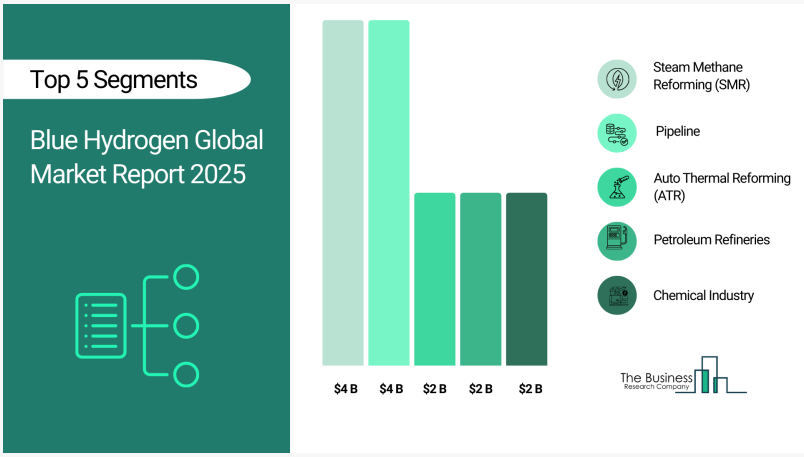
Blue Hydrogen Market In 2029

The Business Research Company's Blue Hydrogen Global Market Report 2026 – Market Size, Trends, And Global Forecast 2026-2035



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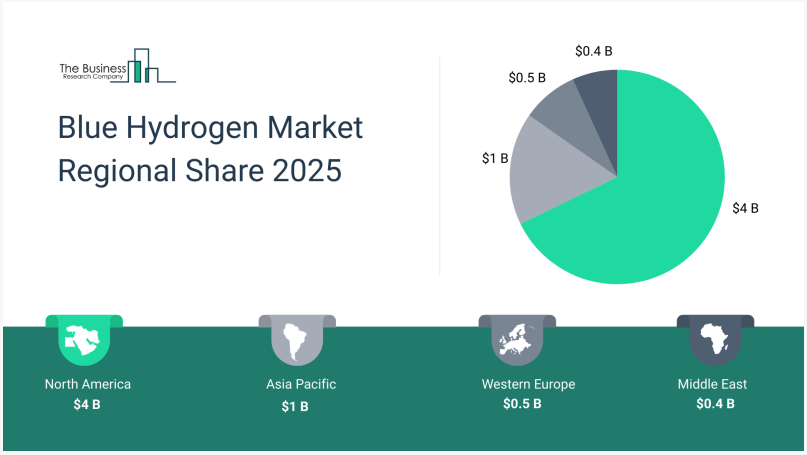

Blue Hydrogen Global Market Report 2026

LONDON, GREATER LONDON, UNITED KINGDOM, January 12, 2026 /EINPresswire.com/ -- "Blue Hydrogen Market to Surpass $34 billion in 2029. In comparison, the Hydrogen market, which is considered as its parent market, is expected to be approximately $69 billion by 2029, with Blue Hydrogen to represent around 49% of the parent market. Within the broader Chemicals industry, which is expected to be $7,042 billion by 2029, the Blue Hydrogen market is estimated to account for nearly 0.5% of the total market value.

Which Will Be the Biggest Region in the Blue Hydrogen Market in 2029
North America will be the largest region in the blue hydrogen market in 2029, valued at $21,833 million. The market is expected to grow from $1,637 million in 2024 at a compound annual growth rate (CAGR) of 68%. The strong growth can be attributed to the increasing demand from chemicals and petrochemicals refining and increasing strategic expansions.

Which Will Be The Largest Country In The Global Blue Hydrogen Market In 2029?
The USA will be the largest country in the blue hydrogen market in 2029, valued at $15,253. The market is expected to grow from $338 million in 2024 at a compound annual growth rate (CAGR) of 114%. The strong growth can be attributed to the increasing demand from chemicals and petrochemicals refining, integration of carbon capture, utilization, and storage (CCUS) infrastructure and increasing technological advancements.

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What will be Largest Segment in the Blue Hydrogen Market in 2029?
The blue hydrogen market is segmented by technology into steam methane reforming (SMR), gas partial oxidation (POX) and auto thermal reforming (ATR). The steam methane reforming (SMR) market will be the largest segment of the blue hydrogen market segmented by technology, accounting for 61% or $20,867 million of the total in 2029. The steam methane reforming (SMR) market will be supported by its established and mature technology with proven efficiency, wide availability of natural gas feedstock, lower capital costs compared to newer technologies, high hydrogen yield suitable for industrial applications, advancements in carbon capture integration to reduce emissions, flexibility in scale from small to large production units, and strong adoption in refineries and chemical industries globally.

The blue hydrogen market is segmented by transportation mode into pipeline and cryogenic liquid tankers. The pipeline market will be the largest segment of the blue hydrogen market segmented by transportation mode, accounting for 59% or $20,136 million of the total in 2029. The pipeline market will be supported by its cost-effective long-distance transport of large hydrogen volumes, ability to integrate with existing natural gas infrastructure, safety and reliability standards, minimal energy loss during transport, growing hydrogen blending initiatives in energy grids, advancements in pipeline materials and monitoring technologies, regulatory support for clean energy distribution networks and energy security and energy independence.

The blue hydrogen market is segmented by end user into petroleum refineries, chemical industry, power generation facilities and other end users. The chemical industry market will be the largest segment of the blue hydrogen market segmented by end user, accounting for 42% or $14,140 million of the total in 2029. The chemical industry market will be supported by high hydrogen demand for hydrocracking and desulfurization processes, integration with existing refinery infrastructure, ability to lower refinery CO emissions using blue hydrogen, increasing adoption of low-carbon hydrogen in fuel production, strategic partnerships with hydrogen producers, technological advances in hydrogen blending and storage and regulatory compliance and policy alignment.

What is the expected CAGR for the Blue Hydrogen Market leading up to 2029?
The expected CAGR for the blue hydrogen market leading up to 2029 is 75%.

What Will Be The Growth Driving Factors In The Global Blue Hydrogen Market In The Forecast Period?
The rapid growth of the global blue hydrogen market leading up to 2029 will be driven by the following key factors that are expected to reshape energy production models, decarbonization strategies, and sustainable industrial transitions worldwide.

Increased Demand From Chemicals And Petrochemicals Refining - The increased demand from chemicals and petrochemicals refining will become a key driver of growth in the blue hydrogen market by 2029. These industries rely heavily on hydrogen for processes such as hydrocracking, desulfurization, and ammonia production. As global regulations tighten on carbon emissions, refineries and chemical producers are shifting toward lower-carbon feedstocks to maintain competitiveness and sustainability. Blue hydrogen offers an ideal pathway, enabling these industries to continue hydrogen-based operations while significantly reducing their carbon footprint. The integration of blue hydrogen into refining and chemical production processes allows companies to align with global decarbonization targets, maintain compliance with emission standards, and future-proof their operations against environmental regulations. As a result, the increased demand from chemicals and petrochemicals refining is anticipated to contributing to annual growth in the market.

Integration Of Carbon Capture, Utilization, And Storage (CCUS) Infrastructure - The integration of carbon capture, utilization, and storage (CCUS) infrastructure will emerge as a major factor driving the expansion of the blue hydrogen market by 2029. Blue hydrogen production relies on capturing and storing the carbon dioxide generated from natural gas reforming processes, making access to efficient CCUS systems essential. As countries expand their carbon capture networks and develop CO transportation and storage capabilities, the cost and operational barriers for blue hydrogen producers will decrease significantly. The growing availability of shared CCUS infrastructure across industrial clusters will encourage more companies to invest in blue hydrogen projects, as they can leverage existing capture and storage facilities instead of developing standalone systems. Consequently, the integration of carbon capture, utilization, and storage (CCUS) infrastructure capabilities is projected to contributing to annual growth in the market.

Increasing Adoption Of Hydrogen-Fueled Heavy-Duty And Commercial Vehicles - The increasing adoption of hydrogen-fueled heavy-duty and commercial vehicles will serve as a key growth catalyst for the blue hydrogen market by 2029. With global emphasis on reducing emissions from the transport sector, hydrogen is emerging as a viable alternative fuel for long-haul trucks, buses, and logistics fleets due to its high energy density and quick refuelling capabilities. Blue hydrogen provides a lower-carbon source of fuel that can be produced at scale to meet this growing transportation demand. As governments and private sectors invest in hydrogen refuelling infrastructure and vehicle technologies, blue hydrogen will become an important energy carrier supporting decarbonized mobility. Therefore, this increasing adoption of hydrogen-fueled heavy-duty and commercial vehicles operations is projected to supporting to annual growth in the market.

Government Incentives And Policy Support - The government incentives and policy support will become a significant driver contributing to the growth of the blue hydrogen market by 2029. Many countries are introducing financial mechanisms such as tax credits, subsidies, carbon pricing, and investment grants to encourage the deployment of low-carbon hydrogen technologies. These initiatives lower the financial risk associated with capital-intensive hydrogen

production and CCUS (carbon capture, utilization, and storage) projects, making them more attractive to private investors and energy companies. Policy frameworks that prioritize hydrogen infrastructure, market access, and international trade cooperation will further enhance the commercial viability of blue hydrogen. Additionally, national hydrogen strategies and net-zero roadmaps are creating long-term visibility for investors and producers, fostering confidence in the future growth of the blue hydrogen ecosystem. Consequently, the government incentives and policy support strategies is projected to contributing to annual growth in the market.

Access the detailed Blue Hydrogen Market report here:
https://www.thebusinessresearchcompany.com/report/blue-hydrogen-global-market-report

What Are The Key Growth Opportunities In The Blue Hydrogen Market in 2029?
The most significant growth opportunities are anticipated in the blue hydrogen and steam methane reforming (SMR) market, the blue hydrogen for pipeline infrastructure market, and the blue hydrogen for chemical industry market. Collectively, these segments are projected to contribute over $41 billion in market value by 2029, driven by advances in low-carbon hydrogen production technologies, expanding pipeline and storage infrastructure, and growing demand from the chemical and industrial sectors for cleaner energy alternatives. This surge reflects the accelerating adoption of blue hydrogen solutions that support carbon reduction goals, enhance energy security, and enable the transition toward a sustainable industrial ecosystem, fuelling transformative growth within the broader blue hydrogen industry.

The blue hydrogen & steam methane reforming (SMR) market is projected to grow by $19,440 million, the blue hydrogen for chemical industry market by $13,481 million and the blue hydrogen for pipeline infrastructure market by $8,638 million over the next five years from 2024 to 2029.

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