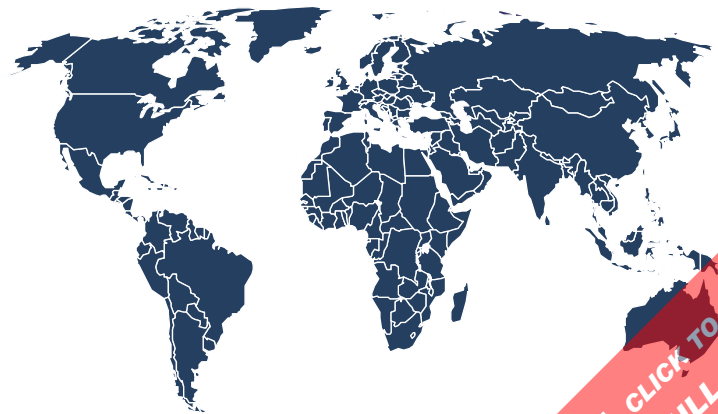




Freedonia Focus Reports  
World Collection

# World Hydrogen

June 2014



## Highlights

World Overview and Forecasts  
Demand by Source | Demand by Market

Regional Trends and Forecasts  
Regional Demand Overview | North America | Western Europe | Asia/Pacific  
Other Regions

Industry Structure  
Industry Composition and Characteristics | Industry Leaders

Resources



## ABOUT THIS REPORT

### Scope & Method

This report forecasts total world demand in 2018 for hydrogen gas by source, market, and major world region in cubic meters. Total demand is also forecasted in dollars.

Demand in cubic meters is segmented by source in terms of:

- captive production
- merchant sales.

Hydrogen consumed in the form of synthesis gas for the production of ammonia (for fertilizer) and methanol is excluded from the scope of this report. In addition, byproduct hydrogen is only included when separated for further use. Hydrogen flared, burned as fuel gas, or discharged into the atmosphere as waste is also excluded. Throughout this report, the concepts of value and price are distinct, though both are used to evaluate the hydrogen market. A “value” is assigned to the captive or “on-purpose” consumption of hydrogen, a “price” to a merchant transaction. Merchant gas consumption is evaluated at the suppliers’ level – taking into account costs of production but excluding gross margins. Market share estimations apply only to the merchant segment of the market.

Reported markets encompass:

- petroleum refining
- chemical manufacturing
- other markets such as metal processing, glass production, and electronics.

Major world regions include:

- North America
- Western Europe
- Asia/Pacific
- all other regions.

Demand by source is also forecast for each major world region.

To illustrate historical trends world, source, market, and regional demand are provided for 2008 and 2013. Further, regional demand is segmented by market for 2013.

Forecasts are developed via the identification and analysis of pertinent statistical relationships and other historical trends/events as well as their expected progression/impact over the forecast period. Changes in quantities between reported years of a given total or segment are typically provided in terms of five-year compound annual growth rates (CAGRs). For the sake of brevity, forecasts are generally stated in smoothed CAGR-based descriptions to the forecast year, such as “demand is projected to rise 3.2% annually through 2018.” The result of any particular year over that period,

however, may exhibit volatility and depart from a smoothed, long-term trend, as historical data typically illustrate.

Other various topics, including profiles of pertinent leading suppliers, are covered in this report. A full outline of report items by page is available in the [Table of Contents](#).

## Sources

*World Hydrogen* is based on [a comprehensive industry study](#) published by The Freedonia Group in June 2014. Reported findings represent the synthesis and analysis of data from various primary, secondary, macroeconomic, and demographic sources including:

- firms participating in the industry, and their suppliers and customers
- government/public agencies
- national, regional, and international non-governmental organizations
- trade associations and their publications
- the business and trade press
- The Freedonia Group Consensus Forecasts dated January 2014
- the findings of other industry studies by The Freedonia Group.

Specific sources and additional resources are listed in the [Resources](#) section of this publication for reference and to facilitate further research.

## Industry Codes

The topic of this report is related to the following industry codes:

NAICS/SCIAN 2007		SIC	
North American Industry Classification System		Standard Industry Codes	
325120	Industrial Gas Mfg	2813	Industrial Gases
325188	All Other Basic Inorganic Chemical Mfg	2819	Industrial Inorganic Chemicals, NEC
424690	Other Chemical and Allied Products Merchant Wholesalers	5169	Chemicals and Allied Products, NEC

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