



To: Office of Fossil Energy and Carbon Management, U.S. Department of Energy

From: Carbon Capture Coalition

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Re: DOE-HQ-2023-0054

Executive Summary

Members of the Carbon Capture Coalition (the Coalition) have prepared these comments on the Office of Fossil Energy and Carbon Management at the U.S. Department of Energy's proposed Responsible Carbon Management Initiative (the initiative).

The Coalition is pleased to see DOE launch the initiative, as it reflects many of our collective priorities as outlined in the Coalition's [2023 Federal Policy Blueprint](#), a roadmap to decarbonize industry, preserve jobs, promote economic development and accelerate environmental protection efforts necessary to meet midcentury climate goals through the widescale adoption of the full suite of carbon management technologies.

Carbon capture, removal, transport, reuse, and storage technologies, commonly referred to as carbon management, are a portfolio of safe and increasingly cost-effective emissions technologies to manage, abate, and remove CO₂ and CO emissions from industrial facilities, power plants, and directly from the air. Captured CO₂ or CO is then reused to make valuable products or transported to appropriate sites for geologic storage.

Widescale deployment of carbon management technologies is fundamental to meeting the Biden Administration's net-zero and midcentury climate goals. In its most recent [Summary for Policymakers of the Sixth Assessment Synthesis Report](#), the Intergovernmental Panel on Climate Change (IPCC) reaffirms the central role that these technologies will play in capturing carbon dioxide (CO₂) from heavy industry sectors, including cement, steel, refining and others, as well as directly removing excess carbon dioxide from the atmosphere.

The year 2030 is widely seen as a critical benchmark for meeting midcentury climate targets. With that in mind, technologies and strategies for meeting 2050 goals need to

be commercially available and deployed at a significant scale by the end of the current decade to meet midcentury targets. Coalition members are working to capitalize on momentum provided by recently enacted legislation to ensure that commercial deployment of this portfolio of technologies can accelerate by 2030 at the pace and scale required to meet net-zero ambition, while simultaneously providing benefits to affected communities and regional economies through associated air quality benefits as well as the preservation and creation of family-sustaining jobs.

As the U.S. prepares for this enormous and vital undertaking, the widescale deployment of the full value chain of carbon management technologies must be grounded in robust community engagement to ensure that benefits—in jobs, economic development, as well as potential co-benefits of project development—flow to the communities and workers that will host and build these diverse projects.

Through this initiative, DOE has recognized that there are many components to consider for successful, responsible project deployment, including but not limited to meaningful and transparent public engagement, workforce development and quality jobs. In its [2023 Federal Policy Blueprint](#), the Coalition called on DOE to develop best practices and provide guidance to project developers with regards to community engagement and workforce development, including:

- Leveraging existing policies to expand support for jobs training;
- Collecting and disseminating information on air and environmental quality, and;
- Providing technical assistance for meaningful community engagement.

With these collective priorities in mind, the Coalition offers the following responses to the questions outlined by FECM in section IV of the RFI.

1. Would the Initiative and the Principles be likely to meaningfully advance responsible carbon management? If not, what changes could be made to better advance this goal?

The Coalition supports the spirit of the initiative and the goal of creating a shared understanding of responsible deployment of carbon management technologies. While some of these principles and best practices may already be contained elsewhere in agency documents, such as funding opportunities, requirements necessary to comply with federal permitting processes and other such requirements, there is value in DOE promoting transparency by outlining in a publicly accessible manner best practices for project developers.

Additionally, DOE compiling such a list of available best practices can help guide other agencies that are grappling with questions regarding implementation of federal policies related to carbon management, further encouraging a whole-of-government approach for carbon management deployment. To that end, the Coalition commends DOE for taking this important first step to create a larger and wholistic outline of best practices for responsible carbon management deployment.

With regard to the principles, the Coalition has several recommendations that, if adopted, would strengthen the initiative by providing further clarity on metrics for success and accountability measures. This in turn would increase project developer and stakeholder support of the outlined principles and increase the initiative's utility towards its stated goals to "recognize and encourage project developers and others in industry to pursue the highest levels of safety, environmental stewardship, accountability, community engagement, and societal benefits in carbon management projects."

To that end, the Coalition has the following three general recommendations, as well as several points of feedback and clarifying questions on language contained within the principles document.

Recommendation 1: Methods of measurement to meet principles

In general, there is value in DOE outlining where and how the initiative and its principles are consistent with requirements already outlined in various funding opportunity announcements under the Bipartisan Infrastructure Law (BIL). Additionally, DOE should clarify if there are areas where the principles go above and beyond what is currently required to receive federal funds under BIL. As an example, recent funding opportunity announcements outline a process for measuring or reporting on the following topics:

- Lifecycle assessment (LCA)
- Business case analysis that includes "potential benefits of large-scale deployment in terms of metrics such as manufacturing jobs, revenue, emissions reductions."
- Environmental health & safety assessment (includes potential air and water emissions, solid wastes produced, compliance with various laws, including Comprehensive Environmental Response, Compensation and Liability Act (or Superfund), Toxic Substances Control Act, Clean Water Act, Clean Air Act, Occupational Safety and Health Administration)
- If applicable, Field Development Plans, which include, legal considerations and rights (pore/surface rights), rights of way and easement, liability transfer, development and management plan.

To promote transparency, DOE should clarify if meeting the principles as outlined in the initiative will also satisfy requirements under various funding opportunity announcements.

Recommendation 2: Definition of terms

DOE should provide additional specificity and clarity with regards to the definitions provided in the principles document. In cases where there is a statutory definition for a

term that will be used as a metric for success in the initiative, DOE should point to these to provide additional clarity.

Recommendation 3: Coordination across federal agencies:

DOE should also identify and coordinate efforts with other federal agencies that have specific guidance and requirements to carbon management project development and ensure consistency. This would include, but is not limited to, the Occupational Safety and Health Administration (OSHA) regarding workplace safety, the EPA on environmental justice, the Department of Labor on workforce development and quality jobs and the Pipeline and Hazardous Materials Safety Administration (PHMSA) on health and safety.

With regards to the principles themselves, the Coalition has the following recommendations.

Community Engagement:

“Project developers will provide clear mechanisms for modifying aspects of their projects”

The Coalition supports early and meaningful community engagement. Such engagement is a fundamental part of successful project development and must be a part of the decision-making process at every level. Meaningful community engagement which takes community values and concerns into consideration during project planning can help avoid the need to revisit project decisions later in the process.

While community engagement should be an ongoing process, the Coalition also recognizes that specific and defined intervals are best suited for a meaningful two-way dialogue. Through the existing federal permitting processes, there are clear points for community engagement, including judicial review, if required. Importantly, there are also end-points to these discussions. DOE should provide more specificity on which aspects of project design could be modified based on community engagement and at what intervals.

Workforce Development and Quality Jobs:

The Coalition agrees that widespread deployment of carbon management technologies at industrial, power, and large-scale direct air capture facilities economywide is an essential tool to preserving and expanding a high-wage jobs base in key sectors across

almost every state in the nation. Furthermore, among the broader suite of low- and zero-carbon technologies needed to reach net-zero emissions by 2050, the full suite of carbon management technologies is especially critical to helping to decarbonize and sustain our nation's domestic energy, industrial, and manufacturing base, whose vital products and services we will continue to rely on for decades to come.

DOE should clarify how they plan to support robust labor standards through the initiative and the Coalition encourages DOE to consult with federal agencies on workforce development and requirements to meet the multiple criteria outlined in the principles.

Health and Safety:

Decades of safety data show that CO₂ pipelines can be operated at the highest safety standards by operators implementing best practices. CO₂ pipelines have been operating in the U.S. for fifty years, currently transporting nearly 70 million metric tons of CO₂ per year, with an excellent safety track record over that time period. As this network scales to meet midcentury climate goals, the Coalition supports transport and storage networks that are designed, constructed, and maintained at rigorous standards delivering the highest levels of reliability and safety while enabling the deployment of these technologies.

DOE should identify how these principles interact with existing regulatory regimes including PHMSA, OSHA regulations, and other applicable statutes as well as state and local regulatory bodies. DOE should work with state and federal agencies to ensure that the adoption of these principles does not create additional confusion about regulatory authority over these systems at other levels of government.

Transparency:

“In particular, project developers will ensure that the siting process is open to public input and transparent with respect to how decisions are made.”

The Coalition supports stakeholders working alongside community advocates, local officials, landowners, Tribal Nations, and other key stakeholders to effectively understand their interests and concerns including potential impacts to land use, habitats, and local communities prior to siting projects. Holistic and effective planning for siting can align stakeholder interest and project development and potentially avoid issues regarding siting later in the design process.

At the same time, project siting often involves confidential business information and competition between developers. Community engagement and public input too early in the project planning stage could have deleterious effects to business decisions.

Additionally, early involvement could inadvertently sow confusion and mistrust within a community if the engagement process starts prior to initial site selection or if sites are changed after the community has been notified. The principles should prioritize a transparent and robust public engagement process to ensure that local concerns are addressed comprehensively, rather than specifically prioritizing siting decisions.

While Coalition members support sharing pertinent project information with key community stakeholders, facility operators are often subject to federal, state and local laws and regulations designed to protect the safety of the public. In some cases, these rules can limit the degree to which certain threat-related information and response plans can be made publicly available. As stated above, it is critical that the carbon management guidance align with other state and federal laws governing confidential and proprietary information. Accordingly, the principles should recognize that certain information is sensitive and not appropriate for public disclosure.

Long-term Stewardship:

The Coalition supports responsible long-term risk management for carbon management projects. However, the issue of risk management is determined by laws in the applicable jurisdiction. This principle should be updated to reflect that long-term financial assurance and risk management is in line with any requirements from the appropriate jurisdiction.

2. At a high level, do the Principles address what is needed for responsible carbon management? If not, what additional Principles may be needed?

Yes, at a high level the principles address the broad topic categories needed to responsibly deploy carbon management technologies. The Coalition's [2023 Policy Blueprint](#) outlines a number of consensus-based recommendations related to responsible carbon management deployment. Successful implementation of these recommendations will play an important role in ensuring that these technologies are deployed responsibly on an economywide scale. This will not only preserve and expand family sustaining jobs that local economies depend on, but also make certain that the benefits to project development are delivered to communities that are the most vulnerable to the impacts of climate change, including the capture of harmful criteria air and other pollutants generated by nearby industrial and power facilities. Specific recommendations outlined by the Coalition in its blueprint that are supported by the Responsible Carbon Management Initiative include:

- Leveraging existing policies to expand support for jobs and apprenticeship training;

- Collecting and disseminating information and data on air and environmental quality, and;
- Providing technical assistance for community engagement.

3. In what ways, if any, could the Principles be revised to better reflect responsible carbon management?

The Coalition commends DOE for working to develop these principles and foster a shared understanding of the responsible deployment of carbon management technologies. To effectively do so, DOE should provide a clear measure or metrics for demonstrating success under these principles. First and foremost, DOE should make clear what, if any, benefits will projects receive from DOE by adhering to the outlined principles? Similarly, if projects/project developers fail to meet these metrics, what, if any action will DOE take?

Beyond wanting to better understand the mechanisms for measuring success under the initiative, the Coalition has several comments and questions that are meant to help shape the principles so they can best reflect responsible deployment of carbon management projects:

- DOE should clearly outline how they will measure success under the principles, and how this information will be clearly shared with outside stakeholders.
- What measures will be used to decide if individual project developers are not adhering to the principles, and what actions will be taken in those cases?
- Will developers be measured on a per project basis; i.e. what happens if a developer has more than one project, with one project in “good standing” but another is not?
- Will other offices outside of FECM who oversee programs related to carbon management be required to adhere to these principles, for example, the Loan Program Office and the Office of Clean Energy Development?

4. Once finalized, would you agree to pledge to abide by or endorse the Principles? If not, what changes could be made to Phase 1 to encourage you to pledge to abide by or endorse the Principles?

As a nonpartisan collaboration of more than 100 companies, unions, conservation and environmental policy organizations, the Coalition is not planning to endorse the principles without further understanding of how individual projects will be measured against the principles, and understanding what impact, if any, will result in being recognized by DOE as abiding by the principles.

5. How could Phase 2 and a recognition program be structured and executed to maximize adoption of the Principles?

The Coalition recommends that DOE create a clear structure that enables a diverse selection of project developers and stakeholders to adopt and adhere to the principles. Additionally, DOE should ensure that compliance with these principles does not overly burden project developers in terms of additional cost measures.

The Coalition has several general recommendations and questions as DOE considers the structure of Phase 2:

- DOE should make clear how they plan to staff and oversee the implementation of this initiative.
- DOE should make clear their plan to share information as well as how they plan to protect information that is privileged, security- or business-sensitive, or otherwise inappropriate for public disclosure.
- How will DOE aggregate information provided by individual organizations in a way that will be useful to outside stakeholders?
- What benefits will be conveyed to adherents to the principles, if any? And what corrective action will be required if groups fail to meet the principles, if any?

6. Would the technical assistance envisioned in Phase 2 be helpful to advance responsible carbon management projects? Would you take advantage of this service or encourage others to take advantage? If not, why not?

The Coalition supports DOE providing technical assistance to eligible parties for the deployment of responsible carbon management projects. In addition to other offices at DOE, FECM should coordinate with agencies of jurisdiction on certain aspects of technical assistance, such as topics under the jurisdiction of EPA or OSHA and other relevant agencies.

DOE should also specify who will be eligible to apply for technical assistance. In the [2023 Policy Blueprint](#), the Coalition recommended that DOE establish a portfolio of best practices for community engagement developed and disseminated by relevant DOE offices through federal funding opportunities. Ideally, building this portfolio of work would be done in conjunction with a broad array of stakeholders and groups outside of project developers, including but not limited to Tribal Nations, labor unions, community advocates, local officials, landowners and non-profit organizations.

Conclusion

The Coalition is pleased to see DOE launch the initiative, as it reflects many of our collective priorities as outlined in the Coalition's [2023 Federal Policy Blueprint](#), a roadmap to decarbonize industry, preserve jobs, promote economic development and accelerate environmental protection efforts necessary to meet midcentury climate goals through the widescale and accelerated adoption of carbon management technologies.

The supportive policy framework in the United States has spurred an unprecedented number of carbon management project announcements. As the industry scales to meet 2030 deployment goals and contribute to midcentury climate targets, the Coalition supports the spirit of the initiative and the goal of creating a shared understanding of responsible deployment of carbon management technologies. The Coalition looks forward to reviewing and providing further feedback on future phases of the initiative.

ABOUT US

The Carbon Capture Coalition is a nonpartisan collaboration of more than 100 companies, unions, conservation and environmental policy organizations, building federal policy support to enable economywide, commercial scale deployment of carbon management technologies. This includes carbon capture, removal, transport, reuse, and storage from industrial facilities, power plants, and ambient air.

Economywide adoption of carbon management technologies are critical to achieving net zero emissions to meet midcentury climate goals, strengthening and decarbonizing domestic energy, industrial production and manufacturing, and retaining and expanding a high-wage jobs base. Successful commercial deployment of these technologies requires prioritizing meaningful engagement and consultation with local communities as well as associated workforce development. Convened by the Great Plains Institute, Coalition membership includes industry, energy, and technology companies; energy and industrial labor unions; and conservation, environmental, and energy policy organizations.