



U.S. DEPARTMENT OF
ENERGY

Fossil Energy and
Carbon Management

Demystifying CBPs
for University-Based
Projects

NETL Spring Review Meeting

Thursday, April 25th, 2024

Caleb Woodall

Agenda

1. Defining Community Benefits Plans at the R&D level
2. CBPs in the Context of the University Training & Research (UTR) Program
3. Walk-through of CBP R&D Template

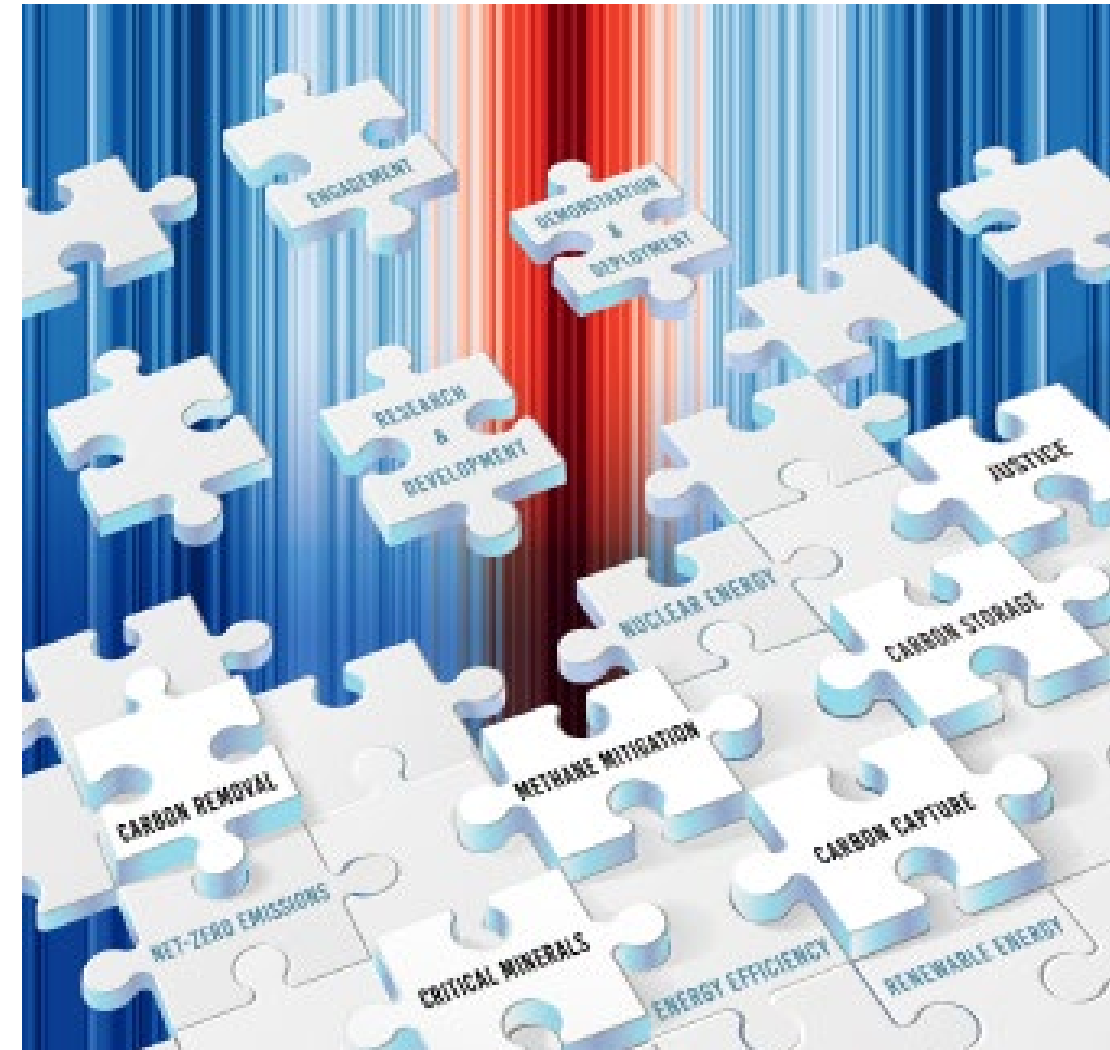


FECM Strategic Vision

To “lead a clean energy revolution that achieves a carbon pollution-free power sector by 2035 and puts the United States on an irreversible path to a net-zero economy by 2050”.

Strategic directions and related priorities:

- Advancing Justice, Labor, and Engagement
- Advancing Carbon Management Approaches toward Deep Decarbonization
- Advancing Technologies that lead to Sustainable Energy Resources



Community Benefits Plan – Overview

What it is

- *Comprehensive incorporation of four key principles into project proposals*
 - *Execution will help ensure broadly shared prosperity in the clean energy transition*
- **REQUIRED** for all BIL and IRA funding opportunities and loan applications
 - Typically 20% of merit review criteria
- **REQUIRED** for University Training & Research FOA in FY23
 - 15% of merit review criteria

What it is NOT

- Setting quotas

Instead, offers an opportunity to:

- increase diversity, creativity, and perspectives of the project team
- create partnerships to address full project scope

- Community Benefit Agreements

While a negotiated and enforceable Workforce and Community Agreement is not required, it is one of the “gold standard” outcomes of a project’s CBP.



CBP – Key Principles

Community & Labor
Engagement

Job Quality and
Workforce Continuity

Diversity, Equity,
Inclusion, & Accessibility

Justice40 Initiative



Community Benefits Plan Template(s)

A demonstration and deployment (D&D) project or program.	Research + Development (R&D)	FEED Study/ Phase One Projects
A demonstration and deployment project in phase 2-4 of a phased award. This template is suitable for most award project types. This template is appropriate for any project incorporating construction work.	A research- or lab-based study that does not include construction or deployment activities as part of the project. This template is consistent with the EERE R&D guidance in the FOA template. Any R&D project that incorporates construction work should use the D&D template.	A project that is at a phase 1 or 2 in a multiple phase award, e.g., a study that could lead to construction of facility or technology. This template contains sections that ask the Selectee to consider future workforce considerations and benefits and impacts of a project.

[Download the template:](#)



SMART milestones and adequate resources

Specific, Measurable, Achievable, Relevant, and Time-bound

Dedicated personnel and budget to ensure successful implementation



CBP – Relevance to Early-Stage R&D

Community & Labor Engagement

(omitted in R&D template)

Describe engagement with stakeholders
and organizations

Job Quality and Workforce Continuity

Articulate future workforce implications of
the innovation

DEIA

Illustrate the work's public benefit
Increase DEIA
Plan approaches to retention, engagement,
career advancement

Justice40 Initiative

Articulate how project will drive equitable
distribution of benefits from successful
innovation



DOE Justice40 Covered Programs

Federal Investments:

- Federal grant and procurements
- Financing (credit, loans, and guarantees)
- Staffing costs
- Provision of goods and services
- Others per OMB

In these areas:

- Climate change
- Clean energy and energy efficiency
- Clean transportation
- Affordable and sustainable housing
- Training and workforce development
- Remediation of legacy pollution
- Clean water and waste infrastructure

Relevant to University Training & Research





CBPs in the Context of the UTR Program

Opportunities to highlight and enhance the broader benefits of UTR projects

University Training and Research (UTR)



Historically Black Colleges & Universities and
Other Minority-Serving Institutions (HBCU-MSI)

University Carbon Research (UCR)

Education and Training Program for Next Generation of Engineers and Scientists



Applying CBPs to Various UTR AOIs

- Varying Areas of Interest (AOIs)
 - Early-stage R&D
 - Curriculum development
 - Institutional planning / R&D scoping studies
 - LCA/TEA
 - Paper-based studies for energy asset transition
- Some examples provided in the R&D CBP template do not apply
- **However, there are still opportunities to:**
 - **Highlight the inherent strengths of the proposal**
 - **Enhance the project to further increase broad benefits**



UTR Mission Objectives

1. **Educate and train** the next generation of engineers and scientists to help develop and contribute to a **highly-skilled**, inclusive, and competitive U.S. **workforce** and economy
2. **Support novel, early-stage research** at U.S. colleges and universities that advances the FECM mission of delivering integrated solutions related to fossil energy and carbon management and enable transformation to a sustainable, net-zero greenhouse gas future
3. **Increase** research and development **opportunities** for underrepresented and structurally marginalized communities within the U.S. and **tap into** the innovative and diverse thinking of student researchers at **minority serving institutions** of higher learning
4. Ensure that students are being equipped with cutting-edge, translatable **skillsets that will allow them to contribute to the U.S. workforce** and greater economy over the course of a longstanding and enduring career.



UTR Mission Objectives

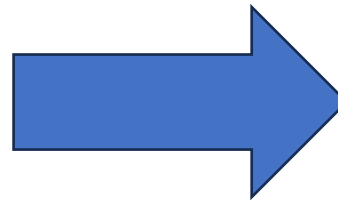
1. **Educate and train** the next generation of engineers and scientists to help develop and contribute to a **Growing the Workforce** and competitive U.S. workforce and economy
2. **Support novel, early-stage research** at U.S. colleges and universities that advance research and development of technologies needed to fossil energy and transition to a sustainable, net-zero greenhouse gas future **Deliver Benefits to Disadvantaged Communities**
3. **Increase** research and development **opportunities** for underrepresented and structurally marginalized groups in the U.S. and **tap into** the innovative and diverse talent of **MSI Capacity Building** members at **minority serving institutions** of higher learning
4. Ensure that students are being equipped with cutting-edge, translatable **skillsets that will allow them to enter the U.S. workforce** and greater economy over the course of a long-standing and enduring career. **Student Training**



Goals of CBP for UTR Projects

Story to Tell

- i. Growth of the workforce in FECM priority areas
- ii. Benefits delivered to DACs
- iii. MSI capacity building
- iv. Students trained & exposed to FECM

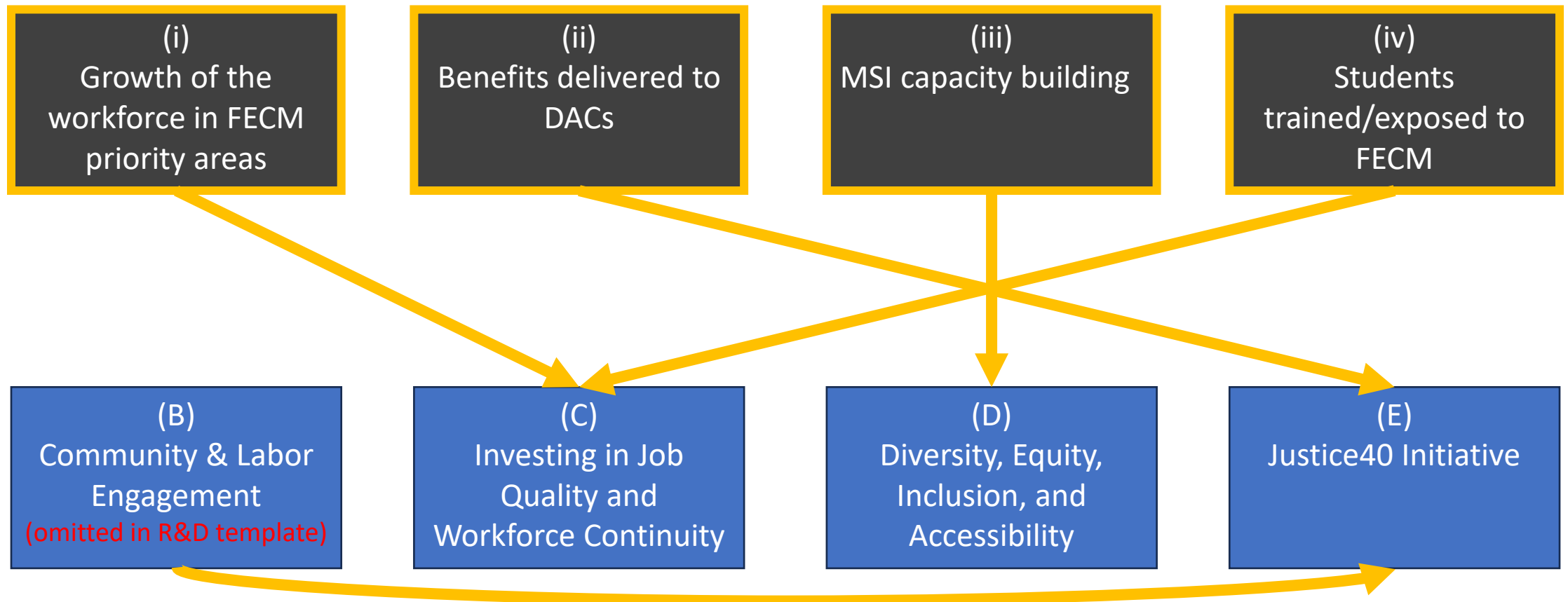


Goals to Set

- i. Tracking the fate of students impacted by UTR projects
- ii. The work, analysis, institution or students are from or within DACs
- iii. New investments in instruments, facilities, faculty, RA/TA positions
- iv. Students trained in different techniques



Capturing UTR Objectives within CBP Sections





Walk-through of CBP R&D Template

Section A: General Project Information

R&D Template

Requests “High-level description of the CBP and project”

UTR Guidance

- Provide a brief synopsis of the project’s technical objectives
 - Include roles of students
 - (if applicable) any partners involved and their roles
- Summarize each CBP component
 - Job quality and workforce
 - DEIA
 - J40



Section B: Community & Labor Engagement

R&D Template

Section omitted for R&D template

D&D Template

Calls for four sub-sections:

1. Community and Labor Stakeholders Engaged to Date
2. Community and Labor Stakeholders to be Engaged
3. Workforce and Community Agreements
4. Other Community and Labor Engagement Goals, Commitments, and Milestones

UTR Guidance

Some UTR projects may involve engagements with communities and/or labor stakeholders

- Suggest to highlight any such plans or commitments in Section E (J40)



Section C: Investing in Job Quality and Workforce Continuity

R&D Template

Example commitments provided:

- Providing above-average wages and benefits
- Provide workforce education and training
- Workers engaged in design and implementation of workplace safety and health plans
- Documenting knowledge, skills, and abilities of workers required for widespread deployment

UTR Guidance

Other beneficial commitments:

- Training students in various settings
- Tracking the destination of students at end of UTR project
- Facilitate broader workforce education and training
- Ensure students and workers are educated in workplace safety and health



Section C: Investing in Job Quality and Workforce Continuity

UTR Guidance

- Training students in various settings:
 - Lab/field/computational work
 - Presenting, publishing
 - Engaging with communities
 - Students from DACs and/or partner institutions/MSIs
- Tracking the destination of students at end of UTR project
 - Remained in degree program
 - Entered advanced degree program
 - Entered industry in a relevant field
 - Is the student a first generation to achieve any of the above?
- Facilitating broader workforce education and training
 - Development of educational materials for internal and/or external community
 - Covering costs for professional development and continuing education
- Ensure students and workers are educated in workplace safety and health
 - Safety training in all applicable project settings
 - E.g., labs, mines, power plants, geological sites



Section D: DEIA

R&D Template

Example commitments provided:

- Partnering with Business & Enterprises owned by Minorities, Women, and/or Veterans for contractor support needs.
- Implementing a plan to reduce barriers and improve access to jobs for local and underrepresented workers.

UTR Guidance

Other beneficial commitments:

- **Institutional Capacity Building**
 - Increasing the capacity for future work at all institutions involved
- **Minority-Serving Institution Involvement**
 - Involvement of any MSIs, either as prime applicant or partner
 - Whether the host (or partner) is an MSI, and whether any minority/women/veteran-owned businesses are involved



Section D: DEIA

UTR Guidance

Institutional capacity building

- Describe how the work will increase the institution's capacity to conduct future activities
 - In R&D, workforce development, and/or community engagement
- Could include (but not limited to)
 - Purchase of new equipment
 - Developing new curricula
 - Development of new partnerships
 - Hiring new research, teaching, adjunct faculty
 - Training of current faculty

Minority-Serving Institution Involvement

- Commit to promoting an MSI, either as the host institution or through a partnership
- Commit to partnering with minority/women/veteran-owned businesses for contract support

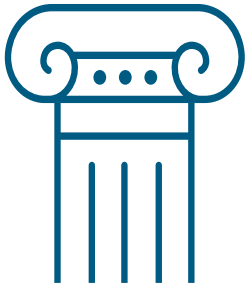
Goal:

**Develop a plan that addresses
all four pillars of DEIA**



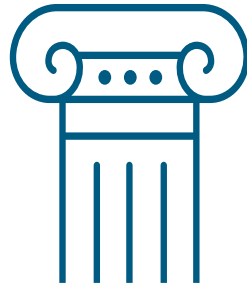
Example DEIA Plan – MSI as Prime Awardee

Diversity



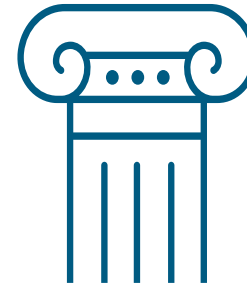
New R&D opportunities are available to a diverse student body.

Equity



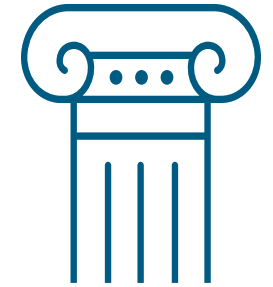
Opportunities to join R&D project are highlighted across campus.

Inclusion



Work is presented publicly in a manner comprehensible to relevant communities.

Accessibility

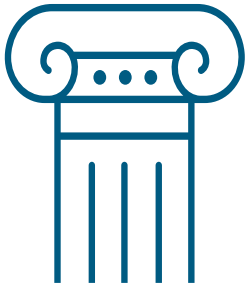


Manuscripts associated with project will be published in open access journals.



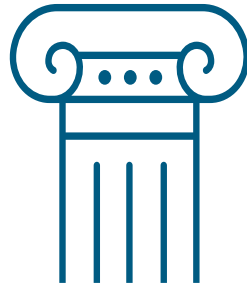
Example DEIA Plan – Curriculum Development

Diversity



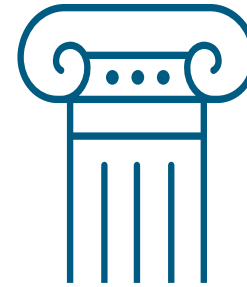
Newly developed course broadens opportunities for student education & training in FECM topic.

Equity



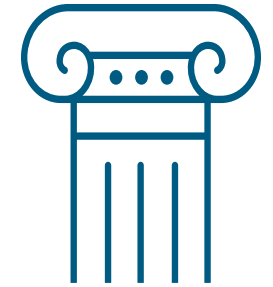
Opportunities to enroll in course are made equitably available across campus.

Inclusion



Establish plan to solicit and respond to feedback in course evaluations involving student comprehension and DEIA indices.

Accessibility



Curriculum made publicly accessible and/or shared with other institutions to broaden student reach.

Section E: Justice40 Initiative

R&D Template

Example commitments provided:

- How, when, and where the work will provide benefits to at least one DAC
- Creating a plan to engage equity and justice stakeholders in evaluating the broader impacts of the innovation
- Describe how the proposed research was strategy was informed by a wide variety of stakeholders
- Describe how a successful innovation will support economic development in diverse communities

UTR Guidance

Other beneficial commitments

- Consider how the UTR project would benefit a DAC, including:
 - Students from DACs are trained
 - DAC(s) are engaged
 - Analysis considers technology implementation within a DAC
 - Host or partner institution is located within a DAC
- Discuss community and labor engagement (section B)
 - Declare an organization or community already engaged or to-be engaged





Closing

UTR FY24 updates

Future contact

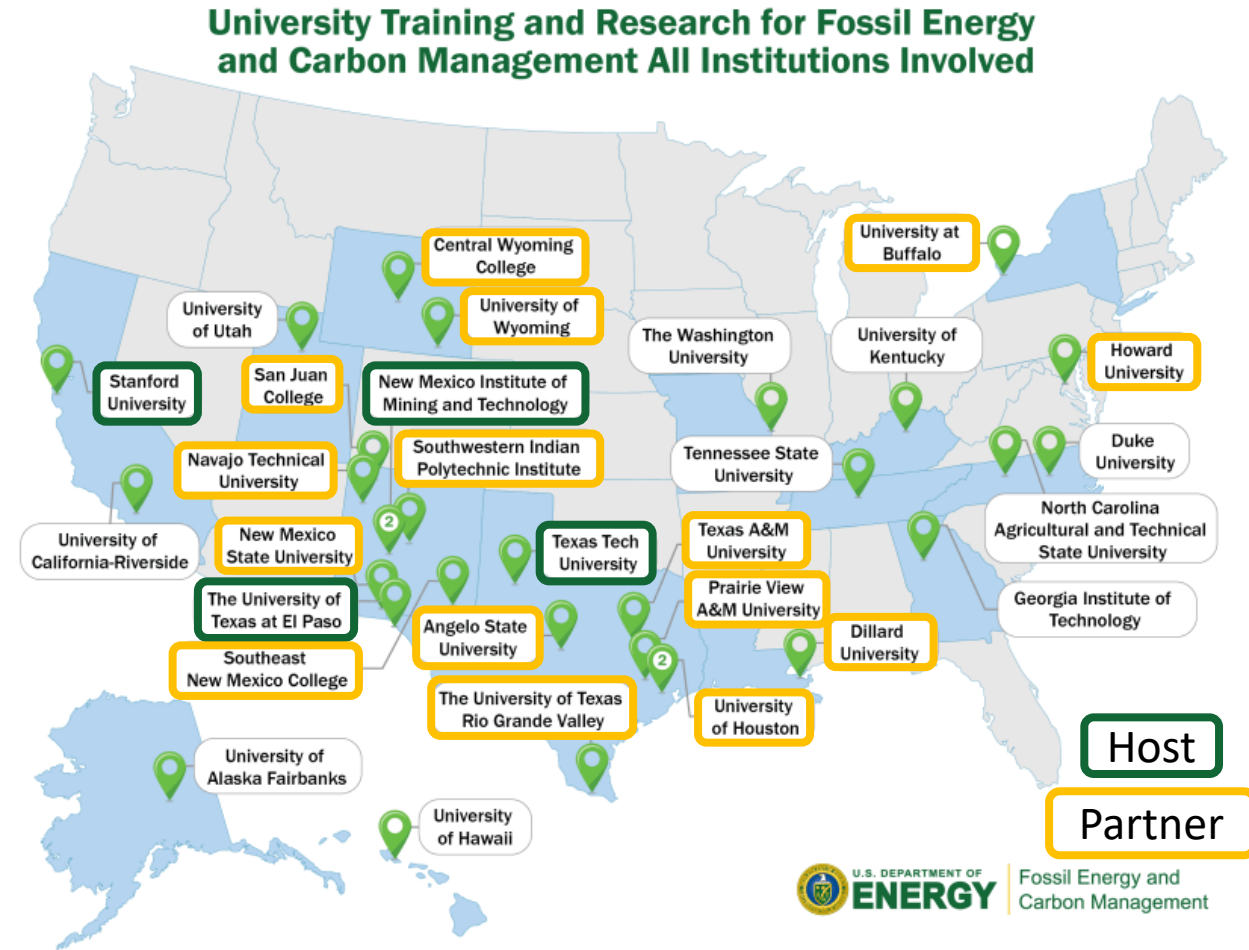
UTR Awards – FY23

- 19 projects selected to receive \$17.4 million
 - 17 different U.S. universities selected



UTR Awards – FY23

- 19 projects selected to receive \$17.4 million
 - 17 different U.S. universities selected
- 12 additional institutions involved in “Visiting Scholar Programs”



FY24: Request for Information

Growing Carbon Management Education Capacity at MSIs

Issued November 2, 2023 | Closed January 5, 2024

Purpose: Seek input regarding potential funding for workforce development efforts through new curricula on carbon management

This was only a request for information; DOE may use information collected for internal planning and decision-making purposes

Potential Benefits:

- Develop pipeline of underrepresented students into the carbon management workforce
- Broaden the network of higher-education institutions with curricula focused on carbon management
- Generate learning materials on how carbon management can be enhanced by incorporating perspectives of different cultures and communities

Topical Questions:

1. Curricula Components
2. Staffing
3. Time
4. Recruitment and Accessibility
5. Follow-on Opportunities
6. Cost



UTR Student Highlight Series

- Outstanding students nominated by professors
- Received recognition by DOE/FECM
- Additional students will continue to be highlighted



Learn more at: <https://www.energy.gov/fecm/articles/meet-fecms-2023-university-training-and-research-participants>

Questions & Follow Ups

You may enter questions on your mobile device. Responses may be used for planning purposes.



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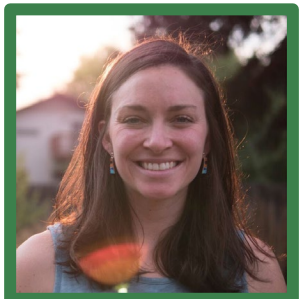
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DOE – About CBPs:

<https://www.energy.gov/infrastructure/about-community-benefits-plans>

DOE – DEIA Strategic Plan:

https://www.energy.gov/sites/default/files/2022-09/DOEDEIAStrategicPlan_1.pdf

DOE – Justice40 Initiative:

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



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CBP Template: <https://eere-exchange.energy.gov/FileContent.aspx?FileID=9848d718-ddc3-4b79-ba9c-3d0b0f155844>