

# **PEM Electrolyzers Industry Research Report 2023**

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## **Abstracts**

Highlights

The global PEM Electrolyzers market is projected to reach US\$ million by 2029 from an estimated US\$ million in 2022, at a CAGR of % during 2023 and 2029.

North American market for PEM Electrolyzers is estimated to increase from \$ million in 2022 to reach \$ million by 2029, at a CAGR of % during the forecast period of 2023 through 2029.

Asia-Pacific market for PEM Electrolyzers is estimated to increase from \$ million in 2022 to reach \$ million by 2029, at a CAGR of % during the forecast period of 2023 through 2029.

The major global companies of PEM Electrolyzers include Proton On-Site, Cummins, Siemens, Toshiba, Kobelco Eco-Solutions, Elogen, Shandong Saksay Hydrogen Energy, ITM Power and Elchemtech, etc. In 2022, the world's top three vendors accounted for approximately % of the revenue.

The global market for PEM Electrolyzers in Hydrogen Refueling Station is estimated to increase from \$ million in 2022 to \$ million by 2029, at a CAGR of % during the forecast period of 2023 through 2029.

Considering the economic change due to COVID-19 and Russia-Ukraine War Influence, Small Scale, which accounted for % of the global market of PEM Electrolyzers in 2022, is expected to reach million US\$ by 2029, growing at a revised CAGR of % from 2023 to 2029.

#### **Report Scope**



This report aims to provide a comprehensive presentation of the global market for PEM Electrolyzers, with both quantitative and qualitative analysis, to help readers develop business/growth strategies, assess the market competitive situation, analyze their position in the current marketplace, and make informed business decisions regarding PEM Electrolyzers.

The PEM Electrolyzers market size, estimations, and forecasts are provided in terms of output/shipments (Units) and revenue (\$ millions), considering 2022 as the base year, with history and forecast data for the period from 2018 to 2029. This report segments the global PEM Electrolyzers market comprehensively. Regional market sizes, concerning products by types, by application, and by players, are also provided. The influence of COVID-19 and the Russia-Ukraine War were considered while estimating market sizes.

For a more in-depth understanding of the market, the report provides profiles of the competitive landscape, key competitors, and their respective market ranks. The report also discusses technological trends and new product developments.

The report will help the PEM Electrolyzers manufacturers, new entrants, and industry chain related companies in this market with information on the revenues, production, and average price for the overall market and the sub-segments across the different segments, by company, product type, application, and regions.

Key Companies & Market Share Insights

In this section, the readers will gain an understanding of the key players competing. This report has studied the key growth strategies, such as innovative trends and developments, intensification of product portfolio, mergers and acquisitions, collaborations, new product innovation, and geographical expansion, undertaken by these participants to maintain their presence. Apart from business strategies, the study includes current developments and key financials. The readers will also get access to the data related to global revenue, price, and sales by manufacturers for the period 2018-2023. This all-inclusive report will certainly serve the clients to stay updated and make effective decisions in their businesses. Some of the prominent players reviewed in the research report include:

Proton On-Site



Cummins

Siemens

Toshiba

Kobelco Eco-Solutions

Elogen

Shandong Saksay Hydrogen Energy

ITM Power

Elchemtech

718th Research Institute of CSIC

H2B2

Product Type Insights

Global markets are presented by PEM Electrolyzers scale, along with growth forecasts through 2029. Estimates on production and value are based on the price in the supply chain at which the PEM Electrolyzers are procured by the manufacturers.

This report has studied every segment and provided the market size using historical data. They have also talked about the growth opportunities that the segment may pose in the future. This study bestows production and revenue data by type, and during the historical period (2018-2023) and forecast period (2024-2029).

PEM Electrolyzers segment by Scale

Small Scale

Middle Scale

Large Scale



#### **Application Insights**

This report has provided the market size (production and revenue data) by application, during the historical period (2018-2023) and forecast period (2024-2029).

This report also outlines the market trends of each segment and consumer behaviors impacting the PEM Electrolyzers market and what implications these may have on the industry's future. This report can help to understand the relevant market and consumer trends that are driving the PEM Electrolyzers market.

PEM Electrolyzers segment by Application

Hydrogen Refueling Station

Industrial Application

Laboratory

Others

## **Regional Outlook**

This section of the report provides key insights regarding various regions and the key players operating in each region. Economic, social, environmental, technological, and political factors have been taken into consideration while assessing the growth of the particular region/country. The readers will also get their hands on the revenue and sales data of each region and country for the period 2018-2029.

The market has been segmented into various major geographies, including North America, Europe, Asia-Pacific, South America. Detailed analysis of major countries such as the USA, Germany, the U.K., Italy, France, China, Japan, South Korea, Southeast Asia, and India will be covered within the regional segment. For market estimates, data are going to be provided for 2022 because of the base year, with estimates for 2023 and forecast value for 2029.

North America



#### **United States**

Canada

## Europe

Germany

France

U.K.

Italy

Russia

Asia-Pacific

China

Japan

#### South Korea

India

Australia

#### China Taiwan

Indonesia

Thailand

Malaysia

Latin America



Mexico

Brazil

Argentina

Key Drivers & Barriers

High-impact rendering factors and drivers have been studied in this report to aid the readers to understand the general development. Moreover, the report includes restraints and challenges that may act as stumbling blocks on the way of the players. This will assist the users to be attentive and make informed decisions related to business. Specialists have also laid their focus on the upcoming business prospects.

COVID-19 and Russia-Ukraine War Influence Analysis

The readers in the section will understand how the PEM Electrolyzers market scenario changed across the globe during the pandemic, post-pandemic and Russia-Ukraine War. The study is done keeping in view the changes in aspects such as demand, consumption, transportation, consumer behavior, supply chain management, export and import, and production. The industry experts have also highlighted the key factors that will help create opportunities for players and stabilize the overall industry in the years to come.

## Reasons to Buy This Report

This report will help the readers to understand the competition within the industries and strategies for the competitive environment to enhance the potential profit. The report also focuses on the competitive landscape of the global PEM Electrolyzers market, and introduces in detail the market share, industry ranking, competitor ecosystem, market performance, new product development, operation situation, expansion, and acquisition. etc. of the main players, which helps the readers to identify the main competitors and deeply understand the competition pattern of the market.

This report will help stakeholders to understand the global industry status and trends of PEM Electrolyzers and provides them with information on key market drivers, restraints, challenges, and opportunities.



This report will help stakeholders to understand competitors better and gain more insights to strengthen their position in their businesses. The competitive landscape section includes the market share and rank (in volume and value), competitor ecosystem, new product development, expansion, and acquisition.

This report stays updated with novel technology integration, features, and the latest developments in the market

This report helps stakeholders to understand the COVID-19 and Russia-Ukraine War Influence on the PEM Electrolyzers industry.

This report helps stakeholders to gain insights into which regions to target globally

This report helps stakeholders to gain insights into the end-user perception concerning the adoption of PEM Electrolyzers.

This report helps stakeholders to identify some of the key players in the market and understand their valuable contribution.

## **Core Chapters**

Chapter 1: Research objectives, research methods, data sources, data cross-validation;

Chapter 2: Introduces the report scope of the report, executive summary of different market segments (by region, product type, application, etc), including the market size of each market segment, future development potential, and so on. It offers a high-level view of the current state of the market and its likely evolution in the short to mid-term, and long term.

Chapter 3: Detailed analysis of PEM Electrolyzers manufacturers competitive landscape, price, production and value market share, latest development plan, merger, and acquisition information, etc.

Chapter 4: Provides profiles of key players, introducing the basic situation of the main companies in the market in detail, including product production/output, value, price, gross margin, product introduction, recent development, etc.

Chapter 5: Production/output, value of PEM Electrolyzers by region/country. It provides a quantitative analysis of the market size and development potential of each region in



the next six years.

Chapter 6: Consumption of PEM Electrolyzers in regional level and country level. It provides a quantitative analysis of the market size and development potential of each region and its main countries and introduces the market development, future development prospects, market space, and production of each country in the world.

Chapter 7: Provides the analysis of various market segments by scale, covering the market size and development potential of each market segment, to help readers find the blue ocean market in different market segments.

Chapter 8: Provides the analysis of various market segments by application, covering the market size and development potential of each market segment, to help readers find the blue ocean market in different downstream markets.

Chapter 9: Analysis of industrial chain, including the upstream and downstream of the industry.

Chapter 10: Introduces the market dynamics, latest developments of the market, the driving factors and restrictive factors of the market, the challenges and risks faced by manufacturers in the industry, and the analysis of relevant policies in the industry.

Chapter 11: The main points and conclusions of the report.



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## Highlights

The global PEM Electrolyzers market is projected to reach US\$ million by 2028 from an estimated US\$ million in 2022, at a CAGR of % during 2024 and 2029.



North American market for PEM Electrolyzers is estimated to increase from \$ million in 2022 to reach \$ million by 2028, at a CAGR of % during the forecast period of 2023 through 2028.

Asia-Pacific market for PEM Electrolyzers is estimated to increase from \$ million in 2022 to reach \$ million by 2029, at a CAGR of % during the forecast period of 2023 through 2029.

The major global companies of PEM Electrolyzers include Proton On-Site, Cummins, Siemens, Toshiba, Kobelco Eco-Solutions, Elogen, Shandong Saksay Hydrogen Energy, ITM Power and Elchemtech, etc. In 2022, the world's top three vendors accounted for approximately % of the revenue.

The global market for PEM Electrolyzers in Hydrogen Refueling Station is estimated to increase from \$ million in 2023 to \$ million by 2029, at a CAGR of % during the forecast period of 2023 through 2029.

Considering the economic change due to COVID-19 and Russia-Ukraine War Influence, Small Scale, which accounted for % of the global market of PEM Electrolyzers in 2022, is expected to reach million US\$ by 2029, growing at a revised CAGR of % from 2023 to 2029.

## Report Scope

This report aims to provide a comprehensive presentation of the global market for PEM Electrolyzers, with both quantitative and qualitative analysis, to help readers develop business/growth strategies, assess the market competitive situation, analyze their position in the current marketplace, and make informed business decisions regarding PEM Electrolyzers.

The PEM Electrolyzers market size, estimations, and forecasts are provided in terms of output/shipments (Units) and revenue (\$ millions), considering 2022 as the base year, with history and forecast data for the period from 2018 to 2029. This report segments the global PEM Electrolyzers market comprehensively. Regional market sizes, concerning products by types, by application, and by players, are also provided. The influence of COVID-19 and the Russia-Ukraine War were considered while estimating market sizes.

For a more in-depth understanding of the market, the report provides profiles of the competitive landscape, key competitors, and their respective market ranks. The report also discusses technological trends and new product developments.

The report will help the PEM Electrolyzers manufacturers, new entrants, and industry chain related companies in this market with information on the revenues, production, and average price for the overall market and the sub-segments across the different segments, by company, product type, application, and regions.

Key Companies & Market Share Insights

In this section, the readers will gain an understanding of the key players competing.



This report has studied the key growth strategies, such as innovative trends and developments, intensification of product portfolio, mergers and acquisitions, collaborations, new product innovation, and geographical expansion, undertaken by these participants to maintain their presence. Apart from business strategies, the study includes current developments and key financials. The readers will also get access to the data related to global revenue, price, and sales by manufacturers for the period 2017-2022. This all-inclusive report will certainly serve the clients to stay updated and make effective decisions in their businesses. Some of the prominent players reviewed in the research report include:

Proton On-Site Cummins Siemens Toshiba Kobelco Eco-Solutions Elogen Shandong Saksay Hydrogen Energy ITM Power Elchemtech 718th Research Institute of CSIC



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