

# Global Proton Exchange Membrane Fuel Cells?PEMFC) Market 2024 by Manufacturers, Regions, Type and Application, Forecast to 2030

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#### **Abstracts**

According to our (Global Info Research) latest study, the global Proton Exchange Membrane Fuel Cells?PEMFC) market size was valued at USD 1092.7 million in 2023 and is forecast to a readjusted size of USD 7054.3 million by 2030 with a CAGR of 30.5% during review period.

Proton-exchange membrane fuel cells, also known as polymer electrolyte membrane (PEM) fuel cells (PEMFC), 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.

The global key Proton Exchange Membrane Fuel Cell (PEMFC) manufacturers include Plug Power, Ballard, Nuvera Fuel Cells, Hydrogenics, Sunrise Power, Panasonic, Vision Group, Nedstack PEM Fuel Cells, Shenli Hi-Tech, Altergy Systems, Horizon Fuel Cell Technologies, Foresightetc and etc.

The Global Info Research report includes an overview of the development of the Proton Exchange Membrane Fuel Cells?PEMFC) industry chain, the market status of Transportation (Compressed Gaseous Hydrogen, Cryogenic Liquid Hydrogen), Stationary (Compressed Gaseous Hydrogen, Cryogenic Liquid Hydrogen), and key enterprises in developed and developing market, and analysed the cutting-edge technology, patent, hot applications and market trends of Proton Exchange Membrane



#### Fuel Cells?PEMFC).

Regionally, the report analyzes the Proton Exchange Membrane Fuel Cells?PEMFC) markets in key regions. North America and Europe are experiencing steady growth, driven by government initiatives and increasing consumer awareness. Asia-Pacific, particularly China, leads the global Proton Exchange Membrane Fuel Cells?PEMFC) market, with robust domestic demand, supportive policies, and a strong manufacturing base.

#### Key Features:

The report presents comprehensive understanding of the Proton Exchange Membrane Fuel Cells?PEMFC) market. It provides a holistic view of the industry, as well as detailed insights into individual components and stakeholders. The report analysis market dynamics, trends, challenges, and opportunities within the Proton Exchange Membrane Fuel Cells?PEMFC) industry.

The report involves analyzing the market at a macro level:

Market Sizing and Segmentation: Report collect data on the overall market size, including the sales quantity (MW), revenue generated, and market share of different by Technology (e.g., Compressed Gaseous Hydrogen, Cryogenic Liquid Hydrogen).

Industry Analysis: Report analyse the broader industry trends, such as government policies and regulations, technological advancements, consumer preferences, and market dynamics. This analysis helps in understanding the key drivers and challenges influencing the Proton Exchange Membrane Fuel Cells?PEMFC) market.

Regional Analysis: The report involves examining the Proton Exchange Membrane Fuel Cells?PEMFC) market at a regional or national level. Report analyses regional factors such as government incentives, infrastructure development, economic conditions, and consumer behaviour to identify variations and opportunities within different markets.

Market Projections: Report covers the gathered data and analysis to make future projections and forecasts for the Proton Exchange Membrane Fuel Cells?PEMFC) market. This may include estimating market growth rates, predicting market demand, and identifying emerging trends.

The report also involves a more granular approach to Proton Exchange Membrane Fuel



#### Cells?PEMFC):

Company Analysis: Report covers individual Proton Exchange Membrane Fuel Cells?PEMFC) manufacturers, suppliers, and other relevant industry players. This analysis includes studying their financial performance, market positioning, product portfolios, partnerships, and strategies.

Consumer Analysis: Report covers data on consumer behaviour, preferences, and attitudes towards Proton Exchange Membrane Fuel Cells?PEMFC) This may involve surveys, interviews, and analysis of consumer reviews and feedback from different by Application (Transportation, Stationary).

Technology Analysis: Report covers specific technologies relevant to Proton Exchange Membrane Fuel Cells?PEMFC). It assesses the current state, advancements, and potential future developments in Proton Exchange Membrane Fuel Cells?PEMFC) areas.

Competitive Landscape: By analyzing individual companies, suppliers, and consumers, the report present insights into the competitive landscape of the Proton Exchange Membrane Fuel Cells?PEMFC) market. This analysis helps understand market share, competitive advantages, and potential areas for differentiation among industry players.

Market Validation: The report involves validating findings and projections through primary research, such as surveys, interviews, and focus groups.

Market Segmentation

Proton Exchange Membrane Fuel Cells?PEMFC) market is split by Technology and by Application. For the period 2019-2030, the growth among segments provides accurate calculations and forecasts for consumption value by Technology, and by Application in terms of volume and value.

Market segment by Technology

Compressed Gaseous Hydrogen

Cryogenic Liquid Hydrogen

Hydrides



Market segment by Application		
Т	Fransportation	
S	Stationary	
C	Others	
Major players covered		
F	Plug Power	
Е	Ballard	
١	Nuvera Fuel Cells	
F	Hydrogenics	
S	Sunrise Power	
F	Panasonic	
V	/ision Group	
١	Nedstack PEM Fuel Cells	
S	Shenli Hi-Tech	
A	Altergy Systems	
ŀ	Horizon Fuel Cell Technologies	
F	Foresight	

Market segment by region, regional analysis covers



North America (United States, Canada and Mexico)

Europe (Germany, France, United Kingdom, Russia, Italy, and Rest of Europe)

Asia-Pacific (China, Japan, Korea, India, Southeast Asia, and Australia)

South America (Brazil, Argentina, Colombia, and Rest of South America)

Middle East & Africa (Saudi Arabia, UAE, Egypt, South Africa, and Rest of Middle East & Africa)

The content of the study subjects, includes a total of 15 chapters:

Chapter 1, to describe Proton Exchange Membrane Fuel Cells?PEMFC) product scope, market overview, market estimation caveats and base year.

Chapter 2, to profile the top manufacturers of Proton Exchange Membrane Fuel Cells?PEMFC), with price, sales, revenue and global market share of Proton Exchange Membrane Fuel Cells?PEMFC) from 2019 to 2024.

Chapter 3, the Proton Exchange Membrane Fuel Cells?PEMFC) competitive situation, sales quantity, revenue and global market share of top manufacturers are analyzed emphatically by landscape contrast.

Chapter 4, the Proton Exchange Membrane Fuel Cells?PEMFC) breakdown data are shown at the regional level, to show the sales quantity, consumption value and growth by regions, from 2019 to 2030.

Chapter 5 and 6, to segment the sales by Technology and application, with sales market share and growth rate by technology, application, from 2019 to 2030.

Chapter 7, 8, 9, 10 and 11, to break the sales data at the country level, with sales quantity, consumption value and market share for key countries in the world, from 2017 to 2023.and Proton Exchange Membrane Fuel Cells?PEMFC) market forecast, by regions, technology and application, with sales and revenue, from 2025 to 2030.

Chapter 12, market dynamics, drivers, restraints, trends and Porters Five Forces analysis.



Chapter 13, the key raw materials and key suppliers, and industry chain of Proton Exchange Membrane Fuel Cells?PEMFC).

Chapter 14 and 15, to describe Proton Exchange Membrane Fuel Cells?PEMFC) sales channel, distributors, customers, research findings and conclusion.



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