

Notice of Intent No. DE-FOA-0002803

Notice of Intent to Issue Funding Opportunity Announcement No. DE-FOA-0002804

The Office of Energy Efficiency and Renewable Energy (EERE) intends to issue, on behalf of the Advanced Manufacturing Office, a Funding Opportunity Announcement (FOA) entitled "Industrial Efficiency and Decarbonization FOA".

The Biden Administration has laid out a bold agenda to address the climate crisis and build a clean and equitable energy economy that achieves carbon pollution free electricity by 2035, and puts the United States on a path to achieve net-zero emissions, economy-wide, by no later than 2050¹ to the benefit of all Americans.

The Advanced Manufacturing Office (AMO) plays a leading role in decarbonizing and revitalizing the industrial sector. AMO drives the innovation and deployment that can lead to a more resilient, robust, and competitive domestic clean energy manufacturing sector that provides economic opportunities across diverse communities. As part of its industrial efficiency and decarbonization efforts, AMO supports applied research, development, and demonstration (RD&D) targeting the reduction of greenhouse gas (GHG) emissions from high emitting industrial sectors and through cross-sector technologies relevant across multiple industrial sectors. Significant decarbonization of the industrial sector is essential to achieving the overall goal of economy-wide decarbonization by 2050 and creating good paying jobs.

The RD&D activities anticipated to be funded under this FOA would support the government-wide approach to the climate crisis by driving the innovation that can lead to industrial decarbonization. Specifically, this anticipated FOA would fund high-impact, applied research and development and prototype or pilot-scale demonstration projects in order to expedite the adoption of transformational industrial technology necessary to reduce energy usage and GHG emissions from high GHG-emitting industrial subsectors. This includes cross-sector industrial decarbonization approaches, via opportunities in energy efficiency; industrial electrification; low carbon fuels, feedstocks and energy sources; and industrial carbon capture and utilization. This anticipated FOA and its associated projects are separate from any forthcoming efforts to be funded under provisions of the Bipartisan Infrastructure Law, including activities related to Industrial Emissions Demonstration Projects.²

¹ Executive Order 14008, "Tackling the Climate Crisis at Home and Abroad," January 27, 2021.

² Section 41008 of the Bipartisan Infrastructure Law is aimed at carrying out activities to fund demonstration projects that test and validate industrial emissions reduction technologies.

This is a Notice of Intent (NOI) only. EERE may issue a FOA as described herein, may issue a FOA that is significantly different than the FOA described herein, or EERE may not issue a FOA at all.

It is anticipated that the FOA may include the following Topics:

Topic 1 – Decarbonizing Chemicals

Anticipated focus on unit operations including advanced separations and advanced reactors, and alternative production and process heating technologies to reduce carbon impacts from the production of high volume chemicals.

Topic 2 – Decarbonizing Iron and Steel

Anticipated focus on advancements that enable decarbonization in ore-based or scrap-based iron and steelmaking operations, and that convert other existing iron and steelmaking ancillary and thermal processes in order to utilize clean fuels or electricity.

Topic 3 – Decarbonizing Food and Beverage Products

Anticipated focus on innovative technologies that decarbonize existing process heating operations within the food and beverage sector.

Topic 4 – Decarbonizing Cement and Concrete

Anticipated focus on next generation cement formulations and process routes, utilization of low carbon fuels, and carbon capture technologies.

Topic 5 – Decarbonizing Paper and Forest Products

Anticipated focus on novel paper and wood drying technologies, and innovative pulping and paper forming technologies.

Topic 6 – Cross-sector Decarbonization Technologies

Anticipated focus on innovations in low temperature waste heat to power, thermal energy storage, and industrial heat pump technologies.

EERE envisions awarding multiple financial assistance awards in the form of cooperative agreements. The estimated period of performance for each award will be approximately 24-36 months.

This Notice is issued so that interested parties are aware of the EERE's intention to issue this FOA in the near term. All of the information contained in this Notice is subject to change. EERE will not respond to questions concerning this Notice. Once the FOA has been released, EERE will provide an avenue for potential Applicants to submit questions.

EERE plans to issue the FOA in or about August 2022 via the EERE Exchange website https://eere-exchange.energy.gov/. If Applicants wish to receive official notifications and information from EERE regarding this FOA, they should register in EERE Exchange. When the FOA is released, applications will be accepted only through EERE Exchange.

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In anticipation of the FOA being released, Applicants are advised to complete the following steps, which are <u>required</u> for application submission:

- Register and create an account in EERE Exchange at https://eere-exchange.energy.gov/. This account will allow the user to register for 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.
 - Questions related to the registration process and use of the EERE Exchange website should be submitted to: EERE-ExchangeSupport@hq.doe.gov
- Register with the System for Award Management (SAM) at https://www.sam.gov.
 Designating an Electronic Business Point of Contact (EBiz POC) and obtaining a special password called an MPIN are important steps in SAM registration. Please update your SAM registration annually. Upon registration, SAM will automatically assign a Unique Entity ID (UEI).
- 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
- Register in Grants.gov to receive automatic updates when Amendments to a FOA are
 posted. However, please note that applications will not be accepted through
 Grants.gov. http://www.grants.gov/. All applications must be submitted through EERE
 Exchange.

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