



# DE-LC-000L101

## FY23 Office of Fossil Energy Carbon Management (FECM) Technology Commercialization Fund (TCF) Base Annual Appropriations Lab Call

Informational Webinar  
March 13, 2023, 1 p.m. ET



# Housekeeping

- All applicants are strongly encouraged to carefully read the entire lab call and adhere to the stated submission requirements.
- This presentation summarizes the contents of lab call. If there are any inconsistencies between the lab call and this presentation or statements from DOE personnel, the lab call is the controlling document and applicants should rely on the lab call language and **seek clarification from OTT and FECM at [FECM-TCF@hq.doe.gov](mailto:FECM-TCF@hq.doe.gov)**.
- Everyone has been placed on mute.
- **Please provide your questions through the Q&A feature.** All questions will go into the formal Q&A log and will be answered and publicly posted to Exchange.
- The Informational Webinar will be recorded and sent to the National Lab TTO POCs listed in Appendix B of the lab call.

# Agenda

- Webinar Purpose
- Background
- Key Dates
- General Information
- Eligibility
- Cost-Share
- Topics
- Partnering
- Diversity, Equity, Inclusion, and Accessibility (DEIA)
- Concept Paper Stage
- Full Application Stage
- Selections and Notification
- Project Administration and Reporting
- Questions

## Webinar Purpose

- The purpose of today's webinar is to:
  - **Provide an overview of the lab call**



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# Background

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# Background

- This lab call focuses on advancing four customized, technology-focused areas under the Office of Fossil Energy Carbon Management (FECM) within the U.S. Department of Energy (DOE).
- The Department of Energy Technology Commercialization Fund (TCF) was established by Congress through the Energy Policy Act of 2005<sup>1</sup> and reauthorized by the recent Energy Act of 2020<sup>2</sup> to “promote promising energy technologies for commercial purposes.”
- Within DOE, the Office of Technology Transitions (OTT) is charged with leading policy and programs related to technology commercialization.

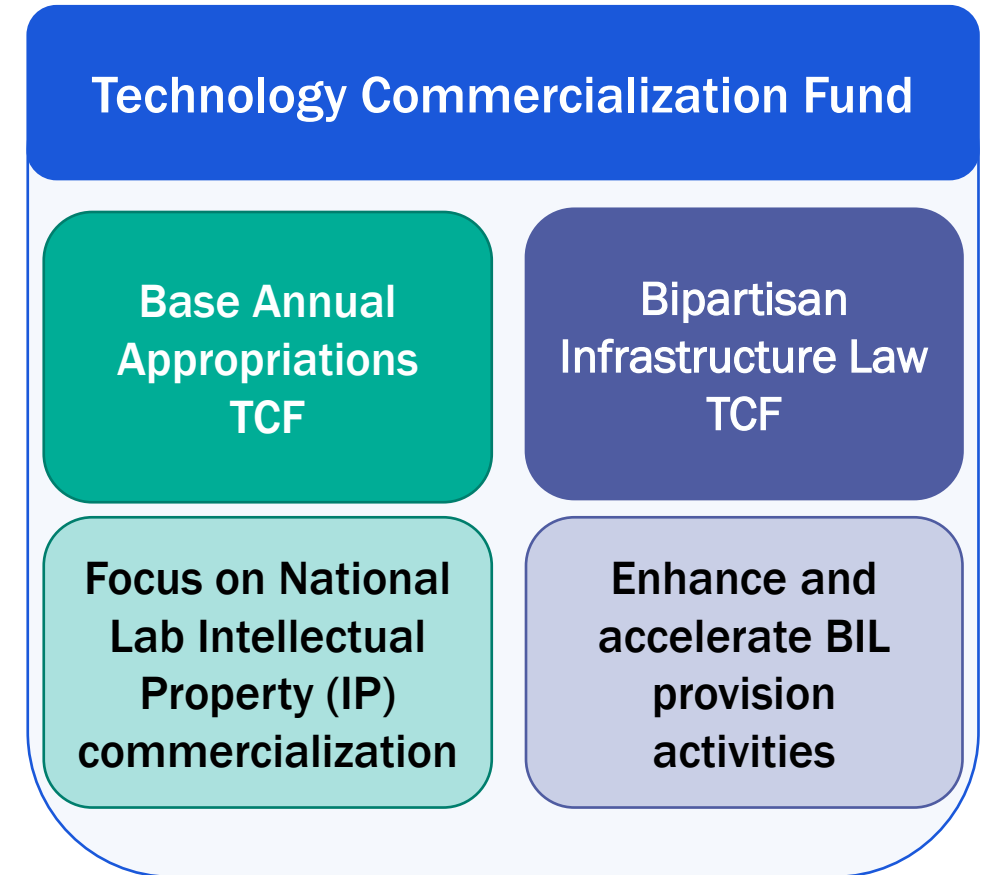
1. Energy Policy Act of 2005, Public Law 109–58, 109<sup>th</sup> Cong. (August 8, 2005), *Improved technology transfer of energy technologies*, 42 U.S. Code § 16391 (a).

2. Consolidated Appropriations Act, 2021, Public Law 116–260, 116<sup>th</sup> Cong. (December 27, 2020), 134 Stat. 2597, Sec. 9003.

<https://www.congress.gov/116/plaws/publ260/PLAW-116publ260.pdf>.

# Technology Commercialization Fund (TCF) Overview

- **Base Annual Appropriations TCF:**  
Nearly \$30M funding opportunity that leverages funding in the applied energy programs to mature promising energy technologies with the potential for high impact across DOE's RD&D and commercial application continuum.
- **Bipartisan Infrastructure Law TCF:**  
The BIL provided more than \$62B to DOE for RD&D and commercial application. OTT seeks to cultivate a broader innovation network around the BIL provision activities to enable faster replication and scaling of demonstration projects.





# What is Base Annual Appropriations TCF?

The TCF uses 0.9 percent of the funding for DOE's applied energy research, development, demonstration, and commercial application budget for each fiscal year from the:

- Office of Electricity
- Office of Energy Efficiency and Renewable Energy
- Office of Fossil Energy and Carbon Management
- Office of Nuclear Energy
- Office of Cybersecurity, Energy Security, and Emergency Response.

For FY23, DOE's approach to the Base Annual Appropriations TCF offered applied energy programs two options for deciding how to obligate their funding:

- 1) Program-Led, Technology-Specific Commercialization Programs
- 2) Joint "Core Laboratory Infrastructure for Commercialization for Market Readiness (CLIMR)" Lab Call





# FY23 TCF Base Annual Appropriations Options, contd.

For FY23, program offices have two options for deciding how to obligate their FY23 TCF funding:

## 1. Program-Led, Technology-Specific Commercialization Programs:

DOE program offices were given the opportunity to develop their own proposed use of TCF funding that meets the statutory requirements of TCF. These proposed activities can leverage or expand existing technology-specific commercialization programs or create new ones. However, programs must coordinate these activities with OTT, and the focus must remain on funding to National Laboratories to promote the commercialization of DOE-funded technologies.

## 2. Joint “Core Laboratory Infrastructure for Commercialization for Market Readiness (CLIMR)” Lab Call:

DOE program offices were given the opportunity to work with OTT and develop a multiple program office joint lab call that combines available appropriated TCF funding to address systemic challenges, core barriers, and known gaps impeding National Laboratory commercialization of promising energy technologies. For FY23, the joint lab call will also solicit collaborative technology-specific partnerships between National Laboratories and private sector companies in a similar manner to previous years’ iterations of the TCF.

For FY23, FECM has elected to use its Base Annual Appropriations to fund both **Program-Led, Technology-Specific Commercialization Programs under this lab call**, in addition to the Core Laboratory Infrastructure for Commercialization topics (Topics 1, 2, 3, 5, and 6) under the FY23 TCF Base CLIMR Lab Call (DE-LC-000L098).

# What will be discussed today

## TCF Base Annual Appropriations Program-Led Lab Call for FECM

Several of the technology areas covered by FECM's strategic vision have critical gaps that impede their deployment and ultimate ability to meet the Administration's goal of net-zero greenhouse gas emissions by 2050. **The intent of the FECM program-led commercialization topics (Topics 1, 2, 3, and 4) are to address these critical gaps by developing and commercializing new technologies.**

This solicitation offers an opportunity for private industry to partner with DOE's National Labs to advance energy-related technologies and lab-developed IP toward commercialization. The main objective of these four topics is to mature and commercialize promising technologies that can meet the Administration's 2030 and 2050 goals.

# Key Dates

KEY DATES	
Solicitation Issue Date	March 3, 2023
Informational Webinar	March 13, 2023, 1 p.m. (ET)
PROPOSAL DEADLINE AND DECISION DATES	
Submission Deadline for Concept Papers	April 7, 2023, 3 p.m. (ET)
Release of Encourage or Discourage Decisions on Concept Papers Back to Labs	April 26, 2023
Submission Deadline for Full Applications	May 25, 2023, 3 p.m. (ET)
Expected Date for Selection Notifications	Q4 FY23

# General Information

Means of Submission for Applications	<p><u>Concept papers:</u> Email to <a href="mailto:FECM-TCF@hq.doe.gov">FECM-TCF@hq.doe.gov</a> with subject line “FECM TCF CONCEPT PAPER TOPIC [insert the applicable topic number]”</p> <p><u>Full applications:</u> Exchange (DE-LC-000L101)</p> <p>DOE will not review or consider proposals submitted through other means.</p>
Total Amount to be Provided	DOE estimates to make available approximately \$8 million – \$11 million of Federal funding for award under this Solicitation pending program direction and go/no-go decision points.
Number of Selections	The number of selections will depend on the number of meritorious proposals and the availability of congressionally appropriated funds.
Estimated Project Duration:	1–3 years
Eligible Entities	All U.S. Department of Energy National Laboratories and facilities
Cost Share	This lab call is subject to Section 988(c) of the Energy Policy Act of 2005 regarding cost share. DOE prefers all funded projects to meet 50% of the total project cost-share fund requirement; however, DOE acknowledges that some potentially high-impact proposed projects may not be able to meet this requirement. In this case, labs may apply with 30% cost share. The scoring criteria reflect that providing cost share will increase the likelihood of selection.
Submission of Multiple Proposals	There is no limit on the number of concept papers or applications that each National Laboratory ORTA TTO may submit.
Questions	<p>FECM TCF lab call solicitation: <a href="mailto:FECM-TCF@hq.doe.gov">FECM-TCF@hq.doe.gov</a></p> <p>Using the online application portal: <a href="mailto:eere-exchangesupport@hq.doe.gov">eere-exchangesupport@hq.doe.gov</a></p>



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# Eligibility

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# Eligibility

**Only DOE National Laboratories and facilities** are eligible for funding from this lab call.

- All applications must be submitted to DOE from each lab's respective Office of Research and Technology Application (ORTA) Technology Transfer Offices (TTOs).
- Applications received from offices other than a lab's ORTA will be rejected.
- All other National Laboratory offices and programs must coordinate with their respective TTOs to submit applications.
- There is no limit on the number of concept papers or full applications that each National Laboratory ORTA TTO may submit.
- To be eligible to apply to this call, a full application must be submitted.
- Applicants are encouraged to submit a concept paper. Applicants who have submitted a concept paper will receive a non-binding "encourage" or "discourage" determination.
- Applicants may proceed to submit a full application regardless of this determination.
- Applicants may submit a full application regardless of whether they submitted a concept paper.



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# Cost-Share

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# Cost Share

This lab call is subject to Section 988(c) of the Energy Policy Act of 2005 regarding cost-share. DOE prefers all funded projects to meet 50% of the total project cost-share fund requirement; however, DOE acknowledges that some potentially high-impact proposed projects may not be able to meet this requirement. In this case, labs may apply with 30% cost-share so that DOE can see the full array of high-quality proposals. The scoring criteria reflect that providing cost-share will increase the likelihood of selection.

- DOE has approved a Cost-Share Waiver to reduce cost-share for topics 1, 2, 3, and 4 of this lab call. This was done to ensure all project ideas can apply and the most impactful mix of projects can be selected. Applications with a cost-share below the default cost-share level of 50% must meet a cost-share level of 30%.
- DOE will evaluate the level of external industry engagement and collaboration as evidence by cost-share to ensure maximum impact of the selected projects.
- The final cost-share requirements for each proposed project will be set at the time of selection and will not be changed during the life of the award. Cost-share requirements will be established on a budget period basis during project negotiations and prior to final project award.



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# Topics

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# Topic 1. Carbon Dioxide Removal Monitoring, Reporting, and Verification

Carbon dioxide removal (CDR) is an essential piece to meeting our goal of net-zero greenhouse gas emissions by mid-century. There are several types of systems for CDR that can remove CO<sub>2</sub> from the atmosphere and sequester it in various forms (e.g., carbonate minerals, bicarbonate anions, soil organic carbon); all of which present unique challenges in quantifying the volume of CO<sub>2</sub> sequestered over time. To ensure durable and long-lasting sequestration of CO<sub>2</sub>, we must develop and commercialize robust and reliable monitoring, reporting, and verification (MRV) protocols.

FECM is seeking proposals involving lab-developed technologies for development and commercialization of MRV protocols for CDR systems involving pathways such as (but not limited to) carbon mineralization, ocean-based CDR, and soil carbon sequestration.

## Topic 2. Hydrogen Quantification

The clean hydrogen (H<sub>2</sub>) value chain is expected to develop rapidly in the coming decades to decarbonize many sectors of the economy, accelerated by DOE initiatives including H2@Scale, H2 Hubs, and equities in BIL and IRA including the clean hydrogen production tax credit. As production, distribution, storage, and use of H<sub>2</sub> becomes more widespread, operators and project developers must take careful steps to mitigate the risk of H<sub>2</sub> leakage across the H<sub>2</sub> value chain.

H<sub>2</sub> is a colorless, mobile, highly flammable, and small molecule, so controlling or detecting its leakage is particularly difficult. Development and commercialization of ppm and ppb H<sub>2</sub> leak detection technologies are imperative to achieve the full emissions-reduction potential of clean H<sub>2</sub>, and to ensure safe, long-term operations at all stages of the value chain.

FECM is seeking proposals involving lab-developed technologies for development and commercialization of technologies that can quantify leakage of H<sub>2</sub> during its production, distribution, storage, and use, with detection capabilities in ambient air at the ppm or ppb (more desirable) level.

## Topic 3. Critical Mineral and Rare-Earth Element Characterization and Extraction

Building the infrastructure necessary to reach net-zero green house gas (GHG) emissions will result in a significant increase in demand for critical minerals (CMs) and rare-earth elements (REEs) over the next several decades. Currently the majority of the CMs and REEs consumed in the U.S. are mined, processed, and produced in a handful of locations overseas that typically have lower standards on environmental quality, labor, and wages. Developing a domestic supply chain of CMs and REEs is imperative to meet our net-zero GHG emission goal in an economic and just way, while also reducing import dependency of many of our critical minerals on foreign sources. One low-hanging fruit for domestic production of CM is remediation of secondary sources (e.g., coal ash, coal waste/refuse, metal mine tailings), which are currently present at the hundreds of thousands of active and abandoned coal and hard rock mine sites across the United States. To establish a supply chain from these unconventional feedstocks, we must develop and commercialize new technologies capable of characterizing and extracting the CMs and REEs within unconventional and secondary feedstocks.



## **Topic 3. Critical Mineral and Rare-Earth Element Characterization and Extraction, contd.**

FECM is seeking proposals involving lab-developed technologies for development and commercialization of technologies that can rapidly detect the quantity and/or form of CMs and REEs present within secondary feedstocks, such as coal ash, coal refuse, or metal mine tailings.

Technologies that are inexpensive, can be taken in the field (e.g., portable), for surface or subsurface (e.g., remote or downhole), and produce reasonably accurate results (e.g., able to detect quantities >10ppm) are preferable to highly accurate but relatively slow and costly technologies that can assess quantities at the ppb level. This can include the application of new software and Machine Learning/Artificial Intelligence algorithms to existing instruments and tools that would enable near real time detection of CMs and REEs both at the surface and in the subsurface. Technologies that can provide insights on the chemical form of the CMs and REEs within the feedstocks that will help inform on effectiveness of extraction technologies are also of interest. Leveraging the capabilities of the National Labs through the TCF program to bring such technologies to commercialization will decrease the time and cost to get the REE and CM resources into production. Another funding goal of this program will be to increase the visibility and realization of the potential for REE/CM production from secondary and unconventional feedstocks.

## Topic 4. Natural Gas Infrastructure Methane Quantification

Domestic natural gas production, distribution, and storage are critical to transition the U.S. energy supply towards zero-emissions resource utilization that can meet demands both domestically and abroad for critical global allies. Ensuring near-zero methane emissions as part of the integrity and reliability of our natural gas distribution and delivery infrastructure has always been important but will become even more so as our need for natural gas persists over the next several decades.

The Administration's targets include a 50 percent reduction in carbon emissions by 2030, 100 percent clean electricity by 2035, and net-zero carbon emissions by 2050. These aggressive carbon emissions reduction targets will be met, in part, by advancing and commercializing technologies that reduce and potentially eliminate methane emissions associated with the production and distribution of oil and natural gas.

Natural gas pipelines (e.g., gathering lines, intrastate lines, interstate transmission lines, and distribution systems) are a part of this infrastructure that will require increased monitoring and more effective inspection capabilities over the coming decades as large segments of the natural gas pipeline network age while still being called upon to deliver increasing amounts of natural gas to end users.

## **Topic 4. Natural Gas Infrastructure Methane Quantification, contd.**

FECM is interested in catalyzing the commercialization of novel sensor technologies and systems that will improve industry's ability to efficiently monitor and quantify methane emissions across natural gas pipeline infrastructure in a continuous, near real-time manner, in upstream and midstream applications.

Since 2016, DOE FECM has supported technology development directly or indirectly related to this topic and recognizes that in order to meet the Administration's carbon emissions targets, it is necessary to promote the rapid scale-up and commercialization of advanced pipeline methane sensing technologies capable of continuous monitoring and quantification of pipeline leak events.

Projects funded under this topic will incorporate lab-developed IP related to methane sensing and quantification technologies and be at a development scale consistent with near-term industry acceptance and commercialization. Using the unique capabilities of the National Labs through the TCF program, this topic aims to accelerate the rapid scale-up and commercialization needed for wide-scale deployment to the field.

# Proposal Requirements Across All Topics

*All proposals must include how the team will track and show their respective commercialization impact and outcomes from the proposed project.*

- Teams must be interdisciplinary, including expertise on sustainability, social and public acceptance, and environmental justice issues.
- Applications must include developing or draft prototype(s) and field test(s) using “real” materials, such as industrial waste streams and targeted mine waste feedstocks.
- Applications must show progress towards and intent to commercialize the technologies as well as be at a stage that will generate private sector interest.
- Proposals have a proposed deployment site or have deployment partners. Letters of support can be included at the full application stage.
- Proposals must produce sufficient materials to complete end-use specific testing, i.e., accelerated stress tests, material characterizations, and purity levels of final product.
- National Lab participation should provide the regional technical gap assessment and define how their expertise can catalyze near-term commercial success for industry partners. Projects leveraging existing lab or industry consortia may be prioritized.



# Proposal Requirements Across All Topics, contd.

Applications must demonstrate clear evidence of commercial potential that combines technology progress with market pull or interest. Examples of evidence of technology progress include:

- Demonstrated analytical and experimental proof of concept in a laboratory environment.
- Experiments or modeling and simulation validating the functional performance of the technology.

Examples of evidence of market pull or interest include:

- Market analysis demonstrating the technology's current or expected future cost and/or performance advantages vis-à-vis incumbent or competing technologies.
- Demonstrated interest from private industry partners or investors.

Ideal applications will include technologies with identified utility and potential impact to industry, market viability, and a clear commercialization path forward. Key milestones for applications under this topic must be commercialization focused, not technology focused, and demonstrate a clear understanding of barriers to commercial adoption (e.g., market entry barriers, regulatory barriers, supply chain barriers) and how they can be overcome.

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# Partnering

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# Partnering

DOE highly encourages labs to partner with **external organizations and private companies**, as such partners may have deep knowledge and experience performing many of the activities described in the topics, some may have already built needed components under any of the topic areas below, and some may help advance DOE's DEIA goals.

All partnerships between the labs and outside partners **must comply with individual lab requirements under their management and operating (M&O) contracts.**

Partners must agree to engage in activities that focus on commercializing or deploying technologies in the marketplace and are highly encouraged to provide cost-share.

- **Partners can be any nonfederal entity**, including private companies, state or local governments (or entities created by a state or local government), colleges, universities, tribal entities, or nonprofit organizations.
- Because only National Laboratory TTO staff are eligible to apply and are responsible for coordinating inter-lab, across labs, and with external partners, a list of lab TTO points of contact are provided in Appendix B of the solicitation.

# Teaming Partner List

To the extent possible and appropriate, FECM seeks lab projects that involve industry engagement or industry partners, to demonstrate the market pull aspects of the technology commercialization.

To expedite external partnerships in support of this lab call, DOE is compiling a “Teaming Partner List” to facilitate the formation of new project teams for this lab call. The Teaming Partner List allows organizations that may wish to participate on an application to express their interest to other applicants and to explore potential partnerships.

Updates to the Teaming Partner List will be available in the Exchange website. The Teaming Partner List will be regularly updated to reflect new teaming partners who provide their organization’s information.

Please refer to the Manuals section on Exchange for more detailed instructions on using the Teaming Partner List.

Submission Instructions: Any organization that would like to be included on this list should submit the following information within the [Teaming Partners section](#) on Exchange (select **TPL-0000012** for this solicitation):

- Organization Name
- Organization Type (dropdown)
- Website
- Contact Name
- Contact Address
- Contact Email
- Contact Phone
- Area of Expertise (dropdown)
- Brief Description of Background, Interest, & Capabilities
- Applicable Topic from the lab call.

## How to Join the Teaming Partner List

Exchange Teaming Partner section (choose **TPL-0000012** for this solicitation):

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Teaming Partners

TEAMING PARTNERS

Submit Entry to Teaming Partner List

Teaming Partner List:

Keyword Search:

Keyword Search includes Investigator Name, Organization Name, and Topic. "AND" or "OR" to fine tune your search. Please use only one search term. "biofuels AND modeling" will return results that include both terms. "biofuels OR modeling" will return results that include either term.

Show Results

TEAMING PARTNER LIST REGISTRATION

Teaming Partner List: \*

Investigator Name: \*

Organization Name: \*

Organization Type: \*

Topic:

Area of Expertise: \*

Background, Interest, and Capabilities: (2500 character limit) \*

TPL-0000012: Teaming Partner List for DE-LC-000L101 - FY23 TCF Bas Annual Appropriations FERC Program-Led Topics Lab Cal

0/2500 Characters



# How to View the Teaming Partner List

Exchange [Teaming Partner section](#) (choose TPL-0000012 for this solicitation):

## TEAMING PARTNERS

**Submit Entry to Teaming Partner List**

**Teaming Partner List:**

TPL-0000012: Teaming Partner List for DE-LC-000L101 - FY23 TCF Bas Annual Appropriations FECM Program-



**Keyword Search:**

[Show Advanced Search](#)

Keyword Search includes Investigator Name, Organization, Background, Topic, and Address. Use operators "AND" or "OR" to fine tune your search. Please use only one operator per search. For example, the search term "biofuels AND modeling" will return results that include both the words biofuels and modeling, while the search term "biofuels OR modeling" will return results that include the word biofuels, modeling, or both.

**Show Results**

**Clear Filter**

**View Archived Teaming Partners**



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# Diversity, Equity, Inclusion, and Accessibility (DEIA)

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# Diversity, Equity, Inclusion, and Accessibility (DEIA):

Specifically, applicants are required to reference, if available, the existing laboratory DEIA plan and describe how diversity, equity, and inclusion objectives will be incorporated in the project. Additionally, applicants are required to describe the actions the applicant will take to foster a welcoming and inclusive environment, support people from underrepresented groups in STEM fields, advance equity, and encourage the inclusion of individuals from these groups in the project, and the extent to which the project activities will be located in or benefit underserved communities.

The proposed project should include at least one SMART (specific, measurable, assignable, realistic and time-related) milestone per budget period supported by DEIA relevant metrics to measure the success of the proposed actions. Because a diverse set of voices at the table in research, design, and execution has an illustrated positive impact on innovation, this implementation strategy for the proposed project will be evaluated as part of the application review process.

Further, Minority Serving Institutions, Minority Business Enterprises, Minority Owned Businesses, Woman Owned Businesses, Veteran Owned Businesses, or entities located in an underserved community that meet the eligibility requirements are encouraged to participate in an application as a proposed partner to the prime applicant. The Selection Official may consider the inclusion of these types of entities as part of the selection decision.

See full lab call for additional information and application requirements.



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# Concept Paper Stage

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# Concept Papers

Applicants are encouraged to submit a concept paper. Labs are encouraged to submit the concept paper to [FECM-TCF@hq.doe.gov](mailto:FECM-TCF@hq.doe.gov) no later than **April 7, 2023 at 3 p.m. ET**.

Please include in the subject line: “FECM TCF CONCEPT PAPER TOPIC [insert applicable topic number]”.

DOE will review the concept paper, and applicants will receive a determination. DOE will encourage or discourage concepts at this stage. The intent is to help the labs focus their efforts on the concepts with the highest potential under this lab call. Labs will receive a DOE determination as to whether they are encouraged to move to the next step or discouraged from moving forward.

Applicants can choose to submit a full application regardless of DOE’s determination. Applicants may submit a full application regardless of whether they submitted a concept paper.



# Concept Papers

*\*Note: please refer to the lab call for the full requirements.*

Concept papers are required to include\* (starting on page 15 of the solicitation):

Section	Page Limit	Description
Cover Page	1 page maximum	The cover page should include the project title, the topic(s) being addressed, points of contact, total project budget including amount of funds being requested from DOE, proposed cost-share, and name of the lab and any partners.
Project Description	3 pages maximum	Applicants are required to: <ul style="list-style-type: none"><li>• Describe the project in enough detail that it may be evaluated for its innovation, impact, and relevance to the topic objectives</li><li>• Describe relevant background information that helps demonstrate the need for this project, including the problem statement or major challenges and barriers being overcome through the project and the approach to solving the problem</li><li>• Show the impact that DOE funding and the proposed project would have on the relevant field and application</li><li>• Describe how the proposed project, if successfully accomplished, would clearly meet the objectives stated in the lab call.</li></ul>
Addendum	2 pages maximum	Applicants are required to describe succinctly the qualifications, experience, and capabilities of the proposed project team, including: <ul style="list-style-type: none"><li>• Whether the project team has the skill and expertise needed to successfully execute the project plan</li><li>• Whether the applicant has prior experience that demonstrates an ability to perform tasks of similar risk and complexity</li><li>• Whether the applicant has worked together with their teaming partners on prior projects or programs</li><li>• Whether the applicant has adequate access to equipment and facilities necessary to accomplish the effort and/or clearly explain how they intend to obtain access to the necessary equipment and facilities.</li><li>• Applicants may provide graphs, charts, or other data to supplement their project description.</li></ul>

# Concept Papers

Concept papers are evaluated based on consideration of the following factors. All sub-criteria are of equal weight.

## 1. Concept Paper Criterion: Overall Lab Call Responsiveness and Viability of the Project (Weight: 100%)

This criterion involves consideration of the following factors:

- The applicant clearly describes the project in enough detail that it may be evaluated for its innovation, impact, and relevance to the topic objectives.
- The applicant clearly describes relevant background information that helps demonstrate the need for this project, including the problem statement or major challenges and barriers being overcome through the project and the approach to solving the problem.
- The applicant has shown the impact that TCF funding and the proposed project would have on the relevant field and application.
- The applicant clearly identifies the topic(s) they are applying for and how they meet the required elements of the topic(s).
- The applicant has the qualifications, experience, capabilities, and other resources necessary to complete the proposed project.
- The proposed work, if successfully accomplished, would clearly meet the objectives as stated in the lab call.

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# Full Application Stage

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# Full Applications

- Please read the lab call in its entirety for all full application requirements.
- DOE will not review or consider ineligible full applications. Each full application shall be limited to a single concept. Unrelated concepts shall not be consolidated in a single full application.
- **Applicants must submit a full application to be eligible for funding.**
- Full applications are due May 25, 2023 by 3:00 p.m. ET.
- To apply to this lab call, ORTA TTO personnel must register and sign in with their lab email address and submit full application materials through Exchange, the online tool being used by OTT and the other program offices. **Only ORTA TTO personnel can submit applications under this lab call.** Full applications must be submitted through [Exchange](#).

# Full Application Requirements

Full Applications need to include:

- Title page
- 1.0 Summary
- 2.0 Project description
- 3.0 DEIA
- 4.0 Potential commercialization advances
- 5.0 Work plan
- 6.0 Impact tracking
- 7.0 Team and required resources
- 8.0 Cost sharing
- 9.0 Proposed base budget and options
- 10.0 References
- 11.0 Team resumes
- 12.0 Project summary slide for public release



# Full Application Scoring Criteria

- **Criterion 1: Innovation and Impact (45%):** How innovative and impactful is the project, assuming the stated outcomes can be achieved as written?
  - Innovative
  - Impactful
  - Scalable
  - Commercialization outcomes
  - Cost share commitment
  - Evidence of commercial potential
- **Criterion 2: Quality and Likelihood of Completion of Stated Goals (35%):** Are the stated goals of the project SMART, and are they likely to be accomplished within the scope of this project? Is there a likelihood of success for the proposed project?
  - Measurable
  - Risks mitigated
  - Validated
  - Reasonable assumptions
  - Reasonable budget
- **Criterion 3: Collaboration and Capability of the Applicant and Holistic Project Team (20%):** Is the team well-qualified and positioned to successfully complete this project?
  - Capable
  - Participation
  - Team quality
  - Past performance
  - Access

These criteria are described in detail beginning at [page 25](#) of the solicitation

# Selections and Notification

- DOE carefully considers all information obtained through the selection process. DOE may select or not select a proposal for negotiations. DOE may also postpone a final selection determination on one or more proposals until a later date, subject to availability of funds and other factors. DOE will notify applicants if they are, or are not, selected for award negotiation.
- DOE will only select proposed projects that support the statutory requirement of the TCF to “promote promising energy technologies for commercial purposes.”
- **Type of award instrument:** TCF awards will be documented and funded through OTT’s work authorization and funds management processes within the Program Information Collection System (PICS). DOE facilities will be required to track federal funds in accordance with normal departmental processes. DOE facilities will also be required to track nonfederal funds in accordance with established DOE facility accounting processes. DOE will direct transfer funding to the relevant labs; lab-to-lab transfers should not be needed.
- **Selection Notification:** DOE anticipates completing the selection and negotiation process by Q4 FY23 (subject to change). DOE will notify lab leads electronically of selection results. All of DOE’s decisions are final when communicated to applicants.

# Project Administration and Reporting

- Projects selected for award are managed by the DOE facilities in accordance with their requisite policies and procedures. DOE will provide all required project oversight and engagement with TCF project recipients.
- TCF project recipients will be required to meet **quarterly** with DOE to discuss project progress in addition to providing quarterly progress reporting, annual metrics reporting for the entire 5-year period, and a final report at the end of the project.

# Questions?

Specific questions about this lab call should be submitted via e-mail to [FECM-TCF@hq.doe.gov](mailto:FECM-TCF@hq.doe.gov).

To ensure fairness across all labs, individual DOE staff cannot answer questions while the lab call remains open.

DOE will post all questions and answers on Exchange.

Questions about Exchange: <https://eere-exchange.energy.gov/FAQ.aspx>