# Blue Hydrogen Market Surges with Growth Prospects and Technological Advancements



Blue hydrogen, produced from natural gas with carbon capture and storage (CCS), is witnessing considerable market growth. This process, essential for reducing global carbon emissions, is projected to expand the blue hydrogen market from USD 2.3 billion in 2024 to USD 5.5 billion by 2033, at a CAGR of 10.8%, according to Dimension Market Research.

Technologies such as methane steam reforming, partial gas oxidation, and auto-thermal reforming are pivotal in this production, capturing and storing CO2. Substantial investments from both private and public sectors support the development of production facilities and transportation infrastructures. Collaboration between energy companies and tech firms plays a significant role in advancing blue hydrogen projects.

Government policies, including subsidies and regulatory support, further stimulate market growth. Regional efforts like California, New York, Canada’s 2050 carbon neutrality goal, and China’s 2060 target promote expansion. North America is predicted to lead the market in 2024 with a 41.2% revenue share, while Asia-Pacific, driven by China's investments, follows closely.

However, the market faces challenges such as high production costs and technical hurdles in carbon capture and storage technology. Despite these, opportunities abound through international collaboration and technological advancements.

In other developments, MMEX Resources is advancing a green hydrogen project with Siemens Energy, and Germany updated its hydrogen strategy to bolster blue hydrogen development.

Additionally, MOL Group introduced the "Low Carbon and New Energies" branch in its Exploration and Production Division, based in Zagreb. This initiative focuses on sustainable projects like geothermal energy production, a lithium extraction pilot project in Hungary, and CCS to mitigate greenhouse gases. MOL aims to reduce methane emissions in line with upcoming EU regulations, employing advanced monitoring systems.

MOL Group, headquartered in Budapest, operates in over 30 countries with a workforce of 24,000. It manages refineries, petrochemical plants, and a network of service stations in Central and South-Eastern Europe, with extensive experience in hydrocarbon exploration and CO2 injection.