

Global Fuel Cell Market 2024 by Manufacturers, Regions, Type and Application, Forecast to 2030

<https://marketpublishers.com/r/G3E07A7C4A8EN.html>

Date: January 2024

Pages: 125

Price: US\$ 3,480.00 (Single User License)

ID: G3E07A7C4A8EN

Abstracts

According to our (Global Info Research) latest study, the global Fuel Cell market size was valued at USD 3982.6 million in 2023 and is forecast to a readjusted size of USD 22380 million by 2030 with a CAGR of 28.0% during review period.

A fuel cell is an energy conversion device that continuously converts chemical energy in a fuel into electrical energy, as long as both the fuel and oxidant are available. It exhibits advantageous characteristics exceeding conventional combustion-based technologies that are currently applied in certain critical fields, such as electronic, housing power, power plants, passenger vehicles, as well as military applications. Operating with higher efficiency than combustion engines, fuel cells demonstrate an electrical energy conversion efficiency of 60% or more, with lower emissions. Water is the only product of the power generation process in hydrogen fuel cells, and thus there are no carbon dioxide emissions or air pollutants that create smog and cause health problems during operation. Moreover, fuel cells emit low noise during operation, because they contain fewer moving parts. Fuel cells come in many varieties, but they all work in generally the same manner. In essence, a fuel cell consists of three adjacent segments, namely, the anode, electrolyte, and cathode. When hydrogen undergoes an oxidation reaction at the anode ($\text{H}_2 \rightarrow 2\text{H}^+ + 2\text{e}^-$), it generates cations that migrate to the cathode through the electrolyte and free electrons that flow the external circuit. Contrarily, a reduction reaction occurs at the cathode, where oxygen is reduced to water by the cations and electrons ($\text{O}_2 + 4\text{H}^+ + 4\text{e}^- \rightarrow 2\text{H}_2\text{O}$) (Ralph et al., 1998). The electrochemical reaction that occurs at the cathode is . Based on the type of electrolyte used, fuel cells can be categorized into alkaline fuel cells (AFCs), PEMFCs, phosphoric acid fuel cells (PAFCs), molten carbonate fuel cells (MCFCs), and solid oxide fuel cells (SOFCs).

The major players in global Fuel Cell market include Bloom Energy, Panasonic, Toshiba

ESS, etc. The top 5 players occupy about 56% shares of the global market. North America and Japan are main markets, they occupy about 75% of the global market. PEMFCs is the main type, with a share about 72%. Stationary is the main application, which holds a share about 67%.

The Global Info Research report includes an overview of the development of the Fuel Cell industry chain, the market status of Transport (PEMFCs, SOFC), Stationary (PEMFCs, SOFC), and key enterprises in developed and developing market, and analysed the cutting-edge technology, patent, hot applications and market trends of Fuel Cell.

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

Key Features:

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

The report involves analyzing the market at a macro level:

Market Sizing and Segmentation: Report collect data on the overall market size, including the sales quantity (GWh), revenue generated, and market share of different by Type (e.g., PEMFCs, SOFC).

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

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

Market Projections: Report covers the gathered data and analysis to make future projections and forecasts for the Fuel Cell market. This may include estimating market growth rates, predicting market demand, and identifying emerging trends.

The report also involves a more granular approach to Fuel Cell:

Company Analysis: Report covers individual Fuel Cell manufacturers, suppliers, and other relevant industry players. This analysis includes studying their financial performance, market positioning, product portfolios, partnerships, and strategies.

Consumer Analysis: Report covers data on consumer behaviour, preferences, and attitudes towards Fuel Cell. This may involve surveys, interviews, and analysis of consumer reviews and feedback from different by Application (Transport, Stationary).

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

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

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

Market Segmentation

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

Market segment by Type

PEMFCs

SOFC

MCFC

PAFC

Others

Market segment by Application

Transport

Stationary

Portable

Major players covered

Bloom Energy

Panasonic

Plug Power

Toshiba ESS

Aisin Seiki

Toyota

Ballard

Hyundai Mobis

SinoHytec

Mitsubishi

Hydrogenics

Pearl Hydrogen

Honda

SOLIDpower

Sunrise Power

Hyster-Yale Group

Market segment by region, regional analysis covers

North America (United States, Canada and Mexico)

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

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

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

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

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

Chapter 1, to describe Fuel Cell product scope, market overview, market estimation caveats and base year.

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

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

Chapter 4, the Fuel Cell breakdown data are shown at the regional level, to show the sales quantity, consumption value and growth by regions, from 2019 to 2030.

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

Chapter 7, 8, 9, 10 and 11, to break the sales data at the country level, with sales quantity, consumption value and market share for key countries in the world, from 2017 to 2023. and Fuel Cell market forecast, by regions, type and application, with sales and revenue, from 2025 to 2030.

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

Chapter 13, the key raw materials and key suppliers, and industry chain of Fuel Cell.

Chapter 14 and 15, to describe Fuel Cell sales channel, distributors, customers, research findings and conclusion.

Contents

1 MARKET OVERVIEW

1.1 Product Overview and Scope of Fuel Cell

1.2 Market Estimation Caveats and Base Year

1.3 Market Analysis by Type

1.3.1 Overview: Global Fuel Cell Consumption Value by Type: 2019 Versus 2023 Versus 2030

1.3.2 PEMFCs

1.3.3 SOFC

1.3.4 MCFC

1.3.5 PAFC

1.3.6 Others

1.4 Market Analysis by Application

1.4.1 Overview: Global Fuel Cell Consumption Value by Application: 2019 Versus 2023 Versus 2030

1.4.2 Transport

1.4.3 Stationary

1.4.4 Portable

1.5 Global Fuel Cell Market Size & Forecast

1.5.1 Global Fuel Cell Consumption Value (2019 & 2023 & 2030)

1.5.2 Global Fuel Cell Sales Quantity (2019-2030)

1.5.3 Global Fuel Cell Average Price (2019-2030)

2 MANUFACTURERS PROFILES

2.1 Bloom Energy

2.1.1 Bloom Energy Details

2.1.2 Bloom Energy Major Business

2.1.3 Bloom Energy Fuel Cell Product and Services

2.1.4 Bloom Energy Fuel Cell Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)

2.1.5 Bloom Energy Recent Developments/Updates

2.2 Panasonic

2.2.1 Panasonic Details

2.2.2 Panasonic Major Business

2.2.3 Panasonic Fuel Cell Product and Services

2.2.4 Panasonic Fuel Cell Sales Quantity, Average Price, Revenue, Gross Margin and

Market Share (2019-2024)

2.2.5 Panasonic Recent Developments/Updates

2.3 Plug Power

2.3.1 Plug Power Details

2.3.2 Plug Power Major Business

2.3.3 Plug Power Fuel Cell Product and Services

2.3.4 Plug Power Fuel Cell Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)

2.3.5 Plug Power Recent Developments/Updates

2.4 Toshiba ESS

2.4.1 Toshiba ESS Details

2.4.2 Toshiba ESS Major Business

2.4.3 Toshiba ESS Fuel Cell Product and Services

2.4.4 Toshiba ESS Fuel Cell Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)

2.4.5 Toshiba ESS Recent Developments/Updates

2.5 Aisin Seiki

2.5.1 Aisin Seiki Details

2.5.2 Aisin Seiki Major Business

2.5.3 Aisin Seiki Fuel Cell Product and Services

2.5.4 Aisin Seiki Fuel Cell Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)

2.5.5 Aisin Seiki Recent Developments/Updates

2.6 Toyota

2.6.1 Toyota Details

2.6.2 Toyota Major Business

2.6.3 Toyota Fuel Cell Product and Services

2.6.4 Toyota Fuel Cell Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)

2.6.5 Toyota Recent Developments/Updates

2.7 Ballard

2.7.1 Ballard Details

2.7.2 Ballard Major Business

2.7.3 Ballard Fuel Cell Product and Services

2.7.4 Ballard Fuel Cell Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)

2.7.5 Ballard Recent Developments/Updates

2.8 Hyundai Mobis

2.8.1 Hyundai Mobis Details

- 2.8.2 Hyundai Mobis Major Business
- 2.8.3 Hyundai Mobis Fuel Cell Product and Services
- 2.8.4 Hyundai Mobis Fuel Cell Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)
- 2.8.5 Hyundai Mobis Recent Developments/Updates
- 2.9 SinoHytec
 - 2.9.1 SinoHytec Details
 - 2.9.2 SinoHytec Major Business
 - 2.9.3 SinoHytec Fuel Cell Product and Services
 - 2.9.4 SinoHytec Fuel Cell Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)
 - 2.9.5 SinoHytec Recent Developments/Updates
- 2.10 Mitsubishi
 - 2.10.1 Mitsubishi Details
 - 2.10.2 Mitsubishi Major Business
 - 2.10.3 Mitsubishi Fuel Cell Product and Services
 - 2.10.4 Mitsubishi Fuel Cell Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)
 - 2.10.5 Mitsubishi Recent Developments/Updates
- 2.11 Hydrogenics
 - 2.11.1 Hydrogenics Details
 - 2.11.2 Hydrogenics Major Business
 - 2.11.3 Hydrogenics Fuel Cell Product and Services
 - 2.11.4 Hydrogenics Fuel Cell Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)
 - 2.11.5 Hydrogenics Recent Developments/Updates
- 2.12 Pearl Hydrogen
 - 2.12.1 Pearl Hydrogen Details
 - 2.12.2 Pearl Hydrogen Major Business
 - 2.12.3 Pearl Hydrogen Fuel Cell Product and Services
 - 2.12.4 Pearl Hydrogen Fuel Cell Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)
 - 2.12.5 Pearl Hydrogen Recent Developments/Updates
- 2.13 Honda
 - 2.13.1 Honda Details
 - 2.13.2 Honda Major Business
 - 2.13.3 Honda Fuel Cell Product and Services
 - 2.13.4 Honda Fuel Cell Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)

- 2.13.5 Honda Recent Developments/Updates
- 2.14 SOLIDpower
 - 2.14.1 SOLIDpower Details
 - 2.14.2 SOLIDpower Major Business
 - 2.14.3 SOLIDpower Fuel Cell Product and Services
 - 2.14.4 SOLIDpower Fuel Cell Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)
 - 2.14.5 SOLIDpower Recent Developments/Updates
- 2.15 Sunrise Power
 - 2.15.1 Sunrise Power Details
 - 2.15.2 Sunrise Power Major Business
 - 2.15.3 Sunrise Power Fuel Cell Product and Services
 - 2.15.4 Sunrise Power Fuel Cell Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)
 - 2.15.5 Sunrise Power Recent Developments/Updates
- 2.16 Hyster-Yale Group
 - 2.16.1 Hyster-Yale Group Details
 - 2.16.2 Hyster-Yale Group Major Business
 - 2.16.3 Hyster-Yale Group Fuel Cell Product and Services
 - 2.16.4 Hyster-Yale Group Fuel Cell Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)
 - 2.16.5 Hyster-Yale Group Recent Developments/Updates

3 COMPETITIVE ENVIRONMENT: FUEL CELL BY MANUFACTURER

- 3.1 Global Fuel Cell Sales Quantity by Manufacturer (2019-2024)
- 3.2 Global Fuel Cell Revenue by Manufacturer (2019-2024)
- 3.3 Global Fuel Cell Average Price by Manufacturer (2019-2024)
- 3.4 Market Share Analysis (2023)
 - 3.4.1 Producer Shipments of Fuel Cell by Manufacturer Revenue (\$MM) and Market Share (%): 2023
 - 3.4.2 Top 3 Fuel Cell Manufacturer Market Share in 2023
 - 3.4.2 Top 6 Fuel Cell Manufacturer Market Share in 2023
- 3.5 Fuel Cell Market: Overall Company Footprint Analysis
 - 3.5.1 Fuel Cell Market: Region Footprint
 - 3.5.2 Fuel Cell Market: Company Product Type Footprint
 - 3.5.3 Fuel Cell Market: Company Product Application Footprint
- 3.6 New Market Entrants and Barriers to Market Entry
- 3.7 Mergers, Acquisition, Agreements, and Collaborations

4 CONSUMPTION ANALYSIS BY REGION

4.1 Global Fuel Cell Market Size by Region

4.1.1 Global Fuel Cell Sales Quantity by Region (2019-2030)

4.1.2 Global Fuel Cell Consumption Value by Region (2019-2030)

4.1.3 Global Fuel Cell Average Price by Region (2019-2030)

4.2 North America Fuel Cell Consumption Value (2019-2030)

4.3 Europe Fuel Cell Consumption Value (2019-2030)

4.4 Asia-Pacific Fuel Cell Consumption Value (2019-2030)

4.5 South America Fuel Cell Consumption Value (2019-2030)

4.6 Middle East and Africa Fuel Cell Consumption Value (2019-2030)

5 MARKET SEGMENT BY TYPE

5.1 Global Fuel Cell Sales Quantity by Type (2019-2030)

5.2 Global Fuel Cell Consumption Value by Type (2019-2030)

5.3 Global Fuel Cell Average Price by Type (2019-2030)

6 MARKET SEGMENT BY APPLICATION

6.1 Global Fuel Cell Sales Quantity by Application (2019-2030)

6.2 Global Fuel Cell Consumption Value by Application (2019-2030)

6.3 Global Fuel Cell Average Price by Application (2019-2030)

7 NORTH AMERICA

7.1 North America Fuel Cell Sales Quantity by Type (2019-2030)

7.2 North America Fuel Cell Sales Quantity by Application (2019-2030)

7.3 North America Fuel Cell Market Size by Country

7.3.1 North America Fuel Cell Sales Quantity by Country (2019-2030)

7.3.2 North America Fuel Cell Consumption Value by Country (2019-2030)

7.3.3 United States Market Size and Forecast (2019-2030)

7.3.4 Canada Market Size and Forecast (2019-2030)

7.3.5 Mexico Market Size and Forecast (2019-2030)

8 EUROPE

8.1 Europe Fuel Cell Sales Quantity by Type (2019-2030)

8.2 Europe Fuel Cell Sales Quantity by Application (2019-2030)

8.3 Europe Fuel Cell Market Size by Country

8.3.1 Europe Fuel Cell Sales Quantity by Country (2019-2030)

8.3.2 Europe Fuel Cell Consumption Value by Country (2019-2030)

8.3.3 Germany Market Size and Forecast (2019-2030)

8.3.4 France Market Size and Forecast (2019-2030)

8.3.5 United Kingdom Market Size and Forecast (2019-2030)

8.3.6 Russia Market Size and Forecast (2019-2030)

8.3.7 Italy Market Size and Forecast (2019-2030)

9 ASIA-PACIFIC

9.1 Asia-Pacific Fuel Cell Sales Quantity by Type (2019-2030)

9.2 Asia-Pacific Fuel Cell Sales Quantity by Application (2019-2030)

9.3 Asia-Pacific Fuel Cell Market Size by Region

9.3.1 Asia-Pacific Fuel Cell Sales Quantity by Region (2019-2030)

9.3.2 Asia-Pacific Fuel Cell Consumption Value by Region (2019-2030)

9.3.3 China Market Size and Forecast (2019-2030)

9.3.4 Japan Market Size and Forecast (2019-2030)

9.3.5 Korea Market Size and Forecast (2019-2030)

9.3.6 India Market Size and Forecast (2019-2030)

9.3.7 Southeast Asia Market Size and Forecast (2019-2030)

9.3.8 Australia Market Size and Forecast (2019-2030)

10 SOUTH AMERICA

10.1 South America Fuel Cell Sales Quantity by Type (2019-2030)

10.2 South America Fuel Cell Sales Quantity by Application (2019-2030)

10.3 South America Fuel Cell Market Size by Country

10.3.1 South America Fuel Cell Sales Quantity by Country (2019-2030)

10.3.2 South America Fuel Cell Consumption Value by Country (2019-2030)

10.3.3 Brazil Market Size and Forecast (2019-2030)

10.3.4 Argentina Market Size and Forecast (2019-2030)

11 MIDDLE EAST & AFRICA

11.1 Middle East & Africa Fuel Cell Sales Quantity by Type (2019-2030)

11.2 Middle East & Africa Fuel Cell Sales Quantity by Application (2019-2030)

11.3 Middle East & Africa Fuel Cell Market Size by Country

- 11.3.1 Middle East & Africa Fuel Cell Sales Quantity by Country (2019-2030)
- 11.3.2 Middle East & Africa Fuel Cell Consumption Value by Country (2019-2030)
- 11.3.3 Turkey Market Size and Forecast (2019-2030)
- 11.3.4 Egypt Market Size and Forecast (2019-2030)
- 11.3.5 Saudi Arabia Market Size and Forecast (2019-2030)
- 11.3.6 South Africa Market Size and Forecast (2019-2030)

12 MARKET DYNAMICS

- 12.1 Fuel Cell Market Drivers
- 12.2 Fuel Cell Market Restraints
- 12.3 Fuel Cell Trends Analysis
- 12.4 Porters Five Forces Analysis
 - 12.4.1 Threat of New Entrants
 - 12.4.2 Bargaining Power of Suppliers
 - 12.4.3 Bargaining Power of Buyers
 - 12.4.4 Threat of Substitutes
 - 12.4.5 Competitive Rivalry

13 RAW MATERIAL AND INDUSTRY CHAIN

- 13.1 Raw Material of Fuel Cell and Key Manufacturers
- 13.2 Manufacturing Costs Percentage of Fuel Cell
- 13.3 Fuel Cell Production Process
- 13.4 Fuel Cell Industrial Chain

14 SHIPMENTS BY DISTRIBUTION CHANNEL

- 14.1 Sales Channel
 - 14.1.1 Direct to End-User
 - 14.1.2 Distributors
- 14.2 Fuel Cell Typical Distributors
- 14.3 Fuel Cell Typical Customers

15 RESEARCH FINDINGS AND CONCLUSION

16 APPENDIX

- 16.1 Methodology

16.2 Research Process and Data Source

16.3 Disclaimer

List Of Tables

LIST OF TABLES

Table 1. Global Fuel Cell Consumption Value by Type, (USD Million), 2019 & 2023 & 2030

Table 2. Global Fuel Cell Consumption Value by Application, (USD Million), 2019 & 2023 & 2030

Table 3. Bloom Energy Basic Information, Manufacturing Base and Competitors

Table 4. Bloom Energy Major Business

Table 5. Bloom Energy Fuel Cell Product and Services

Table 6. Bloom Energy Fuel Cell Sales Quantity (GWh), Average Price (USD/KWh), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 7. Bloom Energy Recent Developments/Updates

Table 8. Panasonic Basic Information, Manufacturing Base and Competitors

Table 9. Panasonic Major Business

Table 10. Panasonic Fuel Cell Product and Services

Table 11. Panasonic Fuel Cell Sales Quantity (GWh), Average Price (USD/KWh), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 12. Panasonic Recent Developments/Updates

Table 13. Plug Power Basic Information, Manufacturing Base and Competitors

Table 14. Plug Power Major Business

Table 15. Plug Power Fuel Cell Product and Services

Table 16. Plug Power Fuel Cell Sales Quantity (GWh), Average Price (USD/KWh), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 17. Plug Power Recent Developments/Updates

Table 18. Toshiba ESS Basic Information, Manufacturing Base and Competitors

Table 19. Toshiba ESS Major Business

Table 20. Toshiba ESS Fuel Cell Product and Services

Table 21. Toshiba ESS Fuel Cell Sales Quantity (GWh), Average Price (USD/KWh), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 22. Toshiba ESS Recent Developments/Updates

Table 23. Aisin Seiki Basic Information, Manufacturing Base and Competitors

Table 24. Aisin Seiki Major Business

Table 25. Aisin Seiki Fuel Cell Product and Services

Table 26. Aisin Seiki Fuel Cell Sales Quantity (GWh), Average Price (USD/KWh), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 27. Aisin Seiki Recent Developments/Updates

Table 28. Toyota Basic Information, Manufacturing Base and Competitors

Table 29. Toyota Major Business

Table 30. Toyota Fuel Cell Product and Services

Table 31. Toyota Fuel Cell Sales Quantity (GWh), Average Price (USD/KWh), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 32. Toyota Recent Developments/Updates

Table 33. Ballard Basic Information, Manufacturing Base and Competitors

Table 34. Ballard Major Business

Table 35. Ballard Fuel Cell Product and Services

Table 36. Ballard Fuel Cell Sales Quantity (GWh), Average Price (USD/KWh), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 37. Ballard Recent Developments/Updates

Table 38. Hyundai Mobis Basic Information, Manufacturing Base and Competitors

Table 39. Hyundai Mobis Major Business

Table 40. Hyundai Mobis Fuel Cell Product and Services

Table 41. Hyundai Mobis Fuel Cell Sales Quantity (GWh), Average Price (USD/KWh), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 42. Hyundai Mobis Recent Developments/Updates

Table 43. SinoHytec Basic Information, Manufacturing Base and Competitors

Table 44. SinoHytec Major Business

Table 45. SinoHytec Fuel Cell Product and Services

Table 46. SinoHytec Fuel Cell Sales Quantity (GWh), Average Price (USD/KWh), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 47. SinoHytec Recent Developments/Updates

Table 48. Mitsubishi Basic Information, Manufacturing Base and Competitors

Table 49. Mitsubishi Major Business

Table 50. Mitsubishi Fuel Cell Product and Services

Table 51. Mitsubishi Fuel Cell Sales Quantity (GWh), Average Price (USD/KWh), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 52. Mitsubishi Recent Developments/Updates

Table 53. Hydrogenics Basic Information, Manufacturing Base and Competitors

Table 54. Hydrogenics Major Business

Table 55. Hydrogenics Fuel Cell Product and Services

Table 56. Hydrogenics Fuel Cell Sales Quantity (GWh), Average Price (USD/KWh), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 57. Hydrogenics Recent Developments/Updates

Table 58. Pearl Hydrogen Basic Information, Manufacturing Base and Competitors

Table 59. Pearl Hydrogen Major Business

Table 60. Pearl Hydrogen Fuel Cell Product and Services

Table 61. Pearl Hydrogen Fuel Cell Sales Quantity (GWh), Average Price (USD/KWh),

Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 62. Pearl Hydrogen Recent Developments/Updates

Table 63. Honda Basic Information, Manufacturing Base and Competitors

Table 64. Honda Major Business

Table 65. Honda Fuel Cell Product and Services

Table 66. Honda Fuel Cell Sales Quantity (GWh), Average Price (USD/KWh), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 67. Honda Recent Developments/Updates

Table 68. SOLIDpower Basic Information, Manufacturing Base and Competitors

Table 69. SOLIDpower Major Business

Table 70. SOLIDpower Fuel Cell Product and Services

Table 71. SOLIDpower Fuel Cell Sales Quantity (GWh), Average Price (USD/KWh), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 72. SOLIDpower Recent Developments/Updates

Table 73. Sunrise Power Basic Information, Manufacturing Base and Competitors

Table 74. Sunrise Power Major Business

Table 75. Sunrise Power Fuel Cell Product and Services

Table 76. Sunrise Power Fuel Cell Sales Quantity (GWh), Average Price (USD/KWh), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 77. Sunrise Power Recent Developments/Updates

Table 78. Hyster-Yale Group Basic Information, Manufacturing Base and Competitors

Table 79. Hyster-Yale Group Major Business

Table 80. Hyster-Yale Group Fuel Cell Product and Services

Table 81. Hyster-Yale Group Fuel Cell Sales Quantity (GWh), Average Price (USD/KWh), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 82. Hyster-Yale Group Recent Developments/Updates

Table 83. Global Fuel Cell Sales Quantity by Manufacturer (2019-2024) & (GWh)

Table 84. Global Fuel Cell Revenue by Manufacturer (2019-2024) & (USD Million)

Table 85. Global Fuel Cell Average Price by Manufacturer (2019-2024) & (USD/KWh)

Table 86. Market Position of Manufacturers in Fuel Cell, (Tier 1, Tier 2, and Tier 3), Based on Consumption Value in 2023

Table 87. Head Office and Fuel Cell Production Site of Key Manufacturer

Table 88. Fuel Cell Market: Company Product Type Footprint

Table 89. Fuel Cell Market: Company Product Application Footprint

Table 90. Fuel Cell New Market Entrants and Barriers to Market Entry

Table 91. Fuel Cell Mergers, Acquisition, Agreements, and Collaborations

Table 92. Global Fuel Cell Sales Quantity by Region (2019-2024) & (GWh)

Table 93. Global Fuel Cell Sales Quantity by Region (2025-2030) & (GWh)

Table 94. Global Fuel Cell Consumption Value by Region (2019-2024) & (USD Million)

- Table 95. Global Fuel Cell Consumption Value by Region (2025-2030) & (USD Million)
- Table 96. Global Fuel Cell Average Price by Region (2019-2024) & (USD/KWh)
- Table 97. Global Fuel Cell Average Price by Region (2025-2030) & (USD/KWh)
- Table 98. Global Fuel Cell Sales Quantity by Type (2019-2024) & (GWh)
- Table 99. Global Fuel Cell Sales Quantity by Type (2025-2030) & (GWh)
- Table 100. Global Fuel Cell Consumption Value by Type (2019-2024) & (USD Million)
- Table 101. Global Fuel Cell Consumption Value by Type (2025-2030) & (USD Million)
- Table 102. Global Fuel Cell Average Price by Type (2019-2024) & (USD/KWh)
- Table 103. Global Fuel Cell Average Price by Type (2025-2030) & (USD/KWh)
- Table 104. Global Fuel Cell Sales Quantity by Application (2019-2024) & (GWh)
- Table 105. Global Fuel Cell Sales Quantity by Application (2025-2030) & (GWh)
- Table 106. Global Fuel Cell Consumption Value by Application (2019-2024) & (USD Million)
- Table 107. Global Fuel Cell Consumption Value by Application (2025-2030) & (USD Million)
- Table 108. Global Fuel Cell Average Price by Application (2019-2024) & (USD/KWh)
- Table 109. Global Fuel Cell Average Price by Application (2025-2030) & (USD/KWh)
- Table 110. North America Fuel Cell Sales Quantity by Type (2019-2024) & (GWh)
- Table 111. North America Fuel Cell Sales Quantity by Type (2025-2030) & (GWh)
- Table 112. North America Fuel Cell Sales Quantity by Application (2019-2024) & (GWh)
- Table 113. North America Fuel Cell Sales Quantity by Application (2025-2030) & (GWh)
- Table 114. North America Fuel Cell Sales Quantity by Country (2019-2024) & (GWh)
- Table 115. North America Fuel Cell Sales Quantity by Country (2025-2030) & (GWh)
- Table 116. North America Fuel Cell Consumption Value by Country (2019-2024) & (USD Million)
- Table 117. North America Fuel Cell Consumption Value by Country (2025-2030) & (USD Million)
- Table 118. Europe Fuel Cell Sales Quantity by Type (2019-2024) & (GWh)
- Table 119. Europe Fuel Cell Sales Quantity by Type (2025-2030) & (GWh)
- Table 120. Europe Fuel Cell Sales Quantity by Application (2019-2024) & (GWh)
- Table 121. Europe Fuel Cell Sales Quantity by Application (2025-2030) & (GWh)
- Table 122. Europe Fuel Cell Sales Quantity by Country (2019-2024) & (GWh)
- Table 123. Europe Fuel Cell Sales Quantity by Country (2025-2030) & (GWh)
- Table 124. Europe Fuel Cell Consumption Value by Country (2019-2024) & (USD Million)
- Table 125. Europe Fuel Cell Consumption Value by Country (2025-2030) & (USD Million)
- Table 126. Asia-Pacific Fuel Cell Sales Quantity by Type (2019-2024) & (GWh)
- Table 127. Asia-Pacific Fuel Cell Sales Quantity by Type (2025-2030) & (GWh)

Table 128. Asia-Pacific Fuel Cell Sales Quantity by Application (2019-2024) & (GWh)

Table 129. Asia-Pacific Fuel Cell Sales Quantity by Application (2025-2030) & (GWh)

Table 130. Asia-Pacific Fuel Cell Sales Quantity by Region (2019-2024) & (GWh)

Table 131. Asia-Pacific Fuel Cell Sales Quantity by Region (2025-2030) & (GWh)

Table 132. Asia-Pacific Fuel Cell Consumption Value by Region (2019-2024) & (USD Million)

Table 133. Asia-Pacific Fuel Cell Consumption Value by Region (2025-2030) & (USD Million)

Table 134. South America Fuel Cell Sales Quantity by Type (2019-2024) & (GWh)

Table 135. South America Fuel Cell Sales Quantity by Type (2025-2030) & (GWh)

Table 136. South America Fuel Cell Sales Quantity by Application (2019-2024) & (GWh)

Table 137. South America Fuel Cell Sales Quantity by Application (2025-2030) & (GWh)

Table 138. South America Fuel Cell Sales Quantity by Country (2019-2024) & (GWh)

Table 139. South America Fuel Cell Sales Quantity by Country (2025-2030) & (GWh)

Table 140. South America Fuel Cell Consumption Value by Country (2019-2024) & (USD Million)

Table 141. South America Fuel Cell Consumption Value by Country (2025-2030) & (USD Million)

Table 142. Middle East & Africa Fuel Cell Sales Quantity by Type (2019-2024) & (GWh)

Table 143. Middle East & Africa Fuel Cell Sales Quantity by Type (2025-2030) & (GWh)

Table 144. Middle East & Africa Fuel Cell Sales Quantity by Application (2019-2024) & (GWh)

Table 145. Middle East & Africa Fuel Cell Sales Quantity by Application (2025-2030) & (GWh)

Table 146. Middle East & Africa Fuel Cell Sales Quantity by Region (2019-2024) & (GWh)

Table 147. Middle East & Africa Fuel Cell Sales Quantity by Region (2025-2030) & (GWh)

Table 148. Middle East & Africa Fuel Cell Consumption Value by Region (2019-2024) & (USD Million)

Table 149. Middle East & Africa Fuel Cell Consumption Value by Region (2025-2030) & (USD Million)

Table 150. Fuel Cell Raw Material

Table 151. Key Manufacturers of Fuel Cell Raw Materials

Table 152. Fuel Cell Typical Distributors

Table 153. Fuel Cell Typical Customers

List Of Figures

LIST OF FIGURES

Figure 1. Fuel Cell Picture

Figure 2. Global Fuel Cell Consumption Value by Type, (USD Million), 2019 & 2023 & 2030

Figure 3. Global Fuel Cell Consumption Value Market Share by Type in 2023

Figure 4. PEMFCs Examples

Figure 5. SOFC Examples

Figure 6. MCFC Examples

Figure 7. PAFC Examples

Figure 8. Others Examples

Figure 9. Global Fuel Cell Consumption Value by Application, (USD Million), 2019 & 2023 & 2030

Figure 10. Global Fuel Cell Consumption Value Market Share by Application in 2023

Figure 11. Transport Examples

Figure 12. Stationary Examples

Figure 13. Portable Examples

Figure 14. Global Fuel Cell Consumption Value, (USD Million): 2019 & 2023 & 2030

Figure 15. Global Fuel Cell Consumption Value and Forecast (2019-2030) & (USD Million)

Figure 16. Global Fuel Cell Sales Quantity (2019-2030) & (GWh)

Figure 17. Global Fuel Cell Average Price (2019-2030) & (USD/KWh)

Figure 18. Global Fuel Cell Sales Quantity Market Share by Manufacturer in 2023

Figure 19. Global Fuel Cell Consumption Value Market Share by Manufacturer in 2023

Figure 20. Producer Shipments of Fuel Cell by Manufacturer Sales Quantity (\$MM) and Market Share (%): 2023

Figure 21. Top 3 Fuel Cell Manufacturer (Consumption Value) Market Share in 2023

Figure 22. Top 6 Fuel Cell Manufacturer (Consumption Value) Market Share in 2023

Figure 23. Global Fuel Cell Sales Quantity Market Share by Region (2019-2030)

Figure 24. Global Fuel Cell Consumption Value Market Share by Region (2019-2030)

Figure 25. North America Fuel Cell Consumption Value (2019-2030) & (USD Million)

Figure 26. Europe Fuel Cell Consumption Value (2019-2030) & (USD Million)

Figure 27. Asia-Pacific Fuel Cell Consumption Value (2019-2030) & (USD Million)

Figure 28. South America Fuel Cell Consumption Value (2019-2030) & (USD Million)

Figure 29. Middle East & Africa Fuel Cell Consumption Value (2019-2030) & (USD Million)

Figure 30. Global Fuel Cell Sales Quantity Market Share by Type (2019-2030)

Figure 31. Global Fuel Cell Consumption Value Market Share by Type (2019-2030)

Figure 32. Global Fuel Cell Average Price by Type (2019-2030) & (USD/KWh)

Figure 33. Global Fuel Cell Sales Quantity Market Share by Application (2019-2030)

Figure 34. Global Fuel Cell Consumption Value Market Share by Application (2019-2030)

Figure 35. Global Fuel Cell Average Price by Application (2019-2030) & (USD/KWh)

Figure 36. North America Fuel Cell Sales Quantity Market Share by Type (2019-2030)

Figure 37. North America Fuel Cell Sales Quantity Market Share by Application (2019-2030)

Figure 38. North America Fuel Cell Sales Quantity Market Share by Country (2019-2030)

Figure 39. North America Fuel Cell Consumption Value Market Share by Country (2019-2030)

Figure 40. United States Fuel Cell Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 41. Canada Fuel Cell Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 42. Mexico Fuel Cell Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 43. Europe Fuel Cell Sales Quantity Market Share by Type (2019-2030)

Figure 44. Europe Fuel Cell Sales Quantity Market Share by Application (2019-2030)

Figure 45. Europe Fuel Cell Sales Quantity Market Share by Country (2019-2030)

Figure 46. Europe Fuel Cell Consumption Value Market Share by Country (2019-2030)

Figure 47. Germany Fuel Cell Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 48. France Fuel Cell Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 49. United Kingdom Fuel Cell Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 50. Russia Fuel Cell Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 51. Italy Fuel Cell Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 52. Asia-Pacific Fuel Cell Sales Quantity Market Share by Type (2019-2030)

Figure 53. Asia-Pacific Fuel Cell Sales Quantity Market Share by Application (2019-2030)

Figure 54. Asia-Pacific Fuel Cell Sales Quantity Market Share by Region (2019-2030)

Figure 55. Asia-Pacific Fuel Cell Consumption Value Market Share by Region (2019-2030)

Figure 56. China Fuel Cell Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 57. Japan Fuel Cell Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 58. Korea Fuel Cell Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 59. India Fuel Cell Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 60. Southeast Asia Fuel Cell Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 61. Australia Fuel Cell Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 62. South America Fuel Cell Sales Quantity Market Share by Type (2019-2030)

Figure 63. South America Fuel Cell Sales Quantity Market Share by Application (2019-2030)

Figure 64. South America Fuel Cell Sales Quantity Market Share by Country (2019-2030)

Figure 65. South America Fuel Cell Consumption Value Market Share by Country (2019-2030)

Figure 66. Brazil Fuel Cell Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 67. Argentina Fuel Cell Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 68. Middle East & Africa Fuel Cell Sales Quantity Market Share by Type (2019-2030)

Figure 69. Middle East & Africa Fuel Cell Sales Quantity Market Share by Application (2019-2030)

Figure 70. Middle East & Africa Fuel Cell Sales Quantity Market Share by Region (2019-2030)

Figure 71. Middle East & Africa Fuel Cell Consumption Value Market Share by Region (2019-2030)

Figure 72. Turkey Fuel Cell Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 73. Egypt Fuel Cell Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 74. Saudi Arabia Fuel Cell Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 75. South Africa Fuel Cell Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 76. Fuel Cell Market Drivers

Figure 77. Fuel Cell Market Restraints

Figure 78. Fuel Cell Market Trends

Figure 79. Porters Five Forces Analysis

Figure 80. Manufacturing Cost Structure Analysis of Fuel Cell in 2023

Figure 81. Manufacturing Process Analysis of Fuel Cell

Figure 82. Fuel Cell Industrial Chain

Figure 83. Sales Quantity Channel: Direct to End-User vs Distributors

Figure 84. Direct Channel Pros & Cons

Figure 85. Indirect Channel Pros & Cons

Figure 86. Methodology

Figure 87. Research Process and Data Source

I would like to order

Product name: Global Fuel Cell Market 2024 by Manufacturers, Regions, Type and Application, Forecast to 2030

Product link: <https://marketpublishers.com/r/G3E07A7C4A8EN.html>

Price: US\$ 3,480.00 (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 <https://marketpublishers.com/r/G3E07A7C4A8EN.html>

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**

Customer signature _____

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

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

