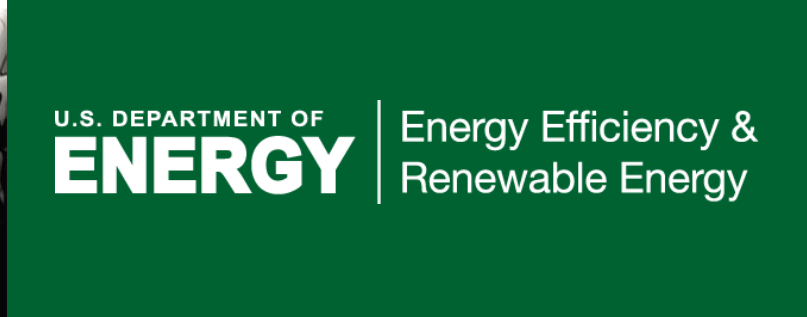


Welcome

This webinar is being recorded and will be published on the EERE Program Information Center website

- If you do not wish to have your voice recorded please do not speak during the call
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Please mute your phones and we'll begin momentarily



Fiscal Year 2023

Bipartisan Infrastructure Law: Silicon Solar Manufacturing, and Dual-use Photovoltaics Incubator Funding Opportunity Announcement

Email questions to:
solar.manufacturing@ee.doe.gov

FOA Webinar
DE-FOA-0003057
12th of July, 2023

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.

Notice

- All applicants are strongly encouraged to carefully read the Funding Opportunity Announcement DE-FOA-0003057 (“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 by submitting a question to solar.manufacturing@ee.doe.gov.

DE-FOA-0003057 Fiscal Year 2023

Bipartisan Infrastructure Law: Silicon Solar Manufacturing, and Dual-use Photovoltaics Incubator Funding Opportunity Announcement

Anticipated Schedule:

FOA Issue Date:	7/6/2023
Submission Deadline for Concept Paper:	9/27/2023
Submission Deadline for Full Applications:	11/14/2023
Expected Date for EERE Selection Notifications:	2/26/2024
Expected Timeframe for Award Negotiations:	6/10/2024

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) Pre-selection Interviews
- 11) Registration Requirements

FOA Description

This funding opportunity announcement (FOA) is issued by the U.S. Department of Energy's (DOE) Office of Energy Efficiency and Renewable Energy (EERE) Solar Energy Technologies Office (SETO).

This FOA will focus on development of new solar photovoltaics (PV) technologies to improve U.S. domestic manufacturing and competitiveness and secure our domestic energy supply chains.

Some of the awards made under this FOA will be funded by the Infrastructure Investment and Jobs Act , also known as the Bipartisan Infrastructure Law (BIL). BIL is a once-in-a-generation investment in modernizing and upgrading American infrastructure to enhance U.S. competitiveness, drive the creation of good-paying union jobs, tackle the climate crisis, and ensure strong access to economic, environmental, and other benefits for disadvantaged communities.

Topic Areas/Technical Areas of Interest

Topic Area 1: Pilot Demonstration of Silicon Supply Chain Components supports RD&D activities with the goal of accelerating manufacturing innovations, which are directly or indirectly part of the silicon solar module supply chain such as:

- silicon
- silicon ingot and wafering
- solar cell
- glass processes and formulations and coatings
- backsheets or other module components
- equipment or consumables used in manufacturing above

Topic Area 2: Dual-use Photovoltaics Incubator supports RD&D activities aimed at domestically made products that can open new markets for the emerging dual-use photovoltaics sectors: in particular

- agricultural PV or agrivoltaics
- building-integrated PV
- floating PV
- vehicle-integrated PV

In both Topic Areas, SETO funding should help retire technical, business, and market risks of solar hardware to validate pathways to commercial success through customer engagement and trials. Successful awardees will be well positioned to attract follow-on private investment, grow their businesses, generate revenue, and create jobs.

See Section I.B for areas of interest, guidelines, and other details.

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

Examples from Topic 1: Pilot Demonstration of Silicon Supply Chain Components

- Technology with a primary application other than c-Si PV for widespread power generation
- Thin-film solar cells and modules
- Tandem PV
- Projects unlikely to reduce U.S. dependence on foreign PV components

Examples from Topic 2:

- Agrivoltaics (APV) Products and technologies where solar and agriculture are not operationally integrated
- APV software solutions
- Data collection of existing APV systems

Non-Responsive Applications (continued)

Topic 2:

- Floating PV (FPV) Systems where PV deployment is on land
- FPV Systems where PV deployment is on aquatic vehicles
- Systems where FPV serves primarily a decorative purpose
- Deep sea and unsheltered marine FPV
- FPV Systems where non-certified PV modules are to be used in the project
- FPV Systems using CIGS, perovskites, organic PV, or thin-film silicon PV
- Building integrated PV (BIPV) systems that rely on traditional PV panels and mounting mechanisms attached to an existing and fully functional building or structure
- BIPV windows
- BIPV Systems on structures that serve primarily a decorative purpose
- Vehicle integrated PV (VIPV) products or technologies not intended for use on moving vehicles, including transportation-adjacent surfaces (e.g., parking lot shades, sidewalk awnings, bridges, elevated walkways, etc.)
- VIPV products, performance models, or demonstrations for applications that are not road-based, including aerial, marine, or rail transportation
- VIPV Products based on perovskites, CIGS, amorphous silicon, or organic photovoltaics (OPV) technology.

Applicant Education Services

- Services provided by third party contractors to the National Renewable Energy Laboratory
- Participation is not mandatory and will have no impact on the evaluation of your application by the Department of Energy.



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THE UNIVERSITY OF ARIZONA
**CENTER FOR
INNOVATION**

Amanda Buchanan

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Award Information

Total Amount to be Awarded	Approximately \$45M
Average Award Amount	EERE anticipates making awards that range from \$1.5 to \$10 million
Types of Funding Agreements	Cooperative Agreements
Period of Performance	12 to 36 months
Cost Share Requirement	20-75% of Total Project Costs

*Subject to the availability of appropriated funds

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.

Cost Sharing Requirements

Total project costs are the sum of the government share, including FFRDC costs if applicable, and the recipient share of allowable costs of the project.

Recipient cost share must come from non-federal sources unless otherwise allowed by law. (See 2 CFR 200.306 and 2 CFR 910.130 for the applicable cost sharing requirements for all Federal Financial Assistance Awards.)

For Topic 1, awardee cost share must be 75% of allowable project costs.

For Topic 2: The cost share must be at least 20% of the total allowable costs for research and development projects and 50% of the total allowable costs for demonstration and commercial application projects.

Please see the table below for the required minimum cost share for each FOA Topic Area.

Topic Area	Minimum Awardee Cost Share	
	Research and Development	Demonstration and Commercialization
1	N/A	75%
2	20%	50%

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.

Allowable Cost Share

- Cost Share must be allowable and must be verifiable upon submission of the Full Application.
- These principles must be used in determining whether specific project costs are allowable.
- The regulations associated with what is allowable as cost share are specific to the type of organization that is receiving funds under the grant or cooperative agreement.
- Refer to the following applicable Federal cost principles:

Entity	Cost Principles
For-profit entities	FAR Part 31 http://farsite.hill.af.mil/reghtml/regs/far2afmcfars/fardfars/far/31.htm
All other non-federal entities	2 CFR Part 200 Subpart E - Cost Principles https://www.ecfr.gov/cgi-bin/text-idx?node=2:1.1.2.2.1.5&rqn=div6

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 space or use of equipment.

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

Unallowable Cost Share

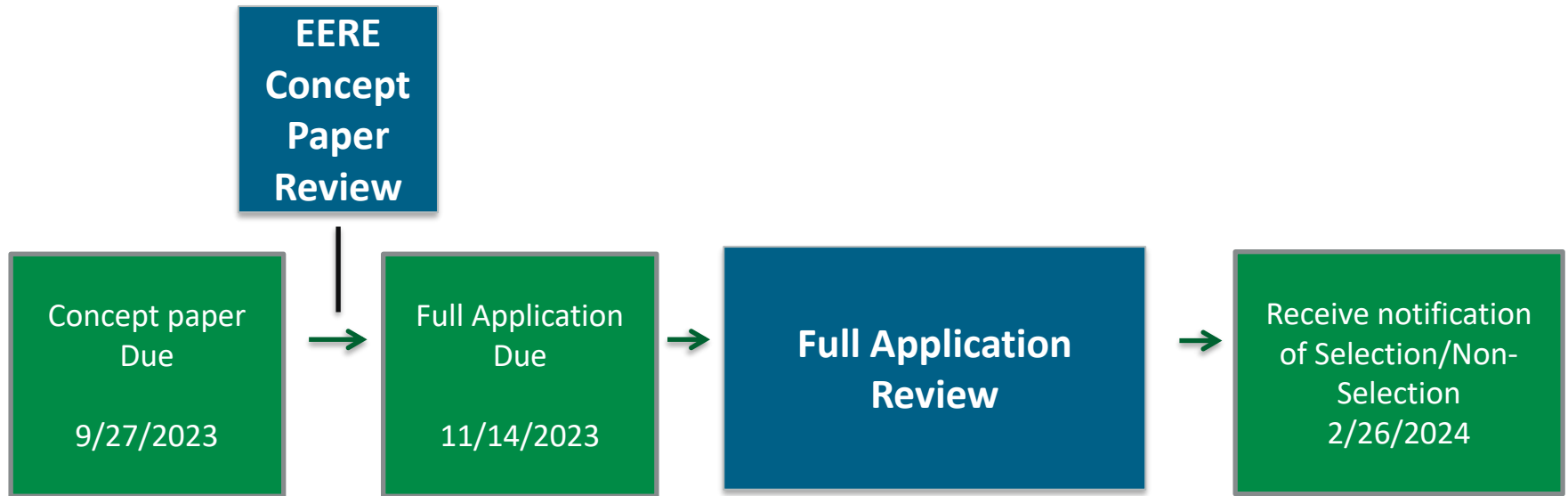
The Prime Recipient may **NOT** use the following sources to meet its cost share obligations including, but not limited to:

- 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

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.6 of the FOA.

FOA Timeline



EERE anticipates making awards in June 2024

Concept Papers

- Applicants must submit a Concept Paper
 - Each Concept Paper must be limited to a single concept or technology
- Section IV.C 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 9/27/2023, 5:00 PM ET, through EERE Exchange
- EERE provides applicants with an “encouraged” or “discouraged” notification

Concept Paper Review

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, describes how the technology is unique and innovative, and how the technology 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.

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.
- **Budget Justification workbook:** a detailed budget and spend plan for the project, (including a subrecipient budget if applicable).
- **Summary for Public Release**
- **Summary Slide**
- **Community Benefits Plan**
- **Letters of Commitment**
- **Resumes**
- **Administrative Documents:** FFRDC Work Proposal and Authorization (if applicable), Disclosure of Lobbying Activities (SF-LLL), Foreign Work Waiver(s) (if applicable), and Current and Pending Support, Transparency of Foreign Connections notice, Potentially Duplicative Funding Notice

Full Applications: Technical Volume Content

This is the key technical component of the Full Application.

There is a page limit for the length of the document:

- Topic 1: 1 cover page + 15 pages maximum
- Topic 2: 1 cover page + 10 pages maximum

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

Full Application Eligibility Requirements

- Applicants must submit a Full Application by November 14th, 2023
- Full Applications are eligible for review if:
 - The Applicant is an eligible entity [Section III.A of FOA](#);
 - A concept paper was submitted [Section IV.C of FOA](#);
 - The Cost Share requirement is satisfied [Section III.B of FOA](#);
 - The Full Application is compliant with [Section III.C of FOA](#);
 - The proposed project is responsive to the FOA [Section III.D of FOA](#); and
 - The Full Application meets any other eligibility requirements listed in [Section III of the FOA](#).

Who is Eligible to Apply?

Only for-profit entities are eligible to apply for funding as a Prime Recipient. An eligibility restriction is considered necessary for this Funding Opportunity because EERE believes that for-profit entities are the most likely entities to achieve the objectives required under this program, as they are the only entities with the capacity to rapidly commercialize new technologies related to innovations in manufacturing. **The for-profit business designated as the Prime Recipient must incur over 50% of costs** under the project, as measured by the Total Project Cost. Expenditures incurred for personnel, fringe, travel, supplies, equipment, vendors, other direct costs, and indirect costs by the Prime Recipient count towards the Prime Recipient's expenditure under the award. However, costs associated to subrecipients and funding associated to a DOE/NNSA FFRDC do not count towards the Prime Recipient's expenditure under the award.

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.ii for requirements applicable to foreign entities applying under this FOA.

Eligible to apply as a subrecipient:

1. U.S. citizens and lawful U.S. permanent residents
2. Educational institutions
3. Nonprofits
4. State, local, and tribal government entities
5. DOE/NNSA FFRDCs
6. Non-DOE/NNSA FFRDCs
7. Federal agencies and instrumentalities (other than DOE)
8. Incorporated Consortia

Refer to section III.A of the FOA for more information on prime and subrecipient eligibility

Multiple Applications

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

Merit Review and Selection Process (Full Applications)

- The Merit Review process includes 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

Technical Merit Review Criteria

Criteria	Topic Area 1 Weighting	Topic Area 2 Weighting
Criterion 1: Technical Merit, Innovation, and Impact	20%	35%
Criterion 2: Project Research and Market Transformation Plan	30%	25%
Criterion 3: Team and Resources	35%	25%
Criterion 4: Diversity, Equity, and Inclusion	15%	15%

See Section V.A.ii for all details

Pre-Selection Interviews

- EERE may invite one or more applicants to participate in Pre-Selection Interviews
- All interviews will be conducted in the same format
- EERE will not reimburse applicants for travel and other expenses relating to the Pre-Selection Interviews, nor will these costs be eligible for reimbursement as pre-award costs
- Participation in Pre-Selection Interviews with EERE does not signify that applicants have been selected for award negotiations

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

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, optimizes the use of available DOE funding to achieve programmatic objectives;
- The level of industry involvement and demonstrated ability to accelerate demonstration and commercialization and overcome key market barriers;
- The degree to which the proposed project is likely to lead to increased high-quality 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;
- 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 incorporates applicant or team members from Minority Serving Institutions (e.g., Historically Black Colleges and Universities (HBCUs)/Other Minority Serving Institutions); and partnerships with Minority Business Enterprises, Minority Owned Businesses, Woman Owned Businesses, Veteran Owned Businesses, or Tribal Nations or Tribal energy development organizations; or native Hawaiian communities;
- The degree to which the proposed project, when compared to the existing DOE project portfolio and other projects to be selected from the subject FOA, contributes to the total portfolio meeting the goals reflected in the Community Benefits Plan criteria; and
- The degree to which the proposed project will employ procurement of U.S. iron, steel, manufactured products, and construction materials.
- The degree to which the proposed project collectively represents a diversity of applicant types and sizes of applicant organizations.
- The degree to which the proposed project has broad public support from the communities most directly impacted by the project.
- The degree to which the proposed project is supported by labor unions engaged in the manufacturing activities.
- The degree to which the proposed project avoids duplication/overlap with other publicly or privately funded work.
- The degree to which the proposed project supports complementary efforts or projects, which, when taken together, will best achieve the research goals and objectives.
- The degree to which the proposed project enables new and expanding market segments.
- The degree to which the project's solution or strategy will maximize deployment or replication.
- The degree to which the project promotes increased coordination with nongovernmental entities for demonstration of technologies and research applications to facilitate technology transfer.

See Section V.C.i

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
SAM / UEI (Prime and Subrecipients)	https://www.sam.gov
FedConnect	https://www.fedconnect.net
Grants.gov	http://www.grants.gov

Means of Submission

- Concept Papers and Full Applications 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>

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 page at each step, which contains the application's Control Number

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

Questions

- Questions about this FOA? Email solar.manufacturing@ee.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 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.
 - Include FOA name and number in subject line