

# Global Proton Exchange Membrane Fuel Cell (PEMFC) Market Growth 2023-2029

https://marketpublishers.com/r/G2FF54DD45D8EN.html

Date: March 2023

Pages: 104

Price: US\$ 3,660.00 (Single User License)

ID: G2FF54DD45D8EN

### **Abstracts**

The report requires updating with new data and is sent in 48 hours after order is placed.

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.

LPI (LP Information)' newest research report, the "Proton Exchange Membrane Fuel Cell (PEMFC) Industry Forecast" looks at past sales and reviews total world Proton Exchange Membrane Fuel Cell (PEMFC) sales in 2022, providing a comprehensive analysis by region and market sector of projected Proton Exchange Membrane Fuel Cell (PEMFC) sales for 2023 through 2029. With Proton Exchange Membrane Fuel Cell (PEMFC) 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 Fuel Cell (PEMFC) industry.

This Insight Report provides a comprehensive analysis of the global Proton Exchange Membrane Fuel Cell (PEMFC) 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 Fuel Cell (PEMFC) 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 Fuel Cell (PEMFC) market.

This Insight Report evaluates the key market trends, drivers, and affecting factors shaping the global outlook for Proton Exchange Membrane Fuel Cell (PEMFC) 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 Fuel Cell (PEMFC).

The global Proton Exchange Membrane Fuel Cell (PEMFC) market size is projected to grow from US\$ 1038.9 million in 2022 to US\$ 1282.1 million in 2029; it is expected to grow at a CAGR of 1282.1 from 2023 to 2029.

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.

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

Market Segmentation:
Segmentation by type
50 KW
75 KW

Segmentation by application

Stationary

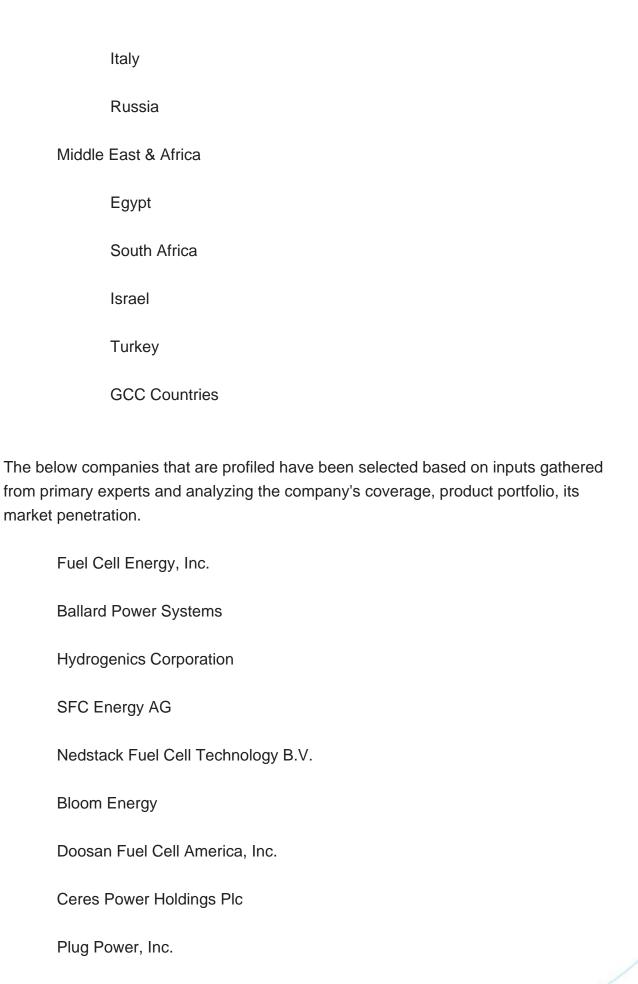
Others



Transportation

Portal	ble	
This report al	Iso splits the market by region:	
Ameri	icas	
	United States	
	Canada	
	Mexico	
	Brazil	
APAC		
	China	
	Japan	
	Korea	
	Southeast Asia	
	India	
	Australia	
Europ	De la companya de la	
	Germany	
	France	
	UK	







#### Nuvera Fuel Cells LLC

Key Questions Addressed in this Report

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

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

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

How do Proton Exchange Membrane Fuel Cell (PEMFC) market opportunities vary by end market size?

How does Proton Exchange Membrane Fuel Cell (PEMFC) break out type, application?

What are the influences of COVID-19 and Russia-Ukraine war?



#### **Contents**

#### 1 SCOPE OF THE REPORT

- 1.1 Market Introduction
- 1.2 Years Considered
- 1.3 Research Objectives
- 1.4 Market Research Methodology
- 1.5 Research Process and Data Source
- 1.6 Economic Indicators
- 1.7 Currency Considered
- 1.8 Market Estimation Caveats

#### **2 EXECUTIVE SUMMARY**

- 2.1 World Market Overview
  - 2.1.1 Global Proton Exchange Membrane Fuel Cell (PEMFC) Annual Sales 2018-2029
- 2.1.2 World Current & Future Analysis for Proton Exchange Membrane Fuel Cell (PEMFC) by Geographic Region, 2018, 2022 & 2029
- 2.1.3 World Current & Future Analysis for Proton Exchange Membrane Fuel Cell (PEMFC) by Country/Region, 2018, 2022 & 2029
- 2.2 Proton Exchange Membrane Fuel Cell (PEMFC) Segment by Type
  - 2.2.1 50 KW
  - 2.2.2 75 KW
  - 2.2.3 Others
- 2.3 Proton Exchange Membrane Fuel Cell (PEMFC) Sales by Type
- 2.3.1 Global Proton Exchange Membrane Fuel Cell (PEMFC) Sales Market Share by Type (2018-2023)
- 2.3.2 Global Proton Exchange Membrane Fuel Cell (PEMFC) Revenue and Market Share by Type (2018-2023)
- 2.3.3 Global Proton Exchange Membrane Fuel Cell (PEMFC) Sale Price by Type (2018-2023)
- 2.4 Proton Exchange Membrane Fuel Cell (PEMFC) Segment by Application
  - 2.4.1 Stationary
  - 2.4.2 Transportation
  - 2.4.3 Portable
- 2.5 Proton Exchange Membrane Fuel Cell (PEMFC) Sales by Application
- 2.5.1 Global Proton Exchange Membrane Fuel Cell (PEMFC) Sale Market Share by Application (2018-2023)



- 2.5.2 Global Proton Exchange Membrane Fuel Cell (PEMFC) Revenue and Market Share by Application (2018-2023)
- 2.5.3 Global Proton Exchange Membrane Fuel Cell (PEMFC) Sale Price by Application (2018-2023)

# 3 GLOBAL PROTON EXCHANGE MEMBRANE FUEL CELL (PEMFC) BY COMPANY

- 3.1 Global Proton Exchange Membrane Fuel Cell (PEMFC) Breakdown Data by Company
- 3.1.1 Global Proton Exchange Membrane Fuel Cell (PEMFC) Annual Sales by Company (2018-2023)
- 3.1.2 Global Proton Exchange Membrane Fuel Cell (PEMFC) Sales Market Share by Company (2018-2023)
- 3.2 Global Proton Exchange Membrane Fuel Cell (PEMFC) Annual Revenue by Company (2018-2023)
- 3.2.1 Global Proton Exchange Membrane Fuel Cell (PEMFC) Revenue by Company (2018-2023)
- 3.2.2 Global Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Market Share by Company (2018-2023)
- 3.3 Global Proton Exchange Membrane Fuel Cell (PEMFC) Sale Price by Company
- 3.4 Key Manufacturers Proton Exchange Membrane Fuel Cell (PEMFC) Producing Area Distribution, Sales Area, Product Type
- 3.4.1 Key Manufacturers Proton Exchange Membrane Fuel Cell (PEMFC) Product Location Distribution
  - 3.4.2 Players Proton Exchange Membrane Fuel Cell (PEMFC) Products Offered
- 3.5 Market Concentration Rate Analysis
  - 3.5.1 Competition Landscape Analysis
  - 3.5.2 Concentration Ratio (CR3, CR5 and CR10) & (2018-2023)
- 3.6 New Products and Potential Entrants
- 3.7 Mergers & Acquisitions, Expansion

# 4 WORLD HISTORIC REVIEW FOR PROTON EXCHANGE MEMBRANE FUEL CELL (PEMFC) BY GEOGRAPHIC REGION

- 4.1 World Historic Proton Exchange Membrane Fuel Cell (PEMFC) Market Size by Geographic Region (2018-2023)
- 4.1.1 Global Proton Exchange Membrane Fuel Cell (PEMFC) Annual Sales by Geographic Region (2018-2023)



- 4.1.2 Global Proton Exchange Membrane Fuel Cell (PEMFC) Annual Revenue by Geographic Region (2018-2023)
- 4.2 World Historic Proton Exchange Membrane Fuel Cell (PEMFC) Market Size by Country/Region (2018-2023)
- 4.2.1 Global Proton Exchange Membrane Fuel Cell (PEMFC) Annual Sales by Country/Region (2018-2023)
- 4.2.2 Global Proton Exchange Membrane Fuel Cell (PEMFC) Annual Revenue by Country/Region (2018-2023)
- 4.3 Americas Proton Exchange Membrane Fuel Cell (PEMFC) Sales Growth
- 4.4 APAC Proton Exchange Membrane Fuel Cell (PEMFC) Sales Growth
- 4.5 Europe Proton Exchange Membrane Fuel Cell (PEMFC) Sales Growth
- 4.6 Middle East & Africa Proton Exchange Membrane Fuel Cell (PEMFC) Sales Growth

#### **5 AMERICAS**

- 5.1 Americas Proton Exchange Membrane Fuel Cell (PEMFC) Sales by Country
- 5.1.1 Americas Proton Exchange Membrane Fuel Cell (PEMFC) Sales by Country (2018-2023)
- 5.1.2 Americas Proton Exchange Membrane Fuel Cell (PEMFC) Revenue by Country (2018-2023)
- 5.2 Americas Proton Exchange Membrane Fuel Cell (PEMFC) Sales by Type
- 5.3 Americas Proton Exchange Membrane Fuel Cell (PEMFC) Sales by Application
- 5.4 United States
- 5.5 Canada
- 5.6 Mexico
- 5.7 Brazil

#### 6 APAC

- 6.1 APAC Proton Exchange Membrane Fuel Cell (PEMFC) Sales by Region
- 6.1.1 APAC Proton Exchange Membrane Fuel Cell (PEMFC) Sales by Region (2018-2023)
- 6.1.2 APAC Proton Exchange Membrane Fuel Cell (PEMFC) Revenue by Region (2018-2023)
- 6.2 APAC Proton Exchange Membrane Fuel Cell (PEMFC) Sales by Type
- 6.3 APAC Proton Exchange Membrane Fuel Cell (PEMFC) Sales by Application
- 6.4 China
- 6.5 Japan
- 6.6 South Korea



- 6.7 Southeast Asia
- 6.8 India
- 6.9 Australia
- 6.10 China Taiwan

#### **7 EUROPE**

- 7.1 Europe Proton Exchange Membrane Fuel Cell (PEMFC) by Country
- 7.1.1 Europe Proton Exchange Membrane Fuel Cell (PEMFC) Sales by Country (2018-2023)
- 7.1.2 Europe Proton Exchange Membrane Fuel Cell (PEMFC) Revenue by Country (2018-2023)
- 7.2 Europe Proton Exchange Membrane Fuel Cell (PEMFC) Sales by Type
- 7.3 Europe Proton Exchange Membrane Fuel Cell (PEMFC) Sales by Application
- 7.4 Germany
- 7.5 France
- 7.6 UK
- 7.7 Italy
- 7.8 Russia

#### **8 MIDDLE EAST & AFRICA**

- 8.1 Middle East & Africa Proton Exchange Membrane Fuel Cell (PEMFC) by Country
- 8.1.1 Middle East & Africa Proton Exchange Membrane Fuel Cell (PEMFC) Sales by Country (2018-2023)
- 8.1.2 Middle East & Africa Proton Exchange Membrane Fuel Cell (PEMFC) Revenue by Country (2018-2023)
- 8.2 Middle East & Africa Proton Exchange Membrane Fuel Cell (PEMFC) Sales by Type
- 8.3 Middle East & Africa Proton Exchange Membrane Fuel Cell (PEMFC) Sales by Application
- 8.4 Egypt
- 8.5 South Africa
- 8.6 Israel
- 8.7 Turkey
- 8.8 GCC Countries

#### 9 MARKET DRIVERS, CHALLENGES AND TRENDS

9.1 Market Drivers & Growth Opportunities



- 9.2 Market Challenges & Risks
- 9.3 Industry Trends

#### 10 MANUFACTURING COST STRUCTURE ANALYSIS

- 10.1 Raw Material and Suppliers
- 10.2 Manufacturing Cost Structure Analysis of Proton Exchange Membrane Fuel Cell (PEMFC)
- 10.3 Manufacturing Process Analysis of Proton Exchange Membrane Fuel Cell (PEMFC)
- 10.4 Industry Chain Structure of Proton Exchange Membrane Fuel Cell (PEMFC)

#### 11 MARKETING, DISTRIBUTORS AND CUSTOMER

- 11.1 Sales Channel
  - 11.1.1 Direct Channels
  - 11.1.2 Indirect Channels
- 11.2 Proton Exchange Membrane Fuel Cell (PEMFC) Distributors
- 11.3 Proton Exchange Membrane Fuel Cell (PEMFC) Customer

# 12 WORLD FORECAST REVIEW FOR PROTON EXCHANGE MEMBRANE FUEL CELL (PEMFC) BY GEOGRAPHIC REGION

- 12.1 Global Proton Exchange Membrane Fuel Cell (PEMFC) Market Size Forecast by Region
- 12.1.1 Global Proton Exchange Membrane Fuel Cell (PEMFC) Forecast by Region (2024-2029)
- 12.1.2 Global Proton Exchange Membrane Fuel Cell (PEMFC) Annual Revenue Forecast by Region (2024-2029)
- 12.2 Americas Forecast by Country
- 12.3 APAC Forecast by Region
- 12.4 Europe Forecast by Country
- 12.5 Middle East & Africa Forecast by Country
- 12.6 Global Proton Exchange Membrane Fuel Cell (PEMFC) Forecast by Type
- 12.7 Global Proton Exchange Membrane Fuel Cell (PEMFC) Forecast by Application

#### 13 KEY PLAYERS ANALYSIS

13.1 Fuel Cell Energy, Inc.



- 13.1.1 Fuel Cell Energy, Inc. Company Information
- 13.1.2 Fuel Cell Energy, Inc. Proton Exchange Membrane Fuel Cell (PEMFC) Product Portfolios and Specifications
- 13.1.3 Fuel Cell Energy, Inc. Proton Exchange Membrane Fuel Cell (PEMFC) Sales, Revenue, Price and Gross Margin (2018-2023)
  - 13.1.4 Fuel Cell Energy, Inc. Main Business Overview
  - 13.1.5 Fuel Cell Energy, Inc. Latest Developments
- 13.2 Ballard Power Systems
  - 13.2.1 Ballard Power Systems Company Information
  - 13.2.2 Ballard Power Systems Proton Exchange Membrane Fuel Cell (PEMFC)

**Product Portfolios and Specifications** 

13.2.3 Ballard Power Systems Proton Exchange Membrane Fuel Cell (PEMFC) Sales,

Revenue, Price and Gross Margin (2018-2023)

- 13.2.4 Ballard Power Systems Main Business Overview
- 13.2.5 Ballard Power Systems Latest Developments
- 13.3 Hydrogenics Corporation
- 13.3.1 Hydrogenics Corporation Company Information
- 13.3.2 Hydrogenics Corporation Proton Exchange Membrane Fuel Cell (PEMFC)

Product Portfolios and Specifications

13.3.3 Hydrogenics Corporation Proton Exchange Membrane Fuel Cell (PEMFC)

Sales, Revenue, Price and Gross Margin (2018-2023)

- 13.3.4 Hydrogenics Corporation Main Business Overview
- 13.3.5 Hydrogenics Corporation Latest Developments
- 13.4 SFC Energy AG
  - 13.4.1 SFC Energy AG Company Information
- 13.4.2 SFC Energy AG Proton Exchange Membrane Fuel Cell (PEMFC) Product Portfolios and Specifications
  - 13.4.3 SFC Energy AG Proton Exchange Membrane Fuel Cell (PEMFC) Sales,

Revenue, Price and Gross Margin (2018-2023)

- 13.4.4 SFC Energy AG Main Business Overview
- 13.4.5 SFC Energy AG Latest Developments
- 13.5 Nedstack Fuel Cell Technology B.V.
  - 13.5.1 Nedstack Fuel Cell Technology B.V. Company Information
- 13.5.2 Nedstack Fuel Cell Technology B.V. Proton Exchange Membrane Fuel Cell (PEMFC) Product Portfolios and Specifications
- 13.5.3 Nedstack Fuel Cell Technology B.V. Proton Exchange Membrane Fuel Cell (PEMFC) Sales, Revenue, Price and Gross Margin (2018-2023)
- 13.5.4 Nedstack Fuel Cell Technology B.V. Main Business Overview
- 13.5.5 Nedstack Fuel Cell Technology B.V. Latest Developments



- 13.6 Bloom Energy
  - 13.6.1 Bloom Energy Company Information
- 13.6.2 Bloom Energy Proton Exchange Membrane Fuel Cell (PEMFC) Product Portfolios and Specifications
- 13.6.3 Bloom Energy Proton Exchange Membrane Fuel Cell (PEMFC) Sales, Revenue, Price and Gross Margin (2018-2023)
  - 13.6.4 Bloom Energy Main Business Overview
  - 13.6.5 Bloom Energy Latest Developments
- 13.7 Doosan Fuel Cell America, Inc.
  - 13.7.1 Doosan Fuel Cell America, Inc. Company Information
- 13.7.2 Doosan Fuel Cell America, Inc. Proton Exchange Membrane Fuel Cell
- (PEMFC) Product Portfolios and Specifications
- 13.7.3 Doosan Fuel Cell America, Inc. Proton Exchange Membrane Fuel Cell
- (PEMFC) Sales, Revenue, Price and Gross Margin (2018-2023)
- 13.7.4 Doosan Fuel Cell America, Inc. Main Business Overview
- 13.7.5 Doosan Fuel Cell America, Inc. Latest Developments
- 13.8 Ceres Power Holdings Plc
  - 13.8.1 Ceres Power Holdings Plc Company Information
  - 13.8.2 Ceres Power Holdings Plc Proton Exchange Membrane Fuel Cell (PEMFC)
- **Product Portfolios and Specifications**
- 13.8.3 Ceres Power Holdings Plc Proton Exchange Membrane Fuel Cell (PEMFC)
- Sales, Revenue, Price and Gross Margin (2018-2023)
- 13.8.4 Ceres Power Holdings Plc Main Business Overview
- 13.8.5 Ceres Power Holdings Plc Latest Developments
- 13.9 Plug Power, Inc.
  - 13.9.1 Plug Power, Inc. Company Information
- 13.9.2 Plug Power, Inc. Proton Exchange Membrane Fuel Cell (PEMFC) Product Portfolios and Specifications
  - 13.9.3 Plug Power, Inc. Proton Exchange Membrane Fuel Cell (PEMFC) Sales,
- Revenue, Price and Gross Margin (2018-2023)
- 13.9.4 Plug Power, Inc. Main Business Overview
- 13.9.5 Plug Power, Inc. Latest Developments
- 13.10 Nuvera Fuel Cells LLC
  - 13.10.1 Nuvera Fuel Cells LLC Company Information
  - 13.10.2 Nuvera Fuel Cells LLC Proton Exchange Membrane Fuel Cell (PEMFC)
- **Product Portfolios and Specifications**
- 13.10.3 Nuvera Fuel Cells LLC Proton Exchange Membrane Fuel Cell (PEMFC) Sales,
- Revenue, Price and Gross Margin (2018-2023)
  - 13.10.4 Nuvera Fuel Cells LLC Main Business Overview



# 13.10.5 Nuvera Fuel Cells LLC Latest Developments

### 14 RESEARCH FINDINGS AND CONCLUSION



### **List Of Tables**

#### LIST OF TABLES

Table 1. Proton Exchange Membrane Fuel Cell (PEMFC) Annual Sales CAGR by Geographic Region (2018, 2022 & 2029) & (\$ millions)

Table 2. Proton Exchange Membrane Fuel Cell (PEMFC) Annual Sales CAGR by Country/Region (2018, 2022 & 2029) & (\$ millions)

Table 3. Major Players of 50 KW

Table 4. Major Players of 75 KW

Table 5. Major Players of Others

Table 6. Global Proton Exchange Membrane Fuel Cell (PEMFC) Sales by Type (2018-2023) & (K Units)

Table 7. Global Proton Exchange Membrane Fuel Cell (PEMFC) Sales Market Share by Type (2018-2023)

Table 8. Global Proton Exchange Membrane Fuel Cell (PEMFC) Revenue by Type (2018-2023) & (\$ million)

Table 9. Global Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Market Share by Type (2018-2023)

Table 10. Global Proton Exchange Membrane Fuel Cell (PEMFC) Sale Price by Type (2018-2023) & (US\$/Unit)

Table 11. Global Proton Exchange Membrane Fuel Cell (PEMFC) Sales by Application (2018-2023) & (K Units)

Table 12. Global Proton Exchange Membrane Fuel Cell (PEMFC) Sales Market Share by Application (2018-2023)

Table 13. Global Proton Exchange Membrane Fuel Cell (PEMFC) Revenue by Application (2018-2023)

Table 14. Global Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Market Share by Application (2018-2023)

Table 15. Global Proton Exchange Membrane Fuel Cell (PEMFC) Sale Price by Application (2018-2023) & (US\$/Unit)

Table 16. Global Proton Exchange Membrane Fuel Cell (PEMFC) Sales by Company (2018-2023) & (K Units)

Table 17. Global Proton Exchange Membrane Fuel Cell (PEMFC) Sales Market Share by Company (2018-2023)

Table 18. Global Proton Exchange Membrane Fuel Cell (PEMFC) Revenue by Company (2018-2023) (\$ Millions)

Table 19. Global Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Market Share by Company (2018-2023)



- Table 20. Global Proton Exchange Membrane Fuel Cell (PEMFC) Sale Price by Company (2018-2023) & (US\$/Unit)
- Table 21. Key Manufacturers Proton Exchange Membrane Fuel Cell (PEMFC)

Producing Area Distribution and Sales Area

- Table 22. Players Proton Exchange Membrane Fuel Cell (PEMFC) Products Offered
- Table 23. Proton Exchange Membrane Fuel Cell (PEMFC) Concentration Ratio (CR3, CR5 and CR10) & (2018-2023)
- Table 24. New Products and Potential Entrants
- Table 25. Mergers & Acquisitions, Expansion
- Table 26. Global Proton Exchange Membrane Fuel Cell (PEMFC) Sales by Geographic Region (2018-2023) & (K Units)
- Table 27. Global Proton Exchange Membrane Fuel Cell (PEMFC) Sales Market Share Geographic Region (2018-2023)
- Table 28. Global Proton Exchange Membrane Fuel Cell (PEMFC) Revenue by Geographic Region (2018-2023) & (\$ millions)
- Table 29. Global Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Market Share by Geographic Region (2018-2023)
- Table 30. Global Proton Exchange Membrane Fuel Cell (PEMFC) Sales by Country/Region (2018-2023) & (K Units)
- Table 31. Global Proton Exchange Membrane Fuel Cell (PEMFC) Sales Market Share by Country/Region (2018-2023)
- Table 32. Global Proton Exchange Membrane Fuel Cell (PEMFC) Revenue by Country/Region (2018-2023) & (\$ millions)
- Table 33. Global Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Market Share by Country/Region (2018-2023)
- Table 34. Americas Proton Exchange Membrane Fuel Cell (PEMFC) Sales by Country (2018-2023) & (K Units)
- Table 35. Americas Proton Exchange Membrane Fuel Cell (PEMFC) Sales Market Share by Country (2018-2023)
- Table 36. Americas Proton Exchange Membrane Fuel Cell (PEMFC) Revenue by Country (2018-2023) & (\$ Millions)
- Table 37. Americas Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Market Share by Country (2018-2023)
- Table 38. Americas Proton Exchange Membrane Fuel Cell (PEMFC) Sales by Type (2018-2023) & (K Units)
- Table 39. Americas Proton Exchange Membrane Fuel Cell (PEMFC) Sales by Application (2018-2023) & (K Units)
- Table 40. APAC Proton Exchange Membrane Fuel Cell (PEMFC) Sales by Region (2018-2023) & (K Units)



Table 41. APAC Proton Exchange Membrane Fuel Cell (PEMFC) Sales Market Share by Region (2018-2023)

Table 42. APAC Proton Exchange Membrane Fuel Cell (PEMFC) Revenue by Region (2018-2023) & (\$ Millions)

Table 43. APAC Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Market Share by Region (2018-2023)

Table 44. APAC Proton Exchange Membrane Fuel Cell (PEMFC) Sales by Type (2018-2023) & (K Units)

Table 45. APAC Proton Exchange Membrane Fuel Cell (PEMFC) Sales by Application (2018-2023) & (K Units)

Table 46. Europe Proton Exchange Membrane Fuel Cell (PEMFC) Sales by Country (2018-2023) & (K Units)

Table 47. Europe Proton Exchange Membrane Fuel Cell (PEMFC) Sales Market Share by Country (2018-2023)

Table 48. Europe Proton Exchange Membrane Fuel Cell (PEMFC) Revenue by Country (2018-2023) & (\$ Millions)

Table 49. Europe Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Market Share by Country (2018-2023)

Table 50. Europe Proton Exchange Membrane Fuel Cell (PEMFC) Sales by Type (2018-2023) & (K Units)

Table 51. Europe Proton Exchange Membrane Fuel Cell (PEMFC) Sales by Application (2018-2023) & (K Units)

Table 52. Middle East & Africa Proton Exchange Membrane Fuel Cell (PEMFC) Sales by Country (2018-2023) & (K Units)

Table 53. Middle East & Africa Proton Exchange Membrane Fuel Cell (PEMFC) Sales Market Share by Country (2018-2023)

Table 54. Middle East & Africa Proton Exchange Membrane Fuel Cell (PEMFC) Revenue by Country (2018-2023) & (\$ Millions)

Table 55. Middle East & Africa Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Market Share by Country (2018-2023)

Table 56. Middle East & Africa Proton Exchange Membrane Fuel Cell (PEMFC) Sales by Type (2018-2023) & (K Units)

Table 57. Middle East & Africa Proton Exchange Membrane Fuel Cell (PEMFC) Sales by Application (2018-2023) & (K Units)

Table 58. Key Market Drivers & Growth Opportunities of Proton Exchange Membrane Fuel Cell (PEMFC)

Table 59. Key Market Challenges & Risks of Proton Exchange Membrane Fuel Cell (PEMFC)

Table 60. Key Industry Trends of Proton Exchange Membrane Fuel Cell (PEMFC)



- Table 61. Proton Exchange Membrane Fuel Cell (PEMFC) Raw Material
- Table 62. Key Suppliers of Raw Materials
- Table 63. Proton Exchange Membrane Fuel Cell (PEMFC) Distributors List
- Table 64. Proton Exchange Membrane Fuel Cell (PEMFC) Customer List
- Table 65. Global Proton Exchange Membrane Fuel Cell (PEMFC) Sales Forecast by Region (2024-2029) & (K Units)
- Table 66. Global Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Forecast by Region (2024-2029) & (\$ millions)
- Table 67. Americas Proton Exchange Membrane Fuel Cell (PEMFC) Sales Forecast by Country (2024-2029) & (K Units)
- Table 68. Americas Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Forecast by Country (2024-2029) & (\$ millions)
- Table 69. APAC Proton Exchange Membrane Fuel Cell (PEMFC) Sales Forecast by Region (2024-2029) & (K Units)
- Table 70. APAC Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Forecast by Region (2024-2029) & (\$ millions)
- Table 71. Europe Proton Exchange Membrane Fuel Cell (PEMFC) Sales Forecast by Country (2024-2029) & (K Units)
- Table 72. Europe Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Forecast by Country (2024-2029) & (\$ millions)
- Table 73. Middle East & Africa Proton Exchange Membrane Fuel Cell (PEMFC) Sales Forecast by Country (2024-2029) & (K Units)
- Table 74. Middle East & Africa Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Forecast by Country (2024-2029) & (\$ millions)
- Table 75. Global Proton Exchange Membrane Fuel Cell (PEMFC) Sales Forecast by Type (2024-2029) & (K Units)
- Table 76. Global Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Forecast by Type (2024-2029) & (\$ Millions)
- Table 77. Global Proton Exchange Membrane Fuel Cell (PEMFC) Sales Forecast by Application (2024-2029) & (K Units)
- Table 78. Global Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Forecast by Application (2024-2029) & (\$ Millions)
- Table 79. Fuel Cell Energy, Inc. Basic Information, Proton Exchange Membrane Fuel Cell (PEMFC) Manufacturing Base, Sales Area and Its Competitors
- Table 80. Fuel Cell Energy, Inc. Proton Exchange Membrane Fuel Cell (PEMFC) Product Portfolios and Specifications
- Table 81. Fuel Cell Energy, Inc. Proton Exchange Membrane Fuel Cell (PEMFC) Sales (K Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2018-2023)
- Table 82. Fuel Cell Energy, Inc. Main Business



Table 83. Fuel Cell Energy, Inc. Latest Developments

Table 84. Ballard Power Systems Basic Information, Proton Exchange Membrane Fuel Cell (PEMFC) Manufacturing Base, Sales Area and Its Competitors

Table 85. Ballard Power Systems Proton Exchange Membrane Fuel Cell (PEMFC) Product Portfolios and Specifications

Table 86. Ballard Power Systems Proton Exchange Membrane Fuel Cell (PEMFC)

Sales (K Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2018-2023)

Table 87. Ballard Power Systems Main Business

Table 88. Ballard Power Systems Latest Developments

Table 89. Hydrogenics Corporation Basic Information, Proton Exchange Membrane

Fuel Cell (PEMFC) Manufacturing Base, Sales Area and Its Competitors

Table 90. Hydrogenics Corporation Proton Exchange Membrane Fuel Cell (PEMFC) Product Portfolios and Specifications

Table 91. Hydrogenics Corporation Proton Exchange Membrane Fuel Cell (PEMFC)

Sales (K Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2018-2023)

Table 92. Hydrogenics Corporation Main Business

Table 93. Hydrogenics Corporation Latest Developments

Table 94. SFC Energy AG Basic Information, Proton Exchange Membrane Fuel Cell

(PEMFC) Manufacturing Base, Sales Area and Its Competitors

Table 95. SFC Energy AG Proton Exchange Membrane Fuel Cell (PEMFC) Product Portfolios and Specifications

Table 96. SFC Energy AG Proton Exchange Membrane Fuel Cell (PEMFC) Sales (K Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2018-2023)

Table 97. SFC Energy AG Main Business

Table 98. SFC Energy AG Latest Developments

Table 99. Nedstack Fuel Cell Technology B.V. Basic Information, Proton Exchange

Membrane Fuel Cell (PEMFC) Manufacturing Base, Sales Area and Its Competitors

Table 100. Nedstack Fuel Cell Technology B.V. Proton Exchange Membrane Fuel Cell (PEMFC) Product Portfolios and Specifications

Table 101. Nedstack Fuel Cell Technology B.V. Proton Exchange Membrane Fuel Cell (PEMFC) Sales (K Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2018-2023)

Table 102. Nedstack Fuel Cell Technology B.V. Main Business

Table 103. Nedstack Fuel Cell Technology B.V. Latest Developments

Table 104. Bloom Energy Basic Information, Proton Exchange Membrane Fuel Cell (PEMFC) Manufacturing Base, Sales Area and Its Competitors

Table 105. Bloom Energy Proton Exchange Membrane Fuel Cell (PEMFC) Product Portfolios and Specifications

Table 106. Bloom Energy Proton Exchange Membrane Fuel Cell (PEMFC) Sales (K



Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2018-2023)

Table 107. Bloom Energy Main Business

Table 108. Bloom Energy Latest Developments

Table 109. Doosan Fuel Cell America, Inc. Basic Information, Proton Exchange

Membrane Fuel Cell (PEMFC) Manufacturing Base, Sales Area and Its Competitors

Table 110. Doosan Fuel Cell America, Inc. Proton Exchange Membrane Fuel Cell (PEMFC) Product Portfolios and Specifications

Table 111. Doosan Fuel Cell America, Inc. Proton Exchange Membrane Fuel Cell (PEMFC) Sales (K Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2018-2023)

Table 112. Doosan Fuel Cell America, Inc. Main Business

Table 113. Doosan Fuel Cell America, Inc. Latest Developments

Table 114. Ceres Power Holdings Plc Basic Information, Proton Exchange Membrane

Fuel Cell (PEMFC) Manufacturing Base, Sales Area and Its Competitors

Table 115. Ceres Power Holdings Plc Proton Exchange Membrane Fuel Cell (PEMFC) Product Portfolios and Specifications

Table 116. Ceres Power Holdings Plc Proton Exchange Membrane Fuel Cell (PEMFC)

Sales (K Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2018-2023)

Table 117. Ceres Power Holdings Plc Main Business

Table 118. Ceres Power Holdings Plc Latest Developments

Table 119. Plug Power, Inc. Basic Information, Proton Exchange Membrane Fuel Cell (PEMFC) Manufacturing Base, Sales Area and Its Competitors

Table 120. Plug Power, Inc. Proton Exchange Membrane Fuel Cell (PEMFC) Product Portfolios and Specifications

Table 121. Plug Power, Inc. Proton Exchange Membrane Fuel Cell (PEMFC) Sales (K Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2018-2023)

Table 122. Plug Power, Inc. Main Business

Table 123. Plug Power, Inc. Latest Developments

Table 124. Nuvera Fuel Cells LLC Basic Information, Proton Exchange Membrane Fuel

Cell (PEMFC) Manufacturing Base, Sales Area and Its Competitors

Table 125. Nuvera Fuel Cells LLC Proton Exchange Membrane Fuel Cell (PEMFC)

**Product Portfolios and Specifications** 

Table 126. Nuvera Fuel Cells LLC Proton Exchange Membrane Fuel Cell (PEMFC)

Sales (K Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2018-2023)

Table 127. Nuvera Fuel Cells LLC Main Business

Table 128. Nuvera Fuel Cells LLC Latest Developments



# **List Of Figures**

#### **LIST OF FIGURES**

- Figure 1. Picture of Proton Exchange Membrane Fuel Cell (PEMFC)
- Figure 2. Proton Exchange Membrane Fuel Cell (PEMFC) Report Years Considered
- Figure 3. Research Objectives
- Figure 4. Research Methodology
- Figure 5. Research Process and Data Source
- Figure 6. Global Proton Exchange Membrane Fuel Cell (PEMFC) Sales Growth Rate 2018-2029 (K Units)
- Figure 7. Global Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Growth Rate 2018-2029 (\$ Millions)
- Figure 8. Proton Exchange Membrane Fuel Cell (PEMFC) Sales by Region (2018, 2022 & 2029) & (\$ Millions)
- Figure 9. Product Picture of 50 KW
- Figure 10. Product Picture of 75 KW
- Figure 11. Product Picture of Others
- Figure 12. Global Proton Exchange Membrane Fuel Cell (PEMFC) Sales Market Share by Type in 2022
- Figure 13. Global Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Market Share by Type (2018-2023)
- Figure 14. Proton Exchange Membrane Fuel Cell (PEMFC) Consumed in Stationary
- Figure 15. Global Proton Exchange Membrane Fuel Cell (PEMFC) Market: Stationary (2018-2023) & (K Units)
- Figure 16. Proton Exchange Membrane Fuel Cell (PEMFC) Consumed in Transportation
- Figure 17. Global Proton Exchange Membrane Fuel Cell (PEMFC) Market:
- Transportation (2018-2023) & (K Units)
- Figure 18. Proton Exchange Membrane Fuel Cell (PEMFC) Consumed in Portable
- Figure 19. Global Proton Exchange Membrane Fuel Cell (PEMFC) Market: Portable (2018-2023) & (K Units)
- Figure 20. Global Proton Exchange Membrane Fuel Cell (PEMFC) Sales Market Share by Application (2022)
- Figure 21. Global Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Market Share by Application in 2022
- Figure 22. Proton Exchange Membrane Fuel Cell (PEMFC) Sales Market by Company in 2022 (K Units)
- Figure 23. Global Proton Exchange Membrane Fuel Cell (PEMFC) Sales Market Share



by Company in 2022

Figure 24. Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Market by Company in 2022 (\$ Million)

Figure 25. Global Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Market Share by Company in 2022

Figure 26. Global Proton Exchange Membrane Fuel Cell (PEMFC) Sales Market Share by Geographic Region (2018-2023)

Figure 27. Global Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Market Share by Geographic Region in 2022

Figure 28. Americas Proton Exchange Membrane Fuel Cell (PEMFC) Sales 2018-2023 (K Units)

Figure 29. Americas Proton Exchange Membrane Fuel Cell (PEMFC) Revenue 2018-2023 (\$ Millions)

Figure 30. APAC Proton Exchange Membrane Fuel Cell (PEMFC) Sales 2018-2023 (K Units)

Figure 31. APAC Proton Exchange Membrane Fuel Cell (PEMFC) Revenue 2018-2023 (\$ Millions)

Figure 32. Europe Proton Exchange Membrane Fuel Cell (PEMFC) Sales 2018-2023 (K Units)

Figure 33. Europe Proton Exchange Membrane Fuel Cell (PEMFC) Revenue 2018-2023 (\$ Millions)

Figure 34. Middle East & Africa Proton Exchange Membrane Fuel Cell (PEMFC) Sales 2018-2023 (K Units)

Figure 35. Middle East & Africa Proton Exchange Membrane Fuel Cell (PEMFC) Revenue 2018-2023 (\$ Millions)

Figure 36. Americas Proton Exchange Membrane Fuel Cell (PEMFC) Sales Market Share by Country in 2022

Figure 37. Americas Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Market Share by Country in 2022

Figure 38. Americas Proton Exchange Membrane Fuel Cell (PEMFC) Sales Market Share by Type (2018-2023)

Figure 39. Americas Proton Exchange Membrane Fuel Cell (PEMFC) Sales Market Share by Application (2018-2023)

Figure 40. United States Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Growth 2018-2023 (\$ Millions)

Figure 41. Canada Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Growth 2018-2023 (\$ Millions)

Figure 42. Mexico Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Growth 2018-2023 (\$ Millions)



Figure 43. Brazil Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Growth 2018-2023 (\$ Millions)

Figure 44. APAC Proton Exchange Membrane Fuel Cell (PEMFC) Sales Market Share by Region in 2022

Figure 45. APAC Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Market Share by Regions in 2022

Figure 46. APAC Proton Exchange Membrane Fuel Cell (PEMFC) Sales Market Share by Type (2018-2023)

Figure 47. APAC Proton Exchange Membrane Fuel Cell (PEMFC) Sales Market Share by Application (2018-2023)

Figure 48. China Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Growth 2018-2023 (\$ Millions)

Figure 49. Japan Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Growth 2018-2023 (\$ Millions)

Figure 50. South Korea Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Growth 2018-2023 (\$ Millions)

Figure 51. Southeast Asia Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Growth 2018-2023 (\$ Millions)

Figure 52. India Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Growth 2018-2023 (\$ Millions)

Figure 53. Australia Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Growth 2018-2023 (\$ Millions)

Figure 54. China Taiwan Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Growth 2018-2023 (\$ Millions)

Figure 55. Europe Proton Exchange Membrane Fuel Cell (PEMFC) Sales Market Share by Country in 2022

Figure 56. Europe Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Market Share by Country in 2022

Figure 57. Europe Proton Exchange Membrane Fuel Cell (PEMFC) Sales Market Share by Type (2018-2023)

Figure 58. Europe Proton Exchange Membrane Fuel Cell (PEMFC) Sales Market Share by Application (2018-2023)

Figure 59. Germany Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Growth 2018-2023 (\$ Millions)

Figure 60. France Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Growth 2018-2023 (\$ Millions)

Figure 61. UK Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Growth 2018-2023 (\$ Millions)

Figure 62. Italy Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Growth



2018-2023 (\$ Millions)

Figure 63. Russia Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Growth 2018-2023 (\$ Millions)

Figure 64. Middle East & Africa Proton Exchange Membrane Fuel Cell (PEMFC) Sales Market Share by Country in 2022

Figure 65. Middle East & Africa Proton Exchange Membrane Fuel Cell (PEMFC)

Revenue Market Share by Country in 2022

Figure 66. Middle East & Africa Proton Exchange Membrane Fuel Cell (PEMFC) Sales Market Share by Type (2018-2023)

Figure 67. Middle East & Africa Proton Exchange Membrane Fuel Cell (PEMFC) Sales Market Share by Application (2018-2023)

Figure 68. Egypt Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Growth 2018-2023 (\$ Millions)

Figure 69. South Africa Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Growth 2018-2023 (\$ Millions)

Figure 70. Israel Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Growth 2018-2023 (\$ Millions)

Figure 71. Turkey Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Growth 2018-2023 (\$ Millions)

Figure 72. GCC Country Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Growth 2018-2023 (\$ Millions)

Figure 73. Manufacturing Cost Structure Analysis of Proton Exchange Membrane Fuel Cell (PEMFC) in 2022

Figure 74. Manufacturing Process Analysis of Proton Exchange Membrane Fuel Cell (PEMFC)

Figure 75. Industry Chain Structure of Proton Exchange Membrane Fuel Cell (PEMFC)

Figure 76. Channels of Distribution

Figure 77. Global Proton Exchange Membrane Fuel Cell (PEMFC) Sales Market Forecast by Region (2024-2029)

Figure 78. Global Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Market Share Forecast by Region (2024-2029)

Figure 79. Global Proton Exchange Membrane Fuel Cell (PEMFC) Sales Market Share Forecast by Type (2024-2029)

Figure 80. Global Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Market Share Forecast by Type (2024-2029)

Figure 81. Global Proton Exchange Membrane Fuel Cell (PEMFC) Sales Market Share Forecast by Application (2024-2029)

Figure 82. Global Proton Exchange Membrane Fuel Cell (PEMFC) Revenue Market Share Forecast by Application (2024-2029)



#### I would like to order

Product name: Global Proton Exchange Membrane Fuel Cell (PEMFC) Market Growth 2023-2029

Product link: https://marketpublishers.com/r/G2FF54DD45D8EN.html

Price: US\$ 3,660.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer

Service:

info@marketpublishers.com

## **Payment**

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <a href="https://marketpublishers.com/r/G2FF54DD45D8EN.html">https://marketpublishers.com/r/G2FF54DD45D8EN.html</a>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:	
Last name:	
Email:	
Company:	
Address:	
City:	
Zip code:	
Country:	
Tel:	
Fax:	
Your message:	
	**All fields are required
	Custumer signature

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <a href="https://marketpublishers.com/docs/terms.html">https://marketpublishers.com/docs/terms.html</a>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970