

**U.S. Department of Energy
Office of Clean Energy Demonstrations**

OCED-RFI-23-1

**Request for Information (RFI) on the Department of Energy's Use of Demand-side
Support for Clean Energy Technologies**

Program Area: Office of Clean Energy Demonstrations

RESPONSES DUE: April 1, 2023 by 5:00 p.m. ET

Description:

This Request for Information (RFI) is re-issued with a new deadline of April 1, 2023. Organizations and individuals that have previously responded may respond again or revise their previous submission.

This is a RFI issued by the U.S. Department of Energy's (DOE) Office of Clean Energy Demonstrations (OCED). This RFI seeks public input to help inform DOE's development of demand-side support measures for clean energy technologies. Demand-side support measures include, but are not limited to, advanced market commitments, direct procurement, and guaranteed offtake.

OCED seeks input on the following topics:

- Cases where demand-side support measures would be useful in scaling up clean energy technologies; and
- The best way for DOE to implement demand-side support measures, were it to elect to do so.

OCED seeks input on these topics from all types of clean energy technology market participants:

- Suppliers of clean energy products (e.g., clean hydrogen producers, carbon dioxide removal developers, sustainable aviation fuel producers);
- Consumers of clean energy products (e.g., corporate sustainability programs, corporate and government procurement programs);
- Investors in clean energy technologies (e.g., project finance investors, debt investors);

- Not-for-profit organizations (e.g., entities capable of operating demand-side support mechanisms to scale up energy technologies at the direction of the DOE);
- State, local, and tribal government entities; and
- Other interested entities (e.g., trade associations, market-clearing organizations).

Background

On November 15, 2021, President Joseph R. Biden, Jr. signed the Infrastructure Investment and Jobs Act (Public Law 117-58), also known as the Bipartisan Infrastructure Law (BIL). Section 41201 of the BIL established OCED to deliver clean energy demonstration projects at scale in partnership with the private sector to accelerate deployment, market adoption, and the equitable transition to a decarbonized energy system.

DOE is committed to commercializing critical clean energy technologies. OCED's activities will help fill the gap between the research and development, and commercial deployments funded by the private sector or DOE's Loan Programs Office.

Demand-side Support

Demand-side support measures represent a potential tool to support DOE's mission by providing a predictable commercial market for clean energy technologies. Demand-side support measures have accelerated commercial scale-up of technologies in energy and other industries, both in the United States and abroad.

There are several types of demand-side support measures for clean energy commercialization. These include, but may not be limited to:

1. Direct procurement through a request for proposal or reverse auction;
2. Advanced market commitments; and
3. Guaranteed price floors.

DOE could pursue one or more approaches to implementing demand-side support measures. These include:

1. **Partnership between a government agency and an independent entity** (e.g., not-for-profit organization, for-profit organization, market clearing organization, trade association) in which the entity administers the demand-side support measure prescribed by the government agency. The government agency may direct, for example, that the

entity administer procurements, reverse auctions, advanced market commitments, or guaranteed price floors.

In pursuing such an option, the government entity would consider several factors in selecting an independent entity. Such factors would likely include, but are not limited to, the abilities of the independent entity with respect to:

- a. Understanding the commercial dynamics of the clean energy technology in question;
 - b. Entering offtake contracts and other commercial arrangements with clean energy companies and/or projects that meaningfully improve the viability of these projects such that private investors can invest in them;
 - c. Contributing to market design and market making (e.g., price discovery, settlement mechanisms); and
 - d. Interacting with the relevant stakeholder ecosystem.
2. **Direct government implementation of demand-side support measures** in which DOE serves as the entity executing demand-side support measures. DOE would enter direct offtake or other commercial arrangements with clean energy developers or projects in this scenario.
 3. **Use of a Government-sponsored enterprise or Government corporation (e.g. power marketing administrations such as BPA or WPA)** to execute demand-side support measures on behalf of DOE.

Purpose

The purpose of this RFI is to solicit feedback on opportunities for demand-side support measures. DOE is specifically interested in information on

- Cases where demand-side support measures would be useful in scaling up clean energy technologies; and
- The best way for DOE to implement demand-side support measures, were it to elect to do so.

You may answer as few or as many of the questions below as you would like. Please use the question number in your response to help reviewers. Please also provide detailed responses.

Category A: Most effective demand-side support measure for given technologies

1. What are the potential benefits and drawbacks of DOE implementing demand-side support measures in a given industry (e.g., carbon dioxide removal, hydrogen, low-carbon cement and concrete, low-carbon steel, sustainable aviation fuels)? (Please specify the technology or technologies in question.) In this question, DOE is not seeking input on the implementation approach.

2. What would be the most effective demand-side support measure DOE could use to support commercial scale-up of a given technology (e.g., reverse auctions, advanced market commitments, contracts-for-difference, direct procurement, pooled offtake vehicles)? (Please specify the technology or technologies in question.) In this question, DOE is not seeking input on the implementation approach.
 - a. What are the most important considerations for DOE in exploring advanced market commitments in particular?
 - b. What are the most important considerations for DOE in exploring guaranteed offtake prices or contracts-for-difference in particular?
 - c. What are the most important considerations for DOE in exploring other demand-side support measures (please specify a measure)?

Category B: Implementation of demand-side support measures

3. What are the benefits and drawbacks of DOE partnering with an independent entity to implement demand-side support measures?
4. If DOE were to partner with an independent entity to implement demand-side support measures,
 - a. What might a partnership arrangement look like between DOE and an independent entity responsible for facilitating purchasing of clean energy technologies and services?
 - b. What would be the best way to structure the agreement between DOE and the entity?
 - c. What would be the best way to structure agreements between the not-for-profit and commercial entities involved in purchasing or producing clean energy products?
 - d. What organizational structure would be best for the entity in question?
 - e. What capabilities would the entity require to effectively provide demand-side support measures?
 - f. How would a partnership ensure that federal requirements (e.g., the National Environmental Policy Act) and national policies (e.g., Justice40) are met with respect to federal funding of demand-side support?
5. What are the benefits and drawbacks of DOE working with a government-sponsored enterprise or government corporation to execute demand-side support measures?
6. Do particular implementation approaches (e.g., partnership with an independent entity, direct government execution, quasi-governmental entity) lend themselves particularly well to specific technologies and/or demand-side support measures?

Category C: Other questions for entities potentially interested in providing demand-side support measures in partnership with DOE

7. Are there other approaches DOE should consider to execute demand-side support measures?
8. Does your organization have the capacity to implement demand-side support measures for critical clean energy technologies?
9. What qualifications does your organization have to implement demand-side support measures?
10. Which technology or technologies could your organization best support?
11. What interests your organization about the opportunity to provide demand-side support measures in partnership with DOE?

PROPRIETARY INFORMATION:

Because information received in response to this RFI may be used to structure future programs and/or otherwise be made available to the public, **respondents are strongly advised NOT to include any information in their responses that might be considered business sensitive, proprietary, or otherwise confidential.**

If, however, a respondent chooses to submit business sensitive, proprietary, or otherwise confidential information, it must be clearly and conspicuously marked as such in the response 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 U.S. Federal Government is not liable for the disclosure or use of unmarked information and may use or disclose such information for any purpose.

If your response contains confidential, proprietary, or privileged information, you must include a cover sheet marked as follows identifying the specific pages containing confidential, proprietary, or privileged information:

Notice of Restriction on Disclosure and Use of Data:

Pages [*list applicable pages*] of this response may contain confidential, proprietary, or privileged information that is exempt from public disclosure. Such information shall be used or disclosed only for the purposes described in this RFI OCED-RFI-23-1. The Government may use or disclose any information that is not appropriately marked or otherwise restricted, regardless of source.

In addition, (1) the header and footer of every page that contains confidential, proprietary, or privileged information must be marked as follows: “Contains Confidential, Proprietary, or Privileged Information Exempt from Public Disclosure” and (2) every line and paragraph containing proprietary, privileged, or trade secret information must be clearly marked with [[double brackets]] or highlighting.

EVALUATION AND ADMINISTRATION BY FEDERAL AND NON-FEDERAL PERSONNEL:

Federal employees are subject to the non-disclosure requirements of a criminal statute, the Trade Secrets Act, 18 USC 1905. The Government may seek the advice of qualified non-Federal personnel. The Government may also use non-Federal personnel to conduct routine, nondiscretionary administrative activities. The respondents, by submitting their response, consent to the Office providing their response to non-Federal parties. Non-Federal parties given access to responses must be subject to an appropriate obligation of confidentiality prior to being given the access. Submissions may be reviewed by support contractors and private consultants.

REQUEST FOR INFORMATION RESPONSE GUIDELINES:

Responses to this RFI must be submitted electronically to keith.boyea@hq.doe.gov with the subject line “**OCED-RFI-23-1**” no later than **5:00 p.m. (ET) on April 1, 2023**. Responses must be provided as attachments to an email. It is recommended that attachments with file sizes exceeding 25 MB be compressed (i.e., zipped) to ensure message delivery. Responses must be provided as a Microsoft Word (*.docx) or Adobe Acrobat (*.pdf) attachment to the email, and **no more than 5 pages in length, 12-point font, 1-inch margins. Only electronic responses will be accepted.**

DOE will not publicly publish a compendium of responses. A response to this RFI will not be viewed as a binding commitment to develop or pursue the project or ideas discussed. OCED may engage in pre and post response conversations with interested parties. Contact the POC above to schedule a call.

DOE requests respondents provide the following information at the start of their response to this RFI:

- Company/institution name
- Company/institution contact
- Contact's address, phone number, and e-mail address.

This is a Request for Information (RFI) only. DOE will not pay for information provided under this RFI and no project will be supported as a result of this RFI. This RFI is not accepting applications for financial assistance or financial incentives. DOE may or may not issue a Funding Opportunity Announcement (FOA) or take any other action based on consideration of the input received from this RFI.