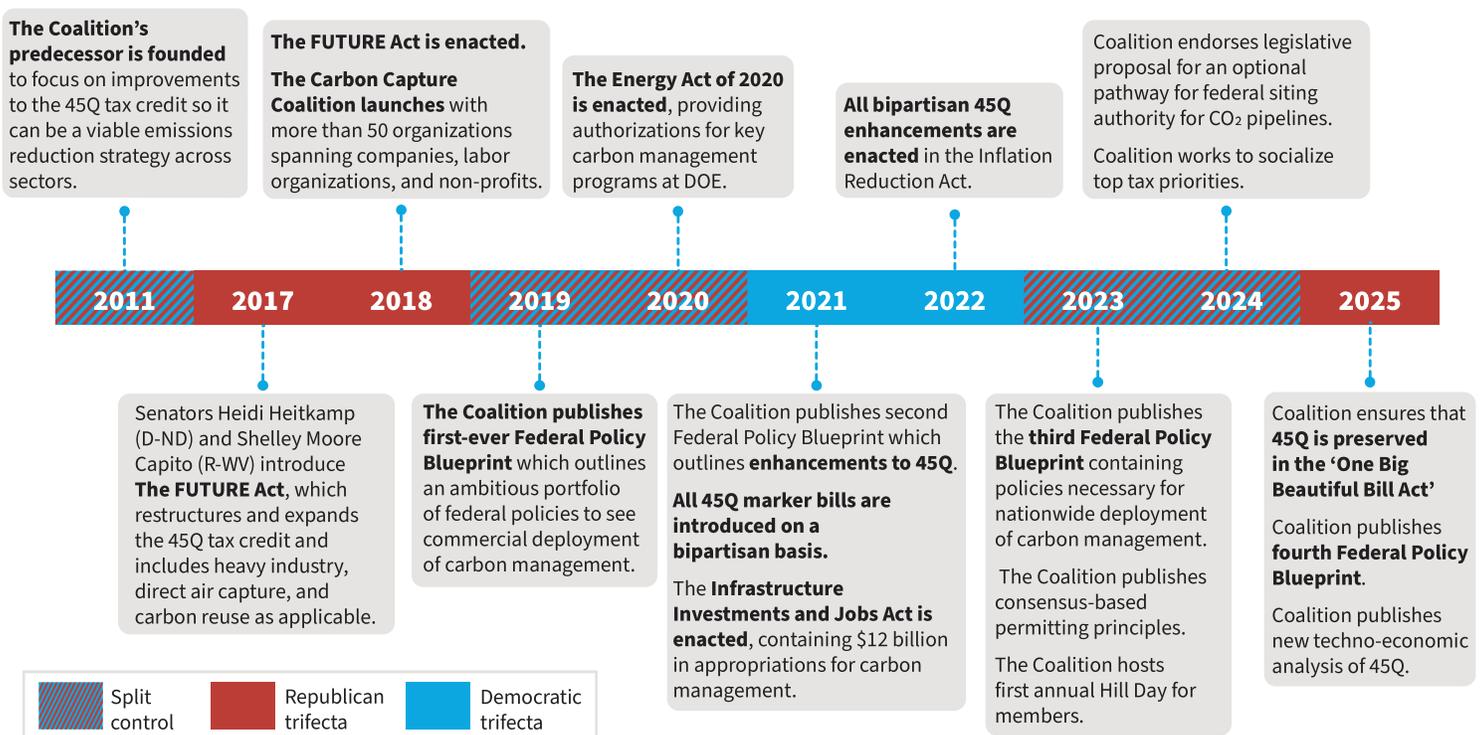


# Carbon Management Federal Policy Framework

**Carbon management technologies—which include carbon capture, utilization, direct air capture, transport, and storage—are crucial for balancing the growing need for affordable, reliable domestic energy with environmental stewardship.** For nearly two decades, lawmakers have built a durable framework of supportive federal policies to catalyze the deployment of these technologies nationwide (seen in the timeline below). This framework enables US industries to deploy carbon management technologies to produce cleaner energy and materials that global markets and corporate buyers are increasingly demanding. In turn, it is essential that federal policies keep pace to provide the stability needed to maintain a strong American carbon management industry and support domestic energy and manufacturing production.



## CARBON CAPTURE AND SEQUESTRATION TAX CREDIT: FEDERAL SECTION 45Q

The [section 45Q tax credit](#) for geologic sequestration of carbon oxides (CO<sub>2</sub> or CO) captured from eligible industry and power facilities, and directly from the atmosphere, is the foundational policy tool for deploying carbon management projects in the US. The credit provides a strong market signal for installing carbon capture and direct air capture technologies by reducing the cost and risk to private capital of investing in deploying these technologies and associated transport and storage infrastructure. 45Q is a performance-based tax credit. Claimants must demonstrate either secure geologic storage or permanent displacement of captured CO<sub>2</sub> when used as a feedstock for the manufacturing of commercial products before receiving credit.

**Thanks to the policy framework in place, the tax credit has resulted in more than [330 announced and operational projects](#), of which [168 are in advanced development](#).**

## 45Q tax credit structure and eligibility requirements as amended by the One Big Beautiful Bill Act of 2025

|                               | Annual Carbon Capture Thresholds (metric tons of CO <sub>2</sub> /CO per year) | For dedicated storage of CO <sub>2</sub> in saline or other geologic formations | Credit value for carbon reuse projects to convert CO or CO <sub>2</sub> into useful products | Credit value for secure geologic storage of CO <sub>2</sub> in oil and gas fields |
|-------------------------------|--|---|--|---|
| Direct Air Capture Facilities | 1,000 or more  | \$180 per ton   | \$180 per ton  | \$180 per ton   |
| Industrial Facilities         | 12,500 or more   | \$85 per ton  | \$85 per ton   | \$85 per ton  |
| Electric Generating Units     | 18,750 or more   | \$85 per ton  | \$85 per ton   | \$85 per ton  |

**Timing:** Projects must begin construction before January 1, 2033, and may claim the credit for up to 12 years after being placed in service. For more information on 45Q eligibility, see the [45Q Tax Credit Primer](#).

## FEDERAL RESOURCES FOR INNOVATIVE, NEXT-GENERATION CARBON MANAGEMENT TECHNOLOGIES

In the same way that other innovative energy technologies were largely developed and commercialized through public-private partnerships, the federal government has played a key role in derisking and developing some of the first carbon capture and storage projects. Research, development, demonstration & deployment (RDD&D) programs administered by the US Department of Energy support early-stage research, pilot projects, and first-of-a-kind commercial demonstrations of the technologies. These programs are essential to driving innovation, reducing costs, and improving the performance of the full portfolio of carbon management technologies. Key programs include:

- **Carbon Capture Demonstration Projects:** Supports first-of-a-kind commercial deployment of carbon capture technologies at power plants and industrial facilities such as cement, steel, refining, and chemical production.
- **Regional Direct Air Capture Hubs:** Supports the development of regional direct air capture hubs capable of removing millions of tons of CO<sub>2</sub> from the atmosphere.
- **CarbonSAFE:** Has helped characterize geologic storage sites across the United States and demonstrate safe and permanent CO<sub>2</sub> storage through field projects, moving projects from site feasibility to injection.
- **Carbon transport and storage infrastructure programs:** Various programs support the development of shared CO<sub>2</sub> transport networks and regional storage hubs that enable multiple facilities to access geologic storage.

Together, these federal investments help reduce technical and financial risks for carbon management technologies, accelerate learning-by-doing, and lay the foundation for commercial-scale deployment of projects across the nation. It remains crucial that lawmakers continue to prioritize sustained, robust funding to support these mission-critical programs.

## CLASS VI INJECTION WELLS

Federal and state authorities are tasked with ensuring safe and permanent storage in appropriate geologic formations through the EPA's Underground Injection Control Program's Class VI and Class II well programs. While Class II wells are used to inject CO<sub>2</sub> into oil and gas fields to produce additional oil, Class VI wells are used to inject CO<sub>2</sub> into deep geologic formations for safely and permanently storing it.

The [Class VI program](#) addresses the permanent storage of CO<sub>2</sub> and ensures that wells are appropriately sited, constructed, tested, monitored, funded, and closed once CO<sub>2</sub> injection activities are completed. Suitable geologic storage locations are separated from underground drinking water sources, typically one mile below the earth's surface, and occur below impermeable rock layers, ensuring CO<sub>2</sub> is permanently trapped in the target geologic formation.