

What Will Hydrogen Fuel Cell Market Look Like In The Future?

Hydrogen Fuel Cell Market is anticipated to reach USD 5.7 billion by 2031

OREGON, PORTLAND, UNITED STATES, July 18, 2023 /EINPresswire.com/ --

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 hydrogen fuel cell is an electrochemical device that generates electricity through a chemical reaction between hydrogen and oxygen. It is a clean and efficient energy technology that produces electricity without combustion, emitting only water vapor as a byproduct.

Hydrogen fuel cells are gaining attention as a potential solution for a wide range of applications, including transportation, stationary power generation, and portable devices.

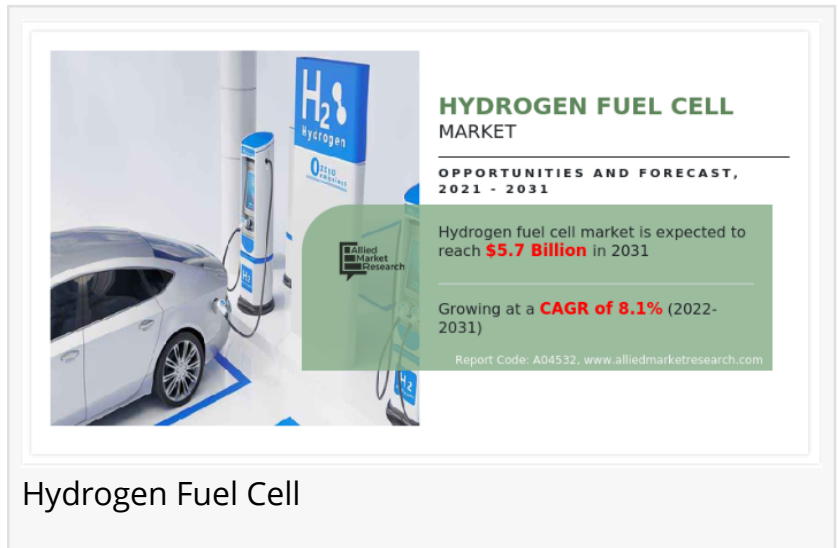
Get a PDF brochure for Industrial Insights and Business Intelligence:

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

Hydrogen fuel cells are known for their high energy efficiency. Unlike traditional combustion engines, which convert chemical energy into heat and mechanical energy, fuel cells directly convert the chemical energy of hydrogen into electrical energy. This results in higher efficiency levels and reduced greenhouse gas emissions, as the fuel cell system operates without burning fossil fuels.

The major companies profiled in hydrogen fuel cells market analysis 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,



Hydrogen Fuel Cell

automotive & residential micro-CHP sector, and diminishing dependence on non-renewable energy sources are some of the factors boosting the market growth.

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

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.

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.

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.

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

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

Hydrogen fuel cells have diverse applications. In the transportation sector, fuel cells can power electric vehicles (FCVs) that emit only water vapor, offering a clean and efficient alternative to internal combustion engines. Fuel cells are also used for stationary power generation, providing electricity and heat for buildings, hospitals, and other facilities. Additionally, portable fuel cells can power devices such as laptops, smartphones, and remote sensors in areas where grid electricity is not available.

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.

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's 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.

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.

Similar Reports:-

Fuel Cell Market by Application (Portable, Stationary, Transport), by Product Type (Solid Oxide Fuel Cell (SOFC), Proton Exchange Membrane Fuel Cell (PEMFC), Molten Carbonate Fuel Cell (MCFC), Phosphoric Acid Fuel Cell (PAFC), Others): Global Opportunity Analysis and Industry Forecast, 2020-2030

[Stationary Fuel Cell Market](#) by Capacity (Less than 1kW, 1 KW to 5kW, 5kW to 250kW, 250kW to 1MW, More than 1MW), by Type (Proton Exchange Membrane Fuel Cell (PEMFC), Phosphoric Acid Fuel Cell (PAFC), Molten Carbonate Fuel Cell (MCFC), Solid Oxide Fuel Cell (SOFC), Direct Methanol Fuel Cell (DMFC), Others), by Application (Combined Heat and Power (CHP), Prime Power, Uninterrupted Power Supply (UPS), Others), by End-Use Industry (Transportation, Defense, Oil and Gas, Utilities, Others): Global Opportunity Analysis and Industry Forecast, 2021-2031

David Correa
Allied Analytics LLP
1 800-792-5285
[email us here](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/644940970>

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.

© 1995-2023 Newsmatics Inc. All Right Reserved.