+44 20 8123 2220
info@marketpublishers.com

Fuel Cells Market based on By Type (Proton Exchange Membrane Fuel Cell, Solid Oxide Fuel Cell, Phosphoric Acid Fuel Cell, and Others), By Application (Transport, Stationary, and Portable), Regional Outlook– Global Forecast up to 2032

https://marketpublishers.com/r/F0EF6BC177FDEN.html
Date: April 2024
Pages: 114
Price: US$ 4,500.00 (Single User License)
ID: F0EF6BC177FDEN

Abstracts

Over 15% of greenhouse gas emissions globally come from vehicle emissions. Governments everywhere are searching for alternate energy sources to use in the transportation sector as a result. Fuel cell vehicles (FCVs) are predicted to see a rise in adoption over the projection period due to their low CO2 emissions when in operation. As a result, a lot of important players are concentrating on fuel cell research and development and investments. By 2030, the EV30@30 campaign hopes to increase sales of new electric vehicles by at least 30%. Many nations are preparing to increase the use of electric vehicles as part of this campaign, including Canada, Finland, France, Japan, Mexico, the Netherlands, Norway, Sweden, and India.

Fuel cell electric vehicles, or FCEVs, use fuel cells to transform hydrogen that is stored inside the car into electricity that powers an electric motor. Because to the high cost of fuel and purchases, FCEVs are more expensive to buy and operate than electric cars. However, because fuel cells are environmentally beneficial, governments are using them to power garbage trucks and public buses all around the world. Since 2014, FCEVs have been sold commercially. The IEA projects that by 2020, there will be 40% more FCEVs on the road, with South Korea accounting for a large portion of this growth. The number of hydrogen refueling stations is rising in nations like China and Japan, which is predicted to propel the fuel cell market.

One of the main limitations of fuel cells is the storage of hydrogen, particularly for long distance transportation within the vehicle's weight, space, efficiency, safety, and cost

+44 20 8123 2220
info@marketpublishers.com

constraints. Hydrogen storage systems are not able to achieve the same range as traditional petroleum-fueled vehicles due to their large weight and volume. Furthermore, the endurance of hydrogen systems is restricted, necessitating the development of materials and components that enable hydrogen storage systems with a 1,500 cycle lifetime. Additionally, systems that require less than three minutes to refuel must be developed because the refueling period associated with hydrogen storage is lengthy.

Research Methodology:

After secondary research provided a fundamental understanding of the worldwide Fuel Cells Market scenario, extensive primary research was carried out. A number of primary interviews were carried out with industry experts from the supply and demand sides, including C- and D-level executives, product managers, and marketing and sales managers of major manufacturers, distributors, and channel partners from tier 1 and tier 2 companies offering Fuel Cells Market, as well as personnel from academia, research, and CROs. These interviews were conducted across five major regions: North America, Europe, Asia Pacific, and the Rest of the World (Latin America & the Middle East & Africa). Participants from the supply-side and demand-side participated in about 70% and 30% of the primary interviews, respectively. Through the use of questionnaires, emails, online surveys, in-person interviews, and phone interviews, this main data was gathered. The primary participants share is given below:

The segmentation coverage of the study is provided below.

Fuel Cells Market based on Type:

Proton Exchange Membrane Fuel Cell

Solid Oxide Fuel Cell

Phosphoric Acid Fuel Cell

Others

Fuel Cells Market based on Application:

Transport

+44 20 8123 2220
info@marketpublishers.com

Stationary

Portable

Fuel Cells Market based on Geography:

North America

US

Canada

Europe

Germany

UK

France

Italy

Spain

Rest of Europe (RoE)

Asia Pacific (APAC)

China

Japan

India

Australia

South Korea

+44 20 8123 2220
info@marketpublishers.com

Rest of Asia Pacific (RoAPAC)

Latin America (LATAM)

Brazil

Argentina

Rest of South America

Middle East and Africa (MEA)

UAE

Turkey

Saudi Arabia

South Africa

Rest of Middle East & Africa

The market is segmented based on fuel type, including solid oxide and phosphoric acid fuel cells, proton exchange membrane fuel cells, and others. The market is dominated worldwide by the Proton Exchange Membrane Fuel Cell (PEMFC) category. PEMFC is in higher demand than other varieties because of a number of advantages. Benefits including lightweight, low cost, solidity of electrolyte, compact design, input fuel flexibility, and low cost will contribute to market expansion.

Over the course of the projected period, the Solid Oxide Fuel Cell (SOFC) segment is expected to increase rapidly. The Ene-Farm program has seen a notable increase in the share of SOFC because of the stack's improved efficiency and higher-grade heat. An rise of bloom units for prime power shipments to the United States and Korea is linked to the net increase in SOFC shipment capacity.

The market has been divided into three segments based on application: transport, stationary, and portable. Over the predicted period, the transport segment will increase

+44 20 8123 2220
info@marketpublishers.com

at a high rate. The global trend is moving more and more in the direction of clean transportation. Many nations are making investments to create an environment free of emissions, which is increasing the transportation sector.

Throughout the projection period, the stationary sector is probably going to develop at a considerable rate. Amidst zero-emission standards and investments in green energy, fuel cell utilization in stationary applications—such as data centers, UPS, and others—is rising dramatically.

The global market has been examined in terms of geography, encompassing North America, Asia Pacific, Europe, and the rest of the world.

The largest proportion of the global fuel cell market is held by Asia Pacific. Thanks to encouraging government regulations, South Korea is currently expanding its lead in the production and use of FC automobiles. For instance, in 2021, a record 8,500 NEXOs were shipped into the nation; in the years to come, this number is expected to rise significantly. Furthermore, Hyundai intends to increase the output of its fuel cell systems to 100,000 units annually by the end of 2023. As a result, China commands a large share of the market in the region. China has set extremely ambitious goals to encourage the use of clean-fuel vehicles.

The established market for this technology is North America. Due to the increased capacity of fuel cell installations in the transportation sector, the region is investing more in the installation of fuel cells. Around the region, more and more portable applications are being installed. In the region of North America, the United States leads the industry. The administration has established ambitious targets to encourage hydrogen-powered automobiles in order to increase the local market for fuel-cell vehicles. Additionally, consumers will be encouraged to embrace hydrogen fuel cell vehicles across the United States and Canada through a variety of infrastructure development plans, research and development initiatives, and subsidy schemes.

In Europe, the number of FC installations has greatly expanded. The region is making significant financial investments to improve the hydrogen infrastructure and meet zero-emission ambitions. Throughout the region, the use of energy-efficient technologies is likewise rising quickly. One of the first CHPs in the world to run exclusively on hydrogen was installed at Berlin Airport in Germany.

Over the projection period, it is anticipated that the remainder of the world would increase dramatically. Worldwide, the need for the installation of fuel cells is growing

+44 20 8123 2220
info@marketpublishers.com

quickly. All around the region, there have been more and more projects. The Abu Dhabi National Oil Company (ADNOC), Mubadala Investment Company, and ADQ signed an MOU in January 2021 to establish the Abu Dhabi Hydrogen Alliance, a specialized sustainable energy organization.

This report illustrates the most vital attributes of the Fuel Cells Market, which are driving and providing opportunities.

This research gives an in-depth analysis of the Fuel Cells Market growth on the basis of several segments in the market.

This report presents the predictions of the past and present trends of the Fuel Cells Market.

This study also presents the competitive analysis, such as key strategies and capabilities of major players of the Fuel Cells Market.

+44 20 8123 2220
info@marketpublishers.com

Contents

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

I would like to order

Product name: Fuel Cells Market based on By Type (Proton Exchange Membrane Fuel Cell, Solid Oxide Fuel Cell, Phosphoric Acid Fuel Cell, and Others), By Application (Transport, Stationary, and Portable), Regional Outlook– Global Forecast up to 2032

Product link: https://marketpublishers.com/r/F0EF6BC177FDEN.html

Price: US$ 4,500.00 (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/F0EF6BC177FDEN.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

Custumer 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

+44 20 8123 2220
info@marketpublishers.com

and fax the completed form to +44 20 7900 3970