

Merchant Hydrogen: Industrial Gas and Energy Markets

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Abstracts

Report Scope:

This BCC Research study focuses on key hydrogen technologies and applications. It provides data about the size and growth of both captive and merchant hydrogen markets, lists company profiles, and discusses patent trends and industry trends. Cutting-edge developments, research priorities and potential business opportunities are key foci.

The report includes the following -

Investigation and assessment of the future use of merchant hydrogen as an industrial gas and the roles likely played by the emerging hydrogen energy market.

Analysis of trends in the market, with data for 2019, estimates for 2020 and projected compound annual growth rates through 2025.

An overview of the structure of the industry and extensive company profiles of the leading organizations.

Detailed analyses of research focus, end-use markets and production technologies.

Analysis of patent and intellectual property activity.

Market drivers, restraints and opportunities.

Initiatives of various regions to develop the hydrogen economy.

Analysis of delivery and storage methods for hydrogen.

Report Includes:

48 tables

A brief overview of the global market for merchant hydrogen technologies within the energy sector

Analyses of the global market trends, with data corresponding to market size for 2019, estimates for 2020, and projections of compound annual growth rates (CAGRs) through 2025

State-of-the-art trends observed in fuel cell technology as it is one of the fastest growing segments in the merchant hydrogen application areas and a shift towards Green Hydrogen

New Federal & States incentives and laws supporting utilization of hydrogen and FCV in the U.S.

Policy Recommendations from IRENA, and economy diversification measures as apart of hydrogen economy by middle eastern states

Latest information on market opportunities for merchant hydrogen and its future use as an industrial gas and the roles likely played by the emerging hydrogen energy market

Industry value chain analysis of the merchant hydrogen energy market providing a systematic study of key intermediaries involved, which could expedite stakeholders in formulating appropriate strategies

Emphasis on the current and emerging applications of merchant hydrogen and its on-site distributed generation

Insight into the major breakthrough development areas such as biological

processing and localized production, research focus, end-use markets, and production technologies

Profile description of major market players including Amec Foster Wheeler Ltd., Air Liquide, Iwatani International Corp., Linde Ag, Exxon Mobil Corp., Ceramatec, Hydrogenics Corp., and Mitsubishi Hitachi Power Systems Ltd.

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AMEC FOSTER WHEELER LTD./WOOD. PLC

TECHNIPFMC

UHDE GMBH

Industrial Gas Providers

AIRGAS, INC.-AN AIR LIQUIDE COMPANY

AIR LIQUIDE

AIR PRODUCTS AND CHEMICALS, INC.

EQUISTAR CHEMICALS LP

GENERAL HYDROGEN CORP.

IWATANI INTERNATIONAL CORP.

LINDE AG

PRAXAIR, INC.- A WHOLLY OWNED SUBSIDIARY OF LINDE PLC

SINOPEC MAOMING CO.

UNITED HYDROGEN GROUP (NOW ACQUIRED BY PLUG POWER INC.)

Refiners and Refineries

AMEC FOSTER WHEELER LTD. (WOOD. PLC)

ANDEAVOR

BP PLC

CHEVRON CORP.

CONOCOPHILLIPS

EXXON MOBIL CORP.

FLINT HILLS RESOURCES

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MOTIVA ENTERPRISES LLC
ROYAL DUTCH SHELL PLC
SHELL DEER PARK REFINING
VALERO ENERGY CORP.
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BALLARD POWER SYSTEMS
BLOOM ENERGY CORP.
CERAMATEC
FUEL CELL ENERGY, INC.
GRZ TECHNOLOGIES SA
HYDROGENICS CORP.
MITSUBISHI HITACHI POWER SYSTEMS LTD.
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PRAGMA INDUSTRIES
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ASIA PACIFIC FUEL CELL TECHNOLOGIES LTD.
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HYUNDAI MOTORS
MAGNA STEYR AG & CO. KG
MERITOR, INC.
TOYOTA MOTORS
US FUEL CELL
Electrolyzers and Distributed Reformers
ACTA SPA
INTELLIGENT ENERGY
ITM POWER PLC
NEL HYDROGEN AS
NUVERA FUEL CELLS LLC
PROTON ONSITE, INC.
Hydrogen Purification and Sensors
ELEMENT ONE
H2SCAN
HY9 CORP.
MAKEL ENGINEERING, INC.
MEMBRANE TECHNOLOGY AND RESEARCH, INC.
XEBEC ADSORPTION, INC.
Catalysts
ACTA SPA

E. I. DU PONT DE NEMOURS AND CO.
HALDOR TOPSOE A/S
MEMBRANE TECHNOLOGY AND RESEARCH, INC.
NANOMIX, INC.
Storage
LUXFER GROUP LTD.
PLASTIC OMNIUM GROUP
QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.
TOSHIBA CORP.
Start-Ups and R&D
ADVANCED MATERIALS CORP.
ALUMIFUEL POWER CORP.
BATELLE MEMORIAL INSTITUTE
DIVERSIFIED ENERGY CORP.
ERGOSUP
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EPRIDA TECHNOLOGIES
ETUDES CHEMIQUES ET PHYSIQUES SARL
GAS TECHNOLOGY INSTITUTE
GENERAL ATOMICS
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HCE LLC
HTC PUREENERGY
INNOVATEK, INC.
JETSTREAM ENERGY TECHNOLOGIES, INC.
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