

Carbon Sequestration Methods

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The background is a stylized illustration of an industrial scene. On the left, two large white smokestacks with red horizontal bands emit thick white and grey smoke that drifts across the top of the image. On the right, there is a red and orange industrial building with a window and a tall silver pipe extending upwards. The overall color palette is muted, with greys, whites, and a touch of red and orange.

01

Carbon Emitters

Where are emissions coming from?

CO2 Emissions since 1750

Annual CO₂ emissions

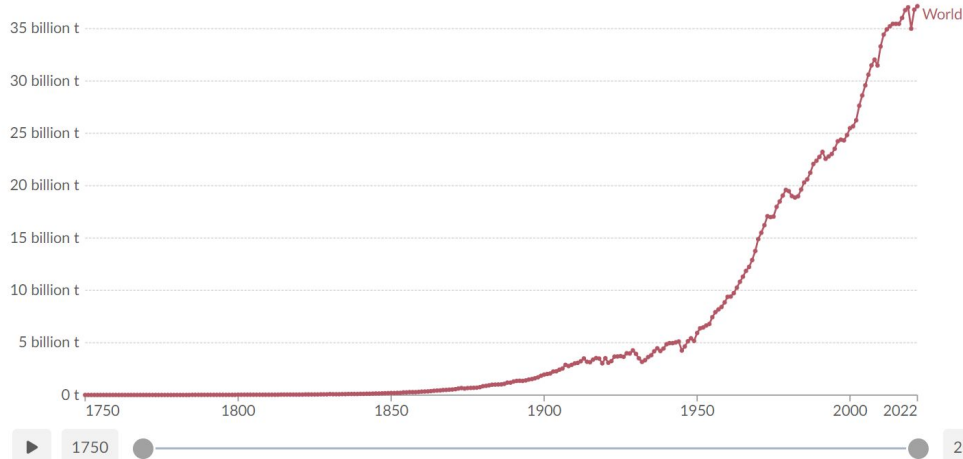
Carbon dioxide (CO₂) emissions from [fossil fuels and industry](#). Land-use change is not included.

Our World
in Data

Table Map Chart

Edit countries and regions

Settings



Data source: Global Carbon Budget (2023) - [Learn more about this data](#)

OurWorldInData.org/co2-and-greenhouse-gas-emissions | CC BY

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Carbon Sources



Transportation

Mostly smaller engines,
often without filters



Agriculture

Cows, fertilizers, and
pesticide-related effects



Commercial / Residential

The energy along the
main power grid



Industrial

Factories, warehouses,
and large-scale
operations



Electric Power

The costs in generating
power for the public



Miscellaneous

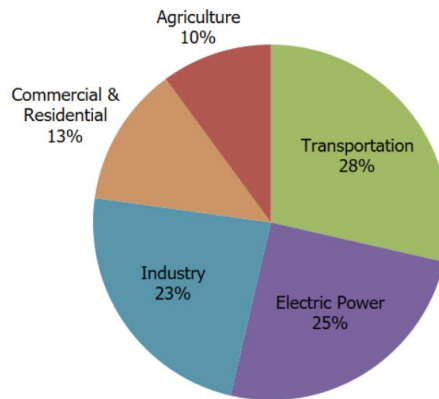
The smaller, sometimes
unintentional polluters

Companies working in Capture

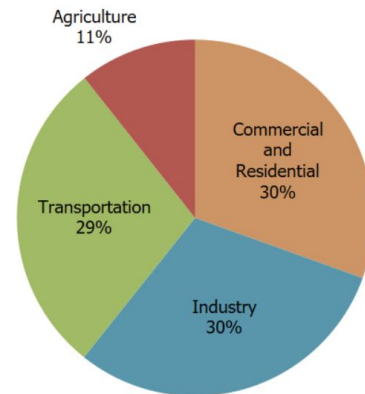


CO2 Emissions By Economic Sector

Total U.S. Greenhouse Gas Emissions by Economic Sector in 2021



Total U.S. Greenhouse Gas Emissions by Economic Sector



Total U.S. Greenhouse Gas Emissions by Economic Sector and Electricity End-Use

02

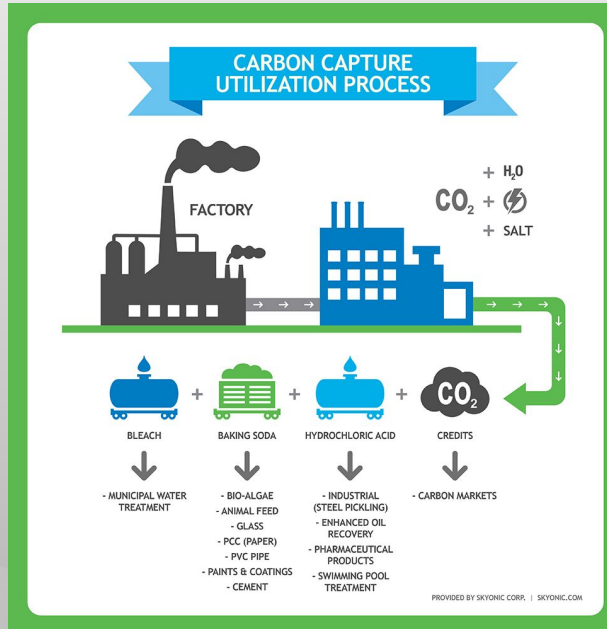
Carbon Capture

What technology is
currently in use?



Carbon Utilisation

Carbon utilization involves converting carbon dioxide into useful products like fuels, chemicals, and building materials to reduce greenhouse gas emissions.





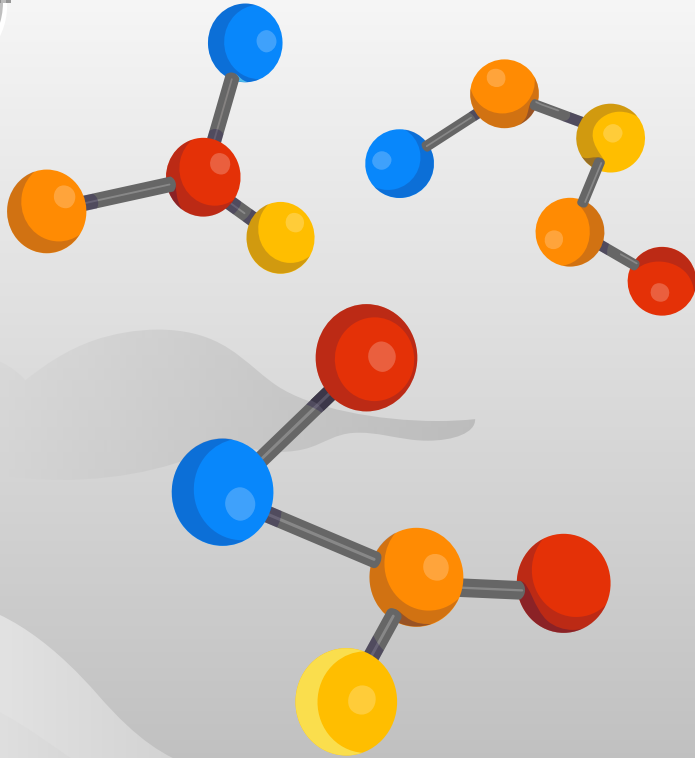
Carbon Capture History



How long do you think carbon capture has been around?

- A) 10 years
- B) 50 years
- C) 100 years
- D) Since the Beginning of time



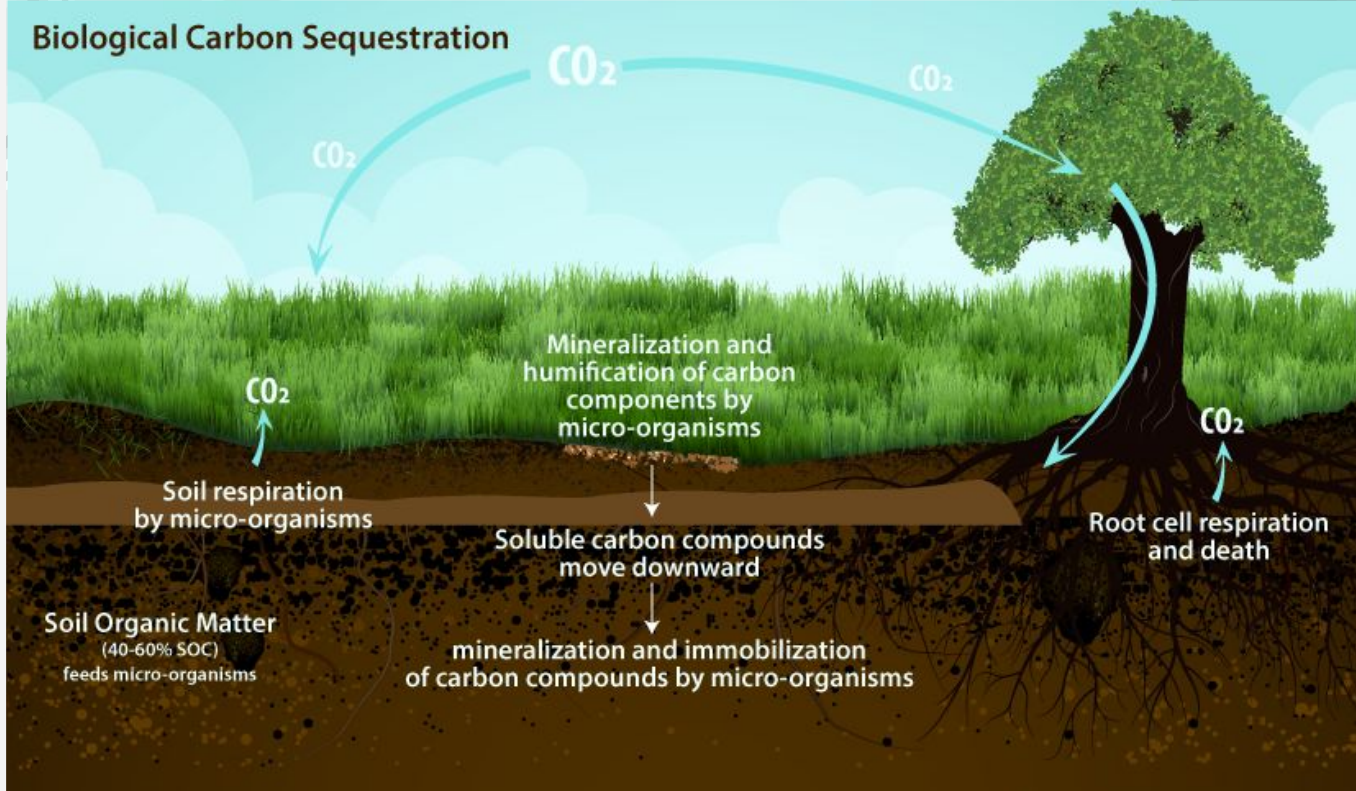


03

Carbon Sequestration

What does the natural carbon cycle look like?

Biological Carbon Sequestration





TYPES OF ENGINEERING | 21 ICONS



ELECTRICAL
ENGINEERING



CIVIL
ENGINEERING



MECHANICAL
ENGINEERING



ENVIRONMENTAL
ENGINEERING



COMPUTER
ENGINEERING



BIOMEDICAL
ENGINEERING



AEROSPACE
ENGINEERING



AUTOMOTIVE
ENGINEERING



ELECTRONIC
ENGINEERING



CHEMICAL
ENGINEERING



NUCLEAR
ENGINEERING



HEALTH AND SAFETY
ENGINEERING



PETROLEUM
ENGINEERING



SOFTWARE
ENGINEERING



MATERIALS
ENGINEERING



SYSTEMS
ENGINEERING



GEOTECHNICAL
ENGINEERING



MARINE
ENGINEERING



MANUFACTURING
ENGINEERING



MINING
ENGINEERING



AGRICULTURAL
ENGINEERING

The background is a stylized illustration of an industrial facility. On the left, two large white smokestacks with red horizontal bands emit thick white smoke. Below them is a red and orange building with a row of windows. A grey fence runs across the bottom. In the top left, grey pipes with black joints curve downwards. On the right, a large, billowing grey cloud shape is visible, and another set of grey pipes with black joints curves upwards from the bottom right.

04

Looking forward

What lies ahead in the future of
carbon capture technology?

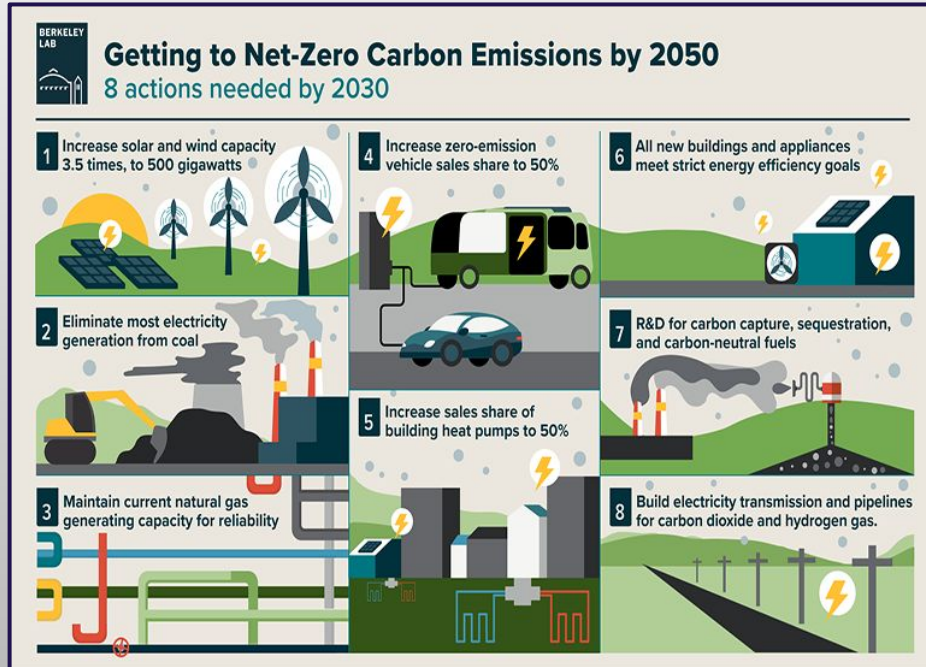
Increased Efficiency

The future of carbon capture technology is bright, with advancements likely to reduce costs and enhance efficiency, encouraging broader adoption and support from governments and industries to help combat climate change.



In the next 50 years...

What are the obstacles in the way?



Quiz Time!



A stylized illustration of an industrial scene. On the left, a large grey cooling tower with two orange horizontal bands is emitting a thick plume of white steam that rises and drifts to the right. In the foreground, there are grey industrial buildings with windows and pipes. A tall, thin smokestack with a red top is also visible. The background is a light grey with soft, white cloud-like shapes.

Thanks!

Does anyone have any questions?

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