

Global Stationary Fuel Cell Market Size study & Forecast, by Technology (MCFC, PAFC, PEMFC, SOFC), by Application (Prime Power, Uninterrupted Power Supply (UPS), Combined Heat and Power (CHP)), by Power Range (Less than 1Kw, More than 1mW) and Regional Analysis, 2023-2030

https://marketpublishers.com/r/G2E53BB44031EN.html

Date: December 2023 Pages: 200 Price: US\$ 4,950.00 (Single User License) ID: G2E53BB44031EN

## **Abstracts**

Global Stationary Fuel Cell Market is valued at approximately USD 3.2 billion in 2022 and is anticipated to grow with a healthy growth rate of more than 20.3 % over the forecast period 2023-2030. stationary fuel cell is a type of fuel cell system designed for stationary or continuous power generation, as opposed to portable fuel cells used in mobile applications. Fuel cells are electrochemical devices that convert the chemical energy of a fuel, typically hydrogen, and an oxidizer, usually oxygen from the air, into electricity and heat. Stationary fuel cells are primarily used to provide clean and efficient power in various stationary applications. The Stationary fuel cell market is expanding because of factors such as increasing demand for clean energy sources, cohesive government incentives and regulations, and rising investments in infrastructure, such as hydrogen refueling stations and fuel cell manufacturing facilities, have played a role in advancing the stationary fuel cell market.

Moreover, increasing concerns about environmental sustainability and the need to reduce greenhouse gas emissions have driven the demand for clean and renewable energy sources. Stationary fuel cells, which can produce electricity with lower emissions compared to traditional fossil fuels, have gained attention in this context. According to a 2021 report published by The International Energy Agency, the global fuel cell market is anticipated to experience growth due to a growing demand for alternative and clean energy sources. The report highlights that renewable energy usage witnessed a 3%



increase in 2020, primarily driven by a nearly 7% growth in electricity generation from renewable sources. Furthermore, it is projected that renewable electricity generation expected expand by over 8% in 2021, reaching a total of 8,300 TWh. In addition, technological advancements in fuel cells and rapid investment in R&D of fuel cell systems would create lucrative growth opportunities. However, the high cost of fuel cell systems stifles market growth throughout the forecast period of 2023-2030.

The key regions considered for the Global Stationary Fuel Cell Market study includes Asia Pacific, North America, Europe, Latin America, and Middle East & Africa. North America dominated the market over the forecast period owing to the well-established energy infrastructure and emphasis on renewable energy sources in the region creating favorable conditions for the adoption of stationary fuel cell systems. Asia Pacific is the fastest growing region over the forecast period, owing to factors such as growing population, rapid urbanization, and the rising demand for reliable and sustainable power generation in the region.

Major market player included in this report are:

Fuji Electric Co Ltd.

Fuelcell Energy Inc.

**Denso Corporation** 

Toshiba Energy Systems & Solutions Corporation

Plug Power Inc.

Posco Energy Co., Ltd.

Mitsubishi Hitachi Power Systems Ltd

Horizon Fuel Cell Technologies Pte Ltd.

Ballard Power Systems Inc.

Aisin Corporation

Recent Developments in the Market:



In May 2021, Fuelcell Energy Inc. secured USD 8 million in funding from the US Department of Energy (DOE) for the ARPA-E project aimed at advancing the development of highly efficient Solid Oxide Fuel Cell (SOFC) devices for power generation.

Global Stationary Fuel Cell Market Report Scope:

Historical Data – 2020 - 2021

Base Year for Estimation – 2022

Forecast period - 2023-2030

Report Coverage - Revenue forecast, Company Ranking, Competitive Landscape, Growth factors, and Trends

Segments Covered – Technology, Application, Power Range, Region

Regional Scope - North America; Europe; Asia Pacific; Latin America; Middle East & Africa

Customization Scope - Free report customization (equivalent up to 8 analyst's working hours) with purchase. Addition or alteration to country, regional & segment scope\*

The objective of the study is to define market sizes of different segments & countries in recent years and to forecast the values to the coming years. The report is designed to incorporate both qualitative and quantitative aspects of the industry within countries involved in the study.

The report also caters detailed information about the crucial aspects such as driving factors & challenges which will define the future growth of the market. Additionally, it also incorporates potential opportunities in micro markets for stakeholders to invest along with the detailed analysis of competitive landscape and product offerings of key players. The detailed segments and sub-segment of the market are explained below:

#### By Technology:



MCFC

PAFC

PEMFC

SOFC

By Application:

**Prime Power** 

Uninterrupted Power Supply (UPS)

Combined Heat and Power (CHP)

By Power Range:

Less than 1Kw

More than 1mW

By Region:

North America

U.S.

Canada

Europe

UK

Germany

France



Spain
Italy
ROE
Asia Pacific
China
India
Japan
Australia
South Korea
RoAPAC
Latin America
Brazil
Mexico
Middle East & Africa
Saudi Arabia
South Africa

Rest of Middle East & Africa



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