

# Global PEM Fuel Cell Membrane Electrode Assembly Supply, Demand and Key Producers, 2026-2032

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## Abstracts

The global PEM Fuel Cell Membrane Electrode Assembly market size is expected to reach \$ 226 million by 2032, rising at a market growth of 9.2% CAGR during the forecast period (2026-2032).

The PEM Fuel Cell Membrane Electrode Assembly serves as the core component of proton exchange membrane fuel cells, integrating a proton-selective membrane with electrocatalytically active electrodes to facilitate the efficient electrochemical conversion of hydrogen and oxygen into electrical energy. The MEA design ensures minimal energy losses due to ohmic and polarization resistances, enabling high power densities and stable operation under a wide range of operating conditions, while maintaining a compact and lightweight form factor suitable for various applications. In 2025, global PEM Fuel Cell Membrane Electrode Assembly production reached approximately 383.2 k sqm with an average global market price of around US\$500 per sqm.

The PEM Fuel Cell Membrane Electrode Assembly industry is experiencing a period of robust growth, driven by the expanding application of PEM fuel cells in sectors such as automotive, portable power, and stationary energy. The increasing demand for these fuel cells is creating new revenue opportunities for MEA manufacturers. Technological advancements aimed at improving the performance and durability of fuel cells, such as enhancements in catalyst layer materials, proton exchange membranes, and bipolar plates, are enhancing the profitability of MEA suppliers. Efforts to reduce costs through optimized manufacturing processes, scaled-up production, and the exploration of alternative materials are critical for maintaining competitiveness. The integration of MEA production into global supply chains, along with supportive policies from governments and private entities, is creating favorable market conditions. Additionally, the alignment with renewable energy trends and collaborative endeavors within the industry are

further bolstering the profit potential for MEA manufacturers. Overall, the PEM Fuel Cell Membrane Electrode Assembly industry is in a phase of dynamic expansion, brimming with opportunities.

This report studies the global PEM Fuel Cell Membrane Electrode Assembly production, demand, key manufacturers, and key regions.

This report is a detailed and comprehensive analysis of the world market for PEM Fuel Cell Membrane Electrode Assembly and provides market size (US\$ million) and Year-over-Year (YoY) Growth, considering 2025 as the base year. This report explores demand trends and competition, as well as details the characteristics of PEM Fuel Cell Membrane Electrode Assembly that contribute to its increasing demand across many markets.

### **Highlights and key features of the study**

Global PEM Fuel Cell Membrane Electrode Assembly total production and demand, 2021-2032, (K Sqm)

Global PEM Fuel Cell Membrane Electrode Assembly total production value, 2021-2032, (USD Million)

Global PEM Fuel Cell Membrane Electrode Assembly production by region & country, production, value, CAGR, 2021-2032, (USD Million) & (K Sqm), (based on production site)

Global PEM Fuel Cell Membrane Electrode Assembly consumption by region & country, CAGR, 2021-2032 & (K Sqm)

U.S. VS China: PEM Fuel Cell Membrane Electrode Assembly domestic production, consumption, key domestic manufacturers and share

Global PEM Fuel Cell Membrane Electrode Assembly production by manufacturer, production, price, value and market share 2021-2026, (USD Million) & (K Sqm)

Global PEM Fuel Cell Membrane Electrode Assembly production by Type, production, value, CAGR, 2021-2032, (USD Million) & (K Sqm)

Global PEM Fuel Cell Membrane Electrode Assembly production by Application, production, value, CAGR, 2021-2032, (USD Million) & (K Sqm)

This report profiles key players in the global PEM Fuel Cell Membrane Electrode Assembly market based on the following parameters - company overview, production, value, price, gross margin, product portfolio, geographical presence, and key developments. Key companies covered as a part of this study include Greenerity, Hyundai Mobis, Johnson Matthey, Gore, Toyota, IRD Fuel Cells, Giner, HyPlat, Advent Technologies, Chromis Technologies, etc.

This report also provides key insights about market drivers, restraints, opportunities, new product launches or approvals.

Stakeholders would have ease in decision-making through various strategy matrices used in analyzing the World PEM Fuel Cell Membrane Electrode Assembly market

### **Detailed Segmentation:**

Each section contains quantitative market data including market by value (US\$ Millions), volume (production, consumption) & (K Sqm) and average price (US\$/Sq m) by manufacturer, by Type, and by Application. Data is given for the years 2021-2032 by year with 2025 as the base year, 2026 as the estimate year, and 2027-2032 as the forecast year.

### Global PEM Fuel Cell Membrane Electrode Assembly Market, By Region:

United States

China

Europe

Japan

South Korea

ASEAN

India

Rest of World

### Global PEM Fuel Cell Membrane Electrode Assembly Market, Segmentation by Type:

Hot-Press Approach Membrane Electrode

CCM 3-in-1 Membrane Electrode

## Ordering Membrane Electrode

Global PEM Fuel Cell Membrane Electrode Assembly Market, Segmentation by Catalyst Type:

Platinum-based Catalyst MEA

Others

Global PEM Fuel Cell Membrane Electrode Assembly Market, Segmentation by Proton Exchange Membrane:

PFSA Membrane MEA

Nafion-based MEA

Composite Proton Membrane MEA

Others

Global PEM Fuel Cell Membrane Electrode Assembly Market, Segmentation by Application:

PEMFC

SOFC

PAFC

Others

Companies Profiled:

Greenerity

Hyundai Mobis

Johnson Matthey

Gore

Toyota

IRD Fuel Cells

Giner

HyPlat

Advent Technologies

Chromis Technologies

Ballard

Hongji Chuangneng Technology (Guangzhou)

Shanghai Tangfeng Energy Technology

Suzhou Hydrogine Technology

Wuhan WUT HyPower Technology

### **Key Questions Answered:**

1. How big is the global PEM Fuel Cell Membrane Electrode Assembly market?
2. What is the demand of the global PEM Fuel Cell Membrane Electrode Assembly market?
3. What is the year over year growth of the global PEM Fuel Cell Membrane Electrode Assembly market?
4. What is the production and production value of the global PEM Fuel Cell Membrane Electrode Assembly market?
5. Who are the key producers in the global PEM Fuel Cell Membrane Electrode

Assembly market?

6. What are the growth factors driving the market demand?

## Contents

### 1 SUPPLY SUMMARY

- 1.1 PEM Fuel Cell Membrane Electrode Assembly Introduction
- 1.2 World PEM Fuel Cell Membrane Electrode Assembly Supply & Forecast
  - 1.2.1 World PEM Fuel Cell Membrane Electrode Assembly Production Value (2021 & 2025 & 2032)
  - 1.2.2 World PEM Fuel Cell Membrane Electrode Assembly Production (2021-2032)
  - 1.2.3 World PEM Fuel Cell Membrane Electrode Assembly Pricing Trends (2021-2032)
- 1.3 World PEM Fuel Cell Membrane Electrode Assembly Production by Region (Based on Production Site)
  - 1.3.1 World PEM Fuel Cell Membrane Electrode Assembly Production Value by Region (2021-2032)
  - 1.3.2 World PEM Fuel Cell Membrane Electrode Assembly Production by Region (2021-2032)
  - 1.3.3 World PEM Fuel Cell Membrane Electrode Assembly Average Price by Region (2021-2032)
  - 1.3.4 North America PEM Fuel Cell Membrane Electrode Assembly Production (2021-2032)
  - 1.3.5 Europe PEM Fuel Cell Membrane Electrode Assembly Production (2021-2032)
  - 1.3.6 China PEM Fuel Cell Membrane Electrode Assembly Production (2021-2032)
  - 1.3.7 Japan PEM Fuel Cell Membrane Electrode Assembly Production (2021-2032)
- 1.4 Market Drivers, Restraints and Trends
  - 1.4.1 PEM Fuel Cell Membrane Electrode Assembly Market Drivers
  - 1.4.2 Factors Affecting Demand
  - 1.4.3 PEM Fuel Cell Membrane Electrode Assembly Major Market Trends

### 2 DEMAND SUMMARY

- 2.1 World PEM Fuel Cell Membrane Electrode Assembly Demand (2021-2032)
- 2.2 World PEM Fuel Cell Membrane Electrode Assembly Consumption by Region
  - 2.2.1 World PEM Fuel Cell Membrane Electrode Assembly Consumption by Region (2021-2026)
  - 2.2.2 World PEM Fuel Cell Membrane Electrode Assembly Consumption Forecast by Region (2027-2032)
- 2.3 United States PEM Fuel Cell Membrane Electrode Assembly Consumption (2021-2032)
- 2.4 China PEM Fuel Cell Membrane Electrode Assembly Consumption (2021-2032)

- 2.5 Europe PEM Fuel Cell Membrane Electrode Assembly Consumption (2021-2032)
- 2.6 Japan PEM Fuel Cell Membrane Electrode Assembly Consumption (2021-2032)
- 2.7 South Korea PEM Fuel Cell Membrane Electrode Assembly Consumption (2021-2032)
- 2.8 ASEAN PEM Fuel Cell Membrane Electrode Assembly Consumption (2021-2032)
- 2.9 India PEM Fuel Cell Membrane Electrode Assembly Consumption (2021-2032)

### **3 WORLD MANUFACTURERS COMPETITIVE ANALYSIS**

- 3.1 World PEM Fuel Cell Membrane Electrode Assembly Production Value by Manufacturer (2021-2026)
- 3.2 World PEM Fuel Cell Membrane Electrode Assembly Production by Manufacturer (2021-2026)
- 3.3 World PEM Fuel Cell Membrane Electrode Assembly Average Price by Manufacturer (2021-2026)
- 3.4 PEM Fuel Cell Membrane Electrode Assembly Company Evaluation Quadrant
- 3.5 Industry Rank and Concentration Rate (CR)
  - 3.5.1 Global PEM Fuel Cell Membrane Electrode Assembly Industry Rank of Major Manufacturers
  - 3.5.2 Global Concentration Ratios (CR4) for PEM Fuel Cell Membrane Electrode Assembly in 2025
  - 3.5.3 Global Concentration Ratios (CR8) for PEM Fuel Cell Membrane Electrode Assembly in 2025
- 3.6 PEM Fuel Cell Membrane Electrode Assembly Market: Overall Company Footprint Analysis
  - 3.6.1 PEM Fuel Cell Membrane Electrode Assembly Market: Region Footprint
  - 3.6.2 PEM Fuel Cell Membrane Electrode Assembly Market: Company Product Type Footprint
  - 3.6.3 PEM Fuel Cell Membrane Electrode Assembly Market: Company Product Application Footprint
- 3.7 Competitive Environment
  - 3.7.1 Historical Structure of the Industry
  - 3.7.2 Barriers of Market Entry
  - 3.7.3 Factors of Competition
- 3.8 New Entrant and Capacity Expansion Plans
- 3.9 Mergers, Acquisition, Agreements, and Collaborations

### **4 UNITED STATES VS CHINA VS REST OF THE WORLD**

#### 4.1 United States VS China: PEM Fuel Cell Membrane Electrode Assembly Production Value Comparison

4.1.1 United States VS China: PEM Fuel Cell Membrane Electrode Assembly Production Value Comparison (2021 & 2025 & 2032)

4.1.2 United States VS China: PEM Fuel Cell Membrane Electrode Assembly Production Value Market Share Comparison (2021 & 2025 & 2032)

#### 4.2 United States VS China: PEM Fuel Cell Membrane Electrode Assembly Production Comparison

4.2.1 United States VS China: PEM Fuel Cell Membrane Electrode Assembly Production Comparison (2021 & 2025 & 2032)

4.2.2 United States VS China: PEM Fuel Cell Membrane Electrode Assembly Production Market Share Comparison (2021 & 2025 & 2032)

#### 4.3 United States VS China: PEM Fuel Cell Membrane Electrode Assembly Consumption Comparison

4.3.1 United States VS China: PEM Fuel Cell Membrane Electrode Assembly Consumption Comparison (2021 & 2025 & 2032)

4.3.2 United States VS China: PEM Fuel Cell Membrane Electrode Assembly Consumption Market Share Comparison (2021 & 2025 & 2032)

#### 4.4 United States Based PEM Fuel Cell Membrane Electrode Assembly Manufacturers and Market Share, 2021-2026

4.4.1 United States Based PEM Fuel Cell Membrane Electrode Assembly Manufacturers, Headquarters and Production Site (States, Country)

4.4.2 United States Based Manufacturers PEM Fuel Cell Membrane Electrode Assembly Production Value (2021-2026)

4.4.3 United States Based Manufacturers PEM Fuel Cell Membrane Electrode Assembly Production (2021-2026)

#### 4.5 China Based PEM Fuel Cell Membrane Electrode Assembly Manufacturers and Market Share

4.5.1 China Based PEM Fuel Cell Membrane Electrode Assembly Manufacturers, Headquarters and Production Site (Province, Country)

4.5.2 China Based Manufacturers PEM Fuel Cell Membrane Electrode Assembly Production Value (2021-2026)

4.5.3 China Based Manufacturers PEM Fuel Cell Membrane Electrode Assembly Production (2021-2026)

#### 4.6 Rest of World Based PEM Fuel Cell Membrane Electrode Assembly Manufacturers and Market Share, 2021-2026

4.6.1 Rest of World Based PEM Fuel Cell Membrane Electrode Assembly Manufacturers, Headquarters and Production Site (State, Country)

4.6.2 Rest of World Based Manufacturers PEM Fuel Cell Membrane Electrode

Assembly Production Value (2021-2026)

4.6.3 Rest of World Based Manufacturers PEM Fuel Cell Membrane Electrode Assembly Production (2021-2026)

## **5 MARKET ANALYSIS BY TYPE**

5.1 World PEM Fuel Cell Membrane Electrode Assembly Market Size Overview by Type: 2021 VS 2025 VS 2032

5.2 Segment Introduction by Type

5.2.1 Hot-Press Approach Membrane Electrode

5.2.2 CCM 3-in-1 Membrane Electrode

5.2.3 Ordering Membrane Electrode

5.3 Market Segment by Type

5.3.1 World PEM Fuel Cell Membrane Electrode Assembly Production by Type (2021-2032)

5.3.2 World PEM Fuel Cell Membrane Electrode Assembly Production Value by Type (2021-2032)

5.3.3 World PEM Fuel Cell Membrane Electrode Assembly Average Price by Type (2021-2032)

## **6 MARKET ANALYSIS BY CATALYST TYPE**

6.1 World PEM Fuel Cell Membrane Electrode Assembly Market Size Overview by Catalyst Type: 2021 VS 2025 VS 2032

6.2 Segment Introduction by Catalyst Type

6.2.1 Platinum-based Catalyst MEA

6.2.2 Others

6.3 Market Segment by Catalyst Type

6.3.1 World PEM Fuel Cell Membrane Electrode Assembly Production by Catalyst Type (2021-2032)

6.3.2 World PEM Fuel Cell Membrane Electrode Assembly Production Value by Catalyst Type (2021-2032)

6.3.3 World PEM Fuel Cell Membrane Electrode Assembly Average Price by Catalyst Type (2021-2032)

## **7 MARKET ANALYSIS BY PROTON EXCHANGE MEMBRANE**

7.1 World PEM Fuel Cell Membrane Electrode Assembly Market Size Overview by Proton Exchange Membrane: 2021 VS 2025 VS 2032

## 7.2 Segment Introduction by Proton Exchange Membrane

7.2.1 PFSA Membrane MEA

7.2.2 Nafion-based MEA

7.2.3 Composite Proton Membrane MEA

7.2.4 Others

## 7.3 Market Segment by Proton Exchange Membrane

7.3.1 World PEM Fuel Cell Membrane Electrode Assembly Production by Proton Exchange Membrane (2021-2032)

7.3.2 World PEM Fuel Cell Membrane Electrode Assembly Production Value by Proton Exchange Membrane (2021-2032)

7.3.3 World PEM Fuel Cell Membrane Electrode Assembly Average Price by Proton Exchange Membrane (2021-2032)

## 8 MARKET ANALYSIS BY APPLICATION

8.1 World PEM Fuel Cell Membrane Electrode Assembly Market Size Overview by Application: 2021 VS 2025 VS 2032

### 8.2 Segment Introduction by Application

8.2.1 PEMFC

8.2.2 SOFC

8.2.3 PAFC

8.2.4 Others

### 8.3 Market Segment by Application

8.3.1 World PEM Fuel Cell Membrane Electrode Assembly Production by Application (2021-2032)

8.3.2 World PEM Fuel Cell Membrane Electrode Assembly Production Value by Application (2021-2032)

8.3.3 World PEM Fuel Cell Membrane Electrode Assembly Average Price by Application (2021-2032)

## 9 COMPANY PROFILES

### 9.1 Greenerity

9.1.1 Greenerity Details

9.1.2 Greenerity Major Business

9.1.3 Greenerity PEM Fuel Cell Membrane Electrode Assembly Product and Services

9.1.4 Greenerity PEM Fuel Cell Membrane Electrode Assembly Production, Price, Value, Gross Margin and Market Share (2021-2026)

9.1.5 Greenerity Recent Developments/Updates

- 9.1.6 Greenerity Competitive Strengths & Weaknesses
- 9.2 Hyundai Mobis
  - 9.2.1 Hyundai Mobis Details
  - 9.2.2 Hyundai Mobis Major Business
  - 9.2.3 Hyundai Mobis PEM Fuel Cell Membrane Electrode Assembly Product and Services
  - 9.2.4 Hyundai Mobis PEM Fuel Cell Membrane Electrode Assembly Production, Price, Value, Gross Margin and Market Share (2021-2026)
  - 9.2.5 Hyundai Mobis Recent Developments/Updates
  - 9.2.6 Hyundai Mobis Competitive Strengths & Weaknesses
- 9.3 Johnson Matthey
  - 9.3.1 Johnson Matthey Details
  - 9.3.2 Johnson Matthey Major Business
  - 9.3.3 Johnson Matthey PEM Fuel Cell Membrane Electrode Assembly Product and Services
  - 9.3.4 Johnson Matthey PEM Fuel Cell Membrane Electrode Assembly Production, Price, Value, Gross Margin and Market Share (2021-2026)
  - 9.3.5 Johnson Matthey Recent Developments/Updates
  - 9.3.6 Johnson Matthey Competitive Strengths & Weaknesses
- 9.4 Gore
  - 9.4.1 Gore Details
  - 9.4.2 Gore Major Business
  - 9.4.3 Gore PEM Fuel Cell Membrane Electrode Assembly Product and Services
  - 9.4.4 Gore PEM Fuel Cell Membrane Electrode Assembly Production, Price, Value, Gross Margin and Market Share (2021-2026)
  - 9.4.5 Gore Recent Developments/Updates
  - 9.4.6 Gore Competitive Strengths & Weaknesses
- 9.5 Toyota
  - 9.5.1 Toyota Details
  - 9.5.2 Toyota Major Business
  - 9.5.3 Toyota PEM Fuel Cell Membrane Electrode Assembly Product and Services
  - 9.5.4 Toyota PEM Fuel Cell Membrane Electrode Assembly Production, Price, Value, Gross Margin and Market Share (2021-2026)
  - 9.5.5 Toyota Recent Developments/Updates
  - 9.5.6 Toyota Competitive Strengths & Weaknesses
- 9.6 IRD Fuel Cells
  - 9.6.1 IRD Fuel Cells Details
  - 9.6.2 IRD Fuel Cells Major Business
  - 9.6.3 IRD Fuel Cells PEM Fuel Cell Membrane Electrode Assembly Product and

## Services

9.6.4 IRD Fuel Cells PEM Fuel Cell Membrane Electrode Assembly Production, Price, Value, Gross Margin and Market Share (2021-2026)

9.6.5 IRD Fuel Cells Recent Developments/Updates

9.6.6 IRD Fuel Cells Competitive Strengths & Weaknesses

## 9.7 Giner

9.7.1 Giner Details

9.7.2 Giner Major Business

9.7.3 Giner PEM Fuel Cell Membrane Electrode Assembly Product and Services

9.7.4 Giner PEM Fuel Cell Membrane Electrode Assembly Production, Price, Value, Gross Margin and Market Share (2021-2026)

9.7.5 Giner Recent Developments/Updates

9.7.6 Giner Competitive Strengths & Weaknesses

## 9.8 HyPlat

9.8.1 HyPlat Details

9.8.2 HyPlat Major Business

9.8.3 HyPlat PEM Fuel Cell Membrane Electrode Assembly Product and Services

9.8.4 HyPlat PEM Fuel Cell Membrane Electrode Assembly Production, Price, Value, Gross Margin and Market Share (2021-2026)

9.8.5 HyPlat Recent Developments/Updates

9.8.6 HyPlat Competitive Strengths & Weaknesses

## 9.9 Advent Technologies

9.9.1 Advent Technologies Details

9.9.2 Advent Technologies Major Business

9.9.3 Advent Technologies PEM Fuel Cell Membrane Electrode Assembly Product and Services

9.9.4 Advent Technologies PEM Fuel Cell Membrane Electrode Assembly Production, Price, Value, Gross Margin and Market Share (2021-2026)

9.9.5 Advent Technologies Recent Developments/Updates

9.9.6 Advent Technologies Competitive Strengths & Weaknesses

## 9.10 Chromis Technologies

9.10.1 Chromis Technologies Details

9.10.2 Chromis Technologies Major Business

9.10.3 Chromis Technologies PEM Fuel Cell Membrane Electrode Assembly Product and Services

9.10.4 Chromis Technologies PEM Fuel Cell Membrane Electrode Assembly Production, Price, Value, Gross Margin and Market Share (2021-2026)

9.10.5 Chromis Technologies Recent Developments/Updates

9.10.6 Chromis Technologies Competitive Strengths & Weaknesses

## 9.11 Ballard

### 9.11.1 Ballard Details

### 9.11.2 Ballard Major Business

### 9.11.3 Ballard PEM Fuel Cell Membrane Electrode Assembly Product and Services

### 9.11.4 Ballard PEM Fuel Cell Membrane Electrode Assembly Production, Price, Value, Gross Margin and Market Share (2021-2026)

### 9.11.5 Ballard Recent Developments/Updates

### 9.11.6 Ballard Competitive Strengths & Weaknesses

## 9.12 Hongji Chuangneng Technology (Guangzhou)

### 9.12.1 Hongji Chuangneng Technology (Guangzhou) Details

### 9.12.2 Hongji Chuangneng Technology (Guangzhou) Major Business

### 9.12.3 Hongji Chuangneng Technology (Guangzhou) PEM Fuel Cell Membrane Electrode Assembly Product and Services

### 9.12.4 Hongji Chuangneng Technology (Guangzhou) PEM Fuel Cell Membrane Electrode Assembly Production, Price, Value, Gross Margin and Market Share (2021-2026)

### 9.12.5 Hongji Chuangneng Technology (Guangzhou) Recent Developments/Updates

### 9.12.6 Hongji Chuangneng Technology (Guangzhou) Competitive Strengths & Weaknesses

## 9.13 Shanghai Tangfeng Energy Technology

### 9.13.1 Shanghai Tangfeng Energy Technology Details

### 9.13.2 Shanghai Tangfeng Energy Technology Major Business

### 9.13.3 Shanghai Tangfeng Energy Technology PEM Fuel Cell Membrane Electrode Assembly Product and Services

### 9.13.4 Shanghai Tangfeng Energy Technology PEM Fuel Cell Membrane Electrode Assembly Production, Price, Value, Gross Margin and Market Share (2021-2026)

### 9.13.5 Shanghai Tangfeng Energy Technology Recent Developments/Updates

### 9.13.6 Shanghai Tangfeng Energy Technology Competitive Strengths & Weaknesses

## 9.14 Suzhou Hydrogine Technology

### 9.14.1 Suzhou Hydrogine Technology Details

### 9.14.2 Suzhou Hydrogine Technology Major Business

### 9.14.3 Suzhou Hydrogine Technology PEM Fuel Cell Membrane Electrode Assembly Product and Services

### 9.14.4 Suzhou Hydrogine Technology PEM Fuel Cell Membrane Electrode Assembly Production, Price, Value, Gross Margin and Market Share (2021-2026)

### 9.14.5 Suzhou Hydrogine Technology Recent Developments/Updates

### 9.14.6 Suzhou Hydrogine Technology Competitive Strengths & Weaknesses

## 9.15 Wuhan WUT HyPower Technology

### 9.15.1 Wuhan WUT HyPower Technology Details

- 9.15.2 Wuhan WUT HyPower Technology Major Business
- 9.15.3 Wuhan WUT HyPower Technology PEM Fuel Cell Membrane Electrode Assembly Product and Services
- 9.15.4 Wuhan WUT HyPower Technology PEM Fuel Cell Membrane Electrode Assembly Production, Price, Value, Gross Margin and Market Share (2021-2026)
- 9.15.5 Wuhan WUT HyPower Technology Recent Developments/Updates
- 9.15.6 Wuhan WUT HyPower Technology Competitive Strengths & Weaknesses

## **10 INDUSTRY CHAIN ANALYSIS**

- 10.1 PEM Fuel Cell Membrane Electrode Assembly Industry Chain
- 10.2 PEM Fuel Cell Membrane Electrode Assembly Upstream Analysis
  - 10.2.1 PEM Fuel Cell Membrane Electrode Assembly Core Raw Materials
  - 10.2.2 Main Manufacturers of PEM Fuel Cell Membrane Electrode Assembly Core Raw Materials
- 10.3 Midstream Analysis
- 10.4 Downstream Analysis
- 10.5 PEM Fuel Cell Membrane Electrode Assembly Production Mode
- 10.6 PEM Fuel Cell Membrane Electrode Assembly Procurement Model
- 10.7 PEM Fuel Cell Membrane Electrode Assembly Industry Sales Model and Sales Channels
  - 10.7.1 PEM Fuel Cell Membrane Electrode Assembly Sales Model
  - 10.7.2 PEM Fuel Cell Membrane Electrode Assembly Typical Distributors

## **11 RESEARCH FINDINGS AND CONCLUSION**

## **12 APPENDIX**

- 12.1 Methodology
- 12.2 Research Process and Data Source
- 12.3 Disclaimer

## List Of Tables

### LIST OF TABLES

Table 1. World PEM Fuel Cell Membrane Electrode Assembly Production Value by Region (2021, 2025 and 2032) & (USD Million)

Table 2. World PEM Fuel Cell Membrane Electrode Assembly Production Value by Region (2021-2026) & (USD Million)

Table 3. World PEM Fuel Cell Membrane Electrode Assembly Production Value by Region (2027-2032) & (USD Million)

Table 4. World PEM Fuel Cell Membrane Electrode Assembly Production Value Market Share by Region (2021-2026)

Table 5. World PEM Fuel Cell Membrane Electrode Assembly Production Value Market Share by Region (2027-2032)

Table 6. World PEM Fuel Cell Membrane Electrode Assembly Production by Region (2021-2026) & (K Sqm)

Table 7. World PEM Fuel Cell Membrane Electrode Assembly Production by Region (2027-2032) & (K Sqm)

Table 8. World PEM Fuel Cell Membrane Electrode Assembly Production Market Share by Region (2021-2026)

Table 9. World PEM Fuel Cell Membrane Electrode Assembly Production Market Share by Region (2027-2032)

Table 10. World PEM Fuel Cell Membrane Electrode Assembly Average Price by Region (2021-2026) & (US\$/Sq m)

Table 11. World PEM Fuel Cell Membrane Electrode Assembly Average Price by Region (2027-2032) & (US\$/Sq m)

Table 12. PEM Fuel Cell Membrane Electrode Assembly Major Market Trends

Table 13. World PEM Fuel Cell Membrane Electrode Assembly Consumption Growth Rate Forecast by Region (2021 & 2025 & 2032) & (K Sqm)

Table 14. World PEM Fuel Cell Membrane Electrode Assembly Consumption by Region (2021-2026) & (K Sqm)

Table 15. World PEM Fuel Cell Membrane Electrode Assembly Consumption Forecast by Region (2027-2032) & (K Sqm)

Table 16. World PEM Fuel Cell Membrane Electrode Assembly Production Value by Manufacturer (2021-2026) & (USD Million)

Table 17. Production Value Market Share of Key PEM Fuel Cell Membrane Electrode Assembly Producers in 2025

Table 18. World PEM Fuel Cell Membrane Electrode Assembly Production by Manufacturer (2021-2026) & (K Sqm)

- Table 19. Production Market Share of Key PEM Fuel Cell Membrane Electrode Assembly Producers in 2025
- Table 20. World PEM Fuel Cell Membrane Electrode Assembly Average Price by Manufacturer (2021-2026) & (US\$/Sq m)
- Table 21. Global PEM Fuel Cell Membrane Electrode Assembly Company Evaluation Quadrant
- Table 22. World PEM Fuel Cell Membrane Electrode Assembly Industry Rank of Major Manufacturers, Based on Production Value in 2025
- Table 23. Head Office and PEM Fuel Cell Membrane Electrode Assembly Production Site of Key Manufacturer
- Table 24. PEM Fuel Cell Membrane Electrode Assembly Market: Company Product Type Footprint
- Table 25. PEM Fuel Cell Membrane Electrode Assembly Market: Company Product Application Footprint
- Table 26. PEM Fuel Cell Membrane Electrode Assembly Competitive Factors
- Table 27. PEM Fuel Cell Membrane Electrode Assembly New Entrant and Capacity Expansion Plans
- Table 28. PEM Fuel Cell Membrane Electrode Assembly Mergers & Acquisitions Activity
- Table 29. United States VS China PEM Fuel Cell Membrane Electrode Assembly Production Value Comparison, (2021 & 2025 & 2032) & (USD Million)
- Table 30. United States VS China PEM Fuel Cell Membrane Electrode Assembly Production Comparison, (2021 & 2025 & 2032) & (K Sqm)
- Table 31. United States VS China PEM Fuel Cell Membrane Electrode Assembly Consumption Comparison, (2021 & 2025 & 2032) & (K Sqm)
- Table 32. United States Based PEM Fuel Cell Membrane Electrode Assembly Manufacturers, Headquarters and Production Site (States, Country)
- Table 33. United States Based Manufacturers PEM Fuel Cell Membrane Electrode Assembly Production Value, (2021-2026) & (USD Million)
- Table 34. United States Based Manufacturers PEM Fuel Cell Membrane Electrode Assembly Production Value Market Share (2021-2026)
- Table 35. United States Based Manufacturers PEM Fuel Cell Membrane Electrode Assembly Production (2021-2026) & (K Sqm)
- Table 36. United States Based Manufacturers PEM Fuel Cell Membrane Electrode Assembly Production Market Share (2021-2026)
- Table 37. China Based PEM Fuel Cell Membrane Electrode Assembly Manufacturers, Headquarters and Production Site (Province, Country)
- Table 38. China Based Manufacturers PEM Fuel Cell Membrane Electrode Assembly Production Value, (2021-2026) & (USD Million)
- Table 39. China Based Manufacturers PEM Fuel Cell Membrane Electrode Assembly

Production Value Market Share (2021-2026)

Table 40. China Based Manufacturers PEM Fuel Cell Membrane Electrode Assembly Production, (2021-2026) & (K Sqm)

Table 41. China Based Manufacturers PEM Fuel Cell Membrane Electrode Assembly Production Market Share (2021-2026)

Table 42. Rest of World Based PEM Fuel Cell Membrane Electrode Assembly Manufacturers, Headquarters and Production Site (State, Country)

Table 43. Rest of World Based Manufacturers PEM Fuel Cell Membrane Electrode Assembly Production Value, (2021-2026) & (USD Million)

Table 44. Rest of World Based Manufacturers PEM Fuel Cell Membrane Electrode Assembly Production Value Market Share (2021-2026)

Table 45. Rest of World Based Manufacturers PEM Fuel Cell Membrane Electrode Assembly Production, (2021-2026) & (K Sqm)

Table 46. Rest of World Based Manufacturers PEM Fuel Cell Membrane Electrode Assembly Production Market Share (2021-2026)

Table 47. World PEM Fuel Cell Membrane Electrode Assembly Production Value by Type, (USD Million), 2021 & 2025 & 2032

Table 48. World PEM Fuel Cell Membrane Electrode Assembly Production by Type (2021-2026) & (K Sqm)

Table 49. World PEM Fuel Cell Membrane Electrode Assembly Production by Type (2027-2032) & (K Sqm)

Table 50. World PEM Fuel Cell Membrane Electrode Assembly Production Value by Type (2021-2026) & (USD Million)

Table 51. World PEM Fuel Cell Membrane Electrode Assembly Production Value by Type (2027-2032) & (USD Million)

Table 52. World PEM Fuel Cell Membrane Electrode Assembly Average Price by Type (2021-2026) & (US\$/Sq m)

Table 53. World PEM Fuel Cell Membrane Electrode Assembly Average Price by Type (2027-2032) & (US\$/Sq m)

Table 54. World PEM Fuel Cell Membrane Electrode Assembly Production Value by Catalyst Type, (USD Million), 2021 & 2025 & 2032

Table 55. World PEM Fuel Cell Membrane Electrode Assembly Production by Catalyst Type (2021-2026) & (K Sqm)

Table 56. World PEM Fuel Cell Membrane Electrode Assembly Production by Catalyst Type (2027-2032) & (K Sqm)

Table 57. World PEM Fuel Cell Membrane Electrode Assembly Production Value by Catalyst Type (2021-2026) & (USD Million)

Table 58. World PEM Fuel Cell Membrane Electrode Assembly Production Value by Catalyst Type (2027-2032) & (USD Million)

Table 59. World PEM Fuel Cell Membrane Electrode Assembly Average Price by Catalyst Type (2021-2026) & (US\$/Sq m)

Table 60. World PEM Fuel Cell Membrane Electrode Assembly Average Price by Catalyst Type (2027-2032) & (US\$/Sq m)

Table 61. World PEM Fuel Cell Membrane Electrode Assembly Production Value by Proton Exchange Membrane, (USD Million), 2021 & 2025 & 2032

Table 62. World PEM Fuel Cell Membrane Electrode Assembly Production by Proton Exchange Membrane (2021-2026) & (K Sqm)

Table 63. World PEM Fuel Cell Membrane Electrode Assembly Production by Proton Exchange Membrane (2027-2032) & (K Sqm)

Table 64. World PEM Fuel Cell Membrane Electrode Assembly Production Value by Proton Exchange Membrane (2021-2026) & (USD Million)

Table 65. World PEM Fuel Cell Membrane Electrode Assembly Production Value by Proton Exchange Membrane (2027-2032) & (USD Million)

Table 66. World PEM Fuel Cell Membrane Electrode Assembly Average Price by Proton Exchange Membrane (2021-2026) & (US\$/Sq m)

Table 67. World PEM Fuel Cell Membrane Electrode Assembly Average Price by Proton Exchange Membrane (2027-2032) & (US\$/Sq m)

Table 68. World PEM Fuel Cell Membrane Electrode Assembly Production Value by Application, (USD Million), 2021 & 2025 & 2032

Table 69. World PEM Fuel Cell Membrane Electrode Assembly Production by Application (2021-2026) & (K Sqm)

Table 70. World PEM Fuel Cell Membrane Electrode Assembly Production by Application (2027-2032) & (K Sqm)

Table 71. World PEM Fuel Cell Membrane Electrode Assembly Production Value by Application (2021-2026) & (USD Million)

Table 72. World PEM Fuel Cell Membrane Electrode Assembly Production Value by Application (2027-2032) & (USD Million)

Table 73. World PEM Fuel Cell Membrane Electrode Assembly Average Price by Application (2021-2026) & (US\$/Sq m)

Table 74. World PEM Fuel Cell Membrane Electrode Assembly Average Price by Application (2027-2032) & (US\$/Sq m)

Table 75. Greenerity Basic Information, Manufacturing Base and Competitors

Table 76. Greenerity Major Business

Table 77. Greenerity PEM Fuel Cell Membrane Electrode Assembly Product and Services

Table 78. Greenerity PEM Fuel Cell Membrane Electrode Assembly Production (K Sqm), Price (US\$/Sq m), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

- Table 79. Greenerity Recent Developments/Updates
- Table 80. Greenerity Competitive Strengths & Weaknesses
- Table 81. Hyundai Mobis Basic Information, Manufacturing Base and Competitors
- Table 82. Hyundai Mobis Major Business
- Table 83. Hyundai Mobis PEM Fuel Cell Membrane Electrode Assembly Product and Services
- Table 84. Hyundai Mobis PEM Fuel Cell Membrane Electrode Assembly Production (K Sqm), Price (US\$/Sq m), Production Value (USD Million), Gross Margin and Market Share (2021-2026)
- Table 85. Hyundai Mobis Recent Developments/Updates
- Table 86. Hyundai Mobis Competitive Strengths & Weaknesses
- Table 87. Johnson Matthey Basic Information, Manufacturing Base and Competitors
- Table 88. Johnson Matthey Major Business
- Table 89. Johnson Matthey PEM Fuel Cell Membrane Electrode Assembly Product and Services
- Table 90. Johnson Matthey PEM Fuel Cell Membrane Electrode Assembly Production (K Sqm), Price (US\$/Sq m), Production Value (USD Million), Gross Margin and Market Share (2021-2026)
- Table 91. Johnson Matthey Recent Developments/Updates
- Table 92. Johnson Matthey Competitive Strengths & Weaknesses
- Table 93. Gore Basic Information, Manufacturing Base and Competitors
- Table 94. Gore Major Business
- Table 95. Gore PEM Fuel Cell Membrane Electrode Assembly Product and Services
- Table 96. Gore PEM Fuel Cell Membrane Electrode Assembly Production (K Sqm), Price (US\$/Sq m), Production Value (USD Million), Gross Margin and Market Share (2021-2026)
- Table 97. Gore Recent Developments/Updates
- Table 98. Gore Competitive Strengths & Weaknesses
- Table 99. Toyota Basic Information, Manufacturing Base and Competitors
- Table 100. Toyota Major Business
- Table 101. Toyota PEM Fuel Cell Membrane Electrode Assembly Product and Services
- Table 102. Toyota PEM Fuel Cell Membrane Electrode Assembly Production (K Sqm), Price (US\$/Sq m), Production Value (USD Million), Gross Margin and Market Share (2021-2026)
- Table 103. Toyota Recent Developments/Updates
- Table 104. Toyota Competitive Strengths & Weaknesses
- Table 105. IRD Fuel Cells Basic Information, Manufacturing Base and Competitors
- Table 106. IRD Fuel Cells Major Business
- Table 107. IRD Fuel Cells PEM Fuel Cell Membrane Electrode Assembly Product and

## Services

Table 108. IRD Fuel Cells PEM Fuel Cell Membrane Electrode Assembly Production (K Sqm), Price (US\$/Sq m), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 109. IRD Fuel Cells Recent Developments/Updates

Table 110. IRD Fuel Cells Competitive Strengths & Weaknesses

Table 111. Giner Basic Information, Manufacturing Base and Competitors

Table 112. Giner Major Business

Table 113. Giner PEM Fuel Cell Membrane Electrode Assembly Product and Services

Table 114. Giner PEM Fuel Cell Membrane Electrode Assembly Production (K Sqm), Price (US\$/Sq m), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 115. Giner Recent Developments/Updates

Table 116. Giner Competitive Strengths & Weaknesses

Table 117. HyPlat Basic Information, Manufacturing Base and Competitors

Table 118. HyPlat Major Business

Table 119. HyPlat PEM Fuel Cell Membrane Electrode Assembly Product and Services

Table 120. HyPlat PEM Fuel Cell Membrane Electrode Assembly Production (K Sqm), Price (US\$/Sq m), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 121. HyPlat Recent Developments/Updates

Table 122. HyPlat Competitive Strengths & Weaknesses

Table 123. Advent Technologies Basic Information, Manufacturing Base and Competitors

Table 124. Advent Technologies Major Business

Table 125. Advent Technologies PEM Fuel Cell Membrane Electrode Assembly Product and Services

Table 126. Advent Technologies PEM Fuel Cell Membrane Electrode Assembly Production (K Sqm), Price (US\$/Sq m), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 127. Advent Technologies Recent Developments/Updates

Table 128. Advent Technologies Competitive Strengths & Weaknesses

Table 129. Chromis Technologies Basic Information, Manufacturing Base and Competitors

Table 130. Chromis Technologies Major Business

Table 131. Chromis Technologies PEM Fuel Cell Membrane Electrode Assembly Product and Services

Table 132. Chromis Technologies PEM Fuel Cell Membrane Electrode Assembly Production (K Sqm), Price (US\$/Sq m), Production Value (USD Million), Gross Margin

and Market Share (2021-2026)

Table 133. Chromis Technologies Recent Developments/Updates

Table 134. Chromis Technologies Competitive Strengths & Weaknesses

Table 135. Ballard Basic Information, Manufacturing Base and Competitors

Table 136. Ballard Major Business

Table 137. Ballard PEM Fuel Cell Membrane Electrode Assembly Product and Services

Table 138. Ballard PEM Fuel Cell Membrane Electrode Assembly Production (K Sqm), Price (US\$/Sq m), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 139. Ballard Recent Developments/Updates

Table 140. Ballard Competitive Strengths & Weaknesses

Table 141. Hongji Chuangneng Technology (Guangzhou) Basic Information, Manufacturing Base and Competitors

Table 142. Hongji Chuangneng Technology (Guangzhou) Major Business

Table 143. Hongji Chuangneng Technology (Guangzhou) PEM Fuel Cell Membrane Electrode Assembly Product and Services

Table 144. Hongji Chuangneng Technology (Guangzhou) PEM Fuel Cell Membrane Electrode Assembly Production (K Sqm), Price (US\$/Sq m), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 145. Hongji Chuangneng Technology (Guangzhou) Recent Developments/Updates

Table 146. Hongji Chuangneng Technology (Guangzhou) Competitive Strengths & Weaknesses

Table 147. Shanghai Tangfeng Energy Technology Basic Information, Manufacturing Base and Competitors

Table 148. Shanghai Tangfeng Energy Technology Major Business

Table 149. Shanghai Tangfeng Energy Technology PEM Fuel Cell Membrane Electrode Assembly Product and Services

Table 150. Shanghai Tangfeng Energy Technology PEM Fuel Cell Membrane Electrode Assembly Production (K Sqm), Price (US\$/Sq m), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 151. Shanghai Tangfeng Energy Technology Recent Developments/Updates

Table 152. Shanghai Tangfeng Energy Technology Competitive Strengths & Weaknesses

Table 153. Suzhou Hydrogine Technology Basic Information, Manufacturing Base and Competitors

Table 154. Suzhou Hydrogine Technology Major Business

Table 155. Suzhou Hydrogine Technology PEM Fuel Cell Membrane Electrode Assembly Product and Services

Table 156. Suzhou Hydrogine Technology PEM Fuel Cell Membrane Electrode Assembly Production (K Sqm), Price (US\$/Sq m), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 157. Suzhou Hydrogine Technology Recent Developments/Updates

Table 158. Suzhou Hydrogine Technology Competitive Strengths & Weaknesses

Table 159. Wuhan WUT HyPower Technology Basic Information, Manufacturing Base and Competitors

Table 160. Wuhan WUT HyPower Technology Major Business

Table 161. Wuhan WUT HyPower Technology PEM Fuel Cell Membrane Electrode Assembly Product and Services

Table 162. Wuhan WUT HyPower Technology PEM Fuel Cell Membrane Electrode Assembly Production (K Sqm), Price (US\$/Sq m), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 163. Wuhan WUT HyPower Technology Recent Developments/Updates

Table 164. Wuhan WUT HyPower Technology Competitive Strengths & Weaknesses

Table 165. Global Key Players of PEM Fuel Cell Membrane Electrode Assembly Upstream (Raw Materials)

Table 166. Global PEM Fuel Cell Membrane Electrode Assembly Typical Customers

Table 167. PEM Fuel Cell Membrane Electrode Assembly Typical Distributors

## List Of Figures

### LIST OF FIGURES

- Figure 1. PEM Fuel Cell Membrane Electrode Assembly Picture
- Figure 2. World PEM Fuel Cell Membrane Electrode Assembly Production Value: 2021 & 2025 & 2032, (USD Million)
- Figure 3. World PEM Fuel Cell Membrane Electrode Assembly Production Value and Forecast (2021-2032) & (USD Million)
- Figure 4. World PEM Fuel Cell Membrane Electrode Assembly Production (2021-2032) & (K Sqm)
- Figure 5. World PEM Fuel Cell Membrane Electrode Assembly Average Price (2021-2032) & (US\$/Sq m)
- Figure 6. World PEM Fuel Cell Membrane Electrode Assembly Production Value Market Share by Region (2021-2032)
- Figure 7. World PEM Fuel Cell Membrane Electrode Assembly Production Market Share by Region (2021-2032)
- Figure 8. North America PEM Fuel Cell Membrane Electrode Assembly Production (2021-2032) & (K Sqm)
- Figure 9. Europe PEM Fuel Cell Membrane Electrode Assembly Production (2021-2032) & (K Sqm)
- Figure 10. China PEM Fuel Cell Membrane Electrode Assembly Production (2021-2032) & (K Sqm)
- Figure 11. Japan PEM Fuel Cell Membrane Electrode Assembly Production (2021-2032) & (K Sqm)
- Figure 12. PEM Fuel Cell Membrane Electrode Assembly Market Drivers
- Figure 13. Factors Affecting Demand
- Figure 14. World PEM Fuel Cell Membrane Electrode Assembly Consumption (2021-2032) & (K Sqm)
- Figure 15. World PEM Fuel Cell Membrane Electrode Assembly Consumption Market Share by Region (2021-2032)
- Figure 16. United States PEM Fuel Cell Membrane Electrode Assembly Consumption (2021-2032) & (K Sqm)
- Figure 17. China PEM Fuel Cell Membrane Electrode Assembly Consumption (2021-2032) & (K Sqm)
- Figure 18. Europe PEM Fuel Cell Membrane Electrode Assembly Consumption (2021-2032) & (K Sqm)
- Figure 19. Japan PEM Fuel Cell Membrane Electrode Assembly Consumption (2021-2032) & (K Sqm)

Figure 20. South Korea PEM Fuel Cell Membrane Electrode Assembly Consumption (2021-2032) & (K Sqm)

Figure 21. ASEAN PEM Fuel Cell Membrane Electrode Assembly Consumption (2021-2032) & (K Sqm)

Figure 22. India PEM Fuel Cell Membrane Electrode Assembly Consumption (2021-2032) & (K Sqm)

Figure 23. Producer Shipments of PEM Fuel Cell Membrane Electrode Assembly by Manufacturer Revenue (\$MM) and Market Share (%): 2025

Figure 24. Global Four-firm Concentration Ratios (CR4) for PEM Fuel Cell Membrane Electrode Assembly Markets in 2025

Figure 25. Global Four-firm Concentration Ratios (CR8) for PEM Fuel Cell Membrane Electrode Assembly Markets in 2025

Figure 26. United States VS China: PEM Fuel Cell Membrane Electrode Assembly Production Value Market Share Comparison (2021 & 2025 & 2032)

Figure 27. United States VS China: PEM Fuel Cell Membrane Electrode Assembly Production Market Share Comparison (2021 & 2025 & 2032)

Figure 28. United States VS China: PEM Fuel Cell Membrane Electrode Assembly Consumption Market Share Comparison (2021 & 2025 & 2032)

Figure 29. United States Based Manufacturers PEM Fuel Cell Membrane Electrode Assembly Production Market Share 2025

Figure 30. China Based Manufacturers PEM Fuel Cell Membrane Electrode Assembly Production Market Share 2025

Figure 31. Rest of World Based Manufacturers PEM Fuel Cell Membrane Electrode Assembly Production Market Share 2025

Figure 32. World PEM Fuel Cell Membrane Electrode Assembly Production Value by Type, (USD Million), 2021 & 2025 & 2032

Figure 33. World PEM Fuel Cell Membrane Electrode Assembly Production Value Market Share by Type in 2025

Figure 34. Hot-Press Approach Membrane Electrode

Figure 35. CCM 3-in-1 Membrane Electrode

Figure 36. Ordering Membrane Electrode

Figure 37. World PEM Fuel Cell Membrane Electrode Assembly Production Market Share by Type (2021-2032)

Figure 38. World PEM Fuel Cell Membrane Electrode Assembly Production Value Market Share by Type (2021-2032)

Figure 39. World PEM Fuel Cell Membrane Electrode Assembly Average Price by Type (2021-2032) & (US\$/Sq m)

Figure 40. World PEM Fuel Cell Membrane Electrode Assembly Production Value by Catalyst Type, (USD Million), 2021 & 2025 & 2032

Figure 41. World PEM Fuel Cell Membrane Electrode Assembly Production Value Market Share by Catalyst Type in 2025

Figure 42. Platinum-based Catalyst MEA

Figure 43. Others

Figure 44. World PEM Fuel Cell Membrane Electrode Assembly Production Market Share by Catalyst Type (2021-2032)

Figure 45. World PEM Fuel Cell Membrane Electrode Assembly Production Value Market Share by Catalyst Type (2021-2032)

Figure 46. World PEM Fuel Cell Membrane Electrode Assembly Average Price by Catalyst Type (2021-2032) & (US\$/Sq m)

Figure 47. World PEM Fuel Cell Membrane Electrode Assembly Production Value by Proton Exchange Membrane, (USD Million), 2021 & 2025 & 2032

Figure 48. World PEM Fuel Cell Membrane Electrode Assembly Production Value Market Share by Proton Exchange Membrane in 2025

Figure 49. PFSA Membrane MEA

Figure 50. Nafion-based MEA

Figure 51. Composite Proton Membrane MEA

Figure 52. Others

Figure 53. World PEM Fuel Cell Membrane Electrode Assembly Production Market Share by Proton Exchange Membrane (2021-2032)

Figure 54. World PEM Fuel Cell Membrane Electrode Assembly Production Value Market Share by Proton Exchange Membrane (2021-2032)

Figure 55. World PEM Fuel Cell Membrane Electrode Assembly Average Price by Proton Exchange Membrane (2021-2032) & (US\$/Sq m)

Figure 56. World PEM Fuel Cell Membrane Electrode Assembly Production Value by Application, (USD Million), 2021 & 2025 & 2032

Figure 57. World PEM Fuel Cell Membrane Electrode Assembly Production Value Market Share by Application in 2025

Figure 58. PEMFC

Figure 59. SOFC

Figure 60. PAFC

Figure 61. Others

Figure 62. World PEM Fuel Cell Membrane Electrode Assembly Production Market Share by Application (2021-2032)

Figure 63. World PEM Fuel Cell Membrane Electrode Assembly Production Value Market Share by Application (2021-2032)

Figure 64. World PEM Fuel Cell Membrane Electrode Assembly Average Price by Application (2021-2032) & (US\$/Sq m)

Figure 65. PEM Fuel Cell Membrane Electrode Assembly Industry Chain

Figure 66. PEM Fuel Cell Membrane Electrode Assembly Procurement Model

Figure 67. PEM Fuel Cell Membrane Electrode Assembly Sales Model

Figure 68. PEM Fuel Cell Membrane Electrode Assembly Sales Channels, Direct Sales, and Distribution

Figure 69. Methodology

Figure 70. Research Process and Data Source

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