



NetØ.Guru

Your Carbon Innovation Hub

Driving Carbon Innovation with Policy, Capital & Technology

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 CLIMEWORKS

The Carbon Capture Revolution

The CCUS industry is experiencing unprecedented growth, creating new opportunities for innovation, investment, and environmental impact.

\$98

per ton for DAC projects
(45Q)

\$27B+

projected market size by
2034

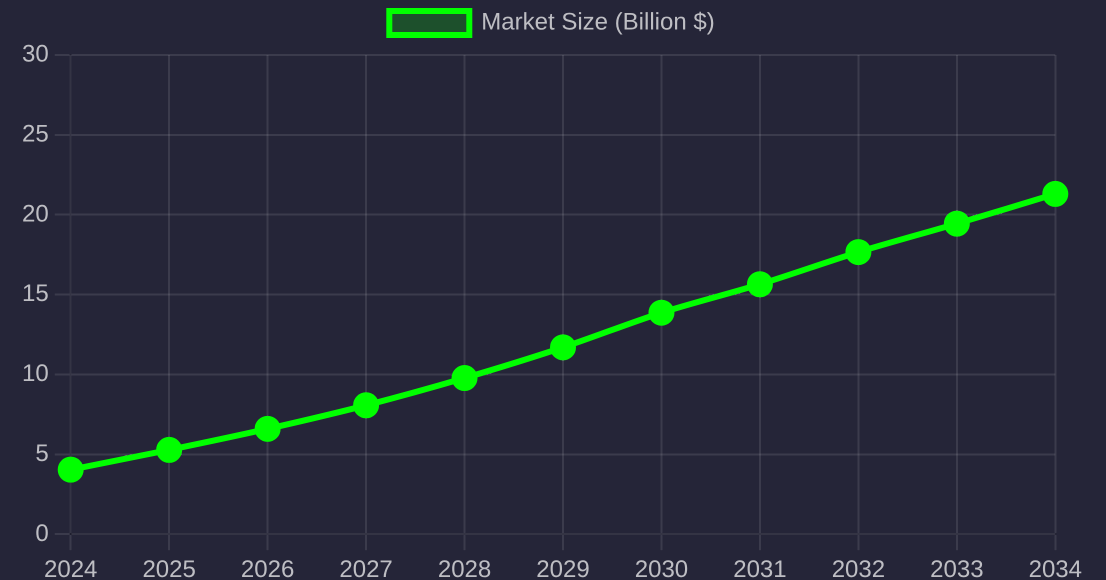
275+

global CCUS projects

9%

average market growth rate

CCUS Market Growth Projection



Understanding Section 45Q Tax Credits

What is 45Q?

Tax credits for qualified carbon oxide that is captured, utilized, or stored.

Economic Impact

Makes carbon capture projects more economically viable through significant tax incentives.

Availability

Extended through 2032 by the Inflation Reduction Act.

Evolution of Section 45Q

2008

Original 45Q enacted with \$20/ton for geological storage

2022

Inflation Reduction Act significantly enhanced credit values

2018

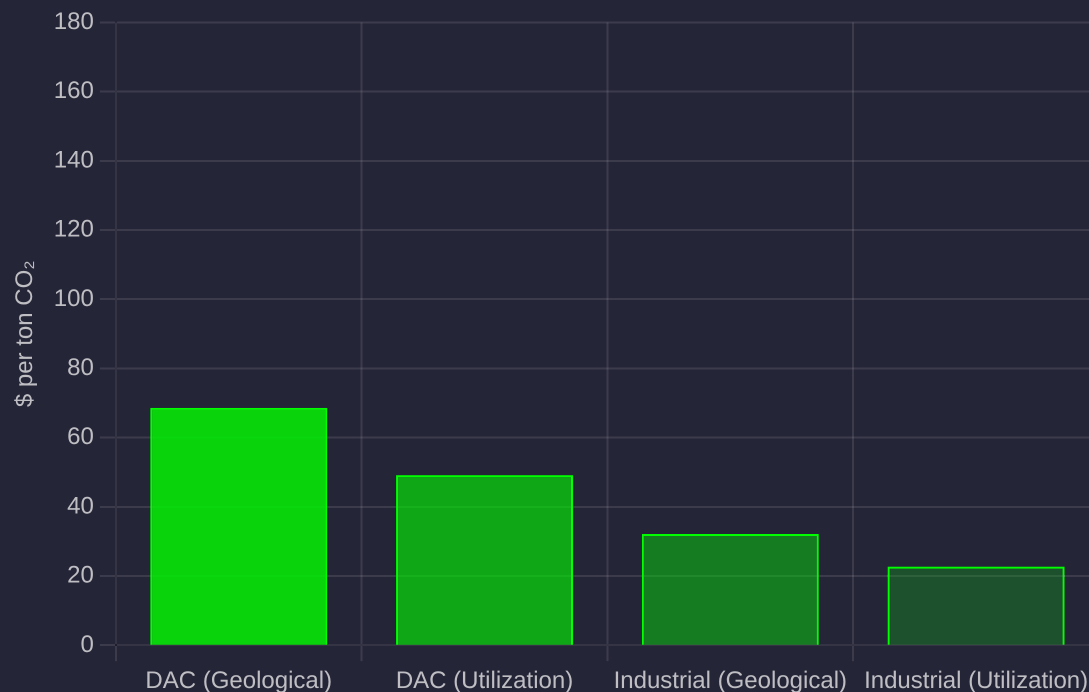
FUTURE Act expanded 45Q with increased values up to \$50/ton

2025

Current values up to \$180/ton for DAC with geological storage

45Q Credit Values: Maximizing Your Returns

2025 Credit Values (\$/ton CO₂)



Direct Air Capture

\$180/ton for geological storage

\$130/ton for utilization

Highest value reflects the technological challenges and importance of removing atmospheric CO₂

Industrial Capture

\$85/ton for geological storage

\$60/ton for utilization

Applies to emissions from power plants, manufacturing facilities, and other industrial sources

ROI Considerations

Credit values are adjusted annually for inflation

12-year claim period once carbon capture equipment is placed in service

Inflation Reduction Act: Game-Changing Improvements




Before IRA

DAC (Geological)	\$50/ton	\$180/ton
DAC (Utilization)	\$35/ton	\$130/ton
Industrial (Geological)	\$50/ton	\$85/ton
Industrial (Utilization)	\$35/ton	\$60/ton
Minimum Capture (Industrial)	100,000 tons/year	12,500 tons/year
Minimum Capture (DAC)	100,000 tons/year	1,000 tons/year

After IRA

Key IRA Enhancements


Increased Credit Values

 Significantly higher credit values make more projects economically viable


Direct Pay Option

 Tax-exempt entities can receive direct payments instead of tax credits

Transferability

 Credits can be transferred to other taxpayers, creating new financing options

Lower Thresholds

 Reduced minimum capture requirements enable smaller projects to qualify

Qualifying for 45Q Credits

Minimum Capture Thresholds

Industrial Facilities

12,500 tons CO₂/year





Power plants, manufacturing facilities, and other industrial sources

Direct Air Capture

1,000 tons CO₂/year

Lower threshold recognizes technological challenges

Additional Requirements

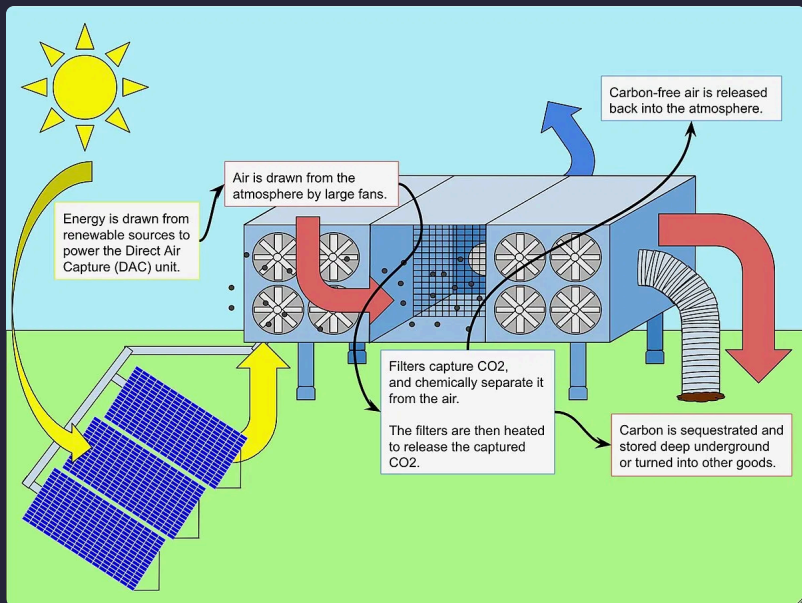
-  Construction must begin before January 1, 2033
-  EPA-approved monitoring, reporting, and verification plan
-  Annual certification of carbon oxide capture and disposal
-  Recapture provisions if CO₂ leaks back to atmosphere

Eligibility Flowchart



Carbon Capture Technologies: From Concept to Scale

Direct Air Capture (DAC) Process



Carbon Utilization Pathways

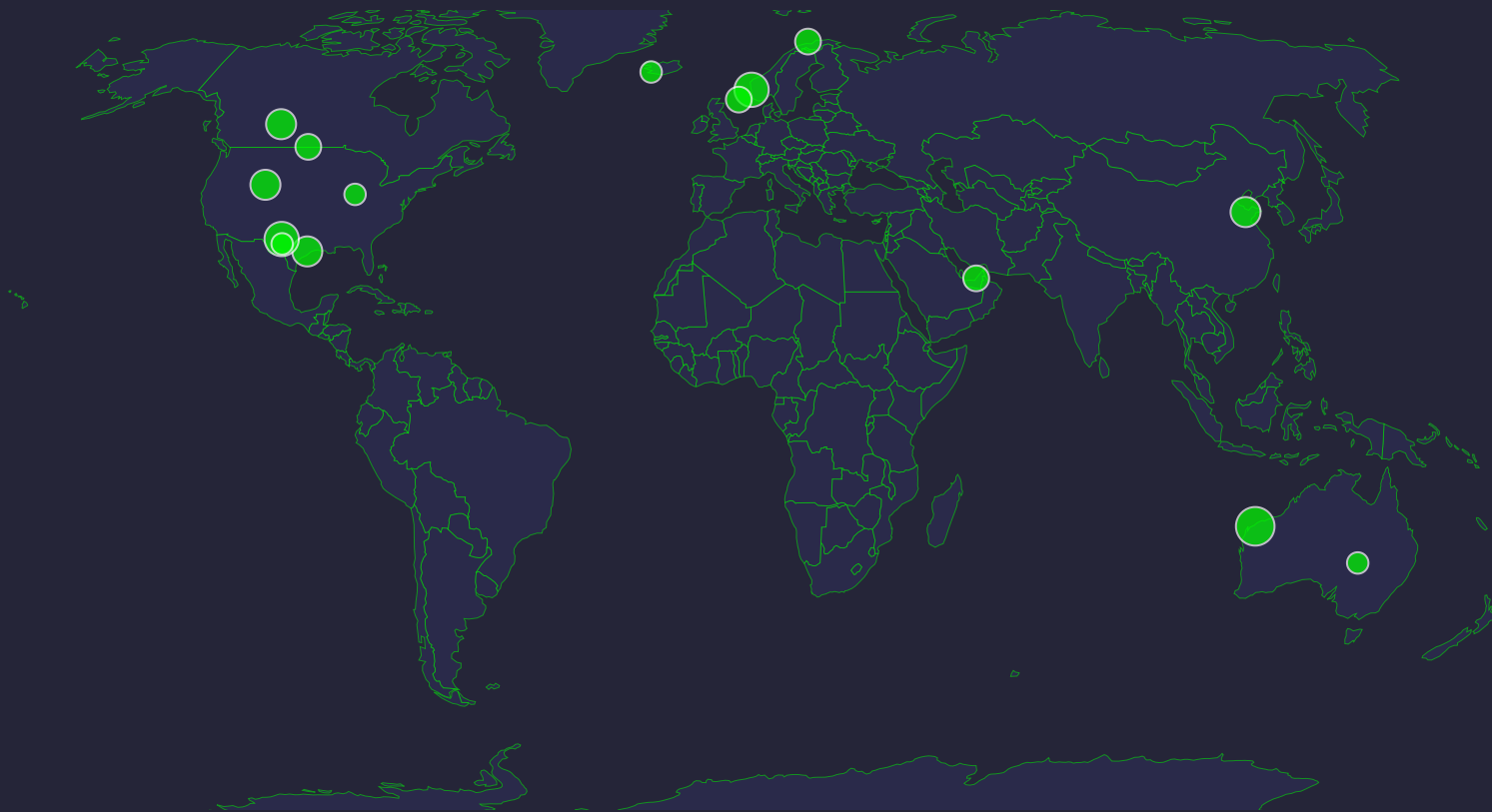
- Building Materials
- Enhanced Oil Recovery
- Chemicals & Polymers
- Synthetic Fuels
- Agriculture Products
- Food & Beverages

Technology Comparison

Technology	Cost Efficiency	Scalability	Maturity	45Q Value
Direct Air Capture	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	\$180/ton
Post-Combustion	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	\$85/ton
Pre-Combustion	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	\$85/ton
Oxy-fuel Combustion	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	\$85/ton
Industrial Separation	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	\$85/ton




Leading CCUS Projects Worldwide

Global CCUS Project Distribution






Featured Projects




Orca (Iceland)

-  Direct Air Capture
-  4,000 tons CO₂/year
-  Climeworks




Northern Lights (Norway)

-  Transport & Storage
-  1.5M tons CO₂/year
-  Equinor, Shell, TotalEnergies

Quest (Canada)

-  Industrial Capture
-  1M+ tons CO₂/year
-  Shell

Gorgon (Australia)

-  Natural Gas Processing
-  4M tons CO₂/year
-  Chevron

275+

Total Projects

42

Countries

150M+

Tons CO₂/Year

\$86B+

Investment

Your Comprehensive CCUS Resource Hub



45Q Calculator

Calculate potential tax credit values for your carbon capture projects with our interactive tool.

- Input project parameters
- Compare storage vs. utilization



Interactive Project Map

Explore global CCUS projects with our interactive map featuring real project data.

- Filter by technology type
- Track project timelines



Startup Directory

Discover innovative CCUS startups, their funding stages, and breakthrough technologies.

- Company profiles and contacts
- Investment tracking



Research Library

Access comprehensive market intelligence, policy analysis, and technical resources.

- Policy briefings and updates
- Market trend analysis

User Journey

1

Explore

Discover CCUS resources

2

Analyze

Calculate project economics

3

Connect

Find partners and resources

4

Implement

Execute carbon strategy

Ready to Navigate the Carbon Innovation Landscape?

Join thousands of professionals using NetØ.Guru for market intelligence, policy insights, and investment opportunities.

Key Benefits



Access market intelligence and trends



Maximize 45Q tax credit opportunities



Connect with industry partners

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