



Guidance for Creating a Community Benefits Plan for the Carbon Capture Demonstration Projects Program FEED Studies



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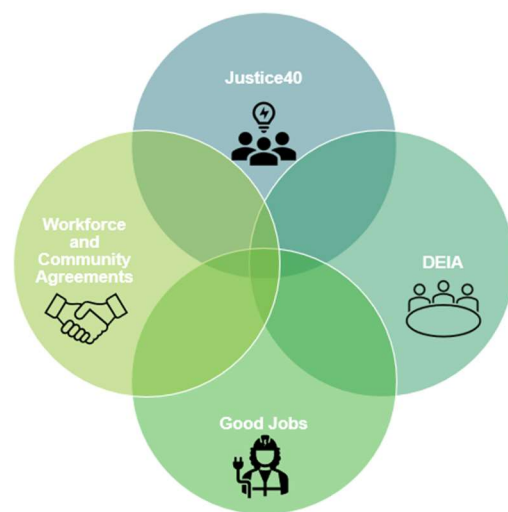
DISCLAIMER

This Carbon Capture Demonstration Projects Program Front-End Engineering Design (FEED) Studies for Integrated Carbon Capture, Transport, and Storage Systems guidance document is not a rule or regulation, and the recommendations it contains may not apply to a particular situation based upon the individual facts and circumstances. If there are any inconsistencies between the Carbon Capture Demonstration Projects Program FEED Studies for Integrated Carbon Capture, Transport, and Storage Systems funding opportunity announcement (FOA) and the statements in this document, the FOA is the controlling document and applicants should rely on the FOA language.

INTRODUCTION

This document is intended to provide supplemental information to assist applicants developing a Community Benefits Plan (CBP) for the Carbon Capture Front-End Engineering Design studies. As shown in the graphic to the right, Community Benefits Plans are based on a set of four core interdependent policy priorities: engaging communities and labor; investing in America's workforce; advancing diversity, equity, inclusion, and accessibility (DEIA); and implementing Justice40. For answers to common Frequently Asked Questions (FAQs) about these four priorities, see: [Community Benefits Plan Frequently Asked Questions \(FAQs\)](https://www.energy.gov/bil/community-benefits-plan-frequently-asked-questions-faqs).¹

These key principles, when incorporated comprehensively into project proposals and executed upon, will help ensure broadly shared prosperity in the clean energy transition. CBP FOA requirements are intentionally flexible to generate the best approaches from applicants and their partners that are responsive to the communities, workers, and groups impacted by their projects. In sections where there is overlap, applicants should point reviewers to more comprehensive efforts addressed elsewhere. This lets reviewers know that applicants are thinking about all these pieces holistically.



CBPs are scored at 20 percent of the overall technical merit review of proposals. This Guidance is designed to provide specific information and examples to aid applicants in developing a CBP that showcases their work in a way that is maximally responsive to DOE FOA requirements.

¹ <https://www.energy.gov/bil/community-benefits-plan-frequently-asked-questions-faqs>

Creating a Community Benefits Plan for the Carbon Capture Demonstration Projects Program FEED Studies



Vision: We affirm we care about justice / engagement / DEIA / quality jobs

Assessment: We mapped or assessed underserved and overburdened communities /stakeholders / DEIA / quality jobs

Goals: From our assessment and engagement, we know X is lacking, so we want to improve in X

Outcomes: We know we have succeeded when Y (specific target) is reached

Implementation: To achieve Y, [specific actor] has to do Z [in specific timeframe]

As the first of the two FOAs DOE intends to issue under the Carbon Capture Demonstration Projects Program, the scope of this FOA is primarily a FEED study, which calls for an Initial CBP to indicate the applicant's plans related to advancing DEIA through the FEED study and/or in their organization more broadly, community and labor engagement, job and job quality impacts, and Justice40. Additional requirements related to community and labor engagement, quality jobs, the Justice40 Initiative, and DEIA will be required in applications to FOA 2 for Phases 2 through 4 and the resulting integrated CCS demonstration projects. While applicants may not have all requested information for an Initial CBP at the time of application, they should complete each portion of the Initial CBP to the greatest extent possible and, where information is missing or not applicable, applicants must describe why, and the steps that could be taken to complete a full CBP for FOA 2. In general, effective DEIA, Community and Labor Engagement, Investing in the American Workforce, and Justice40 Initiative activities will progress from vision through goals to implementation strategies, as shown in the figure above. Effective Initial CBPs will focus on moving through this entire progression for DEIA. When developing assessments related to Community and Labor Engagement, Investing in the American Workforce, and Justice40 sections, this figure can be a useful reference to contextualize the Initial CBP work required in the FEED Studies for Integrated Carbon Capture, Transport, and Storage Systems.

As appropriate, DOE reserves the right to share non-procurement sensitive portions of information contained in Initial CBPs publicly after awards are announced. However, during project selection and negotiations, which can take more than one year, the content in Initial CBPs submitted in FOA applications is considered procurement sensitive and cannot be shared by DOE with the public. Applicants may share details of their Initial CBP with stakeholders and other parties at their own discretion. For example, applicants may create a slide deck, factsheet, or other communication tool to communicate their plans and get feedback.

Applicants may include other elements in their Initial CBP as well as supporting references.

COMMUNITY AND LABOR ENGAGEMENT IN CARBON CAPTURE FRONT-END ENGINEERING DESIGN STUDIES

The Community and Labor Engagement section (“Engagement” section) should provide an analysis of community stakeholders relevant for the project, such as community-based organizations representing local residents and businesses, workforce development organizations including registered apprenticeship programs, local government, emergency responders, communities with environmental justice concerns, disadvantaged communities, and community-based organizations that support or work with disadvantaged communities. By facilitating labor and community input, social buy-in, and accountability, such engagement can substantially reduce or eliminate stalls or slowdowns, and minimize other risks associated with the project. This engagement can lay the ground for negotiation of formal and legally enforceable agreements with labor unions and community partners.

This section should also identify any federally recognized Indian Tribes, including Alaska native village or regional or village corporations (hereinafter, “Tribal entities”) for whom the proposed project may have implications (in addition to any Tribal project partners). DOE is and remains responsible for government-to-government consultation with any federally recognized Indian Tribes, including Alaska native village or regional or village corporations, about a proposed project.

Here, “engagement” differs from a plan to hold events or listening sessions (though the plan will likely reference holding these types of events). It also differs from communications, as traditionally understood in terms of a developer simply reaching out and providing information. Community and labor engagement is about relationship building leading toward partnerships, and one way to think about this section is doing the initial analysis that would be necessary to create and maintain a relationship. Engagement is also about building accountability with impacted communities. Engagement analysis should primarily focus on traditionally excluded stakeholders and those most vulnerable to project impacts.

Building relationships and accountability with community, labor, and other stakeholder groups is critical to getting a project constructed (or not) and can hinge on how the Engagement section is approached and implemented. Moreover, the success of these relationship-building efforts bears not just on the relationships between a particular project, its workers, and its host community; it has the potential to impact the future deployment of CCS projects domestically and globally. Public engagement can make a difference: “Best Practices: Public Outreach and Education for Geologic Storage Projects”² offers some case studies of how public engagement helped align other DOE

² <https://netl.doe.gov/node/5828>

projects with community priorities; and “Promising Practices for Meaningful Public Involvement in Transportation Decision-Making”³ offers additional guidance and information. Additional resources for labor engagement include “Solar Power in Your Community”⁴ and “High-Road Workforce Guide for City Climate Action.”⁵

Process

There is no singular process for generating engagement plans, and successful plans will iterate and evolve throughout project phases and in response to stakeholder input and needs. Initial plans will focus on understanding the landscape to lay the groundwork for future engagement. Some common steps to engage with relevant communities, and other groups are shown below:

- **Perform a social characterization analysis** that describes community dynamics, decision-making processes, etc.
- **Identify stakeholders, especially those that are most impacted by project development**, including organizations representing under-represented or disadvantaged communities and members of those communities.
- **Identify** aspects of the project that could be modified in response to feedback, for example the siting of the project, waste management, or monitoring.
- **Assess existing attitudes towards the proposed project.**

Assessing relevant workforce organizations, including labor unions

The first step to engage with labor unions is to identify the project’s potential employment impacts. This includes identifying which classification will be needed across every project phase, as well as the labor unions that represent them, if applicable. This includes not only workers who are operating on the project site, but also those supporting off-site activities, including those working in transportation and along the supply chain. It also requires identifying workers, and the unions that may represent those workers, whose livelihoods will be impacted by the project, including those whose jobs may be lost or displaced.

Finding the relevant unions and the appropriate union contacts may take time and research. There could be several different unions with overlapping trade jurisdictions in a geographic area; be aware that contact with only one union for a certain trade may not be best practice. Working with local Building and Construction Trade Councils, Central Labor Councils, and State Labor Federations—which often exist at the local and/or county level and which may comprise many local unions involved in infrastructure work—can offer a good starting point for identifying and connecting with local union groups. However, not all relevant unions will be members of these councils. Additionally,

³ https://www.transportation.gov/sites/dot.gov/files/2022-10/Promising_Practices_for_Meaningful_Public_Involvement-in-Transportation_Decision-making.pdf

⁴ <https://www.energy.gov/sites/default/files/2022-06/Solar%20Power%20in%20Your%20Community%20Guidebook.pdf>

⁵ https://www.usdn.org/uploads/cms/documents/workforce-guide_4.12.21_form.pdf

some unions have national and local branches; working with national chapters may help project teams identify and connect with local affiliates.

Every union has its own mission, priorities, and concerns, and taking the time to understand each union can help support effective engagement. Unions often maintain websites to outline their mission and priorities, share news about their latest actions and public statements, and provide resources for members. Their statements or actions may also be recorded in public records and news sources. In addition to reviewing these resources, the High-Road Workforce Guide for City Climate Action⁶ suggests initiating introductory, brief, and informal conversations with identified labor unions, both to introduce the project and its goals, and to understand the concerns, priorities, and initiatives of each union. The DOE's Solar Power in Your Community guide⁷ offers additional guidance on union engagement.

Here are some additional examples:

- **Labor Unions:** It is advantageous to engage with labor unions who already represent workers in relevant industries and facilities.
 - *Construction Unions:* Most large projects will involve many different unions, as they all represent trades with different skill sets. For construction activity, reaching out to the national, state, or local headquarters office of a building trades council can be an effective first step. Building trades councils are comprised of construction unions and have experience working with contractors and project owners on project labor agreements.
 - *Manufacturing, Production, and Other Unions:* For ongoing operations and production activities, reaching out to the national headquarters office of a relevant industrial union can be an effective first step to connect with their local affiliates.
- **State and Local Workforce Development Boards:** Workforce Development Boards (WDB) direct federal, state, and local funding to workforce development programs.⁸ They also oversee the American Job Centers, where job seekers can get employment information, find out about career development training opportunities, and connect to various programs in their area.
- **American Job Centers:** American Job Centers (AJCs) provide free help to job seekers for a variety of career and employment-related needs.⁹ Nearly 2,400 AJCs, funded by the U.S. Department of Labor's Employment and Training Administration, are located throughout the United States.
- **Pre-Apprenticeship Programs:** Pre-Apprenticeship is a program or set of strategies that is designed to prepare individuals to enter and succeed in a Registered Apprenticeship Program (RAP). Quality pre-apprenticeship programs¹⁰ can play a valuable role in providing

6 https://www.usdn.org/uploads/cms/documents/workforce-guide_4.12.21_form.pdf

7 <https://www.energy.gov/sites/default/files/2022-06/Solar%20Power%20in%20Your%20Community%20Guidebook.pdf>

8 Find your state and local Workforce Development Board at:
<https://www.careeronestop.org/LocalHelp/WorkforceDevelopment/find-workforce-development-boards.aspx>

9 Find an American Job Center here:
<https://www.careeronestop.org/LocalHelp/AmericanJobCenters/american-job-centers.aspx>

10 Find and connect with a local pre-apprenticeship program here:
<https://www.apprenticeship.gov/apprenticeship-job-finder>

work-based learning to help people prepare for an entry-level RAP. While Pre-Apprenticeship programs have varied designs and approaches, the Department of Labor has outlined the elements of a quality pre-apprenticeship program that can place an individual on the potential career pathway to employability through a RAP.¹¹

- **Registered Apprenticeship Programs:** Registered Apprenticeship is an industry-driven, high-quality career pathway where employers can develop and prepare their future workforce, and individuals can obtain paid work experience, receive progressive wage increases, classroom instruction, and a portable, nationally recognized credential.¹² Registered Apprenticeships are industry-vetted and approved and validated by the U.S. Department of Labor or a State Apprenticeship Agency. RAPs enable and energize more employers to participate and provide them access to larger talent pools that have been trained for entry-level to management positions, thereby meeting industry demands and reducing unemployment rates across the country.

How should Tribal engagement be approached?

In the event of an award for a project in, or with significant impacts on, tribal communities, the awardee will provide information to support DOE's development of a Tribal engagement plan that acknowledges each Tribe's consultation policies, traditions, and expectations, and adheres to DOE Order 144.1 on Tribal consultation, with the hope that appropriate mitigation will be identified through government-to-government consultation to off-set any such potentially adverse implications.

DOE is and remains responsible for government-to-government consultation with any federally recognized Indian Tribes, including Alaska native village or regional or village corporations, about the proposed integrated CCS demonstration project.

The federal government has affirmed its commitment to Tribal engagement through federal law, agency policy, and Executive Orders and Memoranda.¹³ This commitment was reaffirmed in the "Memorandum on Tribal Consultation and Strengthening Nation-to-Nation Relationships":

American Indian and Alaska Native Tribal Nations are sovereign governments recognized under the Constitution of the United States, treaties, statutes, Executive Orders, and court decisions. It is a priority of my Administration to make respect for Tribal sovereignty and self-governance, commitment to fulfilling Federal trust and treaty responsibilities to Tribal Nations, and regular, meaningful, and robust consultation with Tribal Nations cornerstones of Federal Indian policy. The United States has made solemn promises to Tribal Nations for more than two centuries. Honoring those commitments is particularly vital now, as our Nation faces crises related to health, the economy, racial justice, and climate change — all of which disproportionately harm Native Americans. History demonstrates that we best serve Native American people when Tribal governments are empowered to lead their communities, and

11 <https://www.apprenticeship.gov/employers/explore-pre-apprenticeship>

12 Find and connect with a Registered Apprenticeship program here:

<https://www.apprenticeship.gov/apprenticeship-job-finder>

13 See, e.g., Executive Order 13175, available at: <https://www.energy.gov/nepa/downloads/eo-13175-consultation-and-coordination-indian-tribal-governments-2000>

when Federal officials speak with and listen to Tribal leaders in formulating Federal policy that affects Tribal Nations.¹⁴

How do we know if our Engagement section is well developed?

A good plan will specify organizations and entities representing traditionally excluded stakeholders and those most vulnerable to project impacts, including frontline communities and labor unions representing affected workers, if applicable. It will include a thorough and honest assessment of labor and community support and concerns, gathered from a representative cross-section of the community and labor groups. A good plan will clearly demonstrate an understanding of existing attitudes regarding the project, as well as delineating aspects of the project that could be modified due to stakeholder feedback.

Elements

This section should include the elements listed below. Please use headers to delineate elements.

Background

The background provides a brief narrative description of prior efforts by members of the applicant's project team to engage communities, labor, and other stakeholder groups relevant to this proposed integrated CCS demonstration project—with a focus on those most impacted by project development. It is typical that projects may have multiple of these impacted groups with which they may have different histories and which may require different plans.

The Background element could answer some of the following questions:

- Which labor unions, environmental justice organizations, and organizations representing under-represented or disadvantaged communities and members of those communities have been engaged and what was the nature of the interaction? What is this project team's history of engagement, if any, with other organizations and groups? Were these local, state, or national groups? On what scales has engagement happened? What methods have been used in engagement?
- What has the timeline of this engagement been?
- Would these engagements be characterized as one-way (e.g., communication of materials or information) or two-way (listening to ideas, creating a dialogue)?
- What are some key learnings that will shape your approach to engagement going forward?
- What were the results of the engagement?
- Were agreements reached detailing commitments and responsibilities?
- How were those agreements documented? Did the engaged parties sign these agreements?

If there has not been any engagement to date, note this here with a brief explanation.

¹⁴ <https://www.federalregister.gov/documents/2021/01/29/2021-02075/tribal-consultation-and-strengthening-nation-to-nation-relationships>

Social Characterization Assessment

The Social Characterization Assessment (SCA) element provides a brief summary of the current and historical social, cultural, economic, labor, and environmental landscape, decision-making structures, and other relevant information about the project's affected areas and groups.

Conducting an SCA is a first step of “getting to know the area” that should be completed before conducting a more structured stakeholder identification. An SCA attempts to specify sources of influence and conflicts and establish a foundation for proactive engagement around major projects. While stakeholder analysis or stakeholder identification can produce lists of top-of-mind stakeholder groups with whom applicants are already familiar, it can leave out historically excluded stakeholders—SCAs provide a means of looking more deeply at the history and context of the area to inform later stakeholder analysis.¹⁵ Not only will the SCA lead to more inclusive engagement, it will allow applicants to consider the different levels of influence and power different stakeholders have, as well as how prior development and decision-making processes may impact future plans.

An SCA can use a variety of methods (e.g., desk research, stakeholder interviews, media analyses, and surveys) to provide social context for the project's affected area and to identify the influence of private interests (e.g., property owners, industry); the history of labor and workforce in the area; the economic history and current economic structures of the community; the history of trust/distrust among or between community, government, and industry; experience with disasters; how the area is planning for climate change; and the strength of local media.

A good SCA will consider the entire project's affected areas—geographic and dispersed. Consider not just the project site but major support sites such as burrow pits or lay-down yards; additional land required for facility operation (including required buffers and energy sources); necessary inputs for the project (e.g., water); utilized infrastructure (e.g., transportation routes); local and regional workforces and commuting areas; and areas of air, noise, and light pollution. By recognizing a broader geographical and dispersed affected area during the SCA, applicants can more readily identify typically excluded or overlooked stakeholders, and those most vulnerable to project impacts.

Below is a non-exhaustive list of recommended resources and activities that can help applicants carry out an SCA. This may be a good place to reference the Justice40 Initiative and Investing in the American Workforce sections.

- Conducting a literature review of similar projects, outcomes, challenges, and opportunities using academic, public or private (e.g., government agencies or non-governmental organizations (NGOs)), and popular sources.
- Reviewing local and regional media outlets (e.g., newspapers, radio, television), municipal and county archives (e.g., websites, meeting notes), and industry and advocacy sources

¹⁵ For examples relevant to other types of projects, look at World Resources Institute's (WRI) report Guidelines for Community Engagement in CCS Projects (<https://www.wri.org/research/guidelines-community-engagement-carbon-dioxide-capture-transport-and-storage-projects>) and NETL's Best Practices: Public Outreach and Education for Geologic Storage Projects, section 2.5. (<https://netl.doe.gov/node/5828>).

(e.g., websites, blogs, press releases, recorded presentations) for information related to energy and environmental justice, economic development and impacts, and climate change topics, broadly defined.

- Conducting preliminary interviews with existing contacts and identified stakeholders to discuss the social aspects of the project landscape.
- Conducting public opinion surveys that are representative of the community as a whole and oversample populations that are historically underrepresented.
- Contacting stakeholders of similarly situated projects to discuss their engagement strategies and challenges they faced in the planning process.
- Using the US Census Data Dashboard¹⁶ to examine the demographic and socioeconomic characteristics of the affected area (e.g., race and ethnicity composition, median income, poverty rate, educational attainment, unemployment rate, employment by industry).

Below is a non-exhaustive list of ways to present this information:

- Maps and/or other geospatial analyses showing the distribution of various social, economic, and environmental variables and how they may vary over time
- Tables that illustrate the demographic and socioeconomic characterization of the affected area, possibly comparing the positions of disadvantaged communities, industry, and decision-makers on various project-related issues.
- Diagram showing the linkages and relationships between various stakeholder groups, highlighting points of agreement and contention.
- Timeline of key social, economic, and environmental developments that have impacted the affected area and allows the applicant to speak to cumulative effects.

Initial Stakeholder Analysis Summary

The Initial Stakeholder Analysis Summary element describes how stakeholder analysis was done and provides description of stakeholders.

Whereas the SCA provides a foundation to understand the project impacted area(s)' history, culture, decision-making structures, and more, the initial stakeholder analysis element should identify specific stakeholder groups relevant to the project. Groups specifically recommended for analysis include those most impacted by project development, such as underserved, overburdened, or disadvantaged communities and members of those communities; host communities; and labor unions representing workers or trades that will be needed for the project. The stakeholder analysis summary may also include industry and technical experts; federal, Tribal, state, and local decision-making bodies; representatives of local communities and Tribal entities; private sector actors; environmental non-governmental organizations; entities focused on education, public health and safety, and/or community planning; and concerned members of the public.

As with the SCA, it is recommended that the identification of key stakeholder groups considers potential groups that could be directly and indirectly impacted by the project – including those

¹⁶ <https://data.census.gov/cedsci/>

impacted by project inputs and outputs (e.g., energy inputs, workforce needs, waste streams, transportation). Below is a non-exhaustive list of ways to identify potential stakeholders. This section can also reference the Justice40 Initiative and Investing in the American Workforce sections of the Initial CBP.

- Overlaying the project affected areas with datasets that represent various indicators and communities. For example, this could include overlaying the project affected area with the DOE's Disadvantaged Communities dataset, the Environmental Protection Agency's (EPA) Brownfield Properties and Economic Revitalization dataset, the Interagency Working Group on Coal and Power Plant Communities priority energy community dataset, and/or the Department of the Interior's Bureau of Indian Affairs Indian Lands dataset.
- Identifying fence-line communities (communities adjacent to industrial sites) based on the location of the project. Once identified, applicants can engage directly with members of those communities, or can search for organizations that represent various community interests.
- Mapping project inputs (like water), then identifying the people and communities that rely on those inputs.
- Using county assessor records to identify some of the area's largest property owners.
- Using state and local government websites to identify offices that work in the affected area (e.g., municipal planning and development, county public health).
- Using city and county meeting minutes to identify organizations that routinely attend meetings and speak about related issues.
- Conducting website and media outlet searches for individuals and groups that work in or around the affected area or work on the topic of interest, broadly defined.

Do we need a stakeholder analysis matrix?

While not required, applicants may take steps to categorize stakeholders if desired. For example, stakeholders can be grouped into sectoral and geographic categories.

Statement on Community and Labor Support and Opportunities for Technical or Project Modifications

This statement describes the extent to which the host community or communities and labor have indicated support or concerns for the proposed integrated CCS FEED study. If applicable, it should also describe which aspects of the proposed integrated CCS demonstration projects, including procedural, could be modified based on future engagement. This should include a discussion of whether there is a pathway for the project to consider changing target site(s) based on social considerations. Previous engagement and research, including responses to Requests for Information, have shown that environmental justice groups and community-based organizations prioritize involvement in monitoring and siting decisions, while labor unions and workforce development organizations prioritize local hiring, wages, and benefits, and that two-way engagement and opportunities to influence the project are strongly desired.

Important aspects of this element include:

- **A list of the points in the project where engagement can impact project decisions or project characteristics.** Where can milestones be incorporated into the integrated project schedule (IPS) to influence project direction based on community engagement results?
- **A discussion of whether there is a pathway for the project to propose multiple sites or consider changing the proposed site based on project learnings** from engagement, Justice40, workforce, or other societal considerations. If there is, please describe.
- **A description of the extent to which the host community or communities and labor organizations have already indicated support or voiced concerns for the proposed integrated CCS demonstration project**, which can be demonstrated by signed letters, Memorandum of Understanding (MOUs), public complaints, or other avenues. Applicants are recommended to include a description of steps taken to gather this information.

INVESTING IN THE AMERICAN WORKFORCE IN CARBON CAPTURE FRONT-END ENGINEERING DESIGN STUDIES

The Investing in the American Workforce section is intended to be a systematic way for applicants to identify the potential impacts of the proposed integrated CCS demonstration project on the workforce including, but not limited to: increase or decrease in jobs; changes to the knowledge, skills, and abilities needed within the workforce for installing, maintaining, or operating the project; changing industry structures leading to different employer-employee relationships or changes to collective bargaining agreements, and resultant changes to job quality, wages, fringe benefits, job security, etc.

Investing in America's workforce means shifting from seeing 'labor as a cost' to 'labor as an investment.' DOE's investments seek to create domestic energy and supply chain jobs with good pay, benefits, predictable schedules, and with assurances that workers will have a free and fair chance to join or form a union. Investing in workers includes hiring workers as employees rather than through temp agencies or as independent contractors. It also means fostering safe, healthy, and inclusive workplaces free from harassment and discrimination. Investing in American workers involves making investments in training, education, and skill development and supporting the corresponding mobility of workers to advance in their careers. By supporting such employment practices, DOE seeks to ensure that the efficiency, ingenuity, and high skill of the American workforce is the foundation of America's competitive advantage in the global energy industry and related supply chains. DOE is committed to supporting workers' organizing rights and worker empowerment with investments that expand high-quality jobs with explicit strategies to attract, train, and retain a skilled workforce.

Employees' ability to organize, bargain collectively, and participate through labor organizations of their choosing in decisions which affect them builds meaningful economic power, safeguards the public interest, contributes to the effective conduct of business, and facilitates the amicable settlement of disputes between employees and their employers. It therefore facilitates project efficiency and continuity and supports multiple public benefits.

Applicants may wish to cross-reference the Engagement and DEIA sections. It is important to think of the Investing in the American Workforce section as one interconnected piece of a bigger story that describes how the project will meet broader calls for justice, equity, inclusion, and quality jobs, and engagement.

Process

There is no singular process for generating an Investing in the American Workforce (IAW) section, and successful IAWs will iterate and evolve throughout project phases and in response to stakeholder input and needs. An effective IAW will demonstrate the applicant understands the workforce needs for construction, operations, and maintenance, and if applicable, of the labor unions representing workers or trades needed for the proposed integrated CCS demonstration project; of skills or knowledge gaps and relevant training programs; and, if applicable, of negative impacts on the workforce resulting from the project. Completing the Investing in the American Workforce (IAW) is set within the context of ongoing engagement, social equity considerations, past performance, and future plans. Some common steps to create the IAW section include:

- Characterize the quality of the jobs that will be offered in both construction and ongoing operations;
- Determine the types and level of investments needed for workforce education and training;
- Characterize prior and ongoing engagement with labor unions, community colleges, and other workforce organizations (this is a good place to reference the Engagement section);
- Assess the potential for job growth, skill and wage advancement, and improvements in job security; and
- Assess any potential negative impacts on the workforce.

Applicants are encouraged to review the [Community Benefits Plan Frequently Asked Questions \(FAQs\)](#)¹ for additional information.

How do we know if our IAW section is well developed?

Building on the characteristics of a good plan outlined above, a strong IAW plan will look across short, medium, and long-term time horizons to cohesively and holistically map the potential to create and support quality jobs and workforce development. It will fully consider the benefits and impacts that the project will have on jobs and workers across every phase of the project and across dispersed geographic areas (i.e., both within and beyond the project host site). A good plan will identify key partners for training programs (e.g., relevant labor unions). Effective IAW plans will also build on, and work in concert with, the Community and Labor Engagement plan and the DEIA plan. It

is important to think of the Investing in the American Workforce section as one interconnected piece of a bigger story that describes how your project will meet broader calls for justice, equity, inclusion, and engagement being built in the Initial CBP as part of the application.

Elements

This section should include the elements listed below. Please use headers to delineate elements.

Assessment of Workforce Needs and Labor Unions

Looking across the construction, operations, and maintenance phases of the proposed integrated CCS demonstration project, applicants should assess the workforce needs of each project phase. This assessment may clarify which labor unions are relevant to the proposed integrated CCS demonstration project based on the workers who would need to be employed.

Guiding questions for applicants include:

- What are the various phases of the proposed integrated CCS demonstration project, and what kind of work does each phase entail?
- What are the specific skills and job roles needed to complete or sustain each phase of the proposed integrated CCS demonstration project?
- For each job role identified, how many employees will be needed to fill these role(s), and for what duration?
- Which trades are relevant to each of these project phases, and, if applicable, which unions represent these trades?

Assessment of Jobs, Knowledge or Skill Gaps, and Training Opportunities

Applicants should assess the jobs that will be created by the proposed integrated CCS demonstration project, including the occupational distribution of these jobs (building on the assessment from the previous section); the skills or knowledge gaps that will need to be filled to meet these job needs; and the training programs with which the applicant could work to fill those gaps. For these jobs, applicants should also assess the potential job growth, skill and wage advancement, and improvements in job security.

It may be helpful to approach this section using the framework of “quality jobs.” Applicants may indicate the anticipated quality of jobs in a variety of ways – for example through estimating wages, benefits, opportunities for wage progression, classification as employees, jobs for in-state workers, etc. Human resources policies and procedures and regularly scheduled trainings, but should not be the primary indicators of job quality. The applicant may also demonstrate how the project will advance high wages and reduce income disparity across race and gender lines. The Investing in the American Workforce section can be applied to both project planning phases and later construction phases of projects. Whether you are planning on hiring five lab techs or 500 construction workers, it is important to assess the potential for “quality jobs,” anticipate workplace healthy and safety concerns, and analyze the education and training landscape to facilitate employment.

For more information on what constitutes a quality job, see the [Community Benefits Plan Frequently Asked Questions \(FAQs\)](#).¹

Guiding questions for applicants for this initial assessment include:

- What are the existing skills and experience of the local labor pool, and how does this compare to the needs of anticipated construction, operation, and maintenance jobs for the proposed integrated CCS demonstration project?
- What kinds of training programs could help bridge those gaps? Where are potential employees going to get the skills needed for the jobs you create?
- For each type of anticipated job, how long will that role be needed? Which kinds of jobs are long-term vs short-term? Local vs not in the vicinity of the proposed integrated CCS demonstration project location?
- How can employees continue to grow and develop as job needs change, and as they gain experience? What kinds of experience do employees need to advance in their careers?
- How will the project retain employees and make sure they have a chance to develop and advance in their career?

Workforce training

Successful integrated CCS demonstration projects will need to train and retain a skilled and well-qualified workforce for both construction and ongoing operations, production, and maintenance activities to ensure project stability, continuity, and success. Assessing workforce development should include an overview of the workforce needs of the proposed integrated CCS demonstration project and potential steps to create and sustain a trained workforce. This includes understanding how the local labor force matches up with project needs, how the training and education opportunities can align with project needs, and how recruitment strategies should fit the local community.

Applicants should assess the potential for workforce development programs and continuing workforce education to meet project needs and support employees. Applicants should assess the potential to provide continuing workforce education, professional development, skill acquisition, and opportunities for advancement with increased experience. This may include in-house corporate university programs and/or registered apprenticeships that allow employees to gain new skills and move up the career ladder; partnerships with local universities, community colleges, or third-party trainers to meet continuing education goals; tuition reimbursement programs; and other opportunities to earn credentials and degrees relevant to different career pathways.

Applicants may also assess requirements for appropriate and relevant professional and safety training, certification, and licensure, including where appropriate the utilization of graduates from registered apprenticeship programs, for the different types of jobs created by the proposed integrated CCS demonstration project.

Employer investments in workforce education and training can take several forms, including:

- Participation in labor-management training partnerships, including registered apprenticeships;
- Commitment to employer contributions to training programs and paid time for employees to participate in skills training;
- Partnerships with community colleges;
- Sector-based approaches to workforce development;
- Promotion of worker voice in training programs;
- Provision of continuing education programs for employees to earn credentials and degrees relevant to their career pathways;
- Provision of personalized, modularized, and flexible skill development opportunities, such as on-demand and self-directed virtual training; and
- Tuition or flexible scheduling for education and training.

This assessment section may also include a discussion of broad and inclusive recruitment strategies (e.g., to prioritize the hiring of local workers). Applicants can cross-reference their DEIA and labor-related engagement activities. Applicants may also wish to assess the potential for offering skills-based assessments that could take the place of required credentials, as well as quality pre-apprenticeship programs in the local community, which may improve access to career-track training and jobs for underrepresented workers, including returning citizens.

Assessment of Negative Workforce Impacts

This section should assess any potential negative impacts the project may have on the workforce. This may include, but is not limited to, worker displacement resulting from the project, disruption to existing collective bargaining agreements, reductions in wages and benefits, or other changes in job quality or job security. Applicants are recommended to consider negative impacts over the entire lifecycle of the project, from planning and construction, to operations and maintenance, to decommissioning. Applicants may include workplace safety and health assessments that analyze the impacts to occupational and personal safety and wellbeing posed by worksite conditions, hazards, and other safety and health considerations. These conditions and hazards change over time according to project phase.

JUSTICE40 INITIATIVE IN CARBON CAPTURE FRONT-END ENGINEERING DESIGN STUDIES

Executive Order 14008 created the Justice40 Initiative – which established a goal that 40% of the overall benefits of certain federal investments flow to disadvantaged communities. Applicants should submit a Justice40 Initiative section within the Initial CBP that describes plans to address energy and environmental justice (EEJ), which will maximize the likelihood of successful integrated CCS

demonstration projects. Meaningful engagement with impacted communities is a key component of environmental justice and is covered in detail as part of the Engagement section.¹⁷

For more information on the Justice40 Initiative, see “Department of Energy: General Guidance for Justice40 Implementation”.¹⁸

What is environmental justice?

Environmental justice is the fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no population bears a disproportionate share of negative environmental consequences resulting from industrial, municipal, and commercial operations or from the execution of federal, state, and local laws, regulations, and policies. Meaningful involvement requires effective access to decision makers for all, and the ability in all communities to make informed decisions and take positive actions to produce environmental justice for themselves—and as such closely relates to meaningful engagement as described in the Engagement section.

In other words, environmental justice addresses both how benefits and harms are distributed among groups (distributive justice) and whether there is meaningful involvement in decision-making (procedural justice).

The Assessment component of the Justice40 section tend to focus more on distributive justice (i.e., analyzing the distribution of negative impacts and benefits) than procedural justice (i.e., meaningful involvement in decision-making). It is recommended that applicants develop the Engagement section together with the Justice40 Initiative and other sections of the Initial CBP.

What is energy justice?

DOE defines energy justice as “the goal of achieving equity in both the social and economic participation in the energy system, while also remediating social, economic, and health burdens on

¹⁷ This first FOA (DE-FOA-0002738) will provide funding for up to 20 FEED studies for integrated CCS, submission of permit applications (i.e., Underground Injection Control (UIC) Class VI permit to construct, if necessary), preparation of an Environmental Information Volume (EIV), and the initial CBP work and analysis, which will address the first Phase of an integrated CCS demonstration project.

¹⁸ <https://www.energy.gov/sites/default/files/2022-07/Final%20DOE%20Justice40%20General%20Guidance%20072522.pdf>

those disproportionately harmed by the energy system.”¹⁹ Equity is distinct from equality because equity recognizes that harms and benefits have not been distributed equally, and that just and fair remediation requires responding to these existing imbalances.

What is Justice40?

On January 27, 2021, President Biden issued Executive Order 14008, Tackling the Climate Crisis at Home and Abroad.²⁰ Section 223 of that Executive Order established the Justice40 Initiative,²¹ which creates a goal that 40% of the overall benefits of certain federal investments – including investments in clean energy and energy efficiency, clean transit, affordable and sustainable housing, training and workforce development, the remediation and reduction of legacy pollution, and the development of clean water infrastructure – flow to disadvantaged communities (defined below).

How are disadvantaged communities defined?

Pursuant to E.O. 14008 and the Office of Management and Budget’s Interim Justice40 Implementation Guidance M-21-28, DOE has developed a definition and tools to locate and identify disadvantaged communities.²² Federally recognized Tribal land and U.S. territories in their entirety are categorized as disadvantaged communities in accordance with OMB Interim Guidance “common conditions” definition of communities.

DOE will also recognize disadvantaged communities as defined and identified by the White House Council of Environmental Quality’s Climate and Economic Justice Screening Tool (CEJST).²³ DOE would prefer that funding recipients use either DOE or CEJST definitions and tools to identify disadvantaged communities, which would allow for more streamlined reporting and consistent comparative analyses across all regions. However, DOE recognizes some states have dedicated significant time and resources towards identifying communities of concern in their jurisdictions and may desire to use their own tools and definitions. DOE would prefer that state tools and definitions are aligned with the criteria pursuant to the interim implementation guidance; for information on these criteria please see DOE’s General Guidance for Justice40 Implementation .²⁴

For more information on disadvantaged communities, see the [Community Benefits Plan Frequently Asked Questions \(FAQs\)](#).¹

¹⁹ <https://www.energy.gov/diversity/articles/how-energy-justice-presidential-initiatives-and-executive-orders-shape-equity>

²⁰ <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/>

²¹ Read more about Justice40, including the interim guidance from the White House, here: <https://www.whitehouse.gov/omb/briefing-room/2021/07/20/the-path-to-achieving-justice40/>.

²² <https://energyjustice.egs.anl.gov/>

²³ <https://screeningtool.geoplatform.gov/>

²⁴ <https://www.energy.gov/sites/default/files/2022-07/Final%20DOE%20Justice40%20General%20Guidance%20072522.pdf>

Does this mean that 40% of the benefits of our project have to go to disadvantaged communities?

The 40% is not on a per-project basis—individual projects may contribute more or less substantially to this goal (i.e., have a higher or lower percentage) based on factors unique to the project.

However, successful applicants will demonstrate the ability to act in alignment with the intent of the Justice40 Initiative—by working to maximize benefits flowing to disadvantaged communities (as delineated by census tract) in ways that are relevant to that project. Recipients of DOE funds should ensure that performance of project tasks within disadvantaged communities meaningfully benefits those communities and does not result in significant or permanent increased negative impacts to the disadvantaged community. Doing a CBP well is one way to guard against increased negative impacts.

What if my project is not in a disadvantaged community? Or what if no one lives around it?

The Justice40 Initiative section is required regardless of whether or not a project or work site is located within a disadvantaged community. Because the Justice40 Initiative includes a wide range of environmental, economic, health, and other social benefits that may accrue across many locations, applicants are encouraged to think broadly about project impacts and creatively about ways to provide benefits to disadvantaged communities even if the main project work site itself is not located in a disadvantaged community. For example, benefits and negative impacts can occur throughout the lifecycle of the project including project inputs, waste-streams, and decommissioning. Applicants are encouraged to consider modifications to technical parameters and project cost plans to support the delivery of these benefits.

For example, a project that remediates legacy soil pollution on a site, where the remediation is required prior to construction on that site, could provide benefits to a disadvantaged community downstream that had previously been subject to leaking by reducing or eliminating the leakage of soil pollution into the river. Applicants could also partner with a nearby worker training program to train workers for the project that serves individuals from disadvantaged communities.

Process

There is no singular process for generating plans related to EEJ, and successful plans will iterate and evolve throughout project phases and in response to stakeholder input and needs. For the Initial CBP, the central part of the Justice40 Initiative section is impacts, which can be experienced by groups as positive (“benefits”), neutral or ambiguous (“neutral/uncertain impacts”), or negative (“negative impacts”). Applicants are encouraged to report all anticipated impacts inclusive of benefits, neutral/uncertain impacts, and negative impacts. Energy and environmental justice involve, in part, examining how these potential impacts are distributed among different groups of people. Core elements of the Assessment include evaluations of impacted communities/groups,

identification of impacts and where they flow, assessment of information gaps, and assessment of risks to realizing benefits and minimizing negative impacts.

How do we know if our Justice40 section is well developed?

An inadequate Justice40 section might include vague descriptions of benefits and negative impacts and/or a broad characterization of the region that lacks a detailed characterization with respect to disadvantaged communities.

A good Justice40 section will include very specific benefits and negative impacts—and display an understanding of how these impacts unfold over time—and propose methods for measurement, tracking, and reporting of those impacts, as well as opportunities for communities to engage in defining and monitoring these impacts. Good plans should speak to how the plan may provide benefits aligned with DOE’s eight Justice40 policy priorities (see “Assess project benefits and where they flow” element below). Good plans will also provide a clear assessment of where those impacts may flow—and the degree to which they flow to disadvantaged communities.

Elements

This section should include the elements listed below. Please use headers to delineate elements. The Social Characterization Assessment in the Engagement section, the IAW section, and the Environmental Considerations Summary can be used to support this process as appropriate.

Assessment of Impacted Communities and Groups

An important step in supporting energy and environmental justice is to accurately and precisely identify which communities or groups may be impacted by a particular project—including the existing and cumulative burdens (i.e., multiple burdens that may interact and compound) those communities or groups may already be facing.^{25,26} This element should describe all applicable impacted communities, groups, and Tribal Entities to which the anticipated project impacts could flow; it is recommended to include data/descriptors for each at the most granular level possible. This element should identify which of these are Disadvantaged Communities and should also characterize the existing burdens faced by impacted groups. Impacts to groups, communities, and Tribal Entities should be considered for all inputs and outputs along the full lifecycle of the project and facility, in addition to impacts at the project site(s) or work location(s).

Below is a list of steps applicants could take to assess impacted communities and groups, identify disadvantaged communities, and characterize existing burdens.

²⁵ National Renewable Energy Laboratory. (2021). Energy Justice: Key Concepts and Metrics Relevant to EERE Transportation Projects. Retrieved from <https://www.nrel.gov/docs/fy21osti/80206.pdf>

²⁶ Pacific Northwest National Laboratory. (2021). Advancing Environmental Justice. Retrieved from https://www.pnnl.gov/sites/default/files/media/file/PNNL_EnvironmentalJustice_WhitePaper-Primer_2021.pdf

We have some experience with social impacts assessment / environmental impacts assessment — how is an energy and environmental justice assessment different? And how is this different than SCA or stakeholder analysis?

There is going to be considerable overlap between the tools, methods, and indicators used in these types of assessments, and your prior experience will be helpful. What is unique about the Assessment is that it pays particular attention to (a) who, in terms of which specific groups and communities, bears risks and enjoys benefits; and (b) cumulative burdens, i.e., how this project adds to and interacts with the impacts that these groups and communities are already facing from energy and other types of projects, past and present. Other forms of social and environmental impact assessment frameworks may not explicitly examine both of these. Assessment examines how effects are distributed among groups, and whether those are fair and equitable. This means you have to know both about the effects and the demographics of who is affected.

Identifying impacted communities, groups, and/or Tribal Entities

When identifying impacted communities, groups, and/or Tribal Entities, consider groups of individuals living in geographic proximity (such as census tract) and geographically dispersed sets of individuals (such as migrant workers or Indigenous Americans), where either type of group experiences common conditions.²⁷

Guiding questions for an initial assessment of project benefits could include:

- Review the SCA and Stakeholder Analysis elements of the Engagement section: What communities or groups are within the project's affected area(s), or would otherwise be impacted by the proposed integrated CCS demonstration project?
- Once you have a list of communities or groups broadly defined, consider if there are subsets of the groups or community that might face additional impacts based on other categories that aren't captured at the larger group or community level, including socioeconomic, demographic, or geographic/physical factors that can contribute to inequality, such as gender, citizenship, socioeconomic status, language accessibility, race/ethnicity, age, disability, education, physical or geographic barriers or structures, and access to transit.
- Determine what types of data/descriptors can be used to best describe or specify each community or group at the most granular level possible, including any sub-groups as identified above. Focusing at a granular level may reveal linkages or patterns that are lost at a higher level of analysis, which can be important in understanding—and acting to address—the inequitable distribution of benefits and harms among different groups, especially with an eye towards cumulative burdens. For example, while the construction of a new facility might impact watershed health across an entire city, the impacts of these changes will be experienced differently by communities within a city, e.g., groups who rely on public waterbodies for food, and/or groups who have preexisting health vulnerabilities. Different groups or communities may have different types of data/descriptors that are most accurate

²⁷ <https://www.energy.gov/diversity/justice40-initiative>

or informative, but could include: City, town, or county boundaries; Neighborhood; Private property borders; Tribal lands; Census tract number or census block group number; Geological feature boundary; Map or shapefile; Groups with similar characteristics (e.g., migrant workers or Indigenous Americans); Groups utilizing resources in a particular way; and/or Full address (could include radius of effect).

- Revisit and revisit this list after identifying project impacts: Where and to what communities or groups could these impacts flow? Add any communities or groups to this section.
- This section should also reflect any feedback obtained through engagement from impacted communities/groups.

Identifying Disadvantaged Communities

For this step, applicants must determine which, if any, of the communities or groups impacted are disadvantaged communities (in whole or in part). See the above section for how to define disadvantaged communities.

- Review the list of impacted communities identified above. Which are disadvantaged communities, or located within disadvantaged communities, either in whole or in part?
- Are there groups or communities for which the designation of disadvantaged communities is not yet clear? If so, specify that in the “Assessment of Information Gaps” section below.
- While doing this, applicants can attempt to identify the factors that contribute to the inequalities faced by disadvantaged communities, which is directly addressed in the following section.
- If none of the impacted communities are disadvantaged communities, applicants should provide a detailed explanation to support this conclusion. For example, even if the project work site is located far from a disadvantaged community, what efforts have been taken to identify the benefits to disadvantaged communities provided by your project to the region or state? What efforts or analysis have been taken to minimize negative impacts across the project’s full lifecycle in disadvantaged communities?

Characterizing existing burdens

For each impacted community and group, characterize the existing burdens faced. For example, applicants could:

- Report and interpret indicator values (scores) for each host community using the EPA’s EJSCREEN tool²⁸
- Consult DOE’s working definition of Disadvantaged Communities²⁹ to examine the 36 indicators collected at the census tract level used to construct the working definition.
- Consult the Council on Environmental Quality’s Climate and Economic Justice Screening Tool to examine indicators³⁰

28 <https://www.epa.gov/ejscreen>

29 <https://www.energy.gov/diversity/justice40-initiative>

30 <https://screeningtool.geoplatform.gov/en/#3/33.47/-97.5>

- If applicable, use other publicly available tools developed by States and academic institutions. For example, some states have their own EJ screening tools, such as:
 - New York: <https://www.nyserda.ny.gov/ny/disadvantaged-communities>
 - California: <https://www.cpuc.ca.gov/discom/>
- Engage with impacted communities to assess existing burdens experienced by communities.

Assessment of Project Benefits and Where They Flow

This element should describe anticipated project benefits, including to the greatest extent possible metrics and units of measurement that can be used to track these benefits. Applicants should also describe where/to whom benefits will flow and to what extent they will accrue in disadvantaged communities. Applicants should also describe the extent to which benefits align with community priorities and should include measurable direct or indirect investments or positive project outcomes that contribute to the eight DOE Justice40 policy priorities, outlined below.

Below is a list of steps applicants could take to assess project benefits and where/to whom those benefits will accrue. This is a good place to reference the IAW section and the Engagement section.

Identifying project benefits and metrics

Benefits include environmental, economic, health, social, or other benefits, including benefits defined by impacted communities. While tracking benefits may include tracking direct investments, benefits are much broader than direct investments. To guide the implementation of the Justice40 Initiative, DOE identified eight policy priorities that outline some types of Justice40-relevant benefits that applicants are recommended to consider when assessing project benefits in disadvantaged communities:³¹

1. Decreased energy burden.
2. Decreased environmental exposure and burdens.
3. Increased parity in clean energy technology access and adoption.
4. Increased access to low-cost capital.
5. Increased clean energy enterprise creation and contracting for Minority Business Enterprises/Disadvantaged Business Enterprises.
6. Increased clean energy jobs, job pipeline, and job training for individuals.
7. Increased energy resiliency.
8. Increased energy democracy.

For examples of metrics that could be used for DOE's eight policy priorities, see the [Community Benefits Plan Frequently Asked Questions \(FAQs\)](#).¹

Not all of these benefits will apply to every project and projects may have benefits that are not in this list. Furthermore, some categories of impacts listed above could be benefits for one project but negative impacts for another – for example, some CCS projects could result in decreased NOx

³¹ For more details visit [Justice40 Initiative | Department of Energy](#).

emissions while others may result in increased NO_x relative to a pre-project baseline. Applicants should carefully consider and assess impacts appropriately for their project. Benefits that are relevant for a particular applicant will depend on the project and the location, as well as on the priorities and needs of impacted communities. To the greatest extent possible, applicants should work with impacted communities early and often to define the benefits that are most relevant to them.

Benefits should be quantifiable, measurable, and trackable to the greatest extent possible. It is likely that applicants include qualitative alongside quantitative benefits. If the project is selected for development, benefits will be reported to DOE and tracked throughout the project.

Guiding questions for an initial assessment of project benefits could include:

- Review the eight DOE Justice40 policy priorities (above). Which of these benefits could result from the proposed integrated CCS demonstration project?
- To what extent does the proposed integrated CCS demonstration project provide ancillary environmental benefits, such as reductions in CO₂, CO, NO_x and SO_x emissions, particulate matter, or hazardous pollutants?
- Does the proposed integrated CCS demonstration project involve any clean up or remediation of legacy waste or hazardous pollutants?
- Does the project aim to remedy past harms from the energy system (e.g., remediating and repurposing fossil infrastructure)?
- To what extent does the proposed project provide social benefits (any benefit that affects people)? To what extent are those benefits inherent in the project, or contingent on external policy, social, or economic factors?
- Does the proposed project include community-based organizations as key partners? Does the project feature participation by communities that enables them to influence key decisions?
- To what extent will the proposed project spur enterprise creation, for example through contracts with other businesses or organizations?
- To what extent will the proposed project result in quality job creation, workforce development, and other economic benefits? This can reference the IAW section.
- Does the proposed project have engagement or technical assistance activities that can increase capacity in other organizations or groups?
- To what extent will the proposed project provide other benefits relevant to the surrounding community that are not captured in the above? For example, this could be increased tree cover in the area surrounding the project, upgrading park equipment at a nearby park that needed to be relocated due to construction activities.
- For all benefits identified, what metrics or units could be used to measure, track, and report those benefits? Are there metrics or sets of metrics that can be used to account for both baseline values (existing values) and changes in communities or groups?

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- How can benefits be measured, estimated, or modeled? How can these values be checked to ensure they reflect experience on the ground? What opportunities are there for community participation in the measurement, estimation, or modelling of benefits?

Assessing where/to whom benefits will flow

Once project benefits are identified, applicants must provide an initial assessment of where/to whom they will flow and to what extent benefits will flow to disadvantaged communities. In addition, applicants are encouraged to examine groups beyond disadvantaged communities, and look at what categories of people, based on characteristics including gender, economic sectors, neighborhoods, and social institutions, will most directly benefit.

Guiding questions for an initial assessment of where and to whom benefits will flow could include:

- Review the list of impacted communities. Which of these communities are most likely to receive which benefits?
- To what extent does each benefit flow to disadvantaged communities?
- What are the mechanisms by which the benefits listed will accrue in different communities or groups? How do those mechanisms impact which communities, groups, or sub-groups may have greater access to those benefits?
- Are there social, economic, geographic, or other barriers that would prevent a specific benefit from accruing in a particular community or group?
- What established pathways, structures, relationships, or mechanisms (social, economic, geographic, or other) already exist that would enable certain benefits to easily flow to some communities or groups but not others?
- Does the proposed project team have existing plans or relationships that would affect how benefits are likely to flow?
- For each benefit, what is the expected timeframe over which that benefit will accrue? Do different groups or communities experience a benefit on different time scales?
- For benefits that have a clearly defined geographical area of effect – what is that geographical area? Which communities or groups would receive these benefits? Are the benefits evenly distributed within this geographical area? If not, how can an apportionment of benefits be estimated within this area?
- For benefits without a clearly defined geographical area of effect – what factors might impact which groups are most likely to receive project benefits? Are any of these factors more or less likely to occur for the proposed integrated CCS demonstration project due to economic, geographic, or other factors?

Assessing alignment to community priorities

Briefly describe how well the anticipated project benefits align with community priorities. This description can build on any information contained in the Engagement section regarding the extent to which the host community or communities have already indicated support for the proposed integrated CCS demonstration project. Have other community-based organizations or relevant groups identified community priorities that align, or do not align, with project benefits?

What if some of my benefits are hard to quantify or track?

To support transparency and ensure beneficial project outcomes, benefits should be quantifiable, measurable, and trackable to the greatest extent possible; however, it is expected that applicants include qualitative alongside quantitative benefits. Applicants should strive to list all anticipated benefits, even if they cannot be quantified currently or in the future.

What if my project has benefits that don't fall under any of the policy priorities outlined above?

Please include all anticipated project benefits, even if they do not align with the policy priorities or other examples/categories in this document.

Illustrative Example of a Project Benefit

A project benefit could look like the following:

- You may have identified that a **benefit** from your project is the remediation of legacy soil contamination on a project site, which is adjacent to a public park and several homes.
- A **metric and unit** could be soil lead level (ppm lead), which you plan to reduce from the current **value** of 1600 ppm to below 400 ppm.
- **Temporally**, this benefit will begin to accrue after remediation is complete and continue in perpetuity, for at least as long as the duration of the project but likely much longer.
- The **data type** is empirical/measured, and the **collection methodology** is that soil samples will be collected and tested prior to and after remediation. Samples will be taken by a third party and results posted on a publicly available website within one month.
- That the **area of impact** will be the project site location boundaries and the properties directly adjacent to the project site, which include one block of homes and the park.
- This **benefit will flow** directly to two communities/groups: 1) those that live in the homes directly adjacent to this property, where soil from the property may blow into their yards, and 2) visitors to the park adjacent to the property.
- For 1), you determine that 100% of the homes in the block adjacent to the project are classified as **disadvantaged communities** per DOE's working definition. For 2), you estimate by drawing a five-mile radius around the park, in which approximately 60% of the area is disadvantaged and 40% is not. You recognize that the apportionment of *benefits* is unknown due to unknown rates of park utilization by different communities.
- You reference your EJScreen analysis to **quantify existing and cumulative burdens** which shows that this neighborhood is in the 90-95 percentile for lead paint.
- You note that this benefit aligns well with **community priorities**, as residents have been advocating for remediation at this site for over seven years.

Assessment of Negative Impacts and Where They Flow

This element must describe anticipated project negative impacts including, to the greatest extent possible, metrics that will be used to track these impacts; where and to whom impacts are expected to flow with the greatest amount of specificity possible, including whether disadvantaged communities will experience negative impacts disproportionately; and how additional project negative impacts will interact with existing cumulative burdens. This process will be similar to assessing benefits and where they flow. If the proposed integrated CCS demonstration project is selected and developed, negative impacts will be reported to DOE and tracked throughout the project.

In this element, applicants can also include any impacts which are neutral/uncertain or otherwise not included in the “benefits” section. Because in some cases different groups or communities could experience the same impact as a benefit, disbenefit, or neutral impact, classification of impacts as benefits/neutral/negative should reflect the views of the various impacted communities/groups to the greatest extent possible. For example, building a road as part of project construction plans may increase accessibility or connectivity for some communities, while other communities may be burdened by increased traffic-related air or noise pollution or traffic safety risks. It is understood that impacts may be classified differently throughout the life of the project or for different projects due to deepening understanding of community priorities and concerns. These are classifications that can be updated in conjunction with community engagement.

Assessing project negative impacts

Potential negative impacts could include ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health impacts. Applicants are encouraged to consider direct impacts, indirect impacts, and cumulative impacts. Negative impacts should be quantifiable, measurable, and trackable to the greatest extent possible; it is expected that applicants include quantifiable alongside qualitative metrics. To the greatest extent possible, applicants are recommended to work with impacted communities early and often to define the negative impacts that are most relevant to them.

Applicants are highly encouraged to leverage information reported elsewhere in the application, including the NEPA Environmental Considerations Summary and the Social Characterization Assessment in the Community and Labor Engagement section, to assess the project negative impacts in this assessment.

Guiding questions for an initial assessment of negative impacts could include:

- Which questions and responses in the Environmental Considerations Summary are relevant for the proposed integrated CCS demonstration project and can be included in this assessment? Applicants are highly encouraged to use the Environmental Considerations Summary questions as a baseline assessment of project negative impacts.
- How does the proposed integrated CCS demonstration project rely on limited resources such as, freshwater, land, and critical minerals?

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- What environmental pollution or waste streams (including those discharged to air, water, and/or soil) will the proposed project generate, both during the project execution phase and after if equipment remains in operation (if applicable)?
- To what extent will the proposed project increase energy prices and/or energy burdens?
- To what extent will the proposed project impact land-use patterns, including leading to increased reliance on cars or increased need for sprawl housing development?
- To what extent could the proposed project impact home values, gentrification, or other indirect impacts?
- Would the proposed project be located on or adjacent to Tribal lands, lands considered to be sacred, or lands used for traditional purposes? Describe any known Tribal sensitivities for the proposed project area.
- What metrics or units could be used to measure, track, and report impacts? Are there metrics or sets of metrics that can be used to account for both baseline values (existing values) and changes in communities or groups?
- How would negative impacts be measured, estimated, or modeled? How can these values be checked to ensure they reflect experience on the ground? What opportunities are there for community participation in the measurement, estimation, or modelling of impacts?

Assessing where and who is impacted

This process is similar to the “Assessing where/to whom benefits will flow” topic above.

Assessing how negative impacts interact with existing cumulative burdens

A key factor in energy and environmental justice is the concept of cumulative burdens—when certain communities or groups are disproportionately exposed to multiple burdens that can compound or interact in detrimental ways.³² Whereas a slight increase in a negative impact, for example increased energy burden, might have minimal consequences on one community (e.g., a high-income community) that same quantity of increase may have a huge effect on a different community (e.g., low-income community already facing high energy burden). Assessing how potential negative impacts may compound or add to existing burdens is crucial to energy and environmental justice.

Using the existing burdens characterized in the Assessment of Impacted Communities and Groups, applicants are asked to describe how anticipated flows of project negative impacts will interact with each other and with existing cumulative burdens in each impacted community. Applicants should clearly describe the extent to which project negative impacts could exacerbate existing burdens in disadvantaged communities.

³² For example, a single community may be located in an urban heat island, be low-income, have poor public transportation, and be located in a food desert. If that community experienced a period of contaminated tap water where residents had to rely on bottled water to drink and cook – these cumulative burdens could interact and compound by making access to bottled water extremely difficult, whereas a wealthy community experiencing an identical contaminated tap water issue may not be impacted as significantly due to easier access to bottled water and/or high-cost filtration systems.

Illustrative Example of a CCS Project Negative Impact

A CCS project disbenefit/harm could look like the following:

- You may have identified that your project will result in an increase in truck traffic during construction, which has three potential **negative impacts**: (1) increase in safety risk from accidents, (2) increase in dust and noise pollution, and (3) increase in tail pipe emissions.
- You define three separate sets of **metrics and units** corresponding to each impact, respectively: (1) number of accidents, (2) change in noise level (dB) and change in visibility (mi), and (3) lb NO_x, HC, SO₂, PM, and Ozone emitted.
- The **data type(s), sources, and methodologies** for measuring the three potential negative impacts are, respectively: (1) estimated from typical rates of accidents for industrial projects in areas of similar population density; (2) TBD/unknown; and (3) calculated based on the expected number of trucks, miles driven, and typical exhaust emissions for similar trucks.
- **Temporally**, this impact will last throughout the construction phase (expected to be two years), and at a reduced level to support maintenance for the duration of the site (expected to be 20 years).
- For the initial assessment you analyze the two stretches road that you know trucks must use and estimate that all **negative impacts** will accrue within 0.25 mile radius of the road (your final route and impact area will be refined and updated later on).
- Therefore, the **negative impacts will flow** to those who live, work, and/or recreate within 0.25 miles of that known road.
- In that area, you determine that 20% is classified as **disadvantaged communities** per DOE's working definition.
- You use EJScreen 2.0 to assess **existing burdens** by drawing the truck route and perform an analysis, which shows that the disadvantaged communities along this route score in the highest percentile of the EJ indices for PM 2.5 and ozone. The non-disadvantaged communities also score high but to varying or lesser degrees. You overlay your expected increase in emissions with this map and discuss how your negative impacts add to already high burdens, which motivates additional work to consider ways to mitigate and avoid this impact to the greatest extent possible.
- Further analysis and assessment of **cumulative burdens** also shows that a nearby community has limited access to parks, libraries, and grocery stores, all of which require crossing a road that could become more dangerous and congested if chosen for project truck routing – motivating further work to find alternatives that avoid this disbenefit/harm.

Do we need to include negative impacts or other impacts not included in “benefits” that are unlikely or have a low probability of actually occurring? What about impacts where we already have a mitigation strategy in place?

Yes. All potential negative impacts should be reported, even those that are low probability and those for which the applicant has already planned or implemented strong mitigation strategies. There is a forecasting element to this work, and it is not expected that applicants have exact predictions about every indirect impact. Generally, it is better to evaluate all potential impacts, direct, indirect, and cumulative, and characterize the knowledge base and uncertainty whenever possible.

Assessment of Information Gaps

This element should summarize unknowns in the Justice40 Initiative assessments (including the assessment of risks to realizing benefits and minimizing negative impacts described below) and how they will be addressed. Applicants are expected to provide thorough and comprehensive assessments to the greatest extent possible; however, DOE recognizes that certain elements of this information may not be available at the time of application. Applicants should identify areas in the assessments where additional work is needed to fully characterize impacted communities, project impacts, and where those impacts flow, including the extent to which they accrue in disadvantaged communities and interact with existing burdens. Applicants can outline research and analytical goals to clarify any unknowns.

Assessment of Risks to Realizing Benefits and Minimizing Negative Impacts

This element includes a description of barriers to realizing benefits and minimizing negative impacts. While the assessments above should outline potential benefits, there is often no guarantee that those benefits are always realized. Similarly, there may be the theoretical potential to minimize negative impacts, but this may fail to be done in practice. With this in mind, this element addresses the gap between ambition and reality, and how to ensure that benefits or risk mitigation measures can actually be delivered. This activity may surface additional actions to add to the plan. It may also help identify external factors, which can in turn inform the Engagement section.

Guiding questions for realizing benefits could include:

- To what extent are identified benefits inherent in the project or contingent on external policy, social, or economic factors? What are these factors?
- What could be barriers to delivering these benefits?
- What would need to be done, by people on the project team and by people external to the organization, to overcome these barriers?

Guiding questions for minimizing negative impacts could include:

- What could be obstacles to your plans for minimizing negative impacts?
- What would need to be done, by people on the project team and by people external to the organization, to overcome these barriers?

DIVERSITY, EQUITY, INCLUSION, AND ACCESSIBILITY (DEIA) IN CARBON CAPTURE FRONT-END ENGINEERING DESIGN STUDIES

The Diversity, Equity, Inclusion, and Accessibility (DEIA) Plan describes the actions the project team will take, if selected for award, to foster a welcoming and inclusive environment; support people from groups underrepresented in Science, Technology, Engineering, and Mathematics (STEM), construction and operations workforces, and other applicable workforces; advance equity; and encourage the inclusion of individuals from these groups in all phases of the project. This section should also discuss activities to ensure equitable accessibility to economic opportunities created from the project.

The Executive Order on Diversity, Equity, Inclusion, and Accessibility in the Federal Workforce³³ defines Diversity, Equity, Inclusion, and Accessibility as:

Diversity means the practice of including the many communities, identities, races, ethnicities, backgrounds, abilities, cultures, and beliefs of the American people, including underserved communities.

Equity means the consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment.

Inclusion means the recognition, appreciation, and use of the talents and skills of employees of all backgrounds.

Accessibility means the design, construction, development, and maintenance of facilities, information and communication technology, programs, and services so that all people, including people with disabilities, can fully and independently use them. Accessibility includes the provision of accommodations and modifications to ensure equal access to employment and participation in activities for people with disabilities, the reduction or elimination of physical and attitudinal barriers to equitable opportunities, a commitment to ensuring that people with disabilities can independently access every outward-facing and internal activity or electronic space, and the pursuit of best practices such as universal design.

³³ [https://www.whitehouse.gov/briefing-room/presidential-actions/2021/06/25/executive-order-on-diversity-equity-inclusion-and-accessibility-in-the-federal-workforce/#:~:text=%28e%29%20The%20term%20%E2%80%9Caccessibility%E2%80%9D%20means%20the%20design%2C%20construction%2C,with%20disabilities%2C%20can%20fully%20and%20independently%20use%20them.Executive Order on Diversity, Equity, Inclusion, and Accessibility in the Federal Workforce - The White House](https://www.whitehouse.gov/briefing-room/presidential-actions/2021/06/25/executive-order-on-diversity-equity-inclusion-and-accessibility-in-the-federal-workforce/#:~:text=%28e%29%20The%20term%20%E2%80%9Caccessibility%E2%80%9D%20means%20the%20design%2C%20construction%2C,with%20disabilities%2C%20can%20fully%20and%20independently%20use%20them.Executive%20Order%20on%20Diversity,%20Equity,%20Inclusion,%20and%20Accessibility%20in%20the%20Federal%20Workforce,-The%20White%20House)

What does “underrepresented” mean?

The term “underrepresented” is context-dependent, and should be considered relative to the relevant communities, workforces, and locations. For example, according to the National Science Foundation’s 2019 report titled, “Women, Minorities and Persons with Disabilities in Science and Engineering”, women, persons with disabilities, and underrepresented groups—blacks or African Americans, Hispanics or Latinx, and American Indians or Alaska Natives—are vastly underrepresented in the STEM (science, technology, engineering and math) fields that drive the energy sector. That is, their representation in STEM education and STEM employment is smaller than their representation in the U.S. population.³⁴ For example, in the U.S., Hispanics, African Americans and American Indians or Alaska Natives make up 24 percent of the overall workforce, yet only account for 9 percent of the country’s science and engineering workforce. DOE seeks to inspire underrepresented Americans to pursue careers in energy and support their advancement into leadership positions.³⁵

Grant awardees must make all employment decisions in a nondiscriminatory manner that does not extend a preference to a particular individual based on membership in a protected class, consistent with federal and state labor and employment laws and regulations. A grant awardee may lawfully set placement goals—objectives or targets that are reasonable steps to advance equity in the workplace. See, e.g., 41 CFR 60-2.16. However, a grant awardee is expressly forbidden from setting quotas for individuals in a protected class. For example, an awardee can set a placement goal about broadening recruitment and outreach to increase the diversity of its applicant pool, but cannot set a quota to hire two individuals from a protected class.

Process

There is no singular process for generating DEIA plans, and successful plans will iterate and evolve throughout project phases and in response to stakeholder input and needs. This process can and should overlap with activities in the IAW and Justice40 sections, and applicants can reference these components as applicable. Some common steps to create a DEIA section are shown below:

- Formulate **why** the applicant is creating a DEIA plan for this project, beyond funding requirements. Common reasons for organizations to implement DEIA plans include: to cultivate a workplace culture that will attract and retain top talent, to align practices with the values members hold, to better communicate with clients and other stakeholders, and to act on research that a more diverse workplace will improve creativity and productivity.³⁶ Clarity on this vision for DEIA in the project will help to build buy-in for a plan that is implemented.
- **Assess** the current state of diversity, equity, inclusion, and accessibility in the organization and the economic opportunities (e.g., job opportunities, contracting opportunities,

³⁴ <https://nces.gov/pubs/nsf19304/digest/about-this-report>

³⁵ <https://www.energy.gov/articles/introducing-minorities-energy-initiative>

³⁶ <https://www.nature.com/articles/s41467-018-07634-8/> (Science benefits from diversity (nature.com); [PDF] The preeminence of ethnic diversity in scientific collaboration | Semantic Scholar

opportunities for suppliers) created from the project. This will be an initial assessment; if there are knowledge gaps, identify internal analysis needs and itemize those needs in the plan.

- Develop **goals and desired outcomes**. What does success in achieving these goals look like? How will it be measured?
- **Identify partnerships** critical to reaching desired goals and outcomes. Partnerships are key to reducing barriers to employment and ensuring that disadvantaged and underrepresented workers have access to jobs and training. Partnerships also can facilitate access to financing, insurance, and capacity development for minority- and women-owned businesses.
- Develop **implementation strategies** to reach those outcomes. This includes specifying roles and responsibilities, defining required resources, establishing accountability measures, and developing a timeline for executing the strategies.

How do we know if our DEIA plan is well developed?

An inadequate DEIA plan might include a few vague commitments to values without specific, actionable items.

A good DEIA plan will include milestones, roles, and responsibilities for who is executing the plan, timelines, mechanisms for tracking progress, and ensuring accountability. This includes identifying measures of success. A good DEIA plan is also one your organization will act upon to implement. This means that there needs to be pathways to buy-in for all the people who have roles and responsibilities for enacting it; evidence of having begun or mapped out those conversations can be useful.

How do we avoid creating additional burdens for members of underrepresented groups?

There is a history of well-intentioned but rushed and not-fully-considered DEIA work that creates additional harms or burdens for underrepresented groups. Often people from underrepresented groups are asked to take on this work in a volunteer capacity or are informally consulted on various DEIA topics without compensation, sometimes by multiple employees or teams who think their ask is light and don't realize how it all adds up. It is critical to analyze who is being asked to carry the load, how other work responsibilities are shifted to accommodate it, and how compensation for this work is done. It is also critical to avoid tokenization – the practice of making only a perfunctory or symbolic effort to be inclusive to members of underrepresented groups, especially by recruiting people from such groups in order to give the appearance of racial or gender equality within a workplace or educational context. The de-facto assumption or expectation that individuals speak for or represent views from an entire group should also be avoided. Recognition for DEIA work may not just be financial; it comes at the expense of other activities and could be considered during review or promotion.

Potential methods to avoid overburdening members of underrepresented groups include, but are not limited to, hiring external consultants or experts to support DEIA work; paying and otherwise valuing

members of your organization who do DEIA work; creating accessible “opt-in” mechanisms for participation; providing DEIA and/or implicit bias training to staff to promote an office-wide understanding of DEIA and the risks of overburdening underrepresented groups; creating safe and responsive channels for individuals to provide feedback about DEIA efforts; and offering support services to staff.

What are some ways to address systematic barriers to access?

Additionally, addressing systematic barriers to access is required to avoid occupational segregation. Wrap-around services, comprehensive support services, and more, can work to remove such barriers and provide improved access to opportunities.

Elements

This section should include the elements listed below. Please use headers to delineate elements.

Background

The Background should describe prior and ongoing efforts by the project team relevant to DEIA, based on findings from an initial assessment that examines the context of DEIA within the CCS FEED team’s organization(s), including any relevant accountability mechanisms. It can also describe other efforts taken by the team to advance, among other things, DEIA related to suppliers, partners, and other relevant entities; diversity of the broader workforce; and wealth-building opportunities. The description may include a discussion of how the project team’s DEIA work fits in with the larger organization’s strategy or include key data points, charts, or graphs.

Formulating a vision for DEIA in the project

It is helpful to clearly define why the applicant is creating a DEIA plan.³⁷ The internal process for formulating a DEIA vision will vary by organization, and the resources that are available (e.g., if the organization has a DEIA office). It may be useful to have an external facilitator work with the organization on a discussion of the DEIA vision, or it may just involve a team meeting. The key point is that team members are on the same page about the purpose of putting together a DEIA plan, as well as how it fits into existing efforts. It would be appropriate to include in the plan a few sentences on the outputs of that conversation (e.g., a DEIA vision statement).

Doing an initial assessment

Applicants should summarize the results of an initial assessment of DEIA in the proposed integrated CCS demonstration project. There may be aspects where there is a lack of data, and in this case, gathering that data and analyzing it can be included in the DEIA plan, including specifying what data sources are needed, how to gather new data if needed, who will gather the data and analyze it, and how long it will take. Applicants will probably draw on both internal and external data (e.g., for benchmarking), as well as both qualitative and quantitative data.

³⁷ Some advice for vision and mission statements including DEIA can be found at <http://www.nonprofitinclusiveness.org/building-inclusiveness-your-mission-and-values>.

Guiding questions for an initial assessment, and to help think about outcomes and implementation strategies, could include:

Assessing DEIA training and culture in the organization

- Does the project or organization have an existing DEIA mission statement and philosophy?
- Do project leaders actively enact this DEIA mission, especially as it informs creating a diverse and inclusive work environment? Provide examples of how.
- What percentage of organizational resources, in terms of staff, staff time, and funding, goes to DEIA activities?
- Is there a reporting process that tracks DEIA milestones and metrics in the organization? Does the reporting process involve transparent, third-party reporting systems, and incorporate employee feedback?
- What existing employment, salary, retention, and promotion data is tracked about the organization? Is it disaggregated by race, gender, and other variables? Is this data shared with employees and/or made public?
- What are the DEIA training requirements and learning opportunities for employees? What mechanisms are used to measure the effectiveness of these training activities?
- How are participation and outcomes tracked, measured, and shared? Are there DEIA elements in staff performance appraisals, and clear guidance and examples of how employees will be evaluated and what successful performance looks like?
- Are these policies and practices well-known among the employees — what percent of employees are familiar with them?
- Are these policies and practices clear and effective?

Assessing hiring, including collaborating and contracting with persons from underrepresented groups. Basic analysis:

- How many people are in the organization, and what is the breakdown between management and staff?
- What percent of people employed in the organization are from underrepresented groups?
- What percent of management is from underrepresented groups?
- What percent of contracts are with minority-, women-, Veteran-owned or other disadvantaged businesses?
- What percent of collaborators (project partners, research collaborators, co-investigators, sub-contractors) are from underrepresented groups? From MSIs? How are collaborations typically formed?
- How are current employment and diversity statistics benchmarked against appropriate comparison populations, such as existing employment data for specific STEM fields across the scientific community, and existing graduation rates in specific fields, using, for example, the data available through the National Science Foundation's (NSF) National Center for Science and Engineering Statistics, and NSF Science & Engineering Indicators, and scientific professional societies?

Recruitment:

- What percent of job applicants are from underrepresented groups? What percent of hires are from underrepresented groups?
- How diverse are the workforce recruiting networks (e.g., outreach programs and job groups)?
- What efforts are taken to remove bias from job description language and develop objective hiring criteria? Examples could include using gender-neutral pronouns and job titles; scanning for gender-coding or other phrases that signal unconscious bias towards age, race, or culture; and evaluating language for being welcoming to applicants with disabilities.
- What training is offered to address implicit bias and ensure effective interviewing? Is anonymous resume screening conducted (i.e., without candidate personally identifying information)?

Retention and promotion:

- Are candidates assessed on their aptitude for supporting DEIA goals and an inclusive workplace culture, using standardized behavioral interview questions?
- How robust and transparent are pay equity processes and are these grounded in statistical analysis with annual reviews? Are there formal remediation protocols?
- What employee benefits, policies, resources, and initiatives exist to improve well-being and address the needs of employees across career stages and personal family circumstances (e.g., family support services/childcare, alternative and flexible work schedules)?
- What strategies are in place to retain workers from underrepresented groups?
- Are promotion strategies tracked with an eye towards equity? Are voluntary and involuntary separations tracked with disaggregated data to examine trends?
- Are there mentorship opportunities and programs? If so, are they currently staffed and utilized equally by individuals from different identity groups?
- Does your organization have a process for requesting and providing reasonable accommodations?

Assessing knowledge sharing

- How diverse is the target audience when disseminating results? For example, is there prioritization of MSIs, underserved communities, or organizations working with underserved communities when sharing details and research outcomes of the work?
- How transparent and accessible is the information shared? Is information publicly disseminated and through what channels?
- Is data presented in meaningful ways for the purposes of community engagement and interpretation?
- Could the communication channels and language be rendered more accessible? Are there different forms of communication that need to be employed, e.g., for communities with different levels of digital access? What about language accessibility for speakers of other languages?

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- Is the process of disseminating results empowering to those communities involved? In other words, are communities in a position to use the knowledge to pursue their priorities? If not, is there anything that could be done to facilitate this?

Contracting with minority-, women-, Veteran-owned and other disadvantaged businesses:

- Have federal, state, or local directories of certified minority-, women-, Veteran-owned and other disadvantaged businesses been explored? Numerous sources may help you identify businesses that have been certified by a government entity as a minority-, women-, Veteran-owned or other disadvantaged business.
- Have state or local government's small and minority business contracting offices been contacted? Many state and local governments have offices that serve as a conduit on key issues affecting the small and disadvantaged business communities. They may also provide services to connect minority- and women-owned and other disadvantaged small businesses to contracting and procurement opportunities.
- What Chambers of Commerce are in the project area? There are many chambers that specifically represent minority-, women-, Veteran-owned and other disadvantaged businesses. Working with these chambers can help you identify and connect with minority-, women-, Veteran-owned and other disadvantaged businesses.
- Have project business hosted or participated in supplier diversity programs or training? To increase supplier diversity, many companies host supplier diversity programs and training to identify and connect with minority-, women-, Veteran-owned and other disadvantaged businesses.

For more information on the following topics, see the [Community Benefits Plan Frequently Asked Questions \(FAQs\)](#).¹

- *What are Minority Serving Institutions?*
- *Which Executive Orders describe the Administration's priorities on diversity, equity, inclusion and accessibility?*
- *What types of communities have been denied systematic fair, just, and impartial treatment?*

Strategies, Milestones, and Timelines

This element should describe targeted outcomes and implementation strategies, including milestones, work descriptions, and a timeline for execution. This could be presented in table or graphical form, or as narrative.

The DEIA Plan schedule should define the timeline on the same schedule as the Integrated Project Schedule (IPS) and Workplan. This element is recommended to include anticipated barriers to achieving certain goals, such as lack of organization support, funding, and expertise.

Moving from goals to outcomes to implementation strategies

A goal is an aspiration, while an outcome is what it looks like when the goal is achieved. The implementation strategy spells out what needs to happen to reach that outcome, when it will happen, and who will do it.

Example of moving from goal to outcome to implementation

Within your company, you lead a team pursuing a clean energy development project in the county where your company is located. You are at the early planning stages and are thinking through ways to increase meaningful actions on DEIA in your project—you want your project to be an example for your broader company on how to do this. Your initial analysis showed that the current demographic makeup of your company, and especially the leadership roles, are not reflective of the county demographics.

Perhaps you develop one **goal** (among several) to increase the diversity of the workforce on this project relative to what is in your company and the workforce of similar prior projects.

You may set an **outcome** that the workforce on the project is approximately reflective of the demographics of the county where the project is located.

Your **implementation strategy** may involve things like working with nearby MSIs to advertise STEM positions within your company that are needed to support this project, working with HR to develop a system to track and report key metrics related to this project and to create a transparent mechanism for improvement over time, and hiring an expert to consult on ensuring workforce development and sub-contracting project activities incorporate DEIA throughout.

Below is a list of actions that can serve as examples of ways the project could incorporate diversity, equity, inclusion, and accessibility elements. These examples should not be considered either exhaustive or prescriptive. Applicants may include appropriate actions not covered by these examples and should include a comprehensive set of specific DEIA actions anticipated in connection with the project.

A good DEIA plan will include both **outcomes** and **implementation strategies** in one or all of these areas. Please note there may be important DEIA activities that do not fit into these areas. Below are some examples of goals that may be identified through an initial assessment.

- **Organizational and cultural change: Create or contribute to existing diversity, equity, inclusion, and accessibility programs at the applicants' organization(s)**
 - Enhance or collaborate with existing DEIA programs at the home organization.
 - Implement evidence-based, diversity-focused education programs (such as implicit bias training for staff) in the organization.

- Dedicate time and resources for team members to engage in DEIA training, networking, and learning opportunities externally.
 - Institute or improve reporting process for tracking DEIA milestones and metrics in the project.
 - Look for ways to make the worksite more accessible.
- **Partnership and contracting: Including, collaborating with, and contracting with persons from underrepresented groups**
 - Identify minority business enterprises, minority-owned businesses, woman-owned businesses, and veteran-owned businesses to solicit as vendors and sub-contractors for bids on supplies, services, and equipment.
 - Identify workforce training programs hosted by the proposed integrated CCS demonstration project and/or nearby organizations to foster improved access to jobs for members of the community, including individuals underrepresented in relevant industries and those facing barriers to employment, such as those with disabilities.
 - Support quality pre-apprenticeship programs in the local community to improve access to career-track training and jobs for underrepresented workers, including returning citizens. Who will be partnered with to ensure successful outcomes?
 - Participate in High-Road Workforce Partnerships⁶ that may include community-based organizations, local government, and union programs that serve populations with barriers to employment such as women, residents of disadvantaged communities, returning citizens.
 - Plans can include information and commitments for hiring, retention, contracting, collaboration, and workforce development.
- **Education and outreach: Consider DEIA when sharing knowledge or results**
 - Disseminate results of research and development in MSIs or other appropriate institutions serving underserved communities.
 - Make data available and accessible to communities that may be interested.
 - Work with community groups to figure out how results or insights from the work could be useful for community priorities.
 - Create educational opportunities for schools or other educational institutions in underserved communities where the project team could share their expertise on topics that the communities are interested in.
- **Sustainability:** Consider DEIA leadership engagement, DEIA organizational structure and resources, and DEIA integration.
 - Integrate DEIA into strategic planning, mission, and communications; advance accountability through DEIA performance goals.

In addition to describing any plans for partnerships with MSI, Minority Business Enterprises, Minority-Owned Businesses, Woman-Owned Businesses, and Veteran-Owned Businesses, the

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applicant may also demonstrate how the project will support a diverse and inclusive workforce by advancing high wages and reducing income disparities across race and gender lines. Applicants may describe geographically targeted outreach (e.g., presentations at job fairs) in communities, use of banners and billboards near the proposed integrated CCS demonstration project, online advertising, and other plans for making sure people have equitable access to career-path employment. This can reference IAW and Justice40 sections as applicable.

For more information on the following topics, see the [Community Benefits Plan Frequently Asked Questions \(FAQs\)](#).¹

- *What are quality pre-apprenticeship programs or apprenticeship readiness programs?*
- *What are specific DEIA Actions that I should consider?*
- *What are strategies to expand opportunities on my construction project for women, economically disadvantaged, local workers?*
- *What is the U.S. Department of Labor's Mega Construction Project Program?*

Resource summary

This element provides a summary of resources dedicated to implementing the DEIA section. This should include information about staff (number, time on project, educational qualifications, and experience); contracting or partnering organizations with relevant expertise; and facilities, capabilities, and budget (both federal and cost share) that will support implementing activities. It can also include information about how any identified barriers can be overcome and how the required resources will be obtained.

HAVE MORE QUESTIONS?

If you have further questions, please email them to CCSdemos@netl.doe.gov

If you have problems with OCED Exchange, email OCED-ExchangeSupport@hq.doe.gov.

Include the FOA name and number in the subject line.



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