BLUEGREEN ALLIANCE

CREATING GOOD JOBS, A CLEAN ENVIRONMENT, AND A FAIR AND THRIVING ECONOMY

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Response to Request for Information: Opportunities to Support Mid-scale Commercial Direct Air Capture (DAC) Demonstration Facilities (DE-FOA-0003333)

The BlueGreen Alliance (BGA) unites labor unions and environmental organizations to solve today's environmental challenges in ways that create and maintain quality jobs and build a clean, thriving, and equitable economy. Our partnership is firm in its belief that Americans do not have to choose between a good job and a clean environment—we can and must have both. We appreciate the opportunity to provide a written response to the U.S. Department of Energy's (DOE) request for information on opportunities to support mid-scale commercial direct air capture (MSC DAC) demonstration facilities. The questions posed raise important points and indicate important priorities that DOE and MSC DAC developers must deliver upon to ensure the equitable deployment of direct air capture (DAC). Whatever role this potential MSC DAC program may play in DOE's portfolio, it will be vital for DOE to exceed the bar set by the DAC Hubs program on the necessary role community benefit plans (CBPs) play in the successful, equitable, and just implementation of projects.

With proper implementation, this program could help DAC continue to develop into an important carbon dioxide removal pathway that will deliver permanent removals of atmospheric carbon dioxide necessary to achieve net-zero goals, while also delivering tangible economic benefits for the workers and communities involved. To these ends, BGA offers the following responses to DOE's questions on the potential program to support MSC DAC demonstration facilities.

17. **What existing workforce education and training efforts (e.g., specific registered apprenticeship programs, labor management training programs, community college or technical school programs, etc.) are preparing workers for this industry? How can those efforts be best supported or augmented to ensure success of this industry?**

The DAC industry will require a substantial number of skilled workers to construct and staff facilities, and a shortage of skilled workers poses a significant threat to the scalability of the DAC industry. Research from the Rhodium Group found that the construction and

engineering of a DAC plant will require 1,215 annual average jobs and approximately 340 jobs needed to operate the facility.[i] To address this challenge, DOE should require DAC developers to collaborate with workforce development organizations and establish training opportunities during the initial stages of siting, permitting, and community engagement processes of a project's development. Leveraging the proven record of labor unions training workers, DOE should require companies to utilize union-affiliated training programs, registered apprenticeships, and create joint labor-management training programs. These training programs can ensure that workers are adequately trained and proficient in the safe construction and operation of DAC facilities. Union-led projects have proven to be less costly, more efficient, and safer than non-union projects.[ii, iii] These partnerships can deliver benefits to companies while simultaneously providing communities and workers safe, dignified work that pays a family-sustaining wage. Incorporating union-affiliated training programs, registered apprenticeships, and labor-management training programs will be instrumental in meeting the workforce demands required to achieve our climate goals, and these programs ensure that the workers building and operating DAC projects have access to good-paying, union jobs.

The recent Carbon Capture Demonstration Project award selection for Delek's Big Spring Refinery includes a unique proposal for workforce development that, if executed well, could offer an exciting model for replication. The project proposal includes plans to construct a carbon capture schoolhouse in tandem with the labor unions. The schoolhouse aims to equip the workforce with essential skills for the energy transition. Through instruction in carbon capture and other relevant energy transition practices, the initiative aims to establish a sustainable training pathway for high-quality jobs in carbon management. A similar partnership is underway in Louisiana, where the United Association is partnering with CapturePoint Solutions and the Vernon Parish School District to provide students with tangible skills critical to building infrastructure for carbon management.

18. **What specific criteria should DOE use to evaluate and select applicants for a MSC DAC program based on support for quality jobs, including criteria regarding wages and benefits, training and workforce development, worker health and safety, formal agreements to deliver benefits to workers and communities, respect for workers' free and fair chance to join a union, and other criteria to implement the Good Jobs Principles outlined by the Department of Labor?**

To show a commitment to good-paying, union jobs and the development of a high-road, skilled, and diverse workforce, DOE should seek commitments to the following.

- Proof of compliance of all construction contractors and subcontractors with the **Davis-Bacon Act and Related Acts (DBRA)**. Contractors and subcontractors must agree that all employees shall be paid the local prevailing wages and receive accompanying benefits as identified under DBRA. Compliance with Davis Bacon should be considered a floor—contractors and subcontractors should be encouraged to pay a living wage.

- The development of a **Project Labor Agreement (PLA)** to predict and control project timelines and labor costs. A PLA establishes the terms and conditions of employment for workers on specific construction projects, including wages, hours, working conditions, and dispute resolution methods. These agreements can be utilized at the state and local level to ensure high-road labor standards and timely project completion.
- A **Community Benefit Agreement (CBA)** to ensure that community interests are taken into account. By requiring or incentivizing CBAs, DOE can ensure that developers are held accountable for providing the benefits they promise, and that community groups have a say in the development process.
- The use of **Union-Affiliated Training, Registered Apprenticeship, and Pre-Apprenticeship Programs**, many of which offer wrap-around services to support trainees through the programs and help ensure that workers have a clear path towards skills advancement and career development. DOE should encourage or—where statutory authority permits—require the use of these programs to promote workforce development and ensure that workers receive appropriate training and education. Requiring the use of these programs can also help promote equity and fairness in the workplace by providing training and career advancement to individuals from underrepresented groups.

To ensure worker rights, benefits, and health and safety on the job, DOE should further seek commitments to the following.

- Information describing how the applicant will support and protect **workers' free and fair chance to form or join unions** of their choosing and exercise their collective voice in the workplace, in both construction and ongoing operations. By supporting workers' rights to organize and bargain collectively, DOE can promote fair and safe working conditions, protect workers' interests, and foster a more inclusive and equitable society.
- **Collective Bargaining Agreements:** Applicants should demonstrate or explain whether the applicant or sub-applicants have existing collective bargaining agreements or how they will execute them.
- **Prohibition on Spending:** DOE should prohibit award recipients or any sub-recipient from using grant funds, whether directly or indirectly, to oppose union organizing.
- **Retirement Contributions and Fringe Benefits:** High-road benefits like retirement contributions and fringe benefits can support employer recruitment efforts, motivate existing employees to increase and maintain high performance, and reduce employee burden with certain free and money-saving accommodations like transportation assistance or meal stipends. Promoting retirement contributions and fringe benefits can help to ensure that workers are able to thrive both in and outside of the workplace and can contribute to a more stable and prosperous society.
- **Title VI of the Civil Rights Act of 1964:** DOE should require compliance with Title VI of the Civil Rights Act in order to promote equal opportunity and prevent discrimination in all federally funded programs and activities. This can help to

ensure that all individuals—regardless of their race, color, or national origin—have access to the benefits of federally funded programs and are not subjected to discrimination.

- **Preventing Worker Misclassification:** DOE should require that applicants prevent misclassification to ensure workers are guaranteed benefits and protections. Applicants should explain how projects will properly classify employees and notify all workers of their rights, including workers treated as independent contractors.
- Activities and policies that ensure **worker engagement in the design and execution of workplace safety and health programs** that include a comprehensive analysis and management plan for all risks. These plans should address how hazards will be identified and controlled; how open communication about safety and lessons learned will be encouraged; how workers will be protected from harassment and discrimination; how retention rates will be measured; and how worker and workplace concerns will be addressed.
- **Occupational Safety and Health (OSH) Act and the Contract Work Hours and Safety Standards Act (CWHSSA):** DOE should require applicants to express commitment to the CWHSSA and OSH Act at the time of the application, and during the use of program funds. DOE should require evidence of a workplace safety and health program that is designed and implemented with workers and their representatives and in compliance with state and federal Occupational Safety and Health Administration (OSHA) regulations to ensure safe and healthy working conditions. Compliance with OSHA regulations helps prevent workplace injuries and illnesses and promotes a culture of safety in the workplace. Requiring compliance with CWHSSA ensures that workers are not exposed to unsanitary, hazardous, or dangerous working conditions on federal and federally financed and assisted construction projects. Frequently, workers in the construction industry are subject to overtime hours and the CWHSSA offers an avenue for intervention by the workers if the contractor violates the overtime requirements.

Strong health and safety standards will protect workers inside the fence line of facilities, communities outside the fence line of facilities, and people working on and living next to all carbon management infrastructure. Project plans should be accessible to workers and their representatives, as well as include evidence of a safety and health program designed with workers and their representatives and implemented with a comprehensive analysis and management plan for all risks.

19. **What specific criteria should DOE use to evaluate and select applicants for a MSC DAC program based on support for equitable access to jobs and other economic benefits, including the use of hiring, training, evaluation, and other workplace practices that advance Diversity, Equity, Inclusion, and Accessibility goals?**

Applications should demonstrate engagement with, and the intent to address, the priorities of unions, frontline community groups, and Indigenous Peoples. To ensure

equitable access to jobs and other economic benefits, DOE should seek commitments to the following.

- **Targeted Hire** benchmarks to support the hiring of workers on a project from certain communities, which may include women, people of color, veterans, the formerly incarcerated, dislocated workers, Indigenous People, low wealth communities, communities heavily impacted by climate change, pollution, energy transition, or deindustrialization, and many others. These communities may be prioritized or targeted for funding opportunities through contracting requirements, hiring requirements, or the use or establishment of pre-apprenticeship programs. Ideally, these provisions establish long-lasting pipelines for members of these communities to access good jobs and careers in the clean economy.
- **Local Hire** benchmarks to support the hiring of workers from within the state or local community. Without this provision, work crews from out of state can be brought in, minimizing the job creation benefits for the local community. Local hire provisions may mandate a certain percentage of local workers be used, they may offer incentives to hire local workers, or they may simply require that local employment impacts be considered alongside other benefits of projects being evaluated.

20. **In what way could scaling this industry provide opportunities for workers displaced from fossil industries and other industrial or resource-based industries in decline?**

DAC deployment can support and create jobs that utilize similar skill sets as those possessed by incumbent energy workers. Some of the skills that jobs in DAC will require are similar to the skills already possessed by existing workers in the fossil fuel sector, posing a natural opportunity for displaced workers. Project developers should work with labor unions representing these workers to identify existing skill sets that match expected job responsibilities for work in DAC, and work to employ displaced workers where possible. Though workers in the construction, operations, and maintenance sectors already possess many of the necessary skills for DAC deployment, developers need to establish mechanisms to bridge the skills gap through union partnerships and targeted training and education programs aligned with the evolving needs of the DAC industry. This approach ensures a skilled and diverse workforce for the industry, creating good-paying, union jobs that support American manufacturing and competitiveness.

DOE should work with unions and DAC developers to establish programs to help workers transition their expertise and credentials into new sectors and into roles that match their years of experience. Displaced workers have noted the need for skill matching between available jobs and workers in the labor market.[iv]

DOE can also support the revitalization of domestic manufacturing by requiring DAC projects to adhere to Build America, Buy America (BABA) and support domestic supply

chains. Decades of disinvestment in U.S. manufacturing have caused economic decline in communities that once relied on high quality, union manufacturing jobs. Strong domestic content requirements can help DAC reinvest in U.S. manufacturing and support workers while creating additional economic and job benefits throughout the supply chain. Developers should include workforce implications of the DAC supply chain in funding applications, and DOE should seek the following commitments.

- An acknowledgement that the iron, steel, manufactured goods, and construction materials used in federally funded infrastructure activities will be produced in the United States consistent with BABA standards.
- A strategy to leverage existing U.S. manufacturing and supply chains and support the growth of these domestic capabilities, in keeping with BABA goals, even in sectors beyond infrastructure.
- The identification of any known supply chain risks and plans for timely procurement of supplies.
- A commitment that any product invented with these federal funds will be substantially manufactured in the United States.

21. **What are the key equity-aligned review criteria that DOE should use to evaluate and select applicants for a MSC DAC program?**

To ensure a MSC DAC program is equitable, projects should address racial, environmental, and economic injustices, and reduce emissions and pollution while improving environmental and public health. DOE should seek the following commitments from applicants.

- A description of how the project will seek substantive input from and direct benefits to low-income communities, communities of color, and communities facing deindustrialization, environmental injustice, or energy transition.
- A plan to engage with and address the priorities of labor unions and other worker organizations, workforce development organizations, local government, emergency responders, Tribes and Indigenous Peoples, organizations representing residents and businesses, environmental justice communities, systematically marginalized communities, and community-based organizations that support or work with these communities.
- The demonstration of the success of the initial set of consultations through letters of support from frontline community organizations, Tribes and Indigenous Peoples, and unions.
- Creation of and support for good-paying, union jobs, increasing union density, and supporting the build out of a more robust, union-represented, and diverse workforce.

22. **What equity, environmental, and/or energy justice concerns or priorities are most relevant for an MSC DAC program? How can/have these concerns or priorities be/been addressed?**

The buildout of DAC and its associated infrastructure must ensure an equitable distribution of benefits and risks and avoid recreating or exacerbating environmental injustices by forcing low-income communities and communities of color to bear undue and disproportionate environmental burdens and community risks from inequitable siting practices, inadequate air and water quality standards, and unenforced worker and community protections. As projects progress, DOE must ensure the equitable distribution of benefits and burdens in the development of new infrastructure, taking into account the unjust policies that have disproportionately harmed marginalized communities.

To faithfully avoid recreating or exacerbating injustices, DAC deployment must not increase or intensify climate emissions and air pollution in fenceline communities. DOE and developers should ensure that early and ongoing community engagement is a core tenet of the development of projects. Siting must be done with informed communities who are involved in the development process early and often. To that end, DOE should ensure developers create specific and intentional avenues of consultation for fenceline communities.

The equitable and sustainable buildout of DAC infrastructure will be vital to ensuring positive project outcomes and the technology's long-term success. DAC projects must consider the environmental and health impacts that burden fenceline communities near pipeline and sequestration sites and surrounding project sites with disproportionate air, water, and land pollution risks. To do so, project developers should prioritize siting DAC facilities and associated infrastructure far from the places people live, work, and play, by recognizing, for example, minimum setback requirements that ensure the risks to fenceline communities are minimized to the greatest extent possible. Where risks cannot be fully mitigated through siting and setbacks, project developers should include clear and comprehensive protections for affected communities in all proposal plans. Project developers must allow host communities to negotiate tangible benefits before hosting DAC projects.

When developers propose new DAC facilities for construction, they should demonstrate how they will provide disadvantaged workers with improved access to career opportunities to the new, additional jobs they will create. This may include:

- Requiring or incentivizing local or targeted hire or other hiring and procurement policies that benefit dislocated workers, low-income communities, people of color, and/or women in disadvantaged communities, as identified by CEQ's screening tool or DOE's mapping tool.
- Requiring or incentivizing community benefit/community workforce agreements that increase economic opportunities for communities and local workers—especially for dislocated workers, people of color, and low-income communities.
- Creating and compensating a community task force to monitor and enforce a local hire provision or community benefit/community workforce agreements.

- Requiring or incentivizing pre-apprenticeship opportunities that are linked to registered apprenticeship programs and that target disadvantaged communities.
- Integrating training programs with community-based "wrap around" services to maximize retention of disadvantaged and underrepresented workers as they enter careers (e.g., childcare services and transportation).
- Identifying existing community networks for the recruitment of disadvantaged workers.

Diversity, Equity, Inclusion, and Accessibility (DEIA) planning can help ensure that projects are planned with equity embedded in the design and implementation. This includes ensuring that projects support underrepresented groups and businesses and that impacts on communities are taken into consideration in project design. DOE should require the creation of a DEIA plan that describes the actions developers will take to advance equity, including fostering a welcoming and inclusive environment; supporting people from underrepresented groups; and encouraging participation by and partnership with minority-serving institutions, minority business enterprises, minority-owned businesses, woman-owned businesses, veteran-owned businesses, Tribal colleges and universities, community-based groups, faith-based organizations, or entities located in an underserved community.

24. **How can adverse impacts be measured or monitored, and which materials/processes/components may result in the largest environmental impact? What opportunities exist to minimize impacts?**

DAC projects must thoroughly evaluate and mitigate environmental impacts using best practices with respect to planning, implementation, monitoring, and closure. Projects should publish environmental impact analyses and project monitoring data in a way that is timely and easy for the public to access. Environmental analysis should include total energy use, emissions associated with a plant's electricity use, and life cycle environmental impacts, including greenhouse gases (GHGs), sulfur dioxide, nitrogen oxides, particulate matter, amines, and any other relevant pollutants to ensure that projects are operating responsibly. Projects should evaluate their potential to avoid or reduce air, water, and land pollution—particularly pollution that would impact or has impacted environmental justice and other fenceline communities.

DAC projects should seek to utilize domestically manufactured materials of the necessary components needed to construct and operate their facilities. Prioritizing domestically manufactured materials to construct and operate facilities minimizes embedded emissions in the supply chain. This reduces emissions while promoting U.S. manufacturing and high-quality jobs throughout the supply chain.

Project developers must also follow environmental safeguards to ensure thorough monitoring of underground injection sites for carbon and subject them to sufficient government oversight. They must operate pipelines safely and thoroughly monitor them,

and they must have response plans in place to ensure environmental safety. Responsible deployment of the transport and storage of captured carbon should reflect substantial community engagement; protect water, land, and other natural resources; and address environmental justice concerns. In cases where captured carbon is permanently stored underground, injection sites must have safeguards to protect wells, underground water sources, and surrounding communities—and injections must thoroughly prevent any atmospheric release of carbon. Developers must provide legal certainty by defining liable parties for damages associated with any leaks. Monitoring of CO2 underground storage is essential and the safety record of existing carbon injection wells, operating incident-free, must be maintained as new wells come online solely dedicated to permanently injecting and storing carbon deep underground.

As BGA called for in our June 2023 comments to PHMSA, strong safety regulations for CO2 pipelines are crucial for the protection of communities, workers, and the environment. We encourage DOE to work across agencies and offer support and urgency for the prompt completion and promulgation of PHMSA's CO2 pipeline safety rules. With strong monitoring, inspection, and safety procedures, government regulators and project developers can significantly reduce the risk of pipeline ruptures and well leaks. Regulatory authorities should mandate that pipeline operators adhere to strict safety regulations, including regularly monitoring and maintaining their pipelines, and well-trained workers and first responders must be prepared to promptly mitigate any safety incidents. Using skilled labor for pipeline operators can improve safety outcomes.

Strong monitoring and safety procedures can significantly reduce the risk of pipeline ruptures and well leaks, and they can mitigate the impact of any safety incidents. Similarly to DOE's relationship with PHMSA, DOE should work across agencies with EPA to ensure strong Class VI well safety measures are consistently enforced. DOE should continue to utilize Go/No Go decision points in the distribution of their awards as a means of ensuring their projects consistently meet a high bar of compliance with these various regulatory regimes and are operating safely across the entire value chain of captured carbon, from DAC facility to pipeline to injection site.

25. **What information do communities, Tribal or State governments, or entities/organizations need to engage with the Department on MSC DAC?**

Projects should share information on the type and number of jobs that their projects will require. To ensure the just development of the DAC workforce, projects should work to identify the skills that they expect to need for their facility and identify an appropriate labor union to develop a workforce training program that ensures the presence of a skilled workforce that can safely and effectively staff the project throughout its operational lifetime. This information will help inform communities, workers, and labor unions of the expected economic and workforce impact and can help ensure that a properly skilled workforce is available and trained to fill the expected jobs.

Additional information should include an analysis of their proposals' impacts, including potential benefits and risks to communities and the environment. These should include clearly defined community and workforce benefits in the form of emissions reductions, good local jobs, local revenue, training pathways, improvements to local infrastructure, and a means of avoiding zero-sum conflicts with these communities around water, land, energy use, and impact on air quality.

Communities, Tribal or state governments, and relevant entities/organizations also require access to comprehensive emissions monitoring data and robust emergency response plans. Project developers should help equip local governments and emergency response departments to furnish first responders with pertinent details regarding all projects and the precise characteristics of carbon dioxide-related safety incidents. This proactive information sharing not only enhances the safety of workers and the community but also benefits the project developer by fostering transparency and trust among the community and affected stakeholders.

27. **How should the Department better engage local, State, and Tribal communities to establish reasonable expectations and plans concerning MSC DAC?**

DOE must prioritize transparent information sharing. This involves disseminating detailed estimates on environmental and economic impacts, outlining construction implications, and delineating expected workforce requirements, as well as a comprehensive description of both benefits and risks associated with the program. Identifying trusted messengers within proposed host communities is crucial. Recognizing that project developers or DOE representatives may not be the most effective communicators for potentially affected communities, DOE should leverage existing relationships and local leaders who are trusted voices within communities. This can foster a more collaborative dialogue and ensure that community concerns and perspectives are adequately represented and addressed.

28. **What organizations, universities, or communities should the Department consider partnering with to develop MSC DAC?**

DOE should partner with unions wherever possible and should prioritize companies that have a proven record or have expressed interest in committing to union partnerships as they review applications for competitive funding opportunities.

As projects develop, unions can provide invaluable on-the-ground knowledge, ensuring that project developers site, construct, and operate with an understanding of local contexts. The inclusion of unions in this process adds a layer of understanding, acknowledging the unique perspectives that workers bring regarding both environmental justice and worker welfare.

In addition to their role in workforce representation, unions provide a unique perspective in the planning process. Worker insights can contribute to the formulation of

comprehensive plans that address the concerns of both the community and the workforce. A union workforce can ensure that carbon management brings family supporting jobs with fair pay and benefits. Without the input of unions, the sector risks low-quality job creation and diminished community buy-in. Workers should be invited to participate in any policy development affecting their industries, ensuring their input in project planning, job creation strategies, and worker protections.

30. **How can OCED ensure community-based entities/organizations are engaged and included in the planning, decision-making, and implementation processes (e.g., including community-based organizations on the program/project/activity team)?**

Active involvement of community-based entities and organizations throughout project lifecycles is critical for DAC's success and sustainability. To ensure the active participation of community-based entities and organizations, several key strategies must be employed:

- **Early Stakeholder Consultation and Collaboration:** The department should initiate consultations with identified stakeholders at the outset of the project. This early engagement allows for meaningful input that informs project development.
- **Equitable Community Input Sessions:** When hosting community input sessions, developers must prioritize equitable access. This entails providing essential services such as translators, childcare facilities, transportation options, meals, and stipends to facilitate attendance and input from diverse community members.
- **Clear Project Description:** Developers should provide a comprehensive yet easily understandable description of the proposed project. This transparency ensures that community members grasp the project's scope and potential impact.
- **Transparent Goals of Engagement:** The developer must articulate the goals of the engagement process clearly. This includes demonstrating support for project applications and permitting while fostering community endorsement.
- **Assessment of Benefits and Impacts:** An upfront assessment of the project's potential benefits and negative impacts is imperative. This assessment should be accompanied by a detailed plan to maximize benefits and mitigate risks to the community.
- **Commitment to Stakeholder Engagement:** Developers must demonstrate a genuine willingness to engage stakeholders and build trust. This commitment goes beyond merely hearing concerns but actively addressing them. Measurable outcomes, such as letters of support, memoranda of understanding, and legally binding agreements, signify successful engagement.

31. **What barriers exist, if any, for deeper economic and other engagement with communities impacted by this program/project/activity?**

The disproportionate harm inflicted on disadvantaged communities by polluting industries, affecting both workers and residents near the fenceline, has fostered an understandable distrust of new industries within many communities. This legacy will lead

to challenges in community acceptance and deployment of DAC. Communities enduring historic environmental injustices understandably harbor skepticism towards new industrial activities like DAC and CO2 geologic storage. Community acceptance is integral to the success of DAC, which means communities enduring historic and present environmental injustices may be hesitant or refuse to accept DAC and/or CO2 geologic storage in their region. Developers must acknowledge these voices of opposition and include these concerns in their proposals for DAC development. To address these barriers, DOE and DAC developers must prioritize transparent communication, community involvement, and the equitable distribution of benefits and risks. This involves establishing ongoing dialogue, actively addressing community concerns throughout all project stages, and demonstrating a commitment to mitigating historical injustices.

32. **DOE requires Community Benefits Plans (CBPs) as part of all BIL and IRA funding opportunity announcements. CBPs are based on four core policy priorities: engaging communities and labor; investing in America's workforce; advancing diversity, equity, inclusion, and accessibility; and implementing the Justice40 Initiative. Please give input on how CBPs for MSC DAC can support the identification and implementation of benefits to local communities, including disadvantaged communities.**

Project developers should develop CBPs collaboratively with stakeholders to ensure comprehensive strategies that articulate clear actions, measurable goals, and specific, transparent commitments. This collaborative approach should involve engaging both community members and labor unions to negotiate enforceable agreements, such as CBAs, which guarantee that developers account for and operationalize community and worker interests throughout project development.

DOE should seek written commitments to deliver measurable community and job benefits through milestones and tools such as good neighbor agreements, local hire agreements, PLAs, CWAs, CBAs, and/or collective bargaining agreements. The agreements should identify how concerns will be mitigated, and specify the distribution of community and economic benefits, including job quality, access to jobs and business opportunities for residents, and mitigating community harms, thus reducing or eliminating these types of risks.

DOE should incentivize project developers to establish robust two-way community engagement plans. Transparency in disseminating project information empowers community members to access relevant details, fostering a sense of ownership and facilitating meaningful engagement.

CBPs should foster collaboration and accountability among developers, ensuring they work in tandem with relevant organizations to promote equity and generate high-quality jobs. To bolster accountability, CBPs should translate into legally binding agreements wherever feasible, with a commitment to public disclosure. These agreements should

delineate clear metrics for measuring and implementing commitments, including specific dollar amounts, implementation timelines, and other transparently developed metrics.[v]

Engagement of community and labor should be a cornerstone of CBPs, involving the definition of impacted communities, identification of relevant labor unions, engagement with high-road workforce development partners, and negotiation of legally binding agreements. Similarly, CBPs should outline plans to invest in the U.S. workforce by offering skills training, quality jobs with fair compensation and benefits, safe working conditions, and avenues for worker empowerment through organizing and collective bargaining.

Furthermore, CBPs must advance DEIA by establishing inclusive recruitment, hiring, contracting, and workplace practices. Legally binding agreements should address DEIA concerns of the community, ensuring equitable distribution of benefits.

37. **What factors should be considered when identifying and selecting the location of the technology/project/activity (e.g., economic considerations, policy considerations, environmental and energy justice considerations, geology, workforce availability and skills, current industrial and other relevant infrastructure and storage available/repurposed/reused, industry partners, Socially Disadvantaged Businesses or Enterprises, regional specific resources, security of supply, climate risk, etc.)?**

Several factors should be considered to ensure a project's success and minimize adverse impacts. As projects progress, DOE must ensure the equitable distribution of benefits and burdens in the development of new infrastructure, taking into account the unjust policies that have disproportionately harmed marginalized communities. The outcome of these policies can appear in the form of inequitable siting practices, inadequate air and water quality standards, and unenforced worker and community protections, all of which too often lead to toxic pollution and environmental degradation. The buildout of carbon management technology and its associated infrastructure must ensure an equitable distribution of benefits and risks and avoid recreating or exacerbating these environmental injustices.

Access to abundant renewable energy resources can be a key factor for the success of DAC facilities. Prioritizing locations with ample renewable energy potential reduces carbon emissions and can maximize the facility's net climate benefit. Additionally, DAC facilities should aim to generate renewable energy onsite to minimize reliance on the grid and mitigate induced grid emissions, further enhancing environmental performance.

Geological suitability for carbon injection and storage is another factor to consider. The United States boasts vast geological reservoirs suitable for carbon storage. The modular nature of DAC facilities offers flexibility in siting, allowing developers to leverage nearby geological formations conducive to carbon storage. Proximity to CO2 end-use

destinations can expedite siting and construction while minimizing physical impacts of DAC projects on communities.

Workforce demographics should also be considered. Unionized workers from the fossil fuel sector possess valuable skills transferable to DAC operations. Project developers and DOE should work to facilitate the transition of displaced fossil fuel workers into DAC employment opportunities, promoting workforce continuity, addressing social equity concerns, and providing a well-prepared workforce.

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