

PMC-ND  
(1.08.09.13)

**U.S. DEPARTMENT OF ENERGY**  
**OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY**  
**NEPA DETERMINATION**



RECIPIENT: Georgia Institute of Technology

STATE: GA

**PROJECT TITLE :** Building Efficiency Technologies by Tomorrow's Engineers and Researchers (BETTER) Capstone

<b>Funding Opportunity Announcement Number</b>	<b>Procurement Instrument Number</b>	<b>NEPA Control Number</b>	<b>CID Number</b>
DE-FOA-0001167	DE-EE0007133	GFO-0007133-001	GO7133

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

**CX, EA, EIS APPENDIX AND NUMBER:**

## Description:

<b>A9 Information gathering, analysis, and dissemination</b>	Information gathering (including, but not limited to, literature surveys, inventories, site visits, and audits), data analysis (including, but not limited to, computer modeling), document preparation (including, but not limited to, conceptual design, feasibility studies, and analytical energy supply and demand studies), and information dissemination (including, but not limited to, document publication and distribution, and classroom training and informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)
<b>B3.6 Small-scale research and development, laboratory operations, and pilot projects</b>	Siting, construction, modification, operation, and decommissioning of facilities for smallscale research and development projects; conventional laboratory operations (such as preparation of chemical standards and sample analysis); and small-scale pilot projects (generally less than 2 years) frequently conducted to verify a concept before demonstration actions, provided that construction or modification would be within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible). Not included in this category are demonstration actions, meaning actions that are undertaken at a scale to show whether a technology would be viable on a larger scale and suitable for commercial deployment.

## Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to the Georgia Institute of Technology (Georgia Tech) to conduct eighteen or more building efficiency Capstone projects. Teams of students would be partnered with a specific building energy efficiency industry mentor. Over the semester, the students would design and build a prototype building energy efficiency solution to a problem posed by their industry mentor. The final prototype would be presented publically at the Capstone Expo.

The proposed activities would include meetings with industry mentors (virtually, on campus, and when possible on-site at the industry's office), delivering presentations on data analysis, and demonstration of prototypes at a Capstone Expo via a poster session. There would be no field work associated with the Capstone projects.

The activities would consist of design, analysis and fabrication of building energy efficiency models and bench-scale mechanical prototypes. All computer-based design work and fabrication would occur indoors at the existing Georgia Tech Manufacturing Related Disciplines Complex in Atlanta, GA. Georgia Tech is committed to the proper training of students to safely operate and work in a machine shop. All students go through approved training and use proper personal protective equipment. Waste generated would consist of scrap metal, plastic, wood, etc. in the form of chips from machining tools. In some cases (e.g. aluminum) waste can be recycled. Paper waste would also be generated and would be recycled. The majority of waste would be disposed of with municipal waste according to local, state and Federal regulations. No modifications to buildings, new construction, or new permits, additional licenses and/or authorizations would be required as a result of the proposed project. Any additional projects beyond the initial eighteen that may be added to this award would be of the same general type and would utilize the same facilities described above.

Based on review of the project information and the above analysis, DOE has determined the proposed project would not have a significant individual or cumulative impact to human health and/or environment. DOE has determined that the proposed project is consistent with actions outlined in DOE categorical exclusions A9 "Information gathering, analysis, and dissemination", and B3.6 "Small-scale research and development, laboratory operations, and pilot projects" and is therefore categorically excluded from further NEPA review.

**NEPA PROVISION**



DOE has made a final NEPA determination for this award

Insert the following language in the award:

If you intend to make changes to the scope or objective of your project you are required to contact the Project Officer identified in Block 11 of the Notice of Financial Assistance Award before proceeding. You must receive notification of approval from the DOE Contracting Officer prior to commencing with work beyond that currently approved.

Note to Specialist :

Building Technologies Office

This NEPA determination does not require a tailored NEPA provision.

Review completed by Logan Sholar on 8/4/2015

**SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.**

NEPA Compliance Officer Signature: \_\_\_\_\_

NEPA Compliance Officer

Date: \_\_\_\_\_

8/5/2015

**FIELD OFFICE MANAGER DETERMINATION**

☐ Field Office Manager review required

**NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:**

- ☐ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.
- ☐ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

**BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :**

Field Office Manager's Signature: \_\_\_\_\_

Field Office Manager

Date: \_\_\_\_\_