

Global Regenerative Fuel Cell Market Size study & Forecast, by Type (Alcohol Fuel, Hydrogen Oxygen Fuel, and Others) and Application (Solar Panels, Spacecraft, Automotive Vehicles, and Others) and Regional Analysis, 2022-2029

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Abstracts

Global Regenerative Fuel Cell Market is valued at approximately USD XX billion in 2021 and is anticipated to grow with a healthy growth rate of more than XX% over the forecast period 2022-2029. Regenerative Fuel Cell or reverse fuel cell (RFC) in which a fuel cell and an electrolyzer work together to both create and consume oxygen and stored hydrogen. When an electrolyzer is coupled to a renewable energy source, such as solar or wind, hydrogen is created using input power. When the renewable source isn't available, the hydrogen is then stored in the system and used in the fuel cell to generate power. In comparison with traditional secondary batteries, regenerative fuel cell offers several advantages including high power density, high specific energy density, lightweight, low cost, high efficiency, long life, and zero environmental impact among others. However, regenerative fuel cell systems also carry certain limitations such as vulnerability to heat shock and long-term stability (lifetime). The increasing adoption of fuel cell electric vehicles and growing awareness towards Carbon Emissions and adoption of sustainable business practices are key factors driving the market growth.

The increasing adoption of fuel cell-powered electric vehicles is contributing towards the growth of the Global Regenerative Fuel Cell Market. For instance – according to Statista – in 2020, globally, the number of fuel cell electric vehicles (FCEVs) was recorded at 16,000 units, and as per projections the number of FCEVs is projected to grow at a whopping compound annual growth rate of 95.4 per cent between 2020 and 2030, to reach to approximately 13 million units in 2030. Additionally, Asia Pacific is estimated to



be the biggest market for this type of alternative fuel vehicle over the forecast period. Also, an increase in R&D Programs in the Automobile Sector and growing demand for clean energy would create a lucrative growth prospectus for the market over the forecast period. However, the high maintenance cost of regenerative fuel cells and low durability of regenerative fuel cells stifle the market growth throughout the forecast period of 2022-2029.

The key regions considered for the Global Regenerative Fuel Cell Market study includes Asia Pacific, North America, Europe, Latin America, and Rest of the World. North America dominated the market in terms of revenue, owing to the increasing government spending on clean energy and the presence of leading market players in the region. Whereas Asia Pacific is expected to grow with the highest CAGR during the forecast period, owing to factors such as the presence of a well-established automotive manufacturing industry as well as growing demand for RFCs in automotive vehicles in the region.

Major market player included in this report are: Samsung Sdi Co. Limited Toshiba Corp SFC Energy B.V DuPont de Nemours, Inc Hitachi Ltd. Cmr Fuel Cells Plc. Sharp Corp Fujikura Ltd. Ultracell Corp. Panasonic Holdings Corporation .

Recent Developments in the Market:

In September 2019, USA-based Cummins Inc., announced the acquisition of Toronto, Canada-based Hydrogenics Corp., a leader in a hydrogen fuel cells for a transaction amount of USD 290 million

In March 2022, Cummins Inc. announced the commencement of its new Hydrogen Fuel Cell Systems Production Center in Herten, Germany to scale up the adoption of hydrogen technologies across Europe. This new facility would be equipped with a production capacity of 10 MW per year for fuel cell system engineering and assembly.



Global Regenerative Fuel Cell Market Report Scope: Historical Data 2019-2020-2021 Base Year for Estimation 2021 Forecast period 2022-2029 Report Coverage Revenue forecast, Company Ranking, Competitive Landscape, Growth factors, and Trends Segments Covered Type, Application, Region Regional Scope North America; Europe; Asia Pacific; Latin America; Rest of the World 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 Type Alcohol Fuel Hydrogen Oxygen Fuel Others By Application Solar Panels Spacecraft Automotive Vehicles Others

By Region: North America U.S. Canada Europe UK

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Germany France Spain Italy ROE Asia Pacific China India Japan Australia South Korea RoAPAC Latin America Brazil Mexico RoLA Rest of the World



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