

Notice of Intent No. DE-FOA-0001191

Notice of Intent to Issue Funding Opportunity Announcement No. DE-FOA-0001167

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 “Buildings University Innovators and Leaders Development (BUILD) - 2015”.

The Emerging Technologies (ET) Program of the Building Technologies Office (BTO) supports applied research and development for technologies and systems that contribute to building energy consumption. The goal of the ET Program is to enable 50% primary energy savings in the USA buildings sector by the year 2030, relative to the baseline energy consumption projected by the *2010 Annual Energy Outlook*. The ET Program strives to meet this goal by researching and developing cost-effective, energy-efficient technologies to be introduced into the marketplace.

Recognizing that “our nation’s primary source of both new knowledge and graduates with advanced skills continues to be our research universities”,¹ increasing the competitiveness of American universities in building energy efficiency Research & Development (R&D) is of great importance. This same study by the National Research Council also highlights the need for universities to develop stronger partnerships with business and industry. At the same time, enhancing the competitiveness of American manufacturers requires “a strong educational supply chain,” as pointed out by the CEO/President of the Federal Reserve Bank of Cleveland, Sandra Pianalto.² The Society of Manufacturing Engineers has emphasized the need for expanding manufacturing education at all levels, including undergraduate and graduate students, in order for the USA to continue to provide leadership in manufacturing.³

The BUILD FOA will address these issues through the following objectives:

- (i) Improving the competitiveness of American universities to conduct building energy-efficiency R&D
- (ii) Enabling American universities to develop stronger partnerships with industry
- (iii) Improving manufacturing education in American universities

¹ Research Universities and the Future of America, National Research Council, The National Academies Press, 2012

² R.A. McCafferty, “Pianalto says education is crucial for manufacturing,” Crain’s Cleveland Business, April 7, 2014

³ Workforce Imperative: A Manufacturing Education Strategy, Society of Manufacturing Engineers, 2012

Area of Interest

EERE envisions awarding multiple competitive financial assistance awards in the form of cooperative agreements with an estimated period of performance of approximately 2 years to USA-based university teams to research and develop innovative building energy efficiency technologies. These student teams must include undergraduate students, and be led by faculty with relevant expertise in energy efficient technologies, manufacturing (for projects developing hardware), and commercialization. The Lead Institution must be an Institution of Higher Education, which includes, but is not limited to universities, 2-year community colleges, and predominantly undergraduate institutions. The Lead Institution can choose to team with external partners such as a manufacturer or a government laboratory, but an external partner is not required at the time of application.

Teams may propose to develop any technology (hardware), software, or manufacturing process with direct application to residential, multi-family and/or commercial buildings in the USA, with significant primary energy savings potential. In other words, this is an “open” topic that adheres to the BTO policy on open software standards, but all applications must lead to significant (≥ 0.25 Quads in annual technical potential) primary energy savings in buildings. Proposed technologies or approaches can begin at any Technology Readiness Level (TRL) level short of a commercialized technology ($TRL \leq 8$), but regardless of the beginning TRL level each application must describe the expected TRL level at the end of the project, the next logical step for the project after 2 years of DOE support, and the plan for achieving this next step. Examples of the “next logical step” include obtaining additional funding through an on-campus competition or external investors, starting a spin-off company to commercialize the technology, licensing the patent to a manufacturer, etc. Note that renewal funding through the BUILD program beyond the initial 2 years of BTO support will NOT be allowed; the same faculty can re-apply, but a new project must be proposed.

This Notice is issued so that interested parties are aware of 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.

EERE plans to issue the FOA in late calendar year 2014 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.

This is a Notice of Intent (NOI) only. EERE may issue a FOA as described herein, may issue a FOA that is significantly different than the FOA described herein, or EERE may not issue a FOA at all.

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 https://www.fedconnect.net/FedConnect/PublicPages/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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