North America Green Hydrogen Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2024 to 2032

Market Report | 2024-09-16 | 100 pages | Global Market Insights

AVAILABLE LICENSES:

- Single User $3250.00
- Multi User $3750.00
- Enterprise User $5750.00

Report description:

North America Green Hydrogen Market was valued at USD 304.8 million in 2023 and is expected to experience rapid growth with a CAGR of 62.2% by 2032. Green hydrogen is produced through the electrolysis of water, using renewable energy sources such as wind, solar, or hydroelectric power. This process ensures zero emissions of carbon dioxide or other harmful greenhouse gases, making green hydrogen an environmentally sustainable alternative to conventional hydrogen production.

The rising demand for green hydrogen across various sectors such as industrial, transportation, aviation, and mobility is driving industry growth. Its ability to be stored, transported, and used across multiple applications makes green hydrogen highly attractive for these industries. Additionally, the introduction of stringent government regulations aimed at reducing greenhouse gas emissions and decreasing reliance on fossil fuels is bolstering market dynamics. As clean hydrogen continues to gain traction as a versatile energy carrier, the push towards a complete energy transition will further accelerate market expansion.

The North American green hydrogen market is segmented by technology into alkaline, PEM, solid oxide, and other categories. The PEM (Proton Exchange Membrane) segment is expected to witness substantial growth, with projections exceeding USD 8.5 billion by 2032. Its advantages, including high power reliability, low temperature operation, and flexibility in production, are driving adoption. Additionally, increased funding and development of various projects will significantly contribute to the growth of PEM technology.

In terms of application, the market is divided into power generation, industrial feedstock, transportation, industrial energy, building heat & power, and others. The transportation segment is expected to grow at a CAGR of over 55.5% by 2032. Continuous efforts to reduce carbon emissions and promote hydrogen fuel cell vehicles (FCEVs) are key factors boosting growth in this segment. The shift towards hydrogen-based solutions for various transport modes will further drive market demand.

In the U.S., the green hydrogen market is projected to exceed USD 37.1 billion by 2032. Strong government support and substantial investments in green hydrogen projects are the primary drivers. The availability of low-cost, low-carbon electricity, combined with strategic partnerships, will further stimulate industry growth. Additionally, government initiatives aimed at fostering the adoption of clean hydrogen will continue to push market expansion across the region.

Table of Contents:

Report Content
Chapter 1 Methodology & Scope
1.1 Research design
1.2 Base estimates & calculations
1.3 Forecast model
1.4 Primary research & validation
1.4.1 Primary sources
1.4.2 Data mining sources
1.5 Market definitions
Chapter 2 Executive Summary
2.1 Industry 360□synopsis, 2021 - 2032
Chapter 3 Industry Insights
3.1 Industry ecosystem
3.2 Regulatory landscape
3.3 Industry impact forces
3.3.1 Growth drivers
3.3.2 Industry pitfalls & challenges
3.4 Growth potential analysis
3.5 Price trend analysis
3.6 Porter's analysis
3.6.1 Bargaining power of suppliers
3.6.2 Bargaining power of buyers
3.6.3 Threat of new entrants
3.6.4 Threat of substitutes
3.7 PESTEL analysis
Chapter 4 Competitive landscape, 2024
4.1 Introduction
4.2 Strategic dashboard
4.3 Innovation & technology landscape
Chapter 5 Market Size and Forecast, By Technology, 2021 - 2032 (USD Million & MW)
5.1 Key trends
5.2 Alkaline
5.3 PEM
5.4 Solid oxide
5.5 Others
Chapter 6 Market Size and Forecast, By Source, 2021 - 2032 (USD Million & MW)
6.1 Key trends
6.2 Solar
6.3 Wind
6.4 Others
Chapter 7 Market Size and Forecast, By Application, 2021 - 2032 (USD Million & MW)
7.1 Key trends
7.2 Power generation
7.3 Transportation
7.4 Industry energy
7.5 Industry feedstock

7.6 Building heat & power
7.7 Others
Chapter 8 Market Size and Forecast, By Country, 2021 - 2032 (USD Million & MW)
8.1 Key trends
8.2 U.S.
8.3 Canada
Chapter 9 Company Profiles
9.1 ACME
9.2 Air Products
9.3 Air Liquide
9.4 CWP Global
9.5 Cummins
9.6 Engie
9.7 Getech Group plc
9.8 GH2
9.9 Hiringa Energy Limited
9.10 Iberdrola
9.11 Linde plc
9.12 Plug Power
9.13 Siemens Energy
9.14 Toshiba Energy Systems & Solutions Corporation

North America Green Hydrogen Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2024 to 2032

Market Report | 2024-09-16 | 100 pages | Global Market Insights

To place an Order with Scotts International:

- - Print this form
- - Complete the relevant blank fields and sign
- - Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User	$3250.00
	Multi User	$3750.00
	Enterprise User	$5750.00
	VAT	
	Total	

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*		Phone*	
First Name*		Last Name*	
Job title*			
Company Name*		EU Vat / Tax ID / NIP number*	
Address*		City*	
Zip Code*		Country*	
		Date	2026-03-04
		Signature