CLEAN ENERGY DEMONSTRATIONS

Industrial Demonstrations Program
Funding Opportunity Announcement Informational Webinar

U.S. Department of Energy
Funding Opportunity Announcement No.
DE-FOA-0002936
Disclaimer

Only publicly available information provided by DOE in Funding Opportunity Announcements (FOA) will be discussed in this webinar.

Attending this webinar and watching the recording is completely voluntary and will not impact future application selections. There are no advantages or disadvantages to the application evaluation process with respect to attending or viewing this webinar.

This document is not a rule or regulation, and the recommendations it contains may not apply to a particular situation based upon the individual facts and circumstances. If there are any inconsistencies between a specific FOA and the statements in this webinar, the FOA is the controlling document.
OCED’s Mission

Deliver clean energy technology demonstration projects at scale in partnership with the private sector to accelerate deployment, market adoption, and the equitable transition to a decarbonized energy system.”
OCED’s Role within the U.S. Department of Energy

Technology Readiness Level (TRL)

- Basic & applied research & experiments [TRL 1-3]
- Development & lab-scale prototyping [TRL 4-5]
- Pilot, sub & full-scale demonstration [TRL 6-7]
- Commercial-scale demonstration [TRL 8]
- At-scale long term commercial operations [TRL 9]

R&D&D Steward

Office of Technology Transitions (OTT)

- Research
- Development
- Demonstration
- Deployment

DOE Office Funding Map

- Science
- SBIR/STTR
- ARPA-E
- Applied Offices
- Loan Programs Office
- OCED

Risk Profiles

- Technical Risk
- Project Risk
- Market Risk

Technology Commercialization
Up to $6 billion for transformational, advanced industrial facilities

- to solidify a first-mover advantage for U.S. industry in low- and net-zero carbon manufacturing
- to help substantiate the market for clean products through high-impact, replicable solutions
- to build broadly shared prosperity for American workers and communities
Program Priorities

This funding opportunity is **supportive of multiple technology pathways**. It invites industry to present its best solutions, with the following guiding priorities to maximize the transformative potential for these funds:

- **Deep decarbonization**, by demonstrating significantly less carbon-intensive industrial production processes leading to cleaner materials;

- **Timeliness**, through rapid technology demonstrations that can address emissions in the near-term, meet funding horizons, and be replicated by fast followers;

- **Market viability**, with technological approaches designed to spur follow-on investments for widespread decarbonization as well as partnerships between buyers and sellers of the materials produced; and,

- **Community benefits**, tailored through substantial engagement with local and regional stakeholders, labor unions, and Tribal entities across the project lifecycle, supporting environmental justice; diversity, equity, inclusion, and accessibility; and economic opportunity for local communities.

See: Executive Summary and section 1.2.
DOE is seeking first- or early-of-a-kind projects that maximize the transformational potential of these funds.

This could include:

• New technologies that have been proven at a pilot scale but have yet to be deployed commercially;
• Technologies that are being pursued internationally but do not have a foothold in the U.S.; or
• Other early-of-a-kind projects that face market or adoption risks.

Projects under this FOA should:

• Be commercial-scale or commercially relevant;
• Include a path from demonstration to deployment that includes sustained operation after completion; and,
• Have the goal of enabling widespread, non-federally funded follow-on investments after the project period.
# Program Scope

All values anticipated

<table>
<thead>
<tr>
<th>Topic Area 1</th>
<th>Topic Area 2</th>
<th>Topic Area 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>$100M – $250M federal share*</td>
<td>$75M – $500M federal share*</td>
<td>$35M – $75M federal share*</td>
</tr>
<tr>
<td>~2 – 5 projects</td>
<td>~10 – 30 projects</td>
<td>~10 – 30 projects</td>
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<tr>
<td>Near-Net-Zero Facility Build Projects</td>
<td>Facility-level Large Installations and Overhaul Retrofit Demonstrations</td>
<td>System Upgrades and Retrofits for Critical Unit Operations or Single Process Lines Within Existing Facilities</td>
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<tr>
<td>World-leading, first- or early-of-a-kind, full facility builds resulting in significant emissions reductions up to net-zero operations.</td>
<td>Large-scale overhauls for existing facilities, common technologies across multiple facilities, or new builds with accelerated planning, development, permitting, and financing strategies.</td>
<td>Upgrades, retrofits, and operational improvements that target decarbonization within a unit operation or process line at an existing facility.</td>
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<td>8 – 12 years anticipated. No statutory funding deadline.</td>
<td>3 – 7 years anticipated. Projects should aim to reach Phase 3 (construction) by Sept. 30, 2026. Applicants should substantiate the viability of their proposed timeline.</td>
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*All projects will require at least 50% cost-share.

See: Sections 1.3.2 and 2.0.
Projects will follow a four-phase structure:

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Initial planning and analysis activities to ensure that the overall concept is technologically and financially viable.</th>
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<tbody>
<tr>
<td>Phase 2</td>
<td>Finalize engineering designs and business development, site access, community and workforce agreements, National Environmental Policy Act (NEPA) review, permitting, and offtake agreements.</td>
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<tr>
<td>Phase 3</td>
<td>Installation, integration, and construction activities.</td>
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<tr>
<td>Phase 4</td>
<td>Ramp-up to full operations including data collection to analyze the plant’s operations, performance, and financial viability.</td>
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- This FOA solicits plans for all four phases of proposed activities.
- Projects that have completed initial phases will be eligible to undergo accelerated early reviews for due diligence.
- All projects selected under this FOA will be eligible to complete all four phases pending successful execution of milestones and the successful completion of the Go/No-Go review at the end of each phase.
- This phasing structure is consistent with OCED’s project management approach.

See: Section 1.4.
Areas of Interest

A special emphasis on high energy and carbon intensive processes and industries:

- iron, steel, and steel mill products
- aluminum
- cement and concrete
- glass
- crosscutting opportunities that may address multiple facilities or sectors.

- pulp and paper
- industrial ceramics
- chemicals and refining
- other energy intensive industrial sectors

Applications aren’t limited to these industries; applicants must substantiate a project’s ability to achieve priority criteria and will be judged in context of all responses.

See: Section 1.3.3.
Eligible Applicants

DOE anticipates providing awards to teams that are led by a single, for-profit organization or owner/operator of an eligible facility, depending on the Topic Area:

<table>
<thead>
<tr>
<th>Funding Provision</th>
<th>Eligible Entities for Prime Recipient</th>
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<tbody>
<tr>
<td>Topic Area 1</td>
<td>BIL 41008 For-profit organizations</td>
</tr>
<tr>
<td>Topic Area 2</td>
<td>IRA 50161 Owners or operators of a domestic, non-federal, non-power industrial or manufacturing facility engaged in energy-intensive industrial processes. This includes co-owners or co-operators.</td>
</tr>
<tr>
<td>Topic Area 3</td>
<td>IRA 50161</td>
</tr>
</tbody>
</table>

DOE encourages applicants to strengthen projects by partnering with experts, universities, labor unions, community-based organizations, non-governmental organizations, product off-takers, and/or national laboratories.

See: Section 3.0.
Spotlight: Demand-side Initiatives

Projects funded under this FOA should help establish the viability and competitiveness of domestically manufactured low-carbon products as global consumers look for increased transparency on carbon intensity of their goods.

**Buy Clean** prioritizes the Federal Government’s purchase of steel, concrete, asphalt, and flat glass that have lower levels of embodied GHG emissions. These four construction materials are substantially covered in the FOA and represent 98% of the government’s purchased construction materials.

**EPA’s Embodied GHG Reporting** is executing on $350M from IRA for grants, technical assistance, and tools – including carbon labeling – to measure and report lower levels of embodied carbon.

**The Securities and Exchange Commission** has proposed a rule change that would require climate-related disclosures, including a registrant’s GHG emissions.

**The First Mover’s Coalition** includes companies using their purchasing power to create early markets for innovative clean technologies across eight hard to abate sectors. The coalition formulates purchase commitments and aggregates demand while supporting members in delivering on commitments and creating an enabling environment.

See: Section 1.2.
Prioritizing Community Benefits in OCED Projects

OCED requires applicants to include a Community Benefits Plan to help ensure broadly shared prosperity in the clean energy transition.

By prioritizing community benefits, we can ensure the next chapter in America's energy story is marked by greater justice, equity, security, and resilience.

The IRA supports this goal by giving priority to projects that provide the greatest benefit to the greatest number of people in nearby communities.
Community Benefits Plan Overview

- Detailed guidance and examples on creating each section of the Community Benefits Plan can be found here: energy.gov/oced/idp.
- Additional information on Community Benefits Plans can be found here: www.energy.gov/clean-energy-infrastructure/community-benefits-plan-frequently-asked-questions-faqs.
- Applicants are encouraged to read these resources prior to writing their Community Benefits Plan.

See: Section 4.6.2.
Timeline

**COMPLETE:** NOTICE OF INTENT DEC. 2022

**Funding Opportunity Announcement**
March 8, 2023

**Concept Paper Drafting Phase**
Concept Papers Due
April 21, 2023 5:00PM ET

**Encourage / Discourage Notifications Issued**

**Application Drafting Phase**
Applications Due
August 4, 2023 5:00PM ET

**Selections Announced**
Late 2023 – Early 2024

See: FOA cover page.
Concept Papers

Applicants **must** submit an eligible concept paper to be eligible to submit an application. After concept papers are reviewed and before the application deadline, DOE will issue encourage/discourage notifications. An encourage/discourage notification does not preclude any entity that submitted a concept paper from submitting an application.

Concept papers are a maximum of 10 pages and each applicant must provide the following information as part of the concept paper:

- Cover Page (1 page maximum)
- Project Plan & Project Team Description (6 pages maximum)
- Community Benefits Plan (2 pages maximum)
- Management and Organization (1 page maximum)

Concept papers are due **April 21, 2023 at 5:00 p.m. ET.**

An entity may submit more than one Concept Paper and Application to this FOA, provided that each application describes a unique, scientifically distinct project and provided that an eligible Concept Paper was submitted for each application. (see section 3.4)
FOA Q&A

- Email OCED_Industrial@hq.doe.gov with questions, which will be posted anonymously.
- Visit oced-exchange.energy.gov for Q&A, which is updated regularly.
- Thank you for your patience! Due to the high volume of questions, we are working as quickly as we can. Please check the responses to see if your question has been answered.

Example Questions

- Can an applicant submit to multiple FOAs and / or the Loan Programs Office for a single project?
  - Yes, though federal financing, such as grants or loan guarantees from federal agencies, cannot be leveraged by applicants to provide the required cost share or to otherwise support the same scope of the award. However, other federal support may be used for activities that fall outside of the award scope/budget. See FOA sections 4.6.2.2b and section 4.6.2.13.

- Can a technology provider serve as a prime recipient for a proposal that involves a number of owners of eligible facilities?
  - A project involving multiple facilities may apply; eligible entities are "Owners or operators of a domestic, non-federal nonpower industrial or manufacturing facility engaged in energy intensive industrial processes as stated in the areas of interest," however, a co-owner or co-operator does meet the criteria. See FOA section 3.1.
OCED Resources

OCED Website and Newsletter:
https://energy.gov/oced
https://energy.gov/oced/idp

OCED Exchange (e.g., RFIs, NOIs, FOAs):

Please note, concept papers and full applications are submitted through OCED exchange.
# Registration Checklist

*View the Funding Opportunity Announcement* and ensure you are registered and up-to-date with the following. *Please note that SAM registration is only required for application submission – not concept papers!*

<table>
<thead>
<tr>
<th>System</th>
<th>Purpose</th>
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<tbody>
<tr>
<td>OCED Funding Opportunity Exchange</td>
<td>Online application portal where OCED posted this Funding Opportunity Announcement and where you can self-nominate to be a reviewer.</td>
</tr>
<tr>
<td>Grants.gov</td>
<td>Registering in Grants.gov will allow you to receive automatic updates when amendments to Funding Opportunity Announcements are posted.</td>
</tr>
<tr>
<td>System for Award Management (SAM.gov)</td>
<td>SAM.gov hosts the process for designating an Electronic Business Point of Contact (EBiz POC) and obtaining a special password called a Marketing Partner Identification Number (MPIN), which are important steps in the process.</td>
</tr>
<tr>
<td>FedConnect</td>
<td>Federal government acquisition and grants portal that is integrated with Grants.gov and SAM – register here after setting up your registration in SAM.gov.</td>
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Thank you!

• For more information, please visit: energy.gov/OCED

• For questions regarding the FOA or any other information, please email: OCED_Industrial@hq.doe.gov

• To receive news about OCED’s programs, please sign up for our newsletter: energy.gov/oced/contact-us