

# Global Hydrogen and Fuel Cells Market 2024 by Manufacturers, Regions, Type and Application, Forecast to 2030

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# **Abstracts**

According to our (Global Info Research) latest study, the global Hydrogen and Fuel Cells market size was valued at USD 3391.8 million in 2023 and is forecast to a readjusted size of USD 23280 million by 2030 with a CAGR of 31.7% during review period.

Hydrogen and Fuel Cells use hydrogen as a chemical element, and are made into batteries that store energy. The basic principle is the reverse reaction of electrolysis of water, hydrogen and oxygen were supplied to the cathode and anode, hydrogen diffusion through the cathode and the electrolyte reaction, the release of electrons through the external load to reach the anode.

Traditionally, North American market develops significantly due to commercialization and adoption of electric vehicles. However, Asia Pacific emerges as a growing market in terms of shipment in 2019. Growing demand for new energy vehicles and power systems in APAC market triggers the market demand.

The hydrogen and fuel cells market, by type, is segmented into air-cooled type and transport-cooled type, and air-cooled system accounted for the largest market share in 2019.

Growing demand for clean energy generation and reliance on hydrogen and fuel cellsbased public transportation systems in developed regions is driving market growth. Moreover, advantages offered by air-cooled system, such as structure is simple, light weight, the price is relatively cheap are likely to drive the demand for air-cooled system during the forecast period.



Power based electricity generation is effective in minimizing emission of carbon dioxide or any other hazardous pollutants. Hence, hydrogen and fuel cells technology plays a vital role in dealing with environmental issues as well as encouraging the use of renewable carriers of energy. Ongoing product developments and innovation is expected to open new opportunities for emerging players.

The Global Info Research report includes an overview of the development of the Hydrogen and Fuel Cells industry chain, the market status of Stationary (Air-Cooled, Water-Cooled), Transport (Air-Cooled, Water-Cooled), and key enterprises in developed and developing market, and analysed the cutting-edge technology, patent, hot applications and market trends of Hydrogen and Fuel Cells.

Regionally, the report analyzes the Hydrogen and Fuel Cells markets in key regions. North America and Europe are experiencing steady growth, driven by government initiatives and increasing consumer awareness. Asia-Pacific, particularly China, leads the global Hydrogen and Fuel Cells market, with robust domestic demand, supportive policies, and a strong manufacturing base.

Key Features:

The report presents comprehensive understanding of the Hydrogen and Fuel Cells market. It provides a holistic view of the industry, as well as detailed insights into individual components and stakeholders. The report analysis market dynamics, trends, challenges, and opportunities within the Hydrogen and Fuel Cells industry.

The report involves analyzing the market at a macro level:

Market Sizing and Segmentation: Report collect data on the overall market size, including the sales quantity (GWh), revenue generated, and market share of different by Type (e.g., Air-Cooled, Water-Cooled).

Industry Analysis: Report analyse the broader industry trends, such as government policies and regulations, technological advancements, consumer preferences, and market dynamics. This analysis helps in understanding the key drivers and challenges influencing the Hydrogen and Fuel Cells market.

Regional Analysis: The report involves examining the Hydrogen and Fuel Cells market at a regional or national level. Report analyses regional factors such as government



incentives, infrastructure development, economic conditions, and consumer behaviour to identify variations and opportunities within different markets.

Market Projections: Report covers the gathered data and analysis to make future projections and forecasts for the Hydrogen and Fuel Cells market. This may include estimating market growth rates, predicting market demand, and identifying emerging trends.

The report also involves a more granular approach to Hydrogen and Fuel Cells:

Company Analysis: Report covers individual Hydrogen and Fuel Cells manufacturers, suppliers, and other relevant industry players. This analysis includes studying their financial performance, market positioning, product portfolios, partnerships, and strategies.

Consumer Analysis: Report covers data on consumer behaviour, preferences, and attitudes towards Hydrogen and Fuel Cells This may involve surveys, interviews, and analysis of consumer reviews and feedback from different by Application (Stationary, Transport).

Technology Analysis: Report covers specific technologies relevant to Hydrogen and Fuel Cells. It assesses the current state, advancements, and potential future developments in Hydrogen and Fuel Cells areas.

Competitive Landscape: By analyzing individual companies, suppliers, and consumers, the report present insights into the competitive landscape of the Hydrogen and Fuel Cells market. This analysis helps understand market share, competitive advantages, and potential areas for differentiation among industry players.

Market Validation: The report involves validating findings and projections through primary research, such as surveys, interviews, and focus groups.

#### Market Segmentation

Hydrogen and Fuel Cells market is split by Type and by Application. For the period 2019-2030, the growth among segments provides accurate calculations and forecasts for consumption value by Type, and by Application in terms of volume and value.

#### Market segment by Type

Global Hydrogen and Fuel Cells Market 2024 by Manufacturers, Regions, Type and Application, Forecast to 2030



Air-Cooled

Water-Cooled

Market segment by Application

Stationary

Transport

Portable

Major players covered

Panasonic

**Plug Power** 

Toshiba ESS

Ballard

SinoHytec

Hydrogenics

Honda

Hyundai Mobis

Toyota Denso

Elring Klinger

Bosch/Powercell

Symbio



Market segment by region, regional analysis covers

North America (United States, Canada and Mexico)

Europe (Germany, France, United Kingdom, Russia, Italy, and Rest of Europe)

Asia-Pacific (China, Japan, Korea, India, Southeast Asia, and Australia)

South America (Brazil, Argentina, Colombia, and Rest of South America)

Middle East & Africa (Saudi Arabia, UAE, Egypt, South Africa, and Rest of Middle East & Africa)

The content of the study subjects, includes a total of 15 chapters:

Chapter 1, to describe Hydrogen and Fuel Cells product scope, market overview, market estimation caveats and base year.

Chapter 2, to profile the top manufacturers of Hydrogen and Fuel Cells, with price, sales, revenue and global market share of Hydrogen and Fuel Cells from 2019 to 2024.

Chapter 3, the Hydrogen and Fuel Cells competitive situation, sales quantity, revenue and global market share of top manufacturers are analyzed emphatically by landscape contrast.

Chapter 4, the Hydrogen and Fuel Cells breakdown data are shown at the regional level, to show the sales quantity, consumption value and growth by regions, from 2019 to 2030.

Chapter 5 and 6, to segment the sales by Type and application, with sales market share and growth rate by type, application, from 2019 to 2030.

Chapter 7, 8, 9, 10 and 11, to break the sales data at the country level, with sales quantity, consumption value and market share for key countries in the world, from 2017 to 2023.and Hydrogen and Fuel Cells market forecast, by regions, type and application, with sales and revenue, from 2025 to 2030.



Chapter 12, market dynamics, drivers, restraints, trends and Porters Five Forces analysis.

Chapter 13, the key raw materials and key suppliers, and industry chain of Hydrogen and Fuel Cells.

Chapter 14 and 15, to describe Hydrogen and Fuel Cells sales channel, distributors, customers, research findings and conclusion.



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