



Bipartisan Infrastructure Law (BIL)

U.S. Department of Energy (DOE) Office of Manufacturing and Energy Supply Chains (MESC) Industrial Assessment Centers (IAC) & Office of State and Community Energy Programs (SCEP)

Industrial Assessment Center (IAC) Program Expansion at Trade Schools, Community Colleges, and Union Training Programs; and Building Training and Assessment Centers (BTAC) Program

IACProgram@doe.gov

FOA Webinar

DE-FOA-0002940

April 18, 2023





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Please mute your phones and we'll begin momentarily





Notice

- NO NEW INFORMATION OTHER THAN THAT PROVIDED IN THE FOA WILL BE DISCUSSED IN THE WEBINAR.
- There are no particular advantages or disadvantages to the application evaluation process with respect to participating on the webinar today.
- Your participation is completely voluntary.





Notice

- All applicants are strongly encouraged to carefully read the Funding Opportunity Announcement DE-FOA-0002940 and adhere to the stated submission requirements.
- This presentation summarizes the contents of the FOA. If there are any inconsistencies between the FOA and this presentation or statements from DOE personnel, the FOA is the controlling document and applicants should rely on the FOA language and seek clarification by submitting a question.





DE-FOA-0002940

Industrial Assessment Center (IAC) Program Expansion; and Building Training and Assessment Centers (BTAC) Program

Preamble, page i

Anticipated Schedule:

FOA Issue Date:	4/7/23
Informational Webinar:	4/18/23
Submission Deadline for Concept Papers:	5/25/23
Submission Deadline for Full Applications:	7/31/23
Expected Date for DOE Selection Notifications:	Fall 2023
Expected Timeframe for Award Negotiations:	Fall – Winter 2023-24



Agenda

- 1) FOA Description
- 2) Topic Areas 1, 2 & 3/Technical Areas of Interest
- 3) Award Information
- 4) Statement of Substantial Involvement
- 5) Cost Sharing
- 6) FOA Timeline
- 7) Full Applications
- 8) Merit Review and Selection Process
- 9) Registration Requirements





FOA Description

Section I. A.

The U.S. Department of Energy (DOE) Office of Manufacturing and Energy Supply Chains (MESC) and the DOE Office of State and Community Energy Programs (SCEP) are jointly issuing this Funding Opportunity Announcement (FOA) to establish Industrial Assessment Centers (IACs) at trade schools, community colleges, and union training programs (including joint labor-management training programs), as well as to establish Building Training and Assessment Centers (BTACs) at institutions of higher education.

The BIL will invest appropriations of up to \$150 million for the five (5) year period encompassing Fiscal Years (FYs) 2022 through 2026 to expand DOE's Industrial Assessment Center (IAC) Program and up to \$10M until expended to establish BTACs.

Through three topic areas in this FOA, DOE makes available \$54 million to establish IAC creation at community colleges and trade schools and establish IAC creation at union training programs (including joint labor-management programs), and BTACs at institutions of higher education.





FOA Description (cont.)

Section I. A.

The activities to be funded under this FOA support BIL section 40521(b), which amended the Energy Independence and Security Act of 2007 (EISA 2007) by adding a new section 457; BIL section 40512; and the broader government-wide approach to:

- strengthening domestic manufacturing
- reducing industrial emissions
- developing the clean energy workforce as the nation works to curb the climate crisis, empower workers, and advance environmental justice.

The three topic areas in this FOA focus on establishing IACs at trade schools, community colleges, and union training programs (including joint labor-management programs) and establishing BTACs to support the Administration's broader efforts to:

- Support inclusive workforce development efforts to strengthen America's competitive advantage in the clean energy economy and
- Enhance performance and reduce emissions at small- and medium-sized manufacturing facilities (SMMs – see footnote for definition)⁶ and commercial buildings.





Joint Strategic Goals

Section I. A. ii.

All applications should address:

- Developing and Delivering Hands-On Training for High-Quality Clean Energy Jobs
- Enhancing Performance and Reducing Emissions (*industrial sector or buildings sector*)
- Demand-Driven Impact (*expected demand*)
- Commitment to Collaboration and Coordination
- Leveraging Federal and Other Efforts and Funds
- Community Benefits: Job Quality and Equity (*community and labor engagement; job quality and workforce continuity; diversity, equity, inclusion and accessibility; and Justice40*)





Topic Area 1: IACs at Community Colleges and Trade Schools

Section I. B. i

The objective of this Topic Area is to support the establishment of new IACs at community colleges and trade schools that will build upon the demonstrated success of the applied learning environment and hands-on training approach of the traditional IACs, while simultaneously drawing on the unique strengths, geographic reach, and faculty/student composition of trade schools and community colleges.

Applications are invited from individual community colleges or trade schools or entities that comprise multiple eligible entities such as State community college systems.

Applications should describe how the organization will develop and deliver effective technical assistance for regional Small and Medium Manufacturers consistent with the purposes of the IAC Program but adjusted to the context of applying institutions and their surrounding communities, while concurrently offering training, hands-on experience, and career supports for students.

Applicants should describe in detail the industry-recognized credentials or degrees that students will achieve or progress toward them by participating in IAC programming.





Topic Area 1: Establishment of IACs at Community Colleges and Trade Schools

Section I. B. i

Technical areas of interest include but are not limited to:

- Additive Manufacturing
- Advanced Manufacturing
- Battery Energy Storage
- Carbon Capture Utilization and Sequestration (CCUS)
- Combined Heat and Power (if net-zero aligned)
- Energy Efficiency
- Energy Management
- Geothermal Technologies
- Heating, Ventilation, and Air Conditioning with focus on Heat Pump Technologies
- Hydrogen and Fuel Cell Technologies
- Solar Energy
- Smart Manufacturing
- Sustainable Manufacturing
- Water and Wastewater Management
- MESC also will consider innovative proposals that incorporate other IAC-supported areas, such as cybersecurity, supply chain management, or industrial and manufacturing processes, provided that they incorporate elements of optimizing operations and reducing emissions consistent with the objectives of the IAC program.





Topic Area 2: IACs at Union Training Programs

Section I. B. ii

This Topic Area will support the establishment of new IACs at union training programs (including joint labor-management programs) that will build upon the demonstrated success of the applied learning environment and hands-on training approach of the traditional IACs, **while simultaneously drawing on the unique strengths, geographic reach, and incumbent worker-focused orientation of union training programs** and joint labor-management training programs to support small and medium-sized manufacturers.

As with the IACs discussed in Topic Area 1, DOE intends that these new IACs will use innovative solutions to develop and deliver hands-on technical training necessary for high-quality clean energy jobs and career pathways while concurrently bolstering the nation's small- and medium-sized manufacturing base by promoting best practices for reducing industrial emissions and enhancing energy efficiency and productivity.





Topic Area 2: IACs at Union Training Programs

Section I. B. ii

Technical areas of interest include but are not limited to:

- Additive Manufacturing
- Advanced Manufacturing
- Battery Energy Storage
- Carbon Capture Utilization and Sequestration (CCUS)
- Combined Heat and Power (if net-zero aligned)
- Energy Efficiency
- Energy Management
- Geothermal Technologies
- Heating, Ventilation, and Air Conditioning with focus on Heat

Pump Technologies

- Hydrogen and Fuel Cell Technologies
- Solar Energy
- Smart Manufacturing
- Sustainable Manufacturing
- Water and Wastewater Management
- MESC also will consider innovative proposals that incorporate other IAC-supported areas, such as cybersecurity, supply chain management, or industrial and manufacturing processes, provided that they incorporate elements of optimizing operations and reducing emissions consistent with the objectives of the IAC program.



Topic Area 3: Building Training and Assessment Centers (BTAC) Program

Section I. B. iii

This Topic Area will provide grants to institutions of higher education to establish building training and assessment centers (BTACs) to educate and train building technicians and engineers on implementing modern building technologies. To the greatest extent practicable, BTACs should be co-located with IACs. Applicants for funding should address how they intend to advance workforce development and one or more of the following:

- Identify opportunities for optimizing energy efficiency and environmental performance in buildings
- Promote the application of emerging concepts and technologies in commercial and institutional buildings
- Train engineers, architects, building scientists, building energy permitting and enforcement officials, and building technicians in energy-efficient design and operation
- Assist institutions of higher education and Tribal Colleges or Universities in training building technicians
- Promote research and development for the use of alternative energy sources and distributed generation to supply heat and power for buildings, particularly energy-intensive buildings
- Coordinate with and assist State-accredited technical training centers, community colleges, Tribal Colleges or Universities, and local offices of the National Institute of Food and Agriculture and ensure appropriate services are provided under this section to each region of the United States.





Topic Area 3: Building Training and Assessment Centers (BTAC) Program

Section I. B. iii

The funding for Building Training and Assessment Centers is provided solely by the Bipartisan Infrastructure Law. **Applicants should detail how they plan to use this seed funding to launch a program that can be sustained absent DOE funding.** Applicants may want to explore partnering with state workforce development entities or utility energy efficiency programs that may have funding to supplement the funding being awarded by DOE.

Applications with some or all of the following elements are encouraged:

- Community organization and/or local government partnerships, especially partnerships with organizations that work directly with disadvantaged communities.
- Partnerships with training providers, relevant certification bodies, and local/regional clean energy workforce employers.
- Partnerships with regional utilities, contractors, local grant or lending agencies to assist with financing and implementation of assessment recommendations.
- Trade unions, public employee unions, service sector unions and joint labor-management training programs, including registered apprenticeships.
- Programs that target small businesses or organizations owned or led by individuals from underrepresented groups in client outreach.
- Innovative ideas for partnership structure, training, and methods to bring energy efficiency upgrades to underserved commercial building clients.
- Coordination with the state workforce development agency or plan.





Teaming Partner List

Section I. C.

DOE encourages eligible entities to team up on a single application in order to (1) ease the administrative burdens associated with managing a federal grant, (2) maximize the scope, reach, and level of ambition for the proposed projects and programs, and (3) encourage sharing of capacity, knowledge, expertise, lessons learned and best practices across jurisdictions.

DOE is compiling a “Teaming Partner List” to facilitate the formation of new project teams for this FOA. The Teaming Partner List allows organizations who 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 Infrastructure eXCHANGE website. The Teaming Partner List will be regularly updated to reflect new teaming partners who provide their organization’s information.

Submission instructions are under "Teaming Partner List" in the FOA.





Teaming Partner List

Section I. C.

How do I add myself to a Teaming Partner List?

Step 1: From the Clean Energy Infrastructure Funding Opportunity Exchange homepage, click Teaming Partners in the left-hand menu.

Step 2: Click the Submit Entry to Teaming Partner List button, enter your information, then click Register.

Please note: Once your entry is published, everything you entered on the form will be visible to potential partners. Please see the Teaming Partner List "How-To" for further instruction.





Applications Specifically Not of Interest

Section I. D.

The following types of applications will be deemed nonresponsive and will not be reviewed or considered for an award:

- Applications that fall outside the technical parameters specified in Sections I.A. and I.B. of the FOA.
- Applications to fund construction activities such as the expansion or modification of a facility.
- Applications that promote vendor-specific technologies.
- Applications that utilize prototype technologies or include R&D activities related to prototype software or technology development.





Award Information

Section II. A.

Total Amount to be Awarded	Approximately \$54,000,000*
Average Award Amount	Topic Area 1: \$450,000 - \$3,000,000 Topic Area 2: \$450,000 - \$9,000,000 Topic Area 3: \$950,000 - \$1,100,000
Type of Funding Agreements	Cooperative Agreements
Period of Performance	36 months
Cost Share Requirement	0% of Total Project Costs

*Subject to the availability of appropriated funds





Statement of Substantial Involvement

Section II. B. I & Section VI. B. ix

DOE has substantial involvement in work performed under awards made as a result of this FOA.

1. DOE shares responsibility with the recipient for the management, control, direction, and performance of the project.
2. DOE may intervene in the conduct or performance of work under this award for programmatic reasons. Intervention includes the interruption or modification of the conduct or performance of project activities.
3. DOE may redirect or discontinue funding the project based on the outcome of DOE's evaluation of the project at the Go/No-Go decision point(s).
4. DOE participates in major project decision-making processes.





Cost Sharing Requirements

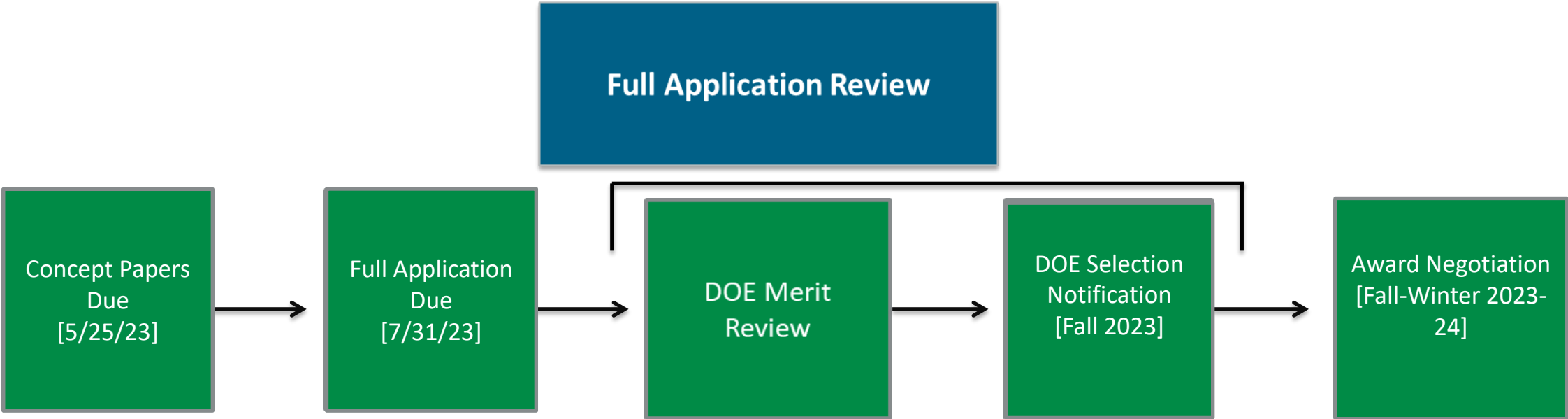
Section III. B.

- **Cost sharing is not required under this FOA. However,** per Section V.A., an applicant's ability to leverage outside funding to ensure and enhance the success of the program, as well as its sustainability following the federal award period, will be considered.
- In the event an applicant intends to propose voluntary committed cost share, DOE has included a cost share information sheet as Appendix A the FOA to assist applicants in calculating proper cost share amounts.
- Although the cost share requirement applies to the project as a whole, including work performed by members of the project team other than the prime recipient, the prime recipient is legally responsible for paying the entire cost share. If the funding agreement is terminated prior to the end of the project period, the prime recipient is required to contribute at least the cost share percentage of total expenditures incurred through the date of termination.





FOA Timeline



MESC and SCEP anticipate award negotiations during Fall Winter 2023-24



Concept Papers

Section IV. A & C.

The application process includes two phases: a Concept Paper phase and a Full Application phase. **Only applicants who have submitted an eligible Concept Paper will be eligible to submit a Full Application.**

Each Concept Paper must be limited to one IAC or BTAC project, either of which could include multiple institutions, or an IAC and BTAC co-located with one another. The Concept Paper must conform to the requirements listed below, including the stated page limits.





Full Applications

Section IV. D. i.

The Full Application includes:

- **Technical Volume**
- **Resumes**
- **Letters of Commitment**
- **Community Partnership Plan and Supporting Documentation**
- **Statement of Project Objectives**
- **SF-424 and Budget Justification Workbook**
- **Summary/Abstract for Public Release**
- **Summary Slide**
- **Administrative Documents:** e.g., subrecipient budgets, FFRDC Authorization (if applicable), Disclosure of Lobbying Activities, etc.





Full Applications: Technical Volume Content

Section IV. D. ii

Technical Volume: the key technical component of the Full Application

Content of Technical Volume – 25 pages
Cover Page
Project Overview [10%]
Project Description, Innovation and Impact [50%]
To address: technical training area; regional context; innovation and impact for trainees; client impact and outreach; collaboration and coordination; community benefits plan with community and labor engagement; job quality and development of a skilled workforce; diversity inclusion and accessibility; and Justice 40 Initiative
Workplan [20%]
Technical Qualifications and Resources [20%]





Full Application Eligibility Requirements

Section III

- **Applicants must submit a Full Application by 7/31/23**
- Full Applications are eligible for review if:
- The Applicant is an eligible entity Section III.A of FOA;
- The Full Application is compliant Section III.C of FOA; and
- The proposed project is responsive to the FOA Section III.D of FOA
- The Full Application meets any other eligibility requirements listed in Section III of the FOA.





Who is Eligible to Apply? Topic Area 1:

Section III. A. i.

This FOA has restricted eligibility requirements to the following entities:

- **Community colleges,**
- **Community College Systems, and**
- **Trade schools,** which are defined as educational institutions, other than community colleges and union training programs, that offer career and technical education leading to industry-recognized credentials or degrees. Trade schools include entities that are nested within larger institutions that grant bachelor's or graduate degrees (e.g., extension schools), but proposed projects must focus on students who are seeking non-bachelor's or graduate credentials.





Who is Eligible to Apply? Topic Area 2:

Section III. A. i.

This FOA has restricted eligibility requirements to the following entities:

- **Union Training Programs**, which are defined as credential-granting training programs (including joint labor-management training programs) administered by (a) a union or group of unions certified by the National Labor Relations Board or (b) a Joint Apprenticeship and Training Committee composed of an equal number of representatives of relevant employer(s) and employees represented by a collective bargaining agreement.





Who is Eligible to Apply? Topic Area 3:

Section III. A. i.

This FOA has restricted eligibility requirements to the following entities:

- **Institutions of higher education**; which means as an institution of higher education as defined under 20 U.S.C. § 1001.
- **Tribal colleges or universities**, which are defined as Tribal Colleges or Universities serving Indian students, as recognized in 20 U.S.C. § 1059c(b).





Limitation on Number of Concept Papers and Full Applications Eligible for Review

Section III.F

An entity may submit more than one Concept Paper and Full Application to this FOA, provided that each application describes a unique, scientifically distinct project and provided that an eligible Concept Paper was submitted for each Full Application.





Merit Review and Selection Process (Full Applications)

Section V.

The evaluation process consists of multiple phases; each includes an initial eligibility review and a thorough technical review. Rigorous technical reviews of eligible submissions are conducted by reviewers that are experts in the subject matter of the FOA. Ultimately, the Selection Official considers the recommendations of the reviewers, along with other considerations such as program policy factors, in determining which applications to select.





Technical Merit Review Criteria

Section V.A. ii.

Criterion 1: Merit, Innovation, and Impact (40%)

This criterion involves consideration of the following factors:

- **General:** The extent to which the proposed project supports the strategic goals set forth in Section I.A.i. and the topic area objectives
- **Impact for Trainees:** The extent to which the applicant demonstrates direct and immediate pipelines to high-quality jobs, including through registered apprenticeship programs and industry partnerships.
- **Client Impact and Outreach:** The extent to which the applicant's plan demonstrates an understanding of barriers to client adoption of best practices in the proposed technical area.
- **Collaboration and Coordination:** The extent to which the project would amplify its impact by aligning with, or making use of, existing training infrastructure and resources developed by other local, state, and federal programs;





Technical Merit Review Criteria (Continued)

Section V.A. ii.

Criterion 2: Community Benefits Plan (30%)

This criterion involves consideration of the following factors:

- Community and Labor Engagement
- Job Quality and Development of a Skilled Workforce
- Diversity, Equity, Inclusion, and Accessibility
- Justice40 Initiative





Technical Merit Review Criteria (Continued)

Section V.A. ii.

Criterion 3: Project Management and Approach (20%)

This criterion involves consideration of the following factors:

- Project Management
- Project Approach, Workplan, and SOPO
- Identification of Risks
- Baseline, Metrics, and Deliverables





Technical Merit Review Criteria (Continued)

Section V.A. ii.

Criterion 4: Team and Resources (10%)

This criterion involves consideration of the following factors:

- **The capability** of the Project Manager(s) and the proposed team to address all aspects of the proposed work with a high probability of success;
- **The expertise** and perspectives of the team and the inclusion of industry partners that will amplify impact;
- **The qualifications**, relevant expertise, and time commitment of the individuals on the team;
- **The sufficiency** of the facilities and equipment proposed to support the work;
- **The level of participation** by project participants as evidenced by letter(s) of commitment and how well they are integrated into the Workplan; and
- **The reasonableness** of the budget and spend plan for the proposed project and objectives.





Program Policy Factors

Section V.C. i

The Selection Official may consider the following program policy factors in making his/her selection decisions:

- The degree to which the proposed project exhibits a diversity of applicant types and sizes of applicant organizations and represents diversity in the technical area when compared to the existing DOE project portfolio and other projects selected from this FOA.
- The degree to which the proposed project, including any proposed cost share, optimizes the use of available DOE funding to achieve programmatic objectives.
- The level of industry involvement and demonstrated ability to accelerate demonstration and commercialization and overcome key market barriers.
- The opportunity to integrate IAC and BTAC activities for unique impact.
- The degree to which the proposed project is likely to lead to increased high-quality employment and manufacturing in the United States.
- The degree to which the project focuses on repurposing, reusing, or decarbonizing existing industrial infrastructure and/or facilities.
- The degree to which the proposed project will accelerate transformational technological advances in areas that industry by itself is not likely to undertake because of technical and financial uncertainty.
- The degree to which the proposed project, or group of projects, represent a desired geographic distribution (considering past awards and current applications), including whether the project is in a community facing job loss in the energy transition.





Program Policy Factors (cont.)

Section V.C. i

- The degree to which the proposed project is consistent with the goals of achieving a zero-carbon electricity system by 2035 and putting the United States on a path to achieve net-zero emissions economy-wide by no later than 2050.
- The degree to which the proposed project incorporates applicant or team members from Minority Serving Institutions (e.g., Historically Black Colleges and Universities (HBCUs)/Other Minority Serving Institutions); and partnerships with Minority Business Enterprises, Minority Owned Businesses, Woman Owned Businesses, Veteran Owned Businesses, or tribal nations.
- The degree to which the proposed project, when compared to the existing DOE project portfolio and other projects to be selected from the subject FOA, contributes to the total portfolio meeting the goals reflected in the Community Benefits criteria (i.e., community and labor engagement, job quality and development of a skilled workforce, DEIA, and Justice40).
- The degree to which the proposed project will employ procurement of U.S. iron, steel, manufactured products, and construction materials
- The degree to which the proposed project collectively represents diverse types and sizes of applicant organizations.
- The degree to which the proposed project has broad public support from the communities most directly impacted by the project.
- The degree to which the proposed project avoids duplication/overlap with other publicly or privately funded work.
- The degree to which the proposed project supports complementary efforts or projects, which, when taken together, will best achieve the statute's goals, objectives, and direction.
- For 40512 (BTAC program): To the maximum extent practicable, building, training, and assessment centers established under this section shall be collocated with industrial research and assessment centers (as defined in section 40531).





Infrastructure eXCHANGE Registration Requirements

Preamble – Section i

- There are several one-time actions before submitting an application in response to this FOA, and 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, or to meet the negotiation deadlines and receive an award if the application is selected. These requirements are as follows:

Infrastructure Exchange

- Register and create an account on Infrastructure eXCHANGE at <https://Infrastructure-Exchange.energy.gov>. This account will then allow the user to register for any open FOAs that are currently in Infrastructure eXCHANGE.
- To access Infrastructure eXCHANGE, potential applicants are required to have a Login.gov account. As part of the eXCHANGE registration process, new users will be directed to create an account in Login.gov. Please note that the email address associated with Login.gov must match the email address associated with the eXCHANGE account. For more information, refer to the eXCHANGE Multi-Factor Authentication (MFA) Quick Guide in the Manuals section of eXCHANGE.





Infrastructure eXCHANGE Registration Requirements (cont.)

Preamble – Section i

It is recommended that each organization or business unit, whether acting as a team or a single entity, use only one account as the contact point for each submission. Applicants should also designate backup points of contact so they may be easily contacted if deemed necessary. **This step is required to apply to this FOA.** The Infrastructure eXCHANGE registration does not have a delay; however, **the remaining registration requirements below could take several weeks to process and are necessary for a potential applicant to receive an award under this FOA.**

Also mandatory:

Registration Requirement	Website
SAM	https://www.sam.gov
FedConnect	https://www.fedconnect.net
Grants.gov	http://www.grants.gov



Key Submission Points

Preamble – Section i

- All required submissions must be submitted in Infrastructure eXCHANGE no later than 5 p.m. ET on the dates provided on the cover page of the FOA.
- **NOTE:** Due to the high demand of UEI requests and SAM registrations, entity legal business name and address validations are taking longer than expected to process. Entities should start the UEI and SAM registration process as soon as possible. If entities have technical difficulties with the UEI validation or SAM registration process they should utilize the **HELP** feature on **SAM.gov**. SAM.gov will work entity service tickets in the order in which they are received and asks that entities not create multiple service tickets for the same request or technical issue.





Questions

Section VII.

- Upon the issuance of a FOA, DOE personnel are prohibited from communicating (in writing or otherwise) with applicants regarding the FOA except through the established question and answer process as described below. **Specifically, questions regarding this FOA must be submitted to IACProgram@doe.gov.**
- Questions must be submitted not later than 3 business days prior to the application due date and time. Please note, feedback on individual concepts will not be provided through Q&A.
- **All questions and answers related to this FOA** will be posted on Infrastructure Exchange at: <https://Infrastructure-Exchange.energy.gov>. You must first select this specific FOA Number to view the questions and answers specific to this FOA. MESC will attempt to respond to a question within 3 business days, unless a similar question and answer has already been posted on the website.
- **Questions related to the registration process** and use of the Infrastructure eXCHANGE website should be submitted to: InfrastructureExchangeSupport@hq.doe.gov.



Thank You

