



Industrial Assessment Centers
IACs@ee.doe.gov

FOA Webinar
DE-FOA-0001513
4/21/2016

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Industrial Assessment Centers

Anticipated Schedule:

FOA Issue Date:	4/5/2016
FOA Informational Webinar:	4/21/2016
Submission Deadline for Letter of Intent:	4/28/2016
Submission Deadline for Full Applications:	5/20/2016
Expected Date for EERE Selection Notifications:	July 2016
Expected Timeframe for Award Negotiations:	July to September 2016

Notice

- All applicants are strongly encouraged to carefully read the FOA and adhere to the stated submission requirements.
- This presentation summarizes the contents of 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 from EERE.
- If you believe there is an inconsistency, please contact IACs@ee.doe.gov

Agenda

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

We encourage you to have a copy of the FOA in front of you for reference as we go through the presentation.

Introduction

The Federal Government has been funding the Industrial Assessment Center (IAC) program, formerly called the Energy Analysis and Diagnostic Center program, since 1976.

The goal of the IAC program is twofold: first, to provide energy efficiency, productivity, sustainability and competitiveness recommendations to small and medium-sized enterprises (SMEs), currently defined as having gross annual sales below \$100 million, fewer than 500 employees, and annual energy bills between \$100,000 and \$2.5 million; and second, to help address a growing shortage of engineering professionals with applied energy and manufacturing-related skills.

The U.S. Department of Energy (DOE) currently funds, through Cooperative Agreements, 24 IACs located throughout the country who are completing their 5 year projects. The IACs are coordinated by DOE staff and a DOE selected Field Manager.

Objectives – SME Resources

IACs will provide resources to the often under-served small and medium sized enterprises/manufacturers (SME's); applicants should:

- Demonstrate their capabilities to recruit and serve small and medium-sized manufacturers
- Describe their approach to identify and communicate recommendations to:
 1. reduce energy, water and waste usage;
 2. increase productivity and competitiveness; and
 3. provide enhancements to cyber security and related information technologies.

The recommendations need be effectively reported to the SMEs, together with estimates of the energy savings opportunities, implementation costs, and payback periods.

Objectives – SME Resources Continued

In addition to the services outlined, DOE is looking for new and innovative ways to accomplish its programmatic goals for manufacturers, and encourages applicants to propose creative approaches to delivering IAC services that coincide with DOE priorities. These priorities are projected to include:

- Smart manufacturing – identifying opportunities for productivity improvements through the availability and use of smart communications between machines, manufacturing processes, operators and management;
- Cybersecurity – assisting SMEs in threat detection and mitigation. According to the Manufacturing Extension Partnership (MEP), 62 percent of data system breaches impacted smaller organizations and in 2011 the average cost to a small or medium-sized business from a cyber-attack was over \$188,000;
- Energy management systems – helping SMEs to continuously improve their energy performance by exploring the entire spectrum of management systems, from foundational to ISO 50001 to Superior Energy Performance; and
- Wastewater and water facilities – supporting the efficiency and productivity of water utility facilities, including facility operations as well as the biological component of wastewater treatment.

Objectives – Student Training

IACs provide extensive training for undergraduate and graduate engineering students in industrial processes, energy assessment procedures, and energy management systems. This training may be provided through coursework as well as via hands-on (in facility) activities.

Describe how they intend to promote the development and national adoption of an accredited B.S. degree in energy engineering or equivalent field; or describe their plans for enhancement of an existing degree program that addresses the entire range of pedagogical content within the context of IAC activities.

Define how they will maximize the student experience; increase student technical knowledge and business sense; and develop their understanding of key industrial concepts, including industrial supply chains, sustainability issues, and management systems. Students should be encouraged to develop and publish technical papers, online learning materials and assessment-derived replicable best practices and other resources.

Objectives – Student Training Continued

Highlight additional value-added experience opportunities for the IAC, including:

- Scholarship or internship opportunities for students;
- Traineeships with National Laboratories or other research institutions;
- Inclusion of other disciplines (e.g., business, marketing, environmental studies etc.) into training and student employee makeup;
- Inclusion of opportunities for students to pursue ISO 50001 auditor certifications or other third-party accreditations and certifications;
- Creation and maintenance of a robust student and alumni social networking system; and
- Other SME or DOE supporting functions, as developed by individual applicants.

Objectives – Partnerships

Describe a partnership plan that includes partners such as:

- electric and gas utilities;
- state energy, economic development or other agencies;
- other government assistance including Manufacturing Extension Partnerships;
- nonprofit or industry associations or other partners.

Each partner should submit a Letter of Commitment that clearly shows the cost share support, both cash and in-kind, pledged to the IAC and how the partnership will lead to better access to SMEs; increased numbers of SMEs assisted; increased implementation of the opportunities identified in the IAC assessment; support for the SME beyond the IAC interaction; and/or develop or deliver resources for SMEs that the IACs do not assist.

Objectives – Outreach

Historically each IAC completes approximately 20 assessments per year. Given the limited number of actual assessments, successful applicants will describe how they intend to reach non-participating SMEs in their region.

Applicants should submit an outreach plan that clearly states resources to be developed and innovative methods to share industry best practices and lessons learned with the widest possible audience. Applicants are encouraged to partner with academic, government, nonprofit or industry groups to develop and deploy energy and water savings guidance and ‘how to’ resources to this hard to reach community. In addition, some means of tracking the uptake of these soft touch points should be developed.

Objectives –Outreach Continued

IACs will need to effectively coordinate their efforts and support existing DOE program elements:

- Better Plants
- Combined Heat & Power Technical Assistance Partnerships
- ISO 50001/Superior Energy Performance
- DOE training and tools
- Promote other external technical resources, including but not limited to
 - industrial/manufacturing interests
 - trade associations
 - utility efficiency programs
 - State energy programs
 - other DOE manufacturing/industrial priorities, etc.

Possible IAC Configurations

- Satellite Centers
 1. One location will serve as the Main Center and assume the lead role as Prime Applicant.
 2. One or more satellite locations, which could include other universities or other campuses within the same University system, may be included to perform certain elements of the work under strict guidance and supervision of the Main Center.
- Support Centers
 1. One location will serve as the Main Center and assume the lead role as Prime Applicant.
 2. One or more support centers will provide support in delivering the services of the IAC (e.g., collaboration with Business, Marketing, Communications or other departments within the university).

Eligible minority-serving institutions are encouraged to apply as the Prime Applicant (Main Center) or to partner with a Prime Applicant to participate on the proposed Project Team as a Satellite or Support Center.

Technical Targets

DOE has established performance goals and expectations for the IAC program. These performance goals are focused on the following:

- Providing a high-quality educational experience that has value in the marketplace for approximately 10 engineering students per center annually;
- Awarding a DOE certificate to a minimum of five students per year per IAC;
- Completing approximately 20 assessments per year per IAC;
- Executing a partnership and outreach plan that increases program implementation and provides energy and water saving assistance to nonparticipants;
- Developing and communicating resources (success stories, energy systems research, etc.) that advance the mission of the IAC program and support other SMEs; and
- Providing high quality, value added services to SMEs, including cybersecurity, smart manufacturing, energy management, waste reduction, sustainability & productivity improvements and other leading issues.

Non-Responsive Applications

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 Section I.A of the FOA

Award Information

Total Amount to be Awarded	\$35,000,000*
Average Award Amount	EERE anticipates Federal funding for individual awards that range from \$1,250,000 to \$1,750,000
Types of Funding Agreements	Cooperative Agreements
Period of Performance	60 months
Cost Share Requirement	20% of Total Project Costs

*Subject to the availability of appropriated funds

Statement of Substantial Involvement

EERE has substantial involvement in work performed under Awards made as a result of this FOA. EERE does not limit its involvement to the administrative requirements of the Award. Instead, EERE has substantial involvement in the direction and redirection of the technical aspects of the project as a whole. Substantial involvement includes, but is not limited to, the following:

1. EERE shares responsibility with the recipient for the management, control, direction, and performance of the Project.
2. EERE 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. EERE may redirect or discontinue funding the Project based on the outcome of EERE's evaluation of the Project at that the Go/No-Go decision point(s).
4. EERE participates in major project decision-making processes.
5. In order to ensure consistency and uniformity of operations across the U.S., DOE will collaborate with each entity in the program, and also foster collaboration and coordination between all entities. DOE also provides additional monitoring to permit specified kinds of direction or redirection of each entity's work due to interrelationships between projects and/or critical programmatic goals.

Cost Sharing

Cost Sharing Requirements

- Applicants must contribute a minimum of 20% of the total project costs for projects.

Cost Share Contributions

- Contributions must be:
 - Specified in the project budget
 - Verifiable from the Prime Recipient's records
 - Necessary and reasonable for proper and efficient accomplishment of the project
- Every cost share contribution must be reviewed and approved in advance by the Contracting Officer and incorporated into the project budget before the expenditures are incurred

Allowable Cost Share

- Cost Share must be allowable and must be verifiable upon submission of the Full Application
- Refer to the following applicable Federal cost principles:

Entity	Cost Principles
For-profit entities	FAR Part 31
All other non-federal entities	2 CFR Part 200 Subpart E - Cost Principles

- Cash Contributions
 - May be provided by the Prime Recipient, Subrecipients, or a Third Party
- In-Kind Contributions
 - Can include, but are not limited to: personnel costs, indirect costs, facilities and administrative costs, rental value of buildings or equipment, and the value of a service, other resource, or third party in-kind contribution

Unallowable Cost Share

- The Prime Recipient may not use the following sources to meet its cost share obligations including, but not limited to:
 - Revenues or royalties from the prospective operation of an activity beyond the project period
 - Proceeds from the prospective sale of an asset of an activity
 - Federal funding or property
 - Expenditures reimbursed under a separate Federal Technology Office
 - Independent research and development (IR&D) funds
 - The same cash or in-kind contributions for more than one project or program

Cost Share Payment

- Recipients must provide documentation of the cost share contribution, incrementally over the life of the award
- The cumulative cost share percentage provided on each invoice must reflect, at a minimum, the cost sharing percentage negotiated
- In limited circumstances, and where it is in the government's interest, the EERE Contracting Officer may approve a request by the Prime Recipient to meet its cost share requirements on a less frequent basis, such as monthly or quarterly. See Section III.B.vi of the FOA.

FOA Timeline



EERE anticipates making awards by **September 2016**

Letters of Intent

Letters of Intent (“LOIs”) are recommended

To be considered:

- The LOI must comply with the content and form requirements of Section IV.B.1 of the FOA, and
- The applicant should enter all required information and click the “Create Submission” button in EERE Exchange by the deadline stated in the FOA.
- Secondly, the Applicant must create a separate Letter of Intent document for email submission to EERE. The Letter of Intent must not exceed two (2) pages, including cover page, charts, graphs, maps, and photographs when printed using standard 8.5” by 11” paper with 1 inch margins (top, bottom, left, and right), single spaced. Letters of Intent must be submitted via email to the following email address: IACs@ee.doe.gov.

The LOIs should not contain any proprietary or sensitive business information

EERE will not provide notification of acceptance for Letters of Intent

Full Applications

- The Full Application includes:
 - **Technical Volume:** The key technical submission - info relating to the technical content, project team members, etc.
 - **Statement of Project Objectives:** Objectives and scope summary, Tasks to be performed and milestones to be met
 - **SF-424 Application for Federal Assistance:** The formal application signed by the authorized representative of the applicant.
 - **SF-424A Budget & Budget Justification:** a detailed budget and spend plan for the project.
 - **Summary for Public Release**
 - **Summary Slide**
 - **Administrative Documents:** E.g., FFRDC Authorization (if applicable), Disclosure of Lobbying Activities, etc

Full Applications: Technical Volume Content

- **Technical Volume: the key technical component of the Full Application**

Content of Technical Volume	Suggested % of Technical Volume
Cover Page	
Project Overview	10%
IAC Operations Approach	30%
Student Staffing, Training and Integration with University Curriculum	20%
Collaborations and Industrial Demographics	20%
Technical Qualifications, Resources and Commitment	20%

Full Application Eligibility Requirements

Applicants must submit a Full Application by 5/20/2016

Full Applications are eligible for review if:

- The Applicant is an eligible entity Section III.A of FOA;
- The Cost Share requirement is satisfied Section III.B 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
- EERE will only consider one Full Application per institution of higher education.
- The Full Application meets any other eligibility requirements listed in Section III of the FOA.

Who's Eligible to Apply?

This FOA has restricted eligibility requirements to the following entities:

U.S. college or school of engineering that is an integral part of its institutional structure and that has at least one of its four year undergraduate programs accredited by the Engineering Accreditation Commission or the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET) or equivalent (The IAC must be in the engineering department that holds the programmatic ABET or equivalent accreditation). The U.S. college or school of engineering must be physically located in the U.S.

Multiple Applications

EERE will only consider one Full Application per institution of higher education. For example, EERE will only consider one Full Application per university (not one submission per each college or school under the university). This limitation does not prohibit an entity from collaborating on other submissions to this FOA (e.g., as a proposed Satellite or Support Center or other subrecipient) as long as the entity is not the Prime Applicant for those submissions.

Merit Review and Selection Process (Full Applications)

- The Merit Review process consists of multiple phases that each include an initial eligibility review and a thorough technical review
- Rigorous technical reviews 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, to make the selection decisions

Technical Merit Review Criteria

Criterion 1: IAC Operations Approach

Weight: [30%]

- Effectiveness and quality of the organizational model, operation plan, proposed tasks and organizational structure to achieve IAC objectives.
- Demonstrated understanding of, experience with, and ability to implement IAC Program goals and established guidelines/protocols.
- Strength and thoroughness of proposed means to develop technical and communications means to provide resources and solutions to participating and non-participating SMEs.
- Quality and extent of plans to incorporate smart manufacturing, cyber security, and wastewater and water-energy relationships, and energy management system standards, such as ISO50001 and Superior Energy Performance, into assessments performed by the center.
- Demonstrated understanding of the health and safety requirements for faculty and students on industrial assessments.
- Quality of plan to integrate satellite centers or other configurations into the main centers operations (if applicable).
- Completeness and reasonableness of the proposed Statement of Project Objectives (SOPO).

Technical Merit Review Criteria - Continued

Criterion 2: Student Staffing, Training and Integration with University Curriculum

Weight: [25%]

- Quality of plan for student staffing and utilization that emphasizes a comprehensive student training program including: assessment experience, training in tools and other resources related to industrial energy systems, professional exposure and relevant coursework. Plan should describe a process to ensure that graduating IAC students achieve a measurable level of competency in all or most of the areas noted above, and how competency will be measured.
- Quality and reasonableness of plan to provide enhanced student training and experience, including discussion of feasibility and demonstration of committed partnerships that may include internships/co-ops for students with partners.
- Quality of plan to provide opportunities for student participation in training/certification programs offered by national laboratories or industrial organizations, including ISO 50001 and Superior Energy Performance.
- Quality of plan for curriculum development to meet the scientific and technical training needs of the Industrial Assessment Center program and inclusion of other disciplines (e.g., business, marketing, environmental studies etc.) into training and student employee makeup.
- Effectiveness to engage current and past students in a social media resource to advance the network of the IAC program and link to the national alumni efforts to keep IAC students and alumni connected.
- Quality of plans promote the development or enhancement of an accredited bachelor's degree in energy-related engineering

Technical Merit Review Criteria - Continued

Criterion 3: Collaborations and Industrial Demographics

Weight: [25%]

- Demonstrated ability to form partnerships and create synergistic efforts in the region that enhance the SME and student experience, particularly with utilities and industrial companies.
- Ability to leverage partnerships to bring direct resources including IAC support, scholarships, co-op, internships, incentive dollars, additional services, and implementation support and other forms of support.
- Strength and effectiveness of the partnering organizations to expand the reach of the IAC program as well as lead to increased effectiveness to both participating and non-participating SMEs.
- Level of industrial concentration to warrant IAC establishment within the applicant's region and understanding of regional industrial base.
- Knowledge of key stakeholders and current challenges related to industrial energy efficiency in applicant's demographic region and familiarity with factors involving the implementation of energy efficiency recommendations, productivity improvements, cyber security, wastewater and water-energy relationships, and new technology

Technical Merit Review Criteria - Continued

Criterion 4: Technical Qualifications, Resources and Commitment

Weight: [20%]

- Qualifications of proposed faculty and staff, including past experience assessing industrial facilities, providing student training in energy related matters, and active integration with university curriculum (i.e. teaching faculty).
- Appropriate roles and responsibilities of all key staff and proposed time/workload commitment to the project including performance of assessments.
- Quality of performance metrics and reporting requirements to ensure ability to measure and share data on workforce development and results of energy audits
- Extent of previous efforts and demonstrated collaborations with industry, and other relevant activities, to achieve the project objectives.
- Adequacy of facilities, equipment, and other resources to accommodate the proposed center.
- Level of commitment from the proposing college or university and the host department, such as commitment letters, that a Center will have strong administrative support as well as support from other departments, potentially including business, marketing, communications, IT, and other areas.

Selection Factors

The Selection Official may consider the merit review recommendation, program policy factors, and the amount of funds available in arriving at selections for this FOA

Program Policy Factors

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

- Past performance of a currently active Industrial Assessment Center with regards to completion of assessments per the approved workplan, quality of assessment impacts and student metrics
- Industrial demographics/geographic diversity (client base and proximity to other Centers) to ensure appropriate services to all regions of the United States
- Involvement of Minority-serving institutions as either Prime Applicants or as Satellite or Support centers
- Overall innovation the Applicant will demonstrate in center operations, program structure, and workforce development

Registration Requirements

- To apply to this FOA, Applicants must register with and submit application materials through EERE Exchange: <https://eere-Exchange.energy.gov>
- Obtain a “control number” at least 24 hours before the first submission deadline eere-exchange.energy.gov
- Although not required to submit an Application, the following registrations must be complete to received an award under this FOA:

Registration Requirement	Website
DUNS Number	http://fedgov.dnb.com/webform
SAM	https://www.sam.gov
FedConnect	https://www.fedconnect.net
Grants.gov	http://www.grants.gov

Means of Submission

- Letters of Intent must be entered in EERE Exchange and submitted via email to IACs@ee.doe.gov
- Full Applications must be submitted only through EERE Exchange at <https://eere-Exchange.energy.gov>
 - EERE will not review or consider applications submitted through other means
- The Users' Guide for Applying to the Department of Energy EERE Funding Opportunity Announcements can be found at <https://eere-Exchange.energy.gov/Manuals.aspx>

Key Submission Points

- Check entries in EERE Exchange
 - Submissions could be deemed ineligible due to an incorrect entry
- EERE strongly encourages Applicants to submit 1-2 days prior to the deadline to allow for full upload of application documents and to avoid any potential technical glitches with EERE Exchange
- Make sure you hit the submit button
 - Any changes made after you hit submit will un-submit your application and you will need to hit the submit button again
- For your records, print out the EERE Exchange Confirmation page at each step, which contains the application's Control Number

Applicant Points-of-Contact

- Applicants must designate primary and backup points-of-contact in EERE Exchange with whom EERE will communicate to conduct award negotiations
- It is imperative that the Applicant/Selectee be responsive during award negotiations and meet negotiation deadlines
 - Failure to do so may result in cancellation of further award negotiations and rescission of the Selection

Questions

- Questions about this FOA? Email IACs@ee.doe.gov
 - All Q&As related to this FOA will be posted on EERE Exchange as a spreadsheet uploaded on the FOA main page
 - EERE will attempt to respond to a question within 3 business days, unless a similar Q&A has already been posted on the website
- Problems logging into EERE Exchange or uploading and submitting application documents with EERE Exchange? Email EERE-ExchangeSupport@hq.doe.gov.
 - Include FOA name and number in subject line
- This concludes the Webinar. Thanks for attending.