Welcome to the Clean Energy and Manufacturing Workforce Training and Technical Assistance Awards (IAC Program) Objective Strategic Session (OSS)

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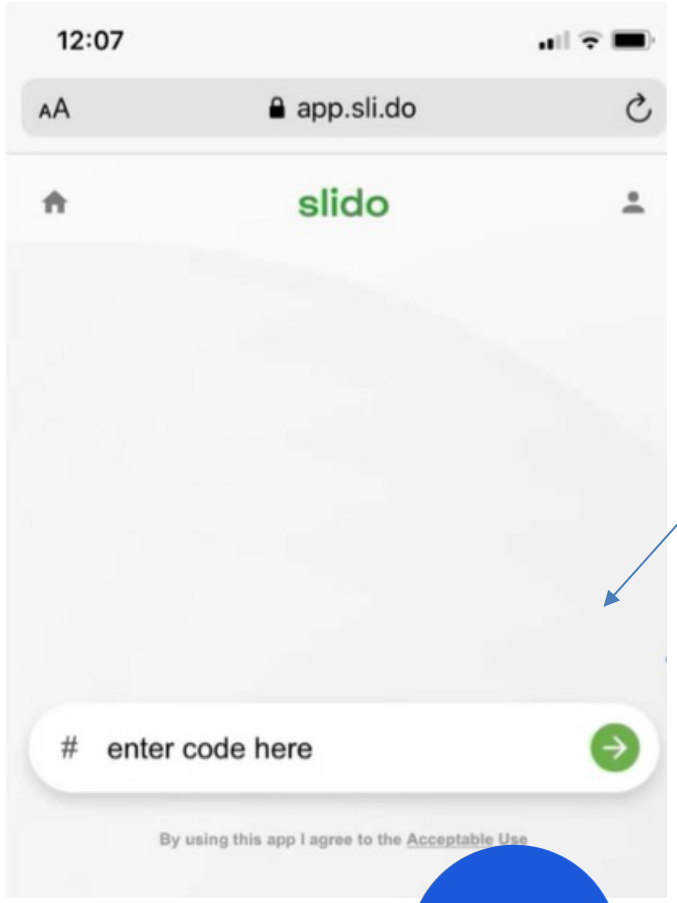

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Clean Energy and Manufacturing Workforce Training and Technical Assistance Awards

Creating new industrial training and assessment centers, as part of the DOE Industrial Assessment Center (IAC) network expansion

February - March 2024

Welcome!

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Please note: Because of the competitive nature of DOE's grant process, Office of Manufacturing and Energy Supply Chains (MESC) staff ***can share general information about this opportunity but cannot answer questions about a specific project concept or pitch.*** *Please refrain from asking questions about specific project idea(s). We may decline to answer as needed. Additionally, we will not collect or accept materials during this webinar or via email that are marked or otherwise identified as confidential, proprietary, or business sensitive.*

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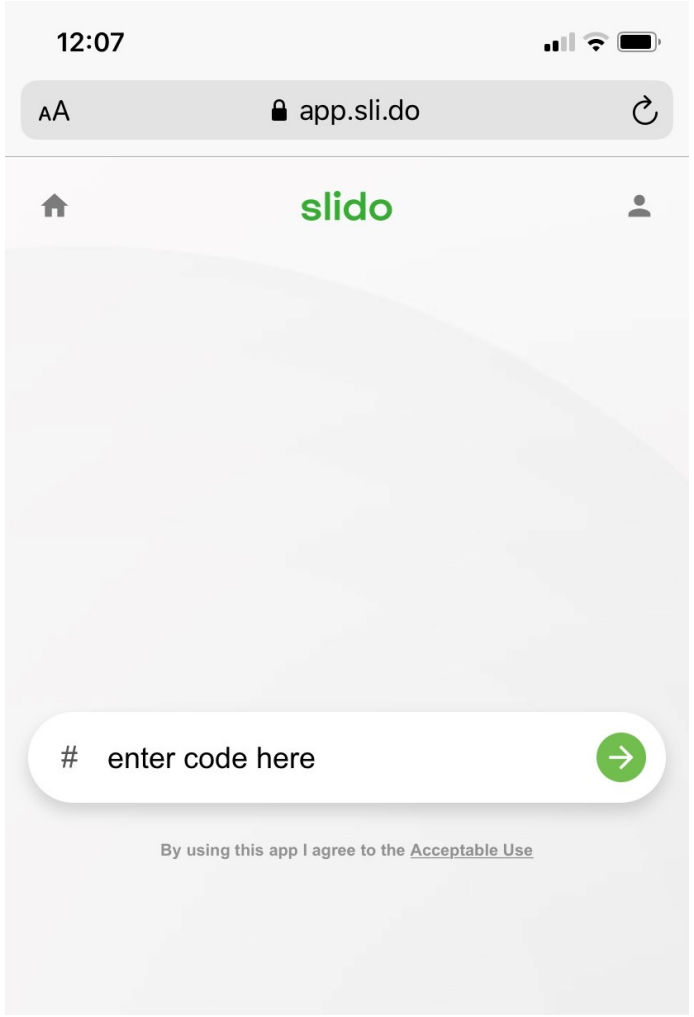

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Agenda

- Overview of MESC and the Industrial Assessment Center program
- Walk through the Solicitation Overview and Solicitation Objectives
- Discuss application requirements and how to apply for this opportunity
- Q&A

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MESC is focused on the "how" of the energy transition

PURPOSE

To **deliver the *how* of the energy transition** quickly, securely, and equitably

MISSION

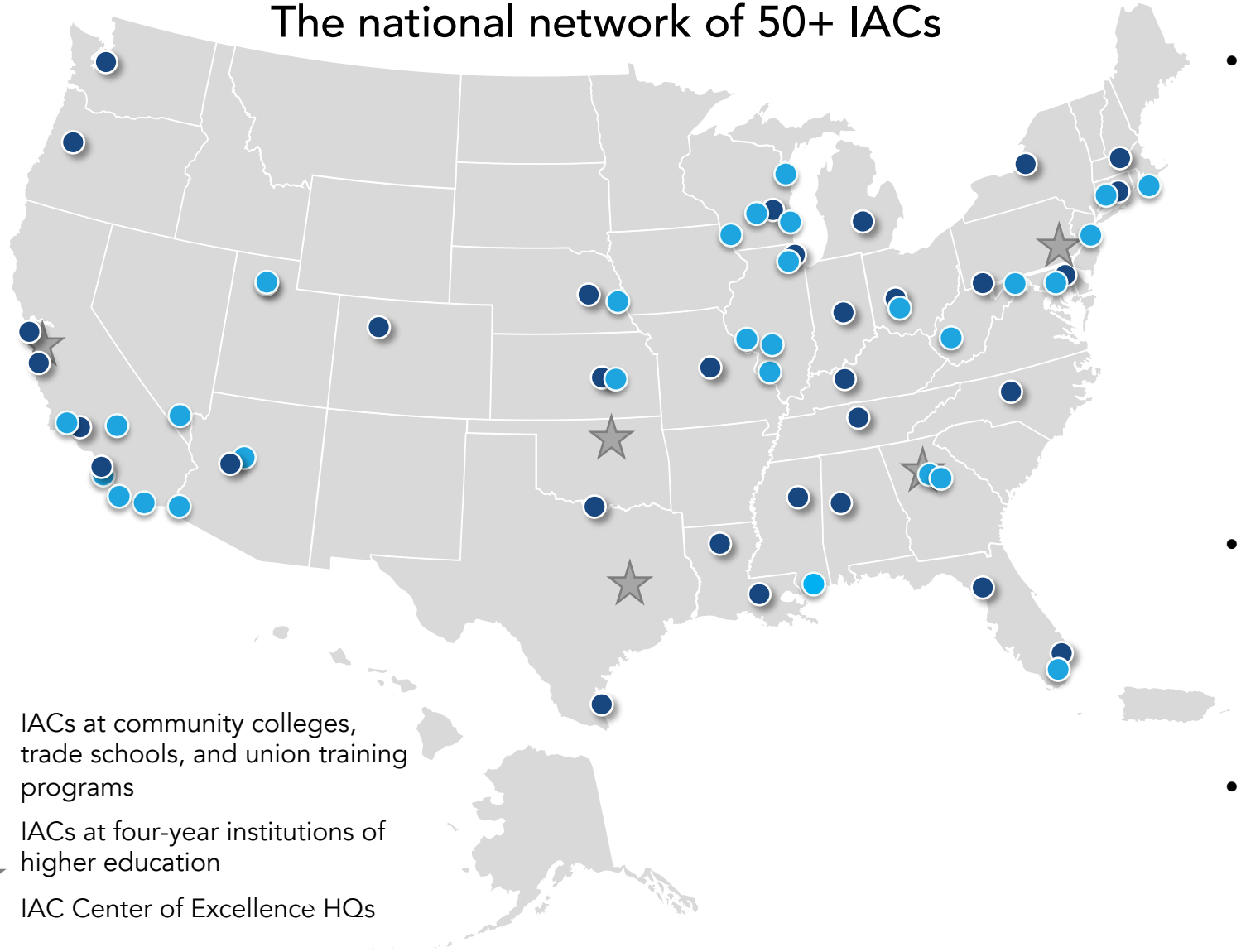
The Office of Manufacturing and Energy Supply Chains (MESC) serves as the frontline of clean energy capital deployment to accelerate America's transition to a resilient, equitable energy future via $20B+ of direct investment in manufacturing capacity and workforce development.

VISION

To **eliminate vulnerabilities in US Clean Energy supply chains**, while driving unparalleled social, economic, and environmental impact through our programs & awards

industrial workforce and supporting smaller manufacturers

The national network of 50+ IACs



- IACs are educational institution-based programs with a two-part mission: 1) providing hands-on training for high-quality manufacturing and clean energy roles while 2) strengthening small and mid-sized manufacturers (SMMs) with hands-on energy audits, incumbent worker training programs, and other services

- IACs are hosted at universities, community colleges, technical and trade schools, and union training programs nationwide.

- The IAC Program also provides grants to SMMs to implement energy-saving and productivity-enhancing upgrades recommended by IACs

Industrial Assessment Center (IAC) Network Expansion

Round 1 (2023)

- Established the first IACs at community and technical colleges and union training programs. Read more about the selected projects here
- Selectees received ~$32M total
- Examples of Round 1 application strengths include:
  - Attentive to job quality (e.g., unionization rates, wage targets)
  - Training for crucial clean energy industries, in partnership with local employers
  - Clear targets for number and types of participants served
  - Efforts to support participants facing barriers to employment (e.g., stipends, targeted

Round 2 (Now Open!)

- **Up to $24 million to continue to expand the IAC network** to eligible training institutions
- **Streamlined application and more structured guidance on required IAC program components,** in response to feedback from last round
- **New track for Planning and Capacity-Building applicants,** to prepare for creation of an IAC through an award in 1-2 years
- **Cost share is generally not required**

Round 2 Solicitation Objectives

Proposed projects should fulfill three core project objectives:

1. **Train for high-quality, in-demand jobs,** in partnership with employers and industry

2. **Provide technical assistance or training for local manufacturers** (or develop plans to provide technical assistance in a future project, for Track 1)

3. **Deliver meaningful community benefits,** including supporting participants to secure high-quality jobs, improving access for those facing barriers to employment, and creating benefits for historically disadvantaged communities aligned with the Justice40 initiative

Objective 1: Train for High-Quality Jobs

Project proposals should:

- **Describe the specific in-demand clean energy and manufacturing careers** for which the project plans to train, including evidence of employer demand (see table for examples)
- **Describe the quality of the proposed jobs,** and how training and employer partners will work together to ensure the resulting jobs are high-quality (i.e., good-paying, safe, create career progression, provide opportunities for worker representation, and other Good Job Principles)
- **Describe at least 1-2 workforce development strategies** that the proposed project will utilize. See Table 4 in the Solicitation Overview for examples of effective workforce development strategies that projects could use.

Each Track's project proposal template contains structured questions to help applicants address each of these required elements – using the template is not mandatory but is encouraged!

Example Career Pathways of Focus

Career Cluster	Example Job Titles (not exhaustive)
Facility Energy Management Roles	• Energy Auditor • Facility Automation Technician • Facility Energy Manager • HVAC Technician • (Industrial) Cybersecurity Technician • (Industrial) Electrician • Insulator • Plumber/Pipefitter
Advanced Manufacturing Roles	• Digital Transformation Manager • Electromechanical Technician • Mechatronics Technician • Machinist/Computer Numerical Control (CNC) Machinist/Programmer • Industrial Automation Technician • Industrial Maintenance Technician • Industrial Mechanic/Repairer • Millwright • Robotics Technician
Other Growing Clean Energy Roles Relevant to SMM Energy Performance	• Electricians • Welders and other metalworkers trained for clean energy fields like wind and nuclear • Other high-growth clean energy manufacturing and operations roles (e.g., wind turbine service technicians) • Business or management-track training

Objective 2: Assist Local Manufacturers

- **IACs are intended to help SMMs** with no- or low-cost energy assessments or similar services to help them reduce energy waste, save money, adopt emerging technologies, and/or improve productivity.
- **Track 1:** identify an assistance option(s) to explore further
- **Track 2 and 3:** propose a concrete plan to serve SMMs through training, assessments, or other useful services, including a target for number of SMMs reached
- **We welcome creative proposals for SMM assistance** (e.g., industrial process redesign, on-site clean power, increases in clean energy manufacturing capabilities, waste management)
- **We welcome partnerships with other manufacturer assistance programs**

SMM assistance options include:

- Traditional energy assessment
- Novel productivity-enhancing assessments (e.g., on job quality and design, worker safety, waste reduction, or cybersecurity)
- Short-term credentials for incumbent workers with capstone projects
- No-cost or low-cost testing, adjusting, and maintenance services
- Industrial apprenticeships with energy efficiency components
- *Other options that meet SMM needs and utilize training participants' skillsets*

Objective 3: Deliver Community Benefits

Community and Labor Engagement: How will this project engage with employers, Tribes, community-based organizations, and labor organizations? What is the expected outcome of each partnership?

Investing in Job Quality and a Skilled Workforce: How will the project help participants complete training programs, obtain credentials, and secure high-quality jobs? What preexisting job quality commitments do employer partners bring to the table?

Diversity, Equity, Inclusion, and Accessibility: How will this project recruit and support participants facing barriers to employment (e.g., via pre-training readiness programs)? What opportunities will the project create for diverse-owned organizations to participate?

Justice40 Initiative: What disadvantaged communities will this project serve (see the CEJST tool)? What benefits will this project create for these communities, such as new jobs and training opportunities, energy savings, or environmental health improvements?

Each Track's project proposal template contains structured questions to help applicants address each of these required elements

Diverse training programs are encouraged to apply, and funds can support many project needs

Example training pathways:

- ✓ Associate degrees in advanced manufacturing and energy
- ✓ Internships connected to industry-recognized credentials
- ✓ Registered Apprenticeships and related readiness programs
- ✓ Short-term, stackable credentials for incumbent workers

Example funding uses:

- ✓ Financial supports for participants
- ✓ Instructor pay
- ✓ Training equipment
- ✓ Outreach and recruitment partnerships
- ✓ Grants management support

Application Tracks

Track	Anticipated Award Size & Duration	Example Projects (not exhaustive)
Track 1: IAC Planning and Capacity-Building. Smaller awards for workforce programs new to the industrial sector to pilot training, develop new employer partnerships, and learn about IACs	$100K – $200K 12 months	• **Build a new employer-educator partnership** between a community college and its employer partners, aiming to add a hands-on training element to a new manufacturing technician training program. • **Plan new training modules.** A trade school and union local create new modules in a Registered Apprenticeship to provide stackable energy management, smart manufacturing, and machine maintenance certifications for journey-persons, in part to support DOE-backed manufacturing facilities.
Track 2: IAC Execution and Scale. Larger awards for an existing career training program to become an IAC. Selected projects will serve SMMs with no-cost technical assistance while expanding their workforce development supports and hands-on career training	$500K – $2M 36 months	• **Create a college-based credential program for incumbent workers**. A technical college and its employer advisory board apply to become an IAC that provides training on smart manufacturing equipment for incumbent workers, culminating in participants providing upgrade recommendations at employers' plants. • **Expand job training programs at a set of manufacturing locations.** A union local represents workers at a large manufacturer with smaller suppliers, all of whom face critical shortages in Mechatronics technicians. The labor-management committee applies to create an IAC that builds a Mechatronics training program and places trainees in internships at suppliers.
Track 3: IAC Consortia. Larger awards for an umbrella organization to establish and support 5-15 new IACs within their member network. At least 80% of funds must go to	$4M –$7M 36 months	• **Expand industrial Registered Apprenticeships nationally.** An apprenticeship intermediary partners with a union and industry group to build a consortium of IACs composed of locals and employer partners. • **Create a statewide industrial training program in a state with new federal infrastructure**

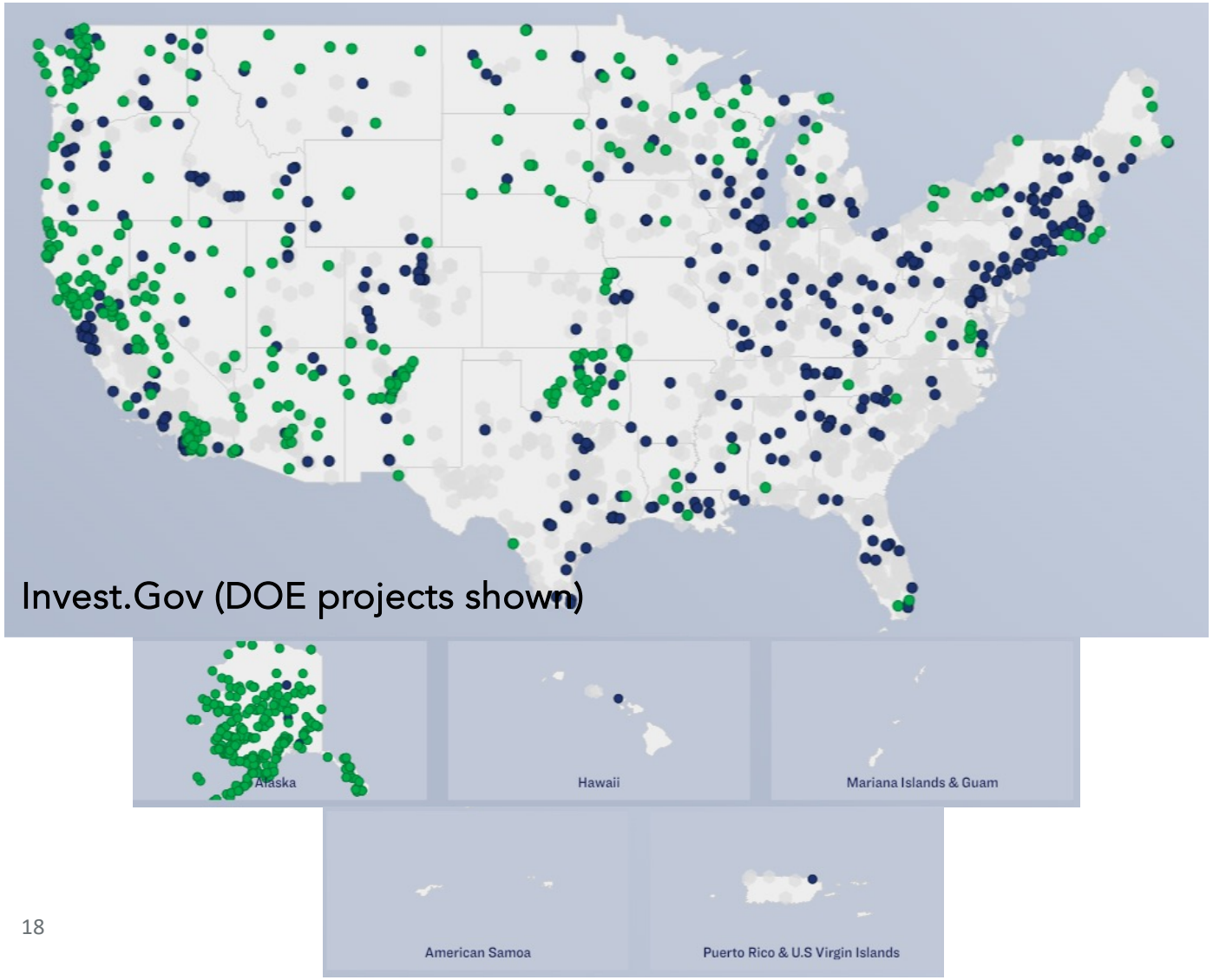
Eligibility: Prime Recipients

- **Community colleges and college systems.** Minority Serving Institutions are encouraged to apply.
- **Trade schools.** Trade schools may include entities that are nested within larger institutions that grant bachelor's or graduate degrees (e.g., extension schools).
- **Union Training Programs** (including union-affiliated Registered Apprenticeships, pre-apprenticeships, and labor-management training programs)
- **Other apprenticeship and internship training programs at entities not listed above,** where students work with or for industries, manufacturers, or energy service providers. *These applicants alone must provide cost share.*
- *Eligible for Track 3 (Consortia) only:* **Entities that represent a network or association of IAC-eligible training entities, or entities that can effectively distribute subawards to IAC-eligible entities,** such as state or national associations of community colleges; national union and labor-management training programs; corporations with workforce and SMM partners (e.g., supply chain partners); federally funded R&D centers; workforce and manufacturing non-profits; workforce development boards; credentialling bodies; apprenticeship intermediaries; community foundations; or other workforce intermediary organizations.

Partnerships are encouraged

1. **Employer partners,** including corporations; small, medium, and large manufacturers; energy service providers; or engineering firms
2. **Other workforce development and career training institutions** (i.e., a college could apply with a union as a subrecipient or partner, or a union could apply with a college subrecipient or partner)
3. **Workforce system institutions** (e.g., workforce development boards)
4. **Community-based organizations**
5. **State, local, and territorial governmental entities,** including local education agencies and high schools
6. **Indian tribes**
7. **Four-year colleges and universities**, including Tribal colleges and universities and other Minority-Serving Institutions
8. **Federally funded R&D centers,** both DOE-sponsored and non-DOE-sponsored

Applicants are encouraged to align their projects with other Investing in America projects



Invest.Gov (DOE projects shown)

- **The federal government is making billions of dollars of manufacturing investments** through the Bipartisan Infrastructure Law, Inflation Reduction Act, and CHIPS and Science Act

- **Workforce, advanced manufacturing, and energy performance are key considerations** for many of these projects

- **DOE welcomes IAC applications that support the success of these projects** and other clustered private investments, such as by helping to build a workforce with SMM-relevant skills in these emerging clusters (see Invest.Gov for details)

- **Applicants can also explain how their projects build on or complement** other workforce and SMM-relevant programs (e.g.

Application review criteria and weight

1. Uses best practices in workforce development (40%)
   i. **Trains for in-demand jobs and explicitly attends to job quality (15%).** The project proposes to train for roles that are (A) in demand, (B) connected to manufacturing and/or clean energy, and (C) have markers of quality jobs.
   ii. **Includes employer partners and job placement (15%).** The project is likely to deliver training that leads to industry-recognized credentials, job placement, and retention.
   iii. **Employs effective workforce development strategies (10%).** The project identifies a focal workforce development strategy and demonstrates that the project can utilize that workforce development strategy effectively.
2. **Serves small and midsized manufacturers (20%).** The project proposes sufficient services to help SMMs save energy, reduce waste, reduce emissions, or improve productivity.
3. **Provides community benefits (20%).** The project proposes to create specific and meaningful community benefits commensurate with the project scope.
4. **Includes a robust project management approach, team, and budget (20%).** The applicant proposes an effective use of existing resources and reasonable budget to complete the project, and includes sustainability plans as applicable.

Tips for a strong application

- **Follow the template guidance** as closely as makes sense for your project – this will help reviewers better evaluate your project.
- **Ensure that your application addresses all three solicitation objectives,** as outlined in the Solicitation Overview and in slides 8-11 here).
- **Utilize the optional Concept Paper opportunity.** DOE will provide brief feedback noting if the proposed concept is missing any key components, which can inform a Full Application (see next slide).
- **Clearly communicate the demand for the identified jobs and how your project fills a gap in that job training landscape.** For instance, applicants could:
  - Review the current map of IACs (slide 6) and note if your proposed project could fill a geographic gap in the IAC network.
  - Review locations of DOE and other federal clean energy and manufacturing investments (e.g., via invest.gov, as shown on slide 16) and highlight overlap between your project's location or training focus and the workforce needs of federally-supported industrial projects.
- **Don't wait to submit until the last minute!**

Application Requirements & How to Apply

Optional Concept Paper

Deadline: March 28th, 5pm ET Requirements:

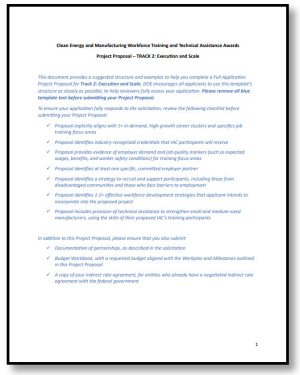
- Complete the Concept Paper form via Submittable (link)
- Form includes four questions about your project concept
- All those who submit on-time Concept Papers will receive brief structured feedback by mid-April

Required Full Application

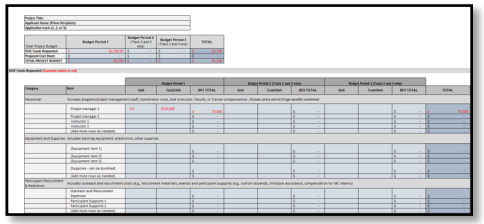
Deadline: May 16th at 5pm ET. Requirements:

1. Complete the Full Application Submittable, including answering all required questions
2. Within Submittable, upload:
   - Project Proposal, using the track-specific template provided
   - Budget, using the Budget Workbook provided
   - Partnership documentation and letters of support

Project Proposal



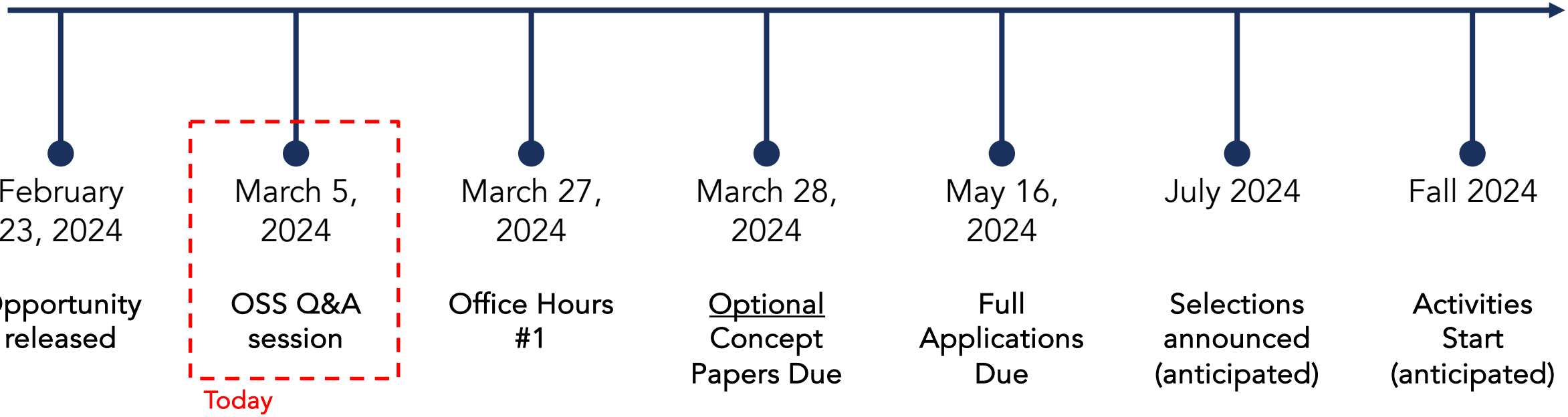
Budget



Letters of Support

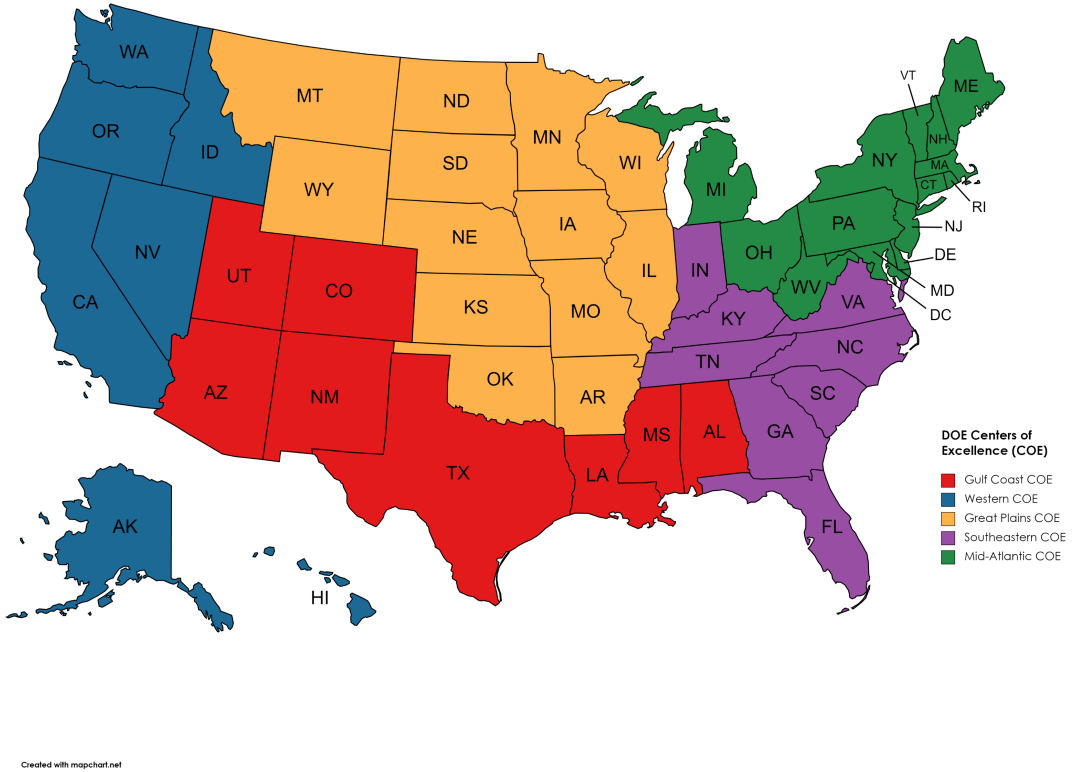
Note: We anticipate that applicants will *not* need to submit additional documents generally required for a Funding Opportunity Announcement (e.g., SF-424, a separate Statement of Project Objectives (SOPO), resumes)

Timeline and Key Deadlines



IAC Regional Centers of Excellence are available to help with your application

Contact your regional IAC Center of Excellence to learn more about the IAC program, receive brief feedback on your project concept, and get connected with potential partners in your area



Center of Excellence	Contact information
Great Plains	Oklahoma State University Dr. Hitesh Vora (hitesh.vora@okstate.edu)
Gulf Coast	Texas A&M University Dr. Bryan Rasmussen (brasmussen@tamu.edu)
Mid-Atlantic	Lehigh University Prof. Alparslan Oztekin (inluiac@lehigh.edu)
Southeastern	Georgia Tech University Dr. Comas Haynes (comas.haynes@gtri.gatech.edu)
Western	San Francisco State University Dr. Ahmad Ganji (iac@sfsu.edu)

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Questions?

Email: info@energywerx.org

Thank you!

IAC Expansion Network Round One Selectees

- Arizona Western College
- Atlanta Technical College
- BridgeValley Community & Technical College
- Community College Of Rhode Island
- Illinois Community College Board
- Imperial Valley Community College District
- Insulation Industry International Apprentice And Training Fund
- International Training Institute for the Sheet Metal and Air Conditioning Industry
- Kern Community College District
- Miracosta Community College Technology Career Institute
- Mississippi Gulf Coast Community College
- Sinclair Community College
- Southwest Wisconsin Technical College
- Tri-Counties Sheet Metal Workers JATC
- Weber State University
- Wichita State University Campus Of Applied Sciences And Technology

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Helpful Links

Resource	Link
Read the Opportunity Announcement (including FAQs) and register for information session(s)	DOE Clean Energy and Manufacturing Workforce Training and Technical Assistance Awards (IAC Program) (energywerx.org)
Apply via Submittable	ENERGYWERX Submission Manager - DOE Clean Energy and Manufacturing Workforce Training and Technical Assistance Awards (IAC Program) (submittable.com)
DOE Press Release on this opportunity	Biden-Harris Administration Announces $24 Million to Expand America's Clean Energy Workforce and Enhance Manufacturing Efficiency | Department of Energy
Previous IAC Expansion selectees	Industrial Assessment Centers (IAC) Expansion and Building Training and Assessment Centers (BTAC) Selectees | Department of Energy
IAC Program	Industrial Assessment Centers (IACs) | Department of Energy