+357 96 030922
info@marketpublishers.com

Carbon Capture and Storage Market Report by Service (Capture, Transportation, Storage), Technology (Post-combustion Capture, Pre-combustion Capture, Oxy-fuel Combustion Capture), End Use Industry (Oil and Gas, Coal and Biomass Power Plant, Iron and Steel, Chemical, and Others), and Region 2024-2032

https://marketpublishers.com/r/CE80BEC9B2BBEN.html
Date: July 2024
Pages: 144
Price: US$ 3,899.00 (Single User License)
ID: CE80BEC9B2BBEN

Abstracts

The global carbon capture and storage market size reached US$ 2.7 Billion in 2023. Looking forward, IMARC Group expects the market to reach US$ 5.8 Billion by 2032, exhibiting a growth rate (CAGR) of 8.5% during 2024-2032. The growing popularity of corporate social responsibility among business organizations, rising focus on climate change mitigation, and favorable government initiatives to combat climate change and reduce emissions are some of the major factors propelling the market.

Carbon capture and storage (CCS) is a technique that focuses on mitigating greenhouse gas (GHG) emissions and combating climate change. It comprises the capture of carbon dioxide (CO2) emissions that are generated from industrial processes or power plants before it is released into the atmosphere. Besides this, it assists in reducing the environmental impact of large-scale industrial operations while transitioning to more sustainable energy sources. As it aids in producing geothermal energy, the demand for CCS is rising across the globe.

At present, the increasing popularity of international agreements to achieve emission reduction targets around the world is contributing to the growth of the market. Apart from this, the rising development of transportation and storage infrastructure for captured carbon dioxide is propelling the growth of the market. In line with this, the increasing adoption of this technique for producing chemicals and plastics is bolstering

+357 96 030922
info@marketpublishers.com

the growth of the market. Besides this, the growing focus on reducing carbon emissions due to rising temperature around the world is positively influencing the market. In addition, technological advancements in CCS that reduce costs and improve efficiency are strengthening the growth of the market. Furthermore, the rising awareness about environmental issues among the masses is bolstering the growth of the market.

Carbon Capture and Storage Market Trends/Drivers:
Rising focus on climate change mitigation

There is a rise in the adoption of CCS due to the increasing focus on climate change mitigation. Climate change is recognized as one of the most concerning global challenges, with rising temperatures, extreme weather events, and increasing sea-level, threatening ecosystems and human societies. As a result, countries worldwide are seeking effective strategies to reduce greenhouse gas (GHG) emissions. CCS plays a crucial role in climate change mitigation by capturing CO2 emissions from various sources, such as power plants and industrial facilities. Apart from this, they prevent CO2 emissions from being released into the atmosphere. Countries can significantly reduce their carbon footprint and achieve emission reduction targets by implementing these effective techniques.

Favorable government initiatives to combat climate change

There is a rise in the need to combat climate change and reduce emissions across the globe. Governing agencies of various countries are promoting the adoption of CCS by implementing stringent environmental regulations and carbon pricing mechanisms. In line with this, these regulations impose limits on greenhouse gas (GHG) emissions and often require industries to adopt cleaner technologies or offset their emissions through this method. Apart from this, the introduction of carbon taxes, cap-and-trade systems, and emission reduction targets encourage several industries to invest in this technique as part of their compliance strategies. Companies are incorporating this technique into their operations to meet regulatory requirements, avoid financial penalties, and reputational risks for businesses.

Growing popularity of corporate social responsibility

Corporate social responsibility (CSR) is becoming a core component of modern business practices. Consumers, investors, and stakeholders are increasingly preferring companies that commit to environmental sustainability. In addition, integrating CCS into

+357 96 030922
info@marketpublishers.com

their operations allows companies to proactively address their carbon emissions and demonstrate their dedication to mitigating climate change. Businesses can improve their environmental reputation and appeal to environmentally conscious consumers by reducing their carbon footprint through these techniques. Moreover, integrating sustainable practices into their operations enhances long-term viability and resilience that attracts socially responsible investors. This technique is becoming a powerful tool for companies to showcase their commitment to environmental sustainability.

Carbon Capture and Storage Industry Segmentation:
IMARC Group provides an analysis of the key trends in each segment of the global carbon capture and storage market report, along with forecasts at the global, regional and country levels from 2024-2032. Our report has categorized the market based on service, technology and end use industry.

Breakup by Service:

Capture
Transportation
Storage

Capture represents the largest market segment

The report has provided a detailed breakup and analysis of the market based on the service. This includes capture, transportation, and storage. According to the report, capture represented the largest segment.

Capture is the initial and crucial stage of the CCS process and is responsible for capturing CO2 emissions from various industrial sources before they are released into the atmosphere. This stage involves the implementation of various capture technologies tailored to specific industries, such as power plants, cement factories, and refineries. There are mainly three types of capture technologies, such as post-combustion, pre-combustion, and oxy-fuel combustion. The capture process is essential for reducing emissions at the source and provides a foundation for further transport and storage stages in the value chain.

Breakup by Technology:

Post-combustion Capture
Pre-combustion Capture

+357 96 030922
info@marketpublishers.com

Oxy-fuel Combustion Capture

Pre-combustion capture accounts for the majority of the market share

The report has provided a detailed breakup and analysis of the market based on the technology. This includes post-combustion capture, pre-combustion capture, and oxy-fuel combustion capture. According to the report, pre-combustion capture represented the largest segment.

Pre-combustion capture is a carbon capture technology that targets CO2 emissions before the combustion of fossil fuels. This process is primarily employed in power plants and certain industrial facilities, particularly those using natural gas or coal. In addition, pre-combustion capture offers various advantages, such as it can generate a cleaner fuel while capturing CO2 before it is emitted. Apart from this, continuous research and development (R&D) efforts are focused on enhancing the efficiency and cost-effectiveness of pre-combustion capture, which is offering a positive market outlook.

Breakup by End Use Industry:

Oil and Gas
Coal and Biomass Power Plant
Iron and Steel
Chemical
Others

Oil and gas hold the biggest market share

The report has provided a detailed breakup and analysis of the market based on the end use industry. This includes oil and gas, coal and biomass power plant, iron and steel, chemical, and others. According to the report, oil and gas represented the largest segment.

In the oil and gas sector, CCS assist in addressing greenhouse gas (GHG) emissions resulting from the extraction, processing, and consumption of fossil fuels. This industry is a significant source of carbon dioxide (CO2) emissions, making it a key candidate for CCS implementation. In the oil and gas industry, it aids in minimizing the environmental impact of fossil fuel operations while contributing to both emission reduction and responsible resources.

+357 96 030922
info@marketpublishers.com

Breakup by Region:

North America
United States
Canada
Asia-Pacific
China
Japan
India
South Korea
Australia
Indonesia
Others
Europe
Germany
France
United Kingdom
Italy
Spain
Russia
Others
Latin America
Brazil
Mexico
Others
Middle East and Africa

North America exhibits a clear dominance, accounting for the largest carbon capture and storage market share

The report has also provided a comprehensive analysis of all the major regional markets, which includes North America (the United States and Canada); Asia Pacific (China, Japan, India, South Korea, Australia, Indonesia, and Others); Europe (Germany, France, the United Kingdom, Italy, Spain, Russia, and Others); Latin America (Brazil, Mexico, and Others); and the Middle East and Africa. According to the report, North America accounted for the largest market share.

North America held the biggest market share due to the increasing focus on addressing climate change. In line with this, the rising advancement in these techniques is

+357 96 030922
info@marketpublishers.com

bolstering the growth of the market in the region. Apart from this, the increasing adoption of CCS due to favorable regulatory frameworks is contributing to the growth of the market. In addition, the wide availability of suitable geological formations for CO2 storage, such as depleted oil and gas reservoirs and saline aquifers, is supporting the growth of the market in the North America region.

Competitive Landscape:
Key players in the industry are actively engaging in various activities and initiatives to advance the deployment and commercialization of CCStechnologies. In addition, many companies are investing in research and development (R&D) activities to enhance the efficiency and cost-effectiveness of these technologies. They are focusing on developing innovative capture, transport, and storage solutions to optimize the entire CCS value chain. Apart from this, several companies are implementing pilot and demonstration projects to showcase the feasibility and viability of these technologies on a large scale. These projects serve as testing grounds to validate the performance of these systems in real-world settings.

The report has provided a comprehensive analysis of the competitive landscape in the market. Detailed profiles of all major companies have also been provided. Some of the key players in the market include:

Air Liquide S.A.
Aker Solutions ASA
Baker Hughes Company
Exxon Mobil Corporation
Fluor Corporation
General Electric Company
Halliburton Company
Honeywell International Inc.
Linde plc
Mitsubishi Heavy Industries Ltd.
NRG Energy Inc.
Occidental Petroleum Corporation
Schlumberger Limited
Shell plc
Siemens AG

Recent Developments:
In July 2021, Shell Plc announced a proposal to build a large-scale carbon capture and

+357 96 030922
info@marketpublishers.com

storage (CCS) project at its Scotford Complex near Edmonton. This will assist in transforming Scotford into one of five energy and chemicals parks for Shell around the world and provide customers with lower-carbon fuels.
In June 2022, ExxonMobil, Shell, CNOOC, and Guangdong Provincial Development & Reform Commission signed a Memorandum of Understanding (MoU) to evaluate the potential for a world-scale carbon capture and storage (CCS) project to reduce greenhouse gas emissions at the Dayawan Petrochemical Industrial Park in Huizhou, Guangdong Province, China.
In March 2022, Aker Carbon Capture and SINTEF entered into a strategic collaboration agreement, with the goal of further developing carbon capture utilization and storage (CCUS) technology to reduce CO2 emissions from industry and energy solutions.

Key Questions Answered in This Report

1. What was the size of the global carbon capture and storage market in 2023?
2. What is the expected growth rate of the global carbon capture and storage market during 2024-2032?
3. What are the key factors driving the global carbon capture and storage market?
4. What has been the impact of COVID-19 on the global carbon capture and storage market?
5. What is the breakup of the global carbon capture and storage market based on the service?
6. What is the breakup of the global carbon capture and storage market based on the technology?
7. What is the breakup of the global carbon capture and storage market based on the end use industry?
8. What are the key regions in the global carbon capture and storage market?
9. Who are the key players/companies in the global carbon capture and storage market?

+357 96 030922
info@marketpublishers.com

Contents

+357 96 030922
info@marketpublishers.com

7 MARKET BREAKUP BY TECHNOLOGY

8 MARKET BREAKUP BY END USE INDUSTRY

9 MARKET BREAKUP BY REGION

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+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: Carbon Capture and Storage Market Report by Service (Capture, Transportation, Storage), Technology (Post-combustion Capture, Pre-combustion Capture, Oxy-fuel Combustion Capture), End Use Industry (Oil and Gas, Coal and Biomass Power Plant, Iron and Steel, Chemical, and Others), and Region 2024-2032

Product link: https://marketpublishers.com/r/CE80BEC9B2BBEN.html

Price: US$ 3,899.00 (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/CE80BEC9B2BBEN.html