

Notice of Intent No.: DE-FOA-0003013

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**This is a Notice of Intent to issue
Funding Opportunity Announcement No.: DE-FOA-0003014**

Regional Initiative for Technical Assistance Partnerships (RITAP) to Advance Deployment of Basin-Scale Carbon Transport and Storage and Community Engagement

The Department of Energy (DOE) National Energy Technology Laboratory (NETL) intends to issue a Funding Opportunity Announcement (FOA) seeking applications for financial assistance awards that would support the Office of Fossil Energy and Carbon Management’s (FECM) Carbon Transport and Storage Program. The FOA is anticipated to be issued in the fourth quarter of Fiscal Year 2023 and will be funded by the DOE Carbon Transport and Storage Research and Development program.

BACKGROUND

Over the past several years, changes in Federal tax incentives and DOE R&D efforts (incentivized by the FY21 Bipartisan Infrastructure Law- BIL) have improved the economic outlook for implementing carbon management strategies such as commercial-scale carbon capture, transport, and storage. As a result, private-sector entities have begun to formulate plans across all suitable geologic basins in the United States for large storage facilities and regional ‘carbon management hubs,’ each consisting of multiple carbon sources, storage reservoirs, and transport mechanisms, such as pipelines, that link the sources and storage locations. The demand for technical assistance in these endeavors has grown substantially, with a need for greater specificity on potential storage resources and impacted communities within a region defined by geologic basins or sub-basins. Given the multitude of stakeholders looking to develop storage projects within a given basin or sub-basin, the creation of widely distributed, place-based technical assistance partnerships focused on the basin or sub-basin scale can efficiently and safely manage storage resources at that scale.

Current Regional Initiative Projects (DE-FOA-0002000) - DOE’s Regional Carbon Sequestration Partnerships Initiative, which lasted from 2003 through 2019, was highlighted by six successful large-scale geologic carbon storage experiments (over 11 million metric tons of CO₂ safely stored collectively) and the establishment of regional teams possessing first-hand experience in conducting such projects. Building on these successes, DOE competitively awarded four new R&D projects under the FY19 Funding Opportunity Announcement titled “Regional Initiative to Accelerate CCUS Deployment” (FOA-2000). Collectively known as the “Regional Initiatives,” these four projects have a common overall objective – to identify and address challenges facing commercial deployment of carbon capture, utilization, and storage (CCUS). Each of the four projects is charged with providing a broad range of technical, procedural, and outreach assistance to CCUS efforts across a rather broad region of the U.S., as shown in Figure 1:

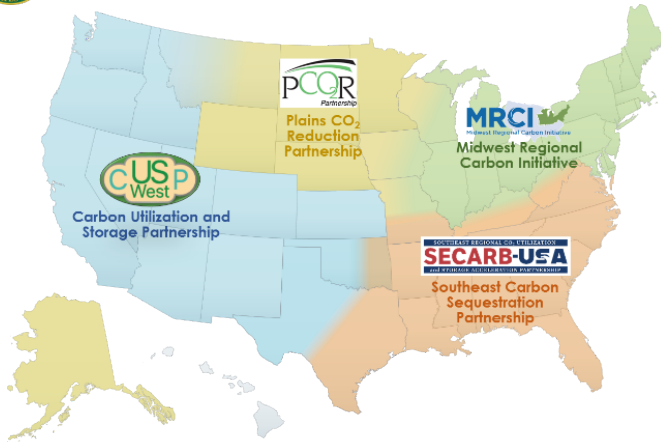


Figure 1 - Current Regional Initiative Areas

- Midwest Regional Carbon Initiative - Northeastern/Mid-Atlantic U.S. and Illinois Basin
- Southeast Carbon Sequestration Partnership – Southeastern U.S.
- Plains CO₂ Reduction Partnership – Great Plains Region
- Carbon Utilization and Storage Partnership – Southwestern and Western U.S.

The following four activities are common to all four Regional Initiative projects: (1) Addressing Key Technical Challenges; (2) Facilitating Data Collection, Sharing, and Analysis; (3) Evaluating Regional Infrastructure; and (4) Promoting Regional Technology Transfer. Overall, the Regional Initiatives are providing stakeholders in each region with crucial information to fill the cost and performance knowledge gaps as needed to enable deployment of carbon management activities, including carbon capture and storage for industrial and power sector emissions mitigation and storage-based carbon dioxide removal. The five-year performance period of these projects is scheduled to end in September 2024.

Assistance to Carbon Management Hubs (DE-FOA-0002799) - To help address the rapidly increasing demand for technical assistance, DOE issued a Funding Opportunity Announcement (FOA-2799) titled “Regional Initiative to Accelerate Carbon Capture, Utilization, and Storage (CCUS) Deployment: Technical Assistance for Large-Scale Storage Facilities and Regional Carbon Management Hubs,” which closed in December 2022. [Sixteen projects were recently selected from FOA-2799](#); negotiations for award of these projects have been initiated. One of the main objectives of this FOA (Area of Interest 1, 6 projects) is to allow multiple entities, including but not limited to the existing Regional Initiative projects, to provide technical and community engagement assistance to developers of specific, well-defined, large-scale storage facilities or regional carbon management hubs. The type of assistance provided by these projects will be similar in nature to the assistance provided by the current Regional Initiative projects, except that it will be focused on more localized needs and will include a greater emphasis on community engagement and community benefits. Projects selected under Area of Interest 2 of FOA-2799 (10 projects) will be performed by State Geologic Surveys or organizations with similar responsibilities, and will have a slightly different objective. These projects will focus primarily on assembling, organizing, and analyzing geologic data as a means of facilitating the development of future large-scale storage facilities or carbon management hubs within their respective States.

Each project selected under FOA-2799, if awarded, is expected to have a two-year duration (fall 2023 – fall 2025); the projects will be performed and managed independently from the current Regional Initiative project that covers the broad region in which the large-scale storage facility or carbon management hub (or State) is located.

Basin Scale Regional Initiative Technical Assistance Partnerships (RITAP) (DE-FOA-0003014) – The current Regional Initiative projects have set the stage for DOE’s intent to transition decades of experience and expertise in geologic carbon storage into a technical assistance program with the aim to accelerate the growth of a carbon management industry that helps us achieve our emissions reduction goals, while providing economic and environmental benefits to communities and local stakeholders. The projects selected under FOA-2799 fill a critical short-term need for data collection/analysis/sharing as well as an increased level of technical and community engagement at the more localized scale of a single storage facility or carbon management hub.

Building on the knowledge and experience gained through past and current efforts, DOE intends to transition technical assistance to address the unique challenges and opportunities of multiple storage-based projects developed within a single geologic basin or sub-basin. Challenges may include pressure interference among neighboring storage facilities, pore space and mineral rights conflicts, transportation rights-of way, diverse regulatory jurisdictions, etc. Developers of carbon storage sites may seek assistance in addressing these challenges, and the affected communities may seek to participate in the resolution of these challenges.

With DE-FOA-0003014, DOE seeks to set up multidisciplinary partnerships as a resource for stakeholders in their efforts to address the challenges within a specific sub-basinal region. Figure 2 provides **some examples** of the geologic basins for which new sub-basinal partnership projects may be sought under this FOA; however, applications seeking to establish technical assistance partnerships in geologic basins or sub-basins not shown in Figure 2 may also be sought.

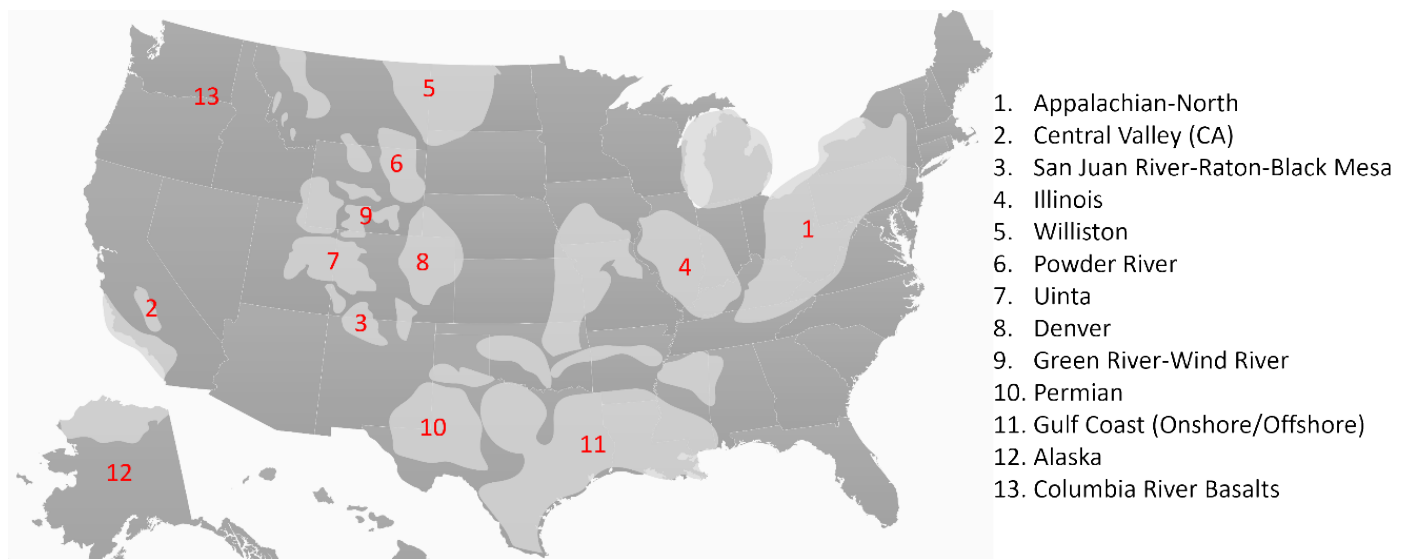


Figure 2 - Geologic basins of the U.S.

If released, this FOA is expected to make available not less than \$20 million for cost-shared R&D project(s) to support the goals of DOE’s long-term technical assistance program. A minimum non-Federal cost share of 20% of the total project value will be required. Work proposed under this FOA will have a maximum duration of 3 years. The awards are expected to become active shortly before the current FOA-2000 Regional Initiative projects end in September 2024.

The new FOA-3014 RITAP effort is designed to align with the Bipartisan Infrastructure Law (BIL) provision 40305: Carbon Storage Validation and Testing. This specific BIL provision is currently supporting the

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continuation of the [CarbonSAFE Initiative](#). A core function of the new RITAP projects will be to provide technical, informational, and educational assistance as requested by stakeholders and impacted communities involved in CarbonSAFE projects and private sector storage-based projects throughout the United States. The goal of the RITAP projects is ensure that community engagement and environmental best practices are foundational to the planning and development process of all potential future storage-based projects.

In keeping with the Biden Administration's goals, and as an agency whose mission includes strengthening our country's energy prosperity, DOE intends to use this program to support the creation of good-paying jobs, the incorporation of strong labor standards, and high-road workforce development, especially registered apprenticeship, and quality pre-apprenticeship. Future RITAP projects will support the Justice40 Initiative, which aims to provide 40 percent of the overall benefits of certain Federal investments to Disadvantaged Communities. DOE will require projects to track and report on outcomes and outputs related to environmental justice, community engagement, and consent-based siting, equity, and workforce development. Guidance on specific application and reporting requirements will be included in the program FOA.

TECHNICAL OBJECTIVES

If released, the overall objective of DE-FOA-0003014 will be to accelerate the responsible deployment of storage-based projects in specific geologic basins or sub-basins by establishing partnerships comprised of participants with extensive technical, managerial, regulatory, and business expertise specific to carbon transport and storage. Each partnership will have the capability to provide project developers, regulators, community groups, labor organizations, and other affected stakeholders with objective, unbiased technical assistance within a region defined by a specific geologic basin or sub-basin in which multiple proposed carbon storage facilities are or will be located.

Applicants will be expected to define the geographical boundaries of the proposed on- or offshore basin or sub-basin. Applicants who target geologic basins that include dedicated CO₂ storage in depleted oil and gas fields or in naturally occurring CO₂ reservoirs or geologic domes will be accepted. Technical assistance for the storage of CO₂ in hydrocarbon fields or naturally occurring CO₂ must focus on the eventual transition of these systems to dedicated storage operations without associated production, including post injection site care. CO₂-EOR in combination with stacked dedicated storage of CO₂ is also acceptable as long as technical assistance is directed exclusively toward the stacked storage component (i.e., technical assistance shall not be provided to help operators improve hydrocarbon production).

Applicants will also define the specific key stakeholders and commercial interests within their proposed sub-basin and the types of assistance they will provide. The form of assistance is expected to be a subset of the types of assistance provided by recipients of previous Regional Initiative awards under FOA-2000 and FOA-2799. For example, field work to assist industry partners in the collection of geologic and geophysical data and subsequent interpretation of these data was within the scope of projects awarded under FOA-2000 and, to a lesser extent, under Area of Interest 1 of FOA-2799. Conversely, such work should not be included within the scope of projects awarded under FOA-3014. Emphasis should be placed on technical assistance that may include:

- Expanding and strengthening partnerships with state and local officials, labor and workforce organizations, environmental groups, Tribes, industry and others and providing information to them on the role carbon management can play in meeting regional climate and energy goals, the potential environmental and economic benefits of carbon management, as well as any potential risks and risk management strategies.

- Developing and disseminating resources and tools for communities, stakeholders, and Tribes that will help them assess the opportunities for carbon management technologies and help ensure that they have accurate technical information to enable them to evaluate projects and meaningfully engage with project developers.
- Working with local universities and academic institutions to develop and disseminate scientifically accurate information about carbon management through avenues such as on-site lectures and trainings, as well as web-based or social media resources.
- Helping to train the next generation of technical professionals in the carbon storage field by assisting in the development of education and training programs at regional universities, trade schools, and/or within labor organizations' training programs. This may include development of curriculum for full college-level degrees in carbon storage or management and/or vocational training in welding, drilling, etc. specific to CO₂ transport and storage.
- Continuing basin scale basin resource assessments to support project developers, communities, resource managers and permitting agencies in the safe and efficient development of the geologic storage resource. This may include gathering of existing information to build or enhance database and geographic information systems and models to support these stakeholder groups. This does not include field work such as drilling, well testing, core collection or analysis; seismic or other geophysical data acquisition, interpretation, or analysis; etc.
- Identifying crosscutting opportunities within the basin for the recovery of geothermal energy and critical minerals, discovery of hydrogen and energy storage resources, and CO₂-EOR that can support the deployment of carbon storage projects by having associated economic benefits.
- Assistance to project developers should focus on the following:
 - Project management plans and data sharing. Applicants will provide advice, data, and apply best practices for projects development, regulatory compliance, community engagement, tax incentives, and other areas as necessary to support the most responsible deployment of carbon storage projects.
 - Integrated carbon management strategies. The applicants will be required to provide technical assistance to regulatory agencies and resource managers that will support the deployment of multiple projects across the basin and the responsible management within the basin. The applicants will help facilitate communication between regulatory agencies, resource managers, and project developers. The applicants will work closely with programs such as Carbon Basin Assessment and Storage Evaluation (CarbonBASE) requested in the FY2024 Budget Request to Congress and CarbonSAFE that will be conducting field efforts and developing basin scale tools.
 - Monitoring, Reporting and Verification (MRV) plan development. Support the application of best practices in project development plans for MRV associated with permit applications, tax credit requirements, and business plans.
 - Pore and pressure space management and optimization. Support the use of best practice in the planning, development, and operation of projects to effectively manage subsurface pressures to reduce risks and maximize pore space utilization for carbon storage.
 - Basinal/local impact assessments to better inform risk management strategies. Work with any CarbonBASE program to provide technical assistance that could support the development of multiple projects in a basin or sub-basin, such as considering potential interference among projects or optimizing permitting and leasing practices.
 - Legal and regulatory issues affecting deployment (intra and interstate). Applicants will be required to identify any legal or regulatory barriers or challenges in their region and work across permitting and resource agencies within the boundaries of the basin or sub-basin to facilitate sharing of best practices and encourage engagement with project developers and communities.

- Carbon transport planning and safety assistance. Where appropriate the applicant may provide assistance in best practices, education, and engagement focused on the planning of carbon transport infrastructure necessary for project and basin scale development of carbon storage.
- Engagement: Applicants will provide social science support and expertise in developing effective community, stakeholder, and Tribal engagement strategies to improve outcomes for project developers and communities.

DOE will **not** accept questions at this time regarding issuance of the potential FOA. Details on how to submit questions and comments will be provided in the FOA, when issued.

Additional Information on the current Regional Initiative awards may be accessed at:

<https://netl.doe.gov/carbon-management/carbon-storage/regional-initiative-to-Accelerate-CCUS-deployment>

Additional Information on the project selections under FOA-2799 may be accessed at:

[2799 Selection Announcement](#)

SUBMISSION AND REGISTRATION REQUIREMENTS FOR FULL APPLICATION

If the FOA is released, it will be posted at Grants.gov (<http://www.grants.gov>) and at FedConnect (<http://www.fedconnect.net>). Entities interested in applying for awards under the FOA are strongly encouraged to register at these sites to receive notification of announcements regarding the FOA. If DOE decides to issue the FOA, applications can only be submitted through Grants.gov.

There are several one-time actions that must be completed before submitting an application in response to this Funding Opportunity Announcement (FOA) (e.g., obtain a Unique Entity Identifier (UEI), register with the System for Award Management (SAM), register with Grants.gov, and register with FedConnect.net to submit questions). It is vital that applicants address these items as soon as possible. Some may take several weeks, and failure to complete them could interfere with an applicant's ability to apply to this FOA. Applicants who are not registered should allow up to **44 days at a minimum to complete these requirements**

- **UEI** - Applicants must obtain an UEI from the SAM to uniquely identify the entity. The UEI is already available in the SAM entity registration record.

NOTE: Subawardees/subrecipients at all tiers must also obtain an UEI and provide the UEI to the Prime Recipient before the subaward can be issued.

- **SAM** - Applicants must register with the SAM at <https://www.sam.gov/> prior to submitting an application in response to this FOA. Designating an Electronic Business Point of Contact (EBiz POC) and obtaining a special password called an MPIN are important steps in SAM registration. Failure to register with SAM will prevent your organization from applying through Grants.gov. The applicant must maintain an active SAM registration with current information at all times during which it has an active Federal award or an application under consideration. More information about SAM registration for applicants is found at: https://www.fsd.gov/gsafsd_sp?id=gsafsd_kb_articles&sys_id=650d493e1bab7c105465eaccac4bcbb.

NOTE: If clicking the SAM links do not work, please copy and paste the link into your

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➤ **Grants.gov** - Applicants must register with Grants.gov and set up your Workspace. You cannot submit an application through Grants.gov unless you are registered. Please read the registration requirements carefully and start the process immediately.

- 1) The Authorized Organizational Representative (AOR) must register at:
<https://apply07.grants.gov/apply/OrcRegister>
- 2) An email is sent to the E-Business (E-Biz) POC listed in SAM. The E-Biz POC must approve the AOR registration using their MPIN from their SAM registration.

More information about the registration steps for Grants.gov is provided at:
<https://www.grants.gov/web/grants/applicants/registration.html>

In addition:

- Add a Profile to a Grants.gov Account: A profile in Grants.gov corresponds to a single applicant organization the user represents (i.e., an applicant) or an individual applicant. If you work for or consult with multiple organizations and have a profile for each, you may log in to one Grants.gov account to access all of your grant applications. To add an organizational profile to your Grants.gov account, enter the UEI for the organization while adding a profile. For more detailed instructions about creating a profile on Grants.gov, refer to: <https://www.grants.gov/web/grants/applicants/registration/add-profile.html>
- *EBiz POC Authorized Profile Roles*: After you register with Grants.gov and create an Organization Applicant Profile, the organization applicant's request for Grants.gov roles and access is sent to the EBiz POC. The EBiz POC will then log in to Grants.gov and authorize the appropriate roles, which may include the AOR role, thereby giving you permission to complete and submit applications on behalf of the organization. You will be able to submit your application online any time after you have been assigned the AOR role.

NOTE: When applications are submitted through Grants.gov, the name of the organization applicant with the AOR role that submitted the application is inserted into the signature line of the application, serving as the electronic signature. The EBiz POC **must** authorize people who are able to make legally binding commitments on behalf of the organization as a user with the AOR role; **this step is often missed and it is crucial for valid and timely submissions.**

For more detailed instructions about creating a profile on Grants.gov, refer to:
<https://www.grants.gov/web/grants/applicants/registration/authorize-roles.html>

To track your role request, refer to:
<https://www.grants.gov/web/grants/applicants/registration/track-role-status.html>

Questions relating to the **registration process, system requirements, or how an application form works** must be directed to Grants.gov at 1-800-518-4726 or support@grants.gov.

➤ **FedConnect.net** - Applicants must register with FedConnect to submit questions. FedConnect website: www.fedconnect.net.

This NOI is issued so that interested parties are aware of the DOE's intention to issue a FOA in the near term. Any information contained in this NOI is subject to change.

No Full Applications are being accepted at this time.