

# Hydrogen as a Chemical Constituent and as an Energy Source

<https://marketpublishers.com/r/H6E3658D4D8EN.html>

Date: January 2019

Pages: 148

Price: US\$ 1,375.00 (Single User License)

ID: H6E3658D4D8EN

## Abstracts

### Report Scope:

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

The report focuses on the following

- The structure of the hydrogen industry, its driving forces, its competitive aspects, market segmentation, distribution channels, pricing, and technology.

- Analysis of global market trends, with data for 2017, estimates for 2018 and projections of compound annual growth rates (CAGRs) through 2023.

- Assessment of hydrogen demand, with five-year forecasts.

- Reviews of global environmental and energy regulations.

- Company profiles.

- Patent activity.

Report includes:

40 tables

An overview of the global market for hydrogen as a chemical constituent and as an energy source

Analyses of global market trends, with data from 2017, 2018, and projections of compound annual growth rates (CAGRs) through 2023.

Detailed description about cutting-edge developments in areas such as nanotechnology, biological processing, and others

Identification of key hydrogen technologies and applications that yield potential business opportunities in the hydrogen industry

Review of global environmental and energy regulations

Company profiles of the major players of the industry, including Accentus Plc, Advanced Materials Corp., Bloom Energy Corp., Exxonmobil, General Hydrogen, Hydrogenics Corp., Shell Oil, Toshiba Corp., Toyota Motors, Valero Energy Corp., United Hydrogen Group and Ztek Corp.

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AIRGAS INC.

L'AIR LIQUIDE SA

AIR PRODUCTS AND CHEMICALS INC.

ALCHEMIX CORP.

ALTERNATIVE FUEL SYSTEMS INC.

ALUMIFUEL POWER CORP.

AMEC FOSTER WHEELER CORP.

AMMINEX A/S

ANDEAVOR

ASIA PACIFIC FUEL CELL TECHNOLOGIES LTD.

ASPEN PRODUCTS GROUP INC.

AVALENCE LLC

BALLARD POWER SYSTEMS

BATTELLE MEMORIAL INSTITUTE  
BAYERISCHE MOTOREN WERKE AG  
BLOOM ENERGY CORP.  
BP PLC  
CERAMATEC  
CHEVRON  
CONOCOPHILLIPS COMPANY  
DEER PARK REFINING LTD. PARTNERSHIP  
DIVERSIFIED ENERGY CORP.  
ECD OVONICS  
EDEN INNOVATIONS  
E. I. DU PONT DE NEMOURS AND CO.  
EPRIDA TECHNOLOGIES  
ERGENICS  
ETUDES CHEMIQUES ET PHYSIQUES SARL  
EQUISTAR CHEMICALS LP  
EXXONMOBIL  
FLINT HILLS RESOURCES  
FUELCELL ENERGY INC.  
GAS TECHNOLOGY INSTITUTE (GTI)  
GENERAL ATOMICS  
GENERAL HYDROGEN  
H2SCAN  
HALDOR TOPSOE A/S  
HCE LLC  
HTC PUREENERGY  
HY9 CORP.  
HYDROGENICS CORP.  
HYUNDAI MOTORS  
HYTHANE CO.  
INNOVATEK INC.  
INTELLIGENT ENERGY  
ITM POWER PLC  
IWATANI INTERNATIONAL CORP.  
JETSTREAM ENERGY TECHNOLOGIES INC.  
LINDE AG  
LUXFER GROUP LTD.  
MAGNA STEYR AG & CO. KG  
MAKEL ENGINEERING INC.

MARKWEST JAVELINA  
MATERIALS AND SYSTEMS RESEARCH INC.  
MEMBRANE TECHNOLOGY AND RESEARCH INC.  
MERITOR INC.  
MITSUBISHI HITACHI POWER SYSTEMS LTD.  
MLEA INC.  
MO-SCI CORP.  
MOTIVA ENTERPRISES LLC  
NANOMIX INC.  
NATIONAL CENTER FOR HYDROGEN TECHNOLOGY  
NEL HYDROGEN AS  
NUVERA FUEL CELLS LLC  
PLUG POWER LLC  
PLASTIC OMNIUM GROUP  
POWERTECH LABS INC.  
PRAXAIR INC.  
PROJECT PERFORMANCE CORP.  
PROTON ONSITE  
PLASTIC OMNIUM GROUP  
QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE INC.  
SECAT INC.  
SHELL OIL  
SINOPEC MAOMING CO.  
SOTACARBO S.P.A.  
TECHNIPFMC  
TOSHIBA CORP.  
TOYOTA MOTORS  
UHDE GMBH  
UNITED HYDROGEN GROUP  
UNIVERSAL INDUSTRIAL GASES INC.  
US FUEL CELL  
VALERO ENERGY CORP.  
WELDSHIP CORP.  
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XEBEC INC.  
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