

Proton Exchange Membrane (PEM) Fuel Cells Market, Global Outlook and Forecast 2022-2028

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Abstracts

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.

This report contains market size and forecasts of Proton Exchange Membrane (PEM) Fuel Cells in global, including the following market information:

Global Proton Exchange Membrane (PEM) Fuel Cells Market Revenue, 2017-2022, 2023-2028, (\$ millions)

Global Proton Exchange Membrane (PEM) Fuel Cells Market Sales, 2017-2022, 2023-2028, (K Units)

Global top five Proton Exchange Membrane (PEM) Fuel Cells companies in 2021 (%)

The global Proton Exchange Membrane (PEM) Fuel Cells market was valued at million in 2021 and is projected to reach US\$ million by 2028, at a CAGR of % during the forecast period 2022-2028.

The U.S. Market is Estimated at \$ Million in 2021, While China is Forecast to Reach \$ Million by 2028.



Compressed Gaseous Hydrogen Segment to Reach \$ Million by 2028, with a % CAGR in next six years.

The global key manufacturers of Proton Exchange Membrane (PEM) Fuel Cells include Plug Power, Ballard, Sunrise Power, Panasonic, Nuvera Fuel Cells, Hydrogenics, Vision Group, Nedstack PEM Fuel Cells and Shenli Hi-Tech, etc. In 2021, the global top five players have a share approximately % in terms of revenue.

MARKET MONITOR GLOBAL, INC (MMG) has surveyed the Proton Exchange Membrane (PEM) Fuel Cells manufacturers, suppliers, distributors and industry experts on this industry, involving the sales, revenue, demand, price change, product type, recent development and plan, industry trends, drivers, challenges, obstacles, and potential risks.

Total Market by Segment:

Global Proton Exchange Membrane (PEM) Fuel Cells Market, by Technology, 2017-2022, 2023-2028 (\$ Millions) & (K Units)

Global Proton Exchange Membrane (PEM) Fuel Cells Market Segment Percentages, by Technology, 2021 (%)

Compressed Gaseous Hydrogen

Cryogenic Liquid Hydrogen

Hydrides

Global Proton Exchange Membrane (PEM) Fuel Cells Market, by Application, 2017-2022, 2023-2028 (\$ Millions) & (K Units)

Global Proton Exchange Membrane (PEM) Fuel Cells Market Segment Percentages, by Application, 2021 (%)

Transportation

Stationary Fuel-cell



Portable Fuel-cell

Global Proton Exchange Membrane (PEM) Fuel Cells Market, By Region and Country, 2017-2022, 2023-2028 (\$ Millions) & (K Units)

Global Proton Exchange Membrane (PEM) Fuel Cells Market Segment Percentages, By Region and Country, 2021 (%)

North America

US

Canada

Mexico

Europe

Germany

France

U.K.

Italy

Russia

Nordic Countries

Benelux

Rest of Europe

Asia

China



Japan

South Korea

Southeast Asia

India

Rest of Asia

South America

Brazil

Argentina

Rest of South America

Middle East & Africa

Turkey

Israel

Saudi Arabia

UAE

Rest of Middle East & Africa

Competitor Analysis

The report also provides analysis of leading market participants including:

Key companies Proton Exchange Membrane (PEM) Fuel Cells revenues in global market, 2017-2022 (Estimated), (\$ millions)



Key companies Proton Exchange Membrane (PEM) Fuel Cells revenues share in global market, 2021 (%)

Key companies Proton Exchange Membrane (PEM) Fuel Cells sales in global market, 2017-2022 (Estimated), (K Units)

Key companies Proton Exchange Membrane (PEM) Fuel Cells sales share in global market, 2021 (%)

Further, the report presents profiles of competitors in the market, key players include:

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



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