

Uinta Basin CarbonSAFE II: Storage Complex Feasibility

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Updated: 1/16/2024

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Agenda

- Project Description
- Project Partners and Resources
- Community Benefits Plan (CBP) Overview
- Community and Labor Engagement
- Investing in Job Quality and a Skilled Workforce
- Diversity, Equity, Inclusion, and Accessibility
- Justice40 Initiative
- Timeline / Implementation Roadmap
- Data and Metrics
- Proposed Framework to Evaluate and Track Progress
- Potential Challenges to Successful Outcome
- A&V Updates

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Project Description

- Technical challenge
 - Determine the commercial and technical feasibility of geologic storage of CO₂ in the Uinta Basin
 - Conduct drilling, coring, and logging of stratigraphic test well
 - Extensive outcrop mapping and data sampling
- Social/environmental/labor challenge
 - Establish community relationships/partners
 - Determine the likelihood of social acceptance of CO₂ in the Uinta Basin
 - Identify and minimize any potential risks
 - Proactively consider ways to integrate community attitudes toward the project into project planning
 - Determine the appetite for Community or Labor Agreements in subsequent phases

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Project Partners and Resources



• Task Leads:

- DEIA – Rob Simmons (U. of Utah Energy & Geoscience Institute)
- Justice40 – Erin Middleton (Carbon Solutions)
- Community and Labor Engagement – Erin Middleton & Rob Simmons
 - Public Outreach & Engagement – Lori McDonald & Samantha Eldridge (U. of Utah)
- Investing in Quality Jobs – Gabriela St. Pierre (Utah Geological Survey) & Rob Simmons

• Financial Resources:

	FY 2024	FY 2025
Federal Budget	\$250,072	\$241,572
Cost Share	\$61,682	\$63,074
Total	\$311,754	\$304,646

• Advisory Board:



• Project Website:

- <https://egi.utah.edu/uinta-basin-carbonsafe/>

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Community Benefits Plan (CBP) Overview

- Goal – Build and grow relationships for future
 - Overarching intention of the CBP.
- Populations impacted
 - The closest cities are ~37 miles away, in Vernal (pop. 10,500) and Naples (pop. 2,300)
 - Project site is on School and Institutional Trust land (SITLA), near Northern Ute tribal lands
- SMART goals
 - Each plan component has one to three separate commitments and SMART goals, discussed as we present each plan

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Community and Labor Engagement

- Advisory board (Commitment B.2.1):
 - Establish an advisory board, integrating community members and those not traditionally included in outreach.
 - There will be no workforce or community agreements; description of what structure might be best moving forward, such as who would execute this kind of agreement.
- Establish multiple engagement opportunities:
 - Project website (for fact sheets, flyers, brochures)
 - Informative Videos
 - Engagement with Advisory board
 - Routine outreach meetings, reviews, surveys, forums, and site visits
- Support job pipeline:
 - Integrate findings into DEIA and Quality Jobs work

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Community and Labor Engagement Timeline*

Description	Task	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25
Community and Labor Engagement																									
In the first 90 days, create an Advisory board that includes at least two community members or group that represent disadvantaged community members, such as tribal representatives, those with low educational attainment, or those impacted by coal community closures.	I 2.1																								
Establish multiple engagement opportunities, including project website, informational videos, engagement with advisory board, and routine outreach events																									*

*Timeline has been updated to reflect input from A&V. Updated timeline is on slide 19.

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Investing in Job Quality and a Skilled Workforce

- CCUS course (Commitment 3b.2):
 - EGI will develop a course in CCUS *with a focus on geologic sequestration*, will be available to students and professionals as part of the development of EGI's new Resilient Energy Certificate program.
 - The course will provide a background in technical, environmental and policy issues relevant to carbon capture, as well as CO2 utilization and sequestration technologies.

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Job Quality Timeline

Description	Task	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	
Investing in Job Quality and a Skilled Workforce																										
By the end of the project, to advance educational opportunities in CCUS, EGI will develop a course in CCUS with a focus on geologic sequestration, will be available to students and professionals as part of the development of EGI's new Resilient Energy Certificate program. The course will provide a background in technical, environmental and policy issues relevant to carbon capture, as well as CO2 utilization and sequestration technologies.	C3.b.2																								*	

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Diversity, Equity, Inclusion, & Accessibility

- Internal training:
 - Task leads and students take University of Utah course about working in communities (Commitment D1).
 - Task leads and student undertake training related to working with Native American communities (Commitment D2).
- Increase student diversity:
 - Promote diversity in student hiring by increasing the diversity in the applicant pool, including advertising jobs at conferences or on websites that reach diverse students (Commitment D3).

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DEIA Timeline*

Description	Task	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	
Diversity, Equity, Inclusion, and Accessibility																									
In the first 60 days, work with the University of Utah to organize training related to DEIA and principles in community-based research (CBR).	D1			*																					
By the middle of the project, attend training organized by the University of Utah on working with tribal governments, with special emphasis on long-term planning and energy, if possible.	D2											*													
Promote diversity in student hiring by increasing the diversity in the applicant pool, including advertising jobs at conferences or on websites that reach diverse students.	D3																								*

*Timeline has been updated to reflect input from A&V. Updated timeline is on slide 20.

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Justice40 Initiative

- Develop Energy and Environmental Justice Assessment:
 - Description of forthcoming Energy and Environmental Justice Assessment development process, if applicable.
 - Disadvantaged communities related to health outcomes,
 - During this project no benefits/disbenefits – instead, articulate where these would occur and what these are based on research during this project.
 - Potential negative impacts:
 - Construction traffic, maintenance activities, noise, water quality,
- Create geodatabase related to project (Commitment E1)
 - Stakeholders, environmental characteristics, site information, demographic data, anticipated risks, potential benefits
 - Receive feedback from advisory board, subject matter experts, and communities about accuracy on information and important information related to siting, risks, and benefits to include

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Justice40 Timeline

Description	Task	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25
Justice40 Initiative																									
Create a geodatabase of stakeholders, physical data, geographic data, and demographic data to facilitate understanding of areas of concern to the community.	E1																							*	

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Timeline / Implementation Roadmap

- Stand-alone components:
 - Task lead/student training on working with communities and tribes
 - Develop a CCUS course
 - Hire diverse interns/postdoctoral students
 - Initial Justice 40 research
- Other tasks require more inter-related work
 - Advisory board -> Geodatabase, Engagement strategies, Community/Labor Agreements
 - Community engagement -> Geodatabase, Community/Labor Agreements

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Data and Metrics

DEIA	Justice40
<ul style="list-style-type: none"> Completion of training Number of interns/postdocs 	<ul style="list-style-type: none"> Geodatabase Amendments to geodatabase based on community/Advisory feedback Estimates of risks/benefits, in terms of jobs, population impacted, and financial benefits
Quality Jobs	Community Engagement
<ul style="list-style-type: none"> CCUS training program 	<ul style="list-style-type: none"> Advisory board meetings Number of engagement activities and people reached Reports, videos, and other products explaining CCUS

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Proposed Framework to Evaluate and Track Progress

- Tracking milestones:
 - Established major deliverable milestones
 - Biweekly project meetings to track progress
 - Quarterly report to write about progress, report completion

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Potential Challenges to Successful Outcome

Project Challenges that may impact successful implementation of the CBP

- The Uinta Basin has complex land ownership and legal jurisdictions that will need to be navigated, including federal, state, private and tribal lands
- The Uinta Basin's complex regulatory and legal environment reflects the diverse communities, which have unique needs and goals, that share the Uinta Basin
- The Uinta Basin's oil and gas industry typically experiences dramatic shifts in market conditions and demand, resulting in unpredictable workforce needs and fluctuations
- The Uinta Basin's communities may be hesitant to invest significant time or energy into a relatively short-duration research project

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Initial A&V Recommendations

1.) To aid in project management, create a list of goals and develop a timeline to accomplish each action listed above in Sections 2.1 and 2.3. For example:

- Action 1: Prepare an outreach list and timeline for recruiting members of underserved communities to the Advisory Board.
- Action 2: Prepare a timeline and target for the number of informational videos and outreach events.
- Action 3: Prepare a timeline for coordinating with the University to develop training, which may involve the expertise of a DEIA professional.
- Action 4: Prepare a timeline for coordinating with an expert to develop training related to working with Native American communities.
- Action 5: Prepare a list of sources for outreach to diverse students and create a timeline for engagement prior to recruitment.

2.) Research best practices in gathering diversity statistics and retention rates of student participants in alignment with university policy.

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Amended: Community and Labor Engagement Timeline

Description	Task	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	
Community and Labor Engagement																										
In the first 90 days, create an Advisory board that includes at least two community members or groups that represent disadvantaged community members, such as tribal representatives, those with low educational attainment, or those impacted by coal community closures.	B.2.1			*																						
Create an outreach list & invite members of underserved communities to the Advisory Board.									*																	
Create four informational videos to post to the website. and conduct four outreach events.											*													*		
Conduct at least four outreach events. At least two in-person outreach events will invite all advisory board members, including an on-site kick-off meeting and site visit and an end-of-project report and update.					*																			*		

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Amended: DEIA Timeline

Description	Task	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25		
Diversity, Equity, Inclusion, and Accessibility																										
In the first 60 days, work with the University of Utah to organize training related to DEIA and principles in community-based research (CBR). By December 2024, conduct follow-up training about DEIA and community research, with university support.	D1		*																							
By May, identify partners who can facilitate a Task Lead training session on Native American outreach. By the middle of the project, attend training organized by the University of Utah on working with tribal governments, with special emphasis on long-term planning and energy, if possible.	D2								*			*														
By May, identify at least three organizations/groups/conferences with diverse students for posting future job ads. Promote diversity in student hiring by increasing the diversity in the applicant pool, including advertising jobs at conferences or on websites that reach diverse students.	D3								*															*		
Conduct research on best practices in gathering diversity statistics and retention rates of student participants. Report results at end of project.													*											*		

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Preparation for the Interim A&V Meeting

- Provide an overview of progress made towards SMART milestones.
- Share an update on the recommendations listed on the *A&V Recommendations* slide (slide 18).
- Prepare a full list of recruitment resources utilized to expand outreach to underrepresented communities or underrepresented groups.
- Prepare a list of outreach meetings, forums, or site visits that have taken place or are planned.
- Share a list of survey questions that will be used in outreach efforts.
- Share results of engagement with Tribal representatives.
- Describe the process for identifying 2-3 new Advisory Board members from local underserved communities.
- Share progress made on securing funding for Advisory Board members from underserved communities.
- Share any outreach efforts that have taken place outside the state of Utah.
- Consider documenting training and characterization of the regulatory policy fiscal landscape surrounding these projects through blog posts, write-ups, or policy briefs.

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References

- <https://www.energy.gov/fecm/articles/infographic-carbon-capture-and-storage>
- <https://www.energy.gov/fecm/listings/fecm-homepage-fact-sheets>
- https://netl.doe.gov/sites/default/files/2023-03/CarbonSAFE%20Infographic_20220909.pdf

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