

Planar Solid Oxide Fuel Cell - Global Market Outlook (2020-2028)

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Abstracts

According to Statistics MRC, the Global Planar Solid Oxide Fuel Cell Market is accounted for \$715.56 million in 2020 and is expected to reach \$1,970.68 million by 2028 growing at a CAGR of 13.5% during the forecast period. Some of the key factors propelling the market growth include wide variety of fuel compatibility makes them more versatile systems for power generation, highest conversion efficiency enables faster return on investments, suitable for wide variety of applications, and biomass utilization makes them highly lucrative technology. However, longer start-up time and high capital investment are restricting the market growth.

Planar solid oxide fuel cell (SOFC) is a flat, thin ceramic plate that converts the chemical energy of a fuel into electricity with least amount emissions. It offers a clean, low-pollution technology to electrochemically generate electricity at high efficiencies, since their efficiencies are not limited by the Carnot cycle of a heat engine. These fuel cell technologies have many advantages over traditional energy conversion systems including high efficiency, consistency, modularity, fuel compliance, and very low levels of NO_x and SO_x emissions.

By application, stationary segment is expected to register significant growth rate in the planar solid oxide fuel cell market during the forecast period. Stationary power includes any application in which the fuel cells are operated at a fixed location, such as large-scale systems for prime power, backup power or combined heat and power and small systems for micro-combined heat and power (m-CHP) for residential and commercial operations. Fuel cells provide reliable backup power for telecommunications networks, which, in many cases, are located in remote areas, without developed power infrastructure, owing to which the demand for stationary SOFCs is expected to increase.

Based on the geography, the Asia Pacific region is projected to be the fastest-growing market for spray drying equipment, owing to increasing demand for the product from the automotive industry, in countries including India, Indonesia, and Thailand. In addition to this, the expansion of several other end-use industries in the developing nations of the region is expected to augment the growth of the regional market. Japan is leading in the region with vast applications of fuel cells, ranging from backup services for data centers, combined heat and power for homes, and many more. This is expected to provide a significant market growth for planar solid oxide fuel cell market. China has also witnessed a rise in its hyper-scale platforms, owing to which providing data center services for Chinese hyper-scale platforms have become necessary.

Some of the key players in Planar Solid Oxide Fuel Cell Market include Accumentrics Corporation, Bloom Energy Corporation, Fuel Cell Energy, Ceramic Fuel Cells Limited, Watt Fuel Cell Corporation, Ultra Electronics, Ceres Power Holdings PLC., Protonex Technology Corporation, Aisin Seiki Corporation Limited, Delphi, SOFC Power S.P.A., Staxera Sunfire GmbH, Topsoe Fuel Cell, Convion Fuel Cells Ltd., Hexis AG, Ballard Power Systems Inc., and Chevron Corporation.

Components Covered:

Manifolds

Seals

Flat Planar Solid Oxide Fuel Cell (SOFC)

Separator Plates

Sales Channels Covered:

Distributor

Direct Sales

Applications Covered:

Stationary

Portable

Transportation

Unrelieved

Traffic

Military

End Users Covered:

Data Centers

Commercial

Regions Covered:

North America

US

Canada

Mexico

Europe

Germany

France

Italy

UK

Spain

Rest of Europe

Asia Pacific

Japan

China

India

Australia

New Zealand

South Korea

Rest of Asia Pacific

South America

Argentina

Brazil

Chile

Rest of South America

Middle East & Africa

Saudi Arabia

UAE

Qatar

South Africa

Rest of Middle East & Africa

What our report offers:

Market share assessments for the regional and country-level segments

Strategic recommendations for the new entrants

Covers Market data for the years 2019, 2020, 2021, 2025 and 2028

Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)

Strategic analysis: Drivers and Constraints, Product/Technology Analysis, Porter's five forces analysis, SWOT analysis, etc.

Strategic recommendations in key business segments based on the market estimations

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Company profiling with detailed strategies, financials, and recent developments

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Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

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