



U.S. DEPARTMENT OF  
**ENERGY** | Energy Efficiency & Renewable Energy

Buildings Energy Efficiency  
Frontiers & Innovation  
Technologies (BENEFIT) – 2020

[DE-FOA-0002196@netl.doe.gov](mailto:DE-FOA-0002196@netl.doe.gov)

FOA Webinar  
DE-FOA-0002196  
October 5, 2020

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Hello, 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.

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.

If you have questions during this webinar, you can send them to the email address on this slide and we'll post the answers on EERE Exchange. Alternately, you can type in your questions in the chat field 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.

## Notice

- NO NEW INFORMATION OTHER THAN THAT PROVIDED IN THE FOA WILL BE DISCUSSED IN THE WEBINAR.
- 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.

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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.

This presentation, including transcript of the presentation, will be provided on Exchange after the presentation. All questions will be answered in the Q&A section under exchange.

## Notice

- All applicants are strongly encouraged to carefully read the Funding Opportunity Announcement [DE-FOA-0002196](#) (“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 at [DE-FOA-0002196@netl.doe.gov](mailto:DE-FOA-0002196@netl.doe.gov).

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(BENEFIT) – 2020**

**Anticipated Schedule:**

<b>FOA Issue Date:</b>	09/25/2020
<b>Submission Deadline for Concept Papers:</b>	11/05/2020 5:00pm ET
<b>Submission Deadline for Full Applications:</b>	01/20/2021 5:00pm ET
<b>Submission Deadline for Replies to Reviewer Comments:</b>	03/29/2021 5:00pm ET
<b>Expected Date for EERE Selection Notifications:</b>	June 2021
<b>Expected Timeframe for Award Negotiations:</b>	September 2021

**DE-FOA-0002196**



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This slide shows the anticipated schedule for the FOA. The FOA has already been posted, and we are conducting the FOA Informational Webinar now. We will cover all requirements for this FOA later in the presentation.

POINT OUT DATES

## Agenda

- 1) FOA Description
- 2) Topic Areas/Technical Areas of Interest
- 3) Award Information
- 4) Statement of Substantial Involvement
- 5) Cost Sharing
- 6) FOA Timeline
- 7) Concept Papers
- 8) Full Applications
- 9) Merit Review and Selection Process
- 10) 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

The objective of this Funding Opportunity Announcement (FOA) is to research and develop next-generation building technologies that have the potential for significant **energy savings** and improved **demand flexibility, affordability, and occupant comfort**. An additional goal is to advance building construction, remodeling, and retrofit practices, and associated workforces.

BTO's overall goal is to improve the energy productivity of buildings without sacrificing occupant comfort or product performance. Progress towards achieving this goal will make building energy costs more affordable to the benefit of American families and businesses.

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{Emphasis added to 4 FOA goals}

## Topic Areas/Technical Areas of Interest

**Topic 1: Building Technology Research, Development and Field Validation:** High-impact, affordable building technologies to improve energy productivity and demand flexibility without negatively impacting occupant comfort.

**Topic 2: Advanced Building Construction:** Building envelope R&D and field validation as well as integration of technological and other advances into mass-produced building practices for manufactured homes and modular classrooms, including training issues such as improving quality installations and quality control.

The FOA structure has 2 primary topic areas with many subtopics underneath.

Important to note: Applicants can not apply to a primary topic area in Exchange. An applicant must apply to the subtopic which is most relevant to their approach.

You are asked to identify the subtopic in most of your application documents such as the technical narrative.

## Topic 1: Building Technology Research, Development and Field Validation

- **Subtopic 1.1:** Advancing Innovative Manufacturing and End-of-Life Processing of Efficient Building Energy Technologies
- **Subtopic 1.2:** Thermal Storage Research, Development and Field Validation
- **Subtopic 1.3:** Heating, Ventilation and Air Conditioning Research, Development and Field Validation
- **Subtopic 1.4:** Refrigeration, Water Heating Research, Development and Field Validation
- **Subtopic 1.5:** Integrated HVAC, Refrigeration and Water Heating Research, Development and Field Validation
- **Subtopic 1.6:** Appliances Research and Development and Field Validation
- **Subtopic 1.7:** Lighting Technology Research, Development and Field Validation
- **Subtopic 1.8:** Energy and Demand Data, Modeling, and Analytics
- **Subtopic 1.9:** Comprehensive Electric Load Optimization

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The first topic consists of 9 subtopics. We do not have time to detail each subtopic today. You are encouraged to read the subtopic descriptions in Exchange and ask any technical questions you may have via the Q&A email provided earlier.

During this webinar, or through the Q&A feature of the FOA, EERE will not make a determination as to whether an application fits the FOA or a specific subtopic. EERE will also not provide input on the merits of an approach outside of the formal application and review process. Applicants must make those determinations on their own using information provided in the FOA and supplemented by the Q&A feature.

READ subtopics



## Topic 2: Advanced Building Construction

- **Subtopic 2.1:** Mass Produced Highly Efficient Manufactured Homes and Portable Classrooms
- **Subtopic 2.2:** Building Envelope Research, Development and Field Validation
- **Subtopic 2.3:** Advanced Workforce for Advanced Technology

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Topic 2 consists of 3 subtopics.

READ SUBTOPICS

Again.... I remind you that you must apply to a subtopic rather than a topic in Exchange.

## 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](#) or [I.B](#) of the FOA
- 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

(1.A is Background and Context, 1.B is Topic Areas)

## Teaming Partner List

- To facilitate the formation of new project teams for this FOA, a Teaming Partner List will be available on EERE Exchange under FOA DE-FOA-0002196
- Any organization that would like to be included on this list should submit the following information to [DE-FOA-0002196@netl.doe.gov](mailto:DE-FOA-0002196@netl.doe.gov) with the subject “Teaming Partner Information”
  - Organization Name, Contact Name, Contact Address, Contact Email, Contact Phone, Organization Type, Topic/Subtopic Area(s) to which the organization would like to participate, Area of Technical Expertise, and Brief (approximately 200 words or less) Description of Capabilities
- By submitting this information, you consent its publication
- By facilitating this Teaming Partner List, EERE does not endorse or otherwise evaluate the qualifications of the entities that self-identify themselves for placement on the Teaming Partner List

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To facilitate the formation of new project teams for this FOA, a Teaming Partner List is available on Exchange under this FOA.

We'll update the Teaming Partner List periodically to reflect new Teaming Partners who have provided their information.

Any organization that would like to be included on this list should submit the information requested to the email address provided in the FOA and shown on this slide. Keep in mind, that by submitting this information, you consent to the publication of that information.

Please also note that by facilitating this Teaming Partner List, EERE does not endorse or otherwise evaluate the qualifications of the entities that self-identify themselves for placement on the Teaming Partner List.

In addition, EERE will not pay for the provision of any information, nor will it compensate any respondents for the development of such information.

## Award Information

<b>Total Amount to be Awarded</b>	Up to \$80 million Federal funding
<b>Federal Share Per Award</b>	Up to \$3 million all subtopics except subtopic 2.3 which is up to \$750,000
<b>Minimum Cost Share Requirement</b>	At least 20% of total project costs for all subtopics except subtopic 2.3 which does not require cost share
<b>Award Duration</b>	Up to 36 months with budget periods/decision points
<b>Types of Funding Agreements</b>	<ul style="list-style-type: none"> <li>• Cooperative Agreements</li> <li>• Grants</li> <li>• Technology Investment Agreements</li> <li>• Work Authorizations</li> <li>• Interagency Agreements</li> </ul>

\*Subject to the availability of appropriated funds

EERE expects to make approximately \$80million of Federal funding available for new awards under this FOA subject to the availability of appropriated funds. The Federal award share is anticipated to be up to \$3million for all subtopics except for subtopic 2.3 (Advanced Workforce Development) which is up to \$750,000 Federal share per award.

All subtopics, except subtopic 2.3 (the advanced workforce development subtopic), require a minimum cost share contribution of at least 20% of the total project cost. Subtopic 2.3 does not require cost share contribution.

Award durations are up to 36 months with budget periods and decision points. These typically occur every 12 months.

EERE intends to fund mostly cooperative agreements under this FOA. Cooperative Agreements include Substantial Involvement, which will be discussed in a coming slide.

## 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
- If you are selected for award negotiations, 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
- Please note, vendors/contractors may NOT provide cost share. Any partial donation of goods or services is considered a discount and is not allowable.

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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. Again, all subtopics must include cost share with the exception of subtopic 2.3 (advanced workforce development). All costs must be verifiable from the Recipient's records and be necessary and reasonable for the accomplishment of the project.

Vendors/contractors providing items such as services are not permitted to provide cost share contributions. Vendors/contractors are not to be confused with subrecipients – those participating in the R&D efforts and who may provide cost share contributions.

## 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 <a href="http://farsite.hill.af.mil/reghtml/regs/far2afmcfars/fardfars/far/31.htm">http://farsite.hill.af.mil/reghtml/regs/far2afmcfars/fardfars/far/31.htm</a>
All other non-federal entities	2 CFR Part 200 Subpart E - Cost Principles <a href="https://www.ecfr.gov/cgi-bin/text-idx?node=2:1.1.2.2.1.5&amp;rgn=div6">https://www.ecfr.gov/cgi-bin/text-idx?node=2:1.1.2.2.1.5&amp;rgn=div6</a>

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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 by entity type. It is imperative that you follow the applicable cost principles when creating your budget for the full application.

[Give moment to capture information]

## Allowable Cost Share

- Cash Contributions
  - May be provided by the Prime Recipient, Subrecipients, or a Third Party (may not be provided by vendors/contractors)
- In-Kind Contributions
  - Can include, but are not limited to: the donation of volunteer time or the donation of space or use of equipment.

*For more information, see the Cost Share Appendix in the FOA*

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Cost share can be provided in cash and/or in-kind contributions. It can be provided by the Prime Recipient, subrecipients, or a third party. As previously mentioned, vendors and contractors cannot provide cost share because that is considered a discount.

Cash contributions include, but are not limited to: personnel costs, fringe costs, supply and equipment costs, indirect costs and other direct costs.

In-kind contributions are those where a value of the contribution can be readily determined, verified and justified but where no actual cash is transacted in securing the good or service comprising the contribution. Allowable in-kind contributions include, but are not limited to: the donation of volunteer time or the donation of space or use of equipment.

## 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
- The same cash or in-kind contributions for more than one project or program
- Vendor/contractor contributions

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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.

[Give moment to read slide]



## 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.vii](#) of the FOA.

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Cost share must be tracked and reported over the life of the project.

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

## Statement of Substantial Involvement

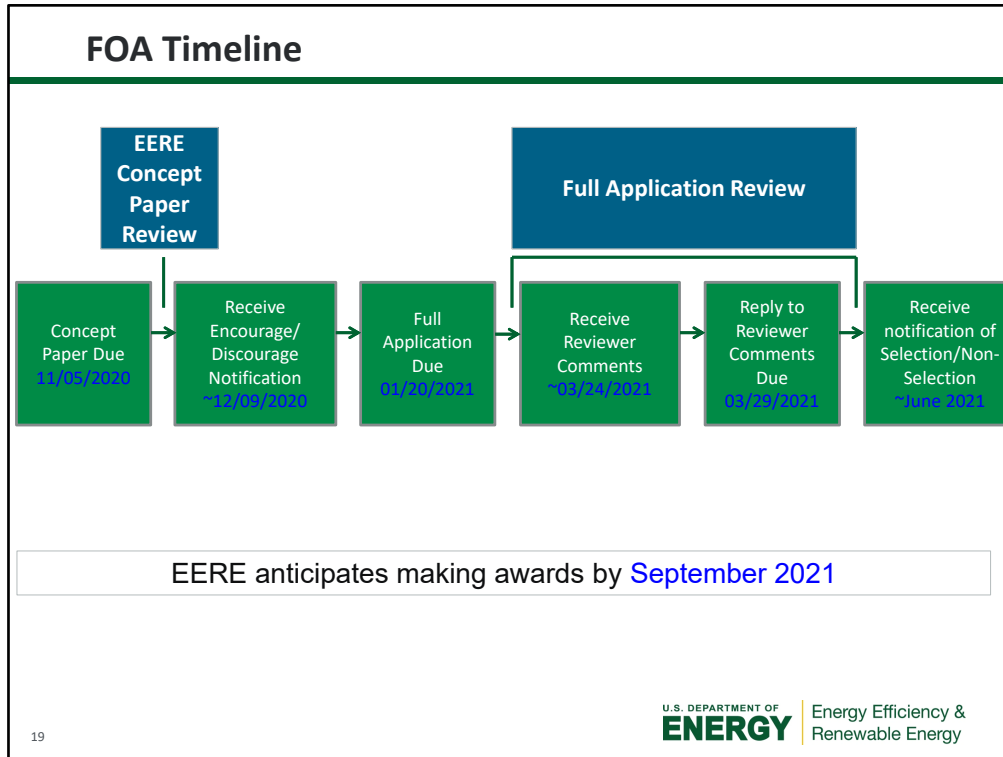
EERE has substantial involvement in work performed under awards made following this FOA. EERE does not limit its involvement to the administrative requirements of the award. Instead, EERE has substantial involvement in the direction and redirection of the technical aspects of the project as a whole. 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 the Go/No-Go decision point(s).
- EERE participates in major project decision-making processes.
- EERE promotes and facilitates technology transfer activities, including disseminating Technology Office results through presentations and publications.
- EERE participates in project management planning activities, including risk analysis, to ensure EERE Technology Office requirements or limitations are considered in performance of the work elements.

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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



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

- Concept papers are due 5 pm ET on November 5<sup>th</sup> of 2020
- Applicants will receive an encourage/discourage notification approximately December 9<sup>th</sup>.
- Full applications are due January 20<sup>th</sup> of 2021.
- Independent reviewer comments will be available to you no later than March 24, 2021. You will then have 3 business days, plus the weekend, to provide your optional Reply to Reviewer Comments.
- Selections are anticipated around June 2021 with awards being completed before the end of September 2021.

## Concept Papers

- Applicants must submit a Concept Paper
  - Each Concept Paper must be limited to a single concept or technology
- [Section IV.B](#) of the FOA states what information a Concept Paper should include and the page limits.
  - Failure to include the required content could result in the Concept Paper receiving a “discouraged” determination or the Concept Paper could be found to be ineligible.
- Concept Papers must be submitted by November 5, 2020 at 5:00pm ET, through EERE Exchange
- EERE only provides applicants with an “encouraged” or “discouraged” notification

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

Concept Papers must be submitted by **11/05/2020 5:00pm ET**, 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.

## Concept Paper Review

### Project (Weight: 100%)

This criterion involves consideration of the following sub-criteria:

- The applicant clearly describes the proposed technology and/or approach, describes how the technology and/or approach is unique and innovative, and how the technology and/or approach will advance the current state-of-the-art;
- The applicant has identified risks and challenges, including possible mitigation strategies, and has shown the impact that EERE funding and the proposed project would have on the relevant field and application;
- 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 the objectives as stated in the FOA.

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This slide shows the evaluation criteria for concept papers.

READ SLIDE

EERE will provide applicants with either an “encouraged” or “discouraged” notification

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.
- **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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Moving on to the full application, the Full Application includes:

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

**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:** There are several other administrative files included in the full application document. Please make sure to refer to the FOA document for those files.

## Full Applications - continued

Take special note:

- **US Manufacturing Plan** and **Data Management Plan** are not required for *Subtopic 2.3 - Advanced Workforce for Advanced Technology*. However, applicants to Subtopic 2.3 need to submit a “placeholder” document in Exchange that states, “A [Manufacturing Plan or Data Management Plan] is not required for this subtopic”.
- Applicants to *Subtopic 2.1 - Mass Produced Highly Efficient Manufactured Homes and Portable Classrooms* – are required to provide one or more **Investor Commitment Letter(s)**. More detail can be found in [Section IV.C.xvii](#).

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Three items that are part of the full application in which to take special note are the US Manufacturing Plan, the Data Management Plan, and the Investor Commitment Letter.

The US Manufacturing Plan and the Data Management Plan are required files for all subtopics with the exception of subtopic 2.3 – advanced workforce. As this is also a required file in Exchange, applicants to subtopic 2.3 will need to submit a placeholder document for each the US Manufacturing Plan and the Data Management Plan. This document must be submitted in the appropriate format (pdf for USMP and Word for DMP) with text similar to...“A [Manufacturing Plan or Data Management Plan] is not required for this subtopic”. Exchange will not let you complete your full application submission without this file being uploaded.

Applicants to Subtopic 2.1 – Mass Produced Highly Efficient Manufactured Homes and Portable Classrooms – are required to provide one or more Investor Commitment Letters. Detail on the Investor Commitment Letter can be found in section 4.C.17 of the FOA. This is not a required file in Exchange. Full applications can be submitted without this file. However, applications to subtopic 2.1 who do not include this file may be negatively impacted in their technical evaluation.

## Full Applications: Technical Volume Content

### Technical Volume: the key technical component of the Full Application

Content of Technical Volume	Approximate % of Technical Volume
Cover Page	
Project Overview	10%
Technical Description, Innovation and Impact	30%
Workplan and Technology Transition Plan	40%
Technical Qualifications and Resources	20%

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The key technical component of the full application is the Technical Volume, which helps applicants frame the technical information to which the application will be evaluated. 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 the sections listed here. To assist applicants in developing their discussion, the FOA provides suggested percentages for each section by length. These percentages listed 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, sub-topic area, points of contact, etc.
- The Project Overview constitutes approximately 10% of the Technical Volume and provides information on project background, goals, and impact of EERE funding
- The Technical Description, Innovation, and Impact section is approximately 30% 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 is the key element to the Technical Volume, and constitutes approximately 40% of the Technical Volume. It details the proposed milestones and project schedule. If selected for award negotiations, the Workplan serves as key tool in negotiating the Statement of Project Objectives.
- The Technical Qualifications and Resources section is approximately 20% of the Technical Volume. It provides applicants an opportunity to provide information about the proposed project team and demonstrate how the applicant will facilitate the successful completion of the proposed project.



## Full Applications: SOPO vs PMP

In past BENEFIT FOAs, applicants have been asked to submit a Statement of Project Objectives (SOPO) that includes the proposed milestones and metrics as part of the full application.

For this FOA, applicants whose full applications are selected for award negotiations will be required to submit a Project Management Plan (PMP)(see [Section IV.C.xix](#)).

For applications selected for negotiation, milestones will be incorporated into the PMP rather than the SOPO. However, all applications must fully detail their proposed milestones in the technical volume of the Full Application (see [Section IV.C.ii](#)).

A PMP template is provided in Exchange under FOA DE-FOA-0002196



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Another item of note, in the past, we have included milestones in the Statement of Project Objectives. That SOPO is negotiated to become a part of the award.

For this FOA, we still negotiate the SOPO to become part of the award, however, the milestones will now be included as part of a Project Management Plan.

You can find more about the project management plan in section 4.C.19. Also, a PMP template is provided in exchange under this FOA.

You are still expected to propose and detail your milestones and metrics in the workplan section of the technical volume for the full application. This is unchanged from before.

The project management plan is not a part of your full application. It will be due as part of any resulting awards and negotiation.

## Full Application Eligibility Requirements

- Applicants must submit a Full Application by January 20, 2021 at 5:00pm ET
- Full Applications are eligible for review if:
  - The Applicant is an eligible entity [Section III.A of FOA](#);
  - The Applicant submitted an eligible Concept Paper;
  - 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](#)
  - 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 01/20/2021 at 5:00pm ET. EERE will conduct an eligibility review, and full application will be deemed eligible if: READ SLIDE

## Who is Eligible to Apply?

Eligible applicants for this FOA include:

1. U.S. citizens and lawful U.S. permanent residents
2. For-profit entities
3. Educational institutions
4. Nonprofits
5. State, local, and tribal government entities
6. **DOE/NNSA FFRDCs (eligible as a prime recipient for subtopics 1.2, 1.7, and 2.2 only; eligible as a subrecipient for all subtopics)**

For more detail about eligible applicants, please see [Section III.A](#) of the FOA

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.

Prime Recipients must be incorporated (or otherwise formed) under the laws of a State or territory of the United States and have a physical location for business operations in the United States. See [Section III.A.iii](#) for requirements applicable to foreign entities applying under this FOA.

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DOE National Labs are not eligible as a the prime, or lead, organization except for subtopics 1.2 (thermal storage), 1.7 (lighting) and 2.2 (building envelope). However, national laboratories are eligible to apply as a subrecipient to all subtopics.

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 and have a physical location for business operations in 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. Foreign entities may request a waiver of the requirement to designate a domestic subsidiary or affiliate as the prime recipient in the Full Application

NETL is not eligible for award under this announcement and may not be proposed as a subrecipient on another entity's application. An application that includes NETL as a prime recipient or subrecipient will be considered non-responsive.

## Multiple Applications

- An entity may submit more than one Concept Paper and one Full Application to this FOA, provided that each concept paper/application describes a unique, scientifically distinct project, and provided that an eligible Concept Paper was submitted for each Full Application. All concept papers and applications must be for a stand-alone project that is not dependent or contingent upon another application submitted to this or any other FOA.

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## Merit Review and Selection Process (Full Applications)

- The Merit Review process consists of multiple phases that each include an 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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## **Criterion 1: Technical Merit, Innovation, and Impact (50%)**

### **Technical Merit and Innovation**

- Extent to which the proposed technology or approach is innovative;
- Degree to which the current problem, 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 advancement; 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.

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Applications will be evaluated against the following merit review criteria:

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## **Criterion 1: Technical Merit, Innovation, and Impact (50%)**

### **Impact of Technology Advancement**

- How the project supports the FOA/topic/subtopic area objectives and target specifications and metrics; and
- The potential impact of the project on advancing the state of the art.

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Applications will be evaluated against the following merit review criteria:

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

### **Research Approach, Workplan and SOPO**

- 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 and SOPO 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 the quality of the mitigation strategies to address them.

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Applications will be evaluated against the following merit review criteria:

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

### **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 mid-point deliverables defined in the application, such that meaningful interim progress will be made.

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Applications will be evaluated against the following merit review criteria:

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

### **Technology Transition Plan**

- Identification of target market, competitors, and distribution channels for proposed technology along with known or perceived barriers to market penetration, including mitigation plan; and
- Comprehensiveness of technology transition plan including but not limited to product development and/or service plan, commercialization timeline, financing, product marketing, legal/regulatory considerations including intellectual property, infrastructure requirements, U.S. manufacturing plan, data management plan, and product distribution.

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Applications will be evaluated against the following merit review criteria:

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### **Criterion 3: Team and Resources (20%)**

- The capability of the Principal Investigator(s) and the proposed team to address all aspects of the proposed work with a high probability of success. The qualifications, relevant expertise, and time commitment of the individuals on the team;
- The sufficiency of the facilities to support the work;
- The degree to which the proposed team demonstrates the ability to facilitate and expedite further development and commercial deployment of the proposed technologies;
- The level of participation by project participants as evidenced by letter(s) of commitment and how well they are integrated into the Workplan; and
- The reasonableness of the budget and spend plan for the proposed project and objectives.

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Applications will be evaluated against the following merit review criteria:

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## Replies to Reviewer Comments

- EERE provides applicants with reviewer comments
- Applicants are not required to submit a Reply - it is optional
- To be considered by EERE, a Reply must be submitted by March 29, 2021 at 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 subtopic area(s). 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.

## 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

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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 exhibits technological diversity when compared to the existing DOE project portfolio and other projects selected from the subject FOA;
- The degree to which the proposed project, including proposed cost share above the minimum requirement, optimizes the use of available EERE funding to achieve programmatic objectives;
- The level of industry involvement and demonstrated ability to accelerate commercialization and overcome key market barriers;
- The degree to which the proposed project is likely to lead to increased employment and manufacturing in the United States;
- The degree to which 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; and
- The degree to which the proposed project, or group of projects, represent a desired geographic distribution (considering past awards and current applications).
- The degree to which the proposed project collectively represents diverse types and sizes of applicant organizations.
- Whether the proposed project will occur in a Qualified Opportunity Zone or otherwise advance the goals of Qualified Opportunity Zones. The goals include spurring economic development and job creation in distressed communities throughout the United States.

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

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## 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 at <https://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	<a href="http://fedgov.dnb.com/webform">http://fedgov.dnb.com/webform</a>
SAM	<a href="https://www.sam.gov">https://www.sam.gov</a>
FedConnect	<a href="https://www.fedconnect.net">https://www.fedconnect.net</a>
Grants.gov	<a href="http://www.grants.gov">http://www.grants.gov</a>

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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.

A user guide is available in exchange.



## 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-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

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## Questions

- Questions about this FOA? Email [DE-FOA-0002196@netl.doe.gov](mailto:DE-FOA-0002196@netl.doe.gov)
  - All Q&As related to this FOA will be posted on EERE Exchange
  - You must select this specific FOA Number in order to view Q&As
  - EERE will attempt to respond to a question within 3 business days, unless a similar Q&A is already posted on the website
- Problems logging into EERE Exchange or uploading and submitting application documents with EERE Exchange? Email [EERE-ExchangeSupport@hq.doe.gov](mailto:EERE-ExchangeSupport@hq.doe.gov)
  - Include FOA name and number in subject line
- All questions asked during this presentation will be posted on EERE Exchange

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The email address for FOA specific questions is shown here.

All Q&As will be posted to exchange under the specific FOA. This includes any questions answered during this webinar.

Technical issues with the use of the exchange system can contact exchange support at the email provided here.