

Carbon capture is an important technology that can significantly reduce emissions from energy, transportation, and industrial manufacturing. Carbon capture reduces these emissions by either capturing carbon at the source (i.e. when polluting activities take place) or pulling it directly from the open atmosphere to reduce our overall footprint. Once captured, that carbon can then be stored in a safe place or utilized by being made into something else. Importantly, carbon capture utilization & storage (CCUS) is a solution that enjoys bipartisan support. As demand for cleaner energy with fewer emissions grows, CCUS will be crucial to our energy strategy. According to the [International Energy Agency](#), we cannot solve climate change without it.

### Facts vs. Myths

- Once emitted, carbon stays in the atmosphere for [300 to 1,000 years](#). **FACT**
- The only way to really reduce emissions is to completely eliminate all fossil fuels. **MYTH**
- Carbon capture can lower emissions while providing reliable and affordable energy. **FACT**

### The Importance of Carbon Capture

- ***It is essential to our clean energy future.***
  - Fossil fuels are [projected](#) to make up 70%+ of the world's energy share by 2040.
  - Carbon capture can reduce emissions while meeting global energy demand.
  - The [International Energy Institute](#) (IEA) says that carbon capture is “a critical part” of a clean energy technology portfolio to lower emissions.
- ***It provides unique economic benefits.***
  - Carbon capture will spur widespread [job creation and private sector investment](#).
  - In 21 states studied, analysis from the Rhodium Group [estimates](#) that carbon capture can create/support up 54,200 jobs per year on average, over the next 15 years.
  - The IPCC has [stated](#) that tackling climate change without carbon capture would be twice as expensive for society, partially due to higher energy costs.
- ***Once captured, carbon can be turned into new products.***
  - While the majority of captured carbon is stored, it can also be utilized to create new products such as [concrete](#) and other [building materials](#).

### Markets vs Mandates

- The United States is uniquely positioned to accelerate CCUS development and deployment, according to a recent [study](#) published by the National Petroleum Council.
  - This is due to the existing infrastructure for petroleum and natural gas, a commitment to R&D, and a geological advantage in storing captured carbon.
- The private sector is beginning to lead the way in carbon capture development.
  - [Microsoft](#), the [Oil and Gas Climate Initiative](#), the [X Prize Foundation](#), and many other companies are investing in CCUS technologies.

# Carbon Capture, Utilization, and Storage 101

## How Technology Can Solve the CO2 Problem

- Scale back energy subsidies. These distort the markets and ultimately drive up the cost of energy in an otherwise competitive free market.
  - Recognizing that the perfect policy (creating a level playing field) could be the enemy of the good policy (targeted, time-limited incentives instead of heavy-handed regulatory mandates and taxes), the so-called [“45Q tax credits”](#), which allow companies or investors to write off their investments into carbon capture technology up to \$20 per ton of CO<sub>2</sub>, has undeniably made private sector deployment of CCUS easier.

### How to Improve and Accelerate Carbon Capture

- Continue to invest in CCUS R&D through the Department of Energy.
- Improve infrastructure.
  - The National Petroleum Council [states](#) that in order to achieve deployment of CCUS at scale, a tenfold increase in pipelines will be required.
  - States should [reclassify](#) captured CO<sub>2</sub> as a beneficial product rather than treating it as waste. This would simplify pipeline development.
- Streamline the permitting process.
  - In order to store CO<sub>2</sub> in deep saline formations, which is safe and secure, a Class VI well permit must be issued by the EPA. Since 2019, the EPA has only issued two Class VI permits because the permitting process can take up to [six years](#).
- Authorize access, through the Department of Interior, to allow captured carbon to be [stored on state and federal lands](#).
- Support pragmatic, market-based policies. Short of fully leveling the playing field, 45Q offers a pragmatic, bipartisan alternative that accelerates market development of CCUS.

### In Summary

- Carbon capture is an essential component of our portfolio in tackling climate change.
- Carbon capture is necessary to reduce our emissions, and America is uniquely positioned to be the world leader in this pioneering technology.
- In order to incentivize robust private sector involvement, there should be more R&D into CCUS, investment in infrastructure, streamlining of the regulatory process, and authorization for storage access on public lands.