CARBON CAPTURE COALITION

2023 Policy Blueprint Recommendations

## I. Policy Work Streams

a. Implementing the Supportive Policy Ecosystem
   i. Support swift and effective implementation of 45Q tax enhancements.
      1. Ensure that the direct pay and transferability provisions provide the necessary flexibility (we now have regulation here, although it is lacking most of our recommendations).
   ii. Ensure federal funding is timely, transparent, and in keeping with congressional intent.
      1. DOE and EPA are responsible for the rollout of more than $12B in carbon management funding.
   iii. Promulgate $CO_2$ storage regulations on federal lands.
      1. Agencies should ensure these policies and processes are aligned to allow for a clear and workable pathway to realize $CO_2$ storage on public lands. The Coalition urges the Department of Interior to finalize draft regulations for the Outer Continental Shelf.
      2. Relevant federal agencies should support the same rigor of MRV for secure, permanent storage of $CO_2$ when promulgating rules governing the offshore environment.
      3. These agencies should also ensure the same level of transparency and reporting measures required by EPA. Ensuring measurement, transparency, and accountability mechanisms for offshore geologic storage of $CO_2$ is integral to maintaining public confidence in the integrity of the 45Q tax credit.

b. Demand-Side Policies
    i. Develop a federal role in standardizing the marketplace.
        1. These mechanisms include purchase agreements for low-, zero- and negative-carbon electricity, liquid fuels, low-carbon intensity hydrogen, and various products and services sourced through carbon capture, removal, reuse, and storage.
        2. The federal government has a central role in developing standards for tracking, accounting for, and verifying carbon reductions from goods and services produced through carbon management.
        3. The Coalition identified a need for additional federal policies or procedures for implementing lifecycle assessment (LCA) and monitoring, reporting and verification (MRV).
            a. LCA: Developing LCA approaches and standards is an area where the federal government can play an important complementary role in the rapidly developing voluntary markets for products and services sourced from carbon management.
            b. MRV: Federal agencies should assist in establishing MRV for less commercially mature technology pathways, such as emerging CDR technologies. The DOE has identified a lack of robust and standardized MRV processes to compare carbon management solutions.
        4. While the US Department of the Treasury and IRS have established MRV processes for qualifying for the 45Q tax credit, federal agencies should assist in establishing MRV for less commercially mature technology pathways, such as emerging CDR technologies.
    ii. Support purchasing of innovative carbon management products and services.
        1. Congress can harness the purchasing power of the federal government to establish markets for earlier-stage carbon management technologies, including commercially available but nascent products as well as net-negative emissions and fuels sourced from direct air capture.

2. Bipartisan members of Congress are actively exploring reverse auctions and other federal purchasing programs for carbon dioxide removal as policy mechanisms to establish advanced commitments and begin building markets for these technologies.

c. Jobs, Economic Development, and Affected Communities
    i. Leverage existing policy levers to expand support for jobs training.
        1. Retrofitting facilities with carbon capture equipment allows for continued operation, avoiding plant closures and preventing the offshoring of jobs and livelihoods, which would otherwise increase economic challenges within communities.
        2. Ensure/create high-quality apprentice and workforce training programs.
    ii. Collect and disseminate information on air and environmental quality.
        1. Make publicly available collected information on available air and environmental quality data associated with project proposals.
        2. Help industry build a standardized approach to collecting and disseminating this crucial information.
    iii. Provide technical assistance for community engagement.
        1. While the 2023 Blueprint does not explicitly discuss Community Benefit Plans (CBPs), it promotes DOE establishing a framework for them.
        2. Stakeholders should work alongside community advocates to effectively understand their interests and concerns, including potential impacts on land use, habitats, and local communities.
        3. DOE should continue to provide guidance to project developers on how to best establish robust and meaningful community engagement plans at the outset of project development and throughout the funding process.

d. Transport and Storage Infrastructure
    i. Support supplemental safety measures for $CO_2$ pipelines.
        1. PHMSA safety recommendations
    ii. Provide clarity for $CO_2$ storage projects on federal lands.

1. BLM should clarify its stance on certain issues, and other agencies must align

iii. Support implementation of Title 41 of the FAST Act.
   1. See below for Coalition-developed guiding principles.

iv. Provide appropriate regulatory clarity for interstate construction.
   1. Any such clarifications should "do no harm" and not hinder existing processes and timelines for the buildout of $CO_2$ transport infrastructure.

v. Coalition-developed permitting principles
   1. Ensure federal and state agencies have the resources, staffing, technology, and training to efficiently complete a growing number of reviews and community engagement processes as carbon management projects scale in deployment.
   2. Ensure early, robust, meaningful, and timely public engagement and input from affected communities is reflected in decision making.
   3. Ensure environmental standards and protections are maintained, and environmental outcomes are strengthened.
   4. Direct agencies to appropriately use programmatic review and categorical exclusions for carbon management infrastructure.
   5. Create a pathway for federal siting authority for interstate CO2 pipelines, creating appropriate parity for all types of interstate linear infrastructure.
   6. Ensure review of Class VI state primacy applications and individual Class VI well applications occur on a reasonable and predictable timeframe.

e. Resources for Next-Generation Technology Deployment

i. Build upon momentum provided by federal demonstration programs.
   1. Provide sustained investment in the Office of Clean Energy Demonstrations (OCED) to oversee technological development.
   2. Investments should not be viewed as a high-water mark for funding these technologies but instead as providing the building blocks for establishing an even more ambitious level of federal support necessary to commercialize a sufficiently broad portfolio of emission reduction technologies.

ii. Continue to scale federal funding for core carbon management activities.
    1. Increased funding for demonstration of industrial carbon capture activities authorized by the 2020 Energy Act
    2. Appropriations for relevant carbon management authorizations enacted by the CHIPS and Science Act
    3. Further buildout of federal funding and support for earlier-scale carbon dioxide removal technologies
    4. Increased federal support for the development of robust monitoring, reporting, and verification protocols for the full suite of carbon management and carbon dioxide removal technology pathways.

iii. Ensure the rapid scale-up of the carbon management industry.
    1. DOE should require that project developers use common specifications and generic technology solutions for capture retrofits for federally cost-shared pilots and demonstrations. Public sharing of certain information related to taxpayer-funded demonstration projects does not preclude project developers from making continual improvements to proprietary technologies.

f. Ensuring Investment Certainty
    i. Increase credit levels for carbon reuse for commercial products.
        1. The 2023 Blueprint supports the CCU Parity Act, which provides parity between geologic storage and carbon reuse for products in the credit level structure
    ii. Index 45Q to inflation immediately to ensure carbon management's progress.
        1. Index 45Q credit values prior to January 1, 2027
    iii. Provide clarity and certainty to the 45Q reuse pathway.
        1. Remove the requirement for LCA preapproval
    iv. Catalyze the growth of a diverse carbon management industry through implementing recent changes to 45Q.
        1. So long as eligible facilities are capturing qualified carbon oxides and subsequently meeting MRV standards for carbon storage, or LCA processes for carbon reuse, these technologies should qualify for 45Q. Examples where further clarity is needed include:

a. IRS should clarify when multiple facilities can be aggregated to count as one facility to qualify for the tax credit
b. Allowing for facilities that produce both hydrogen and capture $CO_2$ to qualify for both 45Q and 45V
c. Biogas flaring facilities that then capture resulting $CO_2$

v. Ensure the intended impact of the direct pay mechanism by extending the direct pay mechanism to cover the lifetime of the credit for both non-profit and for-profit entities.