://bit.ly/40orLW9>

Other factors such as technical improvements, higher performance, rising petroleum prices, reduced noise, and stringent government regulations regarding environmental conservation are also predicted to contribute to the [hydrogen fuel cells market](#) growth during the forecast period.

For instance, on June 23, 2022, Toshiba Energy Systems and Solutions Corp. (Toshiba EES) announced its partnership with Echandia to develop pure hydrogen fuel cell systems for ships. These newly developed pure hydrogen fuel cells could be used for continuous marine operation applications.

Rising hydrogen fuel cell market industry applications in heating and power generation solutions in residential and commercial sectors increase market sales.

Various associations and governments have reformed their energy policies to fulfill the growing demand for power due to surge in population.

By type, proton exchange membrane fuel cell is expected to exhibit CAGR of 8.4% during 2021-2031.

By application, transportation segment accounted for the largest hydrogen fuel cells market share in 2021.

By end user, fuel cell vehicles had the largest market share in 2021.

Enquiry Before Buying: <https://www.alliedmarketresearch.com/purchase-enquiry/4894>

Covid-19 Scenario:

Manufacturers of Electric Vehicle (EV) batteries have started concentrating on lowering up-front costs and extending the range of vehicles by developing more effective power sources. This in turn, is expected to provide growth to the market in the post-pandemic.

Trending Reports in Energy and Power Industry:

Fuel Cell Power System Market

<https://www.alliedmarketresearch.com/fuel-cell-power-system-market-A35077>

Fuel Cell Balance of Plant (BOP) Market

<https://www.alliedmarketresearch.com/global-fuel-cell-balance-of-plant-market-A14523>

Hydrogen Fuel Cell Market

<https://www.alliedmarketresearch.com/hydrogen-fuel-cell-market>

Stationary Fuel Cell Market

<https://www.alliedmarketresearch.com/stationary-fuel-cell-market-A07838>

Microbial Fuel Cell Market

<https://www.alliedmarketresearch.com/microbial-fuel-cell-market-A17181>

Fuel Cell Market

<https://www.alliedmarketresearch.com/fuel-cell-market>

Green Hydrogen Market

<https://www.alliedmarketresearch.com/green-hydrogen-market-A11310>

Electrolyzer Market

<https://www.alliedmarketresearch.com/electrolyzer-market-A10609>

Hydrogen Storage Market

<https://www.alliedmarketresearch.com/hydrogen-storage-market-A122780>

Hydrogen Infrastructure Market

<https://www.alliedmarketresearch.com/hydrogen-infrastructure-market-A165713>

Clean Hydrogen Market

<https://www.alliedmarketresearch.com/clean-hydrogen-market-A53698>

Hydrogen Generation Market

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

Hydrogen Generator Market

<https://www.alliedmarketresearch.com/hydrogen-generator-market-A12538>

Hydrogen Energy Storage Market

<https://www.alliedmarketresearch.com/hydrogen-energy-storage-market-A10578>

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

+ 1800-792-5285

[email us here](#)

Visit us on social media:

[Facebook](#)

[X](#)

[LinkedIn](#)

[YouTube](#)

---

This press release can be viewed online at: <https://www.einpresswire.com/article/795139303>

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.

© 1995-2025 Newsmatics Inc. All Right Reserved.