

Fuel Cell Market: Global Industry Trends, Size, Share, Growth, Opportunities and Forecast 2023-2028

https://marketpublishers.com/r/FA9462C09DAEN.html

Date: January 2023

Pages: 107

Price: US\$ 2,499.00 (Single User License)

ID: FA9462C09DAEN

Abstracts

The global fuel cell market size reached US\$ 4.3 Billion in 2022. Looking forward, IMARC Group expects the market to reach US\$ 16.5 Billion by 2028, exhibiting a growth rate (CAGR) of 24.89% during 2023-2028.

A fuel cell refers to an electrochemical cell which converts the chemical energy from a fuel to electricity. The major components of a fuel cell include anode, cathode and electrolyte. Some of the advantages offered by fuel cells are energy-efficiency, high operating time, ease of maintenance, etc. Apart from this, they are environment-friendly in nature as they prevent production of air pollutants or greenhouse gases. Owing to this, they are used to provide power to vehicles like forklifts, automobiles, buses, boats, motorcycles, etc.

Various initiatives and favourable policies by governments supporting the use of sustainable energy substitutes represents one of the major factors catalysing the growth of the global fuel cell market. Moreover, as fuel cells do not require conventional fuels such as oil or gas, it reduces economic dependence on oil producing countries, thereby broadening the growth prospects of the market. Other growth inducing factors include technological advancements, constant depletion of fossil fuels and rising awareness about the benefits of fuel cells.

Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each sub-segment of the global fuel cell market report, along with forecasts at the global and regional level from 2023-2028. Our report has categorized the market based on type and application.

Breakup by Type:



Proton Exchange Membrane Fuel Cells (PEMFC)
Solid Oxide Fuel Cells (SOFC)
Molten Carbonate Fuel Cells (MCFC)
Direct Methanol Fuel Cells (DMFC)
Phosphoric Acid Fuel Cells (PAFC)
Others

Based on the type, the market has been segmented as proton exchange membrane fuel cells, solid oxide fuel cells, molten carbonate fuel cells, direct methanol fuel cells, phosphoric acid fuel cells and others. Proton exchange membrane fuel cells currently account for the highest market share.

Breakup by Application:

Stationary
Transportation
Portable

On the basis of application, stationary represents the largest segment.

Breakup by Region:

Asia Pacific
North America
Europe
Middle East and Africa
Latin America

Region-wise, the market has been segmented into Asia Pacific, North America, Europe, Middle East and Africa, and Latin America. Amongst these, Asia Pacific is the biggest market.

Competitive Landscape:

The competitive landscape of the market has also been examined with some of the key players being Ballard Power Systems Inc., Bloom Energy Corporation, Toshiba Fuel Cell Power Systems Corporation, FuelCell Energy Inc, Plug Power Inc, Nuvera Fuel Cells Inc, AFC Energy plc, SFC Energy AG, Mitsubishi Hitachi Power Systems, Ltd., Panasonic Corporation, Intelligent Energy Limited and Doosan Fuel Cell America Inc.



This report provides a deep insight into the global fuel cell market covering all its essential aspects. This ranges from macro overview of the market to micro details of the industry performance, recent trends, key market drivers and challenges, SWOT analysis, Porter's five forces analysis, value chain analysis, etc. This report is a must-read for entrepreneurs, investors, researchers, consultants, business strategists, and all those who have any kind of stake or are planning to foray into the fuel cell industry in any manner.

Key Questions Answered in This Report

- 1. What was the size of the global fuel cell market in 2022?
- 2. What is the expected growth rate of the global fuel cell market during 2023-2028?
- 3. What are the key factors driving the global fuel cell market?
- 4. What has been the impact of COVID-19 on the global fuel cell market?
- 5. What is the breakup of the global fuel cell market based on the type?
- 6. What is the breakup of the global fuel cell market based on the application?
- 7. What are the key regions in the global fuel cell market?
- 8. Who are the key players/companies in the global fuel cell market?



Contents

1 PREFACE

2 SCOPE AND METHODOLOGY

- 2.1 Objectives of the Study
- 2.2 Stakeholders
- 2.3 Data Sources
 - 2.3.1 Primary Sources
 - 2.3.2 Secondary Sources
- 2.4 Market Estimation
 - 2.4.1 Bottom-Up Approach
 - 2.4.2 Top-Down Approach
- 2.5 Forecasting Methodology

3 EXECUTIVE SUMMARY

4 INTRODUCTION

- 4.1 Overview
- 4.2 Key Industry Trends

5 GLOBAL FUEL CELL MARKET

- 5.1 Market Overview
- 5.2 Market Performance
- 5.3 Impact of COVID-19
- 5.4 Price Analysis
 - 5.4.1 Key Price Indicators
 - 5.4.2 Price Structure
 - 5.4.3 Margin Analysis
- 5.5 Market Breakup by Type
- 5.6 Market Breakup by Application
- 5.7 Market Breakup by Region
- 5.8 Market Forecast
- 5.9 SWOT Analysis
 - 5.9.1 Overview
 - 5.9.2 Strengths



- 5.9.3 Weaknesses
- 5.9.4 Opportunities
- 5.9.5 Threats
- 5.10 Value Chain Analysis
 - 5.10.1 Overview
 - 5.10.2 Research and Development
 - 5.10.3 Raw Material Procurement
 - 5.10.4 Manufacturing
 - 5.10.5 Marketing
 - 5.10.6 Distribution
 - 5.10.7 End-Use
- 5.11 Porters Five Forces Analysis
 - 5.11.1 Overview
 - 5.11.2 Bargaining Power of Buyers
 - 5.11.3 Bargaining Power of Suppliers
 - 5.11.4 Degree of Competition
 - 5.11.5 Threat of New Entrants
 - 5.11.6 Threat of Substitutes

6 MARKET BREAKUP BY TYPE

- 6.1 Proton Exchange Membrane Fuel Cells (PEMFC)
 - 6.1.1 Market Trends
 - 6.1.2 Market Forecast
- 6.2 Solid Oxide Fuel Cells (SOFC)
 - 6.2.1 Market Trends
 - 6.2.2 Market Forecast
- 6.3 Molten Carbonate Fuel Cells (MCFC)
 - 6.3.1 Market Trends
 - 6.3.2 Market Forecast
- 6.4 Direct Methanol Fuel Cells (DMFC)
 - 6.4.1 Market Trends
 - 6.4.2 Market Forecast
- 6.5 Phosphoric Acid Fuel Cells (PAFC)
 - 6.5.1 Market Trends
 - 6.5.2 Market Forecast
- 6.6 Others
 - 6.6.1 Market Trends
 - 6.6.2 Market Forecast



7 MARKET BREAKUP BY APPLICATION

- 7.1 Stationary
 - 7.1.1 Market Trends
 - 7.1.2 Market Forecast
- 7.2 Transportation
 - 7.2.1 Market Trends
 - 7.2.2 Market Forecast
- 7.3 Portable
 - 7.3.1 Market Trends
 - 7.3.2 Market Forecast

8 MARKET BREAKUP BY REGION

- 8.1 Asia Pacific
 - 8.1.1 Market Trends
 - 8.1.2 Market Forecast
- 8.2 North America
 - 8.2.1 Market Trends
 - 8.2.2 Market Forecast
- 8.3 Europe
 - 8.3.1 Market Trends
 - 8.3.2 Market Forecast
- 8.4 Middle East and Africa
 - 8.4.1 Market Trends
 - 8.4.2 Market Forecast
- 8.5 Latin America
 - 8.5.1 Market Trends
 - 8.5.2 Market Forecast

9 FUEL CELL MANUFACTURING PROCESS

- 9.1 Product Overview
- 9.2 Raw Material Requirements
- 9.3 Manufacturing Process
- 9.4 Key Success and Risk Factors

10 COMPETITIVE LANDSCAPE



- 10.1 Market Structure
- 10.2 Key Players
- 10.3 Profiles of Key Players
 - 10.3.1 Ballard Power Systems Inc.
 - 10.3.2 Bloom Energy Corporation
 - 10.3.3 Toshiba Fuel Cell Power Systems Corporation
 - 10.3.4 FuelCell Energy Inc
 - 10.3.5 Plug Power Inc
 - 10.3.6 Nuvera Fuel Cells Inc
 - 10.3.7 AFC Energy plc
 - 10.3.8 SFC Energy AG
 - 10.3.9 Mitsubishi Hitachi Power Systems, Ltd.
 - 10.3.10 Panasonic Corporation
 - 10.3.11 Intelligent Energy Limited
 - 10.3.12 Doosan Fuel Cell America Inc.



List Of Tables

LIST OF TABLES

Table 1: Global: Fuel Cell Market: Key Industry Highlights, 2022 and 2028

Table 2: Global: Fuel Cell Market Forecast: Breakup by Type (in Million US\$),

2023-2028

Table 3: Global: Fuel Cell Market Forecast: Breakup by Application (in Million US\$),

2023-2028

Table 4: Global: Fuel Cell Market Forecast: Breakup by Region (in Million US\$),

2023-2028

Table 5: Fuel Cell: Raw Material Requirements

Table 6: Global: Fuel Cell Market: Competitive Structure

Table 7: Global: Fuel Cell Market: Key Players



List Of Figures

LIST OF FIGURES

Figure 1: Global: Fuel Cell Market: Major Drivers and Challenges

Figure 2: Global: Fuel Cell Market: Sales Value (in Billion US\$), 2017-2022

Figure 3: Global: Fuel Cell Market: Breakup by Type (in %), 2022

Figure 4: Global: Fuel Cell Market: Breakup by Application (in %), 2022

Figure 5: Global: Fuel Cell Market: Breakup by Region (in %), 2022

Figure 6: Global: Fuel Cell Market Forecast: Sales Value (in Billion US\$), 2023-2028

Figure 7: Fuel Cell Market: Price Structure

Figure 8: Global: Fuel Cell Industry: SWOT Analysis

Figure 9: Global: Fuel Cell Industry: Value Chain Analysis

Figure 10: Global: Fuel Cell Industry: Porter's Five Forces Analysis

Figure 11: Global: Fuel Cell (Proton Exchange Membrane) Market: Sales Value (in

Million US\$), 2017& 2022

Figure 12: Global: Fuel Cell (Proton Exchange Membrane) Market Forecast: Sales

Value (in Million US\$), 2023-2028

Figure 13: Global: Fuel Cell (Solid Oxide) Market: Sales Value (in Million US\$), 2017&

2022

Figure 14: Global: Fuel Cell (Solid Oxide) Market Forecast: Sales Value (in Million US\$),

2023-2028

Figure 15: Global: Fuel Cell (Molten Carbonate) Market: Sales Value (in Million US\$),

2017& 2022

Figure 16: Global: Fuel Cell (Molten Carbonate) Market Forecast: Sales Value (in Million

US\$), 2023-2028

Figure 17: Global: Fuel Cell (Direct Methanol) Market: Sales Value (in Million US\$),

2017& 2022

Figure 18: Global: Fuel Cell (Direct Methanol) Market Forecast: Sales Value (in Million

US\$), 2023-2028

Figure 19: Global: Fuel Cell (Phosphoric Acid) Market: Sales Value (in Million US\$),

2017& 2022

Figure 20: Global: Fuel Cell (Phosphoric Acid) Market Forecast: Sales Value (in Million

US\$), 2023-2028

Figure 21: Global: Fuel Cell (Other Types) Market: Sales Value (in Million US\$), 2017&

2022

Figure 22: Global: Fuel Cell (Other Types) Market Forecast: Sales Value (in Million

US\$), 2023-2028

Figure 23: Global: Fuel Cell (Stationary) Market: Sales Value (in Million US\$), 2017&



2022

Figure 24: Global: Fuel Cell (Stationary) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 25: Global: Fuel Cell (Transportation) Market: Sales Value (in Million US\$), 2017& 2022

Figure 26: Global: Fuel Cell (Transportation) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 27: Global: Fuel Cell (Portable) Market: Sales Value (in Million US\$), 2017& 2022

Figure 28: Global: Fuel Cell (Portable) Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 29: Asia Pacific: Fuel Cell Market: Sales Value (in Million US\$), 2017& 2022 Figure 30: Asia Pacific: Fuel Cell Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 31: North America: Fuel Cell Market: Sales Value (in Million US\$), 2017& 2022 Figure 32: North America: Fuel Cell Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 33: Europe: Fuel Cell Market: Sales Value (in Million US\$), 2017& 2022

Figure 34: Europe: Fuel Cell Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 35: Middle East and Africa: Fuel Cell Market: Sales Value (in Million US\$),

2017& 2022

Figure 36: Middle East and Africa: Fuel Cell Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 37: Latin America: Fuel Cell Market: Sales Value (in Million US\$), 2017& 2022

Figure 38: Latin America: Fuel Cell Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 39: Fuel Cell Manufacturing: Detailed Process Flow



I would like to order

Product name: Fuel Cell Market: Global Industry Trends, Size, Share, Growth, Opportunities and

Forecast 2023-2028

Product link: https://marketpublishers.com/r/FA9462C09DAEN.html

Price: US\$ 2,499.00 (Single User License / Electronic Delivery)

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

Service:

info@marketpublishers.com

Payment

First name:

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/FA9462C09DAEN.html

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

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 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

