

Internal Talking Points

About the Carbon Capture Coalition

- The Carbon Capture Coalition is a nonpartisan collaboration between more than 100 organizations, working to lay the groundwork for the necessary portfolio of federal policies to enable economywide, commercial-scale deployment of carbon management technologies.
 - This includes carbon capture from industry and power, removal through direct air capture, reuse (utilizing captured CO₂ as a feedstock to manufacture valuable products), and scaling necessary infrastructure to transport and store captured CO₂.
- Our membership consists of three primary pillars: nonprofits and policy organizations, industrial, energy, and construction labor unions, and a broad, wide-ranging contingent of companies and industry voices.
- This group operates on a consensus basis. This means that our members agree on the critical impact carbon management technologies have on the economy, environment, and America's global position in technology innovation and align on our top policy priorities.

History of Coalition Efforts on the Federal Section 45Q Tax Credit

- Historically, the Coalition has been laser-focused on ensuring available incentive structures are sufficient to scale the deployment of carbon management technologies.
- The federal Section 45Q tax credit is the foundational federal policy mechanism to incentivize
 the full value chain of carbon management technologies; it is meant to close the cost gap
 between levels of financing available for project deployment and the costs to develop carbon
 management projects across sectors.
- The Coalition has been instrumental in building bipartisan support for 45Q, and our members were central in advocating for the restructuring of the credit in the 2018 FUTURE Act and subsequent enhancements made to the credit in 2022.
 - While the most recent enhancements made to 45Q were eventually rolled into a partisan legislative vehicle, the elements of the modifications were all contained in bipartisan marker bills that received broad, wide-ranging support from members of both chambers.

<u>Demonstrating the Utility of the 45Q Tax Credit</u>

American businesses and industries spanning multiple sectors, including agriculture and food, oil and gas, cement and steel, aviation and shipping, and pulp and paper, to name a few, rely on the certainty the 45Q tax credit provides to plan investments, hire workers, and obtain construction materials, among other things.

45Q as a Key Economic Driver

 Carbon management technologies have emerged as a powerful economic driver in the US, encouraging innovation, job creation, and preservation, and attracting investment in new technologies.

- Widespread deployment of carbon management technologies at industrial, power, and largescale direct air capture facilities is an essential tool for preserving and expanding familysustaining jobs in key sectors across almost every state in the nation.
- Among the broader toolkit of low- and zero-carbon technologies needed to reduce emissions, the full suite of carbon management technologies is especially critical in helping to innovate and sustain our nation's domestic energy, industrial, and manufacturing base, which produce the materials that drive the American economy.
- Significant federal investments in carbon management and associated infrastructure over the
 past few years have spurred the announcement of more than 270 publicly announced
 domestic projects that span the carbon management value chain and technology readiness
 levels, signaling that good policy will translate into real-world projects.

45Q in Maintaining Global Energy Leadership

- Carbon management technologies are essential for preserving America's economic strength
 and global competitiveness by ensuring that domestic energy remains abundant and
 affordable. They help drive our continued global leadership across sectors.
- As international markets shift toward cleaner, more efficient energy, carbon management technologies will help sustain American industries without sacrificing economic growth.
 - By proactively managing emissions, the US can increase efficiency and attract investment, all while safeguarding US energy production, manufacturing, and industry.
- The US has been the global leader in the commercialization of carbon management technologies for decades, providing new markets and opportunities for significant economic growth.
 - However, nations like China, Canada, the UK, and the EU, are also investing heavily in carbon management technologies and positioning themselves as leaders in deploying these technologies and associated infrastructure.
 - A weakened 45Q tax credit will halt project deployment and, in many cases, cause announced and future projects to relocate abroad to countries with a more favorable policy landscape.

Addressing Growing Energy Demand

- Deployment of **carbon management supports an "all-of-energy" strategy** by bolstering the continued supply of available, low-emissions energy sources.
- Carbon capture at power facilities will be a crucial strategy for meeting anticipated energy demand over the next decade.
 - As US utilities and power producers work to address surging demand in the next decade from the rise of artificial intelligence, data centers, and the like, securing low- and zeroemitting firm, dispatchable power resources, will be crucial.

Ensuring Global Competitiveness

- Regardless of whether the US government is working toward emissions reduction or climate goals, there has been a clear shift over the past several years in market demand consumers, both at home and abroad, are demanding cleaner energy and products.
 - o In order for American industries to remain competitive not only in domestic markets but in the global marketplace, their business depends on investing in innovative solutions

like carbon management to produce reliable, sustainable energy and commercially valuable goods.

• The 45Q tax credit is the main driver to ensure these industries remain viable going forward and help maintain the US competitive edge in global industries and manufacturing.

Robust Bipartisan Support

- Bipartisan support for carbon management has only grown over the course of the past several
 years, underscoring a unified commitment to leveraging American innovation to protect and
 expand jobs in traditional energy sectors, ensure that the US remains a global leader in
 deploying clean energy technologies, and reducing harmful emissions.
- Though the investments in these technologies made under the 117th Congress are just beginning to take hold, the benefits are already being seen and felt across the entire American economy.
- Members of Congress across the political spectrum recognize that energy tax credits, including 45Q, are driving investment and job creation in their states and districts. This support demonstrates that 45Q, and carbon management broadly, is good policy, above all else.

Advocating for Modifications to 45Q

1) Inflation Adjustment

- **Issue overview:** Increased credit values provided to projects developed in the power, industry, and direct air capture sectors are the cornerstone of the enhancements made to the federal Section 45Q program in 2022. However, the tax credit does not begin adjusting for inflation until 2027, using a base index year of 2025.
- As Congress negotiated the IRA tax title, some of the highest inflation rates identified in four decades dramatically shifted the economic feasibility of clean energy project deployment.
 - As a result, the cost to deploy carbon management technologies, even with higher
 45Q credit levels, changed rapidly over a short period of time.
 - In fact, an Energy Futures Initiative (EFI) report and analysis estimated that between 2020 and 2022, inflation had already consumed about half of the value increase of the credit (\$85 and \$180, respectively) for carbon capture retrofits in power and industry, as well as direct air capture.¹
- Solution: To prevent further reduction of the credit value, 45Q should be adjusted for inflation beginning immediately, using 2021 as the base index year for the real dollar value to remain consistent with the intention of 2021 marker bills to increase credit levels.
- Adjusting the base index year to 2021 would increase the credit's nominal value by nearly 25 percent and have a sizeable impact across ALL sectors.
- This would bring real credit levels in line with those originally intended by Congress in 2021 marker bills, compared to using 2025 as the base index year, as is in the current statute.²
 - As introduced in 2021, the Coordinated Action to Capture Harmful (CATCH) Emissions Act (<u>S.2230</u> / <u>H.R.3538</u>) intended to provide increased 45Q credit levels valued in 2021

¹ Moniz et al., "Turning CCS Projects in Heavy Industry & Power into Blue Chip Financial Investments."

² Using the Gross National Production: Implicit Price Deflator through 2023, then assuming 2.5 percent inflation per year.

dollars.

2) Increasing Credit Values for Saline Storage Consistent with Sen. Kevin Cramer's (R-ND) Framework

- **Issue overview:** The current economics for project deployment are extremely challenging due to a combination of inflationary pressures on raw materials and components, labor, higher interest rates for securing capital, and supply chain shortages.
 - This is particularly true in sectors that have higher costs to deploy carbon management technologies, which include coal and natural gas-fired power generation, diverse industrial sectors including steel, cement, basic chemicals, and fertilizer, and capturing CO2 directly from the atmosphere.
- Between 2020 and 2024, prices of basic commodities, equipment, metals, construction labor, and engineering contractors skyrocketed, increasing between 30 and 40 percent across heavy construction and capital equipment sectors.
 - At the same time, high inflation rates from 2020 to 2022, coupled with rising rates to borrow capital, dramatically shifted the economic feasibility of energy and industrial project deployment, affecting both capital goods costs and energy prices.
 - As a result, the cost to deploy carbon management technologies, even with higher 45Q credit levels, changed rapidly over a short period of time.
- While adjusting the credit appropriately to address inflation's significant erosion of the credit value is essential to prevent further erosion and sustain projects already in the development pipeline, it is not sufficient to enable broader deployment across sectors.
- **Solution:** Sen. Kevin Cramer (R-ND) has proposed to increase credit values for carbon capture projects that store their captured CO₂ in saline geologic formations to \$120/metric ton, which would be a nominal increase of \$35/metric ton.
 - The Carbon Capture Coalition supports this key piece of Senator Cramer's proposal as it would incentivize greater deployment across power and industrial applications.

Providing Parity for Carbon Utilization Projects

- **Issue overview:** The \$25 per metric ton disparity between Section 45Q carbon sequestration and carbon utilization credit levels disincentivizes the development and deployment of nascent carbon reuse technologies. This disparity rises to \$50 per metric ton in relation to direct air capture projects.
- The current disparity between credit levels for saline geologic storage and carbon used for the manufacturing of valuable products creates a harmful and unnecessary cost for carbon conversion companies, discouraging private investment in the CCU sector.
- The US is uniquely positioned to lead the globe in the reuse of captured carbon emissions.
 Today, innovative companies are piloting sustainable processes for converting captured carbon in the United States each year into useful products such as plastics, concrete, and fuels, among many others—essentially creating entirely new supply chains. To achieve this, they will need to invest billions of dollars in private capital to construct new manufacturing facilities.
- It comes down to making these projects cost-competitive with their storage project counterparts—CCU needs a level playing field.
- **Solution:** Provide parity between credit levels for utilization projects that reuse captured carbon to manufacture valuable goods and those that store captured CO₂ in saline geologic formations.

Preserving Key Mechanisms to Monetize 45Q

Transferability

- Transferability allows project developers to sell credits to other entities with greater tax liability, increasing market liquidity, attracting more investors, and providing additional financing options for carbon management projects. It allows claimants of clean energy tax credits to monetize tax credits even if they do not have enough tax liability to use the full value of the credit themselves.
- Transferability will further incentivize the deployment of new carbon capture technologies by increasing the universe of potential investors and allowing project developers to fully realize the benefits of the credit.

Direct Pay

- Providing a direct pay option allows project developers to access the full value of the tax credits and leverage greater private capital for project investment.
- Treatment of the 45Q tax credit as an estimated tax payment provides a much more effective and cost-efficient mechanism to incentivize projects than monetizing a tax credit.
 - For every dollar expended by the federal government through the 45Q incentive, direct pay will deliver greater value for the American taxpayer by yielding more deployment of carbon capture, removal, and utilization technologies—and thus greater technology deployment, jobs, and economic benefits.
- The complexity and inefficiency of tax equity transactions impose increased costs and burdens on project developers.
- Tax equity is a suboptimal means of financing carbon capture technologies because tax equity investors demand elevated returns that erode the value of the tax credit to the project, especially for carbon capture, direct air capture, and other less commercially mature technologies.