



U.S. DEPARTMENT OF
ENERGY

Fossil Energy and
Carbon Management

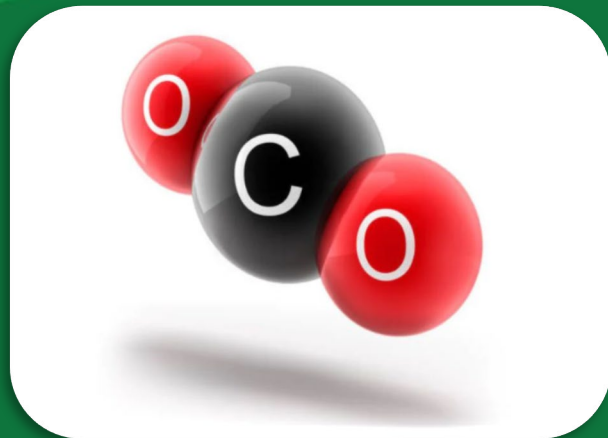
Federal Financing Mechanisms Available to Project Developers

USE-IT Act CCUS Permitting Taskforce

Robert Smith

*Carbon Transport and Storage (CTS) Program
Office of Fossil Energy and Carbon Management*

May 22, 2024



Bipartisan Infrastructure Law (BIL)

Provisions Managed by FECM Carbon Transport & Storage Division

SEC. 40303 Carbon Capture Front End Engineering Design (FEED) Studies for Transport Infrastructure
\$100 million/5 years (FY2022-2026)

SEC. 40304 *Carbon Dioxide Transportation Infrastructure Finance and Innovation (CIFIA)
\$2.1 billion/5 years (FY2022-2026)

SEC. 40305 Carbon Storage Validation and Testing: \$2.5 billion/5 years

Other Provisions Relevant to Transport and Storage

SEC. 40306 Support for UIC Class VI permitting and state primacy efforts: \$75 million

SEC. 40307 Geologic Carbon Sequestration on the Outer Continental Shelf

SEC. 40314 DOE will deploy \$8 billion for regional clean hydrogen hubs and project financing, including at least one of four projects using fossil fuels with carbon management

SEC. 40601 Orphan Well Site Plugging, Remediation, and Restoration: \$4.7 billion

* Managed in partnership between FECM and Loan Programs Office (LPO)

Transport Pre-FEED/FEED Studies

Pre-FEED Study Objective:

To support advancements in infrastructure engineering and conceptual design needed for large-scale transport projects.

Up to 12 months

FEED Study Objective:

Accelerate the planning and development of CO₂ transportation infrastructure by a variety of modes, such as through rail, trucks, ships, and pipelines.

Up to 24 months

Front-End Engineering Design for CO₂ Transport

FEED Scope:

- **Engineering and Design Package**
 - Route report and map (i.e., wetlands and environmental)
- **Design basis document**
- **Critical safety and risk assessments**
 - Air dispersion and potential impact radius study, Emergency Response Plan, and redundant safety design
- **Environment, Safety & Health and Regulatory Plan analysis**
- **Community Benefits Plan**
- **Cost and Business Case**



Transport Pre-FEED/FEED Studies cont.

Study Type	Mode/Project Type	Project General Location(s)	*Contingent Transport Capacity (MMTPA)	Selectee/Awardee
Pre-FEED	Multimodal Hub	OH/PA/WV	3.4+	FOA Release #1 Selectee
Pre-FEED	Multimodal Hub	Tampa Bay area, FL	2+	FOA Release #1 Selectee
FEED	Pipeline	WY	25	FOA Release #1 Awardee
FEED	Pipeline	LA/TX	250	FOA Release #1 Awardee
FEED	Pipeline	WY/SD/MT	60	FOA Release #2 Selectee
FEED	Barge	OR/WA/CA	1+	FOA Release #2 Selectee
FEED	Barge	FL/LA	1+	FOA Release #2 Selectee
FEED	Barge	AL/MS/LA	2+	FOA Release #2 Selectee

*Values are approximated based on preliminary findings and subject to change

NOTE: The plus sign (+) means potentially scalable

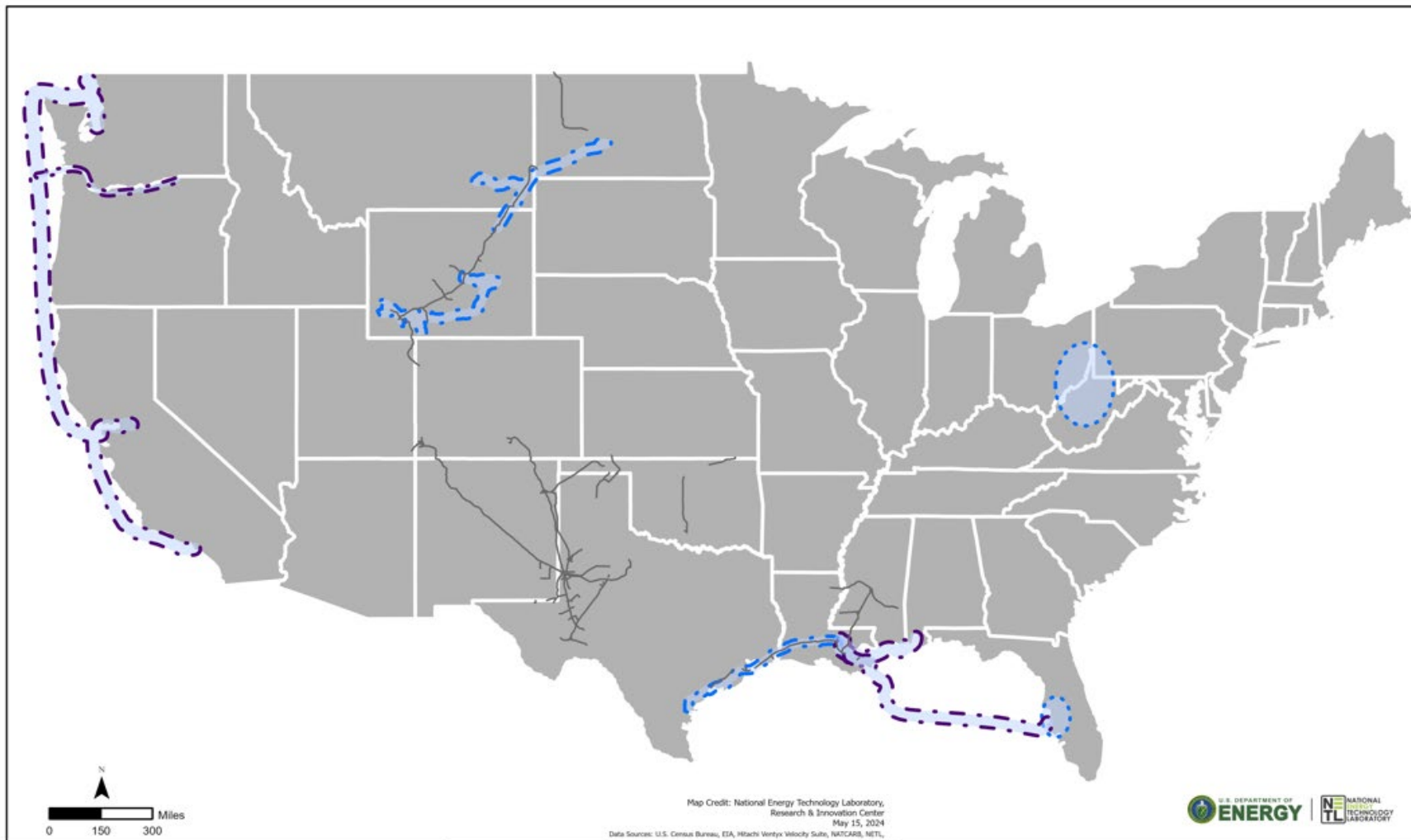
FOA: Funding Opportunity Announcement

MMTPA: Million Metric Tonnes per Annum

Total:

344.4+ MMTPA

Map of Transport Pre-FEED/FEED Studies



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CO₂ Transportation Infrastructure Finance & Innovation Program of Loans & Grants

BIL Funding: \$2.1B with credit subsidy of approx. \$20B

Objective: Offers access to capital for large-capacity, common-carrier CO₂ transport infrastructure projects to transport CO₂ from points of capture to conversion facilities and/or storage wells.

Transport Modes: Pipeline, rail, truck, ship & barge



*CIFIA funding of up to 80% of project costs

CIFIA Program*

Loans

New & re-purposed transport infrastructure

Future Growth Grants

Building excess capacity on new/existing infrastructure



Some CIFIA Program Key Eligibility Requirements

- Is a common carrier CO2 transportation infrastructure project in the United States, with total project costs greater than \$100 million, that will transport CO2 captured from anthropogenic sources and/or ambient air by pipeline, shipping, rail, or other transportation infrastructure for storage or use.
- Can attract public and/or private investment to fund Project costs not covered by the CIFIA Loan, as evidenced by binding commitments and/or expressions of interest from other potential funders.
- Will publish a publicly available tariff with just and reasonable rates, terms, and conditions for nondiscriminatory CO2 transportation service.

NOTE: See “CIFIA Program Guide” for the full list of requirements



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[Click here to visit the CIFIA
Program webpage](#)

CIFIA Loan Application Process



NOTE: Project shape and scale may impact these timelines



Fossil Energy and Carbon Management



[Click here to visit the CIFIA Program webpage](#)

CIFIA Loan Pre-Application Consultations

Potential applicants to CIFIA may request free, informal Pre-Application Consultations with DOE by visiting the CIFIA webpage at www.energy.gov/lpo/cifia or by sending an email to CIFIA@hq.doe.gov.

During Pre-Application Consultations, DOE will:

1. Evaluate Project eligibility for CIFIA,
2. Determine whether the project is ready to proceed with a CIFIA Application,
3. Discuss the phases of the process to get a CIFIA Loan, and
4. Answer questions that the potential Applicant may have.

Based on Pre-Application Consultations, DOE/Loan Programs Office may invite potential Applicants to submit a Letter of Interest on Projects deemed Ready to Proceed.



CIFIA Future Growth Grant Eligibility Requirements

Future Growth Grant (FGG) FOA now issued! LPO also posts revised CIFIA Guidance Document on CIFIA Program Website

In General: A FGG application must meet CIFIA program eligibility requirements of a base project and additional requirements stated in the FOA. Grant applications will follow a similar process of an LOI and Application as described in the FOA.

Funding Opportunity Announcement (FOA) Number: DE-FOA-0002966

FOA Type: **Amendment 000001**

Assistance Listing Number: 81.089, Fossil Energy Research and Development

FOA Amendment 000001 Issue Date:	05/16/2024
Submission deadline for Letter of Interest:	08/15/2024 5:00pm ET
Submission Deadline for Full Applications:	09/30/2024 5:00pm ET
Expected Date for DOE Selection Notifications:	January 2024
Expected Timeframe for Award Negotiations:	February to June 2024



Source: Virginia Mercury

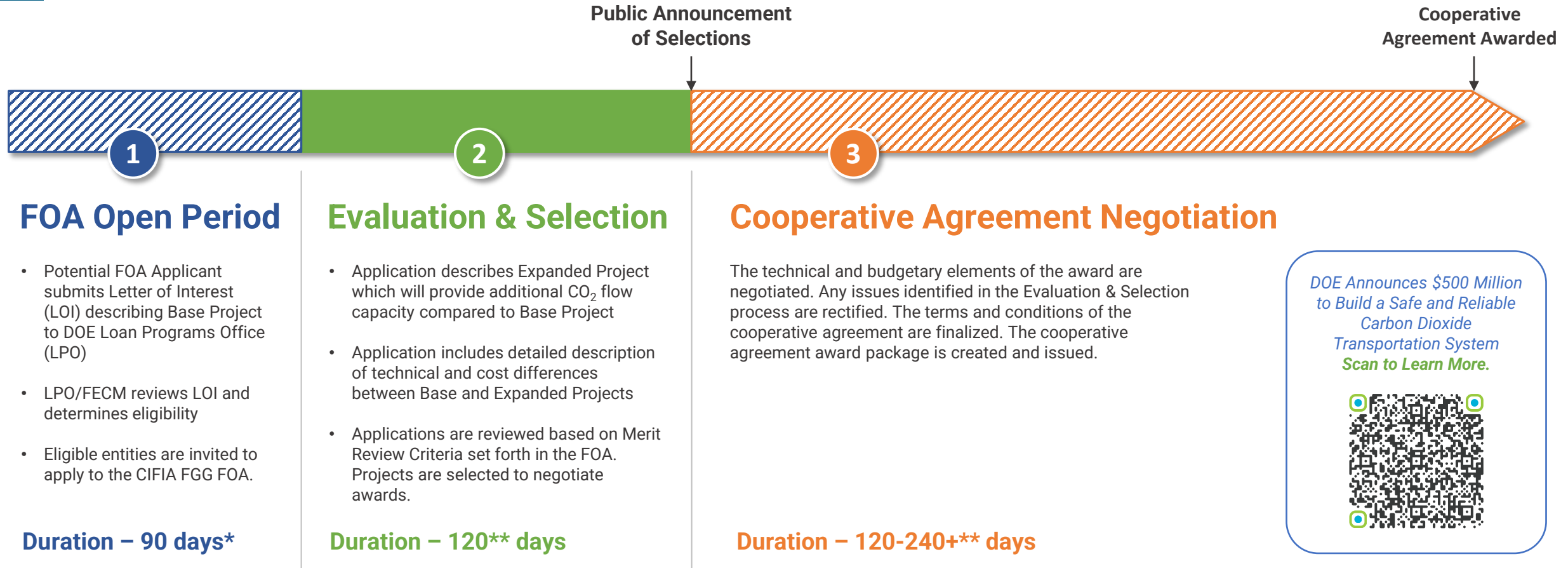


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[Click here for CIFIA FGG Opportunities](#)

CIFIA FGG Application Process



*DOE may extend FOA Open Period to allow additional time for submission of Applications

**Size, scope, and complexity of a project may lead to longer durations.

Note: Only entities with a suitable Base Project (large-scale CO₂ transport system of >\$100 million) are eligible to apply for Future Growth Grants

Thank You!



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<https://www.energy.gov/fe/office-fossil-energy>

Sign up to receive DOE FECM's email updates [here](#).

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