

Good afternoon everyone and welcome to our webinar. Thank you for your interest in the U.S. Department of Energy's efforts on renewable energy and energy efficiency. You are joining us for the Informational Webinar for Applicants and other Interested parties for the "Building America Industry Partnerships for High Performance Housing Innovation" Funding Opportunity Announcement, or FOA, which was issued on November 18. My name is Eric Werling and I am a Technology Manager in the Building Technologies Office within the DOE's Office of Energy Efficiency and Renewable Energy. We hope to cover the basic aspects of the Funding Opportunity Announcement during this webinar.

Before we begin, I'd like to draw your attention to the email address on the left hand side of this cover page. This is the official mailbox to direct all of your questions during the entire FOA process. Please do not contact EERE individuals directly with questions, including myself. All questions received at this mailbox are posted publicly at the Q&A section of the FOA page on EERE Exchange in an anonymous way. The official answers to your questions will typically also be posted within 3 business days. Please be careful not to submit any language that might be business sensitive, proprietary or confidential.

We will have a live Q&A period at the end of the webinar, so please type in your questions as they come up. Again, please be careful not to submit any language that might be business sensitive, proprietary or confidential. We will be posting all Q&As to EERE Exchange after the webinar. There may be questions that require further discussion with

EERE staff and will not be addressed today. If you don't hear your question during the Webinar, please check EERE Exchange in the next few days as the answer will be posted there.

Also, just to be clear, 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.

Let's get started!

FOA Issue Date:	11/18/2015
FOA Informational Webinar:	11/30/2015
Submission Deadline for Concept Papers:	12/21/2015
Submission Deadline for Full Applications:	02/08/2016
Submission Deadline for Replies to Reviewer Comments:	03/08/2016
Expected Date for EERE Selection Notifications:	Spring 2016
Expected Timeframe for Award Negotiations:	Summer 2016

This slide shows the anticipated schedule for the FOA. The FOA has already been posted, and we are conducting the FOA Informational Webinar now. Please note that there are a few requirements that we will go over in the presentation that are different than in past FOAs, such as Replies to Reviewer Comments – we will cover all requirements for this FOA later in the presentation.

Notice

- All applicants are strongly encouraged to carefully read the entire FOA 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 from EERE.
- If you believe there is an inconsistency, please contact Building_America_FOA@EE.Doe.Gov.

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[READ SLIDE]

Agenda

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

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The agenda for this presentation is as follows: [READ SLIDE]

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

FOA Description

With this FOA, RBI will select additional building science project teams in 2016 for the Building America Program to address RBI's "Demonstrating and Integrating Technology" performance goal in the residential building sector. This FOA builds on work begun in the 2015 Building America FOA.

Awardees will conduct applied research, development, and demonstration (RD&D) in real world houses of cost-effective technologies and practices that can help reduce the energy use intensity (EUI) of new single-family homes by 60% and existing single-family homes by 40%, relative to the 2010 average home EUI in each climate zone, by 2020, with a focus on reducing heating and cooling loads.

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[READ SLIDE]

Topic Areas/Technical Areas of Interest

Topic 1: Building America Technology to Market Roadmap Projects

Topic 1 addresses three integrated technology gaps focused on achieving high performance residential buildings and overcoming market barriers to adoption at scale, including:

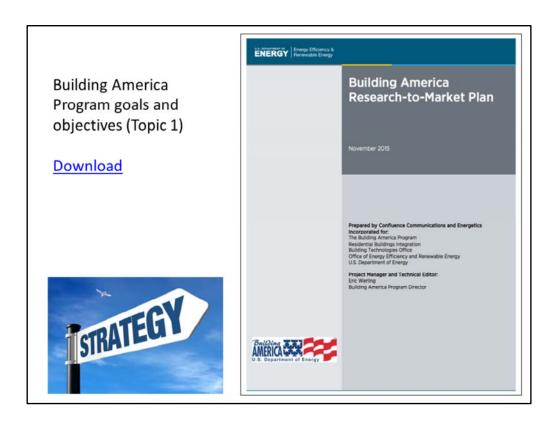
- A) High Performance Moisture-Managed Building Envelope Systems;
- B) Optimized Comfort Systems for Low-Load Homes; and
- C) High Performance Ventilation Systems & IAQ Strategies.

This topic applies to either new construction or existing home retrofits or both, as it focuses on remaining technical challenges that slow the adoption of high performance envelopes and HVAC systems, affecting both the new construction and home improvement industries. This topic primarily focuses on solutions for U.S. climate zones with the greatest need – i.e., Hot/humid, Mixed Humid, and Cold climates. **Detailed objectives for this topic have been expanded** through the Building America planning process described in the *Building America Research to Market Plan*, available at: energy.gov/eere/buildings/downloads/building-america-program-research-market-plan

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This FOA has two topics. [READ SLIDE]





- A. High Performance, Moisture Managed **Envelope Systems**
- B. Optimal Comfort Systems for Low Load Homes
- C. Optimal Ventilation Systems and IAQ Solutions for Low Load Homes

Overall Roadmap Objectives:

- Standard Practice as endpoints
- Manage risks to minimize problems of adoption
- Address optimal performance & costeffectiveness
- Solutions must be practical & profitable for builders and home improvement contractors



Topic Areas/Technical Areas of Interest

Topic 2: Home Improvement RD&D Projects

Topic 2 addresses RD&D related to innovative energy efficiency upgrade opportunities for trade contractors during home improvements. Topic 2 projects must offer significant potential for increasing the energy efficiency of existing homes by addressing cost and/or market entry barriers related to home improvement trades adding energy efficiency measures during typical home improvement transactions. Applicants may propose RD&D projects in the following home improvement sectors:

- Envelope upgrades (i.e., roofing, siding, & window replacements, foundation repairs, or other home envelope improvements related to achieving energy savings)
- Mechanical system upgrades (i.e., HVAC service & replacements with the potential for significant energy savings above standard practice)

In addition, DOE will also consider Topic 2 project proposals that develop and/or demonstrate:

Innovative, cost saving methods/technologies for assessing home performance, either during inspections or real time operation.

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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.B of the FOA, including but not limited to:
 - Applications for proposed technologies that are not based on sound scientific principles (e.g., violates the law of thermodynamics).

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[READ SLIDE]

Total Amount to be Awarded	\$5,500,000*
Average Award Amount	EERE anticipates making awards that range from \$500,000 to \$2,000,000.
Types of Funding Agreements	Cooperative Agreements, Grants, Technology Investment Agreements, Work Authorizations, and Interagency Agreements
Period of Performance	24 to 36 months
Cost Share Requirement	20% of Total Project Costs

EERE expects to make approximately \$5.5 million of Federal funding available for new awards under this FOA subject to the availability of appropriated funds. The average award amount is anticipated to range from \$500,000 to \$2 million.

EERE intends to fund mostly cooperative agreements under this FOA, but may also fund Grants, TIAs, Work Authorizations, and Interagency Agreements. Cooperative Agreements include Substantial Involvement, which we will discuss next.

[NOTE form legal: we use cooperative agreements unless special circumstances justify the use of another one of the vehicles.]

Statement of Substantial Involvement

EERE has substantial involvement in work performed under Awards made following 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:

- EERE shares responsibility with the Recipient for the management, control, direction, and performance of the Project.
- 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.
- 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.
- EERE participates in major project decision-making processes.
- EERE reserves the right to direct which resources, including the assistance of and input from National Laboratories and FFRDC's that it will use to conduct the independent validation and analysis of project results.

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 Under cooperative agreements, there will be what is known as "substantial involvement" between EERE and the Recipient during the performance of the project. [READ SLIDE]

Cost Sharing Requirements

 Applicants must contribute a minimum of 20% of the total project costs for R&D projects.

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[READ SLIDE]

Cost Share Contributions

- · Contributions must be:
 - o Specified in the project budget
 - O 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

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The total budget presented in the application must include both Federal (DOE), and Non-Federal (cost share) portions, thereby reflecting TOTAL PROJECT COSTS proposed. All costs must be verifiable from the Recipient's records and be necessary and reasonable for the accomplishment of the project.

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

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Cost Share must be allowable and must be verifiable upon submission of the Full Application. Please refer to this chart for your entity's applicable cost principles. It is imperative that you follow the applicable cost principles when creating your budget for the full application.

Allowable Cost Share

- 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

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Cost share can provided in cash and/or in-kind. It can be provided by the Prime Recipient, subs, or a third party.

The basic definition of in-kind cost share is the donation of personnel time, equipment, facilities, or other items that an organization will contribute to the project. It can take many forms, each of which must be assigned a dollar value to be included in the budget. Some examples of in-kind cost share are the donation

of work hours, facility use, equipment use.

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
 - o Independent research and development (IR&D) funds
 - The same cash or in-kind contributions for more than one project or program

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Be aware that there are items that are considered unallowable cost share. If a cost is considered unallowable, it cannot be counted as cost share. This slide provides some examples of cost share that is unallowable.

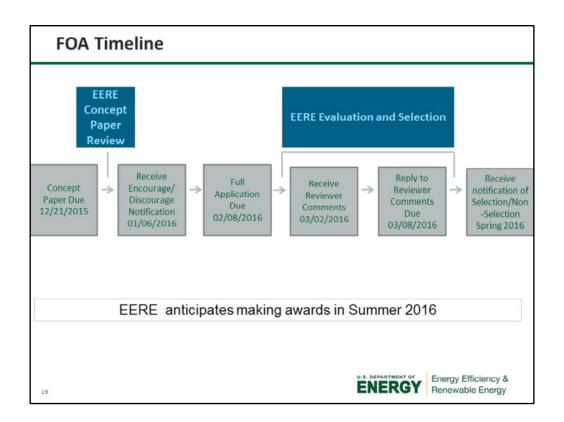
Cost Share Payment

- Recipients must provide documentation of the cost share contribution, incrementally over the life of the award
- The cumulative cost share percentage provided on <u>each</u> <u>invoice</u> 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.5 of the FOA.

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Cost Share must be provided on an invoice basis, unless a waiver is requested and approved by the DOE Contracting Officer.



EERE's Evaluation and Selection Process is shown in blue here. EERE will review Concept Papers, Replies to Reviewer Comments (which we will cover later in the presentation), and Full Applications. The gray boxes represent the actions that apply to applicants throughout the FOA process.

Concept Papers

- Applicants must submit a Concept Paper
 - Each Concept Paper must be limited to a single concept or technology
- The Concept Paper must include a technology description (See Section IV.C of the FOA)
 - The technology description is limited to 2 pages
 - The Concept Paper can also include graphs, charts, or other data (limited to 4 pages)
- Concept Papers must be submitted by 12/21/15, 5:00pm ET, through EERE Exchange, and must comply with the content and form requirements in Section IV.C of the FOA
- EERE provides applicants with: (1) an "encouraged" or "discouraged" notification, and (2) the reviewer comments

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Concept Papers are required for this FOA. Concept Papers are brief descriptions of the proposed project. It allows applicants to submit their ideas with minimal time and expense. EERE will provide feedback on the proposed project so the Applicant can make an informed decision whether to expend additional resources to prepare a full application.

If an applicants fails to submit an eligible Concept Paper, the applicant is not eligible to submit a Full Application.

Concept Papers must be submitted by December 21, 2015, through EERE Exchange.

EERE will provide applicants with either an encouraged or discouraged notification. A "discouraged" notification conveys EERE's lack of programmatic interest in the proposed project. An applicant who receives a "discouraged" notification may still submit a Full Application.

Topic 1: Concept Paper Review

EERE evaluates the Concept Papers based on the following technical review criteria:

Topic 1: Concept Paper Criterion: Overall FOA Responsiveness and Viability of the Project (Weight: 100%) This criterion involves consideration of the following factors:

- The applicant clearly describes the proposed technology or approach, describes how the project is unique and innovative, and how it will advance the current state-of-the-art;
- The applicant has identified risks and challenges, including possible mitigation strategies;
- The applicant has shown the potential impact that the proposed project would have on the relevant field and application;
- · The proposed approach provides for quantification of impact;
- The applicant has the qualifications, experience, capabilities and other resources necessary to complete the proposed project; and
- The proposed work, if successfully accomplished, would clearly meet objectives of one or more of the Building America Roadmaps: A) High Performance Moisture Managed Envelope Solutions, B) Optimal Comfort Systems for Low-Load Homes, and/or C) Optimal Ventilation & IAO Solutions.

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EERE will provide applicants with (1) either an "encouraged" or "discouraged" notification, and (2) the reviewer comments.

Please note that regardless of the date applicants receive the Encourage/Discourage notifications, the submission deadline for the

Full Application remains the date stated on the FOA cover page

Topic 2: Concept Paper Review

EERE evaluates the Concept Papers based on the following technical review criteria:

Topic 2: Concept Paper Criterion: Overall FOA Responsiveness and Viability of the Project (Weight: 100%) This criterion involves consideration of the following factors:

- The applicant clearly describes the proposed technology or approach, how it is unique and innovative, and how it will advance the current state-of-theart in home improvement;
- The applicant has identified risks and challenges, including possible mitigation strategies;
- The applicant has shown the potential impact that the proposed project would have on the relevant home improvement trade and application;
- The proposed approach provides for quantification of impact;
- The applicant has the qualifications, experience, capabilities and other resources necessary to complete the proposed project;
- The proposed approach reduces the cost of, and/or addresses existing technological and market barriers to, energy efficiency upgrades, and can be implemented through conventional trades;
- The proposed work, if successfully accomplished, would increase the energy
 efficiency of existing homes though innovative upgrades during typical
 home improvement transactions.

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EERE will provide applicants with (1) either an "encouraged" or "discouraged" notification, and (2) the reviewer comments.

Please note that regardless of the date applicants receive the Encourage/Discourage notifications, the submission deadline for the

Full Application remains the date stated on the FOA cover page

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: a detailed plan for tasks, milestones, and deliverables for the project.
 - 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., U.S. Manufacturing Plan, FFRDC Authorization (if applicable), Disclosure of Lobbying Activities, etc

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The Full Application includes:

Technical Volume: The key technical submission. Applicants submit info pertaining to the technical content, project team members, etc.

Statement of Project Objectives: a detailed plan for tasks, milestones, and deliverables for the project.

SF-424 Application for Federal Assistance: The formal application signed by the authorized representative of the applicant. Includes cost share amounts and Federal certifications and assurances.

SF-424A Budget & Budget Justification: Budget documents that asks applicants to submit a detailed budget and spend plan for the project.

Summary for Public Release: Applicants must provide a 1 page summary of their technology appropriate for public release.

Summary Slide: Powerpoint slide that provides quick facts about the technology. Slide content requirements are provided in the FOA.

Administrative Documents: E.g., U.S. Manufacturing Plan, 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% 30% - 40% Technical Description, Innovation and Impact Workplan and Market Transformation Plan 30% - 40% Technical Qualifications and Resources 20% ENERGY Energy Efficiency & Renewable Energy

The key technical component of the full application is the Technical Volume, which helps applicants frame the technical information that the application will be evaluated on. The Technical Volume provides information regarding what the project is, how the project tasks will be accomplished, and the project timetable.

The Technical Volume is comprised of a cover page, project overview, technical description, innovation, and impact, workplan, technical qualifications and resources. Please note that the percentages listed here are suggested and are not mandatory.

- The Cover Page will be a one page document and provides basic information on their project, such as title, topic area, points of contact, etc.
- The Project Overview constitutes approximately 10% of the Technical Volume and provides information on project background, goals, impact of EERE funding
- The Technical Description, Innovation, and Impact section is approximately 30-40% of the Technical Volume. It provides information on project relevance and outcomes, feasibility, and innovation/impacts. This ultimately provides the justification as to why EERE should fund the project.
- The Workplan and Market Transformation Plan is the key element to the Technical Volume, and constitutes approximately 30-40% of the Technical Volume. It details the proposed milestones and project schedule. If selected for award negotiations, the Workplan serves as the starting point when negotiating the Statement of Project Objectives.
- The Technical Qualifications and Resources section is approximately 20% of the Technical Volume. It provides applicants and opportunity to provide information about the proposed project team and demonstrate how the applicant will facilitate the successful completion of the proposed project.

[*NOTE from Legal: "The percentages that we include are recommendations only, as we do not seek to bind applicants to a specific number of pages for each item we ask them for. That said, having numbers here that are different from what are in the FOA may be confusing, so I would just be sure to clearly explain the difference in the webinar (i.e., why do the numbers differ, what can applicants expect to take away from the difference)."]

Full Application Eligibility Requirements

- Applicants must submit a Full Application by 02/08/2016
- · Full Applications are eligible for review if:
 - o The Applicant is an eligible entity Section III.A of FOA;
 - o The Applicant submitted an eligible Concept Paper;
 - o The Cost Share requirement is satisfied Section III.B of FOA;
 - o 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.

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As we previously pointed out, applicants must submit full applications by February 8, 2016. EERE will conduct an eligibility review, and full application will be deemed eligible if: [READ SLIDE]

Who's Eligible to Apply?

Eligible applicants for this FOA include:

- 1. Individuals
- 2. Domestic Entities
- 3. Foreign Entities
- 4. Incorporated Consortia
- 5. Unincorporated Consortia

For more detail about each eligible applicant, please see Section III.A of the FOA for eligibility requirements

Nonprofit organizations described in Section 501(c)(4) of the Internal Revenue Code of 1986 that engaged in lobbying activities after December 31, 1995, are not eligible to apply for funding.

This FOA has restricted eligibility requirements to the following entities:

 DOE/NNSA Federally Funded Research and Development Centers (FFRDCs) and DOE Government-Owned, Government-Operated laboratories (GOGOs) will not be eligible to apply for funding as a Prime Recipient, but they are eligible to apply for funding as a Subrecipient. National Renewable Energy Lab (NREL)/Alliance for Sustainable Energy, LLC will be precluded from applying to this FOA entirely.

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Please note that nonprofit organizations described in Section 501(c)(3) of the Internal Revenue Code of 1986 that engaged in lobbying activities after December 31, 1995, are not eligible to apply for funding.

Also, note that all Prime Recipients receiving funding under this FOA must be incorporated (or otherwise formed) under the laws of a State or territory of the United States. If a foreign entity applies for funding as a Prime Recipient, it must designate in the Full Application a subsidiary or affiliate incorporated (or otherwise formed) under the laws of a State or territory of the United States to be the Prime Recipient. The Full Application must state the nature of the corporate relationship between the foreign entity and domestic subsidiary or affiliate.

Multiple Applications

Applicants may submit more than one application to this FOA, provided that each application describes a unique, scientifically distinct project.

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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

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Topic 1: Technical Merit Review Criteria

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

Technical Merit and Innovation

- · Extent to which the proposed technology or process is innovative;
- Degree to which the current state of the technology and the proposed advancement are clearly described;
- Extent to which the application specifically and convincingly demonstrates how the applicant will move the state of the art to the proposed innovation; and
- Sufficiency of technical detail in the application to assess whether the
 proposed work is scientifically meritorious and revolutionary, including
 relevant data, calculations and discussion of prior work in the literature with
 analyses that support the viability of the proposed work.

Impact of Proposed Innovation

- How effectively the proposal addresses specific objectives of the Building America Technology to Market Roadmaps; and
- The potential quantifiable impact of the project on advancing results in the market if successful.

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Applications will be evaluated against the following merit review criteria: READ SLIDE

Topic 1: Technical Merit Review Criteria - Continued

Criterion 2: Project Research and Market Transformation Plan (20%)

Project Approach and Workplan

- Degree to which the approach and critical path have been clearly described and thoughtfully considered; and
- Degree to which the task descriptions are clear, detailed, timely, and reasonable, resulting in a high likelihood that the proposed Workplan will succeed in meeting the project goals.

Identification of Technical Risks

- Discussion and demonstrated understanding of the key technical risk areas involved in the proposed work, and
- · Quality of the mitigation response strategies to address identified risks.

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Topic 1: Technical Merit Review Criteria - Continued

Criterion 2, Continued

Baseline, Metrics, and Deliverables

- · The level of clarity in the definition of the baseline, metrics, and milestones;
- The degree to which defined metrics and milestones reflect the goals of the Building America Roadmaps; and
- Relative to a clearly defined experimental baseline, the strength of the quantifiable metrics, milestones, and a mid-point deliverables defined in the application, such that meaningful interim progress will be made.

Market Transformation Plan

- Identification of target market, competitors, and distribution channels for proposed innovation;
- · Understanding of known or perceived barriers to market penetration; and
- · The quality of strategies for overcoming market barriers.

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Criterion 3: Team and Resources (40%)

- The capability of the Principal Investigator(s) and the proposed team to address all aspects of the proposed work with a good chance of success.
- Qualifications, relevant expertise, and time commitment of the individuals on the team;
- The capability of the proposed team to recruit and partner with industry stakeholders to create opportunities for developing and demonstrating innovative system and process solutions;
- The capability of the proposed team to anticipate, understand and resolve innovation risks and barriers;
- The capability of the proposed team to develop technology system and process solutions that can be successfully communicated to and implemented by residential market leaders;

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Criterion 3, Continued

- The capability of the proposed team to facilitate and expedite market transformation through leveraged stakeholder actions that lead to broader market adoption of Building America research results;
- · The sufficiency of the facilities to support the work, if applicable;
- The capability of the proposed team to track and evaluate market impacts of their innovations;
- Level of participation by project participants as evidenced by letter(s) of commitment and how well they are integrated into the Workplan; and
- Reasonableness of budget and spend plan for proposed project and objectives.

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Topic 2: Technical Merit Review Criteria

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

Technical Merit and Innovation

- Extent to which the proposed technology or process is innovative and has the
 potential to advance the state of the art in energy efficient home improvement
 applications;
- Degree to which the current state of the technology or market and the proposed innovation are clearly described;
- Extent to which the application specifically and convincingly demonstrates how the applicant will support successful implementation of the proposed innovation; and
- Sufficiency of technical detail in the application to assess whether the proposed work is credible and innovative.

Impact of Proposed Innovation

- Demonstrated ability for proposed innovation to be implemented through conventional trades
- Degree to which the proposed innovation or approach supports and complements Building America, Staged Upgrade Initiative, and/or other BTO program strategies; and
- The potential quantifiable impact of the project on advancing results in the market if successful.

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Applications will be evaluated against the following merit review criteria: READ SLIDE

Criterion 2: Project Research and Market Transformation Plan (30%)

Project Approach and Workplan

- Degree to which the approach and critical path have been clearly described and thoughtfully considered; and
- Degree to which the task descriptions are clear, detailed, timely, and reasonable, resulting in a high likelihood that the proposed Workplan will succeed in meeting the project goals.

Identification of Technical Risks

- Discussion and demonstrated understanding of the key technical risk areas involved in the proposed work, and
- · Quality of the mitigation and response strategies to address identified risks.

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Criterion 2, Continued

Baseline, Metrics, and Deliverables

- The level of clarity in the definition of the baseline, metrics, and milestones;
 and
- Relative to a clearly defined experimental baseline, the strength of the
 quantifiable metrics, milestones, and a mid-point deliverables defined in the
 application, such that meaningful interim progress will be made.

Market Transformation Plan

- Identification of target market, competitors, and supply chain for proposed innovation;
- Understanding of known or perceived barriers to market penetration, from the perspectives of both the contractor and the customer; and
- · The quality of strategies for overcoming the barriers.

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Criterion 3: Team and Resources (30%)

- The capability of the Principal Investigator(s) and the proposed team to address all aspects of the proposed work with a good chance of success.
 Qualifications, relevant expertise, and time commitment of the individuals on the team;
- The capability of the proposed team to recruit and partner with industry stakeholders to create opportunities for developing and demonstrating innovative system and process solutions;
- The capability of the proposed team to anticipate, understand and resolve innovation risks and barriers;
- The capability of the proposed team to develop technology system and process solutions that can be successfully communicated to and implemented by residential market leaders;

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Criterion 3, Continued

- The capability of the proposed team to facilitate and expedite market transformation through leveraged stakeholder actions that lead to broader market adoption of Building America research results;
- The sufficiency of the facilities to support the work, if applicable;
- The capability of the proposed team to track and evaluate market impacts of their innovations;
- Level of participation by project participants as evidenced by letter(s) of commitment and how well they are integrated into the Workplan; and
- Reasonableness of budget and spend plan for proposed project and objectives.

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Replies to Reviewer Comments

- EERE provides applicants with reviewer comments
- Applicants are <u>not</u> required to submit a Reply it is optional
- To be considered by EERE, a Reply must be submitted by 03/08/2016, 5:00pm ET and submitted through EERE Exchange
- Content and form requirements:

Section	Page Limit	Description
Text	2 pages max	Applicants may respond to one or more reviewer comments or supplement their Full Application.
Optional	1 page max	Applicants may use this page however they wish; text, graphs, charts, or other data to respond to reviewer comments or supplement their Full Application are acceptable.

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The Full Applications are reviewed by experts in the FOA topic areas. After those experts review the applications, EERE will provide applicants with reviewer comments. Applicants will have a brief opportunity to review the comments and prepare a short Reply to Reviewer Comments responding to comments however they desire. The Reply to Reviewer Comments is due by the date and time provided on this slide. Applicants should anticipate receiving the independent reviewer comments approximately three business days before this due date. The Reply to Reviewer Comments is an optional submission; applicants are not required to submit a Reply to Reviewer Comments.

This a **customer centric** process that provides applicants with a unique opportunity to correct misunderstandings and misinterpretations and to provide additional data that might influence the selection process in their favor. The Replies are considered by the reviewers and the selection official.

Replies to Reviewer Comments must conform to the content and form requirements listed here, including maximum page lengths. If a Reply to Reviewer Comments is more than three pages in length, EERE will review only the first three pages and disregard any additional pages.

Please see Sections IV.F. and V.A.3 for additional information regarding Replies to Reviewer Comments

Selection Factors

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

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Program Policy Factors

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

- The degree to which the proposed project, including proposed cost share, optimizes the use of available EERE funding to achieve programmatic objectives;
- The level of industry involvement and demonstrated ability to commercialize energy or related technologies;
- Technical, market, organizational, and environmental risks associated with the project;
- Whether the proposed project is likely to lead to increased employment and manufacturing in the United States;
- Whether 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;
- Whether the proposed project will enhance vs. duplicate/overlap with other EERE funded work;
- Whether the proposed project contributes to underserved strategic priorities in the Building America technology roadmap or technology to market strategy;
- · Comprehensiveness of commercialization plan if the project will result in IP; and
- Whether the proposed project will advance the goals of the Climate Action Champion initiative, as committed to by the designated Champion pursuant to its designation agreement. The Climate Action Champion initiative goals include improving climate resilience and reducing greenhouse gas emissions.

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After the Merit Review process, the Selection Official may consider program policy factors to come to a final selection decision.

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
- 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

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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.

DUNS Number

Obtain a Dun and Bradstreet Data Universal Numbering System (DUNS) number.

System for Award Management

Register with the System for Award Management (SAM). 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.

Fedconnect

Register in FedConnect. 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 the FedConnect site.

Grants.gov

Register in Grants.gov to receive automatic updates when Amendments to this FOA are posted. However, please note that [Delete if Letters of Intent are not applicable] Letters of Intent, Concept Papers, and Full Applications will not be accepted through Grants.gov.

Means of Submission

- Concept Papers, Full Applications, and Replies to Reviewer Comments must be submitted 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

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All required submissions must come through EERE Exchange. EERE will not review or consider applications submitted through any other means.

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

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Applicant Points-of-Contact

- Applicants must designate primary and backup points-ofcontact 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

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Questions

- Questions about this FOA? Email Building_America_FOA@EE.Doe.Gov
 - All Q&As related to this FOA will be posted on EERE Exchange
 - o You must select this specific FOA Number in order to view the Q&As
 - 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.
 - o Include FOA name and number in subject line
- All questions asked during this presentation will be posted on EERE Exchange

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