+357 96 030922
info@marketpublishers.com

North America Steam Methane Reforming Market By Distribution (Pipelines, Cryogenic Tanks), By End Use (Transportation, Chemicals, Others), By Country, Competition, Forecast and Opportunities, 2020-2030F

https://marketpublishers.com/r/N9AABC837E11EN.html
Date: May 2025
Pages: 120
Price: US$ 4,000.00 (Single User License)
ID: N9AABC837E11EN

Abstracts

Market Overview

The North America Steam Methane Reforming Market was valued at USD 3.24 Billion in 2024 and is projected t%li%reach USD 4.38 Billion by 2030, growing at a CAGR of 5.15% during the forecast period. Steam methane reforming (SMR) is a widely adopted method for large-scale hydrogen production, utilizing high-temperature steam t%li%extract hydrogen from methane, primarily derived from natural gas. This process is foundational t%li%North America's hydrogen supply chain, especially in sectors such as oil refining, ammonia synthesis, and chemical manufacturing. The region’s abundant natural gas resources and established infrastructure make SMR an economically viable option for hydrogen production. Rising investment in low-carbon energy technologies and decarbonization initiatives is further boosting the SMR market, particularly through the adoption of carbon capture, utilization, and storage (CCUS), transforming conventional SMR int%li%"blue hydrogen" production. With industrial hubs in the U.S. Gulf Coast and Canada’s Alberta region expanding hydrogen capabilities, SMR remains a core strategy for meeting clean energy targets and supporting the emerging hydrogen economy. Public-private partnerships and government-backed incentives are playing a key role in advancing SMR infrastructure across power generation, manufacturing, and transport sectors.

Key Market Drivers

Growing Hydrogen Demand in Industrial Applications Driving Steam Methane

+357 96 030922
info@marketpublishers.com

Reforming Adoption

The North America Steam Methane Reforming Market is witnessing strong momentum due t%li%the growing need for hydrogen across a wide range of industrial applications. SMR continues t%li%dominate hydrogen production due t%li%its cost efficiency and integration within critical sectors such as refining, ammonia, and methanol production. In oil refineries, hydrogen is essential for hydrocracking and hydrotreating processes that remove sulfur and other contaminants from fuels, enabling compliance with emissions regulations. The sustained refining activity across North America, especially in the United States and Canada, supports ongoing SMR utilization. Additionally, hydrogen is a crucial input in ammonia and methanol production—key components for fertilizer and chemical manufacturing. As agricultural demand and plastic production grow, s%li%does the demand for hydrogen, reinforcing SMR's role in industrial hydrogen supply. In the metals industry, hydrogen is increasingly used in processes such as direct reduced iron production, offering a lower-carbon alternative t%li%conventional methods. As industrial sectors prioritize emissions reduction and energy efficiency, SMR paired with CCUS is gaining traction as a cleaner hydrogen production pathway.

Key Market Challenges

High Carbon Emissions Undermining Long-Term Viability of Steam Methane Reforming Technology

A major challenge facing the North America Steam Methane Reforming Market is the high level of carbon emissions associated with the process. Despite its economic viability and widespread use, SMR generates significant CO? emissions during both the reforming and water-gas shift reactions. As North American governments implement stricter environmental regulations and introduce carbon pricing, the sustainability of traditional SMR is increasingly questioned. These policy changes raise operational costs and create uncertainty for companies considering future SMR investments, particularly for those unable t%li%incorporate carbon capture and storage solutions. Retrofitting existing facilities with CCUS infrastructure is capital-intensive and complex, often only feasible for large operators with sufficient financial resources. Furthermore, the availability of suitable CO? storage sites varies by region, creating additional barriers for widespread CCUS adoption. As industries transition t%li%cleaner energy sources, and with electrolysis powered by renewables gaining popularity, the long-term competitiveness of SMR without emission mitigation strategies is at risk.

+357 96 030922
info@marketpublishers.com

Key Market Trends

Integration of Carbon Capture Technologies int%li%Existing Steam Methane Reforming Facilities

An emerging trend in the North America Steam Methane Reforming Market is the growing integration of carbon capture technologies t%li%reduce emissions and meet decarbonization goals. As regulatory bodies and industry sustainability commitments place pressure on producers t%li%cut carbon output, hydrogen producers are incorporating carbon capture systems int%li%SMR operations t%li%produce low-emission or "blue" hydrogen. This shift allows companies t%li%maintain the scalability and cost benefits of SMR while addressing environmental concerns. Large-scale energy and industrial gas firms are leading the transition, supported by favorable government policies, funding initiatives, and tax incentives in both the U.S. and Canada. Recent improvements in carbon capture efficiency and the availability of more reliable infrastructure are als%li%encouraging broader adoption. These advancements are helping reduce the economic burden of CCUS implementation, making it a more viable option for medium-scale producers. As demand grows for low-carbon hydrogen, SMR facilities with integrated carbon capture will be well-positioned t%li%serve industries prioritizing sustainability, energy security, and regulatory compliance.

Key Market Players

Air Products and Chemicals, Inc.

Linde plc

BOC Limited

Shell International B.V.

Honeywell International Inc.

TechnipFMC plc

Worley Limited

McDermott International, Ltd.

+357 96 030922
info@marketpublishers.com

Report Scope:

In this report, the North America Steam Methane Reforming Market has been segmented int%li%the following categories, in addition t%li%the industry trends which have als%li%been detailed below:

North America Steam Methane Reforming Market, By Distribution:

Pipelines

Cryogenic Tanks

North America Steam Methane Reforming Market, By End Use:

Transportation

Chemicals

Others

North America Steam Methane Reforming Market, By Country:

United States

Canada

Mexico

Competitive Landscape

Company Profiles: Detailed analysis of the major companies present in the North America Steam Methane Reforming Market.

Available Customizations:

North America Steam Methane Reforming Market report with the given market data, TechSci Research offers customizations according t%li%a company's specific needs. The following customization options are available for the report:

+357 96 030922
info@marketpublishers.com

Company Information

Detailed analysis and profiling of additional market players (up t%li%five).

+357 96 030922
info@marketpublishers.com

Contents

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: North America Steam Methane Reforming Market By Distribution (Pipelines, Cryogenic Tanks), By End Use (Transportation, Chemicals, Others), By Country, Competition, Forecast and Opportunities, 2020-2030F

Product link: https://marketpublishers.com/r/N9AABC837E11EN.html

Price: US$ 4,000.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:
info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/N9AABC837E11EN.html