U.S. Department of ENERGY | Office of Technology Transitions

Partnership Intermediary Agreement – Fiscal Year 2024 Annual Report

January 17, 2025

Partnership Intermediary Agreement – FY24 Annual Report

This Annual Summary Report provides a snapshot of the Partnership Intermediary Agreement (PIA) Pilot effort in the 2024 Fiscal Year (FY24) for the U.S. Department of Energy (DOE). As of September 30th, 2024, the Pilot portfolio size was 46 PIA Project Orders (PPOs) – including both active and in development PPOs – representing over a 3X growth from FY23.

Key FY24 successes for the PIA Pilot included receiving more than 2,000 applications, with applicants representing all fifty U.S. states and **nearly 60% reporting no prior DOE engagement**. From these applications, 409 entities stand to receive direct or in-kind support, 198 of which have completed negotiations and signed business-to-business (B2B) agreements with the partnership intermediary EnergyWerx. In total, 97% of the 409 PIA award beneficiaries identified as small or medium-sized manufacturers, small businesses, or other non-traditional partners.[1] This success was demonstrated with PIA projects across 19 participating DOE program offices, with many leveraging the PIA to expand participation, streamline access, and build greater geographical engagement within their financial assistance portfolios. In total, PIA PPOs are estimated to support over $13B in DOE financial assistance-based programmatic activity. The 46 projects in FY24 totaled to a portfolio size of $342M and covered a variety of tasks eligible for the PIA Pilot, with the majority focused on lowering barriers for domestic small businesses, academic institutions, and other non-traditional partners to participate in DOE opportunities and initiatives.

Within the FY24 Annual Summary Report, the DOE Office of Technology Transitions (OTT) provides a summary of the DOE PIA Pilot Portfolio evolution, including project status, outcomes, lessons learned, and notable PIA projects as of September 30th, 2024. OTT looks to build on the successes of FY24 discussed in this report and will continue to evaluate the PIA's impact and engage new PPOs across DOE in FY25.

Table 1: Comparison of FY23 and FY24 PIA Portfolio Metrics

	Sep-23	Sep-24	Year-over-Year Increase
Total # of Projects	14	46	3.3X
Total PPO Funds	$135.3M	$342.3M	2.5X
Participating Program Offices	10	19	1.9X
# of Applications Received	253	2,237	8.8X
% of "New to DOE" Applicants*	45%	58%	
# of PIA Award Beneficiaries	43	409†	9.6X
% of "Non-Traditional" Award Beneficiaries	100%	97%	

* Adjusted for applications where prior DOE experience was optional and reported. Excludes 115 applications (in FY24) for VO1 and VO4 Recipients which required previous DOE funding to be eligible and 69 applications to MESC ITAC Implementation Grants (in FY23) for which previous DOE experience was not reported.

† 429 selections were announced, but 20 B2B awards had been declined as of September 30th, 2024, for a total of 409 Awards signed or pending negotiation.

[1] 3% of the entities are National Laboratories, which can apply through the PIA for specific opportunities, but if selected, contracting does not go through the PI.

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1. Background

A Partnership Intermediary Agreement (PIA) is an agreement between the Federal government and a non-Federal Partnership Intermediary (PI). The PI role is to increase outreach and engagement with small business firms, institutes of higher education, and non-traditional partners. Title 15 U.S.C 3715, Use of Partnership Intermediaries, provides the authority to enter into agreements with PIs. Since their introduction in the early 1990s, PIAs have evolved from agreements primarily focused on intellectual property (IP) management and technology scouting, to agreements covering a broad spectrum of activities.

PIAs are a previously underutilized tool within the U.S. Department of Energy (DOE). In August 2022, the DOE Chief of Staff established a PIA Working Group to explore the possibility of leveraging PIAs within DOE. As a result, that November, DOE released a Broad Agency Announcement seeking PIs.[2] In April 2023, DOE's Chief Commercialization Officer, the Director of the Office of Technology Transitions (OTT), was designated as the Director of a Federal Laboratory (pursuant to 15 U.S.C 3715), and DefenseWerx was selected as a PI for a two-year pilot under EnergyWerx trademark. OTT has since managed the PIA with EnergyWerx, and due to the significant growth of Departmental PIA Project Orders (PPOs), has exercised the remaining option years through April 2028. Additionally, to ensure adequate PI bandwidth to meet project demand, in July 2024, OTT entered into PIAs with two additional PIs, RTI International (operating as TechWerx) and Advanced Technology International (operating as ConnectWerx).

OTT, in collaboration with the Golden Field Office (GFO), the Office of the General Counsel (GC), the Office of Management (MA), and the Office of the Chief Financial Officer (CF) provides guidance and support on the opportunities and limitations of the PIA. The use of PIAs is expanding throughout the federal government to increase outreach to, and engagement with, non-traditional partners in ways that may not be possible using traditional constructs. PIAs are complementary and are not intended to replace traditional financial assistance or acquisition vehicles. PIAs are best utilized when traditional mechanisms do not provide adequate outreach or engagement, or when providing additional flexibility and reducing barriers to entry is imperative. For a comprehensive understanding of PIAs, please refer to the "U.S. Department of Energy Partnership Intermediary Interim Pilot Guide."[3] This guide offers detailed information regarding the governance and use of a PIA under the Department's Partnership Intermediary Pilot, aimed to benefit stakeholders across the DOE. An update to the PIA Pilot Guide is expected later in Fiscal Year 2025 (FY25).

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[2] Broad Agency Announcement for Partnership Intermediaries to Support the Development, Scaling, Commercialization, and Deployment of DOE Technologies; U.S. Department of Energy; November 30, 2022; https://www.energy.gov/technologytransitions/articles/us-department-energys-office-technology-transitions-releases-broad

[3] Partnership Intermediary Interim Pilot Guide; U.S. Department of Energy; August 20, 2023; https://www.energy.gov/sites/default/files/2023-08/PIA%20Guide%20Aug%202023_0.pdf

2. The DOE FY24 PIA Portfolio

In the first full fiscal year of the PIA Pilot, the portfolio saw substantial growth including to new program offices and Lines of Work (LOWs). Project orders more than tripled and project funding increased by 2.5X. To respond to this rapid growth, OTT signed agreements with two new PIs, ConnectWerx and TechWerx, to expand solution offerings and increase capacity to meet widespread demand from across the Department. In addition to growth in PPOs, projects also moved expeditiously through each stage of project execution, as defined in Figure 1, demonstrating the PIA's ability to offer efficiency while projects remain in compliance with statutory and program requirements.

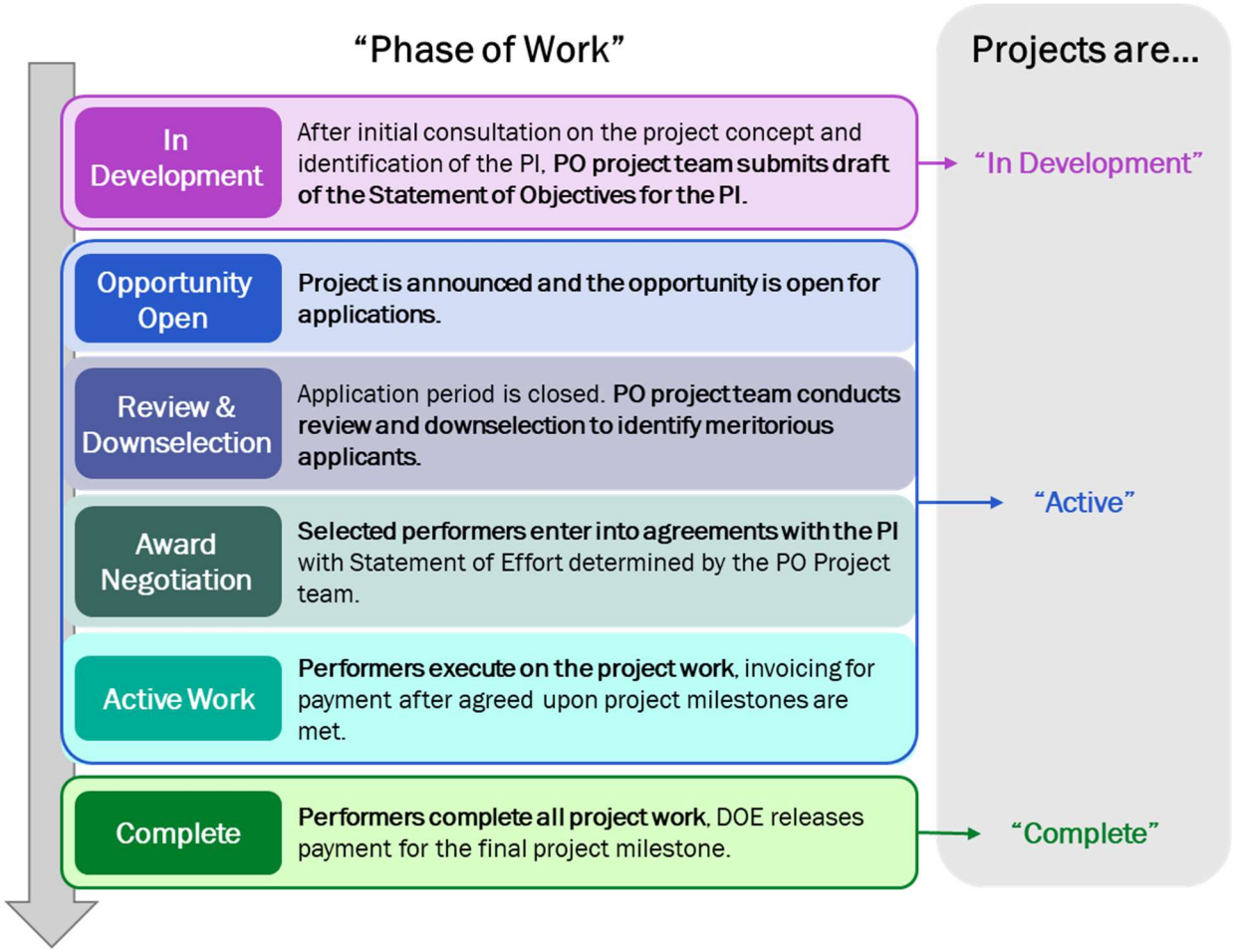


Figure 1: Defining Phases of Work for PIA Projects

2.1. PIA Project Orders (PPOs)

In FY24, the total number of PPOs in the Portfolio tripled from 14 to 46. As shown in Figure 2, there has been a steady increase in the number of projects, with interest growing through formal information sessions offered to DOE program offices in Q1 & Q2 FY24, as well as through informal communication channels. Additionally, projects have moved to later stages of project execution, including engaging selected performers in active work. Of the projects, 46% (21 projects) have

Business to Business (B2B) agreements signed with PIs and performers engaged in project work ("active work") and 4% (two projects) are complete. Other projects are nearing the end of the first "option-year" for performer work, and due to quality of selected performers, intend to continue the project. Of the 31 projects that made selections in FY24, 26 (84%) selected more than one performer. Of the projects with multiple performers (and sometimes multiple rounds of performers), eight projects have at least one performer that has completed work, with a total of 60 performers having completed their project work as of September 30th, 2024.

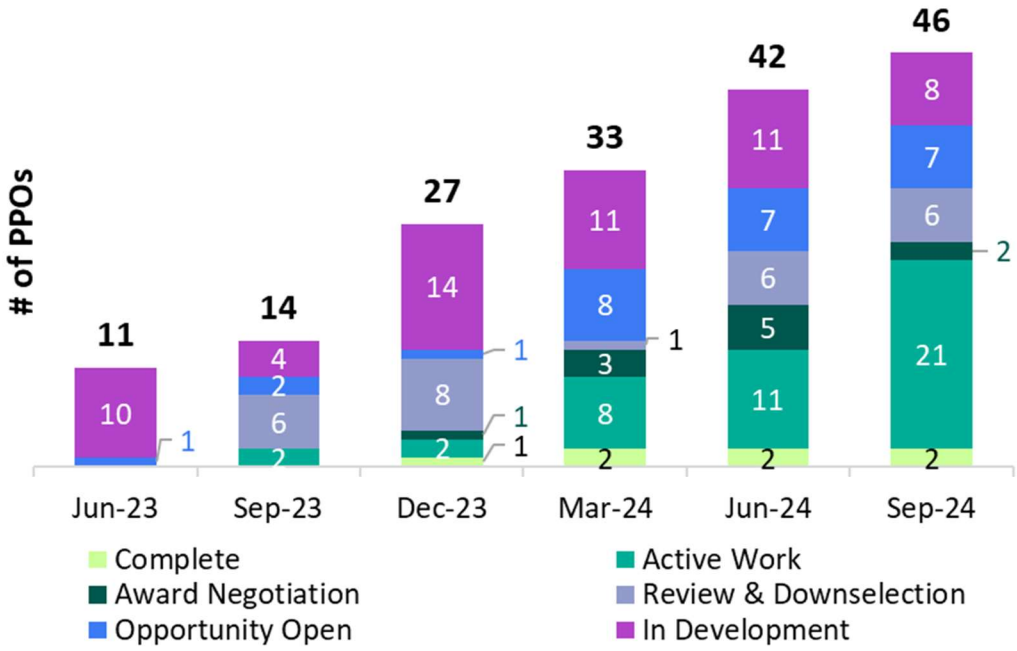


Figure 2: PIA Portfolio PPOs in FY24 by Phase of Work

2.2. PPO Funding

The increase in PPOs directly resulted in the steady growth of PIA portfolio funds, as shown below in Figure 3. From September 2023 to September 2024, the total portfolio funds more than doubled (2.5X) from $135 million to over $340 million. And while the PIA Pilot was initialized to support the Bipartisan Infrastructure Law (BIL) Technology Commercialization Funds (TCF) programs, with 64% of the initial PPOs and 90% of total funds from BIL, there has been a steady increase in projects funded from other sources such as Annual Appropriations and the Inflation Reduction Act (IRA). The nearly 40% of current PPOs being funded from Annual Appropriations is noteworthy, because it indicates that, even in the absence of specific legislative appropriation increases like BIL and IRA, the PIA is a useful mechanism to support mainstay DOE programmatic activity.

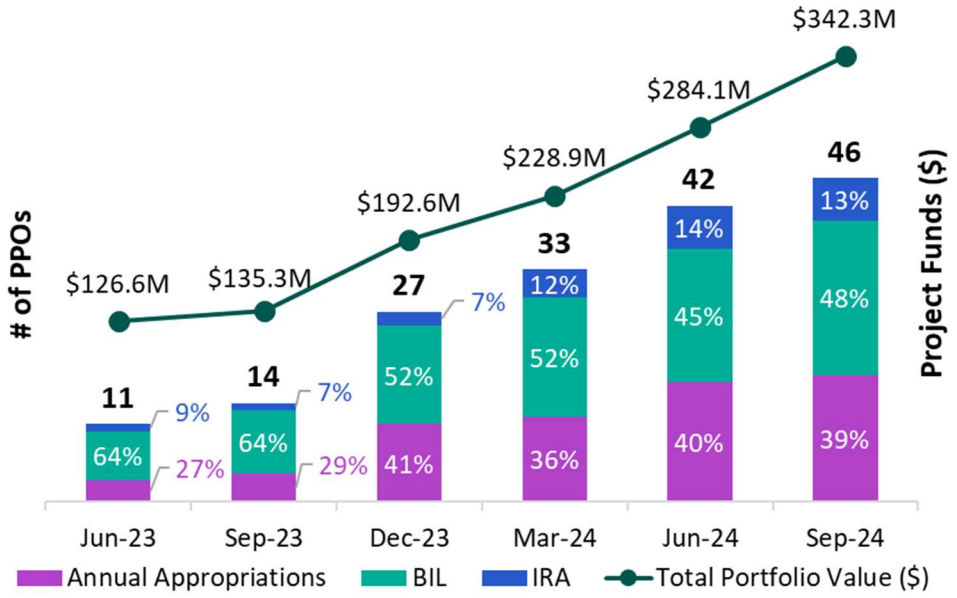


Figure 3: PIA Portfolio PPOs in FY24 by Funding Source

2.3. PIA Awards

Throughout FY24, a significant number of projects have moved from PIA project development to active work stages, demonstrating the ability of the PIA to award competitive funding efficiently to its recipients. In September 2023, one project was in the "Active Work" phase with two awarded performers who had signed B2B agreements with the PI.[4] At the end of FY24, that first PPO is complete, 21 additional PPOs have performers with business-to-business (B2B) agreements signed and engaged in Active Work and two more PPOs were negotiating B2B agreements. The number of entities selected for PIA awards – which includes those selected to receive monetary awards via B2B agreements as well as non-monetary awards via in-kind support – is shown in Figure 4, and Table 2 below provides definitions for each award type as well as the stages of the B2B agreement negotiation status.

Table 2: PIA Award Definitions: National Laboratory Recipients, In-Kind Beneficiaries and B2B Agreement Stages

B2B Selection: Pending Negotiation	Selection for monetary award is announced.
B2B Award: Under Negotiation	B2B award negotiation is ongoing.
B2B Award: Agreement Signed	B2B agreement is signed by PI and performers. Project work begins.
In-Kind Beneficiaries	A beneficiary of non-monetary, in-kind support provided by a B2B awardee (e.g., a voucher recipient).
National Laboratories	National Laboratories can apply through the PIA for specific opportunities, but if selected contracting does not go through the PI.

[4] The second project shown as "active" in Figure 2 engaged in active work with the PI, but did not enter into B2B agreements with external performers.

As of September 30th, 2024, 409 entities stand to receive direct or in-kind support across 289 B2B awards with EnergyWerx (198 signed, 91 pending or in ongoing negotiation) and 13 awards with six National Laboratories outside of the PIA. Overall, 107 of these entities – also referred to as "in-kind beneficiaries" – were competitively selected through the PIA Vouchers Program to receive support and services from "provider" organizations.

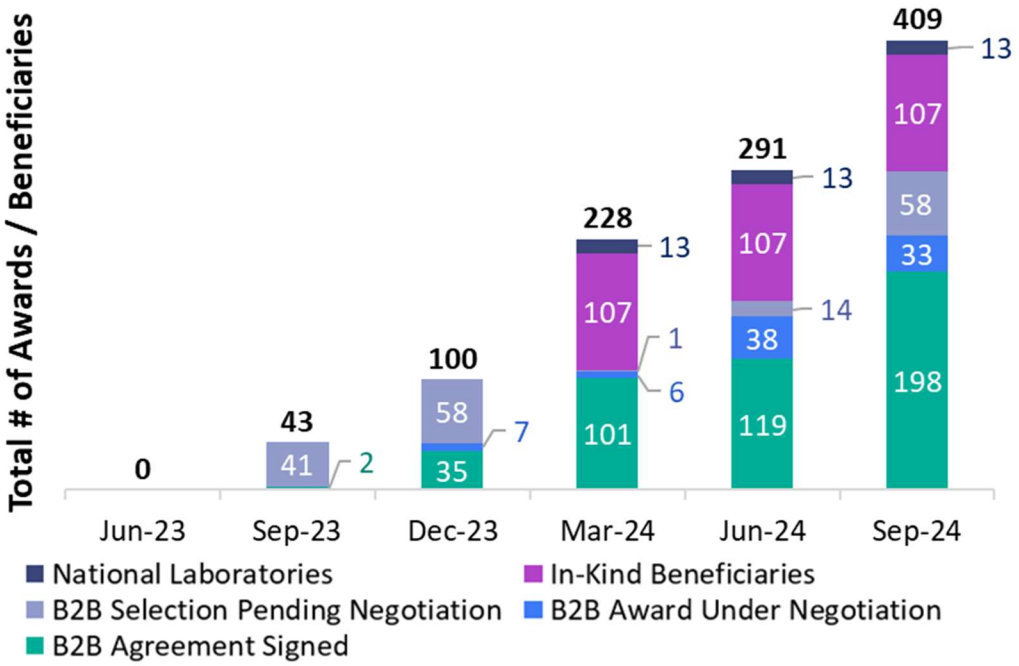


Figure 4: PIA B2B Awards, National Laboratory PIA Selections, and In-Kind Support Beneficiaries in FY24

The PIA is a flexible funding mechanism which can support a range of individual award sizes. One advantage is the ability to efficiently handle small awards (less than $1,000,000) to a large number of entities, which increases the impact of the funds while reducing financial risk. Of PIA awards[5] announced during FY24, more than half (52%) were valued at $100,000 or less (as shown below in Figure 5). This was driven by the two largest programs by number of awardees, the PIA Vouchers Program and Industrial Training and Assessment Center (ITAC) Implementation Grants, which had a median award size of $50,000 and $122,000 respectively. For additional information, see the project spotlights on the ITAC Implementation Grants and PIA Vouchers Program later in this report, and a full list of awards in Appendix C: PIA Awards through September 30, 2024.

[5] Because one B2B Awardee or National Laboratory can provide in-kind support to multiple beneficiaries, the number of awards for these projects (i.e., Vouchers) is equal to the number of in-kind beneficiaries. For all other projects the number of PIA awards is equal to the number of B2B agreements sent to selectees (not to include awards that have been announced pending negotiation). Specifically, the total number of awards (288) is equal to non-Voucher B2B awardees (181) plus the in-kind support beneficiaries of the Voucher Program (107) partnered with National or non-National Laboratory Voucher Providers.

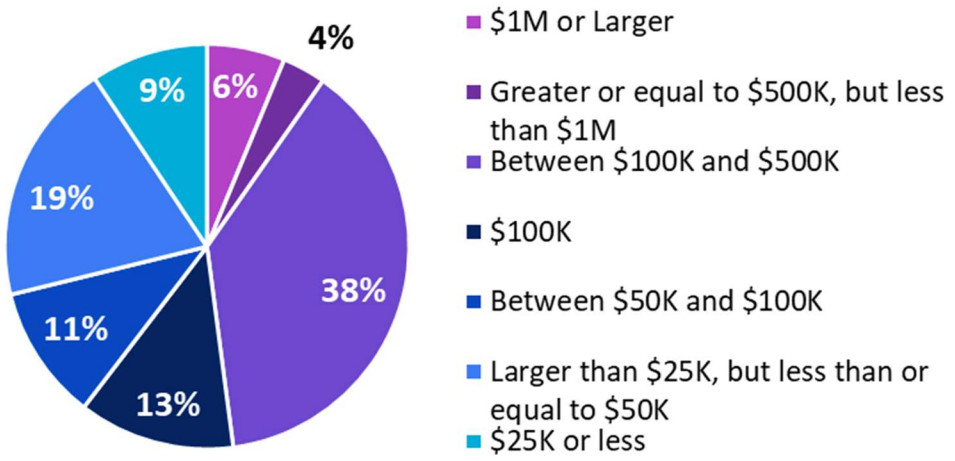


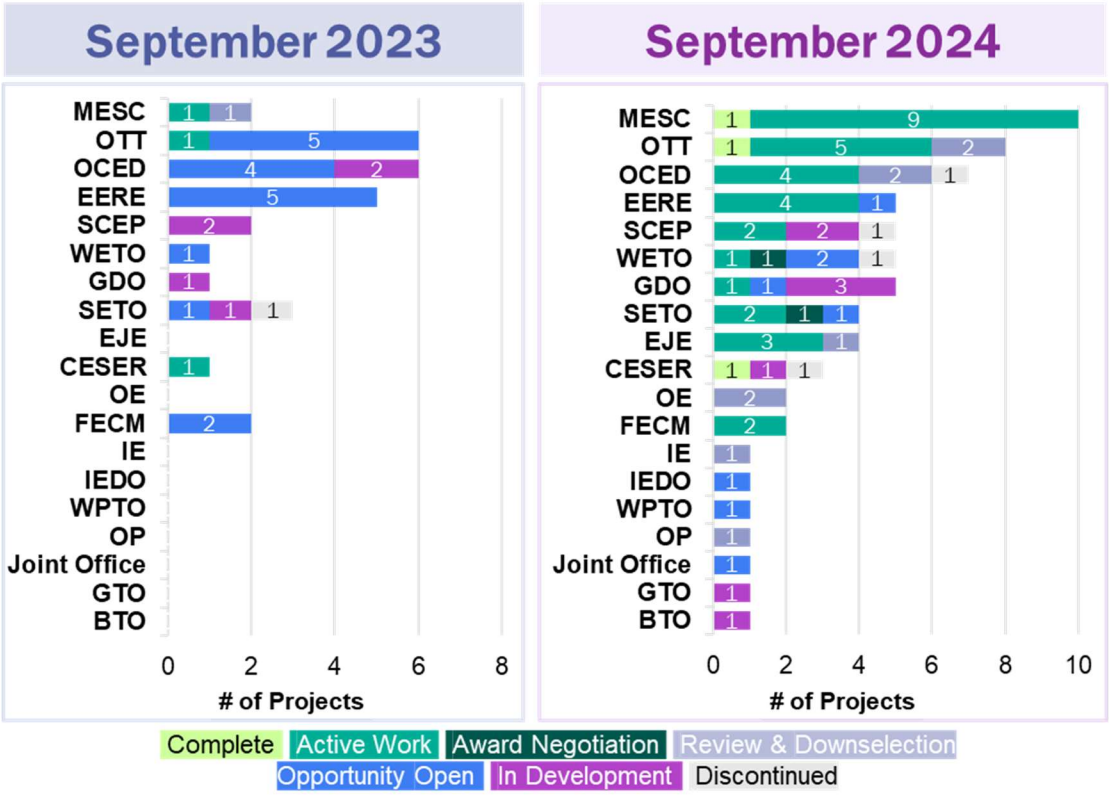
Figure 5: PIA Awards Signed or Under Negotiation through FY24 by Award Size ($)

2.4. Program Office Participation

Program office interest and participation in the PIA mechanism grew consistently throughout FY24. PIA projects were proposed by new teams from returning program offices including the Office of State and Community Energy Programs (SCEP), Office of Manufacturing & Energy Supply Chains (MESC), Wind Energy Technologies Office (WETO), and Grid Deployment Office (GDO). Returning program office teams also opened second rounds or otherwise related projects, as in the case of the Solar and Wind Energy Technologies Offices' (SETO/WETO) Renewable Energy Siting through Technical Engagement and Planning (R-STEP) project and the Office of Clean Energy Demonstrations (OCED) and OTT's Voucher project. For additional information, see the project spotlights on the R-STEP and PIA Vouchers Program later in this report, and a full list of awards in Appendix C: PIA Awards through September 30, 2024.

At the start of FY24, there were 14 PIA PPOs across 10 different program offices, and by the end of FY24, 19 different program offices[6] were leveraging the PIA mechanism across 46 PIA PPOs. Figure 6 shows the number of projects undertaken by each program office in FY24.

[6] For the purposes of tracking Program Office involvement, the PIA counts the Offices of Energy Efficiency and Renewable Energy (EERE) sub-offices, including SETO, WETO, IEDO, WPTO, GTO, and BTO, individually, to differentiate them from EERE level project efforts.



Note: The sum of the projects represented on these graphs will not equal the total number of Projects due to opportunities sponsored by more than one office being represented for each.

Figure 6: Program Office[7] Participation in the PIA Pilot

2.5. Initial and Supplemental Lines of Work

As the PIA mechanism was established at DOE, Initial and Supplemental Lines of Work (I- and S-LOWs) were defined to provide clear guidance and boundaries on the types of projects suited to a PIA.

The complete list of I- and S-LOWs, and the associated number of projects selecting each is shown in Table 3. In total, 12 out of the 15 I- and S-LOWs have been selected by at least one of the 46 projects in the PIA portfolio. The I/S-LOWs most utilized for PIA projects in FY24 targeted accessing non-traditional (to DOE) entities, with 18 projects selecting "Technical assistance to increase outreach and lower barriers of access" (I-6) and 17 "facilitating collaboration, matchmaking, and/or connections" (I-1).

In FY25, the PIA team seeks to leverage the addition of two new PI organizations, and their relevant expertise, to enable projects congruent with some of the lesser utilized I- and S-LOWs to date.

[7] A full list of participating Program Offices and their acronyms are defined in Appendix D: Acronyms – DOE Program & Staff Offices.

Table 3: The Number of Projects Aligning with the PIA Initial and Supplemental Lines of Work

		Total	% of Projects that Selected the I/S-LOW
I-6	Providing technical assistance to increase outreach and lower barriers of access for domestic small businesses, academic institutions, non-traditional partners, and industry, with the goal of increasing the likelihood of engagement between such entities and DOE and its laboratories and facilities.	**18**	**58%**
I-1	Facilitating collaboration, matchmaking, and/or connections through events; clearinghouses; coordination with convening bodies, such as Manufacturing Extension Partnership Centers; providing collaboration spaces; and other means to bring together potential solution providers including small business and non-traditional partners to complement the activities of DOE programs, DOE National Laboratories, and DOE facilities.	**17**	**55%**
I-9	Planning and executing outreach, training, events, and other programs for industry and academic stakeholders.	**8**	**26%**
I-5	Science, Technology, Engineering, and Math (STEM) activities and workforce development, including STEM education and work-based learning programs supporting scientists and engineers across the DOE enterprise, including DOE National Laboratories, DOE facilities, and funding recipients of DOE programs.	**6**	**19%**
I-3	Facilitating, managing, and assisting in the awarding of research, development, demonstration and/or deployment funding, innovation hubs, collaborations, public-private partnerships and Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) funding/programs.	**5**	**16%**
S-2	Tech scouting and horizon scanning for DOE Programs, DOE National Laboratories, and DOE Facilities including technology and market research and hosting technology showcases.	**5**	**16%**
I-4	Facilitating rapid prototyping, demonstration, deployment, and/or manufacturing, in furtherance of DOE's mission.	**4**	**13%**
S-4	Providing manufacturing, design, business, and incubation assistance to DOE awardees, licensees of DOE technologies, and other DOE stakeholders, including those interested in submitting funding proposals to DOE, for the purpose of successfully maturing and transitioning technologies to commercialization or providing small production runs of critical technologies that would otherwise be too small of an order to be of interest to manufacturers.	**4**	**13%**
I-2	Facilitating and/or administering lab voucher programs, rebate programs, and prize competitions.	**4**	**13%**

I-7	Providing access to physical collaboration space(s) with tools that can enable virtual engagements. Host planned and/or ad- hoc engagements with DOE and members of the innovative academic and industrial base across the nation.	**3**	**10%**
I-8	Fostering and tracking a network of academic and industrial base members, keeping them up to date on DOE engagements with academia and industry, funding opportunities, etc..	**3**	**10%**
S-6	Establishing a network of subject matter experts to engage with DOE program managers to review and evaluate promising technology solutions for technology transfer and commercialization to industry.	**2**	**6%**
S-3	Encouraging industry collaborative investment of leveraged research resources as having high potential for commercialization, especially in areas related to DOE missions.	**0**	**0%**
S-1	National Laboratory technology matchmaking including but not limited to facilitating patent and intellectual property (IP) management, such as patent and licensing assistance, or partnering for continued development.	**0**	**0%**
S-5	Identifying promising technologies that currently exist or are in the developmental phase at DOE, DOE facilities, or DOE awardees, that could be efficiently, and cost effectively transitioned to the market.	**0**	**0%**

3. Key FY24 Outcomes and Accomplishments

In FY24, OTT tracked the progress and results of all PIA PPOs, evaluating the PIA mechanism's capabilities, flexibility, usage by program offices, and impacts. In addition, data was collected to ensure the PIA achieves its intended purpose to increase outreach and engagement with small business firms, institutes of higher education, and other non-traditional partners, thus expanding DOE's capabilities to achieve its mission.

Key accomplishments in FY24 include:

- Added two additional PI organizations to increase project capacity and diversify expertise.
- Executed an effective and streamlined PIA mechanism process and added 32 new PPOs.
- Engaged non-traditional entities and "new-to" DOE applicants, with nearly 60% of applicants and performers reporting not previously receiving DOE funds or support.
- Received applications from 50 states, two territories, and Washington, DC and selected performers in 48 states and Washington, DC for awards and in-kind support.
- Supported PIA PPOs from 19 program offices within DOE.
- Enabled program offices to design and develop impactful PIA PPOs at a range of funding levels (from $30,000 to $8.5 million) that complement larger financial assistance portfolios and programmatic priorities.
- Awarded 100% of funds to U.S. companies, non-profits, state and local governments, and other domestic entities.

3.1. Increasing PIA Project Capacity and Diversifying Expertise

In FY24, OTT – in collaboration with GFO, GC, MA, and CF – signed agreements with two additional PIs to address PPO capacity needs and to enable additional capabilities and expertise within the DOE's PI portfolio. RTI International (operating as TechWerx) and Advanced Technology International (operating as ConnectWerx) both signed PIAs with DOE in July 2024.

ConnectWerx[8], managed by Advanced Technology International (ATI), brings deep industry ties and substantial experience managing and supporting government consortia and similar initiatives. In FY24, the ConnectWerx network has grown to 270 organizations across 39 states.

TechWerx[9], managed by RTI International, is advancing DOE's mission to drive clean energy innovation, bolster energy security, and strengthen national security ecosystems. TechWerx's extensive network of over 4,500 innovation leaders includes academics, small businesses, startups, utilities, National Laboratories, and economic development organizations. With access to RTI International's 6,000 subject matter experts across energy technology development and deployment, facilitation, community engagement and impact assessments, TechWerx is working with DOE program offices to accelerate the development and deployment of transformative energy solutions.

[8] ConnectWerx Website: https://www.connectwerx.org/
[9] TechWerx Website: https://www.techwerx.org/

Table 4: Intermediary Capabilities Comparison

	DEFENSEWERX Challenges are opportunities	ATI ADVANCED TECHNOLOGY INTERNATIONAL	RTI Innovation Advisors
DOE PI Organization	energywerx	connectwerx	techwerx
Additive Expertise and Capabilities	• **Lab vouchers & rebates** • **Workforce development and community engagement** • **Local and regional deployment** • **Implementation grants** • **Collaboratives, partnerships and consortia**	• **Consortia and innovation ecosystem building** • **Rapid prototyping** • **Conference/event hosting**	• **STEM education and workforce development** • **Technology horizon scanning** • **Technology licensing and PPP agreements** • **Impact measurement and assessment** • **In-house energy technology SMEs**
Network reach	22,832 members in the EnergyWerx ecosystem	500K+ members (30% are energy sector innovators)	5,000+ innovation leaders includes academics, small businesses, startups, utilities, national labs, and economic development organizations
Parent Organization Size	102 employees	350+ employees	6,000+ employees
Agencies Assisted	DOE, DoD, DHS, CIA, and NRO	DOE, DoD, NASA, DHS, HHS, NSF	DOE, NASA, NIST, NIJ, USAID, NIH, DoD, DoEd, EPA
Physical Space	Fully Remote	Offices in SC, VA, TX and AL	Offices in 6 states – CA, CO, GA, MA, MI, NC – and DC. 11,000 sq-ft laboratory in NC

Each PI provides the full range of services defined in the I- and S-LOWs for the PIA mechanism, and also has specific core competencies — activities particularly well suited to their organizational strengths, represented in Table 4. TechWerx's core competencies include technology and horizon scanning, market analysis, matchmaking, and STEM education activities. ConnectWerx uses its capabilities to develop consortia and partnerships, convene stakeholders, and facilitate rapid prototyping. EnergyWerx cultivated expertise to support matchmaking (e.g. vouchers), rebate programs, workforce and community engagement, as well as local and regional deployment efforts. This structure balances flexibility and specialization across the PIA service while allowing DOE to incorporate new capabilities into its projects such as pre- and post-opportunity market research and analysis, hyper-targeted outreach, and direct access to subject matter experts to support opportunity facilitation.

EnergyWerx, which was active as a PI for the entirety of FY24, had the largest number of PPOs and programmatic activities across all measures, as shown in Table 5. ConnectWerx and TechWerx joined EnergyWerx as PIs for the DOE in July 2024, announced four projects within the first two months, and had seven more projects in development and slated for Q1FY25 openings. In total for FY24, $228M in project funds was obligated to the three PIAs, and $86M has been awarded to selected entities via B2B agreements.

Table 5: PIA Portfolio across Three U.S. DOE PIs as of September 30, 2024

	energywerx	connectwerx	techwerx
Date Established	Apr-23	Jul-24	Jul-24
# of Projects	35	5	6
$ Project Funds Obligated	$209.9M	$5.9M	$12.6M
# of Opportunities Hosted	66	3	1
# of Applications Received	2,237	0	0
# of B2Bs Executed	198	0	0
$ Awarded	$85.9M	$0	$0
# of Completed Projects	2	0	0
# of B2Bs w/ Work Complete	60	0	0

3.2. Effective PIA Management

As outlined in the PIA Pilot Guide[10,11], a driving goal of the PIA is to increase engagement with small business firms, state and local government offices, community colleges, local non-profits and other non-traditional partners. By engaging through a PI, a PPO simplifies applications, award negotiation, project execution, and payment, which both appeals to and enables increased participation from these capacity and resource constrained entities. As such, the PIA team, led by OTT and in collaboration with GFO, GC, MA and CF, developed an effective and streamlined PPO process to realize this PIA mandate. In particular, the PIA team developed a streamlined approach for internal PPO approvals that incorporates all required DOE statutory and programmatic regulations – including National Environmental Policy Act (NEPA) reviews as well as vetting through DOE's Office of Research, Technology, and Economic Security (RTES). The PPO process managed programmatic risk by leveraging a payment for milestone structure for both the PIs and performers with signed B2B agreements, and focusing funds to support domestic entities, particularly those operating at a local or regional scale. PPO reviews are conducted by a vertically integrated PIA team that includes PPO Managers, Agreements Officers, and General Counsel.

In FY24, PPOs on average started work within six months of the opportunity opening, with two PPOs completing these actions in less than three months. As shown below in Figure 7, the duration for each PPO process stage varied significantly depending on the individual program office and PPO requirements, demonstrating the flexibility of the process execution. Typically, process time increased for PPOs that collaborate across multiple DOE program offices, as well as for programs that incorporated novel structuring or a multi-phased approach. Additionally, some PPOs with a longer project development phase employed pre-announcement steps such as soliciting feedback from potential applicants or encouraging applicants to collaborate on joint applications. By design, Voucher-type projects on average doubled the period which applications were open (up to four

[10] Partnership Intermediary Interim Pilot Guide; U.S. Department of Energy; August 20, 2023; https://www.energy.gov/sites/default/files/2023-08/PIA%20Guide%20Aug%202023_0.pdf

[11] An update to the PIA Pilot Guide is expected later in FY25.

months), as consecutive application periods were required for technical assistance providers and recipients, to enable effective matchmaking.

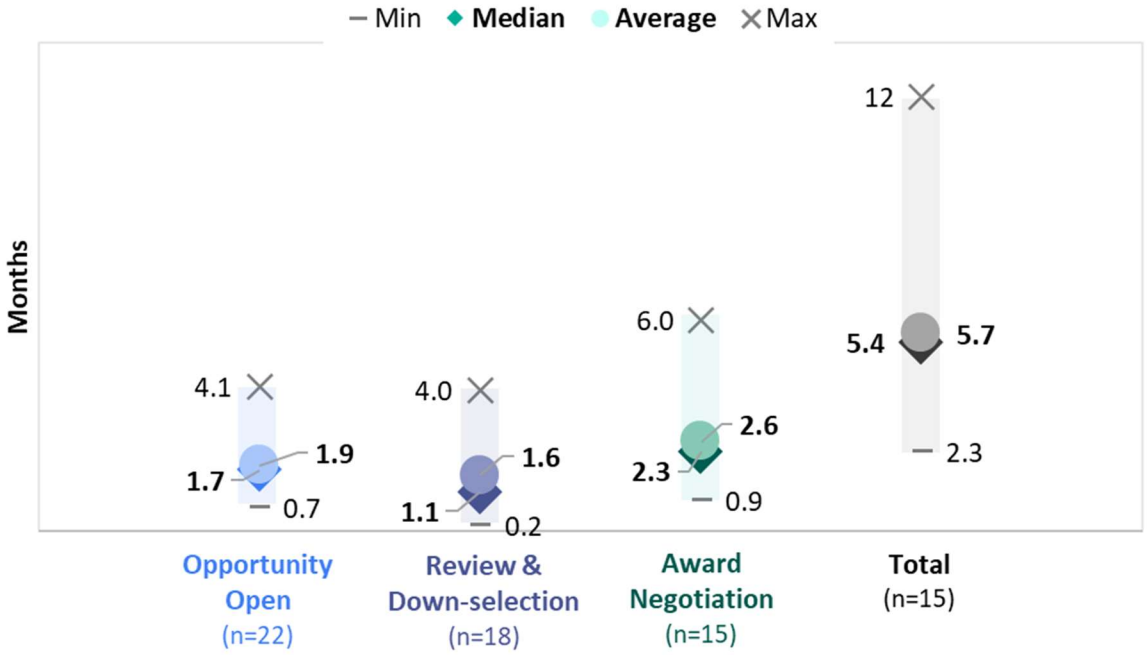


Figure 7: Time PIA Projects Spent from Opportunity Announcement through Award Negotiation in FY24

3.3. Reaching Non-Traditional Entities

By several measures, OTT's PIA implementation demonstrated its effectiveness at introducing non-traditional and "new-to-DOE" applicants to the PPO opportunities in FY24. First, with PIs identifying non-traditional partners and then developing direct communication channels to elevate relevant PPO opportunities. The PIs also reduced application burden to increase their appeal to new-to-DOE applicants. Ultimately, the PIA demonstrated great success both in the volume of submissions and selections of non-traditional and new-to-DOE entities.

To assess the PIAs reach to new applicants, applications for PPO opportunities include the question: "Have you previously received funding/support from DOE?". Of 2,053 applications[12,13] to PPOs, 58% of applicants reported no prior DOE support or funding. Notably, for 15 out of 23 projects[14] (65%), more than half of the applicants reported having received no previous DOE experience/funding, as shown in Figure 8.

[12] Note this is based on number of applications, not unique applicants. Applicants can apply to more than one opportunity.
[13] Excludes 115 applications for VO1 and VO4 Recipients which required previous DOE funding to be eligible and 69 applications to MESC ITAC Implementation Grants which for which previous DOE experience was not reported.
[14] Note value differs from PIA Project Orders (unique Statements of Objectives) because of combining related project efforts.

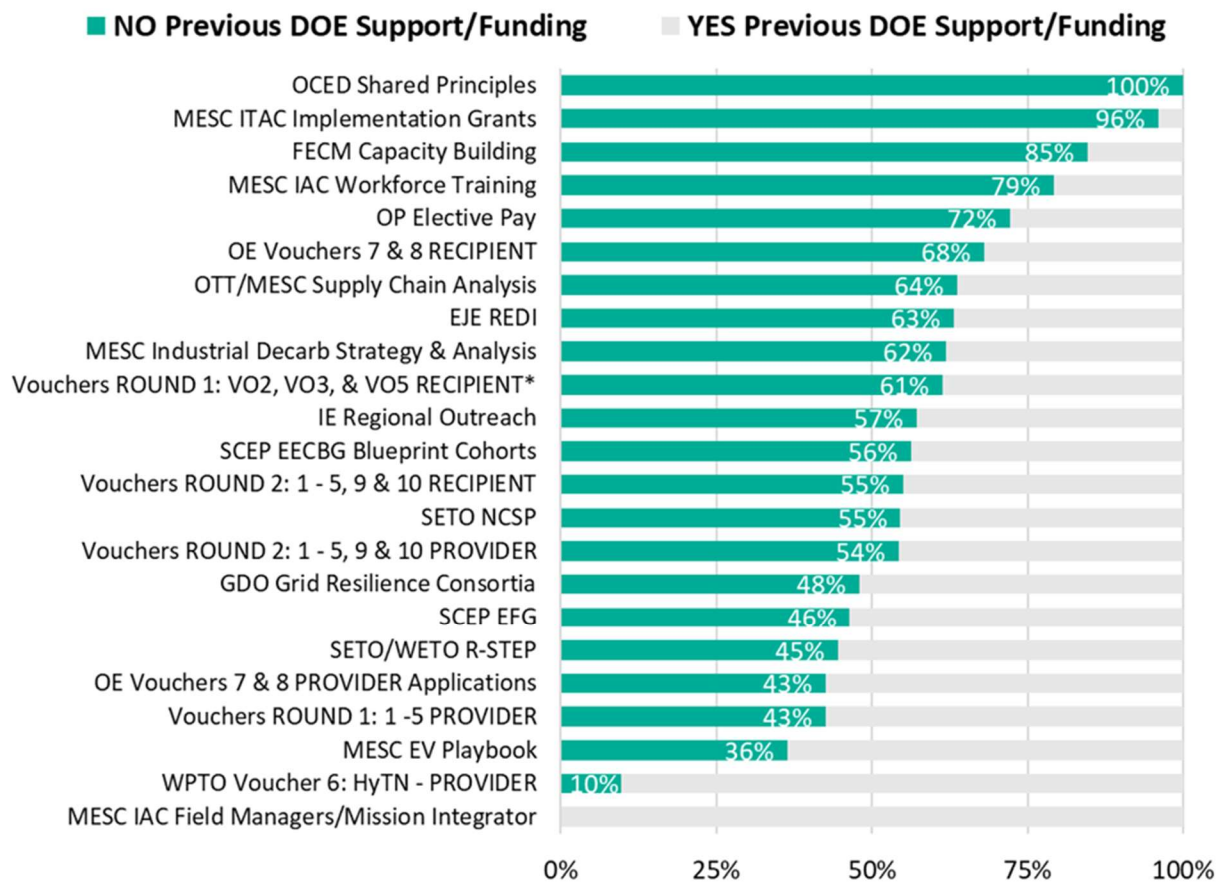


Figure 8: Applications through FY24 (n = 2,053) to PIA Project Opportunities Self-reporting "No Previous DOE Support/Funding" as of September 30, 2024

Ultimately, of the 409 entities that stand to receive direct or in-kind support, 97% of the entities identify as small or medium-sized manufacturers, small businesses, or other non-traditional partners, as shown in Figure 9.[15,16] This result is driven by the two largest projects by number of selections: PIA Voucher Program (42% of selected entities) which targets small businesses, National Laboratories, and university laboratories and ITAC Implementation Grants (36% of selected entities) which target small and medium sized manufacturers.

[15] 3% of the entities are National Laboratories, which can apply through the PIA for specific opportunities, but if selected, contracting does not go through the PI.

[16] 429 selections announced were announced, but 20 B2B awards had been declined as of September 30, 2024, for a total of 409 Awards signed or pending negotiation.

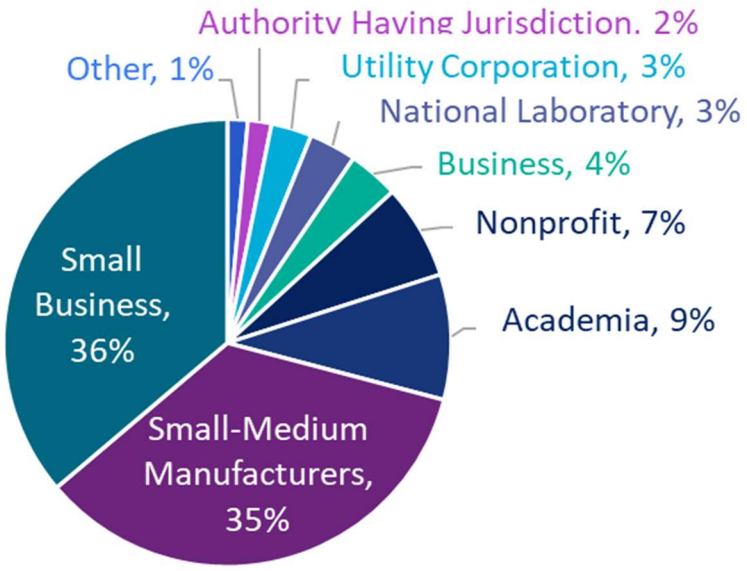


Figure 9: Organization Type of PIA Entities (n = 409) to Receive Direct or In-kind Support as of September 30, 2024

3.4. Geographic Diversity of Applicants

The PIA has demonstrated geographic diversity in its reach with applications from all 50 states, Washington, DC, Puerto Rico, and Guam. Figure 10 shows the location of the 2,237 applicants received and Figure 11 shows the location of the 409 entities selected for PIA Awards (National Laboratory Selections, B2B agreements, or in-kind support) in FY24.

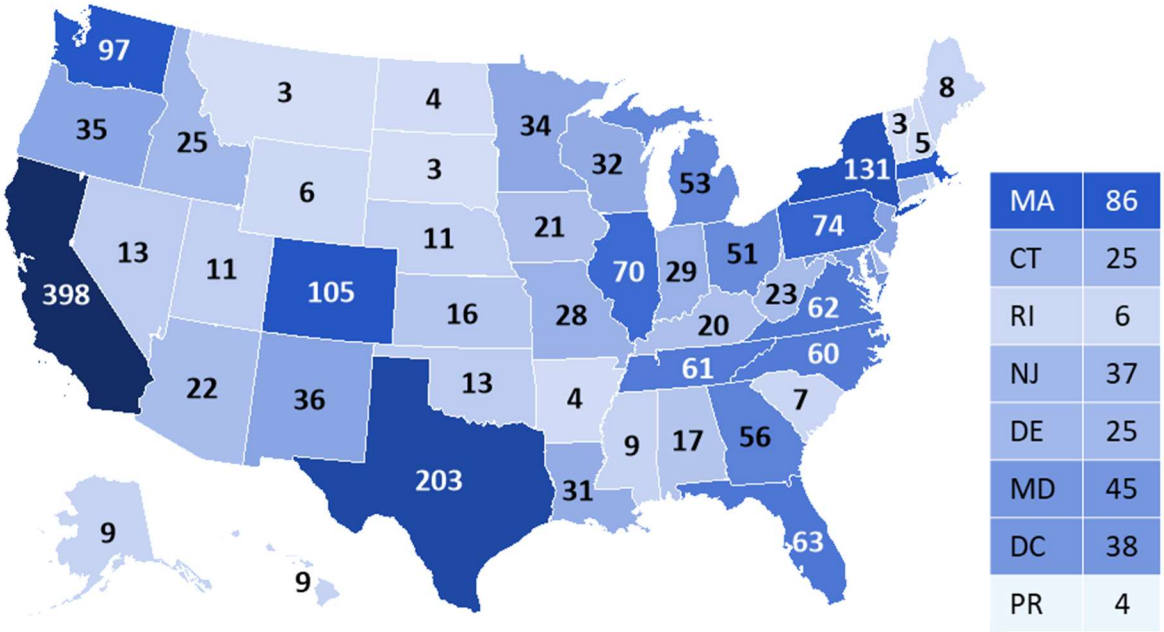


Figure 10: PIA Project Applications (n = 2,237) by State through September 30, 2024.

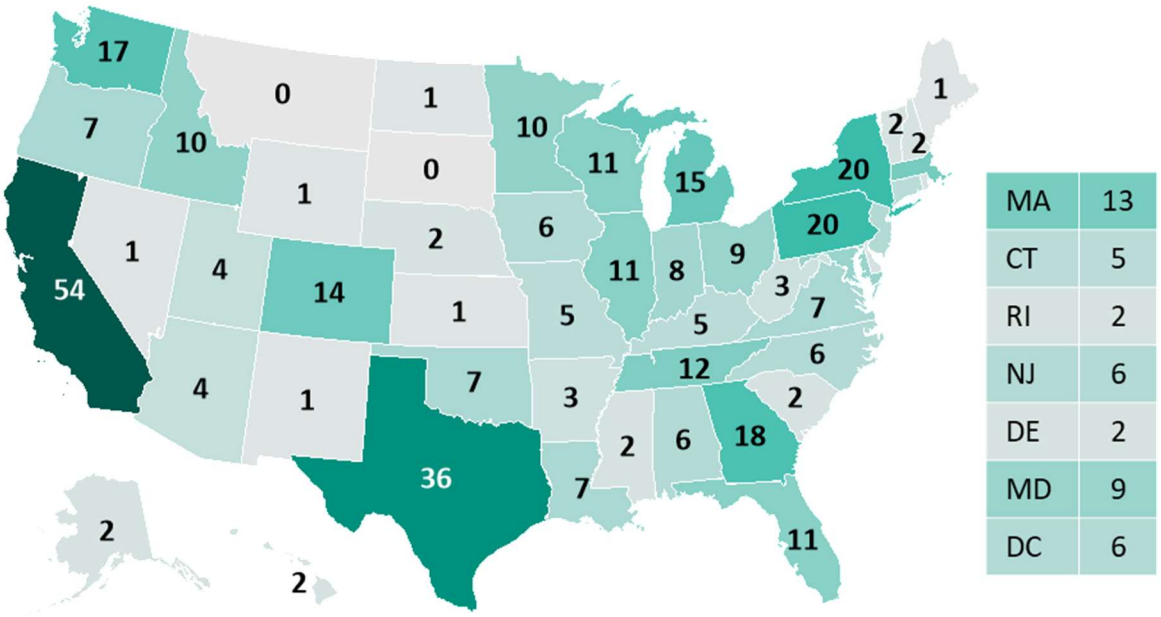


Figure 11: PIA Beneficiary Organizations with B2B Agreements or Receiving In-Kind Support, and National Laboratory PIA Selections by State (n = 409) through September 30, 2024

3.5. Support to Larger Project Portfolios and Priorities

Many of the current PIA Projects are part of, or otherwise support, larger program office project portfolios or efforts, and leverage the PIA to expand participation, streamline access, and build greater geographical engagement within their financial assistance portfolios. Based on discussions with program offices, an estimated $222M of the $342M PIA Portfolio can be tied to larger programmatic initiatives. In total, this $222M in PIA project awards is estimated to support over $13B in DOE financial assistance-based programmatic activity, thus enabling the participation of a broader and deeper set of participants working to build out a robust, domestic energy industrial base.

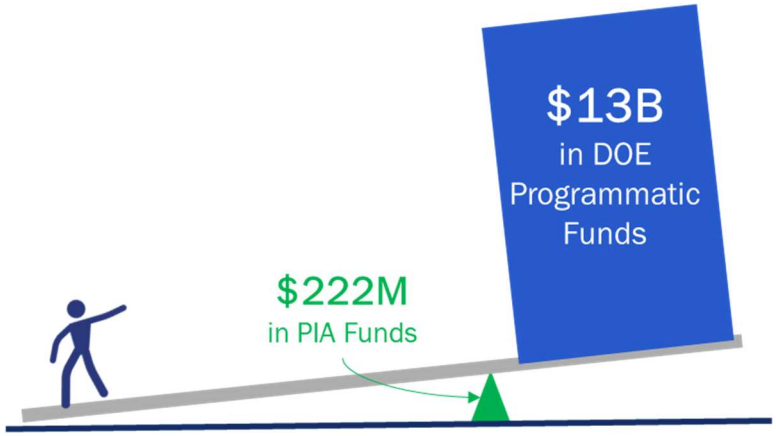


Figure 12: PIA project awards supporting DOE financial assistance-based programming

Some program offices have used PIA projects to identify and partner with subject matter experts to conduct in-depth analyses to ultimately inform larger program design implementation. One example of this type of project is the OTT/MESC supply analysis project.[17] This $0.75M project gathered data on key supply chain issues, which supported and informed two broader initiatives: the Qualifying Advanced Energy Project Credit (48C) Program ($10B total)[18] and Domestic Automotive Manufacturing Conversion Grants ($2B total)[19].

Other program offices leverage the PIA to help inform and develop future, larger programmatic investments. SETO is an example of an office that used the PIA to inform expansion of an existing program. Their project, the Equitable Solar Communities of Practice, [20] used the PIA to collect stakeholder information and recommendations on how to address barriers to and create solutions for equitable residential solar. The data collected through their PIA project will inform $42M worth of efforts conducted through the National Community Solar Partnership+ (NCSP) [21], a program that aims to scale solutions for equitable residential solar.

Several projects help reduce barriers for accessing other government funds. For example, the DOE Office of Indian Energy used the PIA to address barriers that Tribes face in being able to track, engage and respond to funding opportunities, training, and education relating to clean energy transitions. The $3.6M PIA, Intertribal Organization Opportunity: Support for Tribal Clean Energy Communication and Engagement,[22] provides funding for organizations to assist their member Tribes in accessing opportunities, within DOE and the broader energy community, that align with their Tribal energy sovereignty goals.

Two SCEP PIA projects complement larger grants awarded through formula grants and a Funding Opportunity Announcement (FOA), by identifying performers to create training webinars and other resources to support awardees and selectees for the Energy Efficiency and Conservation Block Grant (EECBG) Program and Energy Future Grants (EFG). The EECBG Program is a $550 million grant program funded through the BIL designed to assist states, local governments, and Tribes in implementing strategies to reduce energy use, to reduce fossil fuel emissions, and to improve energy efficiency.[23] One performer was selected for a $2M award through the PIA to lead the Blueprint Cohorts working with a coalition of expert organizations to develop curricula and host

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[17] DOE OTT Supply Chain Analysis; EnergyWerx; https://www.energywerx.org/opportunities/doe-ott-assessment-event

[18] Qualifying Advanced Energy Project Credit (48C) Program; U.S. Department of Energy; https://www.energy.gov/infrastructure/qualifying-advanced-energy-project-credit-48c-program

[19] Domestic Automotive Manufacturing Conversion Grants; U.S. Department of Energy; https://www.energy.gov/mesc/domestic-manufacturing-conversion-grants

[20] Request for Lead Organizations for U.S. Department of Energy Equitable Solar Communities of Practice; EnergyWerx; https://www.energywerx.org/opportunities/request-for-lead-organizations-for-u-s-department-of-energy-equitable-solar-communities-of-practice

[21] About the National Community Solar Partnership+; U.S. Department of Energy; https://www.energy.gov/communitysolar/about-national-community-solar-partnership

[22] Intertribal Organization Opportunity: Support for Tribal Clean Energy Communication and Engagement; EnergyWerx; https://www.energywerx.org/opportunities/intertribal-organization-opportunity-clean-energy-communication-and-engagement

[23] Energy Efficiency and Conservation Block Grant Program | Department of Energy; U.S. Department of Energy; https://www.energy.gov/scep/energy-efficiency-and-conservation-block-grant-program

individual cohort meetings for each of the 13 EECBG Blueprint Topic areas.[24] Additionally, the EFG program provides $27 million in financial assistance and technical assistance to support local, state, and Tribal government-led partnership efforts that will help scale local strategies that increase resiliency and improve access to affordable clean energy. [25] The EFG team developed a $0.9M PIA project to identify three organizations that will support cohorts of EFG awardees during the duration of the EFG planning phase (12+ months) through cohort meeting facilitation, subject-matter-expert connection, and other relevant technical assistance offerings.[26] As such, the $2M and $0.9M of PIA project funds supports the $550M and $27M financial assistance awards, respectively.

4. Spotlighted PIA Projects

The flexibility of the PIA mechanism enabled program offices to design projects to meet a variety of DOE mission spaces. The following FY24 PIA project "spotlights" demonstrate the breadth of the PIA mechanism to engage non-traditional entities and enable key Departmental goals and objectives:

- MESC, $80M Industrial Training and Assessment Centers (ITAC) Implementation Grant Program[27]
- EERE/SETO/WETO, $22.5M Renewable Energy Siting through Technical Engagement and Planning (R-STEP) Program[28]
- OTT/OCED/EERE/FECM, $47M Technology Commercialization Fund (TCF) Vouchers Program[29]
- FECM, $3.5M Capacity Building for Repurposing Energy Assets[30]

[24] Request for Implementation Support for the U.S Department of Energy: Energy Efficiency and Conservation Block Grant Blueprint Cohorts; EnergyWerx; https://www.energywerx.org/opportunities/request-for-implementation-support-for-the-u-s-department-of-energy-energy-efficiency-and-conservation-block-grant-blueprint-cohorts

[25] Energy Future Grants; U.S. Department of Energy; https://www.energy.gov/scep/energy-future-grants

[26] Request for Facilitation Support for the U.S. Department of Energy: Energy Future Grants Program Technical Assistance Cohorts; EnergyWerx; https://www.energywerx.org/opportunities/energy-future-grants-technical-assistance-facilitation

[27] Industrial Training and Assessment Center Implementation Grant Awards; U.S. Department of Energy; https://www.energy.gov/mesc/industrial-research-and-assessment-center-implementation-grant-awards?utm_medium=email&utm_source=govdelivery

[28] Renewable Energy Siting through Technical Engagement and Planning (R-STEP™); U.S. Department of Energy; https://www.energy.gov/eere/renewable-energy-siting-through-technical-engagement-and-planning-r-steptm

[29] DOE Announces New $27.5M Voucher Program to Bring Innovative Energy Technologies to Market; U.S. Department of Energy; https://www.energy.gov/technologytransitions/articles/doe-announces-new-275m-voucher-program-bring-innovative-energy

[30] Funding Notice: Capacity Building for Repurposing Energy Assets; U.S. Department of Energy; https://www.energy.gov/fecm/funding-notice-capacity-building-repurposing-energy-assets

4.1. ITAC Implementation Grants

Program Office	MESC
Project Funds	$80M
Round 1: Applicants	69[31]
Round 2-4: Applicants	172 (95.9% new to DOE)
Selected Performers	162
Funds Awarded	$26.2M (21% through 4 Rounds)

The ITAC Implementation Grant Program through MESC is designed to help small- and medium-sized manufacturers (SMMs) implement recommendations made in Industrial Training and Assessment Center[32] or Onsite Energy Combined Heat and Power Technical Assistance Partnerships (CHP-TAP)[33] assessments since 2018, as well as recommendations made in assessments that DOE has deemed equivalent since 2021. This project effectively uses the PIA to provide grants to SMMs that support their efficiency and competitiveness.

These grants bolster the American manufacturing base by supporting projects to improve energy and material efficiency, to increase productivity, and to reduce emissions at SMMs. These grants also aim to advance the objectives of improving business performance, increase energy affordability, and create pathways to high-quality jobs in disadvantaged communities by driving federal investment into these communities and, where possible, utilizing registered apprenticeship programs and ITAC Program participants in implementation efforts.

Grant awards are up to $300,000 each at a 50% cost share (i.e., if a project costs $50,000, an implementation grant can cover up to $25,000). Other federal funds cannot count toward the applicant's share.

To date, 162 SMMs across 36 states have been selected to receive a combined total of more than $26.2 million to implement energy saving improvements, matched by $51 million in industry investment under the ITAC Implementation Grants Program.[34]

One awardee, Paramount Coffee Company in Lansing, Michigan, has been awarded more than $31,000 in ITAC implementation grant funding to install insulation and LED lights. They are an employee-owned business that has partnered with a minority-owned business for their upgrades and are located in a disadvantaged community. Their projects are expected to save almost 230,000 kWh in energy consumption annually and abate almost 46 metric tons of Carbon Dioxide (CO2) annually, or the equivalent of taking 11 gasoline-powered passenger vehicles off the road for a year.

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[31] For Round 1 Applications, previous DOE experience was not reported.
[32]Industrial Training and Assessment Center; U.S. Department of Energy; https://www.energy.gov/mesc/industrial-assessment-centers-iacs
[33] Onsite Energy Technical Assistance Partnerships (TAPs); Better Buildings Initiative – U.S. Department of Energy; https://betterbuildingssolutioncenter.energy.gov/onsite-energy/taps
[34] Industrial Training and Assessment Center Implementation Grant Awards; U.S. Department of Energy; https://www.energy.gov/mesc/industrial-research-and-assessment-center-implementation-grant-awards?utm_medium=email&utm_source=govdelivery

Trillium Brewing is a woman-owned business in Canton, Massachusetts, that has been awarded $300,000 to install a rooftop solar array. The project is expected to save 240,000 kWh in energy consumption annually and abate around 82 metric tons of CO2 annually, or the equivalent of taking 21 gasoline-powered passenger vehicles off the road for a year.

The PIA mechanism enables MESC to distribute these grants to SMMs, reducing the administrative burden and making it possible for these new-to-DOE entities to benefit from the program. Given the small grant sizes (per statute), the PIA allowed for deployment of these grants at scale to entities that have difficultly accessing capital and financing to support these operation upgrades. Through rolling applications, the DOE and EnergyWerx teams were able to iterate on learnings and distribute funds until expended.

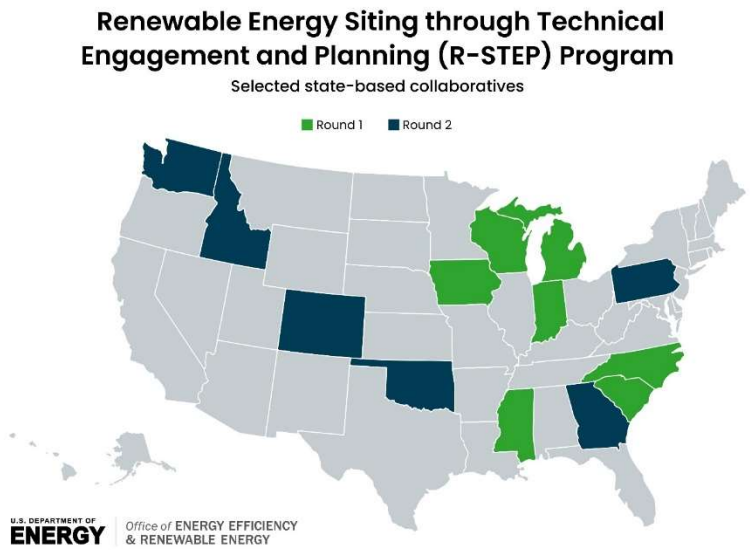
4.2. R-STEP Round 1 & Round 2

Program Office	EERE, SETO, & WETO
Project Funds	$22.8M
Selected Performers	12 (50% new to DOE*)
Funds Awarded	$22.1M

**As self-reported within their applications*

The Renewable Energy Siting through Technical Engagement and Planning (R-STEP) program expands the decision-making capacity and expertise of state and local governments around large-scale renewable energy and energy storage project planning, siting, and permitting.[35]

R-STEP worked with EnergyWerx through the PIA to enable unique partnerships between DOE and the state-based collaboratives. These partnerships enable trusted entities like cooperative extension and state energy offices to provide local communities with science-based information to inform the equitable deployment of large-scale renewable energy facilities.



The R-STEP Opportunity first opened in August 2023 and applications closed in November 2023. In March 2024, six state-based projects were selected to receive $10.6 million, and DOE announced its intent to open a second round of the program with

[35] Renewable Energy Siting through Technical Engagement and Planning (R-STEP™); U.S. Department of Energy; https://www.energy.gov/eere/renewable-energy-siting-through-technical-engagement-and-planning-r-steptm

up to $12 million in funding from the IRA.

Applications for the second round opened in April 2024 and closed in June 2024. Of the 12 performers selected in Rounds 1 and 2, half report having not previously worked with or received support from DOE, showcasing the PIA's ability to bring new entities into the DOE ecosystem.

Another key success of utilizing the PIA is to improve program efficiency from funding announcement through DOE selections. The PIA enabled the R-STEP project team to quickly iterate on the successful first round when additional funding became available.

R-STEP Participants from Round 1 began work in August 2024, and Round 2 performers are expected to start work in late 2024.

4.3. PIA Voucher Program

Program Office	OTT, OCED, EERE, FECM
Project Funds	$47M
Total # of Applications (Round 1 & 2)*	1,299 (54%)† new to DOE
Matched Performers (Round 1: January 2024)	33 Provider Organizations (50% new to DOE) 107 Recipient Organizations (67% new to DOE**)
Funds Awarded	$9M+

**Note this is the number of total applications, not the number of unique applicants/organizations. Applicants can apply for multiple Voucher Opportunities.*
†When adjusted to the 1,183 applications without a prior DOE funding eligibility requirement
*** of the 72 matches who applied to VOs without a prior DOE funding eligibility requirement*

OTT in collaboration with OCED, EERE and FECM, first announced a new Voucher Program, leveraging the PIA and funded by the BIL and IRA as part of the Technology Commercialization Fund[36] (TCF) in July 2023.[37] By providing this in-kind commercialization support, the Voucher Program helps small businesses and other non-traditional partners access testing facilities or obtain third-party subject matter expertise needed to advance their technologies, business, or energy projects to the next level. The available support works to increase the adoption readiness[38] of the participating organizations and ultimately brings impactful, clean energy technologies to fruition nationwide.

Selected organizations receive vouchers worth up to $250,000 each for a specific, provider defined capability across numerous categories of support, including analytical assistance (technoeconomic analyses, market readiness assessments, etc.), performance validation (testing,

[36] Bipartisan Infrastructure Law Technology Commercialization Fund; U.S. Department of Energy; https://www.energy.gov/technologytransitions/bipartisan-infrastructure-law-technology-commercialization-fund
[37] DOE Announces New $27.5M Voucher Program to Bring Innovative Energy Technologies to Market; U.S. Department of Energy; https://www.energy.gov/technologytransitions/articles/doe-announces-new-275m-voucher-program-bring-innovative-energy
[38] Adoption Readiness Levels (ARL) Framework; U.S. Department of Energy; https://www.energy.gov/technologytransitions/adoption-readiness-levels-arl-framework

certification, etc.), siting/permitting support for jurisdictions, and manufacturing support (industrial decarbonization strategy and manufacturing conversion, retooling, and retrofitting support).

In October 2023, 92 capabilities were selected from 39 provider organizations (including 6 National Laboratories), 50% of which were new to DOE. Recipients were then able to apply to be matched with the selected capabilities. In January 2024, nearly $10M was awarded to benefit 107 recipient organizations with in-kind support from 33 provider organizations (including six National Laboratories) in the form of DOE-funded vouchers.[39,40] Of the matched recipient organizations, 67% of those who applied to voucher opportunities (VOs) without a prior DOE funding eligibility requirement were new to DOE. As of September 30, 2024, nearly half of the first round of voucher projects had completed work.

Building on the successful first round, several of the voucher opportunities were reopened and two new opportunities were opened in June 2024. In August 2024, 174 capabilities were selected from 81 provider organizations, 53% of which were new to DOE. Recipient applications closed in September 2024. It is anticipated that the second round of voucher projects will start work by end of the calendar year.

Ultimately, in FY24, the PIA mechanism was essential for the facilitating voucher opportunities that increase small business and non-traditional partner access to diverse subject matter expertise and capabilities across the private sector, including private engineering test centers and facilities that do not typically participate in DOE voucher opportunities. By hosting their capabilities side by side with National Lab capabilities, the PIA enabled potential voucher recipients to engage with a comprehensive support marketplace to find the private sector or National Lab support provider who fits best with their organizational needs and goals. EnergyWerx administration was critical in managing the high volume of applications, selections, agreements, and invoicing from opportunity announcement through project execution.

More information about the past, current, and future voucher opportunities can be found at https://www.energywerx.org/vouchers/overview.

4.4. FECM Capacity Building for Repurposing Energy Assets

Program Office	FECM
Project Funds	$3.5M
Applicants	26 (84.6% new to DOE)
Selected Performers	22 (86.4% new to DOE)
Funds Awarded to Performers	$2.2M (63% through 2 Rounds)

[39] DOE Announces Nearly $10M in Vouchers to Support 111 Organizations to Accelerate Clean Energy Technology Adoption; U.S. Department of Energy; https://www.energy.gov/technologytransitions/articles/doe-announces-nearly-10m-vouchers-support-111-organizations

[40] As of September 30, 2024, four of the 111 announced matches declined to move forward, bringing the total number of recipients to 107.

The FECM Capacity Building for Repurposing Energy Assets project[41] provides targeted support to communities around the country by funding the creation and development of plans to repurpose energy assets. The project focused on communities where a significant portion of the local economy was or is supported by energy assets such as coal, oil, and/or natural gas power facilities and accompanying equipment and infrastructure. The initiative will help these communities build technical capacity and develop a workforce necessary to help revitalize energy systems, address environmental impacts, and tackle challenges associated with energy assets that have been retired, or are slated for retirement.

The PIA enabled this project's success by simplifying the process of applying for funding and partnering with DOE to complete their roadmaps. Local entities sought through this opportunity (e.g., mayor's offices, local economic development entities, community colleges) often face capacity limitations that reduce their likelihood of participating in other funding opportunities. FECM utilized the PIA's flexibility to design a clear and streamlined application that reduced barriers previously identified as limiting community participation. The PIA's straightforward agreement and payment structure allowed these entities to quickly enter into agreements with EnergyWerx and receive funding to commence work. This was particularly important for these communities as assets have already or will soon be retired, making near term planning efforts critical.

FECM also successfully leveraged the PIA's flexibility to open a second application round with expanded eligibility, allowing FECM and EnergyWerx to reach a broader set of performers and maximize outreach – ensuring the right communities were aware of the opportunity.

Over the two rounds of the Capacity Building for Repurposing Energy Assets project, the project received 26 applications, 22 of which were selected for a total of $2.2M in funding distributed across 15 states. Nineteen of the 22 organizations selected had not previously received DOE funding – demonstrating the success of the PIA in reaching new-to-DOE organizations. Work for this opportunity is currently underway, with Round 1 projects reaching completion in late fall 2024 and Round 2 projects in spring 2025.

5. Conclusion

The PIA Pilot experienced significant growth and notable successes during FY24. Data collected shows the PIA has been able to reach non-traditional entities, including small businesses and academic institutions. As anticipated in the FY23 Annual Report, the volume and breadth of project types, as well as the number of DOE program offices, leveraging the PIA Pilot have all increased.

As a result of PIA's established track record in FY23 and FY24, the pilot phase concluded in December 2024 and the PIA was formally established the PIA as an ongoing partnership mechanism available at the DOE. It is anticipated that going forward, Program Offices can embark on larger-scale or more complex projects, given their experience with initial PIA projects and the conclusion of the pilot phase. This may further diversify the type and structure of PIA PPOs, such as leveraging the capabilities of multiple PIs to support a single DOE initiative and/or project. In

[41] Funding Notice: Capacity Building for Repurposing Energy Assets; U.S. Department of Energy; https://www.energy.gov/fecm/funding-notice-capacity-building-repurposing-energy-assets

addition, the three PIs may work more collaboratively to reach applicants and maximize their impact.

As an established mechanism, process improvements are also anticipated. Many of the program structures seen in PIA projects in FY24 can be replicated to further streamline the process from program design to implementation. OTT will continue to report on the progress of the PIA in administering programs and accelerating public-private partnership formation in support of DOE's missions to expand development and deployment of energy technologies, heighten energy security, and strengthen national security.

Appendix A: Initial and Supplemental Lines of Work

Initial Lines of Work (I-LOWs):

1. Facilitating collaboration, matchmaking, and/or connections through events; clearinghouses; coordination with convening bodies, such as Manufacturing Extension Partnership Centers; providing collaboration spaces; and other means to bring together potential solution providers including small business firms, other industry, government, universities, non-profit organizations, and non-traditional partners to complement the activities of DOE programs, DOE laboratories, and DOE facilities;
2. Facilitating and/or administering Laboratory voucher programs, rebate programs, and prize competitions;
3. Facilitating, managing, and assisting in the awarding of research, development, demonstration and/or deployment funding, innovation hubs, collaborations, public-private partnerships, and SBIR/STTR funding/programs;
4. Facilitating rapid prototyping, demonstration, deployment, and/or manufacturing, in furtherance of DOE's mission;
5. STEM activities and workforce development, including STEM education and work-based learning programs supporting scientists and engineers across the DOE enterprise, including DOE Laboratories, DOE facilities, and funding recipients of DOE programs;
6. Providing technical assistance to increase outreach and lower barriers of access for domestic small business firms, other industry, government, universities, non-profit organizations, and non-traditional partners with the goal of increasing the likelihood of engagement between such entities and DOE and its laboratories and facilities;
7. Providing access to physical collaboration space(s) with tools that can enable virtual engagements, and hosting planned and/or ad-hoc engagements with DOE and members of the innovative academic and industrial base across the nation;
8. Fostering and tracking a network of academic and industrial base members, keeping them up to date on DOE engagements with academia and industry, funding opportunities; and
9. Planning and executing outreach, training, events, and other programs for industry and academic stakeholders.

Supplemental Lines of Work (S-LOWs):

1. National Laboratory technology matchmaking including but not limited to facilitating patent and intellectual property management, such as patent and licensing assistance, or partnering for continued development;

2. Technology scouting and horizon scanning for DOE programs, DOE National Laboratories, and DOE facilities including technology and market research and hosting technology showcases;
3. Encouraging industry collaborative investment of leveraged research resources as having high potential for commercialization, especially in areas related to DOE missions;
4. Providing manufacturing, design, business, and incubation assistance to DOE awardees, licensees of DOE technologies, and other DOE stakeholders, including those interested in submitting funding proposals to DOE, for the purpose of successfully maturing and transitioning technologies to commercialization or providing small production runs of critical technologies that would otherwise be too small of an order to be of interest to manufacturers;
5. Identifying promising technologies that currently exist or are in the developmental phase at DOE, DOE facilities, or with DOE awardees, that could be efficiently, and cost effectively transitioned to the market; and
6. Establishing a network of subject matter experts to engage with DOE program managers to review and evaluate promising technology solutions for technology transfer and commercialization to industry.

Appendix B: PIA Projects

Project Name	Office	Project Funding	Description	Status as of Sept. 30, 2024
Automotive Supplier Diversification and Conversion Playbook Deployment Project	MESC	$1.5M	A "playbook" of strategies for automotive small and medium-sized manufacturers to transition to electric vehicles or other clean energy manufacturing.	**Award Negotiation**
Capacity Building for Repurposing Energy Assets	FECM	$3.5M	Supporting performers (e.g., municipal governments, community-based NGOs) in capacity building and workforce development planning in communities that host fossil fuel assets that comprise or comprised a significant portion of local activities. The funding directly supports analysis and transition coordination and planning, with an emphasis on workforce development.	**Active Work**
Community College/Trade School/Union Training Program Technical Assistance IAC Field Manager	MESC	$5M	funds the creation of new Industrial Assessment Centers (IACs) at community college, trade schools, and union training programs. This project will fund the Technical Assistance Field Manager.	**Award Negotiation**
Developing Shared Principles for Community Collaboration for Office of Clean Energy Demonstration (OCED) Projects	OCED	$3M	Communities hosting OCED projects will establish a set of Shared Principles for Community Collaboration that can support meaningful engagement throughout the life of their project and adapt to changes and developments in communities over time. OCED will provide support for local organizations that can convene all parties, facilitate side-bar discussions, and serve as a trusted partner throughout the process.	**Active Work**
Elective Pay Blueprints and Technical Assistance	OP	$1M	Provides funding to non-profit organizations with tax law expertise that are committed to engaging with other non-profits, governmental entities, and public power utilities, co-ops, and non-traditional partners regards elective pay. Allocated funding would allow the recipient organizations to produce and distribute detailed guides and blueprints demonstrating how elective pay eligible entities can use tax credits to support clean energy projects.	**Review & Down selection**
Energy Efficiency and Conservation Block Grant (EECBG) Blueprint Cohorts	SCEP	$2M	Provides Energy Efficiency and Conservation Block Grant (EECBG) selectees the support they need to successfully execute their EECBG projects and programs. The cohorts will facilitate peer-to-peer learning,	**Active Work**

			troubleshooting around common challenges, information sharing, and Q&A sessions through regular virtual meetings, seminar, small group discussions, office hours and more. Cohort participants will gain valuable skills, such as how to use various energy planning tools, through expert-lead trainings and interactive seminars.	
Energy Future Grants (EFG): Creating a Community-Led Energy Future	SCEP	$0.9M	Funds an organization to help SCEP's EFG Program support meaningful clean energy investments in communities in and across the power, building, and transportation sectors.	**Active Work**
Grid Resilience Consortia: Grid Resilience and Climate Change Impacts Analysis (GRACI)	GDO	$5.25M	Supports the development of domestic, regionally focused consortium hubs of university and industry partners to provide technical assistance on grid resilience to states, Tribes and territories. These consortium hubs will use existing tools and/or develop new tools and methodologies to provide support and accelerate analysis of climate change threats and impacts on electric grid infrastructure.	**Active Work**
IAC Technical Assistance Clearinghouse Manager/Mission Integrator	MESC	$3M	Supports two primary objectives: (1) connect small and medium-sized manufacturers to Industrial Assessment Centers (IAC) services and relevant MESC, DOE, and broader federal resources that help small and medium sized manufacturers with industrial processes and energy efficiency and (2) work with the regional Centers of Excellence to connect the institution of higher education-based IACs and Expansion IACs to technical expertise and tools that support the Centers of Excellence to strengthen their approaches to technical assistance and workforce development via specialized technical opportunities.	**Active Work**
IAC Workforce Training Expansion – TRACK 1	MESC, EJE	$2M	Funds workforce development programs at community colleges, trade schools, and union training programs to strengthen their manufacturing training programs and tests approaches to serving small and medium sized manufacturers with no-cost technical assistance. Track 1 performers receive a one-year award, during which they strengthen their employer partner relationships, execute on their submitted workforce development plan, and prepare to apply for a Track 2 award during the next solicitation cycle.	**Active Work**

IAC Workforce Training Expansion – TRACK 2	MESC, EJE	$8.0M	Funds workforce development programs to expand their manufacturing workforce development programs and provides small and medium sized manufacturers with no-cost technical assistance. Performers selected for Track 2 train students, apprentices, and incumbent workers in alignment with their proposals, place them in high-quality jobs (as applicable in their program), and provide no-cost services for at least 3-8 small and medium sized manufacturers annually.	**Award Negotiation**
IAC Workforce Training Expansion – TRACK 3	MESC, EJE	$14M	Supports consortiums of workforce development programs to develop and support multiple IACs (5-15+) within their network of members. Track 3 performers receive funds and technical assistance to develop a custom solicitation process to select new IACs from amongst their members and develop member-specific how-to-be-an-IAC guidance.	**Award Negotiation**
Indian Energy Policy and Programs Communication and Outreach with Regional Nonprofit Intertribal Organizations	IE	$3.6M	Provides assistance to intertribal organization to better educate and collaborate with tribal entities. The Office of Indian Energy funds regional nonprofit intertribal organizations to provide focused efforts to increase tribal participation and cooperation to effectively communicate funding opportunities, amplify DOE messaging, and support tribal energy capacity building.	**Opportunity Open**
Industrial Decarbonization Strategy and Analysis	MESC	$0.66M	Funds experts to conduct analyses of the industrial decarbonization sector and clean energy supply chains to inform MESC and DOE strategy in these sectors. The analyses provided by these subject matter experts will advise senior leadership on emerging technologies, flag new opportunities, champion partnerships, and support program design and execution with external stakeholders where DOE is not the lead actor.	**Active Work**
Industrial Training Assessment Centers (ITAC) Implementation Grants	MESC	$80M	Provides grants to small and medium sized manufacturing firms to implement recommendations made in IAC assessments, Department of Energy Combined Heat and Power Technical Assistance Partnership assessments, or assessments deemed equivalent by the Secretary of Energy. These grants will bolster the American manufacturing base by supporting projects to improve energy and material efficiency, increase productivity, reduce waste and pollution at small and medium sized	**Active Work**

			manufacturing facilities, and enhance cybersecurity.	
Institutions of Higher Education-based (IHE) Technical Assistance IAC Field Manager	MESC	$8M	Funds the establishment of a nimble and responsive Industrial Assessment Center (IAC) operations and engagement organization that maximizes the impact of the recent expansion of the IAC program. The IHE-based IAC Technical Assistance Field Manager will serve as a liaison between the MESC Program Manager and the individual centers based at IHEs and provides technical assistance and outreach to the IACs.	**Active Work**
Interconnection Innovation e-Xchange (i2X) Pilots to Optimize and Automate Mid-scale Distributed Energy Resource interconnection	SETO, WETO / Joint Office	$10.5M / $2.14M	Funds distribution utilities to facilitate the rapid prototyping and demonstration of different interconnection queue management optimization solutions such as automated interconnection studies, flexible interconnection strategies, locational clustering, advanced hosting capacity services, and a host of other new capabilities proposed in the i2X Distribution Interconnection Roadmap. The funded pilots will help utilities and public utility commissions understand the real-world capabilities of these new solutions and strategies and arm them with the information they need to advocate for their rapid adoption.	**Opportunity Open**
NCSP: National Community Solar Partnership	SETO	$0.48M	Performers are developing five communities of practice to explore, identify, and develop the resources necessary to improve the delivery and communication of the meaningful benefits of community solar. The communities of practice will identify the challenges, barriers, and opportunities to scale community solar developments in the short and long term.	**Active Work**
REDI: Regional Energy Democracy Initiative	EJE	$5.3M	Funds the creation of regional consortia to coordinate community organizations in regions with significant BIL and IRA investments, specifically on community benefits plans education, design, and/or implementation. These consortia will ensure the successful delivery of community benefits from BIL and IRA investments, as well as leverage and align federal, state, philanthropic and private funding with communities' needs.	**Review & Down selection**

R-STEP (Round 2): Renewable Energy Siting through Technical Engagement and Planning	SETO, WETO	$11.6M	Supports state-base collaboratives through direct funding for program expansion (e.g., hiring staff, working with stakeholder/contractors to develop new resources). This project will catalyze the development of new or expansion of existing state programs that improve renewable energy siting processes and planning for local communities.	**Review & Down selection**
R-STEP: Renewable Energy Siting through Technical Engagement and Planning	SETO, WETO	$11.2M	Supports state-base collaboratives through 1) direct funding for program expansion (e.g., hiring staff, working with stakeholder/contractors to develop new resources) and 2) technical assistance (TA) and peer-learning opportunities tailored to the needs of selected awardees. This project will catalyze the development of new or expansion of existing state programs that improve renewable energy siting processes and planning for local communities.	**Active Work**
Rural and Municipal Utility Advanced Cybersecurity (RMUC) Market Analysis	CESER	$0.03M	The RMUC Market Analysis project funded market research to identify investor-owned utilities (IOUs) selling less than 4,000,000 megawatt hours of electricity per year within the United States and its territories.	**Complete**
Supply Chain Analysis	OTT, MESC	$0.75M	The Supply Chain Analysis PIA project built a single, concise resource that summarizes supply chain issues in a standardized framework in partnership with DOE and National Lab subject matter experts and leadership.	**Complete**
Voucher Opportunity 1: Pre-Demonstration Commercialization Support	OTT, OCED, EERE	$5.25M	Addresses key adoption risk areas including bankability studies, manufacturing/supply chain assessments, and other technoeconomic analyses.	**Active Work**
Voucher Opportunity 10: Facility Retrofits for Critical Component Manufacturing	OTT, OCED	$5M	Supports established small and medium-sized manufacturers in assessing the feasibility of converting existing production lines to produce components used in the clean hydrogen, long duration energy storage, direct air capture, carbon capture, advanced nuclear, and industrial decarbonization sectors.	**Opportunity Open**
Voucher Opportunity 2: Performance Validation, Modeling, and Certification Support	OTT, OCED, EERE	$15.75M	Enables evaluation of technology performance under certification-relevant operating conditions, accelerated lifetime testing to test for failure modes, and access to advance modeling and digitization resources.	**Active Work**

Voucher Opportunity 3: Clean Energy Demonstration Project Siting/Permitting Support	OTT, OCED, EERE	$5.5M	Enables expert assistance to educate authority having jurisdictions on new clean energy technologies being demonstrated and ultimately deployed at scale in the next 5 to 10 years, understand siting and permitting best practices developed by similar jurisdictions, develop and/or propose streamlined permitting processes, understand training needs for jurisdictions' personnel (including fire, health, and safety personnel), and mitigate community acceptance concerns.	**Active Work**
Voucher Opportunity 4: EERE Commercialization Support	OTT, EERE	$1M	Focuses on EERE Commercialization Support including market research, business plans, fundraising road-mapping, and other commercialization strategy assistance for companies who have received funding from DOE's RD&D programs.	**Active Work**
Voucher Opportunity 5: FECM Commercialization Support	OTT, FECM	$4.6M	Provides support to entrepreneurs and/or businesses to address key adoption risk areas faced by carbon management companies at Technology Readiness Level (TRL) 3-6. Support may include independent assessment of monitoring reporting technologies and practices for carbon management technologies and resource sustainability technology performance validation support.	**Active Work**
Voucher Opportunity 6: The Hydropower Testing Network (HyTN) Program	WPTO	$2.2M	Establishes a Hydropower Testing Network that facilitates and funds testing activities between innovators and laboratories through a voucher-type program.	**Opportunity Open**
Voucher Opportunity 7: Long Duration Energy Storage (LDES) Technology Acceleration	OE	$0.5M	Funds municipalities, Tribes and tribal organizations, state or local governments, community development organizations, or utilities who are interested in deploying energy storage in their jurisdiction. These recipients receive targeted technical assistance, siting/permitting support and community engagement support.	**Opportunity Open**
Voucher Opportunity 8: Long Duration Energy Storage (LDES) Community Development	OE	$0.5M	Targets LDES technology innovators, including vendors and manufacturers, who will spend their vouchers at provides to receive technical assistance, analysis, modelling, performance validation, or other technology development and commercialization assistance. These providers may include National Laboratories, consulting firms, nonprofits, and technology testing centers.	**Opportunity Open**
Voucher Opportunity 9: Planning and Validation of Industrial	OTT, OCED	$10M	Supports feasibility studies to accelerate demonstration and deployment of promising industrial decarbonization technologies for small and medium-sized manufacturers,	**Opportunity Open**

Decarbonization Solutions			small industrial facilities, and technology providers.	

Appendix C: PIA Awards through September 30, 2024

B2B Agreements Signed or Under Negotiation[42]

Project	Awardee	Awardee State	Amount Awarded
Automotive Supplier Diversification and Conversion Playbook Deployment Project	Central Indiana Corporate Partnership, Inc.	IN	$500,000
Automotive Supplier Diversification and Conversion Playbook Deployment Project	University of Illinois	IL	$500,000
Automotive Supplier Diversification and Conversion Playbook Deployment Project	University of Michigan	MI	$500,000
Capacity Building for Repurposing Energy Assets	Alaska Municipal League	AK	$100,000
Capacity Building for Repurposing Energy Assets	Associated Governments of Northwest Colorado	CO	$100,000
Capacity Building for Repurposing Energy Assets	Beaver County Corporation for Economic Development	PA	$100,000
Capacity Building for Repurposing Energy Assets	Center for Applied Research & Technology, Inc.	VA	$100,000
Capacity Building for Repurposing Energy Assets	City of Beulah	ND	$100,000
Capacity Building for Repurposing Energy Assets	Eastern PA Coalition for Abandoned Mine Reclamation	PA	$100,000
Capacity Building for Repurposing Energy Assets	Floyd County Fiscal Court	KY	$100,000
Capacity Building for Repurposing Energy Assets	Four Corners Economic Development, Inc	NM	$100,000
Capacity Building for Repurposing Energy Assets	Grow Rural PA	PA	$100,000
Capacity Building for Repurposing Energy Assets	Growth Partnership for Ashtabula County	OH	$100,000
Capacity Building for Repurposing Energy Assets	Hopi Tribe Economic Development Corporation	AZ	$100,000
Capacity Building for Repurposing Energy Assets	Impact EVV Foundation	IN	$100,000
Capacity Building for Repurposing Energy Assets	Itasca Economic Development Corporation	MN	$100,000

[42] Note that data shown includes all organizations with signed or B2B agreements under negotiation, but not selections that have been announced but not yet started negotiations.

Capacity Building for Repurposing Energy Assets	Joseph City Foundation	AZ	$100,000
Capacity Building for Repurposing Energy Assets	Pennsylvania Association for Sustainable Agriculture	PA	$100,000
Capacity Building for Repurposing Energy Assets	Pueblo Economic Development Corporation	CO	$100,000
Capacity Building for Repurposing Energy Assets	Regents of the University of California on behalf of its Riverside Campus,	CA	$100,000
Capacity Building for Repurposing Energy Assets	Southeastern Utah Economic Development District	UT	$100,000
Capacity Building for Repurposing Energy Assets	Texas A&M International University	TX	$100,000
Capacity Building for Repurposing Energy Assets	THE CENTER FOR COMMUNITY GROWTH	PA	$100,000
Capacity Building for Repurposing Energy Assets	The Pennsylvania State University	PA	$100,000
Capacity Building for Repurposing Energy Assets	Woodland Community Land Trust	TN	$100,000
Community College/Trade School/Union Training Program Technical Assistance IAC Field Manager	Michigan State University	MI	$4,999,999
Developing Shared Principles for Community Collaboration for OCED Projects	Emergent Method, LLC	LA	$53,900
EECBG Blueprint Cohorts	American Council for an Energy Efficient Economy	DC	$1,000,000
Energy Futures Grants Technical Assistance Facilitator	Rocky Mountain Institute	CO	$375,000
Energy Futures Grants Technical Assistance Facilitator	Southface Institute	GA	$375,000
Energy Futures Grants Technical Assistance Facilitator	Sustainable Capital Advisors	DC	$150,000
Regional Energy Democracy Initiative	Power Coalition for Equity and Justice	LA	$400,000
Regional Energy Democracy Initiative	Louisiana Chamber of Commerce Foundation	LA	$395,558
Regional Energy Democracy Initiative	Gulf States Renewable Industries Association	LA	$150,000
Regional Energy Democracy Initiative	Micah Six Eight Mission	LA	$113,200
Regional Energy Democracy Initiative	SOUTHERN UNIVERSITY AGRICULTURAL & MECHANICAL COLLEGE	LA	$2,000,000
Regional Energy Democracy Initiative	Integrated Minority Aids Network, Inc. (IMANI NETWORK)	TX	$400,000
Regional Energy Democracy Initiative	Air Alliance Houston	TX	$450,188

Regional Energy Democracy Initiative	Digital Workforce Academy, Inc.	TX	$701,000
Regional Energy Democracy Initiative	Ingleside on the Bay Coastal Watch Association	TX	$341,000
Regional Energy Democracy Initiative	Texas Climate Jobs Project	TX	$390,054
Grid Resilience Consortia	Baringa Partners LP	NY	$950,000
Grid Resilience Consortia	Creation Energy LLC	TX	$500,000
Grid Resilience Consortia	Pointerra US, Inc.	VA	$1,630,000
Grid Resilience Consortia	Texas A&M	TX	$600,000
Grid Resilience Consortia	University of Albany	NY	$475,000
Grid Resilience Consortia	University of Connecticut	CT	$525,000
IAC Technical Assistance Clearinghouse Manager/Mission Integrator	Houston Advanced Research Center	TX	$2,771,451
IAC Workforce Training Expansion - TRACK 1	Arkansas State University Newport	AR	$200,000
IAC Workforce Training Expansion - TRACK 1	Central Alabama Community College	AL	$200,000
IAC Workforce Training Expansion - TRACK 1	County College of Morris	NJ	$199,328
IAC Workforce Training Expansion - TRACK 1	DEW HVAC Training Services Center	SC	$200,000
IAC Workforce Training Expansion - TRACK 1	Greenfield Community College	MA	$199,791
IAC Workforce Training Expansion - TRACK 1	Idaho State University College of Technology	ID	$199,831
IAC Workforce Training Expansion - TRACK 1	Jobs to Move America	CA	$200,000
IAC Workforce Training Expansion - TRACK 1	Johnston Community College	NC	$152,709
IAC Workforce Training Expansion - TRACK 1	Northeast Community College	NE	$200,000
IAC Workforce Training Expansion - TRACK 1	Spokane Community	WA	$180,548
IAC Workforce Training Expansion - TRACK 1	Tulsa Community	OK	$80,358
IAC Workforce Training Expansion - TRACK 1	UA Pulaski Technical College	AR	$200,000
IAC Workforce Training Expansion - TRACK 1	Ulster County Community College	NY	$199,376
IAC Workforce Training Expansion - TRACK 2	Bucks County Community College	PA	$2,000,000
IAC Workforce Training Expansion - TRACK 2	Iowa Lakes Community College Lorain County Community College	IA	$1,986,637

IAC Workforce Training Expansion - TRACK 2	Lorain County Community College	OH	$2,000,000
IAC Workforce Training Expansion - TRACK 2	United Auto Workers Region 6	CA	$2,000,000
IAC Workforce Training Expansion - TRACK 2	United Steelworkers Local Union 1-689 (USW Local 689)	OH	$1,989,978
IAC Workforce Training Expansion - TRACK 3	SMART Industrial Assessment Centers	CA	$5,700,000
IAC Workforce Training Expansion - TRACK 3	UWM IAC Consortia Program	WI	$5,700,000
ITAC Implementation Grant Program	Absecon Mills	NJ	$283,937
ITAC Implementation Grant Program	ACP Composites	CA	$218,292
ITAC Implementation Grant Program	Aggie Creamery	UT	$22,921
ITAC Implementation Grant Program	American Ag Energy, Inc	NH	$300,000
ITAC Implementation Grant Program	Annieglass Inc	CA	$159,999
ITAC Implementation Grant Program	APT Metal Fabricators Inc.	CA	$150,600
ITAC Implementation Grant Program	Artone Manufacturing	NY	$300,000
ITAC Implementation Grant Program	Atlantic County Utilities Authority	NJ	$300,000
ITAC Implementation Grant Program	Aztec Manufacturing LLC d/b/a AZZ Galvanizing - Crowley	TX	$15,047
ITAC Implementation Grant Program	AZZ Surface Technologies - Rowlett LLC	TX	$56,338
ITAC Implementation Grant Program	BCI Solutions, Inc	IN	$32,700
ITAC Implementation Grant Program	Beauflor USA	GA	$245,689
ITAC Implementation Grant Program	Best Bath Systems Inc.	TN	$300,000
ITAC Implementation Grant Program	BJS&T Enterprises	CA	$300,000
ITAC Implementation Grant Program	Bless Precision Tool, Inc.	PA	$269,241
ITAC Implementation Grant Program	Bo Bo Poultry Market Inc.	NY	$101,790
ITAC Implementation Grant Program	Brooks & Perkins, Inc.	MI	$196,249
ITAC Implementation Grant Program	C-Care LLC	MD	$107,760

ITAC Implementation Grant Program	Chesapeake Specialty Products, Inc.	MD	$300,000
ITAC Implementation Grant Program	City of Englewood	CO	$118,500
ITAC Implementation Grant Program	City of Gloucester	MA	$300,000
ITAC Implementation Grant Program	City of Le Sueur	MN	$201,500
ITAC Implementation Grant Program	City of Watertown	WI	$100,000
ITAC Implementation Grant Program	Cleaveland Price Inc	PA	$14,598
ITAC Implementation Grant Program	Collins Company	OR	$116,245
ITAC Implementation Grant Program	Con-Fab California, LLC	CA	$47,000
ITAC Implementation Grant Program	Con-Fab California, LLC	CA	$47,000
ITAC Implementation Grant Program	CW Recycling	IN	$17,108
ITAC Implementation Grant Program	CymSTAR LLC	OK	$175,766
ITAC Implementation Grant Program	DR Johnson Lumber Co	OR	$49,096
ITAC Implementation Grant Program	Durgin and Crowell Lumber Co., Inc.	NH	$300,000
ITAC Implementation Grant Program	Dye Precision CNC, Inc.	CA	$300,000
ITAC Implementation Grant Program	Eastgate Group Ltd	OH	$99,095
ITAC Implementation Grant Program	Edscha Automotive	MI	$26,000
ITAC Implementation Grant Program	Edscha Automotive Michigan	MI	$141,500
ITAC Implementation Grant Program	Electroimpact Inc	WA	$251,769
ITAC Implementation Grant Program	Gateway Aluminum	MO	$166,266
ITAC Implementation Grant Program	Gulf South Machine, Inc.	LA	$63,052
ITAC Implementation Grant Program	Hood Container	KY	$300,000
ITAC Implementation Grant Program	Huf North America Automotive Parts Manufacturing, Corp.	TN	$166,324
ITAC Implementation Grant Program	Industrial Heater Corp/Hi Tech Fabricating	CT	$109,975

ITAC Implementation Grant Program	IT ASSET PARTNERS	CA	$70,172
ITAC Implementation Grant Program	Kaemark	TX	$4,820
ITAC Implementation Grant Program	Kirsh Foundry Inc	WI	$286,000
ITAC Implementation Grant Program	Lomar Machine and Tool Company	MI	$21,510
ITAC Implementation Grant Program	Maine Woods Company, LLC	ME	$300,000
ITAC Implementation Grant Program	Manufacturing Sciences Corporation	TN	$26,250
ITAC Implementation Grant Program	Manufacturing Sciences Corporation	TN	$162,600
ITAC Implementation Grant Program	Maverick Aerospace, LLC	CA	$276,100
ITAC Implementation Grant Program	MISA Specialty Processing, Inc.	MI	$91,138
ITAC Implementation Grant Program	NAECO LLC	GA	$78,905
ITAC Implementation Grant Program	Natural Vitamins Laboratory Corp	FL	$300,000
ITAC Implementation Grant Program	Newton Heat Treating Co., Inc.	CA	$254,660
ITAC Implementation Grant Program	North American Galvanizing Company, LLC d/b/a AZZ Galvanizing – Hurst	TX	$31,313
ITAC Implementation Grant Program	Northern Hardwoods Lumber, LLC	MI	$31,313
ITAC Implementation Grant Program	Oliver Wine Company, Inc	IN	$31,313
ITAC Implementation Grant Program	ONEDA CORPORATION	GA	$251,842
ITAC Implementation Grant Program	Otsuka Chemical America, Inc	GA	$300,000
ITAC Implementation Grant Program	Pacific Fresh Cold Storage LLC	TX	$119,000
ITAC Implementation Grant Program	Paramount Coffee Company	MI	$31,096
ITAC Implementation Grant Program	Pemco International	AL	$95,675
ITAC Implementation Grant Program	Piolax	GA	$300,000
ITAC Implementation Grant Program	Plastics Engineering Company	WI	$111,350
ITAC Implementation Grant Program	Polo Farms LLC	FL	$4,171

ITAC Implementation Grant Program	Precipart Group Inc	NY	$52,185
ITAC Implementation Grant Program	Radcliff Wire, Inc.	CT	$19,200
ITAC Implementation Grant Program	Renascent, Inc. DBA CW Recycling	IN	$17,108
ITAC Implementation Grant Program	Ricaurte Precision, Inc.	CA	$52,714
ITAC Implementation Grant Program	RLB VENTURES INC	PA	$34,584
ITAC Implementation Grant Program	RSDC of Michigan LLC	MI	$122,789
ITAC Implementation Grant Program	SAFTCART, Inc.	MD	$150,000
ITAC Implementation Grant Program	Salvage Trading LLC	GA	$300,000
ITAC Implementation Grant Program	Samson Rope Technologies, Inc.	WA	$128,250
ITAC Implementation Grant Program	Sargent Metal	SC	$300,000
ITAC Implementation Grant Program	Sekisui Aerospace - Renton	WA	$86,000
ITAC Implementation Grant Program	SENGA ENGNEERING, Inc.	CA	$300,000
ITAC Implementation Grant Program	Senior Flexonics – Bartlett, Div. of Senior Operations, LLC	IL	$200,000
ITAC Implementation Grant Program	Sheet Metal Components, Inc.	GA	$300,000
ITAC Implementation Grant Program	Solidify Manufacturing	MN	$300,000
ITAC Implementation Grant Program	Southeastern Printing	FL	$100,781
ITAC Implementation Grant Program	TH Foods	IL	$273,135
ITAC Implementation Grant Program	Tintoria Piana	GA	$121,930
ITAC Implementation Grant Program	Top Hat Mushrooms, Inc.	OR	$300,000
ITAC Implementation Grant Program	Trillium Brewing Company, LLC	MA	$300,000
ITAC Implementation Grant Program	Unit Drop Forge Co Inc	WI	$31,114
ITAC Implementation Grant Program	Universal Metal Works LLC	NY	$20,000
ITAC Implementation Grant Program	Valence Surface Technologies	WA	$11,189

ITAC Implementation Grant Program	Valence Surface Technologies - Blue Streak Finishers	WA	$80,855
ITAC Implementation Grant Program	Valence Surface Technologies - Magnetic & Penetrant Services Co (MAPSCO)	WA	$2,200
ITAC Implementation Grant Program	Vergent Power Solutions on behalf of the City of Janesville WI WWTP	WI	$300,000
ITAC Implementation Grant Program	Vox Nutrition, Inc.	UT	$300,000
ITAC Implementation Grant Program	W.A. Wilson & Son's, Inc.	WV	$32,850
ITAC Implementation Grant Program	Walker Emulsions Inc.	OR	$153,620
ITAC Implementation Grant Program	Watertown Water and Wastewater Utility	WI	$100,000
ITAC Implementation Grant Program	Zeeospheres Ceramics, LLC	WV	$26,776
Industrial Decarbonization Strategy and Analysis	Ed Rightor	MD	$100,000
Industrial Decarbonization Strategy and Analysis	Metis Endeavor LLC	TX	$100,000
Industrial Decarbonization Strategy and Analysis	Michigan State University	MI	$100,000
Industrial Decarbonization Strategy and Analysis	Rocky Mountain Institute	CO	$100,000
Institutions of Higher Education-based (IHE) Technical Assistance IAC Field Manager	Rutgers Center for Advanced Energy Systems	NJ	$8,500,000
MESC Supply Chain Analysis	DRG Technical Solutions LLC	TN	$500,000
MESC Supply Chain Analysis	Valdos Consulting	PA	$250,000
National Community Solar Partnership	Clean Energy Group, Inc.	VT	$93,000
National Community Solar Partnership	Clean Energy States Alliance, Inc	VT	$93,000
National Community Solar Partnership	Cooperative Energy Futures	MN	$93,000
National Community Solar Partnership	Midwest Renewable Energy Association	WI	$93,000
National Community Solar Partnership	Solar United Neighbors	DC	$90,000
R-STEP	Board of Regents of the University of Wisconsin System/UW - Madison	WI	$993,877
R-STEP	Iowa State University of Science and Technology	IA	$1,741,463
R-STEP	Michigan Department of Environment, Great Lakes, and Energy	MI	$1,980,000
R-STEP	Mississippi	MS	$1,980,000

R-STEP	North Carolina State University	NC	$1,964,349
R-STEP	Purdue University	IN	$1,929,255
Voucher Opportunities 1 - 5	350Solutions, Inc	NC	$460,000
Voucher Opportunities 1 - 5	ADL Ventures, LLC	CA	$48,000
Voucher Opportunities 1 - 5	Bennovative LLC	AL	$35,000
Voucher Opportunities 1 - 5	Boundless Impact Research & Analytics Inc.	NY	$866,870
Voucher Opportunities 1 - 5	CPFD, LLC	TX	$1,268,550
Voucher Opportunities 1 - 5	DNV ENERGY USA, INC.	TX	$775,000
Voucher Opportunities 1 - 5	eFormative Options, LLC	WA	$50,000
Voucher Opportunities 1 - 5	Evergreen Climate Innovations	IL	$50,000
Voucher Opportunities 1 - 5	EXP US Services, Inc	IL	$100,000
Voucher Opportunities 1 - 5	Feldhake Consulting LLC	MO	$75,000
Voucher Opportunities 1 - 5	GLOBAL TECHNOLOGY CONNECTION INC	GA	$600,000
Voucher Opportunities 1 - 5	Johnston Engineering PLLC	WA	$1,000,000
Voucher Opportunities 1 - 5	LHP Data Analytic Solutions LLC	IN	$384,870
Voucher Opportunities 1 - 5	Mark Mba Wright	IA	$30,000
Voucher Opportunities 1 - 5	Moeller Ventures LLC	MN	$20,000
Voucher Opportunities 1 - 5	Nalu Scientific, LLC	HI	$50,000
Voucher Opportunities 1 - 5	Omitz, LLC	CO	$20,000
Voucher Opportunities 1 - 5	Peak Innovations Group LLC	WA	$50,000
Voucher Opportunities 1 - 5	Rare Innovation, LLC	FL	$90,000
Voucher Opportunities 1 - 5	Research Triangle Institute	NC	$215,000
Voucher Opportunities 1 - 5	Strategen Consulting Inc	CA	$140,000
Voucher Opportunities 1 - 5	Strategic Analysis, Inc.	VA	$200,000
Voucher Opportunities 1 - 5	The Ohio State University	OH	$100,000
Voucher Opportunities 1 - 5	TPR Enterprises, LLC dba EcoEngineers	IA	$280,000
Voucher Opportunities 1 - 5	Turbine Logic	GA	$399,870
Voucher Opportunities 1 - 5	Wichita State University	KS	$120,000
Voucher Opportunities 1 - 5	X UTILITY	CA	$46,050

National Laboratory PIA Awardees[43]

Project	Awardee	Awardee State	Amount Awarded
Voucher Opportunities 1 - 5	Argonne National Laboratory	IL	$75,000
Voucher Opportunities 1 - 5	Idaho National Laboratory	ID	$517,399
Voucher Opportunities 1 - 5	Lawrence Livermore National Laboratory	CA	$600,000

[43] National laboratories can apply through the PIA for specific opportunities, but if selected, contracting does not go through the PI.

Voucher Opportunities 1 - 5	National Energy Technology Laboratory	PA	$500,000
Voucher Opportunities 1 - 5	National Renewable Energy Laboratory	CO	$250,000
Voucher Opportunities 1 - 5	Oak Ridge National Laboratory	TN	$700,000

Appendix D: Acronyms

DOE Program & Staff Offices:

AMMTO	Advanced Materials and Manufacturing Technologies Office
BTO	Buildings Technologies Office
CESER	Office of Cybersecurity, Energy Security, and Emergency Response
CF	Office of the Chief Financial Officer
EERE	Office of Energy Efficiency & Renewable Energy
EJE	Office of Energy Justice and Equity
FECM	Office of Fossil Energy & Carbon Management
GC	Office of the General Counsel
GDO	Grid Deployment Office
GFO	Golden Field Office
GTO	Geothermal Technologies Office
IE	Indian Energy Policy and Programs
IEDO	Industrial Efficiency and Decarbonization Office
Joint Office	Joint Office of Energy and Transportation
MA	Office of Management
MESC	Office of Manufacturing & Energy Supply Chains
OCED	Office of Clean Energy Demonstrations
OE	Office Electricity
OP	Office of Policy
OTT	Office of Technology Transitions
RTES	Office of Research, Technology, and Economic Security
SCEP	Office of State and Community Energy Programs
SETO	Solar Energy Technologies Office

WETO	Wind Energy Technologies Office
WPTO	Water Power Technologies Office

Other:

ATI	Advanced Technology International
B2B	Business to Business
BAA	Broad Agency Announcement
BIL	Bipartisan Infrastructure Law
CHP-TAP	Combined Heat and Power Technical Assistance Partnerships
CIA	Central Intelligence Agency
CO2	Carbon Dioxide
DHS	Department of Homeland Security
DOD	Department of Defense
DOE	Department of Energy
DoED	Department of Education
EECBG	Energy Efficiency and Conservation Block Grant Program
EFG	Energy Future Grants
EPA	Environmental Protection Agency
EV	Electric Vehicle
FOA	Funding Opportunity Announcement
FY	Fiscal Year
HHS	Department of Health and Human Services
HyTN	Hydropower Testing Network
IAC	Industrial Assessment Center
I-LOW	Initial Line of Work
IP	Intellectual Property
IRA	Inflation Reduction Act

ITAC	Industrial Assessment Training Center
LDES	Long Duration Energy Storage
NASA	National Aeronautics and Space Administration
NCSP	National Community Solar Partnership+
NEPA	National Environmental Policy Act
NIH	National Institutes of Health
NIJ	National Institute of Justice
NIST	National Institute of Standards and Technology
NRO	National Reconnaissance Office
NSF	National Science Foundation
PI	Partnership Intermediary
PIA	Partnership Intermediary Agreement
PPO	Partnership Intermediary Agreement Project Orders
RMUC	Rural and Municipal Utility Advanced Cybersecurity
R-STEP	Renewable Energy Siting through Technical Engagement and Planning
SBIR	Small Business Innovation Research
S-LOW	Supplemental Line of Work
STEM	Science, Technology, Engineering, and Mathematics
STTR	Small Business Technology Transfer
TCF	Technology Commercialization Fund
USAID	United States Agency of International Development
VO	Voucher Opportunity