

The Global Market for Carbon Capture, Utilization and Storage Technologies

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Abstracts

Carbon capture, utilization, and storage (CCUS) refers to technologies that capture CO₂ emissions and use or store them, leading to permanent sequestration.

CCUS technologies capture carbon dioxide emissions from large power sources, including power generation or industrial facilities that use either fossil fuels or biomass for fuel. CO₂ can also be captured directly from the atmosphere. If not utilized onsite, captured CO₂ is compressed and transported by pipeline, ship, rail or truck to be used in a range of applications, or injected into deep geological formations (including depleted oil and gas reservoirs or saline formations) which trap the CO₂ for permanent storage.

Carbon removal technologies include direct air capture (DAC) or bioenergy with carbon capture and storage (BECCS). This fast growing market is being driven by government climate initiatives and increased public and private investments. In 2022 there was over \$1 billion in private investment in CCUS companies. Climeworks, a Swiss start-up developing direct air capture (DAC) raised a \$650m round in April 2022. In December 2022, Svante raised US\$318 million in a Series E fundraising round.

The market for CO₂ use is expected to remain relatively small in the near term (

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