

Global PEM Electrolyzers 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 PEM Electrolyzers market size was valued at USD 68 million in 2023 and is forecast to a readjusted size of USD 396.2 million by 2030 with a CAGR of 28.7% during review period.

Proton exchange membrane (PEM) electrolysis is the electrolysis of water in a cell equipped with a solid polymer electrolyte (SPE) that is responsible for the conduction of protons, separation of product gases, and electrical insulation of the electrodes. The PEM electrolyzer was introduced to overcome the issues of partial load, low current density, and low pressure operation currently plaguing the alkaline electrolyzer.

The main application of PEM electrolyzers are hydrogen refueling station, industrial application, laboratory and other fields, of which hydrogen refueling station is the biggest market with a share about 43%, followed by industrial application and other fields. In terms of product, PEM electrolyzers can be divided into three scales: small scale, middle scale, large scale. The small scale holds a share about 73%. The major manufacturers in the world include Proton On-Site, Cummins, Siemens, Toshiba. etc.

The Global Info Research report includes an overview of the development of the PEM Electrolyzers industry chain, the market status of Hydrogen Refueling Station (Small Scale, Middle Scale), Industrial Application (Small Scale, Middle Scale), and key enterprises in developed and developing market, and analysed the cutting-edge technology, patent, hot applications and market trends of PEM Electrolyzers.

Regionally, the report analyzes the PEM Electrolyzers 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 PEM Electrolyzers market, with robust domestic demand, supportive policies, and a strong manufacturing base.

Key Features:

The report presents comprehensive understanding of the PEM Electrolyzers 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 PEM Electrolyzers 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 (Units), revenue generated, and market share of different by Scale (e.g., Small Scale, Middle Scale).

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 PEM Electrolyzers market.

Regional Analysis: The report involves examining the PEM Electrolyzers 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 PEM Electrolyzers market. This may include estimating market growth rates, predicting market demand, and identifying emerging trends.

The report also involves a more granular approach to PEM Electrolyzers:

Company Analysis: Report covers individual PEM Electrolyzers 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 PEM Electrolyzers This may involve surveys, interviews, and analysis of consumer reviews and feedback from different by Application (Hydrogen Refueling Station, Industrial Application).

Technology Analysis: Report covers specific technologies relevant to PEM Electrolyzers. It assesses the current state, advancements, and potential future developments in PEM Electrolyzers areas.

Competitive Landscape: By analyzing individual companies, suppliers, and consumers, the report present insights into the competitive landscape of the PEM Electrolyzers 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

PEM Electrolyzers market is split by Scale and by Application. For the period 2019-2030, the growth among segments provides accurate calculations and forecasts for consumption value by Scale, and by Application in terms of volume and value.

Market segment by Scale

Small Scale

Middle Scale

Large Scale

Market segment by Application

Hydrogen Refueling Station

Industrial Application

Laboratory

Others

Major players covered

Proton On-Site

Cummins

Siemens

Toshiba

Kobelco Eco-Solutions

Elogen

Shandong Saksay Hydrogen Energy

ITM Power

Elchemtech

718th Research Institute of CSIC

H2B2

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 PEM Electrolyzers product scope, market overview, market estimation caveats and base year.

Chapter 2, to profile the top manufacturers of PEM Electrolyzers, with price, sales, revenue and global market share of PEM Electrolyzers from 2019 to 2024.

Chapter 3, the PEM Electrolyzers competitive situation, sales quantity, revenue and global market share of top manufacturers are analyzed emphatically by landscape contrast.

Chapter 4, the PEM Electrolyzers 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 Scale and application, with sales market share and growth rate by scale, 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 PEM Electrolyzers market forecast, by regions, scale 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 PEM Electrolyzers.

Chapter 14 and 15, to describe PEM Electrolyzers sales channel, distributors, customers, research findings and conclusion.

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