

# **The Global Market for Carbon Dioxide (CO<sub>2</sub>) Utilization 2024-2045**

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## **Abstracts**

There are a wide range of commercial opportunities in carbon dioxide (CO<sub>2</sub>) utilization, from aviation fuel to sportswear. This extensive report provides a detailed analysis of the growing global market for carbon utilization, forecasting growth in CO<sub>2</sub> utilization across chemicals, fuels, polymers, building materials, agriculture and other sectors.

It assesses the addressable emissions sources by industry segment and competing carbon removal solutions while profiling key corporate players across the value chain spanning CO<sub>2</sub> capture, CO<sub>2</sub> conversion via thermochemical, electrochemical, catalytic and biological routes as well as mineralization concepts.

Multiple product opportunity areas are examined including synthetic hydrocarbon fuels and feedstocks, polycarbonates, polyols, industrial gases, enhanced oil recovery, yield boosting technologies, carbon nanomaterials and sustainable building products.

The report analyzes drivers, developments, investments, and challenges associated with transitioning CO<sub>2</sub> into a viable renewable feedstock at scale. Regional market demand analysis covers North America, Europe, Asia Pacific, China and Rest of World geographies. Technology readiness and outlook is provided for different CO<sub>2</sub> utilization pathways guiding research and adoption roadmaps. Report contents include:

Carbon Capture, Utilization and Storage (CCUS) market overview across industrial sectors and competing removal solutions

Global market forecasts for Carbon Utilization from 2022 to 2045 - volumes and revenues

Analysis of CO<sub>2</sub> conversion technologies - thermochemical, electrochemical, biological etc.

Assessment of synthetic hydrocarbon fuels, chemicals, polymers and building materials made from captured CO<sub>2</sub>

Analysis of CO<sub>2</sub> reuse across agriculture, horticulture, enhanced oil recovery

Emerging concepts around mineralization pathways for carbon removal

Review of investments, policies, developments, partnerships, and funding

Profiles of 80+ companies across the CCUS value chain (full list of companies profiled in table of contents)

Evaluation of technology readiness, scalability challenges, projected adoption roadmaps

Regional market demand analysis - North America, Europe, Asia Pacific, China, RoW

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