

Notice of Intent No. DE-FOA-0001544

Notice of Intent to Issue Funding Opportunity Announcement No. DE-FOA-0001532

The Office of Energy Efficiency and Renewable Energy (EERE) intends to issue, on behalf of the Building Technologies Office, a Funding Opportunity Announcement (FOA) entitled “Commercial Buildings and Energy Code Field Studies”.

This FOA supports the Department of Energy’s (DOE) continued interest in providing tools and data to help local governments, utilities, industry, design and construction professionals and other entities better understand the impact of energy codes and how to most effectively increase energy and cost savings. The Building Energy Codes Program (BECPP) issued a residentially-focused FOA in 2014 (DE-FOA-0000953: Strategies to Increase Residential Energy Code Compliance Rates and Measure Results) which is still underway. The current FOA expands the field-based concepts developed in the residential FOA to the much more diverse commercial sector. In particular, DOE is seeking to develop and test a methodology for identifying the commercial energy code requirements that can provide the maximum cost-effective energy and cost savings through increased compliance. DOE has completed a pilot study in this area which will serve as the basis for the requirements in this FOA. At the same time, there has been very little scientifically-based research conducted on commercial energy codes. Therefore DOE anticipates that information gathered during the FOA work will lead to new thinking and approaches which will be incorporated into the award.

It is anticipated that the FOA may include the following Areas of Interest:

Area of Interest #1 – Commercial Field Study. The applicant will field test a preliminary methodology for determining commercial energy and cost savings opportunities which DOE developed in its above-mentioned pilot study. The applicant will also conduct analytical work on the data collected, develop and implement supporting research projects such as interviews of key stakeholder groups, and provide education and training guided by the research results. Implementation will occur in several states with different climate zones. The applicant will test multiple approaches – determined in conjunction with DOE -- to determine which is the most accurate and cost-effective in collecting data. Examples of approaches include using third-party contractors to collect all data, working with local building permit officials to collect data or a hybrid approach in which permit officials gain access to buildings but third-party contractors collect the data.

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The goal of this area of interest will be to document progress toward a practical, affordable approach to measuring savings from improvements to commercial energy code compliance. Results from this methodology will provide the basis for private (utility) investment in code compliance programs. States will be able to incorporate the methodology itself into their own energy and emissions-related planning efforts.

Area of Interest #2 – Low-Rise Multifamily. The Low-rise Multifamily topic area is addressed as a separate topic because while these are commercial buildings in the sense that they are operated as income-generating assets, they are defined by the code as residential and are subject to the requirements of the residential energy code. According to the Census Bureau, over 40% of new construction is now multifamily, yet because of their hybrid residential/commercial status they are virtually always ignored in research studies. DOE will review its already-developed residential methodology, seek input from subject matter experts and determine what, if any, modifications are needed to apply it to multifamily buildings with accurate results. Applications will be solicited to apply the methodology in 4-5 states. Additionally, the applicant will do research to determine whether the market of low-rise multifamily builders and contractors is completely, somewhat, or not at all different from the single family market. The applicant may also be asked to develop and test an educational curriculum for multifamily buildings which addresses deficiencies in code compliance found in the field study.

Area of Interest #3 – Exploration of Life-Cycle Energy Code Impacts. Energy codes influence the design and construction of the building envelope. We know deductively that they impact energy use for the life of a building. In reality, however, very little research has been done on the life-cycle of buildings from an energy perspective. This topic area represents a small, initial effort to understand a building's current energy use in the context of choices made over its lifetime and, at the same time, to create a systematic approach to identifying energy use patterns in existing buildings that can guide efforts to substantially reduce energy use after they are occupied.

The research will be limited to public buildings in cities which have formally adopted policies committing them to significantly reducing energy use. Since the buildings will have only one owner during their lifetime, public buildings provide a relatively controlled research setting where there is a high chance that comprehensive written records of building modifications are available. Thus, they offer the best chance of providing insights into both how and why energy use has changed over time and whether and how much energy codes played a role in that.

DOE is interested in working with cities to provide technical assistance and tools for tasks to help assess the lifecycle impacts of building energy codes:

- Collecting, organizing and entering their building energy data into EPA's Portfolio Manager or other building analysis software.

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- Analyzing the data to identify low-performing buildings and cost-effective investment opportunities.
- Developing cost-effective remediation plans for selected buildings and estimates of resulting improvements in overall performance.
- Determining if changes to the sections of the energy code which pertain to renovations and remodels could address any of the causes of low performance.

EERE envisions awarding multiple financial assistance awards in the form of cooperative agreements. The estimated period of performance for each award will range from one to three years.

This Notice is issued so that interested parties are aware of the EERE's intention to issue this FOA in the near term. All of the information contained in this Notice is subject to change. EERE will not respond to questions concerning this Notice. Once the FOA has been released, EERE will provide an avenue for potential Applicants to submit questions.

Subject to annual appropriation, EERE plans to issue the FOA on or about March 2016 via the EERE Exchange website <https://eere-exchange.energy.gov/>. If Applicants wish to receive official notifications and information from EERE regarding this FOA, they should register in EERE Exchange. When the FOA is released, applications will be accepted only through EERE Exchange.

In anticipation of the FOA being released, Applicants are advised to complete the following steps, which are **required** for application submission:

- Register and create an account in EERE Exchange at <https://eere-exchange.energy.gov/>. This account will allow the user to register for any open EERE FOAs that are currently in EERE Exchange. 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.

Questions related to the registration process and use of the EERE Exchange website should be submitted to: EERE-ExchangeSupport@hq.doe.gov

- Obtain a Dun and Bradstreet Data Universal Numbering System (DUNS) number (including the plus 4 extension, if applicable) at <http://fedgov.dnb.com/webform>
- Register with the System for Award Management (SAM) at <https://www.sam.gov>. Designating an Electronic Business Point of Contact (EBiz POC) and obtaining a special password called an MPIN are important steps in SAM registration. Please update your SAM registration annually.
- Register in FedConnect at <https://www.fedconnect.net/>. To create an organization account, your organization's SAM MPIN is required. For more information about the SAM MPIN or other registration requirements, review the FedConnect Ready, Set, Go! Guide at

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https://www.fedconnect.net/FedConnect/Marketing/Documents/FedConnect_Ready_Set_Go.pdf

- Register in Grants.gov to receive automatic updates when Amendments to a FOA are posted. However, please note that applications will not be accepted through Grants.gov. <http://www.grants.gov/>. All applications must be submitted through EERE Exchange.

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