

Fuel Cell Market by Type (PEMFC, SOFC, PAFC, MFC, DMFC, AFC), Application (Portable, Stationary, Vehicles (FCV)), Size (Small & Large), End User (Residential, C&I, Transportation, Data Center, Military & Defense, Utility), Region - Global Forecast to 2027

<https://marketpublishers.com/r/F124450C357EN.html>

Date: May 2022

Pages: 310

Price: US\$ 4,950.00 (Single User License)

ID: F124450C357EN

Abstracts

The global fuel cell market size is estimated to be USD 2.9 billion in 2022 and is projected to reach USD 9.1 billion by 2027, at a CAGR of 26.0%. The market has a promising growth potential due to several factors, including the stringent norms on GHG emission across the globe, increasing R&D grants, increasing need of energy efficient power generation, and spur in demand of public as well as personal fuel cell electric vehicles.

“Stationary, The largest segment of fuel cell market, by application”

In the stationary application of fuel cells, the output required can be as high as multi megawatts (MW) or as low as less than 1 kW. Fuel cells with larger capacities are larger in size as well. These fuel cells can further be used for capacity addition and carbon capturing operations in a thermal power plant. Thus, the use of fuel cells consequently helps in reducing the carbon footprint in the residential, commercial, and industrial sectors.

“Transportation: The largest segment of fuel cell market, by end user”

The rising demand for personal mobility and increased concerns for low emission vehicles are driving the growth of the transportation end user. Several FCEV models, such as the Toyota Mirai, Honda Clarity, Mercedes Benz GLC FCEV, Nissan X-Trail FCEV, and Riversimple RASA are available in the market. Realizing the significant

potential in the passenger light duty market, various companies are planning to launch new models in the coming years.

“Asia Pacific: The largest region in the fuel cell market”

Asia Pacific is one of the leading markets which is continuously shifting its focus towards green and renewable technologies to meet the targets set by the governments for reducing GHG emissions. Furthermore, countries such as Japan and South Korea are increasing their investments to adopt fuel cell technology.

Breakdown of Primaries:

The study contains insights from various industry experts, ranging from component suppliers to Tier 1 companies and OEMs. The break-up of the primaries is as follows:

By Company Type— Tier 1- 65%, Tier 2- 24% Tier 3 - 11%

By Designation— C level - 30%, Managers & Other Level - 70%

By Region— North America - 27%, Europe - 20%, Asia Pacific - 53%

The fuel cell market is dominated by a few globally established players such as Bloom Energy (US), Aisin Corporation (Japan), Doosan Fuel Cell Co., Ltd. (South Korea), KYOCERA Corporation (Japan), Plug Power Inc. (US), Ceres (UK), Cummins Inc. (US), PowerCell Sweden AB (Sweden), TOSHIBA CORPORATION (Japan), Ballard Power Systems (Canada), SFC Energy (Germany), Mitsubishi Heavy Industries, Ltd (Japan), AFC Energy PLC (UK), ElringKlinger AG (Germany), Fuji Electric Co., Ltd. (Japan), Proton Motor Fuel Cell GmbH (UK), Adaptive Energy (US), Adelan (UK), Special Power Sources (US), ZTEK Corporation (US), SOLIDpower S.p.A. (Italy), Watt Fuel Cell Corporation (US), AVL List GmbH (Austria), Alteryg (US), MICROrganic Technologies (US), Nedstack Fuel Cell Technology BV (Netherlands), Intelligent Energy Limited (UK), Horizon Fuel cell Technologies (Singapore), Nuvera Fuel Cells, LLC (US), and PowerUP Energy Technologies (Estonia).

Study Coverage:

The report segments the fuel cell market and forecasts its size, by volume and value, based on region (Asia Pacific, Europe, North America, and RoW), type (PEMFC, SOFC,

PAFC, AFC, MFC, and DMFC), application (Stationary, Portable, and Fuel Cell Vehicles), size (Small scale and Large scale), end user (Residential, Commercial & Industrial, Transportation, Data Centers, Military & Defense, and Utilities & Government/Municipal Institutes).

The report also provides a comprehensive review of market drivers, restraints, opportunities, and challenges in the fuel cell market. The report also covers qualitative aspects in addition to the quantitative aspects of these markets.

Key benefits of buying the report:

The report will help the leaders/new entrants in this market with information on the closest approximations of the revenue numbers for the overall market and the sub-segments. This report will help stakeholders understand the competitive landscape and gain more insights to better position their businesses and plan suitable go-to-market

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