

Global Hydrogen Fuel Cell Train Market Size study, By Application (Passenger Train, Freight Train), By Technology (Proton Exchange Membrane Fuel Cell, Phosphoric Acid Fuel Cell), By Component (Hydrogen fuel cell Pack, Batteries, Electric traction motors), By Rail type (Passenger Rail, Commuter Rail, Light Rail, Trams, Freight), and Regional Forecasts 2022-2028

<https://marketpublishers.com/r/G3F036B338EDEN.html>

Date: August 2022

Pages: 200

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

ID: G3F036B338EDEN

Abstracts

Global Hydrogen Fuel Cell Train Market is valued approximately USD XX million in 2021 and is anticipated to grow with a healthy growth rate of more than XX % over the forecast period 2022-2028.

The Hydrogen Fuel Cell Train or hydrogen powered trains refer to trains that uses hydrogen as a power source for propulsion and auxiliary application. Hydrogen fuel cells offer an inherently clean source of energy, with no adverse environmental impact during operation as the byproducts are simply heat and water. Also, unlike biofuel or hydropower, hydrogen doesn't require large areas of land to produce. The rising investment towards development of railways infrastructure and increasing concern over environmental degradation as well as recent strategic initiatives from leading market players are factors that are accelerating the global market demand. For instance, in January 2022, Canadian Pacific railroad and Ballard Power Systems, a maker of hydrogen fuel cells, entered in a partnership to expand CP's Hydrogen Locomotive Program, adding eight additional 200 kW fuel cell modules to their initial order. Canadian Pacific received USD 15 million in funding from Emissions Reduction Alberta (ERA). Moreover, in February 2022, India announced USD 32.7 billion capital investment in rail in national budget for the purpose of rolling stock development. Furthermore, leading market players are working towards strategic partnerships to

capture substantial market share. For instance, in April 2022, Alstom and ENGIE entered in a partnership agreement to supply a fuel cell system with renewable hydrogen for use in European rail freight. Also, growing number of R&D activities in Hydrogen Fuel Cell Technology coupled with rising logistics and transportation sector are anticipated to act as a catalyzing factor for the market demand during the forecast period. However, a high capital-intensive nature of Hydrogen Fuel Cell Train development impedes the growth of the market over the forecast period of 2022-2028.

The key regions considered for the global Hydrogen Fuel Cell Train Market study include Asia Pacific, North America, Europe, Latin America, and the Rest of the World. North America is the leading region across the world in terms of market share owing to the growing railways infrastructure and presence of leading market players. Whereas, Asia Pacific is anticipated to exhibit a significant growth rate over the forecast period 2022-2028. Factors such as the thriving growth of railways and increasing number of investment activities towards sustainable railways infrastructure, would create lucrative growth prospects for the global Hydrogen Fuel Cell Train Market across the Asia Pacific region.

Major market players included in this report are:

Alstom
Ballard Power Systems
BNSF
CAF group
CRRC Corporation Limited
Engie Sa
Hitachi
Hyundai Corporation
IHI Corporation
Kawasaki Heavy Industries, Ltd.

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 eight years. The report is designed to incorporate both qualitative and quantitative aspects of the industry within each of the regions and countries involved in the study. Furthermore, the report also caters the detailed information about the crucial aspects such as driving factors & challenges which will define the future growth of the market. Additionally, the report shall also incorporate available 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 Application

Passenger Train

Freight Train

By Technology

Proton Exchange Membrane Fuel Cell

Phosphoric Acid Fuel Cell

By Component

Hydrogen fuel cell Pack

Batteries

Electric traction motors

By Rail type

Passenger Rail

Commuter Rail

Light Rail

Trams

Freight

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

Rest of the World

Furthermore, years considered for the study are as follows:

Historical year – 2018, 2019, 2020

Base year – 2021

Forecast period – 2022 to 2028

Target Audience of the Global Hydrogen Fuel Cell Train Market in Market Study:

Key Consulting Companies & Advisors

Large, medium-sized, and small enterprises

Venture capitalists

Value-Added Resellers (VARs)

Third-party knowledge providers

Investment bankers

Investors

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