

Global SOFC and SOEC Market 2024 by Manufacturers, Regions, Type and Application, Forecast to 2030

<https://marketpublishers.com/r/G2EDAAD6B853EN.html>

Date: January 2024

Pages: 116

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

ID: G2EDAAD6B853EN

Abstracts

According to our (Global Info Research) latest study, the global SOFC and SOEC market size was valued at USD 1327 million in 2023 and is forecast to a readjusted size of USD 7589.3 million by 2030 with a CAGR of 28.3% during review period.

The Solid Oxide Fuel Cell (SOFC) is an all-solid chemical power generation device that directly converts the chemical energy stored in the fuel and oxidizer into electrical energy at medium and high temperature in an efficient and environmentally friendly manner. The SOFC is a type of fuel cell, which is characterized by the use of solid oxide materials as the electrolyte. SOFC uses a solid oxide electrolyte to conduct negative oxygen ions from the cathode to the anode.

The Solid Oxide Electrolyzer Cell (SOEC) is a solid oxide fuel cell that operates in the reverse direction. In the electrolysis mode, under the applied voltage and high temperature, it electrolyzes H₂O to produce H₂ and O₂, and realizes the conversion of electrical and thermal energy into chemical energy.

The global key SOFC and SOEC manufacturers include Bloom Energy, Aisin Seiki, Mitsubishi Heavy Industries, etc. The top 1 company hold a share about 65%. North America is the largest market, with a share about 45%, followed by Asia Pacific and Europe with the share about 40% and 13%. In terms of product, planar is the largest segment, with a share about 85%. And in terms of application, the largest application is stationary, followed by transportation.

The Global Info Research report includes an overview of the development of the SOFC and SOEC industry chain, the market status of Stationary (Planar, Tubular),

Transportation (Planar, Tubular), and key enterprises in developed and developing market, and analysed the cutting-edge technology, patent, hot applications and market trends of SOFC and SOEC.

Regionally, the report analyzes the SOFC and SOEC 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 SOFC and SOEC market, with robust domestic demand, supportive policies, and a strong manufacturing base.

Key Features:

The report presents comprehensive understanding of the SOFC and SOEC 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 SOFC and SOEC 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 (MW), revenue generated, and market share of different by Type (e.g., Planar, Tubular).

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 SOFC and SOEC market.

Regional Analysis: The report involves examining the SOFC and SOEC 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 SOFC and SOEC market. This may include estimating market growth rates, predicting market demand, and identifying emerging trends.

The report also involves a more granular approach to SOFC and SOEC:

Company Analysis: Report covers individual SOFC and SOEC 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 SOFC and SOEC. This may involve surveys, interviews, and analysis of consumer reviews and feedback from different by Application (Stationary, Transportation).

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

Competitive Landscape: By analyzing individual companies, suppliers, and consumers, the report presents insights into the competitive landscape of the SOFC and SOEC 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

SOFC and SOEC 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

Planar

Tubular

Others

Market segment by Application

Stationary

Transportation

Portable & Military

Major players covered

Bloom Energy

Aisin Seiki

Mitsubishi Power

Ceres

SolydEra

Sunfire GmbH

Convion

Special Power Sources (SPS)

Topsoe

Redox Power Systems

ZTEK Corporation

OxEon Energy

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 SOFC and SOEC product scope, market overview, market estimation caveats and base year.

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

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

Chapter 4, the SOFC and SOEC 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 SOFC and SOEC 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 SOFC and SOEC.

Chapter 14 and 15, to describe SOFC and SOEC sales channel, distributors,

customers, research findings and conclusion.

Contents

1 MARKET OVERVIEW

- 1.1 Product Overview and Scope of SOFC and SOEC
- 1.2 Market Estimation Caveats and Base Year
- 1.3 Market Analysis by Type
 - 1.3.1 Overview: Global SOFC and SOEC Consumption Value by Type: 2019 Versus 2023 Versus 2030
 - 1.3.2 Planar
 - 1.3.3 Tubular
 - 1.3.4 Others
- 1.4 Market Analysis by Application
 - 1.4.1 Overview: Global SOFC and SOEC Consumption Value by Application: 2019 Versus 2023 Versus 2030
 - 1.4.2 Stationary
 - 1.4.3 Transportation
 - 1.4.4 Portable & Military
- 1.5 Global SOFC and SOEC Market Size & Forecast
 - 1.5.1 Global SOFC and SOEC Consumption Value (2019 & 2023 & 2030)
 - 1.5.2 Global SOFC and SOEC Sales Quantity (2019-2030)
 - 1.5.3 Global SOFC and SOEC 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 SOFC and SOEC Product and Services
 - 2.1.4 Bloom Energy SOFC and SOEC Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)
 - 2.1.5 Bloom Energy Recent Developments/Updates
- 2.2 Aisin Seiki
 - 2.2.1 Aisin Seiki Details
 - 2.2.2 Aisin Seiki Major Business
 - 2.2.3 Aisin Seiki SOFC and SOEC Product and Services
 - 2.2.4 Aisin Seiki SOFC and SOEC Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)
 - 2.2.5 Aisin Seiki Recent Developments/Updates

2.3 Mitsubishi Power

2.3.1 Mitsubishi Power Details

2.3.2 Mitsubishi Power Major Business

2.3.3 Mitsubishi Power SOFC and SOEC Product and Services

2.3.4 Mitsubishi Power SOFC and SOEC Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)

2.3.5 Mitsubishi Power Recent Developments/Updates

2.4 Ceres

2.4.1 Ceres Details

2.4.2 Ceres Major Business

2.4.3 Ceres SOFC and SOEC Product and Services

2.4.4 Ceres SOFC and SOEC Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)

2.4.5 Ceres Recent Developments/Updates

2.5 SolydEra

2.5.1 SolydEra Details

2.5.2 SolydEra Major Business

2.5.3 SolydEra SOFC and SOEC Product and Services

2.5.4 SolydEra SOFC and SOEC Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)

2.5.5 SolydEra Recent Developments/Updates

2.6 Sunfire GmbH

2.6.1 Sunfire GmbH Details

2.6.2 Sunfire GmbH Major Business

2.6.3 Sunfire GmbH SOFC and SOEC Product and Services

2.6.4 Sunfire GmbH SOFC and SOEC Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)

2.6.5 Sunfire GmbH Recent Developments/Updates

2.7 Convion

2.7.1 Convion Details

2.7.2 Convion Major Business

2.7.3 Convion SOFC and SOEC Product and Services

2.7.4 Convion SOFC and SOEC Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)

2.7.5 Convion Recent Developments/Updates

2.8 Special Power Sources (SPS)

2.8.1 Special Power Sources (SPS) Details

2.8.2 Special Power Sources (SPS) Major Business

2.8.3 Special Power Sources (SPS) SOFC and SOEC Product and Services

2.8.4 Special Power Sources (SPS) SOFC and SOEC Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)

2.8.5 Special Power Sources (SPS) Recent Developments/Updates

2.9 Topsoe

2.9.1 Topsoe Details

2.9.2 Topsoe Major Business

2.9.3 Topsoe SOFC and SOEC Product and Services

2.9.4 Topsoe SOFC and SOEC Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)

2.9.5 Topsoe Recent Developments/Updates

2.10 Redox Power Systems

2.10.1 Redox Power Systems Details

2.10.2 Redox Power Systems Major Business

2.10.3 Redox Power Systems SOFC and SOEC Product and Services

2.10.4 Redox Power Systems SOFC and SOEC Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)

2.10.5 Redox Power Systems Recent Developments/Updates

2.11 ZTEK Corporation

2.11.1 ZTEK Corporation Details

2.11.2 ZTEK Corporation Major Business

2.11.3 ZTEK Corporation SOFC and SOEC Product and Services

2.11.4 ZTEK Corporation SOFC and SOEC Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)

2.11.5 ZTEK Corporation Recent Developments/Updates

2.12 OxEon Energy

2.12.1 OxEon Energy Details

2.12.2 OxEon Energy Major Business

2.12.3 OxEon Energy SOFC and SOEC Product and Services

2.12.4 OxEon Energy SOFC and SOEC Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)

2.12.5 OxEon Energy Recent Developments/Updates

3 COMPETITIVE ENVIRONMENT: SOFC AND SOEC BY MANUFACTURER

3.1 Global SOFC and SOEC Sales Quantity by Manufacturer (2019-2024)

3.2 Global SOFC and SOEC Revenue by Manufacturer (2019-2024)

3.3 Global SOFC and SOEC Average Price by Manufacturer (2019-2024)

3.4 Market Share Analysis (2023)

3.4.1 Producer Shipments of SOFC and SOEC by Manufacturer Revenue (\$MM) and

Market Share (%): 2023

- 3.4.2 Top 3 SOFC and SOEC Manufacturer Market Share in 2023
- 3.4.2 Top 6 SOFC and SOEC Manufacturer Market Share in 2023
- 3.5 SOFC and SOEC Market: Overall Company Footprint Analysis
 - 3.5.1 SOFC and SOEC Market: Region Footprint
 - 3.5.2 SOFC and SOEC Market: Company Product Type Footprint
 - 3.5.3 SOFC and SOEC 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 SOFC and SOEC Market Size by Region
 - 4.1.1 Global SOFC and SOEC Sales Quantity by Region (2019-2030)
 - 4.1.2 Global SOFC and SOEC Consumption Value by Region (2019-2030)
 - 4.1.3 Global SOFC and SOEC Average Price by Region (2019-2030)
- 4.2 North America SOFC and SOEC Consumption Value (2019-2030)
- 4.3 Europe SOFC and SOEC Consumption Value (2019-2030)
- 4.4 Asia-Pacific SOFC and SOEC Consumption Value (2019-2030)
- 4.5 South America SOFC and SOEC Consumption Value (2019-2030)
- 4.6 Middle East and Africa SOFC and SOEC Consumption Value (2019-2030)

5 MARKET SEGMENT BY TYPE

- 5.1 Global SOFC and SOEC Sales Quantity by Type (2019-2030)
- 5.2 Global SOFC and SOEC Consumption Value by Type (2019-2030)
- 5.3 Global SOFC and SOEC Average Price by Type (2019-2030)

6 MARKET SEGMENT BY APPLICATION

- 6.1 Global SOFC and SOEC Sales Quantity by Application (2019-2030)
- 6.2 Global SOFC and SOEC Consumption Value by Application (2019-2030)
- 6.3 Global SOFC and SOEC Average Price by Application (2019-2030)

7 NORTH AMERICA

- 7.1 North America SOFC and SOEC Sales Quantity by Type (2019-2030)
- 7.2 North America SOFC and SOEC Sales Quantity by Application (2019-2030)
- 7.3 North America SOFC and SOEC Market Size by Country

- 7.3.1 North America SOFC and SOEC Sales Quantity by Country (2019-2030)
- 7.3.2 North America SOFC and SOEC 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 SOFC and SOEC Sales Quantity by Type (2019-2030)
- 8.2 Europe SOFC and SOEC Sales Quantity by Application (2019-2030)
- 8.3 Europe SOFC and SOEC Market Size by Country
 - 8.3.1 Europe SOFC and SOEC Sales Quantity by Country (2019-2030)
 - 8.3.2 Europe SOFC and SOEC 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 SOFC and SOEC Sales Quantity by Type (2019-2030)
- 9.2 Asia-Pacific SOFC and SOEC Sales Quantity by Application (2019-2030)
- 9.3 Asia-Pacific SOFC and SOEC Market Size by Region
 - 9.3.1 Asia-Pacific SOFC and SOEC Sales Quantity by Region (2019-2030)
 - 9.3.2 Asia-Pacific SOFC and SOEC 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 SOFC and SOEC Sales Quantity by Type (2019-2030)
- 10.2 South America SOFC and SOEC Sales Quantity by Application (2019-2030)
- 10.3 South America SOFC and SOEC Market Size by Country
 - 10.3.1 South America SOFC and SOEC Sales Quantity by Country (2019-2030)

- 10.3.2 South America SOFC and SOEC 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 SOFC and SOEC Sales Quantity by Type (2019-2030)
- 11.2 Middle East & Africa SOFC and SOEC Sales Quantity by Application (2019-2030)
- 11.3 Middle East & Africa SOFC and SOEC Market Size by Country
 - 11.3.1 Middle East & Africa SOFC and SOEC Sales Quantity by Country (2019-2030)
 - 11.3.2 Middle East & Africa SOFC and SOEC 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 SOFC and SOEC Market Drivers
- 12.2 SOFC and SOEC Market Restraints
- 12.3 SOFC and SOEC 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 SOFC and SOEC and Key Manufacturers
- 13.2 Manufacturing Costs Percentage of SOFC and SOEC
- 13.3 SOFC and SOEC Production Process
- 13.4 SOFC and SOEC Industrial Chain

14 SHIPMENTS BY DISTRIBUTION CHANNEL

- 14.1 Sales Channel

14.1.1 Direct to End-User

14.1.2 Distributors

14.2 SOFC and SOEC Typical Distributors

14.3 SOFC and SOEC 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 SOFC and SOEC Consumption Value by Type, (USD Million), 2019 & 2023 & 2030

Table 2. Global SOFC and SOEC 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 SOFC and SOEC Product and Services

Table 6. Bloom Energy SOFC and SOEC Sales Quantity (MW), Average Price (USD/KW), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 7. Bloom Energy Recent Developments/Updates

Table 8. Aisin Seiki Basic Information, Manufacturing Base and Competitors

Table 9. Aisin Seiki Major Business

Table 10. Aisin Seiki SOFC and SOEC Product and Services

Table 11. Aisin Seiki SOFC and SOEC Sales Quantity (MW), Average Price (USD/KW), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 12. Aisin Seiki Recent Developments/Updates

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

Table 14. Mitsubishi Power Major Business

Table 15. Mitsubishi Power SOFC and SOEC Product and Services

Table 16. Mitsubishi Power SOFC and SOEC Sales Quantity (MW), Average Price (USD/KW), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 17. Mitsubishi Power Recent Developments/Updates

Table 18. Ceres Basic Information, Manufacturing Base and Competitors

Table 19. Ceres Major Business

Table 20. Ceres SOFC and SOEC Product and Services

Table 21. Ceres SOFC and SOEC Sales Quantity (MW), Average Price (USD/KW), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 22. Ceres Recent Developments/Updates

Table 23. SolydEra Basic Information, Manufacturing Base and Competitors

Table 24. SolydEra Major Business

Table 25. SolydEra SOFC and SOEC Product and Services

Table 26. SolydEra SOFC and SOEC Sales Quantity (MW), Average Price (USD/KW), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 27. SolydEra Recent Developments/Updates

Table 28. Sunfire GmbH Basic Information, Manufacturing Base and Competitors

- Table 29. Sunfire GmbH Major Business
- Table 30. Sunfire GmbH SOFC and SOEC Product and Services
- Table 31. Sunfire GmbH SOFC and SOEC Sales Quantity (MW), Average Price (USD/KW), Revenue (USD Million), Gross Margin and Market Share (2019-2024)
- Table 32. Sunfire GmbH Recent Developments/Updates
- Table 33. Convion Basic Information, Manufacturing Base and Competitors
- Table 34. Convion Major Business
- Table 35. Convion SOFC and SOEC Product and Services
- Table 36. Convion SOFC and SOEC Sales Quantity (MW), Average Price (USD/KW), Revenue (USD Million), Gross Margin and Market Share (2019-2024)
- Table 37. Convion Recent Developments/Updates
- Table 38. Special Power Sources (SPS) Basic Information, Manufacturing Base and Competitors
- Table 39. Special Power Sources (SPS) Major Business
- Table 40. Special Power Sources (SPS) SOFC and SOEC Product and Services
- Table 41. Special Power Sources (SPS) SOFC and SOEC Sales Quantity (MW), Average Price (USD/KW), Revenue (USD Million), Gross Margin and Market Share (2019-2024)
- Table 42. Special Power Sources (SPS) Recent Developments/Updates
- Table 43. Topsoe Basic Information, Manufacturing Base and Competitors
- Table 44. Topsoe Major Business
- Table 45. Topsoe SOFC and SOEC Product and Services
- Table 46. Topsoe SOFC and SOEC Sales Quantity (MW), Average Price (USD/KW), Revenue (USD Million), Gross Margin and Market Share (2019-2024)
- Table 47. Topsoe Recent Developments/Updates
- Table 48. Redox Power Systems Basic Information, Manufacturing Base and Competitors
- Table 49. Redox Power Systems Major Business
- Table 50. Redox Power Systems SOFC and SOEC Product and Services
- Table 51. Redox Power Systems SOFC and SOEC Sales Quantity (MW), Average Price (USD/KW), Revenue (USD Million), Gross Margin and Market Share (2019-2024)
- Table 52. Redox Power Systems Recent Developments/Updates
- Table 53. ZTEK Corporation Basic Information, Manufacturing Base and Competitors
- Table 54. ZTEK Corporation Major Business
- Table 55. ZTEK Corporation SOFC and SOEC Product and Services
- Table 56. ZTEK Corporation SOFC and SOEC Sales Quantity (MW), Average Price (USD/KW), Revenue (USD Million), Gross Margin and Market Share (2019-2024)
- Table 57. ZTEK Corporation Recent Developments/Updates
- Table 58. OxEon Energy Basic Information, Manufacturing Base and Competitors

Table 59. OxEon Energy Major Business

Table 60. OxEon Energy SOFC and SOEC Product and Services

Table 61. OxEon Energy SOFC and SOEC Sales Quantity (MW), Average Price (USD/KW), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 62. OxEon Energy Recent Developments/Updates

Table 63. Global SOFC and SOEC Sales Quantity by Manufacturer (2019-2024) & (MW)

Table 64. Global SOFC and SOEC Revenue by Manufacturer (2019-2024) & (USD Million)

Table 65. Global SOFC and SOEC Average Price by Manufacturer (2019-2024) & (USD/KW)

Table 66. Market Position of Manufacturers in SOFC and SOEC, (Tier 1, Tier 2, and Tier 3), Based on Consumption Value in 2023

Table 67. Head Office and SOFC and SOEC Production Site of Key Manufacturer

Table 68. SOFC and SOEC Market: Company Product Type Footprint

Table 69. SOFC and SOEC Market: Company Product Application Footprint

Table 70. SOFC and SOEC New Market Entrants and Barriers to Market Entry

Table 71. SOFC and SOEC Mergers, Acquisition, Agreements, and Collaborations

Table 72. Global SOFC and SOEC Sales Quantity by Region (2019-2024) & (MW)

Table 73. Global SOFC and SOEC Sales Quantity by Region (2025-2030) & (MW)

Table 74. Global SOFC and SOEC Consumption Value by Region (2019-2024) & (USD Million)

Table 75. Global SOFC and SOEC Consumption Value by Region (2025-2030) & (USD Million)

Table 76. Global SOFC and SOEC Average Price by Region (2019-2024) & (USD/KW)

Table 77. Global SOFC and SOEC Average Price by Region (2025-2030) & (USD/KW)

Table 78. Global SOFC and SOEC Sales Quantity by Type (2019-2024) & (MW)

Table 79. Global SOFC and SOEC Sales Quantity by Type (2025-2030) & (MW)

Table 80. Global SOFC and SOEC Consumption Value by Type (2019-2024) & (USD Million)

Table 81. Global SOFC and SOEC Consumption Value by Type (2025-2030) & (USD Million)

Table 82. Global SOFC and SOEC Average Price by Type (2019-2024) & (USD/KW)

Table 83. Global SOFC and SOEC Average Price by Type (2025-2030) & (USD/KW)

Table 84. Global SOFC and SOEC Sales Quantity by Application (2019-2024) & (MW)

Table 85. Global SOFC and SOEC Sales Quantity by Application (2025-2030) & (MW)

Table 86. Global SOFC and SOEC Consumption Value by Application (2019-2024) & (USD Million)

Table 87. Global SOFC and SOEC Consumption Value by Application (2025-2030) &

(USD Million)

Table 88. Global SOFC and SOEC Average Price by Application (2019-2024) & (USD/KW)

Table 89. Global SOFC and SOEC Average Price by Application (2025-2030) & (USD/KW)

Table 90. North America SOFC and SOEC Sales Quantity by Type (2019-2024) & (MW)

Table 91. North America SOFC and SOEC Sales Quantity by Type (2025-2030) & (MW)

Table 92. North America SOFC and SOEC Sales Quantity by Application (2019-2024) & (MW)

Table 93. North America SOFC and SOEC Sales Quantity by Application (2025-2030) & (MW)

Table 94. North America SOFC and SOEC Sales Quantity by Country (2019-2024) & (MW)

Table 95. North America SOFC and SOEC Sales Quantity by Country (2025-2030) & (MW)

Table 96. North America SOFC and SOEC Consumption Value by Country (2019-2024) & (USD Million)

Table 97. North America SOFC and SOEC Consumption Value by Country (2025-2030) & (USD Million)

Table 98. Europe SOFC and SOEC Sales Quantity by Type (2019-2024) & (MW)

Table 99. Europe SOFC and SOEC Sales Quantity by Type (2025-2030) & (MW)

Table 100. Europe SOFC and SOEC Sales Quantity by Application (2019-2024) & (MW)

Table 101. Europe SOFC and SOEC Sales Quantity by Application (2025-2030) & (MW)

Table 102. Europe SOFC and SOEC Sales Quantity by Country (2019-2024) & (MW)

Table 103. Europe SOFC and SOEC Sales Quantity by Country (2025-2030) & (MW)

Table 104. Europe SOFC and SOEC Consumption Value by Country (2019-2024) & (USD Million)

Table 105. Europe SOFC and SOEC Consumption Value by Country (2025-2030) & (USD Million)

Table 106. Asia-Pacific SOFC and SOEC Sales Quantity by Type (2019-2024) & (MW)

Table 107. Asia-Pacific SOFC and SOEC Sales Quantity by Type (2025-2030) & (MW)

Table 108. Asia-Pacific SOFC and SOEC Sales Quantity by Application (2019-2024) & (MW)

Table 109. Asia-Pacific SOFC and SOEC Sales Quantity by Application (2025-2030) & (MW)

Table 110. Asia-Pacific SOFC and SOEC Sales Quantity by Region (2019-2024) & (MW)

Table 111. Asia-Pacific SOFC and SOEC Sales Quantity by Region (2025-2030) & (MW)

Table 112. Asia-Pacific SOFC and SOEC Consumption Value by Region (2019-2024) & (USD Million)

Table 113. Asia-Pacific SOFC and SOEC Consumption Value by Region (2025-2030) & (USD Million)

Table 114. South America SOFC and SOEC Sales Quantity by Type (2019-2024) & (MW)

Table 115. South America SOFC and SOEC Sales Quantity by Type (2025-2030) & (MW)

Table 116. South America SOFC and SOEC Sales Quantity by Application (2019-2024) & (MW)

Table 117. South America SOFC and SOEC Sales Quantity by Application (2025-2030) & (MW)

Table 118. South America SOFC and SOEC Sales Quantity by Country (2019-2024) & (MW)

Table 119. South America SOFC and SOEC Sales Quantity by Country (2025-2030) & (MW)

Table 120. South America SOFC and SOEC Consumption Value by Country (2019-2024) & (USD Million)

Table 121. South America SOFC and SOEC Consumption Value by Country (2025-2030) & (USD Million)

Table 122. Middle East & Africa SOFC and SOEC Sales Quantity by Type (2019-2024) & (MW)

Table 123. Middle East & Africa SOFC and SOEC Sales Quantity by Type (2025-2030) & (MW)

Table 124. Middle East & Africa SOFC and SOEC Sales Quantity by Application (2019-2024) & (MW)

Table 125. Middle East & Africa SOFC and SOEC Sales Quantity by Application (2025-2030) & (MW)

Table 126. Middle East & Africa SOFC and SOEC Sales Quantity by Region (2019-2024) & (MW)

Table 127. Middle East & Africa SOFC and SOEC Sales Quantity by Region (2025-2030) & (MW)

Table 128. Middle East & Africa SOFC and SOEC Consumption Value by Region (2019-2024) & (USD Million)

Table 129. Middle East & Africa SOFC and SOEC Consumption Value by Region (2025-2030) & (USD Million)

Table 130. SOFC and SOEC Raw Material

Table 131. Key Manufacturers of SOFC and SOEC Raw Materials

Table 132. SOFC and SOEC Typical Distributors

Table 133. SOFC and SOEC Typical Customers

List Of Figures

LIST OF FIGURES

Figure 1. SOFC and SOEC Picture

Figure 2. Global SOFC and SOEC Consumption Value by Type, (USD Million), 2019 & 2023 & 2030

Figure 3. Global SOFC and SOEC Consumption Value Market Share by Type in 2023

Figure 4. Planar Examples

Figure 5. Tubular Examples

Figure 6. Others Examples

Figure 7. Global SOFC and SOEC Consumption Value by Application, (USD Million), 2019 & 2023 & 2030

Figure 8. Global SOFC and SOEC Consumption Value Market Share by Application in 2023

Figure 9. Stationary Examples

Figure 10. Transportation Examples

Figure 11. Portable & Military Examples

Figure 12. Global SOFC and SOEC Consumption Value, (USD Million): 2019 & 2023 & 2030

Figure 13. Global SOFC and SOEC Consumption Value and Forecast (2019-2030) & (USD Million)

Figure 14. Global SOFC and SOEC Sales Quantity (2019-2030) & (MW)

Figure 15. Global SOFC and SOEC Average Price (2019-2030) & (USD/KW)

Figure 16. Global SOFC and SOEC Sales Quantity Market Share by Manufacturer in 2023

Figure 17. Global SOFC and SOEC Consumption Value Market Share by Manufacturer in 2023

Figure 18. Producer Shipments of SOFC and SOEC by Manufacturer Sales Quantity (\$MM) and Market Share (%): 2023

Figure 19. Top 3 SOFC and SOEC Manufacturer (Consumption Value) Market Share in 2023

Figure 20. Top 6 SOFC and SOEC Manufacturer (Consumption Value) Market Share in 2023

Figure 21. Global SOFC and SOEC Sales Quantity Market Share by Region (2019-2030)

Figure 22. Global SOFC and SOEC Consumption Value Market Share by Region (2019-2030)

Figure 23. North America SOFC and SOEC Consumption Value (2019-2030) & (USD

Million)

Figure 24. Europe SOFC and SOEC Consumption Value (2019-2030) & (USD Million)

Figure 25. Asia-Pacific SOFC and SOEC Consumption Value (2019-2030) & (USD Million)

Figure 26. South America SOFC and SOEC Consumption Value (2019-2030) & (USD Million)

Figure 27. Middle East & Africa SOFC and SOEC Consumption Value (2019-2030) & (USD Million)

Figure 28. Global SOFC and SOEC Sales Quantity Market Share by Type (2019-2030)

Figure 29. Global SOFC and SOEC Consumption Value Market Share by Type (2019-2030)

Figure 30. Global SOFC and SOEC Average Price by Type (2019-2030) & (USD/KW)

Figure 31. Global SOFC and SOEC Sales Quantity Market Share by Application (2019-2030)

Figure 32. Global SOFC and SOEC Consumption Value Market Share by Application (2019-2030)

Figure 33. Global SOFC and SOEC Average Price by Application (2019-2030) & (USD/KW)

Figure 34. North America SOFC and SOEC Sales Quantity Market Share by Type (2019-2030)

Figure 35. North America SOFC and SOEC Sales Quantity Market Share by Application (2019-2030)

Figure 36. North America SOFC and SOEC Sales Quantity Market Share by Country (2019-2030)

Figure 37. North America SOFC and SOEC Consumption Value Market Share by Country (2019-2030)

Figure 38. United States SOFC and SOEC Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 39. Canada SOFC and SOEC Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 40. Mexico SOFC and SOEC Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 41. Europe SOFC and SOEC Sales Quantity Market Share by Type (2019-2030)

Figure 42. Europe SOFC and SOEC Sales Quantity Market Share by Application (2019-2030)

Figure 43. Europe SOFC and SOEC Sales Quantity Market Share by Country (2019-2030)

Figure 44. Europe SOFC and SOEC Consumption Value Market Share by Country (2019-2030)

- Figure 45. Germany SOFC and SOEC Consumption Value and Growth Rate (2019-2030) & (USD Million)
- Figure 46. France SOFC and SOEC Consumption Value and Growth Rate (2019-2030) & (USD Million)
- Figure 47. United Kingdom SOFC and SOEC Consumption Value and Growth Rate (2019-2030) & (USD Million)
- Figure 48. Russia SOFC and SOEC Consumption Value and Growth Rate (2019-2030) & (USD Million)
- Figure 49. Italy SOFC and SOEC Consumption Value and Growth Rate (2019-2030) & (USD Million)
- Figure 50. Asia-Pacific SOFC and SOEC Sales Quantity Market Share by Type (2019-2030)
- Figure 51. Asia-Pacific SOFC and SOEC Sales Quantity Market Share by Application (2019-2030)
- Figure 52. Asia-Pacific SOFC and SOEC Sales Quantity Market Share by Region (2019-2030)
- Figure 53. Asia-Pacific SOFC and SOEC Consumption Value Market Share by Region (2019-2030)
- Figure 54. China SOFC and SOEC Consumption Value and Growth Rate (2019-2030) & (USD Million)
- Figure 55. Japan SOFC and SOEC Consumption Value and Growth Rate (2019-2030) & (USD Million)
- Figure 56. Korea SOFC and SOEC Consumption Value and Growth Rate (2019-2030) & (USD Million)
- Figure 57. India SOFC and SOEC Consumption Value and Growth Rate (2019-2030) & (USD Million)
- Figure 58. Southeast Asia SOFC and SOEC Consumption Value and Growth Rate (2019-2030) & (USD Million)
- Figure 59. Australia SOFC and SOEC Consumption Value and Growth Rate (2019-2030) & (USD Million)
- Figure 60. South America SOFC and SOEC Sales Quantity Market Share by Type (2019-2030)
- Figure 61. South America SOFC and SOEC Sales Quantity Market Share by Application (2019-2030)
- Figure 62. South America SOFC and SOEC Sales Quantity Market Share by Country (2019-2030)
- Figure 63. South America SOFC and SOEC Consumption Value Market Share by Country (2019-2030)
- Figure 64. Brazil SOFC and SOEC Consumption Value and Growth Rate (2019-2030) &

(USD Million)

Figure 65. Argentina SOFC and SOEC Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 66. Middle East & Africa SOFC and SOEC Sales Quantity Market Share by Type (2019-2030)

Figure 67. Middle East & Africa SOFC and SOEC Sales Quantity Market Share by Application (2019-2030)

Figure 68. Middle East & Africa SOFC and SOEC Sales Quantity Market Share by Region (2019-2030)

Figure 69. Middle East & Africa SOFC and SOEC Consumption Value Market Share by Region (2019-2030)

Figure 70. Turkey SOFC and SOEC Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 71. Egypt SOFC and SOEC Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 72. Saudi Arabia SOFC and SOEC Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 73. South Africa SOFC and SOEC Consumption Value and Growth Rate (2019-2030) & (USD Million)

Figure 74. SOFC and SOEC Market Drivers

Figure 75. SOFC and SOEC Market Restraints

Figure 76. SOFC and SOEC Market Trends

Figure 77. Porters Five Forces Analysis

Figure 78. Manufacturing Cost Structure Analysis of SOFC and SOEC in 2023

Figure 79. Manufacturing Process Analysis of SOFC and SOEC

Figure 80. SOFC and SOEC Industrial Chain

Figure 81. Sales Quantity Channel: Direct to End-User vs Distributors

Figure 82. Direct Channel Pros & Cons

Figure 83. Indirect Channel Pros & Cons

Figure 84. Methodology

Figure 85. Research Process and Data Source

I would like to order

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

Product link: <https://marketpublishers.com/r/G2EDAAD6B853EN.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/G2EDAAD6B853EN.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

