Department of Energy (DOE)
Office of Energy Efficiency and Renewable Energy (EERE)

Onsite Energy Technical Assistance Partnerships

Funding Opportunity Announcement (FOA) Number: DE-FOA-0002945
FOA Type: Initial
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FOA Issue Date:	02/03/2023
Informational Webinar	02/22/2023 1:00pm ET
Submission Deadline for Letter of Intent (optional):	02/28/2023 5:00pm ET
Submission Deadline for Full Applications:	04/21/2023 5:00pm ET
Expected Submission Deadline for Replies to Reviewer Comments:	05/19/2023 5:00pm ET
Expected Date for EERE Selection Notifications:	June - July 2023
Expected Timeframe for Award Negotiations:	July – September 2023

- Applicants are encouraged to submit a Letter of Intent (optional) by 5:00pm ET on the due date listed above.

- To apply to this FOA, applicants must register with and submit application materials through EERE eXCHANGE at https://eere-eXCHANGE.energy.gov, EERE's online application portal.

- Applicants must designate primary and backup points-of-contact in EERE eXCHANGE with whom EERE will communicate to conduct award negotiations. If an application is selected for award negotiations, it is not a commitment to issue an award. It is imperative that the applicant/selectee be responsive during award negotiations and meet negotiation deadlines. Failure to do so may result in cancelation of further award negotiations and rescission of the selection.

- **Unique Entity Identifier (UEI) and System for Award Management (SAM) -** Each applicant (unless the applicant is excepted from those requirements under 2 CFR 25.110) is required to: (1) Be registered in the SAM at https://www.sam.gov before submitting its application; (2) provide a valid UEI number in its application; and (3) continue to maintain an active SAM registration with current information at all times during which it has an active federal award or an application or plan under consideration by a federal awarding agency. DOE may not make a federal award to an applicant until the applicant has complied with all applicable UEI and SAM requirements and, if an applicant has not fully complied with the requirements by the time DOE is

ready to make a federal award, the DOE will determine that the applicant is not qualified to receive a federal award and use that determination as a basis for making a federal award to another applicant.

- **NOTE:** Due to the high demand of UEI requests and SAM registrations, entity legal business name and address validations are taking longer than expected to process. Entities should start the UEI and SAM registration process as soon as possible. If entities have technical difficulties with the UEI validation or SAM registration process they should utilize the **HELP** feature on **SAM.gov**. SAM.gov will work entity service tickets in the order in which they are received and asks that entities not create multiple service tickets for the same request or technical issue. Additional entity validation resources can be found here: **GSAFSD Tier 0 Knowledge Base - Validating your Entity**.

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I. Funding Opportunity Description

A. Background and Context

i. Background and Purpose

This funding opportunity announcement (FOA) is being issued by the U.S. Department of Energy's (DOE) Office of Energy Efficiency and Renewable Energy (EERE) Industrial Efficiency and Decarbonization Office (IEDO). Building a clean and equitable energy economy and addressing the climate crisis are top priorities of the Biden Administration. This FOA will help to advance the Biden Administration's goals to achieve carbon pollution-free electricity by 2035 and to "deliver an equitable, clean energy future, and put the United States on a path to achieve net-zero emissions, economy-wide, by no later than 2050"[1] to the benefit of all Americans.

In 2020, the industrial sector accounted for 33% of the nation's primary energy use and 30% of energy-related carbon dioxide (CO_2) emissions.[2] Achieving net-zero emissions across the U.S. economy by 2050 will require an aggressive, multidimensional approach to eliminating industrial emissions. DOE's *Industrial Decarbonization Roadmap*[3] identifies strategies to reduce industrial emissions across the five most energy-and carbon-intensive sectors: petroleum refining, chemicals, iron and steel, cement, and food and beverage. Together, these industries represent approximately 51% of energy-related CO_2 emissions in the U.S. industrial sector and 15% of U.S. economy-wide total CO_2 emissions. To reduce emissions across these sectors, the *Roadmap* focuses on four key pathways, accelerating the innovation and adoption of: energy efficiency technologies; industrial electrification technologies; low-carbon fuels, feedstocks, and energy sources (LCFFES); and carbon capture, utilization, and storage (CCUS) technologies. IEDO supports the adoption of these and other innovative technologies and practices that enable the industrial sector to cost-effectively reduce greenhouse gas emissions.

To support the industrial decarbonization approach identified in the Roadmap, IEDO recently led the launch of DOE's Industrial Heat Shot™, a new effort aimed at dramatically reducing the cost, energy use, and carbon emissions associated with industrial heat demand. The Industrial Heat Shot™ seeks to develop cost-competitive solutions for industrial heat with at least 85% lower greenhouse gas emissions by 2035. If this target is achieved, the American industrial sector will

[1] Executive Order 14008, "Tackling the Climate Crisis at Home and Abroad," January 27, 2021.
[2] *"Annual Energy Outlook 2021 with Projections to 2050," U.S. Energy Information Administration, Feb. 3, 2021.*
[3] U.S. Department of Energy, "Industrial Decarbonization Roadmap," September 7, 2022

be on course to reduce its carbon equivalent emissions by 575 million metric tons by 2050, roughly equal to the annual emissions generated by all passenger cars currently on the road.

In support of these goals, IEDO provides funding, management, and the strategic direction necessary for a balanced national program of research, development, demonstration, technical assistance, and workforce development to drive improvements in energy, materials, and production efficiency, and decarbonization across the industrial sector. IEDO and its programs are critical to putting the nation on a pathway to achieve net-zero carbon emissions by 2050.

The technical assistance activities to be funded under this FOA will support DOE's industrial decarbonization strategy by establishing a regional network of Technical Assistance Partnerships (TAPs) to help industrial facilities and other large energy users increase the adoption of onsite energy technologies.[4] Clean onsite energy generation and storage technologies provide a practical alternative to conventional fossil-fuel systems and grid electricity for facilities to directly produce flexible, reliable, and affordable heat and electricity to reduce emissions across the industrial sector.

DOE released a Request for Information[5] on barriers and pathways to integrating onsite clean energy technologies in the industrial sector, and used this to identify technical and non-technical barriers to implementation. The most significant technical barriers include the cost of new or retrofitted equipment, finding solutions that support high-temperature and energy-intensive processes/equipment, and dealing with space limitations. Non-technical barriers include expertise gaps in the workforce (both in analysis and maintenance/operation) and regulatory constraints, including issues related to grid interconnection.

The table below lists some key technical and non-technical needs that address the main barriers to integrating onsite clean energy technologies in industry. Needs mostly center around analysis, training and expertise, and engagement. TAPs will work with manufacturers to address these barriers.

[4] Other large energy users may include district energy networks, hospitals, colleges/universities, military bases, and other commercial, federal, and institutional facilities.

[5] Request for Information - BARRIERS AND PATHWAYS TO INTEGRATING ONSITE CLEAN ENERGY TECHNOLOGIES IN THE INDUSTRIAL SECTOR - https://eere-exchange.energy.gov/Default.aspx#FoaId1681d7ea-86fb-486f-a7b7-abff1f3b977b

Technical needs	Non-technical needs
Modeling technical, economic, and environmental performance of onsite energy technologies and equipment options	Information about policy, regulations, incentives, and other financial support available
Unbiased, technology-neutral feasibility assessments and evaluations of multi-technology solutions	Engagement between industrial energy users, utilities, policymakers
Resources to assist with reducing risk and ensuring commercial viability	Engagement with local communities
Support for optimizing, operating, and maintainingenergy systems in industrial facilities	Connections and collaborations with peers
Support with electrical infrastructure upgrades & grid interconnection	Knowledge about successful regional demonstration projects

Onsite energy generation and storage has a number of direct benefits for manufacturers, enabling them to save money and gain greater control over the availability of clean energy and how it gets integrated into their processes. Onsite energy technologies additionally have the potential to save energy by increasing efficiency and capturing usable energy that would otherwise be wasted. In addition to the energy and cost savings, onsite energy technologies can allow industrial facilities to significantly decrease their carbon footprint by incorporating renewable energy and storage. This FOA will accelerate the adoption of clean onsite energy generation and storage by providing manufacturers and large energy users with unbiased information on which energy technologies would meet both their operational needs and decarbonization goals, as well as assist them during the implementation process.

ii. Technology Space and Strategic Goals

For the purpose of this FOA, "onsite energy" refers to electric and thermal energy generation and storage technologies that are physically located at an end-user site and provide clean energy services directly to the end-user. Onsite energy encompasses a broad range of technologies that are suitable for deployment at typical industrial facility sites, typically at a scale between 50 kW and 50 MW, including battery storage, combined heat and power (CHP), district energy, fuel cells, geothermal, industrial heat pumps, renewable fuels, solar photovoltaics, solar thermal, thermal storage, and wind power, and others.

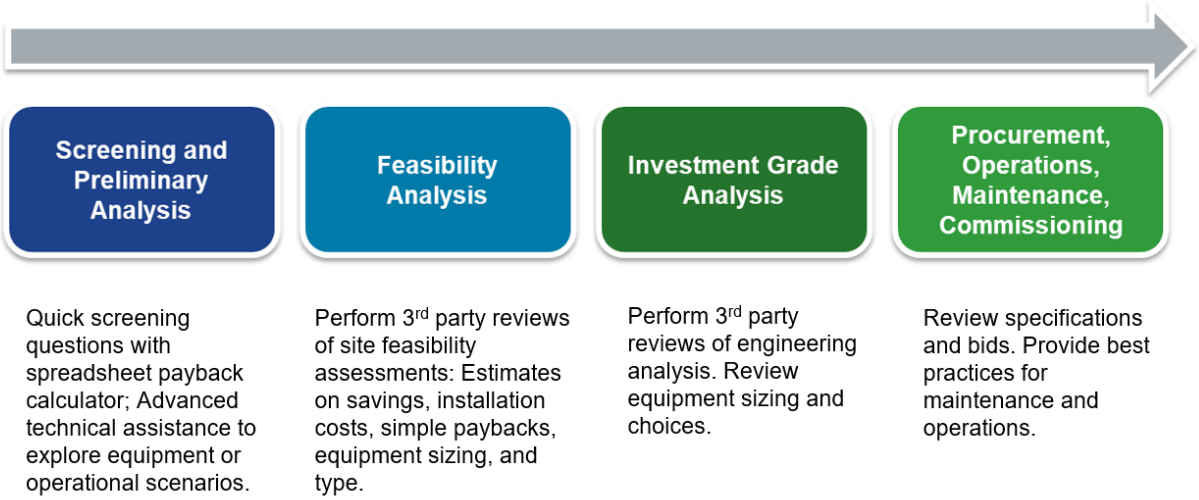
In the past, DOE has supported a subset of these technologies through a regional network of technical assistance providers, known as the Combined Heat and Power Technical Assistance Partnerships (CHP TAPs).[6] The CHP TAPs promote and assist in transforming the market for combined heat and power (CHP), waste

[6] https://betterbuildingssolutioncenter.energy.gov/chp/chp-taps

heat to power (WHP), and district energy technologies throughout the United States. Recent years have seen a dramatic decrease in costs in many other technologies appropriate for onsite deployment. However, to support the emerging familiarity of the industrial sector with facility integration of these technologies, IEDO is initiating a broader TAPs program, based on the successful model of the existing CHP TAPs program, with the goal of providing similar services for a broader set of technologies.

The goal of this FOA is to fund the development and operations of the Onsite Energy TAPs program. The Onsite Energy TAPs program will operate by providing direct technical assistance to end-users and other stakeholders with identifying technology options for achieving clean energy objectives. For the purpose of this FOA, "technical assistance" refers to the broad range of services in support of onsite energy project deployment from the beginning of the implementation process (e.g., pre-installation technology screenings) to the end (e.g., post-installation operation and maintenance).

Example Onsite Energy Technical Assistance Activities



The Onsite Energy TAPs will also engage with policymakers, utilities, and other key stakeholders to accelerate pathways for integration of onsite energy technologies. Additional activities will include developing public tools and resources, sharing best practices, and building partnerships that drive decarbonization across the U.S. industrial sector. The Onsite Energy TAPs program will be closely coordinated with and supported by DOE National Laboratory expertise in clean energy generation and storage technologies that is separately funded by DOE.

B. Topic Areas

This FOA includes two topic areas:

- **Topic Area 1: Regional Onsite Energy Technical Assistance Partnerships (TAPs):** Funding for up to 10 entities to serve as region-specific Onsite Energy TAPs that will engage end-users and key stakeholders in defined multi-state regions.
- **Topic Area 2: Onsite Energy Technical Analysis and Support Center (TASC):** Funding for one central national entity that will provide technical analysis and other support to the Onsite Energy TAPs program.

The intended roles of the Regional TAPs under Topic Area 1 and the TASC under Topic Area 2 are described in detail in this section. Because the Regional TAPs and TASC are expected to coordinate closely and work collaboratively, applicants are encouraged to review the responsibilities and requirements of both topic areas for awareness and clarity in developing responsive applications. See also Section IV.D.ii, which describes the requirements of the technical volume and provides additional information on key activities of Regional TAPs and the TASC and how these entities are distinct from each other.

i. Topic Area 1: Regional Onsite Energy Technical Assistance Partnerships

This topic area anticipates funding up to 10 entities to serve as regional Onsite Energy TAPs. Each TAP will represent a multi-state region and serve as the primary technical, market, and policy point of contact for end-users and other state and local stakeholders that engage with the Onsite Energy TAPs Program.

Onsite Energy TAP responsibilities include:

Serve as primary point of contact - Regional TAPs will serve as a single point of contact for end-users and stakeholders including states, local governments, utilities, policy makers, and others seeking education or technical assistance related to onsite energy technology deployment. Regional TAPs will engage directly with these end-users and stakeholders, cultivate relationships, build awareness of technical and educational services available, and scope and develop requests for technical assistance. Requests for assistance may cover a variety of activities including technology screenings, advanced technical analysis, policy landscape analysis, siting and permitting support, project finance planning, utility coordination, outreach and public engagement assistance, and other types of support.

Coordinate with the Onsite Energy TASC - Once a request for technical assistance has been identified, Regional TAPs will coordinate with the Onsite Energy TASC to fulfill the request. The TASC is a new, centralized entity intended to provide advanced technical capabilities, specialized engineering and modeling support, and other technical expertise across the range of onsite energy technologies, including technology screenings and advanced analysis. This will enable Regional TAPs to focus their efforts on region-specific knowledge and end-user engagements. Regional TAPs will be responsible for facilitating data collection from end-users, participating in analysis activities coordinated by the TASC, effectively communicating results of technical analyses, and representing the end-user or stakeholder to ensure deliverables meet their needs. Regional TAPs are also expected to participate in strategic onsite energy initiatives as directed by the TASC and work collaboratively with other technical assistance programs, DOE offices, and agencies, as directed by IEDO.

Conduct region-specific outreach - Regional TAPs will also conduct region-specific market analysis, outreach, and targeted stakeholder engagement to address regional economic, financial, regulatory, and information barriers to deploying onsite energy. This will include regularly engaging key stakeholders including state energy offices, local governments, utilities, economic development agencies, community-based organizations, and others to develop opportunities and provide inputs to the design and implementation of programs that encourage onsite energy deployment for large energy users. Engagement strategies can include hosting and/or attending various types of relevant networking events, workshops, webinars, etc. that reach stakeholders and decision makers across all covered states to provide education and actionable information that increases the adoption of onsite clean energy technologies.

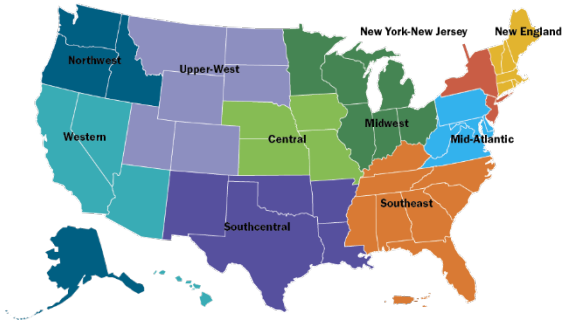
Prepare outreach materials - Regional TAPs will be responsible for developing outreach tools and resources to support their stakeholder engagement activities. This will include developing onsite energy case studies and project profiles that illustrate the successful installation and integration of onsite energy technologies to demonstrate value and replicability to the broader market. Case studies and project profiles also help educate end-users about technology characteristics, performance data, installation approaches, and lessons learned. Case studies, regional policy profiles, and other materials are expected to include information such as graphics, photos, and testimonials.

Track performance metrics - The Regional TAPs will be expected to report regular updates to the TASC and IEDO to enable general management oversight and evaluation of performance.

Multi-State Regions

Applicants must propose to operate as a Regional TAP in at least one of the following 10 regions. These are the same 10 regions used by the existing CHP TAP program:

New England: VT, NH, ME, MA, RI, CT
New York-New Jersey: NY, NJ
Mid-Atlantic: PA, WV, VA DE, MD, DC
Southeast: KY, TN, NC, SC, GA, FL, AL, MS
Midwest: MN, WI, MI, IL, IN, OH
Southcentral: TX, NM, OK, AR, LA
Central: NE, IA, KS, MO
Upper-West: UT, CO, WY, MT, ND, SD
Western: CA, NV, AZ, HI
Northwest: WA, OR, ID, AK



Applicants may propose operating in up to three regions, with one being the applicant's primary region and the other one or two being the applicant's secondary region(s). If IEDO selects an entity for multiple regions, IEDO anticipates selecting regions that are immediately adjacent to each other. While IEDO does not anticipate selecting a Regional TAP to cover more than two regions, applicants may express interest in up to three regions. IEDO's evaluation and selection process will include criteria and selection factors to ensure overlaps of coverage are avoided. IEDO anticipates selecting 6-10 applicants for award negotiations. See Section II.A.i for regional budget information and Section V.A for the Technical Review Criteria and Section V.C for Other Selection Factors.

Applicant Teams

Applicants should assemble a team with qualifications and relevant expertise, demonstrating general technical capabilities applicable to a broad range of onsite energy technologies. Applicants should also include policy and market specialists with experience navigating utility, state, and local regulations, programs, incentives, and other interests. Regional TAPs will have access to highly technical and specialized engineering capabilities in specific technology areas through national lab experts separately funded by DOE to support this program and through the TASC team. Regional TAPs are not expected to duplicate this level of highly technical expertise at the regional level. However, regional TAPs are expected to possess technical capabilities that ensure clear

understanding of engineering concepts and enable effective communication of technical information to end-users and stakeholders.

ii. Topic Area 2: Onsite Energy Technical Analysis and Support Center

The objective of this topic area is to fund one national entity to serve in the role of Onsite Energy TASC. The TASC will centrally coordinate technical analysis and programmatic activities of the Onsite Energy TAPs Program. The TASC will serve as a liaison between the Regional Onsite Energy TAPs and the National Laboratory experts separately funded by DOE to support this program.

Onsite Energy TASC responsibilities include:

Coordinate responses to requests for assistance - A primary function of the TASC will be evaluating requests for technical assistance and organizing the right mix of personnel and resources available to complete the request. The TASC will convene personnel with appropriate expertise and coordinate activities needed to complete each request. The TASC may bring subcontractors with specialized engineering expertise to assist with requests for technical assistance. The TASC is required to coordinate with national lab experts who are separately funded by DOE to provide technical expertise to this program. The TASC is also required to coordinate with staff from the Regional TAPs. The TASC will develop a plan for completing requests for technical assistance, identify and organize the efficient use of subject matter expertise and staff resources based on the level of analysis needed, track progress, and ensure the quality of final technical deliverables.

Conduct technology screenings and advanced technical analysis – The TASC will play a key role in completing screenings of onsite technologies and conducting advanced technical analysis for manufacturers and other large energy users.

Provide quality control and review of all TAP materials – All outreach materials that are produced by the Onsite Energy TAPs will go through a standardized review process by the TASC to ensure consistent messaging and high quality work products. Materials for review include case studies, project profiles, policy profiles, white papers, technology reports, tip sheets, and other materials intended for a public audience.

Update online dashboard - All requests for technical assistance will be centrally coordinated by the TASC through an online project dashboard. DOE has developed an online project dashboard for the existing CHP TAP program to track engagements, technical assistance, and other activites.

The TASC will work with DOE to support further development and integration of the existing tool to meet the needs of the new Onsite Energy TAP program. This will include tracking engagements and requests for technical assistance identified by Regional TAPs, stakeholders, or other activities identified by EERE. The TASC will maintain the project dashboard and track metrics and data related to activities for all 10 TAP regions and for the TASC. This includes completing required documentation, collecting data, tabulating and reporting metrics, and other administrative components to be delivered to EERE. The TASC will also maintain a database of all Onsite Energy TAPs stakeholders and end-user partners, and support maintenance of other web-based tools and resources that can assist with project administration.

Prepare national-level outreach materials - The TASC will be responsible for supporting the capacity building, education, resource development, and information-sharing across the Regional TAPs network. This includes contributing to the development and dissemination of technical and informational resources such as presentations, fact sheets, reports, market analysis, or other tools to assist regional TAPs with stakeholder engagement and end-user partnerships.

Provide training and technical assistance to Regional TAPs - These activitiesinclude hosting informational webinars, workshops, trainings, and organizing other meetings specifically for the Regional TAPs. Information may include training courses for new TAPs, education about EERE and IEDO strategic priorities, programs, and resources; training and education in onsite energy technology areas and technical assistance best practices; and other activities as defined by EERE.

Support IEDO workforce development and energy justice activities - The TASC will support incorporation of DOE, EERE, and IEDO strategic prioritites -- including workforce development and energy justice -- into program activities of the Onsite Energy TAPs program. This includes helping identify and prioritize opportunities to increase engagement in underserved communities and identify opportunities to work with minority- and women-owned businesses.

Applicant Teams

Applicants should assemble a team with qualifications, relevant expertise, and availability to provide highly technical engineering capabilities applicable to a broad range of onsite energy resources. Teams should also include field practitioners with significant knowledge and experience facilitating installation of projects, and programmatic specialists and project coordinators with

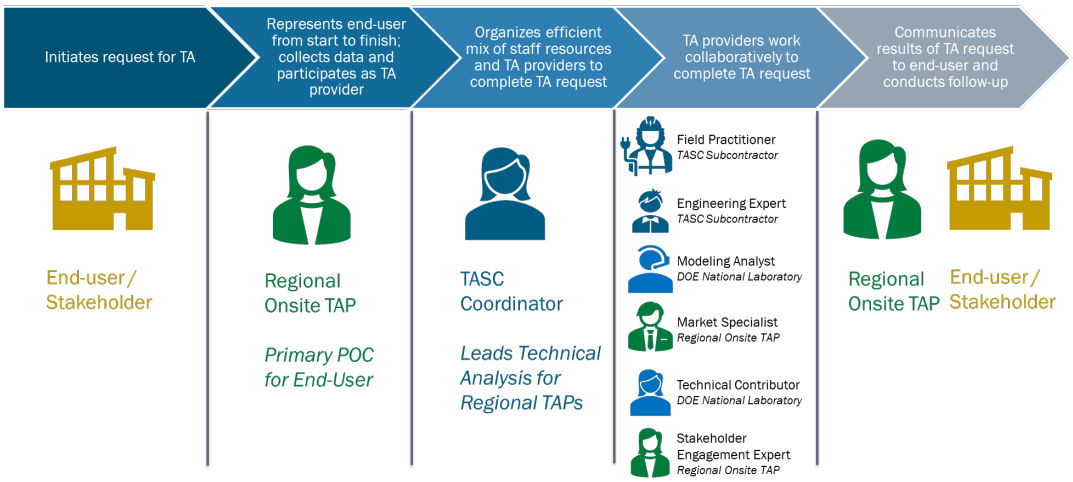
experience administering technical assistance programs. Applicants should have staff, program delivery capabilities, and relationships that enable them to readily deploy expertise shortly after starting the project. The TASC will be expected to report regular updates to IEDO to enable general management oversight and evaluation of performance.

By centralizing specialized technical expertise and programmatic support with the TASC, DOE intends to avoid replicating technical expertise at the regional level, and to enable the Regional TAPs to focus directly on engaging end-users and addressing policy issues specific to their geographic territories. Because this is a new program model, the TASC will be expected to make appropriate ongoing adjustments as the program develops. The TASC should be prepared to assess procedures and practices biannually, and make any necessary recommendations to update procedures to EERE.

All work under EERE funding agreements must be performed in the United States. See Section IV.J.iii. and Appendix A.

Example Technical Assistance Request Process

A Regional TAP may identify a request from an end-user for an initial screening to determine if thermal storage is a good fit for their site. The Regional TAP will bring the request to the TASC and the TASC will identify and organize the appropriate thermal storage subject matter expert(s), screening tools, and other resources necessary to complete the request. These personnel and resources may be TASC subcontractors, national lab experts funded separately by DOE to support this program, and/or Regional TAP staff with relevant expertise.The TA providers coordinated by the TASC will complete the thermal energy screening and the Regional TAP will communicate the results to the end-user.



iii. Teaming Partner List

IEDO encourages collaboration and diverse partnerships to maximize the impact of work under this FOA. To assist with the formation of project teams demonstrating expertise across a range of technical, market, and policy areas relevant to onsite energy, DOE is compiling a "Teaming Partner List." The Teaming Partner List allows organizations who may wish to participate on an application to express their interest to other applicants and to explore potential partnerships.

Updates to the Teaming Partner List will be available in the EERE Exchange website. The Teaming Partner List will be regularly updated to reflect new teaming partners who have provided their organization's teaming partner information.

SUBMISSION INSTRUCTIONS: Users will see a new section, "Teaming Partners", within the left-hand navigation in EERE Exchange. This page allows users to view published Teaming Partner Lists and any interested party that would like to be included on this list should submit a request within Exchange to join the teaming partner list. Select the appropriate Teaming Partner List from the dropdown and fill in the following information: Investigator Name, Organization Name, Organization Type, Topic Area, Background and Capabilities, Website, Contact Address, Contact Email, and Contact Phone. Additional instructions for "How to Submit Teaming Partner List Entry" are available to download in the "Manuals" section of Exchange.

DISCLAIMER: By submitting a request to be included on the Teaming Partner List, the requesting organization consents to the publication of the above-referenced information. By enabling and publishing the Teaming Partner List, DOE is not endorsing, sponsoring, or otherwise evaluating the qualifications of the individuals and organizations that are self-identifying for placement on this Teaming Partner List. DOE will not pay for the provision of any information, nor will it compensate any applicants or requesting organizations for the development of such information.

C. Applications Specifically Not of Interest

The following types of applications will be deemed nonresponsive and will not be reviewed or considered (See Section III.D. of the FOA):

- Applications that fall outside the technical parameters specified in Section I.A. and I.B. of the FOA.

- Applications that include approaches that are biased towards a specific vendor or commercial provider technology solution.

D. Community Benefits Plan

DOE is committed to investing in programs that deliver benefits to the American public and leads to commercialization of technologies and products that foster sustainable, resilient, and equitable access to clean energy. Further, DOE is committed to supporting the development of more diverse, equitable, inclusive, and accessible workplaces to help maintain the nation's leadership in science and technology.

To support the goal of building a clean and equitable energy economy, projects funded under this FOA are expected to (1) advance diversity, equity, inclusion and accessibility (DEIA); (2) contribute to energy equity; and (3) invest in America's workforce. To ensure these objectives are met, applications must include a Community Benefits Plan that addresses three objectives stated above. See Section IV.D.xiv and Appendix F for the more information on the Community Benefits Plan content requirements.

E. Authorizing Statutes

The programmatic authorizing statutes are the Energy Act of 2020 Section 1013, which amends Section 375 of the Energy Policy and Conservation Act, 42 U.S.C. § 6345, and section 911 (a)(2)(C) of the Energy Policy Act of 2005, as codified at 42 U.S.C. § 16191(a)(2)(C)

Awards made under this announcement will fall under the purview of 2 Code of Federal Regulation (CFR) Part 200 as amended by 2 CFR Part 910.

II. Award Information

A. Award Overview

i. Estimated Funding

EERE expects to make a total of approximately $23 million of federal funding available for new awards under this FOA, subject to the availability of appropriated funds. EERE anticipates making approximately 6 – 10 awards under this FOA for Topic Area 1. EERE anticipates making one award under this FOA for Topic Area 2. EERE may issue one, multiple, or no awards. Individual awards may vary between $300,000 and $500,000 per year for single TAP regions under

Topic Area 1. Individual awards may vary between $1,000,0000 and $2,000,000 per year under Topic Area 2.

EERE may issue awards in one, multiple, or none of the following topic areas:

Topic Area Number	Topic Area Title	Anticipated Number of Awards	Anticipated Minimum Award Size for Any One Individual Award (Fed Share)	Anticipated Maximum Award Size for Any One Individual Award (Fed Share)	Approximate Total Federal Funding Available for All Awards	Anticipated Period of Performance (months)
1	Regional Onsite Energy Technical Assistance Partnerships (TAPs)	6-10	$900,000	$1,500,000	$15,000,000	36
2	Onsite Energy Technical Analysis and Support Center (TASC)	1	$4,000,0000	$8,000,000	$8,000,0000	48

EERE may establish more than one budget period for each award and fund only the initial budget period(s). Funding for all budget periods, including the initial budget period, is not guaranteed.

DOE encourages applicants to consider region-specific characteristics of the manufacturing sector and related market factors in scoping work and developing budget proposals and justifications. For example, regions with a high concentration of facilities and plants are anticipated to require more funding than regions with fewer facilities and plants. The adequacy of the proposed budget relative to the number of plants in the region is an aspect of DOE's technical review criteria.

TAP Region	States Included in Region	Percent of U.S. Manufacturing Facilities and Wastewater Treatment Plants by TAP Region
Northwest	AK, ID, OR, WA	4%
Western	AZ, CA, HI, NV	12%
Upper-West	CO, MT, ND, SD, UT, WY	3%
Southcentral	AR, LA, OK, NM, TX	10%
Central	IA, KS, MO, NE	6%
Midwest	IN, IL, MI, MN, OH, WI	25%
Southeast	AL, FL, GA, KY, MS, NC, SC, TN, PR	17%
Mid-Atlantic	VA, WV, MD, DE, PA	9%

New York-New Jersey	NY, NJ	8%
New England	CT, MA, ME, NH, RI, VT	6%
	U.S. Total	**100%**

Source: Internal DOE analysis. Contains all manufacturing facilities tied to NAICS codes 31-33 and wastewater treatment facilities.

ii. Period of Performance

EERE anticipates making awards that will run for 3 years in length for Topic Area 1 and 4 years in length for Topic Area 2, comprised of one or more budget periods. Project continuation will be contingent upon several elements, including satisfactory performance and Go/No-Go decision review. For a complete list, see Section VI.B.xiii. At the Go/No-Go decision points, EERE will evaluate project performance, project schedule adherence, the extent milestone objectives are met, compliance with reporting requirements, and overall contribution to the program goals and objectives. As a result of this evaluation, EERE may, at its discretion, authorize the following actions: (1) continue to fund the project, contingent upon the availability of funds appropriated by Congress for the purpose of this program and the availability of future-year budget authority; (2) recommend redirection of work under the project; (3) place a hold on federal funding for the project, pending further supporting data or funding; or (4) discontinue funding the project because of insufficient progress, change in strategic direction, or lack of funding.

iii. New Applications Only

EERE will accept only new applications under this FOA. EERE will not consider applications for renewals of existing EERE-funded awards through this FOA.

B. EERE Funding Agreements

Through cooperative agreements and other similar agreements, EERE provides financial and other support to projects that have the potential to realize the FOA objectives. EERE does not use such agreements to acquire property or services for the direct benefit or use of the United States government.

i. Cooperative Agreements

EERE generally uses cooperative agreements to provide financial and other support to prime recipients.

Through cooperative agreements, EERE provides financial or other support to accomplish a public purpose of support or stimulation authorized by federal statute. Under cooperative agreements, the government and prime recipients share responsibility for the direction of projects.

EERE has substantial involvement in all projects funded via cooperative agreement. See Section VI.B.ix of the FOA for more information on what substantial involvement may involve.

ii. Funding Agreements with Federally Funded Research and Development Center (FFRDCs)

In most cases, FFRDCs are funded independently of the remainder of the project team. The FFRDC then executes an agreement with any non-FFRDC project team members to arrange work structure, project execution, and any other matters. Regardless of these arrangements, the entity that applied as the prime recipient for the project will remain the prime recipient for the project.

III. Eligibility Information

To be considered for substantive evaluation, an applicant's submission must meet the criteria set forth below. If the application does not meet these eligibility requirements, it will be considered ineligible and removed from further evaluation.

A. Eligible Applicants

i. Individuals

U.S. citizens and lawful permanent residents are eligible to apply for funding as a prime recipient or subrecipient.

ii. Domestic Entities

For-profit entities, educational institutions, and nonprofits that are incorporated (or otherwise formed) under the laws of a particular state or territory of the United States and have a physical location for business operations in the United States are eligible to apply for funding as a prime recipient or subrecipient. 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.

State, local, and tribal government entities are eligible to apply for funding as a prime recipient or subrecipient.

DOE/NNSA FFRDCs are eligible to apply for funding as a subrecipient, but are not eligible to apply as a prime recipient.

Non-DOE/NNSA FFRDCs are eligible to apply for funding as a subrecipient, but are not eligible to apply as a prime recipient.

Federal agencies and instrumentalities (other than DOE) are eligible to apply for funding as a subrecipient, but are not eligible to apply as a prime recipient.

Entities banned from doing business with the United States government such as entities debarred, suspended, or otherwise excluded from or ineligible for participating in Federal programs are not eligible.

iii. Foreign Entities

Foreign entities, whether for-profit or otherwise, are eligible to apply for funding under this FOA. Other than as provided in the "Individuals" or "Domestic Entities" sections above, 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 subsidiary in the United States as the prime recipient in the Full Application (i.e., a foreign entity may request that it remains the prime recipient on an award). To do so, the applicant must submit an explicit written waiver request in the Full Application. Appendix A lists the necessary information that must be included in a request to waive this requirement. The applicant does not have the right to appeal EERE's decision concerning a waiver request.

In the waiver request, the applicant must demonstrate to the satisfaction of EERE that it would further the purposes of this FOA and is otherwise in the economic interests of the United States to have a foreign entity serve as the prime recipient. EERE may require additional information before considering the waiver request.

A foreign entity may receive funding as a subrecipient.

iv. Incorporated Consortia

Incorporated consortia, which may include domestic and/or foreign entities, are eligible to apply for funding as a prime recipient or subrecipient. For consortia incorporated (or otherwise formed) under the laws of a state or territory of the United States, please refer to "Domestic Entities" above. For consortia incorporated in foreign countries, please refer to the requirements in "Foreign Entities" above.

Each incorporated consortium must have an internal governance structure and a written set of internal rules. Upon request, the consortium must provide a written description of its internal governance structure and its internal rules to the EERE Contracting Officer.

v. Unincorporated Consortia

Unincorporated Consortia, which may include domestic and foreign entities, must designate one member of the consortium to serve as the prime recipient/consortium representative. The prime recipient/consortium representative must be incorporated (or otherwise formed) under the laws of a state or territory of the United States. The eligibility of the consortium will be determined by the eligibility of the prime recipient/consortium representative under Section III.A. of the FOA.

Upon request, unincorporated consortia must provide the EERE Contracting Officer with a collaboration agreement, commonly referred to as the articles of collaboration, which sets out the rights and responsibilities of each consortium member. This agreement binds the individual consortium members together and should discuss, among other things, the consortium's:

- Management structure;
- Method of making payments to consortium members;
- Means of ensuring and overseeing members' efforts on the project;
- Provisions for members' cost sharing contributions; and
- Provisions for ownership and rights in intellectual property developed previously or under the agreement.

B. Cost Sharing

Cost sharing is not required under this FOA.

C. Compliance Criteria

Letters of Intent (optional), Full Applications, and Replies to Reviewer Comments must meet all compliance criteria listed below or they will be considered noncompliant. EERE will not review or consider noncompliant submissions, including Letters of Intent (optional), Full Applications, and Replies to Reviewer Comments that were: submitted through means other than EERE eXCHANGE; submitted after the applicable deadline; and/or submitted incomplete. EERE will not extend the submission deadline for applicants that fail to submit required information by the applicable deadline due to server/connection congestion.

i. Compliance Criteria

i. *Letters of Intent (Optional)*
Letters of Intent are deemed compliant if:
- The applicant entered all required information and clicked the "Submit" button in EERE eXCHANGE by the deadline stated in the FOA.

ii. *Full Applications*
Full Applications are deemed compliant if:
- The Full Application complies with the content and form requirements in Section IV.D. of the FOA; and
- The applicant successfully uploaded all required documents and clicked the "Submit" button in EERE eXCHANGE by the deadline stated in the FOA.

iii. *Replies to Reviewer Comments*
Replies to Reviewer Comments are deemed compliant if:
- The Reply to Reviewer Comments complies with the content and form requirements in Section IV.E. of the FOA; and
- The applicant successfully uploaded all required documents to EERE eXCHANGE by the deadline stated in the FOA.

D. Responsiveness Criteria

All "Applications Specifically Not of Interest," as described in Section I.C. of the FOA, are deemed nonresponsive and are not reviewed or considered.

E. Other Eligibility Requirements

i. Requirements for DOE/NNSA and non-DOE/NNSA Federally Funded Research and Development Centers Included as a Subrecipient

DOE/NNSA and non-DOE/NNSA FFRDCs may be proposed as a subrecipient on another entity's application subject to the following guidelines:

i. *Authorization for non-DOE/NNSA FFRDCs*
The federal agency sponsoring the FFRDC must authorize in writing the use of the FFRDC on the proposed project and this authorization must be submitted with the application. The use of a FFRDC must be consistent with its authority under its award.

ii. *Authorization for DOE/NNSA FFRDCs*
The cognizant Contracting Officer for the FFRDC must authorize in writing the use of the FFRDC on the proposed project and this authorization must be

submitted with the application. The following wording is acceptable for this authorization:

Authorization is granted for the Laboratory to participate in the proposed project. The work proposed for the laboratory is consistent with or complementary to the missions of the laboratory, and will not adversely impact execution of the DOE assigned programs at the laboratory.

iii. *Funding and Subaward with FFRDCs*
The value of and funding for the FFRDC portion of the work will not normally be included in the award. DOE/NNSA FFRDCs participating as a subrecipient on a project will be funded directly through the DOE field work proposal (WP) process. Non-DOE/NNSA FFRDCs participating as a subrecipient will be funded through an interagency agreement with the sponsoring agency.

Unless instructed otherwise by the DOE CO for the DOE award, all FFRDCs are required to enter into a Cooperative Research and Development Agreement (CRADA) or, if the role of the DOE/NNSA FFRDC is limited to technical assistance and intellectual property is not anticipated to be generated from the DOE/NNSA FFRDC's work, a Technical Assistance Agreement (TAA), with at least the prime recipient before any project work begins. Any questions regarding the use of a CRADA or TAA should be directed to the cognizant DOE field intellectual property (IP) counsel.

The CRADA or TAA is used to ensure accountability for project work and provide the appropriate management of intellectual property (IP), e.g., data protection and background IP. The CRADA or TAA must be agreed upon by all parties and submitted to DOE or other sponsoring agency, when applicable, for approval, or submitted to DOE for notice under the Master Scope of Work process, when applicable, using any DOE or other sponsoring agency approved CRADA or TAA template without substantive changes by the time the award is made to the prime recipient.

iv. *Responsibility*
The prime recipient will be the responsible authority regarding the settlement and satisfaction of all contractual and administrative issues including, but not limited to disputes and claims arising out of any agreement between the prime recipient and the FFRDC.

v. *Limit on FFRDC Effort*
The scope of work to be performed by the FFRDC may not be more significant than the scope of work to be performed by the applicant.

F. Limitation on Number of Full Applications Eligible for Review

An entity may only submit one Full Application for each topic area of this FOA. Applicants may submit for only one of the topic areas, or they may submit separate full applications for both Topic 1 and Topic 2. If an entity submits more than one Full Application to the same topic area, EERE will request a determination from the applicant's authorizing representative as to which application should be reviewed. Any other submissions received listing the same entity as the applicant for the same topic area will not be eligible for further consideration. This limitation does not prohibit an applicant from collaborating on other applications (e.g., as a potential subrecipient or partner) so long as the entity is only listed as the applicant on one Full Application for each topic area of this FOA.

G. Questions Regarding Eligibility

EERE will not make eligibility determinations for potential applicants prior to the date on which applications to this FOA must be submitted. The decision whether to submit an application in response to this FOA lies solely with the applicant.

IV. Application and Submission Information

A. Application Process

The application process will include an optional Letter of Intent phase and a Full Application phase. At each phase, EERE performs an initial eligibility review of the applicant submissions to determine whether they meet the eligibility requirements of Section III. of the FOA. EERE will not review or consider submissions that do not meet the eligibility requirements of Section III. All submissions must conform to the following form and content requirements, including maximum page lengths (described below) and must be submitted via EERE eXCHANGE at https://eere-eXCHANGE.energy.gov, unless specifically stated otherwise. **EERE will not review or consider submissions submitted through means other than EERE eXCHANGE, submissions submitted after the applicable deadline, or incomplete submissions**. EERE will not extend deadlines for applicants who fail to submit required information and documents due to server/connection congestion.

A **Control Number** will be issued when an applicant begins the EERE eXCHANGE application process. This control number must be included with all application documents, as described below.

The Full Application and Reply to Reviewer Comments must conform to the following requirements:

- Each must be submitted in Adobe PDF format unless stated otherwise;
- Each must be written in English;
- All pages must be formatted to fit on 8.5 x 11 inch paper with margins not less than one inch on every side. Use Calibri typeface, a black font color, and a font size of 12 point or larger (except in figures or tables, which may be 10 point font). A symbol font may be used to insert Greek letters or special characters, but the font size requirement still applies. References must be included as footnotes or endnotes in a font size of 10 or larger. Footnotes and endnotes are counted toward the maximum page requirement;
- The **Control Number** must be prominently displayed on the upper right corner of the header of every page. Page numbers must be included in the footer of every page; and
- Each submission must not exceed the specified maximum page limit, including cover page, charts, graphs, maps, and photographs when printed using the formatting requirements set forth above and single spaced. If applicants exceed the maximum page lengths indicated below, EERE will review only the authorized number of pages and disregard any additional pages.

Applicants are responsible for meeting each submission deadline. **Applicants are strongly encouraged to submit their Letters of Intent (optional), Full Applications, and Replies to Reviewer Comments at least 48 hours in advance of the submission deadline**. Under normal conditions (i.e., at least 48 hours in advance of the submission deadline), applicants should allow at least 1 hour to submit a Letter of Intent (optional), Full Application, or Reply to Reviewer Comments. Once the Letter of Intent (optional), Full Application, or Reply to Reviewer Comments is submitted in EERE eXCHANGE, applicants may revise or update that submission until the expiration of the applicable deadline. If changes are made to any of these documents, the applicant must resubmit the Letter of Intent (optional), Full Application, or Reply to Reviewer Comments before the applicable deadline.

EERE urges applicants to carefully review their Letters of Intent (optional), Full Applications, and Replies to Reviewer Comments to allow sufficient time for the submission of required information and documents. All Full Applications that pass the initial eligibility review will undergo comprehensive technical merit review according to the criteria identified in Section V.A.ii. of the FOA.

i. Additional Information on EERE eXCHANGE

EERE eXCHANGE is designed to enforce the deadlines specified in this FOA. The "Apply" and "Submit" buttons will automatically disable at the defined

submission deadlines. Should applicants experience problems with EERE eXCHANGE, the following information may be helpful.

Applicants that experience issues with submission PRIOR to the FOA deadline: In the event that an applicant experiences technical difficulties with a submission, the applicant should contact the EERE eXCHANGE helpdesk for assistance (EERE-eXCHANGESupport@hq.doe.gov). The EERE eXCHANGE helpdesk and/or the EERE eXCHANGE system administrators will assist applicants in resolving issues.

B. Application Forms

The application forms and instructions are available at EERE Funding Application and Management Forms and on EERE eXCHANGE. To access these materials, go to https://eere-eXCHANGE.energy.gov and select the appropriate funding opportunity number.

Note: The maximum file size that can be uploaded to the EERE eXCHANGE website is 50MB. Files in excess of 50MB cannot be uploaded, and hence cannot be submitted for review. If a file exceeds 50MB but is still within the maximum page limit specified in the FOA, it must be broken into parts and denoted to that effect. For example:
TechnicalVolume_Part_1
TechnicalVolume_Part_2

C. Content and Form of the Letter of Intent

Applicants may submit an optional Letter of Intent by the specified due date before submitting a Full Application. Letters of Intent will be used by EERE to plan for the merit review process. The letters should not contain any proprietary or sensitive business information. The letters do not commit an applicant to submit an application.

EERE will not review or consider ineligible Letters of Intent (see Section III. of the FOA).

Each applicant should provide the following information as part of the Letter of Intent (optional):

- Project Title;
- Multi-State Region(s), if applicable
- Lead Organization;
- Organization Type (Business < 500 Employees; Business > 1000 Employees; Business 500-1000 Employees; FFRDC; Government-Owned, Government Operated; Non-Profit; University);
- % of effort contributed by the Lead Organization;

- The Project Team, including:
  - The Principal Investigator (PI) for the prime recipient;
  - Team Members (i.e., subrecipients); and
  - Senior/Key Personnel (i.e., individuals who contribute in a substantive, measureable way to the execution of the proposed project);
- Technical Topic or Area; and
- Abstract – The abstract provided should be not more than 200 words in length, and should provide a truncated explanation of the proposed project.

D. Content and Form of the Full Application

Applicants must submit a Full Application by the specified due date and time to be considered for funding under this FOA. Applicants must complete the following application forms found on the EERE eXCHANGE website at https://eere-eXCHANGE.energy.gov/, in accordance with the instructions.

All Full Application documents must be marked with the Control Number issued to the applicant.

i. Full Application Content Requirements

EERE will not review or consider ineligible Full Applications (see Section III. of the FOA).

Each Full Application shall be limited to a single concept. Full Applications must conform to the following requirements and must not exceed the stated page limits.

Component	File Format	Page Limit	File Name
Technical Volume	PDF	See table below	ControlNumber_LeadOrganization_TechnicalVolume
Resumes	PDF	2 pages each	ControlNumber_LeadOrganization_Resumes
Letters of Commitment	PDF	1 page each	ControlNumber_LeadOrganization_LOCs
SF-424	PDF	n/a	ControlNumber_LeadOrganization_App424
Budget Justification Workbook	MS Excel	n/a	ControlNumber_LeadOrganization_Budget_Justification
Summary/Abstract for Public Release	PDF	1	ControlNumber_LeadOrganization_Summary
Summary Slide	MS Powerpoint	1	ControlNumber_LeadOrganization_Slide

Subrecipient Budget Justification	MS Excel	n/a	ControlNumber_LeadOrganization_Sub_Budget_Justification
DOE Work Proposal for FFRDC, if applicable (see DOE O 412.1A, Attachment 3)	PDF	n/a	ControlNumber_LeadOrganization_WP
Authorization from cognizant Contracting Officer for FFRDC	PDF	n/a	ControlNumber_LeadOrganization_FFRDCAuth
SF-LLL Disclosure of Lobbying Activities	PDF	n/a	ControlNumber_LeadOrganization_SF-LLL
Foreign Entity and Foreign Work Waivers	PDF	n/a	ControlNumber_LeadOrganization_Waiver
Community Benefits Plan	PDF	5	Control Number_LeadOrganization_CBP
Current and Pending Support	PDF	n/a	ControlNumber_LeadOrganization_CPS

Note: The maximum file size that can be uploaded to the EERE eXCHANGE website is 50MB. Files in excess of 50MB cannot be uploaded, and hence cannot be submitted for review. If a file exceeds 50MB but is still within the maximum page limit specified in the FOA it must be broken into parts and denoted to that effect. For example:
TechnicalVolume_Part_1
TechnicalVolume_Part_2

EERE will not accept late submissions that resulted from technical difficulties due to uploading files that exceed 50MB.

EERE provides detailed guidance on the content and form of each component below.

ii. Technical Volume

The Technical Volume must be submitted in PDF format. The Technical Volume must conform to the following content and form requirements, including maximum page lengths. If applicants exceed the maximum page lengths indicated below, EERE will review only the authorized number of pages and disregard any additional pages. This volume must address the Merit Review Criteria as discussed in Section V.A.i. of the FOA. Save the Technical Volume in a single PDF file using the following convention for the title "ControlNumber_LeadOrganization_TechnicalVolume".

Applicants must provide sufficient citations and references to the primary research literature to justify the claims and approaches made in the Technical Volume. However, EERE and reviewers are under no obligation to review cited sources.

The Technical Volume to the Full Application may not be more than the number of pages specified in the table below, including the cover page, table of contents, and all citations, charts, graphs, maps, photos, or other graphics, and must include all of the information in the table below. The applicant should consider the weighting of each of the evaluation criteria (see Section V.A.i. of the FOA) when preparing the Technical Volume.

Topic Area	Topic Area Title	Page Limit
1	Regional Onsite Energy TAPs	- 15 pages for an application to serve one region - 20 pages for an application to serve multiple regions
2	Onsite Energy Technical Analysis and Support Center (TASC)	- 20 pages

The Technical Volume must conform to the following content requirements:

TOPIC AREA 1: REGIONAL ONSITE ENERGY TAPs

SECTION/PAGE LIMIT	DESCRIPTION
Cover Page	The cover page should include: • Title of submission • Topic Area being addressed • Region(s) covered • Proposed budget on an annual basis (if covering multiple regions, provide a budget for each region) • Proposed TAP Director name and organization • Any statements regarding confidentiality

Project Overview (Approximately 10% of the Technical Volume)	The Project Overview should contain the following information: • Background: Discuss the background of the applicant organization, including the history, successes, and any other information relevant to the topic. • Project Goal: The applicant should explicitly identify the overall goals of the proposed project and summarize anticipated activities to achieve success. • DOE Impact: Discuss the impact that DOE funding would have on the proposed project. Applicants should specifically explain how DOE funding, relative to prior, current, or anticipated funding from other public and private sources, is necessary to achieve the project objectives.
End-User Technical Assistance (Approximately 30% of the Technical Volume)	End-User Technical Assistance should describe the applicant's approach for direct engagement with manufacturers and other large energy users seeking technical assistance through the Onsite Energy TAP Program. It should address how the TAP will: • Support end-users in identifying specific needs for technical assistance with the greatest potential to increase onsite energy deployment, meet facility energy needs, and reduce greenhouse gas emissions. • Contribute to technical assistance activities – such as technology screenings, market analysis, and other technical efforts -- and work cooperatively and collaboratively with other TAPs, the TASC, and national lab subject matter experts supporting the program. • Deliver and effectively communicate results of unbiased technical information – including evaluations of multiple technology options and other technical assistance. • Cultivate and maintain strong, professional, and meaningful relationships with manufacturers and other large energy users, including serving as the primary point of contact representing the Onsite Energy TAP Program and engaging with companies to help with onsite energy planning, implementation, and operation. • Educate end-users about technology characteristics, performance data, installation approaches, lessons learned, and other practical information to support deployment of onsite energy. EERE estimates approximately 50% of an applicant's activities and budget in this area.
Market Outreach and Stakeholder Engagement (Approximately 40% of the Technical Volume)	Market Outreach and Stakeholder Engagement should include the applicant's approach for engaging with key market players and stakeholders to address region-specific economic, financial, regulatory, and informational barriers to deploying onsite energy. The section should address how the TAP will: • Identify region-specific market opportunities and barriers, emphasizing key industrial sub-sectors and local geographic resources, to support deployment of onsite energy in the region.

	• Maintain a strong knowledge of key policy issues and market factors impacting deployment of onsite energy in the region and support the development of tools, resources, and other materials related to key topic areas. • Build partnerships and engage with policy makers, utilities, state and local governments, community organizations, and other stakeholders to advance deployment of onsite energy in the region. • Synthesize best practices and lessons learned into public materials to help educate market players about onsite energy deployment. • Develop onsite energy case studies and project profiles that illustrate the successful installation and integration of onsite energy technologies to demonstrate value and replicability to the broader market. • Organize events, moderate webinars, participate in panel discussions, and conduct other activities geared toward educating key markets and building awareness of the Onsite Energy TAPs to increase onsite energy deployment. • Support identification of workforce development needed to advance onsite energy in industry on a greater scale, including solutions that consider local community strengths and needs. EERE estimates approximately 45% of an applicant's activities and budget in this area.
Project Management, Resources, and Commitment (Approximately 20% of the Technical Volume)	Project Management, Resources, and Commitment should include the applicant's plan for managing personnel resources and budget in support of overall project management activities. The section should include: • A description of how the TAP will be organized and the operational model to demonstrate how staff, office space, and other relevant resources will be managed. • Short bios (100 - 200 words) describing the project team's qualifications to support TAP activities, with emphasis on expertise with onsite energy technologies, stakeholder engagement, and policy analysis. Include the roles to be performed by each key participant and % of time commitment to support the project. In addition to proposing a TAP Director, applicants are encouraged to propose an AssistantDirector. • Buy America Requirements for Infrastructure Projects: Within the first 2 pages of the Workplan, include a short statement on whether the project will involve the construction, alteration, and/or repair of infrastructure in the United States. See Appendix B for applicable definitions and other information to inform this statement. • A commitment to coordinating TA activities through an online dashboard and regularly uploading deliverables to the DOE-hosted shared repository (box.com).

	• A commitment to participate in 30-minute status calls monthly and semi-annual meetings hosted by EERE in Washington, DC or another location to be specified. • Describe how the TAP will manage and resolve any potential conflicts of interest for other work by the team members, partners and subcontractors. EERE estimates approximately 5% of an applicant's activities and budget in this area.

TOPIC AREA 2: ONSITE ENERGY TECHNICAL ANALYSIS AND SUPPORT CENTER

SECTION/PAGE LIMIT	DESCRIPTION
Cover Page	The cover page should include: • Title of submission • Topic Area being addressed • Proposed budget on an annual basis • Technical and business points of contact • Names of all team member organizations • Names of the senior/key personnel and their organizations • Any statements regarding confidentiality
Project Overview (Approximately 10% of the Technical Volume)	The Project Overview should contain the following information: • Background: Discuss the background of the applicant organization, including the history, successes, and any other information relevant to the topic. • Project Goal: The applicant should explicitly identify the overall goals of the proposed project and summarize anticipated activities to achieve success. • DOE Impact: Discuss the impact that DOE funding would have on the proposed project. Applicants should specifically explain how DOE funding, relative to prior, current, or anticipated funding from other public and private sources, is necessary to achieve the project objectives.
Technical Analysis Approach (Approximately 40% of the Technical Volume)	Technical Analysis Approach should include the applicant's plan for coordinating and completing the technical analysis activities of the program. It should include: • A description of procedures for completing requests for TA, including identifying and organizing the efficient use of subject matter expertise and staff resources based on the level of analysis required. • Discussion of experience with techno-economic analysis tools and protocols for identifying optimal and cost-effective mix of onsite energy technologies given a site's specific characteristics and goals

	• Discussion of plans and capabilities to conduct technolology screenings, feasibility analyses, third party reviews of engineering analyses, reviews of equipment siting and selection, reviews of specifications and bids, and analysis to assist with continued operations and maintenance of onsite energy resources. • A plan to foster collaboration across a team of subject matter experts including subcontractors, national lab experts separately funded by DOE to support the program, and Regional TAP representatives. EERE estimates approximately 65% of an applicant's activities and budget in this area.
Operational Support Services and Project Administration (Approximately 30% of the Technical Volume)	Operational Support Services and Project Administration should describe the applicant's approach for providing operational support services and project administration to support technical assistance activities. It should address how the TASC will: • Centrally coordinate activities using a project dashboard, track metrics and data related to activities for all 10 TAP regions, and produce monthly and quarterly reports. • Effectively maintain an accurate and up-to-date internal database of onsite energy TAP stakeholders and end-user partners in support of program objectives • Use other innovative tools and resources that can support collaboration across the network or assist with project administration, as needed • Schedule, facilitate, and develop programmatic activities and produce materials for the regional TAPs to support their training, development, education, and information-sharing among regional TAPs, such as hosting informational webinars, workshops, training, and other meetings. Support logistics, agenda, and encourage substantive interactions among TAP Directors and DOE. Provide updates on program priorities and technology developments. EERE estimates approximately 30% of an applicant's activities and budget in this area.
Project Management, Resources, and Commitment (Approximately 20% of the Technical Volume)	Project Management, Resources, and Commitment should include the applicant's plan for managing personnel resources and budget in support of overall project management activities. The section should include: • A description of how the TASC will be organized and the operational model to demonstrate how staff, office space, and other relevant resources will be managed. • Short bios (100 - 200 words) describing the project team's qualifications, with emphasis on specialized engineering capabilities, field practitioner experience, and administrative and support services. Include the roles to be performed by each key participant and % of time commitment to support the project. • Buy America Requirements for Infrastructure Projects: Within the first 2 pages of the Workplan, include a short statement on

	whether the project will involve the construction, alteration, and/or repair of infrastructure in the United States. See Appendix B for applicable definitions and other information to inform this statement. • A commitment to participate in planning meetings, regular calls and semi-annual meetings hosted by EERE in Washington, DC or another location to be specified. • Describe how the TASC will manage and resolve any potential conflicts of interest for other work by the team members, partners and subcontractors. EERE estimates approximately 5% of an applicant's activities and budget in this area.

iii. Resumes

A resume provides information that can be used by reviewers to evaluate the individual's skills, experience, and potential for leadership within the scientific community. Applicants are required to submit two-page resumes for the Principal Investigator and all Senior/Key Personnel that include the following:

1. Contact Information;
2. Education and training: Provide institution, major/area, degree, and year for undergraduate, graduate, and postdoctoral training;
3. Professional Experience: Beginning with the current position, list professional/academic positions in chronological order with a brief description. List all current academic, professional, or institutional appointments, foreign or domestic, at the applicant institution or elsewhere, whether or not remuneration is received, and, whether full-time, part-time, or voluntary;
4. Awards and honors;
5. A list of up to 10 publications most closely related to the proposed project. For each publication, identify the names of all authors (in the same sequence in which they appear in the publication), the article title, book or journal title, volume number, page numbers, year of publication, and website address if available electronically. Patents, copyrights, and software systems developed may be provided in addition to or substituted for publications. An abbreviated style such as the Physical Review Letters (PRL) convention for citations (list only the first author) may be used for publications with more than 10 authors; and
6. Synergistic Activities: List up to five professional and scholarly activities related to the proposed effort.

Save the resumes in a single PDF file using the following convention for the title "ControlNumber_LeadOrganization_Resumes".

In future FOAs, EERE may require a biographical sketch for the PI and senior/key personnel. In the meantime, in lieu of a resume, it is acceptable to use the biographical sketch format approved by the National Science Foundation (NSF). The biographical sketch format may be generated by the Science Experts Network Curriculum Vita (SciENcv), a cooperative venture maintained at https://www.ncbi.nlm.nih.gov/sciencv/, and is also available at https://nsf.gov/bfa/dias/policy/nsfapprovedformats/biosketch.pdf. The use of a format required by another agency is intended to reduce the administrative burden to researchers by promoting the use of common formats.

iv. Letters of Commitment

Submit letters of commitment from all subrecipients. If applicable, also include any letters of commitment from partners/end users (one-page maximum per letter). Save the letters of commitment in a single PDF file using the following convention for the title "ControlNumber_LeadOrganization_LOCs".

Letters of support or endorsement for the project from entities that do not have a substantive role in the project are not accepted.

v. SF-424: Application for Federal Assistance

Applicants are required to complete the SF-424 Application for Federal Assistance. This form is available on EERE eXCHANGE at https://eere-eXCHANGE.energy.gov/ under this FOA posting. Complete all required fields in accordance with the instructions on the form. The list of certifications and assurances in Field 21 can be found at http://energy.gov/management/office-management/operational-management/financial-assistance/financial-assistance-forms, under Certifications and Assurances. Note: The dates and dollar amounts on the SF-424 are for the complete project period and not just the first project year, first phase or other subset of the project period. Save the SF-424 in a single PDF file using the following convention for the title "ControlNumber_LeadOrganization_424".

vi. Budget Justification Workbook

Applicants are required to complete the Budget Justification Workbook. This form is available on EERE eXCHANGE at https://eere-eXCHANGE.energy.gov/. Prime recipients must complete each tab of the Budget Justification Workbook for the project as a whole, including all work to be performed by the prime recipient and its subrecipients and contractors. **If proposing to cover multiple regions (see Section I.B.i) applicants must complete the budget justification workbook for the primary region and identify in the Technical Volume the additional amount of funding proposed to cover each secondary region**. Applicants should include costs associated with required annual audits and incurred cost proposals in their proposed budget documents. The "Instructions and Summary"

included with the Budget Justification Workbook will auto-populate as the applicant enters information into the Workbook. Applicants must carefully read the "Instructions and Summary" tab provided within the Budget Justification Workbook. Save the Budget Justification Workbook in a single Microsoft Excel file using the following convention for the title "ControlNumber_LeadOrganization_Budget_Justification".

vii. Summary for Public Release

Applicants are required to submit a one-page summary of their project that is suitable for dissemination to the public. It should be a self-contained document that identifies the name of the applicant, the project director/principal investigator(s), the project title, the objectives of the project, a description of the project, including methods to be employed, the potential impact of the project (e.g., benefits, outcomes), major participants (for collaborative projects), and the project's commitments and goals described in the Community Benefits Plan. This document must not include any proprietary or sensitive business information as DOE may make it available to the public after selections are made. The project summary must not exceed 1 page when printed using standard 8.5 x 11 paper with 1" margins (top, bottom, left, and right) with font not smaller than 12 point. Save the Summary for Public Release in a single PDF file using the following convention for the title "ControlNumber_LeadOrganization_Summary".

viii. Summary Slide

Applicants are required to provide a single slide summarizing the proposed project. This slide is used during the evaluation process.

The Summary Slide template requires the following information:

- A project summary;
- A description of the project's impact;
- Proposed project goals;
- Any key graphics (illustrations, charts and/or tables);
- The project's key idea/takeaway;
- Project title, prime recipient, Principal Investigator, and senior/key personnel information; and
- Requested EERE funds.

Save the Summary Slide in a single Microsoft Powerpoint file using the following convention for the title "ControlNumber_LeadOrganization_Slide".

ix. Subrecipient Budget Justification (if applicable)

Applicants must provide a separate budget justification for each subrecipient that is expected to perform work estimated to be more than $250,000 or 25

percent of the total work effort (whichever is less). The budget justification must include the same justification information described in the "Budget Justification" section above. Save each subrecipient budget justification in a Microsoft Excel file using the following convention for the title "ControlNumber_LeadOrganization_Subrecipient_Budget_Justification".

x. Budget for DOE/NNSA FFRDC (if applicable)

If a DOE/NNSA FFRDC contractor is to perform a portion of the work, the applicant must provide a DOE WP in accordance with the requirements in DOE Order 412.1A, Work Authorization System, Attachment 2, available at: https://www.directives.doe.gov/directives-documents/400-series/0412.1-BOrder-a-chg1-AdmChg Save the WP in a single PDF file using the following convention for the title "ControlNumber_LeadOrganization_WP".

xi. Authorization for non-DOE/NNSA or DOE/NNSA FFRDCs (if applicable)

The federal agency sponsoring the FFRDC must authorize in writing the use of the FFRDC on the proposed project and this authorization must be submitted with the application. The use of a FFRDC must be consistent with the contractor's authority under its award. Save the Authorization in a single PDF file using the following convention for the title "ControlNumber_LeadOrganization_FFRDCAuth".

xii. SF-LLL: Disclosure of Lobbying Activities (required)

Prime recipients and subrecipients may not use any federal funds to influence or attempt to influence, directly or indirectly, congressional action on any legislative or appropriation matters.

Prime recipients and subrecipients are required to complete and submit SF-LLL, "Disclosure of Lobbying Activities" (https://www.grants.gov/web/grants/forms/sf-424-individual-family.html) to ensure that non-federal funds have not been paid and will not be paid to any person for influencing or attempting to influence any of the following in connection with the application:

- An officer or employee of any federal agency;
- A Member of Congress;
- An officer or employee of Congress; or
- An employee of a Member of Congress.

Save the SF-LLL in a single PDF file using the following convention for the title "ControlNumber_LeadOrganization_SF-LLL".

xiii. Waiver Requests: Foreign Entity and Foreign Work (if applicable)

i. Foreign Entity Participation:
As set forth in Section III.A.iii., 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. To request a waiver of this requirement, the applicant must submit an explicit waiver request in the Full Application. Appendix A lists the necessary information that must be included in a request to waive this requirement.

ii. Performance of Work in the United States (Foreign Work Waiver)
As set forth in Section IV.J.iii., all work under EERE funding agreements must be performed in the United States. This requirement does not apply to the purchase of supplies and equipment, so a waiver is not required for foreign purchases of these items. However, the prime recipient should make every effort to purchase supplies and equipment within the United States. Appendix A lists the necessary information that must be included in a foreign work waiver request.

Save the Waivers in a single PDF file using the following convention for the title "ControlNumber_LeadOrganization_Waiver".

xiv. Community Benefits Plan

The Community Benefits Plan must set forth the applicant's approach to ensuring the Federal investments advance the following three objectives: (1) advance diversity, equity, inclusion and accessibility (DEIA); (2) contribute to energy equity; and (3) invest in America's workforce. The below sections set forth the content requirements for the Community Benefits Plan, which addresses each of the foregoing objectives. Applicants must address all three sections.

The applicant's Community Benefits Plan must include at least one Specific, Measurable, Assignable, Relevant, and Timely (SMART) milestone per budget period to measure progress on the proposed actions. The Community Benefits Plan will be evaluated as part of the technical review process. If EERE selects a project, EERE will incorporate the Community Benefits Plan into the award and the recipient must implement its Community Benefits Plan as part of carrying out its project. During the life of the EERE award, EERE will evaluate the recipient's progress, including as part of the Go/No-Go review process.

The plan should be specific to the proposed project and not a restatement of an organizational policies. Applicants should describe the future implications or a

milestone-based plan for identifying future implications of their research on energy equity, including, but not limited to, benefits for the U.S. workforce. While some guidance and example activities are provided in Appendix F, applicants are encouraged to leverage promising practices and develop a plan that is tailored for their project.

The Community Benefits Plan must not exceed five (5) pages. It must be submitted in PDF format using the following convention name for the title: "Control Number_LeadOrganization_CBP." This Plan must address the technical review criterion titled, "Community Benefits Plan." See Section V. of the FOA.

The applicant's Community Benefits Plan must address the three sections listed below. Under Topic 1, applicants should submit a single plan that comprehensively addresses the three sections for the regions the applicant proposes to cover. Under Topic 2, applicants should submit a single plan that addresses the three sections at a national-level across the program, including how the applicant will contribute to and support the Regional TAPs in their efforts to address these considerations at a regional level.

1) **Diversity, Equity, Inclusion, and Accessibility**
To build a clean and equitable energy economy, it is important that there are opportunities for people of all racial, ethnic, socioeconomic and geographic backgrounds, sexual orientation, gender identity, persons with disabilities, and those re-entering the workforce from incarceration. This section of the plan must demonstrate how DEIA is incorporated in the project objectives. The plan must identify the specific actions the applicant would undertake to integrate DEIA into the project goals and project teams. Submitting an institutional DEIA plan without specific integration into the project will be deemed insufficient.

2) **Energy Equity**
This section must articulate the applicant's consideration of long-term equity implications of the proposed project. It must identify how the specific project integrates equity considerations into the project design to support equitable outcomes.

Applicants must provide an overview of benefits to disadvantaged communities (DACs) that the project can deliver, supported by measureable milestones. This section should describe how the project contributes to the Justice40 Initiative, including a discussion of the relevance of the eight DOE Justice40 Initiative benefits, as applicable:[7]

1. Decrease energy burden in disadvantaged communities (DACs)

[7] For more information about the Justice40 Initiative, visit: https://www.energy.gov/diversity/justice40-initiative.

2. Decrease environmental exposure and burdens for DACs
3. Increase parity in clean energy technology (e.g., solar, storage) access and adoption in DACs
4. Increase access to low-cost capital in DACs
5. Increase clean energy enterprise creation and contracting (MBE/DBE) in DACs
6. Increase clean energy jobs, job pipeline, and job training for individuals from DACs
7. Increase energy resiliency in DACs
8. Increase energy democracy in DACs

3) Workforce Implications

This section must articulate the applicant's consideration of long-term workforce impacts and opportunities of the proposed project. It must identify how the project is designed and executed to include an understanding of the future workforce needs, and include a discussion of how the proposed project will address those workforce needs.

See Appendix F for more guidance.

xv. Current and Pending Support

Current and pending support is intended to allow the identification of potential duplication, overcommitment, potential conflicts of interest or commitment, and all other sources of support. As part of the application, the principal investigator and senior/key personnel at the applicant and subrecipient level must provide a list of all sponsored activities, awards, and appointments, whether paid or unpaid; provided as a gift with terms or conditions or provided as a gift without terms or conditions; full-time, part-time, or voluntary; faculty, visiting, adjunct, or honorary; cash or in-kind; foreign or domestic; governmental or private-sector; directly supporting the individual's research or indirectly supporting the individual by supporting students, research staff, space, equipment, or other research expenses. All connections with foreign government-sponsored talent recruitment programs must be identified in current and pending support.

For every activity, list the following items:

- The sponsor of the activity or the source of funding
- The award or other identifying number
- The title of the award or activity. If the title of the award or activity is not descriptive, add a brief description of the research being performed that would identify any overlaps or synergies with the proposed research
- The total cost or value of the award or activity, including direct and indirect costs. For pending proposals, provide the total amount of requested funding
- The award period (start date – end date)

- The person-months of effort per year being dedicated to the award or activity

To identify overlap, duplication of effort, or synergistic efforts, append a description of the other award or activity to the current and pending support.

Details of any obligations, contractual or otherwise, to any program, entity, or organization sponsored by a foreign government must be provided on request to either the applicant institution or DOE. Supporting documents of any identified source of support must be provided to DOE on request, including certified translations of any document.

PIs and senior/key personnel must provide a separate disclosure statement listing the required information above regarding current and pending support. Each individual must sign and date their respective disclosure statement and include the following certification statement:

> I, [Full Name and Title], certify to the best of my knowledge and belief that the information contained in this Current and Pending Support Disclosure Statement is true, complete and accurate. I understand that any false, fictitious, or fraudulent information, misrepresentations, half-truths, or omissions of any material fact, may subject me to criminal, civil or administrative penalties for fraud, false statements, false claims or otherwise. (18 U.S.C. §§ 1001 and 287, and 31 U.S.C. §§ 3729-3730 and 3801-3812). I further understand and agree that (1) the statements and representations made herein are material to DOE's funding decision, and (2) I have a responsibility to update the disclosures during the period of performance of the award should circumstances change which impact the responses provided above.

The information may be provided in the format approved by the National Science Foundation (NSF), which may be generated by the Science Experts Network Curriculum Vita (SciENcv), a cooperative venture maintained at https://www.ncbi.nlm.nih.gov/sciencv/, and is also available at https://www.nsf.gov/bfa/dias/policy/nsfapprovedformats/cps.pdf. The use of a format required by another agency is intended to reduce the administrative burden to researchers by promoting the use of common formats. If the NSF format is used, the individual must still include a signature, date, and a certification statement using the language included in the paragraph above.

Save the Current and Pending Support in a single PDF file using the following convention for the title "ControlNumber_LeadOrganization_CPS".

Definitions:

Current and pending support – (a) All resources made available, or expected to be made available, to an individual in support of the individual's RD&D efforts, regardless of (i) whether the source is foreign or domestic; (ii) whether the resource is made available through the entity applying for an award or directly to the individual; or (iii) whether the resource has monetary value; and (b) includes in-kind contributions requiring a commitment of time and directly supporting the individual's RD&D efforts, such as the provision of office or laboratory space, equipment, supplies, employees, or students. This term has the same meaning as the term Other Support as applied to researchers in NSPM-33: For researchers, Other Support includes all resources made available to a researcher in support of and/or related to all of their professional RD&D efforts, including resources provided directly to the individual or through the organization, and regardless of whether or not they have monetary value (e.g., even if the support received is only in-kind, such as office/laboratory space, equipment, supplies, or employees). This includes resource and/or financial support from all foreign and domestic entities, including but not limited to, gifts provided with terms or conditions, financial support for laboratory personnel, and participation of student and visiting researchers supported by other sources of funding.

Foreign Government-Sponsored Talent Recruitment Program – An effort directly or indirectly organized, managed, or funded by a foreign government, or a foreign government instrumentality or entity, to recruit science and technology professionals or students (regardless of citizenship or national origin, or whether having a full-time or part-time position). Some foreign government-sponsored talent recruitment programs operate with the intent to import or otherwise acquire from abroad, sometimes through illicit means, proprietary technology or software, unpublished data and methods, and intellectual property to further the military modernization goals and/or economic goals of a foreign government. Many, but not all, programs aim to incentivize the targeted individual to relocate physically to the foreign state for the above purpose. Some programs allow for or encourage continued employment at United States research facilities or receipt of federal research funds while concurrently working at and/or receiving compensation from a foreign institution, and some direct participants not to disclose their participation to United States entities. Compensation could take many forms including cash, research funding, complimentary foreign travel, honorific titles, career advancement opportunities, promised future compensation, or other types of remuneration or consideration, including in-kind compensation.

Senior/key personnel – an individual who contributes in a substantive, meaningful way to the scientific development or execution of a research, development and demonstration (RD&D) project proposed to be carried out with DOE award.[8]

E. Content and Form of Replies to Reviewer Comments

EERE will provide applicants with reviewer comments following the evaluation of all eligible Full Applications. Applicants will have a brief opportunity to review the comments and to prepare a short Reply to Reviewer Comments responding to the comments however they desire or supplementing their Full Application. The Reply to Reviewer Comments is an optional submission; applicants are not required to submit a Reply to Reviewer Comments. EERE will post the Reviewer Comments in EERE eXCHANGE. The expected submission deadline is on the cover page of the FOA; however, it is the applicant's responsibility to monitor EERE eXCHANGE in the event that the expected date changes. The deadline will not be extended for applicants who are unable to timely submit their reply due to failure to check EERE eXCHANGE or relying on the expected date alone. Applicants should anticipate having approximately three (3) business days to submit Replies to Reviewer Comments.

EERE will not review or consider ineligible Replies to Reviewer Comments (see Section III. of the FOA). EERE will review and consider each eligible Full Application, even if no Reply is submitted or if the Reply is found to be ineligible.

Replies to Reviewer Comments must conform to the following content and form requirements, including maximum page lengths, described below. If a Reply to Reviewer Comments is more than three (3) pages in length, EERE will review only the first three (3) pages and disregard any additional pages.

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.

[8] Typically, these individuals have doctoral or other professional degrees, although individuals at the masters or baccalaureate level may be considered senior/key personnel if their involvement meets this definition. Consultants, graduate students, and those with a postdoctoral role also may be considered senior/key personnel if they meet this definition.

F. Post Selection Information Requests

If selected for award negotiations, DOE reserves the right to require that selected applicants provide additional or clarifying information regarding the application submissions, the project, the project team, the award requirements, and any other matters related to anticipated award. The following is a non-exhaustive list of examples of information that may be required:

- Personnel proposed to work on the project and collaborating organizations (See Section VI.B.xvii. Participants and Collaborating Organizations);
- Current and Pending Support (See Sections IV.D.xv and VI.B.xviii. Current and Pending Support);
- An Intellectual Property Management Plan (if applicable) describing how the project team/consortia members will handle intellectual property rights and issues between themselves while ensuring compliance with federal intellectual property laws, regulations, and policies in accordance with VI.B. Intellectual Property Management Plan;
- A Data Management Plan (if applicable) describing how all research data displayed in publications resulting from the proposed work will be digitally accessible at the time of publications, in accordance with Section VI.B.;
- Indirect cost information;
- Other budget information;
- Commitment Letters from Third Parties, if applicable;
- Name and phone number of the Designated Responsible Employee for complying with national policies prohibiting discrimination (See 10 CFR 1040.5);
- Information for the DOE Office of Civil Rights to process assurance reviews under 10 CFR 1040;
- Representation of Limited Rights Data and Restricted Software, if applicable; and
- Environmental Questionnaire.

G. Unique Entity Identifier (UEI) and System for Award Management (SAM)

Each applicant (unless the applicant is an individual or federal awarding agency that is excepted from those requirements under 2 CFR 25.110(b) or (c), or has an exception approved by the federal awarding agency under 2 CFR 25.110(d)) is required to: (1) Be registered in the SAM at https://www.sam.gov before submitting its application; (2) provide a valid UEI in its application; and (3) continue to maintain an active SAM registration with current information at all times during which it has an active federal award or an application or plan under consideration by a federal awarding agency. DOE may not make a federal award to an applicant until the applicant has complied with all applicable UEI and SAM requirements and, if an applicant has not fully complied with the requirements by the time DOE is ready to

make a federal award, the DOE will determine that the applicant is not qualified to receive a federal award and use that determination as a basis for making a federal award to another applicant.

NOTE: Due to the high demand of UEI requests and SAM registrations, entity legal business name and address validations are taking longer than expected to process. Entities should start the UEI and SAM registration process as soon as possible. If entities have technical difficulties with the UEI validation or SAM registration process they should utilize the HELP feature on SAM.gov. SAM.gov will work entity service tickets in the order in which they are received and asks that entities not create multiple service tickets for the same request or technical issue. Additional entity validation resources can be found here: GSAFSD Tier 0 Knowledge Base - Validating your Entity.

H. Submission Dates and Times

All required submissions must be submitted in EERE eXCHANGE no later than 5 p.m. Eastern Time on the dates provided on the cover page of this FOA.

I. Intergovernmental Review

This FOA is not subject to Executive Order 12372 – Intergovernmental Review of Federal Programs.

J. Funding Restrictions

i. Allowable Costs

All expenditures must be allowable, allocable, and reasonable in accordance with the applicable federal cost principles. Pursuant to 2 CFR 910.352, the cost principles in the Federal Acquisition Regulations (48 CFR 31.2) apply to for-profit entities. The cost principles contained in 2 CFR Part 200, Subpart E apply to all entities other than for-profits.

ii. Pre-Award Costs

Applicants selected for award negotiations (selectees) must request prior written approval to charge pre-award costs. Pre-award costs are those incurred prior to the effective date of the federal award directly pursuant to the negotiation and in anticipation of the federal award where such costs are necessary for efficient and timely performance of the scope of work. Such costs are allowable only to the extent that they would have been allowable if incurred after the date of the federal award and **only** with the written approval of the federal awarding agency, through the Contracting Officer assigned to the award.

Pre-award costs cannot be incurred prior to the Selection Official signing the Selection Statement and Analysis.

Pre-award expenditures are made at the selectee's risk. EERE is not obligated to reimburse costs: (1) in the absence of appropriations; (2) if an award is not made; or (3) if an award is made for a lesser amount than the selectee anticipated.

1. **National Environmental Policy Act (NEPA) Requirements Related to Pre-Award Costs**
   EERE's decision whether and how to distribute federal funds under this FOA is subject to NEPA. Applicants should carefully consider and should seek legal counsel or other expert advice before taking any action related to the proposed project that would have an adverse effect on the environment or limit the choice of reasonable alternatives prior to EERE completing the NEPA review process.

   EERE does not guarantee or assume any obligation to reimburse pre-award costs incurred prior to receiving written authorization from the Contracting Officer. If the applicant elects to undertake activities that DOE determines may have an adverse effect on the environment or limit the choice of reasonable alternatives prior to receiving such written authorization from the Contracting Officer, the applicant is doing so at risk of not receiving federal funding for their project. Nothing contained in the pre-award cost reimbursement regulations or any pre-award costs approval letter from the Contracting Officer override these NEPA requirements to obtain the written authorization from the Contracting Officer prior to taking any action that may have an adverse effect on the environment or limit the choice of reasonable alternatives. Likewise, if an application is selected for negotiation of award, and the prime recipient elects to undertake activities that are not authorized for federal funding by the Contracting Officer in advance of EERE completing a NEPA review, the prime recipient is doing so at risk of not receiving federal funding.

iii. Performance of Work in the United States (Foreign Work Waiver)

1. **Requirement**
   All work performed under EERE awards must be performed in the United States. The prime recipient must flow down this requirement to its subrecipients.

2. Failure to Comply

If the prime recipient fails to comply with the Performance of Work in the United States requirement, EERE may deny reimbursement for the work conducted outside the United States. The prime recipient is responsible should any work under this award be performed outside the United States, absent a waiver, regardless of whether the work is performed by the prime recipient, subrecipients, contractors or other project partners.

3. Waiver

There may be limited circumstances where it is in the interest of the project to perform a portion of the work outside the United States. To seek a foreign work waiver, the applicant must submit a written waiver request to EERE. Appendix A lists the necessary information that must be included in a request for a foreign work waiver.

The applicant must demonstrate to the satisfaction of EERE that a waiver would further the purposes of the FOA and is in the economic interests of the United States. EERE may require additional information before considering a waiver request. Save the waiver request(s) in a single PDF file. The applicant does not have the right to appeal EERE's decision concerning a waiver request.

iv. Construction

Recipients are required to obtain written authorization from the Contracting Officer before incurring any major construction costs.

v. Foreign Travel

Foreign travel costs are not allowable under this FOA.

vi. Equipment and Supplies

Property disposition will be required at the end of a project if the current fair market value of property exceeds $5,000. For-profit entity disposition requirements are set forth at 2 CFR 910.360. Property disposition requirements for other non-federal entities are set forth in 2 CFR 200.310 – 200.316.

vii. Buy America Requirements for Infrastructure Projects

Pursuant to the Build America Buy America Act, subtitle IX of BIL (Buy America, or "BABA"), federally assisted projects which involve infrastructure work, undertaken by applicable recipient types, require that:

- All iron, steel, and manufactured products used in the infrastructure work are produced in the United States; and

- All construction materials used in the infrastructure work are manufactured in the United States.

Whether a given project must apply this requirement is project-specific and dependent on several factors, such as the recipient's entity type, whether the work involves "infrastructure," as that term is defined in Section 70914 of the Bipartisan Infrastructure Law, and whether the infrastructure in question is publicly owned or serves a public function.

Applicants are strongly encouraged to consult Appendix B of this FOA to determine whether their project may have to apply this requirement, both to make an early determination as to the need of a waiver, as well as to determine what impact, if any, this requirement may have on the proposed project's budget.

Please note that, based on implementation guidance from the Office of Management and Budget (OMB) issued on April 18, 2022, the Buy America requirements of the BIL do not apply to DOE projects in which the prime recipient is a for-profit entity; the requirements only apply to projects whose prime recipient is a "non-Federal entity," e.g., a State, local government, Indian tribe, Institution of Higher Education, or nonprofit organization. Subawards should conform to the terms of the prime award from which they flow; in other words, for-profit prime recipients are not required to flow down these Buy America requirements to subrecipients, even if those subrecipients are non-Federal entities as defined above. Conversely, prime recipients which are non-Federal entities must flow the Buy America requirements down to all subrecipients, even if those subrecipients are for-profit entities. Finally, for all applicants—both non-Federal entities and for-profit entities—DOE is including a Program Policy Factor that the Selection Official may consider in determining which Full Applications to select for award negotiations that considers whether the applicant has made a commitment to procure U.S. iron, steel, manufactured products, and construction materials in its project.

The DOE financial assistance agreement will require each recipient: (1) to fulfill the commitments made in its application regarding the procurement of U.S.-produced products and (2) to fulfill the commitments made in its application regarding the procurement of other key component metals and manufactured products domestically that are deemed available in sufficient and reasonably available quantities or of a satisfactory quality at the time of award negotiation. Applicants may seek waivers of these requirements in very limited circumstances and for good cause shown. Further details on requesting a waiver can be found in Appendix B and the terms and conditions of the applicant's award.

Applicants are strongly encouraged to consult Appendix B for more information.

viii. Lobbying

Recipients and subrecipients may not use any federal funds to influence or attempt to influence, directly or indirectly, congressional action on any legislative or appropriation matters.

Recipients and subrecipients are required to complete and submit SF-LLL, "Disclosure of Lobbying Activities" (https://www.grants.gov/web/grants/forms/sf-424-individual-family.html) to ensure that non-federal funds have not been paid and will not be paid to any person for influencing or attempting to influence any of the following in connection with the application:

- An officer or employee of any federal agency;
- A Member of Congress;
- An officer or employee of Congress; or
- An employee of a Member of Congress.

ix. Risk Assessment

Pursuant to 2 CFR 200.206, DOE will conduct an additional review of the risk posed by applications submitted under this FOA. Such risk assessment will consider:

1. Financial stability;
2. Quality of management systems and ability to meet the management standards prescribed in 2 CFR 200 as amended and adopted by 2 CFR 910;
3. History of performance;
4. Audit reports and findings; and
5. The applicant's ability to effectively implement statutory, regulatory, or other requirements imposed on non-federal entities.

DOE may make use of other publicly available information and the history of an applicant's performance under DOE or other federal agency awards.

Depending on the severity of the findings and whether the findings were resolved, DOE may elect not to fund the applicant.

In addition to this review, DOE must comply with the guidelines on government-wide suspension and debarment in 2 CFR 180, and must require non-federal entities to comply with these provisions. These provisions restrict federal

awards, subawards and contracts with certain parties that are debarred, suspended or otherwise excluded from or ineligible for participation in federal programs or activities.

Further, as DOE invests in critical infrastructure and funds critical and emerging technology areas, DOE also considers possible vectors of undue foreign influence in evaluating risk. If high risks are identified and cannot be sufficiently mitigated, DOE may elect to not fund the applicant.

x. Invoice Review and Approval

DOE employs a risk-based approach to determine the level of supporting documentation required for approving invoice payments. Recipients may be required to provide some or all of the following items with their requests for reimbursement:

- Summary of costs by cost categories;
- Timesheets or personnel hours report;
- Invoices/receipts for all travel, equipment, supplies, contractual, and other costs;
- UCC filing proof for equipment acquired with project funds by for-profit recipients and subrecipients;
- Explanation for invoicing period;
- Analogous information for some subrecipients; and
- Other items as required by DOE.

xi. Foreign Collaboration Considerations

- Consideration of new collaborations with foreign organizations and governments. The recipient will be required to provide DOE with advanced written notification of any potential collaboration with foreign organizations or governments in connection with its DOE-funded award scope. The recipient will then be required to await further guidance from DOE prior to contacting the proposed foreign organization or government regarding the potential collaboration or negotiating the terms of any potential agreement.

- Existing collaborations with foreign organizations and governments. The recipient will be required to provide DOE with a written list of all existing foreign collaborations in which has entered in connection with its DOE-funded award scope.

- Description of collaborations that should be reported: In general, a collaboration will involve some provision of a thing of value to, or from, the recipient. A thing of value includes but may not be limited to all resources made available to, or from, the recipient in support of and/or related to the

DOE award, regardless of whether or not they have monetary value. Things of value also may include in-kind contributions (such as office/laboratory space, data, equipment, supplies, employees, students). In-kind contributions not intended for direct use on the DOE award but resulting in provision of a thing of value from or to the DOE award must also be reported. Collaborations do not include routine workshops, conferences, use of the recipient's services and facilities by foreign investigators resulting from its standard published process for evaluating requests for access, or the routine use of foreign facilities by awardee staff in accordance with the recipient's standard polies and procedures.

V. Application Review Information

A. Technical Review Criteria

i. Full Applications

Applications will be evaluated against the merit review criteria shown below. All sub-criteria are of equal weight.

TOPIC AREA 1: REGIONAL ONSITE ENERGY TAPs

Criterion 1: Technical Approach and Viability (35%)
This criterion involves consideration of the following factors:

- Extent to which the proposed approach is likely to build awareness and capacity of end-users to deploy onsite clean energy in the industrial sector.
- Quality of plan to communicate independent, unbiased technical information to end-users.
- Extent to which the proposed approach is likely to result in long-term, comprehensive, effective engagements with a range of end-users in support of onsite energy deployment.

Criterion 2: Market Transformation and Impact (30%)
This criterion involves consideration of the following factors:

- Extent to which the proposed approach addresses key market sectors where technical assistance, outreach, and education will have a significant impact on increasing deployment of onsite clean energy.
- Knowledge of economic, financial, regulatory, and information barriers and quality of approach to address key barriers.
- Extent to which the submission demonstrates a clear plan to develop region-specific resources such as case studies, project or policy profiles, and other public education materials.

- Extent to which the submission demonstrates an understanding of state and local policy factors influencing onsite energy deployment and articulates effective strategies for engaging on these topics.
- Extent to which the proposed plan is likely to result in effective engagements with utilities on deployment of onsite energy in the region.

Criterion 3: Team and Resources (20%)
This criterion involves consideration of the following factors:

- Quality of organizational model proposed to integrate and manage TAP activities.
- Extent to which the team collectively possesses knowledge and expertise related to a range of onsite energy technologies.
- Extent to which the team collectively possesses experience engaging with the industrial sector, including manufacturers and other large energy users.
- Experience and qualifications of proposed Director and the rest of the proposed project team.
- Clarity in the description of roles and responsibilities.
- Reasonableness of budget and spend plan for the proposed work.

Criterion 4: Community Benefits Plan (15%)
This criterion involves consideration of the following factors:

Diversity, Equity, Inclusion and Accessibility (DEIA)

- Clear articulation of the project's goals related to diversity, equity, inclusion, and accessibility.
- Quality of the project's DEIA goals, as measured by the goals' depth, breadth, likelihood of success, inclusion of appropriate and relevant SMART milestones, and overall project integration.
- Degree of applicant's commitment and ability to track progress towards meeting each of the diversity, equity, inclusion, and accessibility goals.
- Extent of engagement of organizations that represent underserved. communities as a core element of their mission, including MSIs, Minority Business Entities, and non-profit or community-based organizations.

Energy Equity

- Clear workplan tasks, staffing, and timeline for engaging energy equity stakeholders and/or evaluating the possible near and long-term implications of the project for the benefit of the American public, including, but not limited to the public health and public prosperity benefits.

- Approach, methodology, and expertise articulated in the plan for addressing energy equity and justice issues associated with the proposed project and the Justice40 Initiative.

Workforce Implications

- Clear and comprehensive workplan tasks, staffing, and timeline for engaging workforce stakeholders and/or evaluating the possible near and long-term implications of the project for the U.S. workforces.
- Approach to document the knowledge, skills, and abilities of the workforce required for successful commercial deployment of technologies resulting from this project
- Likelihood that the plan will result in improve understanding of the workforce implications related to the proposed project.

TOPIC AREA 2: ONSITE ENERGY TECHNICAL ANALYSIS AND SUPPORT CENTER

Criterion 1: Technical Approach and Viability (35%)

This criterion involves consideration of the following factors:

- Extent to which the applicant clearly articulates procedures for completing high-quality, unbiased technical analysis using multi-technology tools to analyze distributed energy resources.
- Degree to which the submission clearly articulates a plan to build a diverse team, encourage collaboration, and effectively manage activities across the program entities (i.e., TAPS, TASC, National Labs, IEDO).
- Extent to which the submission demonstrates a clear approach for tracking TAP activities and providing quality assurance and quality control of all technical deliverables

Criterion 2: Market Transformation and Impact (20%)

This criterion involves consideration of the following factors:

- Extent to which the submission clearly articulates an approach that will contribute to and enhance the capacity and effectiveness of the Regional TAPs
- Extent to which the approach to administration is likely to produce clear, timely, and consistent reports on the status and impact of program activities
- Extent to which the approach to operational support is likely to support long-term, comprehensive, effective technical assistance engagements in support of onsite energy deployment

Criterion 3: Team and Resources (30%)

This criterion involves consideration of the following factors:

- Quality of organizational model proposed to integrate and manage TASC activities.

- Extent to which the team collectively possesses significant experience facilitating the installation of real-world onsite energy projects in the field.
- Extent to which the team collectively possesses highly technical engineering expertise applicable to a broad range of onsite energy resources.
- Extent to which the team collectively possesses experience providing administrative and operational support services for technical assistance programs.
- Clarity in the description of roles and responsibilities
- Reasonableness of budget and spend plan for the proposed work

Criterion 4: Community Benefits Plan (15%)
This criterion involves consideration of the following factors:

Diversity, Equity, Inclusion and Accessibility (DEIA)

- Clear articulation of the project's goals related to diversity, equity, inclusion, and accessibility.
- Quality of the project's DEIA goals, as measured by the goals' depth, breadth, likelihood of success, inclusion of appropriate and relevant SMART milestones, and overall project integration.
- Degree of applicant's commitment and ability to track progress towards meeting each of the diversity, equity, inclusion, and accessibility goals.
- Extent of engagement of organizations that represent underserved. communities as a core element of their mission, including MSIs, Minority Business Entities, and non-profit or community-based organizations.

Energy Equity

- Clear workplan tasks, staffing, and timeline for engaging energy equity stakeholders and/or evaluating the possible near and long-term implications of the project for the benefit of the American public, including, but not limited to the public health and public prosperity benefits.
- Approach, methodology, and expertise articulated in the plan for addressing energy equity and justice issues associated with the proposed project and the Justice40 Initiative.

Workforce Implications

- Clear and comprehensive workplan tasks, staffing, and timeline for engaging workforce stakeholders and/or evaluating the possible near and long-term implications of the project for the U.S. workforces.
- Approach to document the knowledge, skills, and abilities of the workforce required for successful commercial deployment of technologies resulting from this project

- Likelihood that the plan will result in improve understanding of the workforce implications related to the proposed project.

ii. Criteria for Replies to Reviewer Comments

EERE has not established separate criteria to evaluate Replies to Reviewer Comments. Instead, Replies to Reviewer Comments are attached to the original applications and evaluated as an extension of the Full Application.

B. Standards for Application Evaluation

Applications that are determined to be eligible will be evaluated in accordance with this FOA, by the standards set forth in EERE's Notice of Objective Merit Review Procedure (76 Fed. Reg. 17846, March 31, 2011) and the guidance provided in the "DOE Merit Review Guide for Financial Assistance," effective September 2020, which is available at: https://energy.gov/management/downloads/merit-review-guide-financial-assistance-and-unsolicited-proposals-current.

C. Other Selection Factors

i. Program Policy Factors

In addition to the above criteria, the Selection Official may consider the following program policy factors in determining which Full Applications to select for award negotiations:

- Past performance of a currently active CHP TAP with regards to the delivery of technical assistance per the approved Statement of Project Objectives;
- The degree to which the proposed project 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;
- 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 diversity, equity, and inclusion elements, including but not limited to team members from Minority Serving Institutions (e.g. Historically Black Colleges and Universities (HBCUs)/Other Minority Institutions), Minority Business Enterprises, Minority

Owned Businesses, Woman Owned Businesses, Veteran Owned Businesses, or members within underserved communities; and
- The degree to which the proposed project will employ procurement of U.S. iron, steel, manufactured products, and construction materials.

Diversity (other than technological)
- The degree to which the proposed project collectively represents diverse types and sizes of applicant organizations.

Optimize Funding
- The degree to which the proposed project avoids duplication/overlap with other publicly or privately funded work.

Complementary Efforts
- The degree to which the proposed project supports complementary efforts or projects, which, when taken together, will best achieve the research goals and objectives.

Market Impact
- The degree to which the proposed project enables new and expanding market segments.

EE/Deployment
- The degree to which the project's solution or strategy will maximize deployment or replication.

Tech Transfer
- The degree to which the project promotes increased coordination with nongovernmental entities for demonstration of technologies and research applications to facilitate technology transfer.

D. Evaluation and Selection Process

i. Overview

The evaluation process consists of multiple phases; each includes an initial eligibility review and a thorough technical review. Rigorous technical reviews of eligible submissions 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, in determining which applications to select.

ii. Pre-Selection Interviews

As part of the evaluation and selection process, EERE may invite one or more applicants to participate in Pre-Selection Interviews. Pre-Selection Interviews are distinct from and more formal than pre-selection clarifications (See Section V.D.iii. of the FOA). The invited applicant(s) will meet with EERE representatives to provide clarification on the contents of the Full Applications and to provide EERE an opportunity to ask questions regarding the proposed project. The information provided by applicants to EERE through Pre-Selection Interviews contributes to EERE's selection decisions.

EERE will arrange to meet with the invited applicants in person at EERE's offices or a mutually agreed upon location. EERE may also arrange site visits at certain applicants' facilities. In the alternative, EERE may invite certain applicants to participate in a one-on-one conference with EERE via webinar, videoconference, or conference call.

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.

iii. Pre-Selection Clarification

EERE may determine that pre-selection clarifications are necessary from one or more applicants. Pre-selection clarifications are distinct from and less formal than pre-selection interviews. These pre-selection clarifications will solely be for the purposes of clarifying the application, and will be limited to information already provided in the application documentation. The pre-selection clarifications may occur before, during or after the merit review evaluation process. Information provided by an applicant that is not necessary to address the pre-selection clarification question will not be reviewed or considered. Typically, a pre-selection clarification will be carried out through either written responses to EERE's written clarification questions or video or conference calls with EERE representatives.

The information provided by applicants to EERE through pre-selection clarifications is incorporated in their applications and contributes to the merit review evaluation and EERE's selection decisions. If EERE contacts an applicant for pre-selection clarification purposes, it does not signify that the applicant has been selected for negotiation of award or that the applicant is among the top ranked applications.

EERE will not reimburse applicants for expenses relating to the pre-selection clarifications, nor will these costs be eligible for reimbursement as pre-award costs.

iv. Recipient Responsibility and Qualifications

DOE, prior to making a federal award with a total amount of federal share greater than the simplified acquisition threshold, is required to review and consider any responsibility and qualificiation information about the applicant that is in the entity information domain in SAM.gov (see 41 U.S.C. 2313).

The applicant, at its option, may review information in the designated entity information domain in SAM.gov and comment on any information about itself that a federal awarding agency previously entered and is currently in the entity information domain in SAM.gov.

DOE will consider any written comments by the applicant, in addition to the other information in the designated integrity and performance system, in making a judgment about the applicant's integrity, business ethics, and record of performance under federal awards when completing the review of risk posed by applicants as described in 2 CFR 200.206.

v. Selection

The Selection Official may consider the technical merit, the Federal Consensus Board's recommendations, program policy factors, and the amount of funds available in arriving at selections for this FOA.

E. Anticipated Notice of Selection and Award Negotiation Dates

EERE anticipates notifying applicants selected for negotiation of award and negotiating awards by the dates provided on the cover page of this FOA.

VI. Award Administration Information

A. Award Notices

i. Ineligible Submissions

Ineligible Full Applications will not be further reviewed or considered for award. The Contracting Officer will send a notification letter by email to the technical and administrative points of contact designated by the applicant in EERE eXCHANGE. The notification letter will state the basis upon which Full Application is ineligible and not considered for further review.

ii. Full Application Notifications

EERE will notify applicants of its determination via a notification letter by email to the technical and administrative points of contact designated by the applicant in EERE eXCHANGE. The notification letter will inform the applicant whether or not its Full Application was selected for award negotiations. Alternatively, EERE may notify one or more applicants that a final selection determination on particular Full Applications will be made at a later date, subject to the availability of funds or other factors.

iii. Successful Applicants

Receipt of a notification letter selecting a Full Application for award negotiations does not authorize the applicant to commence performance of the project. If an application is selected for award negotiations, it is not a commitment by EERE to issue an award. Applicants do not receive an award until award negotiations are complete and the Contracting Officer executes the funding agreement, accessible by the prime recipient in FedConnect.

The award negotiation process will take approximately 60 days. Applicants must designate a primary and a backup point-of-contact in EERE eXCHANGE with whom EERE will communicate to conduct award negotiations. The applicant must be responsive during award negotiations (i.e., provide requested documentation) and meet the negotiation deadlines. If the applicant fails to do so or if award negotiations are otherwise unsuccessful, EERE will cancel the award negotiations and rescind the Selection. EERE reserves the right to terminate award negotiations at any time for any reason.

Please refer to Section IV.J.ii. of the FOA for guidance on pre-award costs.

iv. Alternate Selection Determinations

In some instances, an applicant may receive a notification that its application was not selected for award and EERE designated the application to be an alternate. As an alternate, EERE may consider the Full Application for federal funding in the future. A notification letter stating the Full Application is designated as an alternate does not authorize the applicant to commence performance of the project. EERE may ultimately determine to select or not select the Full Application for award negotiations.

v. Unsuccessful Applicants

EERE shall promptly notify in writing each applicant whose application has not been selected for award or whose application cannot be funded because of the unavailability of appropriated funds.

B. Administrative and National Policy Requirements

i. Registration Requirements

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. These requirements are as follows:

1. **EERE Funding Opportunity Exchange (eXCHANGE)**
   Register and create an account on EERE eXCHANGE at https://eere-eXCHANGE.energy.gov. This account will allow the user to apply to any open EERE FOAs that are currently in EERE eXCHANGE.

   It is recommended that each organization or business unit, whether acting as a team or a single entity, use only one account as the contact point for each submission. Applicants should also designate backup points of contact so they may be easily contacted if deemed necessary. **This step is required to apply to this FOA.** The eXCHANGE registration does not have a delay; however, **the remaining registration requirements below could take several weeks to process and are necessary for a potential applicant to receive an award under this FOA.**

2. **System for Award Management**
   Register with the SAM at https://www.sam.gov. Designating an Electronic Business Point of Contact (EBiz POC) and obtaining a special password called a Marketing Partner ID Number (MPIN) are important steps in SAM registration. Please update your SAM registration annually.

3. **FedConnect**
   Register in FedConnect at https://www.fedconnect.net. To create an organization account, your organization's SAM MPIN is required. For more information about the SAM MPIN or other registration requirements, review the FedConnect Ready, Set, Go! Guide at https://www.fedconnect.net/FedConnect/Marketing/Documents/FedConnect_Ready_Set_Go.pdf.

4. **Grants.gov**
   Register in Grants.gov (http://www.grants.gov) to receive automatic updates when Amendments to this FOA are posted. However, please note that

Letters of Intent (optional) and Full Applications will not be accepted through Grants.gov.

5. **Electronic Authorization of Applications and Award Documents**
Submission of an application and supplemental information under this FOA through electronic systems used by the DOE, including EERE eXCHANGE and FedConnect.net, constitutes the authorized representative's approval and electronic signature.

ii. Award Administrative Requirements

The administrative requirements for DOE grants and cooperative agreements are contained in 2 CFR Part 200 as amended by 2 CFR Part 910.

iii. Foreign National Participation

All applicants selected for an award under this FOA and project participants (including subrecipients and contractors) who anticipate involving foreign nationals in the performance of an award, may be required to provide DOE with specific information about each foreign national to satisfy requirements for foreign national participation. A "foreign national" is defined as any person who is not a United States citizen by birth or naturalization. The volume and type of information collected may depend on various factors associated with the award. DOE concurrence may be required before a foreign national can participate in the performance of any work under an award.

DOE may elect to deny foreign national's participation in the award. Likewise, DOE may elect to deny a foreign national's access to a DOE sites, information, technologies, equipment, programs, or personnel.

iv. Subaward and Executive Reporting

Additional administrative requirements necessary for DOE grants and cooperative agreements to comply with the Federal Funding and Transparency Act of 2006 (FFATA) are contained in 2 CFR Part 170. Prime recipients must register with the new FFATA Subaward Reporting System database and report the required data on their first tier subrecipients. Prime recipients must report the executive compensation for their own executives as part of their registration profile in SAM.

v. National Policy Requirements

The National Policy Assurances that are incorporated as a term and condition of award are located at: http://www.nsf.gov/awards/managing/rtc.jsp.

vi. Environmental Review in Accordance with National Environmental Policy Act (NEPA)

EERE's decision whether and how to distribute federal funds under this FOA is subject to NEPA (42 U.S.C. 4321, *et seq.*). NEPA requires federal agencies to integrate environmental values into their decision-making processes by considering the potential environmental impacts of their proposed actions. For additional background on NEPA, please see DOE's NEPA website, at https://www.energy.gov/nepa.

While NEPA compliance is a federal agency responsibility and the ultimate decisions remain with the federal agency, all recipients selected for an award will be required to assist in the timely and effective completion of the NEPA process in the manner most pertinent to their proposed project. If DOE determines certain records must be prepared to complete the NEPA review process (e.g., biological evaluations or environmental assessments), the recipient may be required to prepare the records and the costs to prepare the necessary records may be included as part of the project costs.

vii. Applicant Representations and Certifications

1. Lobbying Restrictions

By accepting funds under this award, the prime recipient agrees that none of the funds obligated on the award shall be expended, directly or indirectly, to influence Congressional action on any legislation or appropriation matters pending before Congress, other than to communicate to Members of Congress as described in 18 U.S.C. § 1913. This restriction is in addition to those prescribed elsewhere in statute and regulation.

2. Corporate Felony Conviction and Federal Tax Liability Representations

In submitting an application in response to this FOA, the applicant represents that:

a. It is **not** a corporation that has been convicted of a felony criminal violation under any federal law within the preceding 24 months; and

b. It is **not** a corporation that has any unpaid federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

For purposes of these representations the following definitions apply:

A Corporation includes any entity that has filed articles of incorporation in any of the 50 states, the District of Columbia, or the various territories of the United States [but not foreign corporations]. It includes both for-profit and non-profit organizations.

3. **Nondisclosure and Confidentiality Agreements Representations**
In submitting an application in response to this FOA the applicant represents that:

a. It **does not and will not** require its employees or contractors to sign internal nondisclosure or confidentiality agreements or statements prohibiting or otherwise restricting its employees or contactors from lawfully reporting waste, fraud, or abuse to a designated investigative or law enforcement representative of a federal department or agency authorized to receive such information.

b. It **does not and will not** use any federal funds to implement or enforce any nondisclosure and/or confidentiality policy, form, or agreement it uses unless it contains the following provisions:

(1) *''These provisions are consistent with and do not supersede, conflict with, or otherwise alter the employee obligations, rights, or liabilities created by existing statute or Executive order relating to (1) classified information, (2) communications to Congress, (3) the reporting to an Inspector General of a violation of any law, rule, or regulation, or mismanagement, a gross waste of funds, an abuse of authority, or a substantial and specific danger to public health or safety, or (4) any other whistleblower protection. The definitions, requirements, obligations, rights, sanctions, and liabilities created by controlling Executive orders and statutory provisions are incorporated into this agreement and are controlling.''*

(2) The limitation above shall not contravene requirements applicable to Standard Form 312 Classified Information Nondisclosure Agreement (https://fas.org/sgp/othergov/sf312.pdf), Form 4414 Sensitive Compartmented Information Disclosure Agreement (https://fas.org/sgp/othergov/intel/sf4414.pdf), or any other form issued by a federal department or agency governing the nondisclosure of classified information.

(3) Notwithstanding the provision listed in paragraph (a), a nondisclosure or confidentiality policy form or agreement that is to be executed by

a person connected with the conduct of an intelligence or intelligence-related activity, other than an employee or officer of the United States government, may contain provisions appropriate to the particular activity for which such document is to be used. Such form or agreement shall, at a minimum, require that the person will not disclose any classified information received in the course of such activity unless specifically authorized to do so by the United States government. Such nondisclosure or confidentiality forms shall also make it clear that they do not bar disclosures to Congress, or to an authorized official of an executive agency or the Department of Justice, that are essential to reporting a substantial violation of law.

viii. Statement of Federal Stewardship

EERE will exercise normal federal stewardship in overseeing the project activities performed under EERE awards. Stewardship Activities include, but are not limited to, conducting site visits; reviewing performance and financial reports; providing assistance and/or temporary intervention in unusual circumstances to correct deficiencies that develop during the project; assuring compliance with terms and conditions; and reviewing technical performance after project completion to ensure that the project objectives have been accomplished.

ix. Statement of Substantial Involvement

EERE has substantial involvement in work performed under awards made as a result of 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:

1. EERE shares responsibility with the recipient for the management, control, direction, and performance of the project.

2. 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.

3. 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).

4. EERE participates in major project decision-making processes.

x. Subject Invention Utilization Reporting

In order to ensure that prime recipients and subrecipients holding title to subject inventions are taking the appropriate steps to commercialize subject inventions, EERE may require that each prime recipient holding title to a subject invention submit annual reports for ten (10) years from the date the subject invention was disclosed to EERE on the utilization of the subject invention and efforts made by prime recipient or their licensees or assignees to stimulate such utilization. The reports must include information regarding the status of development, date of first commercial sale or use, gross royalties received by the prime recipient, and such other data and information as EERE may specify.

xi. Intellectual Property Provisions

The standard DOE financial assistance intellectual property provisions applicable to the various types of recipients are located at http://energy.gov/gc/standard-intellectual-property-ip-provisions-financial-assistance-awards.

xii. Reporting

Reporting requirements are identified on the Federal Assistance Reporting Checklist, attached to the award agreement.

xiii. Go/No-Go Review

Each project selected under this FOA will be subject to a periodic project evaluation referred to as a Go/No-Go Review. A Go/No-Go Review is a risk management tool and a project management best practice to ensure that, for the current phase or period of performance, success is definitively achieved and potential for success in future phases or periods of performance is evaluated, prior to actually beginning the execution of future phases. At the Go/No-Go decision points, EERE will evaluate project performance, project schedule adherence, meeting milestone objectives, compliance with reporting requirements, and overall contribution to the EERE program goals and objectives. Federal funding beyond the Go/No-Go decision point (continuation funding) is contingent upon (1) availability of federal funds appropriated by Congress for the purpose of this program; (2) the availability of future-year budget authority; (3) recipient's technical progress compared to the Milestone Summary Table stated in Attachment 1 of the award; (4) recipient's submittal of required reports; (5) recipient's compliance with the terms and conditions of the award; (6) EERE's Go/No-Go decision; (7) the recipient's submission of a continuation application; and (8) written approval of the continuation application by the Contracting Officer.

As a result of the Go/No-Go Review, DOE may, at its discretion, authorize the following actions: (1) continue to fund the project, contingent upon the

availability of funds appropriated by Congress for the purpose of this program and the availability of future-year budget authority; (2) recommend redirection of work under the project; (3) place a hold on federal funding for the project, pending further supporting data or funding; or (4) discontinue funding the project because of insufficient progress, change in strategic direction, or lack of funding.

The Go/No-Go decision is distinct from a non-compliance determination. In the event a recipient fails to comply with the requirements of an award, EERE may take appropriate action, including but not limited to, redirecting, suspending or terminating the award.

xiv. Conference Spending

The recipient shall not expend any funds on a conference not directly and programmatically related to the purpose for which the grant or cooperative agreement was awarded that would defray the cost to the United States government of a conference held by any Executive branch department, agency, board, commission, or office for which the cost to the United States government would otherwise exceed $20,000, thereby circumventing the required notification by the head of any such Executive Branch department, agency, board, commission, or office to the Inspector General (or senior ethics official for any entity without an Inspector General), of the date, location, and number of employees attending such conference.

xv. Uniform Commercial Code (UCC) Financing Statements

Per 2 CFR 910.360 (Real Property and Equipment) when a piece of equipment is purchased by a for-profit recipient or subrecipient with federal funds, and when the federal share of the financial assistance agreement is more than $1,000,000, the recipient or subrecipient must:

Properly record, and consent to the Department's ability to properly record if the recipient fails to do so, UCC financing statement(s) for all equipment in excess of $5,000 purchased with project funds. These financing statement(s) must be approved in writing by the Contracting Officer prior to the recording, and they shall provide notice that the recipient's title to all equipment (not real property) purchased with federal funds under the financial assistance agreement is conditional pursuant to the terms of this section, and that the government retains an undivided reversionary interest in the equipment. The UCC financing statement(s) must be filed before the Contracting Officer may reimburse the recipient for the federal share of the equipment unless otherwise provided for in the relevant financial assistance agreement. The recipient shall further make any amendments to the financing statements or additional recordings, including

appropriate continuation statements, as necessary or as the Contracting Officer may direct.

xvi. Implementation of Executive Order 13798, Promoting Free Speech and Religious Liberty

States, local governments, or other public entities may not condition sub-awards in a manner that would discriminate, or disadvantage sub-recipients based on their religious character.

xvii. Participants and Collaborating Organizations

If selected for award negotiations, the selected applicant must submit a list of personnel who are proposed to work on the project, both at the recipient and subrecipient level and a list of collaborating organizations prior to award. Recipients will have an ongoing responsibility to notify DOE of changes to the personnel and collaborating organizations, and submit updated information during the life of the award.

xviii. Current and Pending Support

If selected for award negotiations, within 30 days of the selection notice, the selectee must submit 1) current and pending support disclosures and resumes for any new PIs or senior/key personnel and 2) updated disclosures if there have been any changes to the current and pending support submitted with the application. Throughout the life of the award, the Recipient has an ongoing responsibility to submit 1) current and pending support disclosure statements and resumes for any new PI and senior/key personnel and 2) updated disclosures if there are changes to the current and pending support previously submitted to DOE. Also See. Section IV.D.xv.

xix. U.S. Manufacturing Commitments

A primary objective of DOE's multi-billion dollar research, development, and demonstration investments is to cultivate new research and development ecosystems, manufacturing capabilities, and supply chains for and by United States industry and labor. Therefore, in exchange for receiving taxpayer dollars to support an applicant's project, the applicant must agree to a U.S. Competitiveness provision requiring that any products embodying any subject invention or produced through the use of any subject invention will be manufactured substantially in the United States unless the recipient can show to the satisfaction of DOE that it is not commercially feasible. Award terms, including the specific U.S. Competitiveness Provision applicable to the various types of recipients and projects, are available at https://www.energy.gov/gc/standard-intellectual-property-ip-provisions-financial-assistance-awards.

Please note that a subject invention is any invention conceived or first actually reduced to practice in performance of work under an award. An invention is any invention or discovery which is or may be patentable. The recipient includes any awardee, recipient, sub-awardee, or sub-recipient.

As noted in the U.S. Competitiveness Provision, if an entity cannot meet the requirements of the U.S. Competitiveness Provision, the entity may request a modification or waiver of the U.S. Competitiveness Provision. For example, the entity may propose modifying the language of the U.S. Competitiveness Provision in order to change the scope of the requirements or to provide more specifics on the application of the requirements for a particular technology. As another example, the entity may request that the U.S. Competitiveness Provision be waived in lieu of a net benefits statement or United States manufacturing plan. The statement or plan would contain specific and enforceable commitments that would be beneficial to the United States economy and competitiveness. Examples of such commitments could include manufacturing specific products in the United States, making a specific investment in a new or existing United States manufacturing facility, keeping certain activities based in the United States or supporting a certain number of jobs in the United States related to the technology. DOE may, in its sole discretion, determine that the proposed modification or waiver promotes commercialization and provides substantial United States economic benefits, and grant the request. If granted, DOE will modify the award terms and conditions for the requesting entity accordingly.

More information and guidance on the waiver and modification request process can be found in the DOE Financial Assistance Letter on this topic, available at https://www.energy.gov/management/pf-2022-09-fal-2022-01-implementation-doe-determination-exceptional-circumstances-under. Additional information on DOE's Commitment to Domestic Manufacturing for DOE-funded R&D is available at https://www.energy.gov/gc/us-manufacturing.

The U.S. Competitiveness Provision is implemented by DOE pursuant to a Determination of Exceptional Circumstances (DEC) under the Bayh-Dole Act and DOE Patent Waivers. See Section VIII.J. Title to Subject Inventions of this FOA for more information on the DEC and DOE Patent Waivers.

xx. Interim Conflict of Interest Policy for Financial Assistance

The DOE interim Conflict of Interest Policy for Financial Assistance (COI Policy) is applicable to all non-Federal entities applying for, or that receive, DOE funding by means of a financial assistance award (e.g., a grant, cooperative agreement, or technology investment agreement) and, through the implementation of this policy by the entity, to each Investigator who is planning to participate in, or is

participating in, the project funded wholly or in part under the DOE financial assistance award. The term "Investigator" means the PI and any other person, regardless of title or position, who is responsible for the purpose, design, conduct, or reporting of a project funded by DOE or proposed for funding by DOE. Recipients must flow down the requirements of the interim COI Policy to any subrecipient non-federal entities. Further, for DOE funded projects, the recipient must include all financial conflicts of interest (FCOI) (i.e., managed and unmanaged/ unmanageable) in their initial and ongoing FCOI reports.

It is understood that non-federal entities and individuals receiving DOE financial assistance awards will need sufficient time to come into full compliance with DOE's interim COI Policy. To provide some flexibility, DOE allows for a staggered implementation. Specifically, prior to award, applicants selected for award negotiations must: ensure all Investigators complete their significant financial disclosures; review the disclosures; determine whether a FCOI exists; develop and implement a management plan for FCOIs; and provide DOE with an initial FCOI report that includes all FCOIs (i.e., managed and unmanaged/ unmanageable). Recipients will have 180 days from the date of the award to come into full compliance with the other requirements set forth in DOE's interim COI Policy. Prior to award, the applicant must certify that it is, or will be within 180 days of the award, compliant with all requirements in the COI Policy.

xxi. Fraud, Waste and Abuse

The mission of the DOE Office of Inspector General (OIG) is to strengthen the integrity, economy and efficiency of the Department's programs and operations including deterring and detecting fraud, waste, abuse and mismanagement. The OIG accomplishes this mission primarily through investigations, audits, and inspections of DOE activities to include grants, cooperative agreements, loans, and contracts.

The OIG maintains a Hotline for reporting allegations of fraud, waste, abuse, or mismanagement. To report such allegations, please visit https://www.energy.gov/ig/ig-hotline.

Additionally, recipients of DOE awards must be cognizant of the requirements of 2 CFR 200.113 Mandatory disclosures, which states:

The non-Federal entity or applicant for a Federal award must disclose, in a timely manner, in writing to the Federal awarding agency or pass-through entity all violations of Federal criminal law involving fraud, bribery, or gratuity violations potentially affecting the Federal award. Non-Federal entities that have received a Federal award including the term and condition outlined in appendix XII of 2 CFR Part 200 are required to report certain civil, criminal, or administrative

proceedings to SAM.gov. Failure to make required disclosures can result in any of the remedies described in 2 CFR 200.339. (See also 2 CFR part 180, 31 U.S.C. § 3321, and 41 U.S.C. § 2313.) [85 FR 49539, Aug. 13, 2020]

Applicants and subrecipients (if applicable) are encouraged to allocate sufficient costs in the project budget to cover the costs associated for personnel and data infrastructure needs to support performance management and program evaluation needs including but not limited to independent program and project audits to mitigate risks for fraud, waste, and abuse.

xxii. Human Subjects Research

Research involving human subjects, biospecimens, or identifiable private information conducted with DOE funding is subject to the requirements of DOE Order 443.1C, Protection of Human Research Subjects, 45 CFR Part 46, Protection of Human Subjects (subpart A which is referred to as the "Common Rule"), and 10 CFR Part 745, Protection of Human Subjects. Additional information on the DOE Human Subjects Research Program can be found at: HUMAN SUBJECTS Human Subjects Pr... | U.S. DOE Office of Science (SC) (osti.gov).

VII. Questions/Agency Contacts

Upon the issuance of a FOA, EERE personnel are prohibited from communicating (in writing or otherwise) with applicants regarding the FOA except through the established question and answer process as described below. Specifically, questions regarding the content of this FOA must be submitted to: onsiteenergy@ee.doe.gov. Questions must be submitted not later than 3 business days prior to the application due date and time. Please note, feedback on individual concepts will not be provided through Q&A.

All questions and answers related to this FOA will be posted on EERE eXCHANGE at: https://eere-exchange.energy.gov. **Please note that you must first select this specific FOA Number in order to view the questions and answers specific to this FOA**. EERE will attempt to respond to a question within 3 business days, unless a similar question and answer has already been posted on the website.

Questions related to the registration process and use of the EERE eXCHANGE website should be submitted to: EERE-eXCHANGESupport@hq.doe.gov.

VIII. Other Information

A. FOA Modifications

Amendments to this FOA will be posted on the EERE eXCHANGE website and the Grants.gov system. However, you will only receive an email when an amendment or a FOA is posted on these sites if you register for email notifications for this FOA in Grants.gov. EERE recommends that you register as soon after the release of the FOA as possible to ensure you receive timely notice of any amendments or other FOAs.

B. Government Right to Reject or Negotiate

EERE reserves the right, without qualification, to reject any or all applications received in response to this FOA and to select any application, in whole or in part, as a basis for negotiation and/or award.

C. Commitment of Public Funds

The Contracting Officer is the only individual who can make awards or commit the government to the expenditure of public funds. A commitment by anyone other than the Contracting Officer, either express or implied, is invalid.

D. Treatment of Application Information

Applicants should not include business sensitive (e.g., commercial or financial information that is privileged or confidential), trade secrets, proprietary, or otherwise confidential information in their application unless such information is necessary to convey an understanding of the proposed project or to comply with a requirement in the FOA. Applicants are advised to not include any critically sensitive proprietary detail.

If an application includes business sensitive, trade secrets, proprietary, or otherwise confidential information, it is furnished to the federal government (government) in confidence with the understanding that the information shall be used or disclosed only for evaluation of the application. Such information will be withheld from public disclosure to the extent permitted by law, including the Freedom of Information Act. Without assuming any liability for inadvertent disclosure, DOE will seek to limit disclosure of such information to its employees and to outside reviewers when necessary for merit review of the application or as otherwise authorized by law. This restriction does not limit the government's right to use the information if it is obtained from another source.

If an applicant chooses to submit business sensitive, trade secrets, proprietary, or otherwise confidential information, the applicant must provide two copies of the submission (e.g, Concept Paper, Full Application). The first copy should be marked,

"non-confidential" with the information believed to be confidential deleted. The second copy should be marked "confidential" and must clearly and conspicuously identify the business sensitive, trade secrets, proprietary, or otherwise confidential information and must be marked as described below. Failure to comply with these marking requirements may result in the disclosure of the unmarked information under the Freedom of Information Act or otherwise. The government is not liable for the disclosure or use of unmarked information and may use or disclose such information for any purpose as authorized by law.

The cover sheet of the Full Application, and other applicant submission must be marked as follows and identify the specific pages containing business sensitive, trade secrets, proprietary, or otherwise confidential information:

Notice of Restriction on Disclosure and Use of Data:
Pages [list applicable pages] of this document may contain business sensitive, trade secrets, proprietary, or otherwise confidential information that is exempt from public disclosure. Such information shall be used or disclosed only for evaluation purposes or in accordance with a financial assistance agreement between the submitter and the government. The government may use or disclose any information that is not appropriately marked or otherwise restricted, regardless of source. [End of Notice]

In addition, (1) the header and footer of every page that contains business sensitive, trade secrets, proprietary, or otherwise confidential information must be marked as follows: "Contains Business Sensitive, Trade Secrets, Proprietary, or Otherwise Confidential Information Exempt from Public Disclosure," and (2) every line or paragraph containing such information must be clearly marked with double brackets or highlighting. DOE will make its own determination about the confidential status of the information and treat it according to its determination.

E. Evaluation and Administration by Non-Federal Personnel

In conducting the merit review evaluation, the Go/No-Go Reviews and Peer Reviews, the government may seek the advice of qualified non-federal personnel as reviewers. The government may also use non-federal personnel to conduct routine, nondiscretionary administrative activities, including EERE contractors. The applicant, by submitting its application, consents to the use of non-federal reviewers/administrators. Non-federal reviewers must sign conflict of interest (COI) and non-disclosure acknowledgements (NDA) prior to reviewing an application. Non-federal personnel conducting administrative activities must sign an NDA.

F. Notice Regarding Eligible/Ineligible Activities

Eligible activities under this FOA include those which describe and promote the understanding of scientific and technical aspects of specific energy technologies, but not those which encourage or support political activities such as the collection and dissemination of information related to potential, planned or pending legislation.

G. Notice of Right to Conduct a Review of Financial Capability

EERE reserves the right to conduct an independent third party review of financial capability for applicants that are selected for negotiation of award (including personal credit information of principal(s) of a small business if there is insufficient information to determine financial capability of the organization).

H. Requirement for Full and Complete Disclosure

Applicants are required to make a full and complete disclosure of all information requested. Any failure to make a full and complete disclosure of the requested information may result in:

- The termination of award negotiations;
- The modification, suspension, and/or termination of a funding agreement;
- The initiation of debarment proceedings, debarment, and/or a declaration of ineligibility for receipt of federal contracts, subcontracts, and financial assistance and benefits; and
- Civil and/or criminal penalties.

I. Retention of Submissions

EERE expects to retain copies of all Full Applications and other submissions. No submissions will be returned. By applying to EERE for funding, applicants consent to EERE's retention of their submissions.

J. Rights in Technical Data

Data rights differ based on whether data is first produced under an award or instead was developed at private expense outside the award.

"Limited Rights Data": The United States government will not normally require delivery of confidential or trade secret-type technical data developed solely at private expense prior to issuance of an award, except as necessary to monitor technical progress and evaluate the potential of proposed technologies to reach specific technical and cost metrics.

Government Rights in Technical Data Produced Under Awards: The United States government retains unlimited rights in technical data produced under government

financial assistance awards, including the right to distribute to the public. One exception to the foregoing is that invention disclosures may be protected from public disclosure for a reasonable time in order to allow for filing a patent application.

K. Copyright

The prime recipient and subrecipients may assert copyright in copyrightable works, such as software, first produced under the award without EERE approval. When copyright is asserted, the government retains a paid-up nonexclusive, irrevocable worldwide license to reproduce, prepare derivative works, distribute copies to the public, and to perform publicly and display publicly the copyrighted work. This license extends to contractors and others doing work on behalf of the government.

L. Export Control

The United States government regulates the transfer of information, commodities, technology, and software considered to be strategically important to the United States to protect national security, foreign policy, and economic interests without imposing undue regulatory burdens on legitimate international trade. There is a network of federal agencies and regulations that govern exports that are collectively referred to as "Export Controls". All recipients and subrecipients are responsible for ensuring compliance with all applicable United States Export Control laws and regulations relating to any work performed under a resulting award.

The recipient must immediately report to DOE any export control violations related to the project funded under the DOE award, at the recipient or subrecipient level, and provide the corrective action(s) to prevent future violations.

M. Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment

As set forth in 2 CFR 200.216, recipients and subrecipients are prohibited from obligating or expending project funds (federal funds and recipient cost share) to procure or obtain; extend or renew a contract to procure or obtain; or enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Section 889 of Public Law 115-232, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).

See Public Law 115-232, Section 889, 2 CFR 200.216, and 2 CFR 200.471 for additional information.

N. Personally Identifiable Information (PII)

All information provided by the applicant must to the greatest extent possible exclude PII. The term "PII" refers to information which can be used to distinguish or trace an individual's identity, such as their name, social security number, biometric records, alone, or when combined with other personal or identifying information which is linked or linkable to a specific individual, such as date and place of birth, mother's maiden name. (See OMB Memorandum M-17-12 dated January 3, 2017)

By way of example, applicants must screen resumes to ensure that they do not contain PII such as personal addresses, personal landline/cell phone numbers, and personal emails. **Under no circumstances should Social Security Numbers (SSNs) be included in the application**. Federal agencies are prohibited from the collecting, using, and displaying unnecessary SSNs. (See, the Federal Information Security Modernization Act of 2014 (Pub. L. No. 113-283, Dec 18, 2014; 44 U.S.C. § 3551).

O. Annual Independent Audits

If a for-profit entity is a prime recipient and has expended $750,000 or more of DOE awards during the entity's fiscal year, an annual compliance audit performed by an independent auditor is required. For additional information, please refer to 2 CFR 910.501 and Subpart F.

If an educational institution, non-profit organization, or state/local government is a prime recipient or subrecipient and has expended $750,000 or more of federal awards during the non-federal entity's fiscal year, then a Single or Program-Specific Audit is required. For additional information, please refer to 2 CFR 200.501 and Subpart F.

Applicants and subrecipients (if applicable) should propose sufficient costs in the project budget to cover the costs associated with the audit.

P. Informational Webinar

EERE will conduct one informational webinar during the FOA process. It will be held after the initial FOA release but before the due date for optional Letters of Intent.

Attendance is not mandatory and will not positively or negatively impact the overall review of any applicant submissions. As the webinar will be open to all applicants who wish to participate, applicants should refrain from asking questions or communicating information that would reveal confidential and/or proprietary information specific to their project. Specific dates for the webinar can be found on the cover page of the FOA.

APPENDIX A – WAIVER REQUESTS AND APPROVAL PROCESSES: 1. FOREIGN ENTITY PARTICIPATION AS THE PRIME RECIPIENT; AND 2. PERFORMANCE OF WORK IN THE UNITED STATES (FOREIGN WORK WAIVER)

1. Waiver for Foreign Entity Participation as the Prime Recipient

As set forth in Section III.A.iii., 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. To request a waiver of this requirement, an applicant must submit an explicit waiver request in the Full Application.

Waiver Criteria

Foreign entities seeking to participate in a project funded under this FOA must demonstrate to the satisfaction of DOE that:

a. Its participation is in the best interest of the United States industry and United States economic development;
b. The project team has appropriate measures in place to control sensitive information and protect against unauthorized transfer of scientific and technical information;
c. Adequate protocols exist between the United States subsidiary and its foreign parent organization to comply with export control laws and any obligations to protect proprietary information from the foreign parent organization;
d. The work is conducted within the United States and the entity acknowledges and demonstrates that it has the intent and ability to comply with the U.S. Competitiveness Provision (see Section VI.B.xix.); and
e. The foreign entity will satisfy other conditions that may be deemed necessary by DOE to protect United States government interests.

Content for Waiver Request

A Foreign Entity waiver request must include the following:

a. Information about the entity(ies) involved in the work proposed to be conducted outside the U.S. (i.e., entity seek a waiver and the entity(ies) that will conduct the work): name, point of contact, and proposed type of involvement in the project;
b. Country of incorporation, the extent of the ownership/level control by foreign entities, whether the entity is state owned or controlled, a summary of the ownership breakdown of the foreign entity and the percentage of

ownership/control by foreign entities, foreign shareholders, foreign state or foreign individuals;

c. The rationale for proposing a foreign entity participate (must address criteria above);
d. A description of the project's anticipated contributions to the United States economy;
    - How the project will benefit United States research, development and manufacturing, including contributions to employment in the United States and growth in new markets and jobs in the United States;
    - How the project will promote domestic American manufacturing of products and/or services;
e. A description of how the foreign entity's participation is essential to the project;
f. A description of the likelihood of Intellectual Property (IP) being created from the work and the treatment of any such IP; and
g. Countries where the work will be performed (Note: if any work is proposed to be conducted outside the United States, the applicant must also complete a separate request foreign work waiver).

DOE may also require:

- A risk assessment with respect to IP and data protection protocols that includes the export control risk based on the data protection protocols, the technology being developed and the foreign entity and country. These submissions could be prepared by the project lead (if not the prime recipient), but the prime recipient must make a representation to DOE as to whether it believes the data protection protocols are adequate and make a representation of the risk assessment – high, medium or low risk of data leakage to a foreign entity.
- Additional language be added to any agreement or subagreement to protect IP, mitigate risk or other related purposes.

DOE may require additional information before considering the waiver request.

DOE's decision concerning a waiver request is not appealable.

2. Waiver for Performance of Work in the United States (Foreign Work Waiver)

As set forth in Section IV.J.iii., all work under funding under this FOA must be performed in the United States. To seek a waiver of the Performance of Work in the United States requirement, the applicant must submit an explicit waiver request in the Full Application. A separate waiver request must be submitted for each entity proposing performance of work outside of the United States.

Overall, a waiver request must demonstrate to the satisfaction of DOE that it would further the purposes of this FOA and is otherwise in the economic interests of the United States to perform work outside of the United States. A request for a foreign work waiver must include the following:

1. The rationale for performing the work outside the United States ("foreign work");
2. A description of the work proposed to be performed outside the United States;
3. An explanation as to how the foreign work is essential to the project;
4. A description of the anticipated benefits to be realized by the proposed foreign work and the anticipated contributions to the United States economy;
5. The associated benefits to be realized and the contribution to the project from the foreign work;
6. How the foreign work will benefit the United States, including manufacturing, contributions to employment in the United States and growth in new markets and jobs in the United States;
7. How the foreign work will promote domestic American manufacturing of products and/or services;
8. A description of the likelihood of Intellectual Property (IP) being created from the foreign work and the treatment of any such IP;
9. The total estimated cost (DOE and recipient cost share) of the proposed foreign work;
10. The countries in which the foreign work is proposed to be performed; and
11. The name of the entity that would perform the foreign work.

DOE may require additional information before considering the waiver request.

DOE's decision concerning a waiver request is not appealable.

APPENDIX B – REQUIRED USE OF AMERICAN IRON, STEEL, MANUFACTURED PRODUCTS, AND CONSTRUCTION MATERIALS BUY AMERICA REQUIREMENTS FOR INFRASTRUCTURE PROJECTS

A. Definitions

For purposes of the Buy America requirements, based both on the statute and OMB Guidance Document dated April 18, 2022, the following definitions apply:

Construction materials includes an article, material, or supply—other than an item of primarily iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives[9] —that is or consists primarily of:

- non-ferrous metals;
- plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables);
- glass (including optic glass);
- lumber; or
- drywall.

Infrastructure includes, at a minimum, the structures, facilities, and equipment for, in the United States, roads, highways, and bridges; public transportation; dams, ports, harbors, and other maritime facilities; intercity passenger and freight railroads; freight and intermodal facilities; airports; water systems, including drinking water and wastewater systems; electrical transmission facilities and systems; utilities; broadband infrastructure; and buildings and real property. Infrastructure includes facilities that generate, transport, and distribute energy.

Moreover, according to the OMB guidance document:

> When determining if a program has infrastructure expenditures, Federal agencies should interpret the term "infrastructure" broadly and consider the definition provided above as illustrative and not exhaustive. When determining if a particular construction project of a type not listed in the definition above constitutes "infrastructure," agencies should consider whether the project will serve a public function, including whether the project is publicly owned and operated, privately operated on behalf of the public, or is a place of public accommodation, as opposed to a project that is privately owned and not open to the public. Projects with the former qualities have greater indicia of infrastructure, while projects with the latter quality have fewer. Projects consisting solely of the

[9] BIL, § 70917(c)(1).

purchase, construction, or improvement of a private home for personal use, for example, would not constitute an infrastructure project.

The Agency, not the applicant, will have the final say as to whether a given project includes infrastructure, as defined herein. Accordingly, in cases where the "public" nature of the infrastructure is unclear, but the other relevant criteria are met DOE strongly recommends that applicants complete their full application with the assumption that Buy America requirements will apply to the proposed project.

Project means the construction, alteration, maintenance, or repair of infrastructure in the United States.

B. Buy America Requirements for Infrastructure Projects ("Buy America" requirements)
In accordance with Section 70914 of the BIL, none of the project funds (includes federal share and recipient cost share) may be used for a project for infrastructure unless:

(1) all iron and steel used in the project are produced in the United States--this means all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States;

(2) all manufactured products used in the project are produced in the United States—this means the manufactured product was manufactured in the United States; and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product, unless another standard for determining the minimum amount of domestic content of the manufactured product has been established under applicable law or regulation; and

(3) all construction materials[10] are manufactured in the United States—this means that all manufacturing processes for the construction material occurred in the United States.

The Buy America requirements only apply to articles, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project. As such, it does not apply to tools, equipment, and supplies, such as temporary scaffolding, brought to the construction site and removed at or before the completion of the infrastructure project. Nor does the Buy America requirements apply to equipment and furnishings, such as movable chairs, desks, and portable computer equipment, that are used at or within the finished infrastructure project, but are not an integral part of the structure or permanently affixed to the infrastructure project.

These requirements must flow down to all sub-awards, all contracts, subcontracts and purchase orders for work performed under the proposed project, except where the prime recipient is a

[10] Excludes cement and cementitious materials, aggregates such as stone, sand, or gravel, or aggregate binding agents or additives.

for-profit entity. Based on guidance from the Office of Management and Budget (OMB), the Buy America requirements of the BIL do not apply to DOE projects in which the prime recipient is a for-profit entity; the requirements only apply to projects whose prime recipient is a State, local government, Indian tribe, Institution of Higher Education, or nonprofit organization.

For additional information related to the application and implementation of these Buy America requirements, please see OMB Memorandum M-22-11, issued April 18, 2022: https://www.whitehouse.gov/wp-content/uploads/2022/04/M-22-11.pdf

Note that for all applicants—both non-Federal entities and for-profit entities—DOE is including a Program Policy Factor that the Selection Official may consider in determining which Full Applications to select for award negotiations that considers whether the applicant has made a commitment to procure U.S. iron, steel, manufactured products, and construction materials in its project.

C. Waivers

The DOE financial assistance agreement will require each recipient: (1) to fulfill the commitments made in its application regarding the procurement of U.S.-produced products and (2) to fulfill the commitments made in its application regarding the procurement of other key component metals and manufactured products domestically that are deemed available in sufficient and reasonably available quantities or of a satisfactory quality at the time of award negotiation.

In limited circumstances, DOE may waive the application of the Buy America requirements where DOE determines that:

> (1) applying the Buy America requirements would be inconsistent with the public interest;
>
> (2) the types of iron, steel, manufactured products, or construction materials are not produced in the United States in sufficient and reasonably available quantities or of a satisfactory quality; or
>
> (3) the inclusion of iron, steel, manufactured products, or construction materials produced in the United States will increase the cost of the overall project by more than 25 percent.

If an applicant or recipient is seeking a waiver of the Buy America requirements, it may submit a waiver request after it has been notified of its selection for award negotiations. A waiver request must include:

- A detailed justification for the use of "non-domestic" iron, steel, manufactured products, or construction materials to include an explanation as to how the non-domestic item(s) is essential to the project
- A certification that the applicant or recipient made a good faith effort to solicit bids for domestic products supported by terms included in requests for proposals, contracts, and nonproprietary communications with potential suppliers;
- Applicant/Recipient name and Unique Entity Identifier (UEI)
- Total estimated project cost, DOE and cost-share amounts
- Project description and location (to the extent known)
- List and description of iron or steel item(s), manufactured goods, and construction material(s) the applicant or recipient seeks to waive from Domestic Content Procurement Preference requirement, including name, cost, country(ies) of origin (if known), and relevant PSC and NAICS code for each.
- Waiver justification including due diligence performed (e.g., market research, industry outreach) by the applicant or recipient
- Anticipated impact if no waiver is issued

DOE may require additional information before considering the waiver request.
Waiver requests are subject to public comment periods of no less than 15 days and must be reviewed by the Made in America Office. There may be instances where an award qualifies, in whole or in part, for an existing waiver described at [DOE Buy America Requirement Waiver Requests | Department of Energy].

DOE's decision concerning a waiver request is not appealable.

APPENDIX C – GLOSSARY

Applicant – The lead organization submitting an application under the FOA.

Continuation application – A non-competitive application for an additional budget period within a previously approved project period. At least ninety (90) days before the end of each budget period, the Recipient must submit to EERE its continuation application, which includes the following information:

i. A report on the Recipient's progress towards meeting the objectives of the project, including any significant findings, conclusions, or developments, and an estimate of any unobligated balances remaining at the end of the budget period. If the remaining unobligated balance is estimated to exceed 20 percent of the funds available for the budget period, explain why the excess funds have not been obligated and how they will be used in the next budget period.

ii. A detailed budget and supporting justification if there are changes to the negotiated budget, or a budget for the upcoming budget period was not approved at the time of award.

iii. A description of any planned changes from the negotiated Statement of Project Objectives and/or Milestone Summary Table.

Cooperative Research and Development Agreement (CRADA) – a contractual agreement between a national laboratory contractor and a private company or university to work together on research and development. For more information, see https://www.energy.gov/gc/downloads/doe-cooperative-research-and-development-agreements

Federally Funded Research and Development Centers (FFRDC) - FFRDCs are public-private partnerships which conduct research for the United States government. A listing of FFRDCs can be found at http://www.nsf.gov/statistics/ffrdclist/.

Go/No-Go Decision Points: – A decision point at the end of a budget period that defines the overall objectives, milestones and deliverables to be achieved by the recipient in that budget period. As of a result of EERE's review, EERE may take one of the following actions: 1) authorize federal funding for the next budget period; 2) recommend redirection of work; 3) discontinue providing federal funding beyond the current budget period; or 4) place a hold on federal funding pending further supporting data.

Project – The entire scope of the cooperative agreement which is contained in the recipient's Statement of Project Objectives.

Recipient or "Prime Recipient" – A non-federal entity that receives a federal award directly from a federal awarding agency to carry out an activity under a federal program. The term recipient does not include subrecipients.

Subrecipient – A non-federal entity that receives a subaward from a pass-through entity to carry out part of a federal program; but does not include an individual that is a beneficiary of such program. A subrecipient may also be a recipient of other federal awards directly from a federal awarding agency. Also, a DOE/NNSA and non-DOE/NNSA FFRDC may be proposed as a subrecipient on another entity's application. See section III.E.ii.

APPENDIX D – DEFINITION OF TECHNOLOGY READINESS LEVELS

TRL 1:	Basic principles observed and reported
TRL 2:	Technology concept and/or application formulated
TRL 3:	Analytical and experimental critical function and/or characteristic proof of concept
TRL 4:	Component and/or breadboard validation in a laboratory environment
TRL 5:	Component and/or breadboard validation in a relevant environment
TRL 6:	System/subsystem model or prototype demonstration in a relevant environment
TRL 7:	System prototype demonstration in an operational environment
TRL 8:	Actual system completed and qualified through test and demonstrated
TRL 9:	Actual system proven through successful mission operations

APPENDIX E – LIST OF ACRONYMS

COI	Conflict of Interest
DEC	Determination of Exceptional Circumstances
DEI	Diversity, Equity, and Inclusion
DMP	Data Management Plan
DOE	Department of Energy
DOI	Digital Object Identifier
EERE	Energy Efficiency and Renewable Energy
FAR	Federal Acquisition Regulation
FFATA	Federal Funding and Transparency Act of 2006
FOA	Funding Opportunity Announcement
FOIA	Freedom of Information Act
FFRDC	Federally Funded Research and Development Center
GAAP	Generally Accepted Accounting Principles
IPMP	Intellectual Property Management Plan
M&O	Management and Operating
MPIN	Marketing Partner ID Number
MSI	Minority-Serving institution
MYPP	Multi-Year Program Plan
NDA	Non-Disclosure Acknowledgement
NEPA	National Environmental Policy Act
NNSA	National Nuclear Security Agency
OMB	Office of Management and Budget
OSTI	Office of Scientific and Technical Information
PII	Personal Identifiable Information
R&D	Research and Development
RFI	Request for Information
RFP	Request for Proposal
SAM	System for Award Management
SOPO	Statement of Project Objectives
SPOC	Single Point of Contact
STEM	Science, Technology, Engineering, and Mathematics
TIA	Technology Investment Agreement
TRL	Technology Readiness Level
UCC	Uniform Commercial Code
UEI	Unique Entity Identifier
WBS	Work Breakdown Structure
WP	Work Proposal

APPENDIX F – COMMUNITY BENEFITS PLAN GUIDANCE

The DOE is committed to pushing the frontiers of science and engineering; catalyzing high-quality domestic clean energy jobs through research, development, demonstration, and deployment; and ensuring energy equity and energy justice[11] for disadvantaged communities. Therefore, and in accordance with the Administration's priority to empower workers and harness opportunities to create good union jobs as stated in EO 14008 (Executive Order on Tackling the Climate Crisis at Home and Abroad),[12] it is important to consider the impacts resulting from this FOA on current and future workforce.

The goal of the three-section Community Benefits Plan is to allow the application to illustrate engagement in critical thought about implications of how the proposed work will benefit the broadest swaths of American people and lead to broadly shared prosperity, including for workers and disadvantaged communities.[13] The sections of the Community Benefits Plans are considered together because there may be significant overlap between audiences considered in workforce and disadvantaged communities.

Example DEIA, Energy Equity, and Workforce Plan Elements
Outlined below are examples of activities that applicants might consider when developing their Community Benefits Plan. Applicants are not required to implement any of these specific examples and should propose the Plan that best fits this project. Creativity is encouraged.

DEIA
DOE strongly encourages applicants to involve individuals and entities from disadvantaged communities. Tapping all of the available talent requires intentional approaches and yields broad benefits.

[11] At DOE, we define energy justice as "the goal of achieving equity in both the social and economic participation in the energy system, while also remediating social, economic, and health burdens on those disproportionately harmed by the energy system" (Initiative for Energy Justice, 2019). Aligned with that document, the remainder of this document refers to this as, 'energy equity,' and is meant to encompass energy justice as well as DOE's efforts related to Justice40. https://www.energy.gov/diversity/articles/how-energy-justice-presidential-initiatives-andexecutive-orders-shape-equity

[12] https://www.federalregister.gov/documents/2021/02/01/2021-02177/tackling-the-climate-crisis-at-home-and-abroad

[13] Pursuant to E.O. 14008 and the Office of Management and Budget's Interim Justice40 Implementation Guidance M-21-28, DOE has developed a definition and tools to locate and identify disadvantaged communities. These resources can be located at https://energyjustice.egs.anl.gov/. DOE will also recognize disadvantaged communities as defined and identified by the White House Council on Environmental Quality's Climate and Economic Justice Screening Tool (CEJST), which can be located at https://screeningtool.geoplatform.gov/.

Equity extends beyond diversity to equitable treatment. Equitable access to opportunity for members of the project team is paramount. This includes ensuring that all members of the team, including students, are paid a living wage, provided appropriate working conditions, and provided appropriate benefits. In the execution of their project plan, applicants are asked to describe efforts in diversity, equity, inclusion, and accessibility. In this context, efforts toward DEIA are defined as:

> 1) the practice of including the many communities, identities, races, ethnicities, backgrounds, abilities, cultures, and beliefs of the American people,
> 2) the consistent and systematic fair, just, and impartial treatment of all individuals, including protecting workers rights and adhering to Equal Employment Opportunity laws,
> 3) the recognition, appreciation, and use of the talents and skills of employees of all backgrounds, and
> 4) the provision of accommodations so that all people, including people with disabilities, can fully and independently access facilities, information and communication technology, programs, and services.

Successful plans will not only describe how the project team seeks to increase DEIA, but will describe the overall approaches to retention, engagement, professional development, and career advancement. Specifically, they will demonstrate clear approaches to ensure all team members' strengths are meaningfully leveraged and all members are provided opportunities and paths for career development, especially including paths for interns and trainees to secure permanent positions. Diversity should be considered at all levels of the project team, not just leveraging early career individuals to meet diversity goals.

DOE strongly encourages applicants to consider partnerships as a means of promoting diversity, equity, inclusion, accessibility, justice, and workforce participation. Minority Serving Institutions, Minority Business Enterprises, Minority Owned Businesses, Disability Owned Business, Women Owned Businesses, Native American-owned Businesses, Veteran Owned Businesses, or entities located in an underserved community that meet the eligibility requirements are encouraged to lead these partnerships as the prime applicant or participate on an application as a proposed partner to the prime applicant.

When crafting the DEIA section of the Plan, applicants should describe the ways in which they will act to promote each of the four DEIA efforts above into their investigation. It is important to note that diversity, equity, inclusion, and accessibility are four different, but related, concepts that should not be conflated. That is, you can achieve diversity without equity; all four must be addressed. Applicants could discuss how the proposed investigation could contribute to training and developing a diverse

scientific workforce. Applicants could describe the efforts they plan to take, or will continue to take, to create an inclusive workplace, free from retaliation, harassment, and discrimination. Applicants could outline any barriers to creating an equitable and inclusive workplace and address the ways in which the team will work to overcome these barriers within the bounds of the specific project. The plan could detail specific efforts to inform project team members in any capacity of their labor rights and rights under Equal Employment Opportunity laws, and their free and fair chance to join a union. Note that this inclusion of informing project team members is also incorporated into awards through the National Policy Assurances.

Equal treatment of workers, including students, is necessary but overcoming institutional bias requires intentionally reducing sometimes hidden barriers to equal opportunity. Applicants could consider measures like childcare, flexible schedules, paid parental leave, pay transparency, and other supports to ensure that societal barriers are not hindering realization of DEIA intentions. Some of these considerations may result in common approaches in different sections of the plan, and that is acceptable, as long as the submission is not a singular approach to all sections.

EERE especially encourages applicants to form partnerships with diverse and often underrepresented institutions, such as Minority Serving Institutions, labor unions, and community colleges that otherwise meet the eligibility requirements. Underrepresented institutions that meet the eligibility requirements are encouraged to lead these partnerships as the prime applicant. The DEIA section of the Plan could include engagement with underrepresented institutions to broaden the participation of disadvantaged communities and/or with local stakeholders, such as residents and businesses, entities that carry out workforce development programs, labor unions, local government, and community-based organizations that represent, support, or work with disadvantaged communities. Applicants should ensure there is transparency, accountability, and follow-through when engaging with community members and stakeholders.

Specific examples include:

- Building collaborations and partnerships with researchers and staff at Minority Serving Institutions
- Addressing barriers identified in climate surveys to remove inequities
- Providing anti-bias training and education in the project design and implementation teams
- Offering training, mentorship, education, and other support to students and early/mid-career professionals from disadvantaged communities
- Providing efforts toward improving a workplace culture of inclusion
- Developing technology and technology integration innovations to meet the needs of disadvantaged communities

- Creating partnerships with local communities, especially under-resourced and disadvantaged communities
- Voluntary recognition of a union and informing employees of their rights, regardless of their classification
- Making research products and engagement materials accessible in a greater variety of formats to increase accessibility of research outputs
- Implementing training or distributing materials to reduce stigma towards individuals with disabilities
- Designing technologies that strategically fit within the existing workforce for installation and maintenance of the potential new technologies

Energy Equity

The Energy Equity section should articulate how project proposals will drive equitable access to, participation in, and distribution of the benefits produced from successful technology innovations to disadvantaged communities and groups. Intentional inclusion of energy equity requires evaluating the anticipated long-term costs and benefits that will accrue to disadvantaged groups as a result of the project, and project plans are designed for and support historically disadvantaged communities' engagement in clean energy decisions.

Plans should include a discussion of benefits to disadvantaged communities (DACs) that may result from the proposed project and describe how the project contributes to the Justice40 Initiative. The plan may identify applicable DACs to which project benefits may flow and can include a discussion of the relevance of the eight DOE Justice40 Initiative benefits, as applicable:[14]

1. Decrease energy burden in disadvantaged communities
2. Decrease environmental exposure and burdens for DACs
3. Increase parity in clean energy technology (e.g., solar, storage) access and adoption in DACs
4. Increase access to low-cost capital in DACs
5. Increase clean energy enterprise creation and contracting (MBE/DBE) in DACs
6. Increase clean energy jobs, job pipeline, and job training for individuals from DACs
7. Increase energy resiliency in DACs
8. Increase energy democracy in DACs

Additional discussion of how and when anticipated benefits may flow to DACs and a discussion of anticipated environmental impacts on DACs resulting from the project may also be included. Applicants may use the Environmental Protection Agency EJSCREEN

[14] For more information about the Justice40 Initiative, visit: https://www.energy.gov/diversity/justice40-initiative.

tool to quantitatively discuss existing environmental impacts in specific project areas: https://www.epa.gov/ejscreen

Specific examples include:

- Describing how the proposed project will support economic development in diverse geographic or demographic communities
- Creating a plan to engage equity and justice stakeholders in evaluating the broader impacts of the proposed project
- Describe how the proposed project was informed by input from a wide variety of stakeholders
- A literature review of the equity and justice implications of the outcomes of the proposed project or a plan with dedicated budget and expertise (staffing or subawardee) to evaluate the potential equity implications of successful project outcomes.

Workforce

The Workforce section of the Community Benefits Plan should articulate the future workforce implications of the proposed project or a milestone-driven plan for understanding those implications. This includes documenting the skills, knowledge, and abilities that would be required of workers installing, maintaining, and operating the technology, as well as the training pathways and their accessibility for workers to acquire the necessary skills. There may be field-specific or relevant existing research that could be cited in this section. In addition, applicants could detail the process they will use to evaluate long-term impacts on jobs, including job growth or job loss, a change in job quality, disruptions to existing industry and resulting changes to relationships between employers and employees and improvements or reductions in the ability of workers to organize for collective representation, and anything else that could result in changes to regional or national labor markets.

For additional support with developing the Workforce section of a Community Benefits Plan, please refer to the DOE's Community Benefits Plan Frequently Asked Questions (FAQs) webpage (https://www.energy.gov/bil/community-benefits-plan-frequently-asked-questions-faqs). This new resource, though created primarily for demonstration and deployment projects funded by the Bipartisan Infrastructure Law (BIL), may be useful for other projects. Applicants will find section 2 of the FAQ ("Investing in America's Workforce") particularly helpful for understanding key federal policies, terms and concepts, as well as workforce development strategies relevant to examination of workforce implications.

Specific examples include:

- Outlining the challenges and opportunities for adopting onsite energy technologies in the U.S.

- Creating a literature review of the workforce implications of the outcomes of the proposed project or a plan with dedicated budget and expertise (staffing or subawardee) to evaluate the potential equity implications
- Creating a plan and milestones for assessing how a successful project will have implications for job savings or loss, either at the macroeconomic level or within specific industries
- Describing how the project will support training of workforce
- Voluntary recognition of a union and informing employees of their rights, regardless of their classification
- Creating a plan to evaluate how the project will result in potential workforce shifts between industries or geographies.

Inclusion of SMART milestones

EERE requires that the applicant's Community Benefits Plan include one Specific, Measurable, Achievable, Relevant and Timely (SMART) milestone for each budget period. An exemplar SMART milestone clearly answers the following questions:

- What needs to be accomplished?
- What measures and deliverables will be used to track progress toward accomplishment?
- What evidence suggests that the accomplishment is achievable?
- Why choose this milestone?
- When will the milestone be reached?