



Objective Strategic Session (OSS)

Industrial Efficiency & Decarbonization Office (IEDO)

PPO-CWX-002-IEDO

October 9, 2024 (2 PM ET)

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The mission of ConnectWerx is to **Engage, Match,** and **Collaborate** across the US Industrial and Academic base to help the Department of Energy (DOE) address **energy, environmental** and **nuclear** challenges through transformative science and technology solutions.



@connectwerx



info@connectwerx.org

Join the Network!



ConnectWerx (CWX) Resources



COMMUNICATIONS

Stay **engaged and connected** with our various outreach channels

- CWX web & opportunities page
- CWX emails and outreach
- **Join the Network!**
- CWX social media
- CWX newsletter (coming soon)



VIRTUAL EVENTS

Take part in **opportunities** through virtual events

- CWX & DOE Objective Strategic Sessions (OSS/Webinars)
 - Learn about PIA opportunities facilitated by CWX.
 - Overview of opportunity and additional details to participants.
 - Q & A
- CWX & DOE Office Hours
 - Ask direct question to DOE and CWX.
 - Note: review application prior.



CONFERENCES

Encourage & coordinate **involvement** at conferences

Submit your conference today at info@connectwerx.org for our review and consideration to post under our CWX events page!



connectwerx

U.S. DEPARTMENT OF
ENERGY

Office of ENERGY EFFICIENCY
& RENEWABLE ENERGY

INDUSTRIAL EFFICIENCY & DECARBONIZATION OFFICE



Industrial Efficiency and Decarbonization Office

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Technology Manager

Industrial Efficiency and Decarbonization Office

US Department of Energy



Industrial Efficiency and Decarbonization Office

VISION FOR THE FUTURE

An efficient and competitive industrial sector with net-zero greenhouse gas emissions by 2050.

MISSION

IEDO accelerates the innovation and adoption of cost-effective technologies that eliminate industrial GHG emissions.

MAJOR PROGRAM PILLARS



ENERGY- AND EMISSIONS-INTENSIVE INDUSTRIES

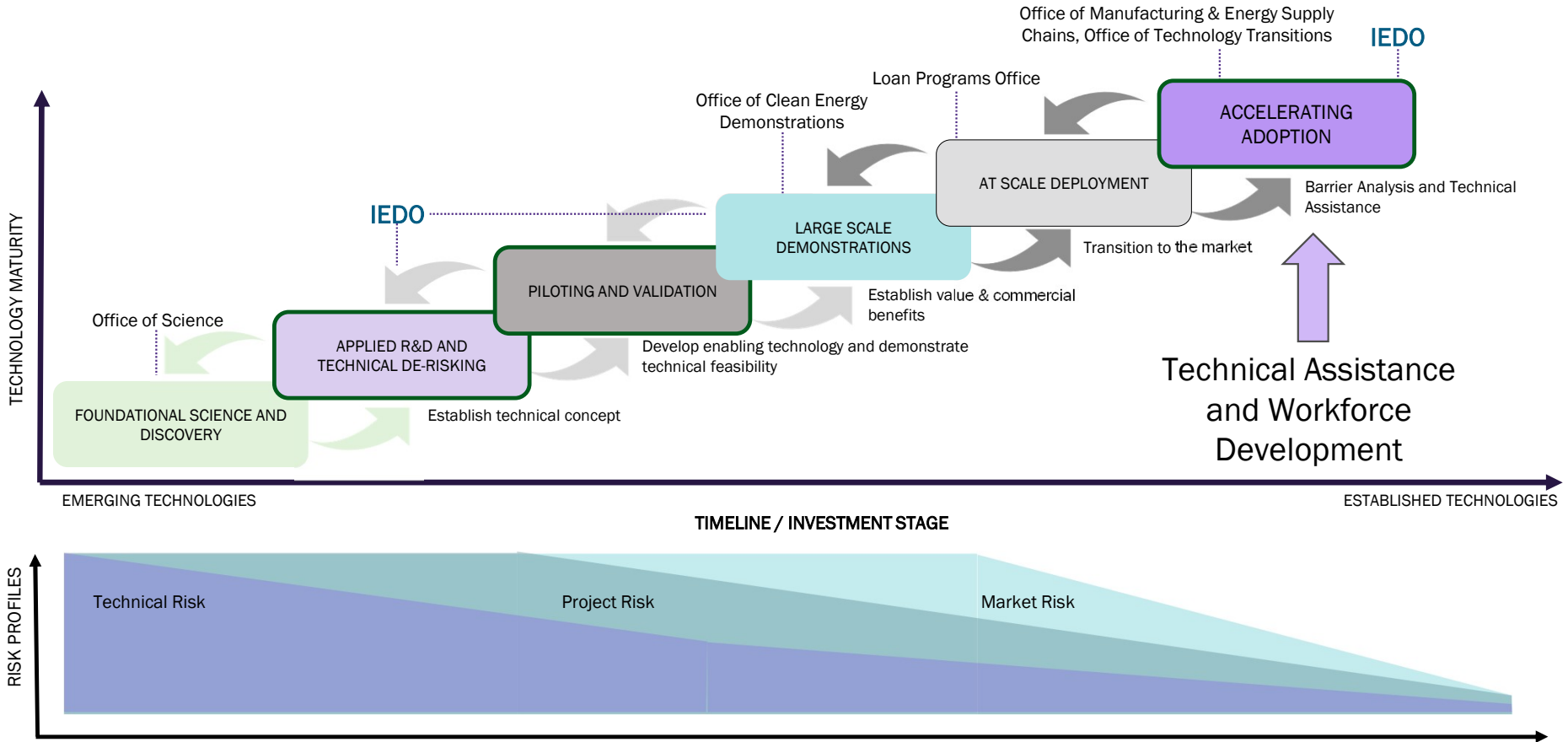


CROSS-SECTOR TECHNOLOGIES



TECHNICAL ASSISTANCE AND WORKFORCE DEVELOPMENT

IEDO Fit within DOE Landscape



IEDO Technical Assistance & Workforce Development



Public /private partnerships

to help manufacturers and industrial organizations set and achieve long-term energy intensity reduction goals



Education and Training

for the current and future manufacturing workforce



No-cost tools and resources

for manufacturers to reduce GHG emissions and improve energy efficiency and competitiveness



End-user support

stakeholder engagement, and technical services for the industrial sector

TA WORK PRODUCTS INCLUDE:

ENERGY ASSESSMENTS

PEER-TO-PEER NETWORKING

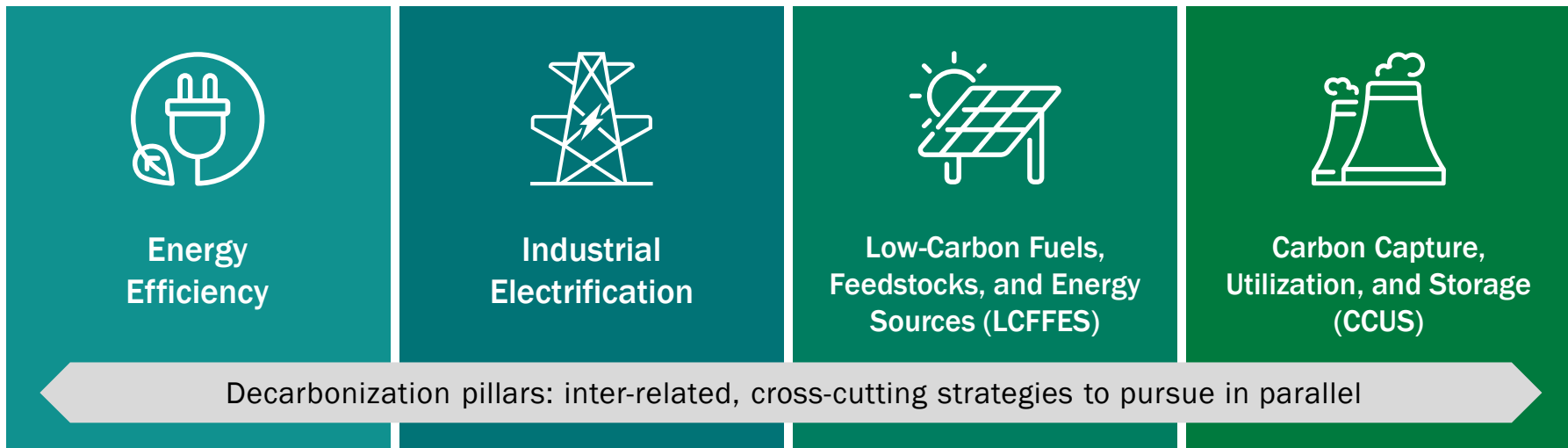
TOOLS & TRAINING

TECHNOLOGY SCREENING

PROJECT PROFILES

DOE Industrial Decarbonization Roadmap

Industrial Decarbonization Pillars



Iron & Steel



Chemicals



Food & Beverage



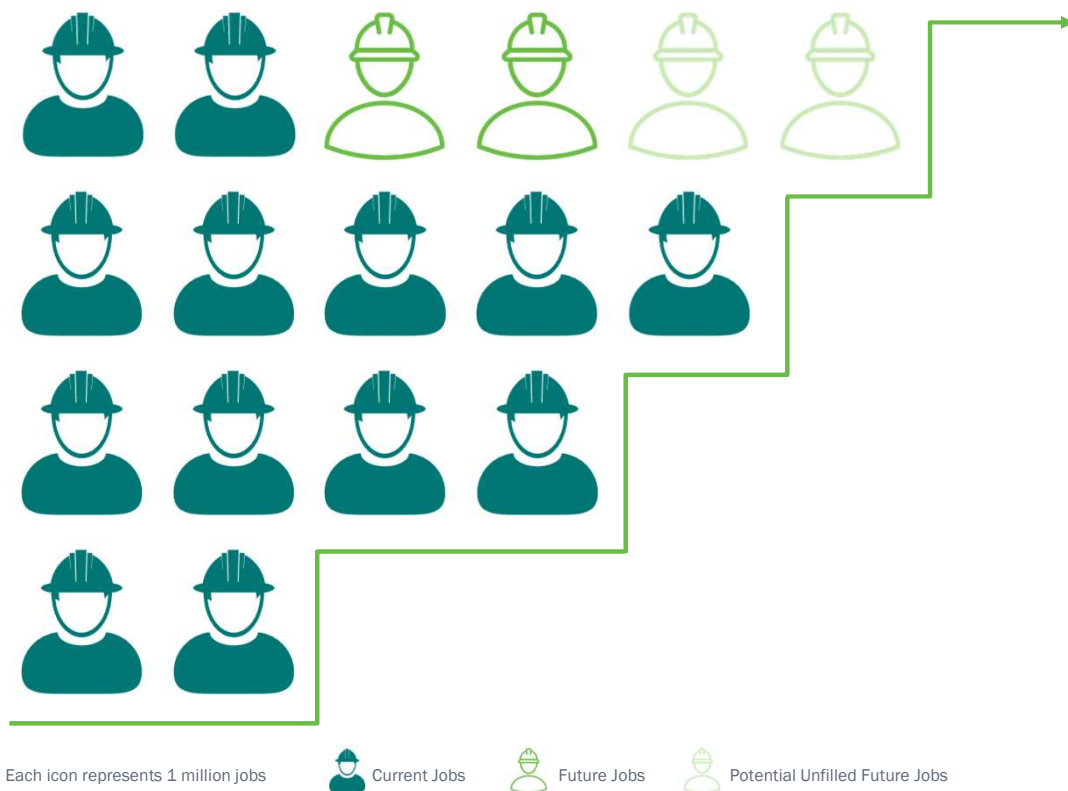
Petroleum Refining



Cement

Industrial Decarbonization Roadmap. U.S. Department of Energy (2023).

Growing the Industrial Workforce of the Future



- **4 million new manufacturing jobs** will need to be filled by 2030.
- **Half are at risk of going unfilled** due to increasing specialization and new skillsets needed.
- **Tailored technical assistance and workforce development** can help grow the readiness of the workforce.

*Employment by Major Industrial Subsector. Bureau of Labor Statistics (2023).
2.1 Million Manufacturing Jobs Could Go Unfilled by 2030. National Association of Manufacturers (2021).*

Diversity, Equity, Inclusion, and Accessibility Focus

Creating a workforce that reflects the diversity of Americans and ensuring that all Americans benefit from a decarbonized industrial sector

Increasing **Diversity** in Partnerships, Funding opportunity applicant pool, and reviewers



Using **Inclusive** language to welcome broader participation in funding opportunities

Ensuring communities have the potential to benefit through Community Benefit Plans

Expanding **Accessibility** for underserved communities, including through community-based stakeholder engagement

Industrial Sustainability, Energy Efficiency and Decarbonization (ISEED) Collaborative

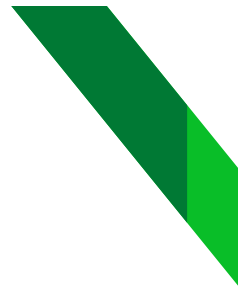
The U.S. Department of Energy's Industrial Efficiency and Decarbonization Office's ISEED Collaborative is an initiative to help grow the readiness of the workforce knowledge and skills needed to decarbonize the U.S. industrial sector.

- The ISEED Collaborative will:
 - Provide assistance to partners to develop and disseminate instructional curricula and training programs focused on industrial sustainability, energy efficiency, and decarbonization.
 - Make resources available for workers at any level of training and education and will empower learners to build the skills and knowledge they need to contribute to sustainable manufacturing
 - Include up to six organizations with established experience or networks in the following focus areas: energy efficiency, industrial electrification and low-carbon fuels, feedstocks, and energy sources.

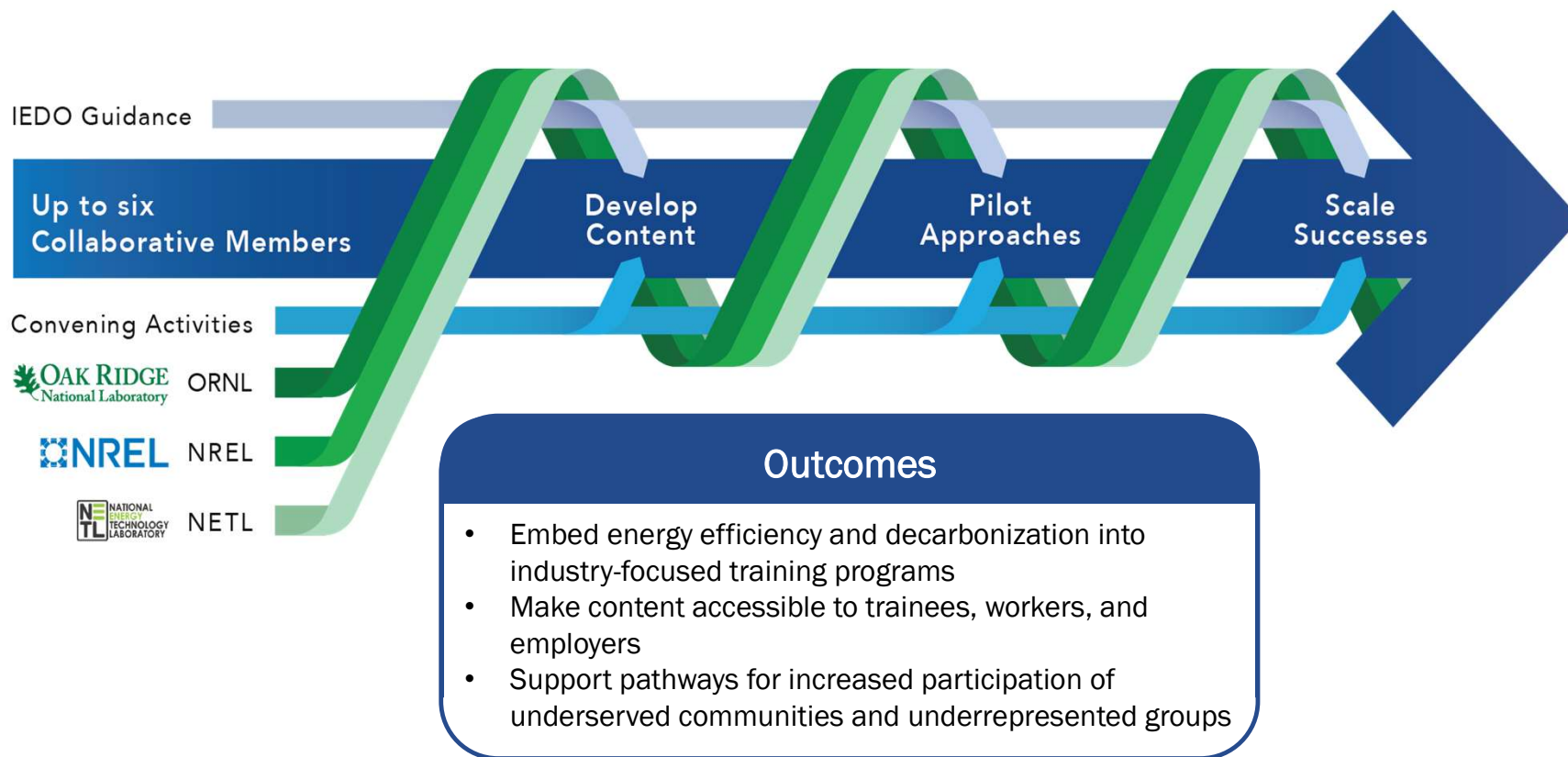


Graphic by the U.S. Department of Energy

<https://bit.ly/ISEEDCollaborative>



Implementation Approach – IEDO ISEED Collaborative

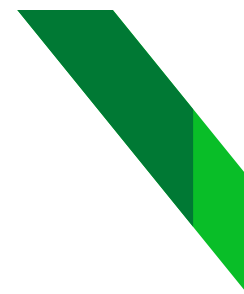


The ISEED Collaborative approach enables members to develop content, pilot approaches, and scale successes with the support of IEDO guidance, convening activities, and three national laboratories. *Graphic from the U.S. Department of Energy*

ISEED Collaborative

The Collaborative will focus on decarbonization technology areas described in the [U.S. Department of Energy's 2022 Industrial Decarbonization Roadmap](#). These focus areas are applicable to processes within any industrial subsector (food and beverage, iron and steel, etc.).

- **Energy efficiency** for existing industrial processes, including energy management, utilization of waste heat, and smart manufacturing strategies.
- **Industrial electrification** of thermal processes, process heat (heat pumps), or hydrogen production.
- **Low-carbon fuels, feedstocks, & energy sources** (LCFFES) will play a critical role decarbonizing subsectors that rely on fossil fuels. These could include the use of renewably sourced electricity, clean hydrogen, fuel-flexible processes, as well as biofuels and bio feedstocks.



ISEED Target Audiences

ISEED awards could potentially go to the following groups (including but not limited to)

Collaborative Members	Audiences Reached by Training
Manufacturing education and training organizations (public, private, and nonprofit)	Prospective workers
Trade, industry, and labor groups	Existing workers in industry (upskilling)
Professional societies and associations	Production jobs
Organizations working to expand job and training access to diverse populations	Supervisors/managers
	Business owners



Applicants Can Apply for One of Three Categories

1. Scale existing & proven programs to broader reach

A rich array of training and workforce content and programs exist to support the manufacturing workforce on energy efficiency and decarbonization. Collaborative partners will leverage the collaborative apparatus and national laboratory resources to scale successful programs and curricula to help broaden the reach and deepen industrial decarbonization across the U.S. manufacturing base.

2. Integrate energy efficiency and decarbonization content into established national or broad sectoral workforce development networks

Successfully decarbonizing industry requires introducing technologies and strategies related to energy efficiency and decarbonization to transform conventional practices. By supporting the cultivation of specialized training programs or content on energy efficiency and decarbonization, the collaborative can ensure that the workers of both today and tomorrow are prepared to take on new roles and job tasks and can contribute to the development of a clean, competitive manufacturing sector.

3. Scale innovative programs to close critical gaps in manufacturing workforce development

This track is dedicated to scaling programs aimed at addressing critical gaps currently documented, whether they pertain to skills, demographics, or other essential aspects, with the goal of transforming specific manufacturing sectors and regional economies. We are in search of groundbreaking ideas that can revolutionize manufacturing workforce development by identifying and addressing unmet needs with novel approaches.

Eligibility

- Existing organizations with established experience, networks, an/or industry reach that can be leveraged to **provide training and education** related to IEDO's technology focus areas. Potential members may include but are not limited to:
 - Manufacturing education and training organizations (public, private, and nonprofit)
 - Trade, industry, and labor groups
 - Professional societies and associations
 - Organizations working to expand job and training access to diverse populations
- Applicants must qualify as a domestic entity
- Applicants must certify that is not owned by, controlled by, or subject to the jurisdiction or direction of government of Country of Risk. The U.S. Department of Energy defines Country of Risk to include China, Russia, North Korea, and Iran. This list is subject to change.



How to Apply

Complete the submission form and upload the appropriate project information and supporting documentation in the application for **PPO-CWX-002-IEDO**.

Submissions are due no later than **Friday, November 1, 2024 at 5:00 PM ET**

Submissions must include the following files using the required templates

File Title	Max Pages	File Type
Project Overview & Plan (Template)	10	MS Word, PDF
Budget Workbook (Template)		Excel, PDF
Project Schedule (Template)		Excel, PDF
Letters of Support	5	MS Word, PDF

Review Criteria

Criteria	Weight	Description
Workplan	30%	Market barrier identification, solution feasibility, clear approach, detailed tasks, reasonable budget
Need for Assistance	20%	Budgetary gap, technical expertise, ISEED Collaborative benefits, non-supplanting funds
Team Members & Resources	25%	Team capability, individual qualifications, successful execution, collaboration, participant engagement
Community Benefits	25%	Disadvantaged and underserved community impacts, workforce upskilling, community engagement, job creation, and minority/women/veteran business involvement,

Important Dates

- **September 16, 2024: Project Application Period Open:** DOE begins accepting applications from a specialized, independent consultant or academic entity.
- **October 9, 2024: Objective Strategic Session/Informational Webinar (OSS/IW):** ConnectWerx & DOE will provide further details about the funding opportunity. Interested collaborative performers can join to better understand the scope, scale, and intent of the opportunity and ask questions. The optional, virtual OSS will take place on October 9 at 2 PM ET.
- **October 23, 2024: Informational office hours:** Interested applicants have the opportunity to ask additional questions of DOE on October 23 at 2 PM ET.
- **November 1, 2024: Application period closes.**
- **Early 2025:** Government review and selection of performers to receive funding.





Common Questions

Q: What is a PIA and why is DOE pursuing this approach?

A: Partnership Intermediary Agreements (PIAs) are agreements between the Federal government and non-Federal partners (partnership intermediaries or PIs) designed to increase outreach to and engagement with small business firms, institutes of higher education, and non-traditional partners.

Q: How will the agreement process work after DOE selection?

A: Upon conclusion of selection from DOE Program Office Representative (POR) and finalization of milestone schedule, ConnectWerx will issue a business-to-business (B2B) agreement to the lead performer for review and execution. The B2B agreement will contain mandatory flowdowns from the prime Partnership Intermediary Agreement (PIA) executed between DOE and Advanced Technology International.

Q: How does invoicing and payments work with ConnectWerx?

A: Upon completion of milestones, invoices will be submitted to ConnectWerx for review with DOE and payment release. Incremental payments to the performer will be made in accordance with the established milestones and deliverables as written (and approved by DOE POR) in the B2B agreements. The payment schedule for each project is to be determined based on negotiated milestones and deliverables. Please be aware, additional documentation and support for expenditures may be requested as determined by DOE.

FAQ (continued)

Q: Are 2- and 4- year colleges and universities eligible to apply?

A: Though an open solicitation, this funding opportunity isn't focused on educational institutions. The ISEED Collaborative is intended to provide technical and financial assistance to smaller, less resourced training organizations. However, there are other DOE programs seeking applications from institutions of higher education. Below are links to a few recent funding opportunities that are seeking proposals from colleges and universities:

- [New Opportunity Funds Non-Profit Educational Organizations' Efforts to Grow a Diverse Clean Energy Workforce | Department of Energy](#)
- [American-Made EnergyTech University Prize \(EnergyTech UP\) www.energy.gov/technologytransitions/energytech-university-prize](http://www.energy.gov/technologytransitions/energytech-university-prize)
- [Funding Notice: Nearly \\$2 Million Available to Support U.S. Offshore Wind Workforce Readiness Programs | Department of Energy](#)

Q: May 2- and 4- year colleges and universities participate as subcontractors to the primary applicant?

A: The primary applicant may work with subcontractors of its choosing as long as they do not belong to one of the excluded categories described in the Eligibility section. Applicants should list subcontractors in its application and describe their respective scopes of work.

Q: What type of technical assistance is available from the Steering Committee?

A: ORNL, NREL, and NETL will serve as the ISEED Collaborative Steering Committee, assisting IEDO in convening, managing, and supporting selected collaborative members. Each Collaborative member will work closely with a liaison from the Steering Committee. The Steering Committee will also offer resources to help members scale and implement their proposed programs. These resources include comprehensive technical expertise and training, workforce development guidance, and stakeholder engagement..