Community Benefits Plan

DE-FOA-0002610, CarbonSAFE (Area of Interest 1)

Gas Technology Institute (GTI)

Sutter County CO_2 Capture and Storage Project, Northern California

Purpose

The purpose of this document is to summarize the specific objectives the Sutter County CCUS project is committing to in its Community Benefits Plan (CBP), in quantifiable terms with SMART milestones.

A. General Project Information

1. Construction Information

Information for each planned project location identified in the Location(s) of Work document (included with the application package) is provided below:

Location 1: Institute of Gas Technology dba Gas Technology Institute

a) Any known construction labor risks or threats that could cause delays to the schedule: None.
b) Potential public and worker health and safety risks and hazards: None expected.
c) Known possibilities of labor disruption: There are no foreseen labor risks at the GTI location that would cause delays to the schedule.
d) Plans for coordination among various employers (i.e., prime contractors and subcontractors): Prime Recipient oversight of all Subrecipients and Subcontractors/Vendors and CBP lead.
e) Plans for resolution mechanism to avoid potential project delays (including issues that may arise among contractors and subcontractors as well as employees): The Principal Investigator from the prime recipient will coordinate with Principal Investigators from each sub-awardee and provide performance oversight for tasks, schedule, and budget and apply risk assessment and mitigation techniques. A multiple Principal Investigator strategy for internal decision-making and a CBP engagement strategy with impacted communities for input on the project.
f) The general contractor or Engineering, Procurement, and Construction contractor, if known: Not Applicable.
g) The primary business of the general contractor or EPC contractor: Not Applicable.

Location 2: Strat Well Location, Sutter Co, CA

a) Any known construction labor risks or threats that could cause delays to the schedule: The project is not aware of any labor risks that could cause schedule delays to construction. Calpine has experience with labor that can mitigate any risks that may arise.

b) Potential public and worker health and safety risks and hazards: There are no known worker health and safety risks and hazards above and beyond expectations for CCUS projects. Updates to health and safety plans are to be worker-informed. Public risks and hazards are not expected to surpass a distance greater than 0.9 miles from the site of injection due to modeling of the CO_2 plume. Any potential plume is confined well within the bounds of the project area of interest. Community engagement will include public communication on health and safety.
c) Known possibilities of labor disruption: There are no known labor risks that would cause delays to the project schedule.
d) Plans for coordination among various employers (i.e., prime contractors and subcontractors): Coordination through prime recipient.
e) Plans for resolution mechanism to avoid potential project delays (including issues that may arise among contractors and subcontractors as well as employees): Coordination through prime recipient.
f) The general contractor or Engineering, Procurement, and Construction contractor, if known: Not Applicable.
g) The primary business of the general contractor or EPC contractor: Not Applicable.

Location 3: Oxy Low Carbon Ventures

a) Any known construction labor risks or threats that could cause delays to the schedule: None.
b) Potential public and worker health and safety risks and hazards: None.
c) Known possibilities of labor disruption: None. There are no foreseen labor risks that would cause delays to the schedule. Oxy has extensive experience with engaging labor on projects without disruption.
d) Plans for coordination among various employers (i.e., prime contractors and subcontractors): Coordination through prime recipient.
e) Plans for resolution mechanism to avoid potential project delays (including issues that may arise among contractors and subcontractors as well as employees): Coordination through prime recipient.
f) The general contractor or Engineering, Procurement, and Construction contractor, if known: Not Applicable.
g) The primary business of the general contractor or EPC contractor: Not Applicable.

Location 4: Carbon Solutions

a) Any known construction labor risks or threats that could cause delays to the schedule: None, CBP work only.
b) Potential public and worker health and safety risks and hazards: None.
c) Known possibilities of labor disruption: None.
d) Plans for coordination among various employers (i.e., prime contractors and subcontractors): Coordination through prime recipient.

e) Plans for resolution mechanism to avoid potential project delays (including issues that may arise among contractors and subcontractors as well as employees): Coordination through prime recipient.
f) The general contractor or Engineering, Procurement, and Construction contractor, if known: Not Applicable.
g) The primary business of the general contractor or EPC contractor: Not Applicable.

Location 5: Stanford University

a) Any known construction labor risks or threats that could cause delays to the schedule: None, administrative work only.
b) Potential public and worker health and safety risks and hazards: None.
c) Known possibilities of labor disruption: None.
d) Plans for coordination among various employers (i.e., prime contractors and subcontractors): Coordination through prime recipient.
e) Plans for resolution mechanism to avoid potential project delays (including issues that may arise among contractors and subcontractors as well as employees): Coordination through prime recipient.
f) The general contractor or Engineering, Procurement, and Construction contractor, if known: Not Applicable.
g) The primary business of the general contractor or EPC contractor: Not Applicable.

Location 6: Frontier Energy

a) Any known construction labor risks or threats that could cause delays to the schedule: None, CBP work only.
b) Potential public and worker health and safety risks and hazards: None.
c) Known possibilities of labor disruption: None.
d) Plans for coordination among various employers (i.e., prime contractors and subcontractors): Coordination through prime recipient.
e) Plans for resolution mechanism to avoid potential project delays (including issues that may arise among contractors and subcontractors as well as employees): Coordination through prime recipient.
f) The general contractor or Engineering, Procurement, and Construction contractor, if known: Not Applicable.
g) The primary business of the general contractor or EPC contractor: Not Applicable.

Location 7: Projeo

a) Any known construction labor risks or threats that could cause delays to the schedule: None.
b) Potential public and worker health and safety risks and hazards: None.
c) Known possibilities of labor disruption: None.
d) Plans for coordination among various employers (i.e., prime contractors and subcontractors): Coordination through prime recipient.

e) Plans for resolution mechanism to avoid potential project delays (including issues that may arise among contractors and subcontractors as well as employees): Coordination through prime recipient.
f) The general contractor or Engineering, Procurement, and Construction contractor, if known: Not Applicable.
g) The primary business of the general contractor or EPC contractor: Not Applicable.

Location 8: New Mexico Tech

a) Any known construction labor risks or threats that could cause delays to the schedule: None, administrative work only.
b) Potential public and worker health and safety risks and hazards: None
c) Known possibilities of labor disruption: None.
d) Plans for coordination among various employers (i.e., prime contractors and subcontractors): Coordination through prime recipient.
e) Plans for resolution mechanism to avoid potential project delays (including issues that may arise among contractors and subcontractors as well as employees): Coordination through prime recipient.
f) The general contractor or Engineering, Procurement, and Construction contractor, if known: Not Applicable.
g) The primary business of the general contractor or EPC contractor: Not Applicable.

Location 9: University of Utah

a) Any known construction labor risks or threats that could cause delays to the schedule: None, administrative work only.
b) Potential public and worker health and safety risks and hazards: None
c) Known possibilities of labor disruption: None.
d) Plans for coordination among various employers (i.e., prime contractors and subcontractors): Coordination through prime recipient.
e) Plans for resolution mechanism to avoid potential project delays (including issues that may arise among contractors and subcontractors as well as employees): Coordination through prime recipient.
f) The general contractor or Engineering, Procurement, and Construction contractor, if known: Not Applicable.
g) The primary business of the general contractor or EPC contractor: Not Applicable.

2. Locations and Communities Affected

The project site is in southwestern Sutter County, in north-central California, in the center of the Sacramento Valley Basin. The current extent of the project Area of Interest (AOI), which includes the current test stratigraphic (strat) well, and all surrounding wells and test wells associated with Phase II, is contained on property owned and managed by project partner OXY Low-Carbon Ventures (OLCV). In this way, the project requires no land or lease procurement for any Phase II activities. Further, any proposed infrastructure development in later phases, which could include capture equipment or other infrastructure like

pipelines, will likely be co-located at the site of CO_2 source, separate from the natural gas combined cycle power plant, but on the property. This reduces any potential future interest in additional land (or access rights) procurement and will help localize any surface impacts within the existing property footprint.

The closest urban center to the project location is Yuba City, the seat of Sutter County, and principal city of the Yuba City Metropolitan Statistical Area (MSA) which encompasses both Sutter and Yuba Counties.

For the purposes of understanding community impact, preparing the Environmental Justice (EJ) assessment, and supplementary demographic analyses for the Justice 40 (J40) insights, the project area of interest will be defined as the Yuba-Sutter Region (also referred to as the Yuba City MSA), encompassing both Sutter and Yuba County. As it intersects with community engagement, the project area is considered fluid and subject to change (especially as engagement evolves to better meet the needs of potentially affected communities in the area), but for the purposes of analysis, the Project Team will focus on the two-county region. This is the only location from the list above that is applicable to this section, and the eight additional locations are for administrative work only.

B. Community and Labor Engagement

1. Community and Labor Stakeholders Engaged to Date

Frontier Energy, Inc., is the lead engagement coordinator and facilitator. Frontier Energy is located in neighboring Yolo County and has been involved with climate-focused engagement in the region. Additionally, Frontier Energy (then called BKi) led the outreach and education team for the West Coast Regional Carbon Sequestration Partnership initiative (funded by DOE and the California Energy Commission). It was a 10-year project that evaluated the potential resources for CO_2 storage in seven western states and drilled two CO_2 characterization wells similar to the well proposed in this CarbonSAFE Phase II project.

Organization	Engagement	First Contact	Outcome
350 Sacramento	Community Input	Q2 2023	Other
Alliance for Hispanic Advancement	Community-Engaged Project Development	Q1 2023	Letter
Center for Energy Efficiency and Renewable Technologies	Community Input	Q2 2023	Other
Coalition for Clean Air	Community Input	Q2 2023	Other
Cole Farms	Community-Engaged Project Development	Q4 2022	Other
Environmental Council of Sacramento	Community Input	Q2 2023	Other

Organization	Engagement	First Contact	Outcome
Feather River Air Quality Management District	Other	Q2 2023	Other
Gurdwara Sahib Yuba City	Community-Engaged Project Development	Q4 2022	Letter
Hoppin Family Farms	Community-Engaged Project Development	Q4 2022	Other
Lawrence Livermore National Laboratory	Technical Assistance	Q2 2021	Letter
Los Medanos College	Other	Q4 2022	Letter
Mid Valley Building and Construction Trades	Other	Q2 2023	Letter
Middletown Rancheria	Other	Q2 2023	Letter
Montna Farms	Community-Engaged Project Development	Q4 2022	Letter
Natural Resources Defense Council	Other	Q2 2023	Other
Operating Engineers Local 3	Other	Q2 2023	Other
Plumbers & Pipefitters Local Union 228	Other	Q2 2023	Other
Reason Farms	Community-Engaged Project Development	Q4 2022	Other
Robinson Rancheria	Other	Q2 2023	Other
Sacramento Municipal Utility District	Project Decision Making	Q3 2021	MOU
Shannon Farms	Community-Engaged Project Development	Q4 2022	Other
Siller Brothers Farms	Community-Engaged Project Development	Q4 2022	Other
State Building & Construction Trades of California	Other	Q1 2023	Letter
Sutter County Board of Supervisors	Community-Engaged Project Development	Q1 2023	Letter
Sutter County Fire Department	Community Input	Q1 2023	Other
Sutter County One Stop	Community Input	Q2 2023	Other
Sutter County Sheriff's Office	Community Input	Q1 2023	Other

Organization	Engagement	First Contact	Outcome
Sutter County Superintendent of Schools	Community Input	Q1 2023	Letter
Sutter-Yuba Tribal Temporary Assistance for Needy Families	Other	Q1 2023	Other
The Appeal-Democrat	Reporting Back	Q1 2023	Other
UC Davis	Technical Assistance	Q2 2023	Letter
Union of Concerned Scientists	Other	Q2 2023	Other
Van Ruiten Brothers Farms	Community-Engaged Project Development	Q4 2022	Other
Western Farm Workers Association	Other	Q2 2023	Other
Yuba City Office of the Mayor	Community-Engaged Project Development	Q1 2023	Other
Yuba College	Community-Engaged Project Development	Q1 2023	Letter
Yuba-Sutter Chamber of Commerce	Other	Q1 2023	Other
Yuba-Sutter Economic Development Corporation	Other	Q1 2023	Letter
Yuba-Sutter Farm Bureau	Other	Q1 2023	Other

2. Community and Labor Stakeholders to be Engaged

Team members have expertise and experience in a variety of community engagement strategies, including interviews, focus groups, survey analysis, geospatial analysis, planning, DEI/DEIA, and tribal outreach, and are sufficient to develop and implement the components of the plan. Frontier Energy will provide on-the-ground facilitation, leverage existing relationships to build community network(s), and help establish membership for the Community Opportunities Panel (COP Panel).

Stakeholder Group	Organizations/Groups
Academia / Local Colleges and Universities	*Yuba Community College District, Yuba College - Sutter County Center, University of California, Davis California State University Sacramento*
Utilities	*Pacific Gas & Electric*
Industry	*Agricultural Community* *Calpine Energy Operating Engineers Laborers Local No. 185*

Stakeholder Group	Organizations/Groups
	Northern California Pipe Trades Union Grow West Yuba City *Sutter Basin Corporation*
Research / Scientific Community	*National Energy Technology Laboratory* *Los Alamos National Laboratory*
Environmental Organizations	*Yuba Watershed Protection and Fire Safe Council Audubon Society* *Sierra Club, Feather River Land Trust Yolo Basin Foundation*
Local Ancestral Groups	*Yoche Dehe Winton Nation in Yolo County* *Sutter-Yuba Tribal Temporary Assistance for Needy Families (TANF)*
Local Organizations	*ClimatePlan, Multiculturism Rocks!, The Utility Reform Network*
Tribal Nations	*California Tribal Temporary Assistance for Needy Families*
Local Communities	*Robbins Elementary School, Community members in Robbins.*
Local Public Officials and Agencies	*Feather River Air Quality Management District* *County Board of Supervisors* *North Central Counties Consortium Workforce Development Board*

The following commitments will be undertaken to engage community and labor stakeholders:

Commitment B2.1: Convene a COP Panel: members will be identified and convened throughout the project to guide CBP activities based on community and labor priorities. Information from CBP activities will be shared with Panel members.

Commitment B2.2: Complete a community and labor engagement strategy and update following COP Panel meeting dates: strategies will be updated to reflect local preferences for two-way engagement in online and offline formats.

Commitment B2.3: Conduct Community and Labor Engagement (CLE): implementation of the engagement plan will be amenable based on information learned through early engagement.

Commitment B2.4: Community, Labor, and stakeholder data analysis: analysis of data from engagement will inform updates to engagement strategies as well as community and labor priorities for DEIA, workforce development, and J40 strategies.

3. Workforce and Community Agreements

The Project Team has not committed to negotiate a workforce and/or project labor agreement (PLA) for this phase of the project. As part of the scope of work under this project, the Project Team will undertake an evaluation of all relevant stakeholder groups to facilitate future agreements, as applicable. If during the project period it appears that a PLA or other agreement would be beneficial, the Project Team will reassess the appropriateness or feasibility of such an agreement.

If a workforce and/or project labor agreement (PLA) is pursued, the Project Team will facilitate any PLA to include:

1. Access to jobs and business opportunities for local residents.
2. Investments in training for local workers.
3. Commitments to pay wages and benefits above the prevailing rates for construction, when not already required.
4. Guarantees against strikes, lockouts, and similar job disruptions.
5. Effective, prompt, and mutually binding procedures for resolving labor disputes arising during the term of the agreement.
6. Listening session by GTI on perceived health, safety, and environment (HSE) risks from field contractors and employees to incorporate into Safety Audits.

4. Other Community and Labor Engagement Goals, Commitments, and Milestones

Frontier Energy will convene a COP Panel that includes technical representatives from the air pollution control district, county commissioners, the agricultural community, and the tribal Temporary Assistance for Needy Families (TANF). Frontier Energy will contribute to the project website by collecting community feedback about climate change, economics, jobs, job training, and transportation from residents and businesses in the area. In concert with local service organizations, Frontier Energy will host in-person listening sessions and virtual sessions. They will also participate in local events to raise awareness and answer community questions about the project.

Finding community partners for the following is a critical element of the community engagement efforts to: (1) Evaluate the project information in the context of the community interests and CCUS planning, (2) Suggest additional data to include, and (3) Improve the utilization of the GIS tool to be used for the duration of future CarbonSAFE phases.

C. Investing in Job Quality and a Skilled Workforce

1. Collective bargaining

The Project Team does not intend to hire additional workers outside of the core Project Team necessary to execute the project scope.

2. Union support

The Project Team does not intend to hire additional workers outside of the core Project Team necessary to execute the project scope.

3. Job quality

The Sutter CCUS project is committed to investing in and delivering benefits to the American workforce through meaningful engagement with community and labor organizations. Workforce development strategies facilitate partnership with labor unions and workforce

organizations to attract, retain, and support a skilled workforce to support the CCUS. Through these two-way engagements, the Project will facilitate any agreements the parties seek.

Workforce development strategies will build on the needs and assets identified through engagement and research. Engagement with community, workforce, and industry stakeholders will identify the skills, credentials, and educational updates needed to develop a skilled workforce for CCUS. This can include identifying needed skills training, credentialing, and educational curricula for the industry to meet workforce needs and inform diverse hiring strategies to increase accessibility by members of disadvantaged communities (DACs).

C3a. Ongoing Operations and Production Jobs

The following commitments will be undertaken to advance workforce development and invest in America's workforce.

Commitment C3a.1: Create a workplace anti-harassment and discrimination policy for work created by the project**.**

Commitment C3a.2: Identify skills, certification, educational needs for future CCUS jobs.

Commitment C3a.3: Identify and report locally defined workforce development and quality job characteristics. Through community and labor engagement, the Recipient will identify local workforce priorities.

Commitment C3a.4: Through community and labor engagement, the Recipient will identify workforce priorities to inform updates to safety and health protocols for the work to be conducted by this project to comply with OSHA safety, health, and training standards set forth in OSHA's General Duty Clause at 29 USC Section 654.

Commitment C3a.5: Identify potential local training and educational partners for CCUS and clean energy jobs. The Recipient will identify potential partners for future collaboration training, education, and certifications needed for work in CCUS and the clean energy industry.

D. Diversity, Equity, Inclusion, and Accessibility

The CarbonSAFE Diversity, Equity, Inclusion, and Accessibility (DEIA) component will support the Recipient's mission of bringing clean energy innovation that fosters diversity, equity and inclusion. This will be accomplished through intentional hiring, training, and outreach strategies with groups underrepresented in STEM fields, by promoting inclusivity through facilitating community engagement strategies designed to empower underrepresented voices and respond to community needs and concerns, as well as improving accessibility to skills training and publicly available data about the project. The DEIA component of the CB plan provides the principles and actions to guide the team in working with the community and project stakeholders to achieve these objectives.

Strategies to apply DEIA principles throughout the project include ensuring descriptions of opportunities for newly created jobs are distributed to underrepresented groups through intentional outreach strategies, collaborating with partners, minority serving institutions (MSIs), and underrepresented community organizations to identify existing programs and partnerships to support a roadmap for skills training, jobs, and job pipelines easily accessible to under-resourced communities. Additionally, the work under DEIA will promote inclusivity by improving the accessibility of publicly available data about the project and providing the structure to reflect relevant community input.

The following commitments will be undertaken to promote DEIA in the project.

Commitment D1. Create a diverse hiring and contracting strategy with DEIA-informed job descriptions, outreach, and hiring practices for proposed project jobs.

The Recipient commits to implementing a plan to reduce barriers and improve access to jobs for local and underrepresented workers, including DAC residents, those with disabilities, returning citizens, opportunity youth, and veterans. This strategy will recognize and value the assets of the local labor market and increase community benefit by increasing the opportunity for jobs to be filled by community residents. An engagement strategy ensures descriptions of opportunities for newly created jobs are distributed to underrepresented groups in STEM.

Timeline: The project expects two sets of job descriptions and outreach. One set for the jobs created during the initial phase of the project, which includes short-term employment. The second set of jobs that extend the duration of the project and beyond. Diverse hiring strategy guidelines will be planned within year 1.

Metrics: The Project Team will evaluate the demographic data describing the job descriptions, applicants, and job offers related to this project on a quarterly basis to track the success of local outreach efforts in applications and hiring practices.

Outcome: Increase diversity and equity in new jobs during the project and in future phases to increase employment opportunities in the surrounding communities.

Commitment D2: Develop partnerships for CCUS-skills training and education pipeline.

As CCUS-related jobs require the appropriate skills, certification, and education, the program will improve access to opportunities by partnering with local educational institutions, including existing collaboration with UC Davis, a designated Hispanic Serving Institution (HSI), as well as local partnerships with Yuba College. Any resulting internships or fellowships will be designed as pathways to employment in clean energy industries.

Timeline: Extends throughout the duration of the project. Partnerships with educational institutions will follow the academic calendar.

Metrics: Track partnerships established for future training and educational opportunities and demographics of potential participants.

Outcome: Develop partnerships that can increase access to opportunities created by the project.

Commitment D3: Increase access to CCUS training and educational opportunities.

The Project Team will draft guidelines for educational materials in collaboration with the industrial partner and project partners that reflect the feedback gained through community and labor engagement. Guidelines will include recommendations for collaborating with local and minority-led institutions and strategies to increase accessibility for community residents and disadvantaged populations.

Timeline: Ongoing throughout the project.

Metrics: Develop guidelines by project completion.

Outcome: Increase diversity in the future workforce through addressing access to opportunities created by the project.

Commitment D4: Promote inclusion through increased accessibility to information and communication platforms on CCUS.

The project will promote inclusion through a public access website and offline formats during community engagement events. The Project Team will compile and verify the project-related data for public consumption, which can include DEI employment data, jobs created, or technical data of the project as applicable and include a process for vetting data for the public in user friendly formats to facilitate two-way community engagement.

Timeline: Ongoing throughout the duration of the project.

Metrics: The Project Team will contribute to the project website and update data on a quarterly basis.

Outcome: Contribute to inclusion through community access to information about CCUS and the project.

E. Justice40 Initiative

The proposed project prioritizes engagement with and for the benefit of the communities and to mitigate any potential harm. Prior to plan development, integrating physical and social data will help both the Project Team and local stakeholders understand potential benefits and disbenefits/burdens associated with deploying Carbon Capture Utilization and Storage (CCUS) at the selected industrial partner and possibly other nearby emission point sources. While this project has the potential to bring investment and new jobs to the surrounding communities, jobs and environmental benefits will occur in future phases of the project. Thus, much of the discussion below addresses benefits that would primarily be realized during future phases of the full CCS project as opposed to during this immediate project and are included here for completeness.

Of the 60 total census tracts in the region, 19 qualify as an Environmental Justice Community (per EJ Screen), eight as a Disadvantaged Community (per CalEnviroScreen) that within CES4.0 fall at least above the 75th percentile, and eight qualify as both. It is important to note that any census tracts where infrastructure is tentatively proposed – including the capture facility, injection site, or any routing/transport facilities – currently qualify as an EPA-defined EJ community. However, within the census tract that contains the project area of interest (distinct from the two-county region), there were fewer than 1,400 residents estimated as of the 2020 census, equal to a population density of only 7.5 persons per square mile, which is extremely sparsely populated.

The potential subsurface CO_2 plume for this project has been modeled with available information based on a 30-year period and was found not to surpass a distance greater than 0.9 miles from the site of injection. This indicates any potential plume is completely confined well within the bounds of the project area of interest. Thus, there is no plan for mitigation beyond meeting the requirements necessary to move the project forward, including any environmental permitting and public engagement.

An initial snapshot of pertinent data available to the Project Team provides information that might result in environmental or social impacts to the community. Examples include the modeled plume extent, relevant fault lines, national conservation lands (i.e., the Wildlife Refuge and Wildlife Management Areas), environmental justice and disadvantaged community data insights, proposed development sites (including injection sites and pipeline route), existing monitoring sites, and existing wells. Given the remote nature of the site and its distance from local communities, areas of environmental concern, the proposed pipeline, and proximity to potential power plants, this is a promising location for exploring the potential for CCUS, while minimizing disbenefits, burdens, or potential harms to local communities. Yet as noted, this is a preliminary assessment and only through conversation with communities can a thorough evaluation of suitability be completed.

Many additional considerations, including endangered species habitat, sensitive or protected flora or fauna, and impaired water bodies, were also evaluated. Within the Project AOI, only two areas were identified of note. These are both protected lands – a remnant Wetland Conservation Easement overseen by the State of California, and in the south-central portion of the project AOI, the Collins Eddy Wildlife Area (12 acres) overseen by the California Department of Fish and Wildlife.
Metrics to assess benefits across the following J40 policy priorities listed below will be updated during this project timeline to be applied to future phases, where many of the benefits will be realized. Given that environmental benefits and impacts are expected in future phases, this project timeline includes preparation tasks.

- Literature review and data gathering to better understand CCUS-related information needed for J40 metrics. Preliminary work will be performed to understand the local context and enable subsequent J40 assessments.
- J40 tasks will establish the methodology to assess the following J40 policy priorities relevant to the CCUS project. Methodologies will be developed to assess each J40 metric.

- A database will be developed to facilitate J40 assessments in subsequent phases.
- Complete report of J40 metrics for application in future phases. At the completion of this project, a report will describe the metrics, database, and methodologies for subsequent J40 assessments.

1. Decrease in energy burden

Prepare for assessment of potential decreases in energy burden resulting from future phases in construction and operation.

The Recipient indicated, as reported by the DOE Low-Income Energy and Affordability Data (LEAD) tool, the Sutter-Yuba region experiences an energy burden greater than the state average. Improvements in air quality will also result in a reduction in household energy burdens. The Recipient will adopt standard operating procedures within the Project Team to assess any inequities in energy burden (and provide concrete actions to ensure benefit or mitigate any further harm) in future phases and in any new energy deployment.

Evaluation Method: Dollars saved ($) in energy expenditures due to technology adoption, accounting for existing designation as vulnerable or disadvantaged community; and energy saved [MMBTU or MWh] or reduction in fuel [GGe] by census tract, accounting for existing designation as vulnerable or disadvantaged community**.**

2. Decreased environmental exposure and burdens

Prepare for assessment of potential decreases in environmental exposure and burdens resulting from future phases in construction and operation.

Applying CCUS at the industrial partner facility will provide the opportunity to reduce multiple facility emissions—including criteria pollutants as well as greenhouse gases, which could yield air quality improvements for the region during future phases of operation. And greenhouse gas capture could include methane and nitrous oxide (NO_2) emissions, in addition to the primary CO_2 emissions.

Evaluation Method: This benefit will prioritize understanding reduction to air quality criteria pollutants.

Metrics for evaluation include:

- Avoided air pollution (CO_2 equivalents, NO_x, SO_2, and /or $PM_{2,5}$), specifically in communities with existing designation as a vulnerable or disadvantaged community.
- Remediation impacts on surface water, groundwater, and soil in communities with existing designation as a vulnerable or disadvantaged community for any CCUS storage infrastructure developed.
- Reduction in legacy contaminated waste in communities with existing designation as a vulnerable or disadvantaged community.
- Dollars saved ($) in energy expenditures due to technology adoption, accounting for existing designation as vulnerable or disadvantaged community

- Energy saved [MMBTU or MWh] or reduction in fuel [GGe] by census tract, accounting for existing designation as vulnerable or disadvantaged community

Long-Term Considerations: While the immediate air quality improvement impacts may be marginal at first, the opportunity for expansion to a CCUS hub would amplify opportunity to reduce facility emissions at other, nearby sources which could have a compounding effect on air quality in the region.

3. Increased clean energy jobs, job pipeline, and job training for individuals

Identify potential barriers and opportunities to access the clean energy job pipeline, and job training for members of DACs and underrepresented groups.

Development of both the capture facility and the storage complex will provide some employment opportunities during construction, operations, and maintenance. This will be enhanced through partnership with the tribal TANF and the community college.

Evaluation Method:

- Dollars spent ($) and/or number of participants from communities with vulnerability or disadvantaged designations in job training programs, apprenticeship programs, STEM education, tuition, scholarships, and recruitment
- Number of hires from communities with vulnerability or disadvantaged designations resulting from DOE job trainings
- Number of jobs created for communities with vulnerability or disadvantaged designations due to the DOE program
- Number of and/or dollar value ($) of partnerships, contracts, or training with minority serving institutions
- Development of longer-term workforce development roadmap to identify a more holistic ecosystem of regional job benefits and opportunity creation, which would incorporate potential training programs to address

Long-Term Considerations: The project will identify skills needed for CCUS- and clean-energy related jobs and training starting in high school and continuing through trade schools and college to prepare the local workforce for clean-energy jobs. This is a vital component in helping the region adapt to the reality of climate change.

4. Increased energy democracy

Increase energy democracy by creating opportunities for two-way engagement.

Leveraging authentic community engagement that prioritizes sharing information and community-informed decision making, the project will deploy a novel decarbonization technology and empower Yuba-Sutter region residents to be involved in a just energy transition and leverage some of the tools available for broader community decarbonization and resilience-building. With respect to concerns about potential electricity rate impacts, the team may engage The Utility Reform Network on this topic. Impacted community residents may also provide project feedback throughout all phases via the project website. Comments will be collated, analyzed, and used to inform decision making.

Evaluation Method:

- Increased access (for community members) to energy use data.

Evaluation of energy democracy will focus on information equity and empowerment through data access to guide how community members want to prioritize or become involved in broader energy planning to decarbonization and transition into new technologies.

Long-Term Considerations: California is in a unique regulatory environment for energy democracy, with calls for experimental systems of ownership and autonomy across levels and sectors of the energy system. Community engagement will demonstrate the impact that community members can make on the California Public Utilities Commission to prioritize community values and benefits and mitigate risks.

5. Increased parity in clean energy technology access and adoption

Increased parity in clean energy technology access and adoption in future phases by demonstrating how CCUS can decarbonize a local power plant.

CCUS is a technology of increasing interest in the decarbonization sector; as commercialization increases, interest in developing markets for carbon, or other financial policies, may reward early adopters. Recent heat waves in California demonstrated the need for power producers to run at peak capacity, while maximizing efficiency and minimizing environmental impacts. Demonstrating how CCUS can decarbonize a local power plant will have a ripple effect through the region. It sets the foundation for a competitive advantage for local residents and industry.

Evaluation Method:

- Percent (%) of utility-level energy supply from advanced decarbonization technologies.

Long-Term Considerations: Early adopters carry greater risk associated with the unknowns of deployment. Despite this, the rewards of successful deployment are also experienced first with those same early adopters.

6. Increased clean energy enterprise creation and contracting (Minority Business Enterprise/ Disadvantaged Business Enterprise)

Update diverse hiring strategy guidelines specific for future clean energy contracting opportunities.

The Project Team aims to include the tribal TANF in the project engagement and workforce development to ensure jobs and job training in future phases are accessible by the Native American workers in the region. The Project Team will also engage with local organizations to conduct local-level outreach. More specifics around contract requirements for Minority and Disadvantaged Business enterprises (MBE/DBE) businesses are outlined in the Diversity, Equity, Inclusion, and Accessibility (DEIA) component of the CB plan.

Evaluation Method:

- Number of contracts and/or dollar value ($) awarded to businesses that are principally owned by women, minorities, disabled veterans, and/or LGBTQ persons, as designated by the MBE/DBE classification process.
- Identification and employment of an EJ year-long fellow to work directly through the community engagement and J40 plan development and implementation, prioritizing diverse candidates with ties to the regional community.

Long-Term Considerations: This benefit seeks to leverage intentional community engagement to improve access to employment opportunities that will address historic inequities.

7. Anticipated or potential negative environmental impacts

The location of anticipated sources, pipelines, and UIC Class VI wells in areas removed from population centers like Yuba City helps mitigate potential negative community impacts, despite the proximity for potential consequences associated with well drilling and completion, CO_2 pipeline trenching, and placement, and CO_2 injection. There are some known concerns with respect to geologic carbon sequestration that will need to be discussed throughout engagement efforts, which include environmental concerns associated with wells and drilling, including:

- Any potential impacts to underground water reservoirs (and subsequently, any drinking water resources);
- Concerns related to constructing/extending pipeline;
- Subsurface CO_2 plume migration; and
- Induced seismicity.

F. Summary Table

Category and Commitment	Milestone Timeline
Community and Labor Engagement	
B2.1 - Convene a COP Panel.	Ongoing throughout project.
B2.2 - Complete a CLE communication and engagement strategy and update following COP Panel meeting dates.	PMP – M4 - throughout the project.
B2.3 - Conduct CLE engagement.	PMP - M4 - throughout the project.
B2.4 - Community and stakeholder data analysis.	Ongoing throughout project.

Category and Commitment	Milestone Timeline
Investing in Job Quality and a Skilled Workforce	
C3a.1 - Create a workplace anti-harassment and discrimination policy for work created by the project.	Completed by project conclusion.
C3a.2 - Identify skills, certification, educational needs for future CCUS jobs.	Ongoing throughout project and beyond.
C3a.3 - Identify and report locally-defined workforce development and quality job characteristics.	Completed by project conclusion.
C3a.4 - Report workforce-informed recommendations to health and safety (HSE) plans for CCUS-related work.	Ongoing throughout project and beyond.
C3a.5 - Identify potential local training and educational partners for CCUS and clean energy jobs.	Completed by project conclusion.
Diversity, Equity, Inclusion, and Accessibility	
D1 - Create a diverse hiring and contracting strategy with DEIA-informed job descriptions, outreach, and hiring practices for proposed project jobs.	PMP – M1-12.
D2 - Develop partnerships for CCUS-skills training and education pipeline.	Ongoing throughout project and beyond.
D3 - Increase access to CCUS training and educational opportunities.	Ongoing throughout project and beyond.
D4 - Promoting inclusion through increased accessibility to information and communication platforms on CCUS.	Ongoing throughout project and beyond.
Justice40 Initiative	
Literature review and data gathering to better understand CCUS-related information needed for J40 metrics.	PMP - M1- 4.
J40 tasks will establish the methodology to assess the following J40 policy priorities relevant to the CCUS project.	Ongoing throughout project and beyond.
Develop a J40 database.	Ongoing throughout project and beyond.
Complete report of J40 metrics for application in future phases.	Completed by project conclusion.
E1 - Prepare for assessment of potential decreases in energy burden resulting from future phases in construction and operation.	Ongoing throughout project and beyond.
E2 - Prepare for assessment of potential decreases in environmental exposure and burdens resulting from future phases in construction and operation.	Ongoing throughout project and beyond.
E3 - Identify potential barriers and opportunities in access to clean energy job pipeline, and job training for	Ongoing throughout project and beyond.

Category and Commitment	Milestone Timeline
members of DACs and underrepresented groups. See D1, D2, D3.	
E4 - Increased energy democracy by creating opportunities for two-way engagement. See D4.	Ongoing throughout project and beyond.
E5 - Increased parity in clean energy technology access and adoption in future phases by demonstrating how CCUS can decarbonize a local power plant.	Ongoing throughout project and beyond.
E6 - Update diverse hiring strategy guidelines specific for future clean energy contracting opportunities.	Ongoing throughout project and beyond.