

# Europe Carbon Capture Utilization Market Size, Share & Trends Analysis Report By Application (Enhanced Oil Recovery, Industrial, And Agriculture), By Country (Germany, France, Netherland, Poland, Austria), And Segment Forecasts, 2020 - 2028

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## Abstracts

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### Europe Carbon Capture Utilization Market Growth & Trends

The Europe carbon capture utilization market size is expected to reach USD 3,985.4 million by 2028, according to a new report by Grand View Research, Inc. The market is expected to expand at a CAGR of 18.4% from 2020 to 2028. Increasing applications of CCU in the enhanced oil recovery (EOR) in the oil and gas segment are expected to contribute to the growth of the market. Further, the food and beverages, chemicals, cement, and other industries are anticipated to be the major application segments that are expected to contribute to the growth of the market over the forecast period.

Industrial emerged as the largest market share in 2020 in terms of value for application segment as it is used in the industries such as cement, chemicals, power, steel, food, and beverages to capture carbon and utilize it for a better purpose. In terms of value, cement in the industrial application segment emerged as the largest segment in 2020 as many companies are showing interest in the adoption of carbon capture and utilization technologies in their manufacturing plants in the form of pilot-scale projects to evaluate the technology and economics of carbon capture and recovery, which is expected to contribute to the growth of the market in the coming years.

The demand for carbon dioxide has been experiencing a dip in sectors such as

beverage manufacturing as restaurants and bars across Europe have shut operations. Also, reduced demand for oil has resulted in halted operations in oil production in some of the exploration sites of oil & gas vendors that employ carbon dioxide-based EOR techniques. Further, the demand for industrial-grade carbon dioxide has also been on the lower side as industrial activities have slowed down in states badly affected by COVID-19.

However, the demand for CCU for the utilization of carbon dioxide has been on a higher side from medical and fire-fighting applications in Europe. The requirement for a large number of COVID care centers across the country, along with a number of medical applications of carbon dioxide, has resulted in high demand for medical-grade carbon dioxide in the region in recent times. Further, the requirement for fire-fighting equipment in newly developed hospitals and centers and upgrade in safety standards in existing facilities have resulted in increased demand for carbon dioxide in firefighting applications in the country.

Significant technological advancements in non-power sectors, such as petroleum refining, chemical, cement manufacturing, and metal foundry, in mature economies, such as the Netherlands, the U.K., and Norway, have led to the implementation of CCU technologies in small or pilot phases. Such favorable initiatives, coupled with increasing awareness among policymakers across various industrial sectors regarding the benefits of such techniques to curtail CO<sub>2</sub> emissions are likely to provide immense opportunities for future investments.

The industrial application segment dominated the market and accounted for a revenue share of 41.6% in 2020. The cement industry emits a significant amount of CO<sub>2</sub> during the calcination of limestone (CaCO<sub>3</sub>) to form CaO, which is the main precursor for cement production. The growing number of regulatory measures undertaken by the local governments to limit carbon emissions has created lucrative opportunities for the carbon capture utilization market.

Moreover, carbon dioxide is widely used for upstream well servicing applications such as hydraulic fracturing and Enhanced Oil Recovery (EOR) applications such as miscible oil displacement in the oil & gas industry. Carbon dioxide is injected into the rock pores to recover crude oil. CO<sub>2</sub> is miscible with crude oil and is comparatively less expensive than other similar miscible fluids used for these applications, making it a preferred choice for EOR applications.

## Europe Carbon Capture Utilization Market Report Highlights

In terms of revenue, the industrial application segment accounted for a prominent share in the market in 2020 and is further expected to witness prominent growth over the forecast period

As of 2020, Germany accounted for 20.0% revenue share in the overall market. Government initiatives, supporting policies and plans, and availability of funds are some of the factors that are expected to drive the market in the country

Various strategic initiatives were recorded over the past few years to boost the growth of the market. For instance, in March 2021, Aker carbon capture and Siemens energy joined forces to generate sustainable power. Both companies have signed an MoU to develop a combined offering for the Carbon capture solutions that can be used in gas turbines and gas power plants. This collaboration will help both companies to explore ways to jointly track the development of major projects across the globe

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