

Global Proton Exchange Membrane (PEM) Fuel Cells Market Growth 2025-2031

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Abstracts

The global Proton Exchange Membrane (PEM) Fuel Cells market size is predicted to grow from US\$ 3973 million in 2025 to US\$ 4950 million in 2031; it is expected to grow at a CAGR of 3.7% from 2025 to 2031.

Proton-exchange membrane fuel cells (PEMFC), also known as polymer electrolyte membrane (PEM) fuel cells, are a type of fuel cell being developed mainly for transport applications, as well as for stationary fuel-cell applications and portable fuel-cell applications. Their distinguishing features include lower temperature/pressure ranges (50 to 100 °C) and a special proton-conducting polymer electrolyte membrane. PEMFCs generate electricity and operate on the opposite principle to PEM electrolysis, which consumes electricity. They are a leading candidate to replace the aging alkaline fuel-cell technology, which was used in the Space Shuttle.

According to data released by the China Association of Automobile Manufacturers, in December 2022, the production and sales of hydrogen fuel cell vehicles in China was 653 and 607, respectively. In the whole year of 2022, the production and sales of hydrogen fuel cell vehicles was 3,626 and 3,367, a year-on-year increase of 105.4% and 112.8%, respectively. According to our Fuel Cell Research Center, by the end of 2022, the number of fuel cell vehicles in the world had reached 67,000 units, a year-on-year increase of 36.6%. Among them, the number of fuel cell vehicles in China was 12,682 units.

LP Information, Inc. (LPI) ' newest research report, the "Proton Exchange Membrane (PEM) Fuel Cells Industry Forecast" looks at past sales and reviews total world Proton Exchange Membrane (PEM) Fuel Cells sales in 2024, providing a comprehensive analysis by region and market sector of projected Proton Exchange Membrane (PEM)

Fuel Cells sales for 2025 through 2031. With Proton Exchange Membrane (PEM) Fuel Cells sales broken down by region, market sector and sub-sector, this report provides a detailed analysis in US\$ millions of the world Proton Exchange Membrane (PEM) Fuel Cells industry.

This Insight Report provides a comprehensive analysis of the global Proton Exchange Membrane (PEM) Fuel Cells landscape and highlights key trends related to product segmentation, company formation, revenue, and market share, latest development, and M&A activity. This report also analyzes the strategies of leading global companies with a focus on Proton Exchange Membrane (PEM) Fuel Cells portfolios and capabilities, market entry strategies, market positions, and geographic footprints, to better understand these firms' unique position in an accelerating global Proton Exchange Membrane (PEM) Fuel Cells market.

This Insight Report evaluates the key market trends, drivers, and affecting factors shaping the global outlook for Proton Exchange Membrane (PEM) Fuel Cells and breaks down the forecast by Type, by Application, geography, and market size to highlight emerging pockets of opportunity. With a transparent methodology based on hundreds of bottom-up qualitative and quantitative market inputs, this study forecast offers a highly nuanced view of the current state and future trajectory in the global Proton Exchange Membrane (PEM) Fuel Cells.

This report presents a comprehensive overview, market shares, and growth opportunities of Proton Exchange Membrane (PEM) Fuel Cells market by product type, application, key manufacturers and key regions and countries.

Segmentation by Type:

Compressed Gaseous Hydrogen

Cryogenic Liquid Hydrogen

Hydrides

Segmentation by Application:

Transportation

Stationary Fuel-cell

Portable Fuel-cell

This report also splits the market by region:

Americas

United States

Canada

Mexico

Brazil

APAC

China

Japan

Korea

Southeast Asia

India

Australia

Europe

Germany

France

UK

Italy

Russia

Middle East & Africa

Egypt

South Africa

Israel

Turkey

GCC Countries

The below companies that are profiled have been selected based on inputs gathered from primary experts and analysing the company's coverage, product portfolio, its market penetration.

Plug Power

Ballard

Sunrise Power

Panasonic

Nuvera Fuel Cells

Hydrogenics

Vision Group

Nedstack PEM Fuel Cells

Shenli Hi-Tech

Altergy Systems

Horizon Fuel Cell Technologies

Key Questions Addressed in this Report

What is the 10-year outlook for the global Proton Exchange Membrane (PEM) Fuel Cells market?

What factors are driving Proton Exchange Membrane (PEM) Fuel Cells market growth, globally and by region?

Which technologies are poised for the fastest growth by market and region?

How do Proton Exchange Membrane (PEM) Fuel Cells market opportunities vary by end market size?

How does Proton Exchange Membrane (PEM) Fuel Cells break out by Type, by Application?

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