

DOE's Response to the EWAB's "Strategy for a 21st Century Energy Workforce"

About this Report:

The Energy Workforce Advisory Board (EWAB) was directed by Infrastructure Investments and Job Act (IIJA) to develop a strategy for the Department of Energy (DOE) to support and develop a skilled energy workforce, with numerous specific objectives therein. The EWAB was charged with submitting a report to the Secretary, within one year of its establishment (and then biennially thereafter), that contains the findings and the proposed energy workforce strategy of the Board. The EWAB submitted that report, titled "Strategy for a 21st Century Energy Workforce" on September 10, 2024.

Within the EWAB's legislative statute, the Secretary of Energy is directed to "submit to the Board a response to the report that: (I) describes whether the Secretary approves or disapproves of each recommendation of the Board...; and (II) if the Secretary approves of a recommendation, provides an implementation plan for the recommendation." **This report serves as that response.**

The legislative statute also directs the Secretary to submit to Congress the Board's report and the response, not later than 90 days after the Board's report is submitted to the Department.

Two factors create an urgency for a significant shift in DOE's workforce strategy.

The EWAB identified at least two major factors calling for a shift in DOE's workforce strategy:

1. **The Investing in America (IIA) agenda is catalyzing unprecedented, large-scale change in the domestic energy sector**, driving a shift to a zero-emissions economy and onshoring key clean energy supply chains, while demand for energy rises. This transition and growth will require skilled workers—likely millions more—to build, operate, manufacture and maintain a clean, reliable, and secure 21st Century energy system.
2. **DOE has an expanded role as a catalyst for the deployment of clean energy infrastructure and the resurgence of domestic manufacturing.**

Now is the time to expand and sharpen DOE’s workforce strategy to align with this role. That strategy must start with leveraging DOE’s unique assets—from its robust National Laboratory complex, to its technical expertise, to its unique ability to have a birds-eye view of anticipated changes in the energy sector, to its influence over key actors, such as energy companies. With major programmatic Bipartisan Infrastructure Law (BIL) and Inflation Reduction Action (IRA) investments, demand for workers across infrastructure and supply chain investments will grow rapidly over the coming years. DOE is well-positioned to lead a national strategy to support the growth, development, and retention of the needed workforce.

DOE has a long history of funding effective workforce activities for science, technology, engineering, and mathematics (STEM) and nuclear—the Research and Development (R&D) workforce. Prior to BIL and IRA investments, 86% of DOE’s workforce investments went into nuclear and cross-cutting science topics (mostly high-performance computing).¹ With the passage of BIL and IRA, DOE must also now command the development, attraction, and retention of the energy workforce that will be needed to deploy (i.e., build, construct, manufacture and maintain) energy solutions.

DOE has condensed the EWAB recommendations into an eight-point plan.

For DOE program offices, this 8-point plan should be considered a recommendation for how the Department should begin to implement the EWAB’s recommendations.

- 1. Workforce Principles: DOE is adopting the eight recommended workforce principles in strategic recommendation I.**

Simultaneous to this response report, the Secretary is issuing an Advisory Memo that instructs the Departmental Elements to integrate the EWAB’s recommended eight workforce principles into its workforce development and deployment activities and initiatives, where feasible and allowable (for the eight principles, see page 7 of this report).

- 2. Registered Apprenticeship and Related High-Quality Workforce Pathways: DOE should take steps to deepen access to and success in Registered**

¹ [DOE Workforce Inventory Report to Congress FY2011-22.pdf \(energy.gov\)](#)

Apprenticeship (as well as high-quality Youth Apprenticeship and apprenticeship readiness) programs across the energy sector.

DOE should prioritize the Registered Apprenticeship model across its workforce development financial assistance programs, wherever feasible, including curriculum development that fits into the Registered Apprenticeship model. DOE should also further efforts to increase access to high-quality apprenticeship readiness (also termed pre-apprenticeship) with articulation into Registered Apprenticeship and begin to explore how to support availability of Youth Apprenticeship models.

3. Place-based Workforce Development Support: DOE should deepen investment in place-based workforce development efforts, including technical assistance.

DOE launched several place-based workforce development initiatives in 2023. DOE should work to bolster the impact of these initiatives and build upon this model, including in energy communities. DOE should request a continual source of funding to support more place-based workforce development fellowships, staff positions, capacity building, and technical assistance.

4. Effectiveness Data: DOE should step up its data gathering efforts on critical workforce topics, including on the effectiveness of its workforce development investments and its deployment investments in creating good quality jobs and access to them.

DOE should continue its work to incorporate several of the EWAB's data recommendations into its forward-looking Energy Workforce Needs Assessment (and request a continual source of funding for this analysis), and DOE should look for ways to address critical questions in the U.S. Energy and Employment Report. DOE should identify recurring workforce development programs on which to begin collecting data on the effectiveness of these investments to prepare and connect people to good quality energy careers. DOE should also gather and publish data to show its progress in connecting workers from disadvantaged communities and underrepresented demographic groups to good quality careers in construction on its BIL/IRA deployment investments.

5. National Laboratories: DOE should continue to more effectively leverage the National Laboratory complex to support the development of the entire energy workforce.

DOE is conducting an inventory and analysis of the workforce development activities, resources, and capacities across all seventeen National Laboratories.

This analysis and inventory should be used—with collaboration from the EWAB—to develop a long-term strategy to more effectively leverage the Labs to support the broader energy workforce.

- 6. National Sectoral Strategies and Support for Intermediaries: DOE should identify priority industries to invest in sectoral workforce development infrastructure, building from the existing Department’s work in the battery manufacturing workforce.**

DOE should leverage its relationships and convening power to catalyze efficient, sustained, sectoral workforce strategies to address both the speed and magnitude of the energy transition. Workforce bottlenecks (and so-called “skills gaps”) can occur when there are not institutions with the capacity to bring together key stakeholders (employers, educators, and training organizations) to address workforce needs and opportunities in a strategic way. DOE is well-positioned to build the capacity of institutions (workforce intermediaries) to play that leadership role in industries and occupations of critical importance to the 21st century energy system. This is also relevant to DOE’s work to bolster place-based workforce development focused on energy careers.

- 7. Robust, Inclusive Energy Workforces: DOE should bolster inclusive access to the energy workforce for underrepresented populations, starting with concerted strategies to increase representation of women in energy and people involved in the criminal legal system.**

The energy workforce needs to grow and retain workers at scale to meet the challenges and growing energy demand. DOE should build upon and deepen its existing strategies to create access and break down barriers for underrepresented and economically marginalized populations. DOE should articulate a concerted strategy to increase access to energy careers for women. The Department should lead analysis on barriers to the energy workforce faced by people involved in the criminal legal system, with a focus on elevating effective strategies to create access and support success across the sector.

- 8. Institutionalize Workforce Strategic Leadership: DOE should maintain a centralized jobs office to coordinate the Department’s workforce development strategy and implement cross-cutting programs.** A centralized structure allows DOE to attract and maintain critical workforce expertise, leverage the Department’s unique assets, identify synergies across projects and investments, champion effective

Enclosure

measures to be built into workforce development investments, among other activities elevated in the EWAB's recommended strategy.

Appendix: Specific responses and Implementation Steps

Abbreviations of Office Names that are listed in the Specific responses and Implementation Steps

Office Names, Cross-Office or Cross-Agency Forums	Abbreviation used in this report (for brevity)
Assistant Secretary for Energy Efficiency & Renewable Energy	EERE
Assistant Secretary for Nuclear Energy	NE
Assistant Secretary for Fossil Energy and Carbon Management	FECM
Energy Workforce Strategy Council	EWSC
Office of the Chief Human Capital Officer	Human Capital
Indian Energy Policy & Programs	IE
Interagency Working Group on Coal & Power Plant Communities & Economic Revitalization	IWG on Energy Communities
Loan Programs Office	LPO
Office of Energy Jobs	OEJ
Office of Energy Justice and Equity	EJE
Office of Manufacturing & Energy Supply Chains	MESC
Office of Science	SC
Office of State and Community Energy Programs	SCEP
Office of the Under Secretary for Infrastructure	Under Secretary for Infrastructure
Office of the Under Secretary for Science and Innovation	Under Secretary for Science

See also [Organization Chart | Department of Energy](#).

Strategic Recommendations		DOE Response	DOE Office(s) Driving Implementation
I	Issue an Agency Directive adopting eight principles for all DOE workforce activities. (Principles are below.)	Concur with amendment.	OEJ
I.1.	Begin with analysis that gathers crucial data, including on labor market demand and supply, the Department’s current workforce activities and outcomes, as well as equity and quality in energy jobs.	DOE is issuing a Secretarial memo for internal stakeholders, which will elevate these principles across DOE. DOE will also elevate these principles on the Department’s website for external stakeholders. The Department will work to embed these principles into its workforce strategy in a variety of ways, through trainings, program development, etc. DOE should show progress within one year.	
I.2.	Prioritize broad occupational training for careers rather than task training for unique jobs.		
I.3.	Break down silos across workforce efforts that focus on specific technologies or tasks.		
I.4.	Leverage, partner with, and boost the capacity of existing workforce and education infrastructure, including union sponsored apprenticeship and labor management partnerships, to impact job quality and equity.		
I.5.	Use every tool in DOE’s toolbox to incentivize employer commitment to direct hiring, retention, and career path strategies.		
I.6.	Focus on partnerships over stand-alone programs.		
I.7.	Drive employer commitment to and investment in job quality and equity.		
I.8.	Choose meaningful metrics—then measure early, evaluate often, and make timely adjustments to meet mission-critical goals.		

Strategic Recommendation		DOE Response	DOE Office(s) Driving Implementation
II	Institutionalize and bolster the Department’s coordination of critical workforce activities internally and across Federal agencies.	Concur with some clarifications.	OEJ
II.1.	Establish the Office of Energy Jobs (OEJ) as a standalone office and clarify that it is charged with leadership and coordination of DOE’s cohesive workforce strategy.	Concur with clarification. OEJ is charged with coordination of DOE’s cohesive workforce strategy, with a particular focus on the deployment workforce (i.e., workers not directly involved in R&D).	
	II.1.i. Move OEJ outside the Office of Policy so that it is a standalone office and clarify that its role is in leading and coordinating DOE’s cohesive workforce strategy across the Department (i.e., goes beyond policy advising to include deployment of funded workforce programs). This is aimed at creating an office where workforce efforts geared towards occupations that do not require advanced degrees for implementation and deployment are overseen through a centralized, coordinated office.	Concur with parts of this. DOE concurs with the point that there should be an office with a clear role in coordinated workforce efforts related to the deployment workforce. Continuity of staff expertise and programmatic capacity is important to execute a coherent and bold workforce strategy to develop and support the 21 st century workforce. OEJ is part of the Office of Policy to ensure that jobs and workforce considerations are part of all policy considerations. Over time, different office structures can be considered to best deliver mission functions as directed by Congress.	
	II.1.ii. Do an assessment of how much funding and staffing this office would need to implement	Concur with clarification. Assessments of funding and staffing needs are a regular part of	

	<p>recommendations in this report, and request that amount from Congress. The mission of this office would need significant funding to support workforce programming aimed at the vast majority of occupations needed for deployment—those related to constructing, maintaining, repairing, and manufacturing critical infrastructure. It would also need a larger staff of individuals with expertise in effective workforce development to execute these recommendations. OEJ would not necessarily execute everything in this report but would play a coordinating/influencing role across the Department, and for this, there would need to be more staff to coordinate and support these recommendations.</p>	<p>the budget development process. Congress can direct DOE expand its energy jobs mission and provide resources to do so.</p>	
	<p>II.1.iii. Identify best practices for recruitment and qualifications of workforce development and labor staff when filling positions across the agency, informed by the principles above. Establish an expectation that program offices engage experts in OEJ in relevant hiring decisions.</p>	<p>Concur. OEJ will work with Human Capital and representatives of the Energy Workforce Strategy Council to develop a memo and distribute it to relevant offices.</p> <p>DOE should show progress within one year.</p>	
<p>II.2.</p>	<p>Lead and expand collaboration with other Federal agencies implementing workforce development for critical energy sector occupations.</p>	<p>Concur with parts of this.</p>	<p>OEJ (as above)</p>
	<p>II.2.i. Partner with the Departments of Education and Labor to leverage supply-side workforce development systems and relationships to support energy workforce development and education. For example, all supply-side workforce development funding opportunities that are relevant to energy occupations should be uplifted in a</p>	<p>Concur with parts of this. DOE should continue to collaborate with Departments of Education and Labor and explore ways to improve leveraging supply-side workforce development systems and relationships towards the energy sector.</p>	<p>OEJ</p>

<p>navigable website, rather than only listing the funding opportunities on the respective websites of each agency.</p>	<p>A near-term action could be to link to relevant funding opportunities on each agency’s websites or maintain an external website inclusive of all Federal energy workforce opportunities.</p>	
<p>II.2.ii. Partner with the Departments of Commerce and Transportation and the Environmental Protection Agency (EPA) to leverage demand-side investments and relationships to support energy workforce development and education. In particular, DOE should coordinate more closely with Children’s Health Insurance Programs (CHIPS), given the overlapping skill requirements for semi-conductors, solar modules, and batteries. Additionally, the other infrastructure agencies’ investments require many of the same workers, so more coordination to understand gaps and strategies to fill them is essential. A long-term goal could be aligning funding opportunities across these agencies to support shared workforce needs.</p>	<p>Concur with parts of this. DOE should continue to collaborate with Departments of Commerce, Transportation and EPA. DOE should explore ways to leverage data at the Department of Commerce’s Census Bureau to track effectiveness of DOE’s workforce investments.</p> <p>DOE should also explore ways to collaborate more strategically with CHIPS Office in the Department of Commerce.</p>	<p>OEJ</p>
<p>II.2.iii. Foster intentional connections between demand-side investments at DOE and supply-side workforce investments across the Federal Government. For example, encourage energy employers to partner with Department of Labor’s (DOL) workforce grantees that support underrepresented populations and disadvantaged communities,² such as Women in Apprenticeship and Nontraditional Occupations</p>	<p>Concur. DOE should explore ways to foster funding opportunities between grant recipients from DOL’s programs that support underrepresented populations and disadvantaged communities.</p> <p>This exploration should include using incentives in competitive Funding Opportunity</p>	<p>OEJ with Under Secretary for Infrastructure (and</p>

² Note that the terms disadvantaged communities, socioeconomically disadvantaged communities, underserved populations, underrepresented populations, and dislocated workers are bolded throughout the EWAB report. As such the use of bold text in the EWAB’s recommendations over these terms follows the EWAB’s use.

<p>(WANTO), Job Corps, Youth Build, and Pathway Home grantees. This looks like putting incentives into competitive FOAs to encourage applicants to make partnerships and engage with these supply-side investments.</p>	<p>Announcements (FOA) and loan applications that encourage applicants for large-scale deployment programs to engage with these supply-side investments when there is geographic and occupational overlap.</p> <p>It may also include directing applicants to DOL resources to foster connections with DOL grantees and the public workforce system, e.g.,</p> <ul style="list-style-type: none"> • High Road to the Middle Class Map • DOL Grantees Map • Job Corps Centers • Workforce Development Board Finder <p>DOE should contribute to DOL’s ongoing efforts to communicate about Investing in America (IIA) infrastructure investment funding opportunities, resources, and other relevant information to the public workforce system to improve connectivity between workforce development and infrastructure, clean energy, and manufacturing projects.</p> <p>DOE should show progress within one year.</p>	<p>related offices)³</p>
<p>II.2.iv. Partner with the Department of the Interior, as well as DOL, Departments of Education, Health and Human Services, and other agencies to provide resources</p>	<p>Concur. The Office of Indian Energy should continue to actively work on implementing this.</p>	<p>IE</p>

³ Note: All places that indicate actions led by the Office of the Under Secretary for Infrastructure refer to both grant and loan programs.

	and technical assistance to accelerate Tribal governments’ pooling or braiding of funding across agencies to support cohesive workforce development planning and interventions.	DOE should show progress within one year.	
II.3.	Make information on how DOE funding can be used for workforce development more useable and accessible.	Concur.	OEJ with numerous offices
	II.3.i. Clarify, uplift, and streamline information on allowable uses of DOE’s funds for workforce development. Do this while concurrently developing a website that includes relevant supply-side workforce development funding opportunities across the Federal agencies, described above.	Concur. DOE should take steps to clarify, uplift and streamline information on allowable uses of DOE’s funds for workforce development. DOE should show progress within one year.	OEJ with the Under Secretary for Infrastructure (and related offices)
	II.3.ii. Leverage the Community Benefits Plan (CBP) framework to render it more impactful in fostering workforce development partnerships and employer investment in workforce development. Specifically, collect information on employers interested in applying to DOE competitive deployment projects and make this information publicly accessible and navigable during the period that employers are developing CBPs. (Include contact information and fundamental workforce demand data around projects). Once projects are selected (and before awards are made), make CBPs public and navigable. When awards are made, make CBPs public and navigable. These steps allow workforce and education stakeholders to know which energy companies	Concur. DOE will explore ways to build on existing progress. DOE has provided public information on community benefits from demonstration and deployment projects under BIL and IRA, based on public fact sheets. DOE should continue to actively investigate how to make more selectee data public. DOE should increase the quality and detail of selectee and awardee fact sheets. DOE should show progress within one year.	Under Secretary for Infrastructure (and related offices)

	to contact, when there is an opportunity to collaborate in recruiting, training and supporting the workforce for the project, and who is a point of contact within the company.		
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	Strategic Recommendation	DOE Response	DOE Office(s) Driving Implementation
III	To support DOE’s industrial strategy to revitalize the U.S. energy and manufacturing sectors, integrate six interdependent strategies into DOE’s work to increase cohesion, effectiveness and planning for the future.	Concur with some amendments, clarifications and exceptions.	OEJ
III.1	Compile and maintain the data required to project workforce needs and prioritize investment in the energy workforce.	Concur.	OEJ
III.1.A	Prioritize data that informs a cohesive, effective energy workforce strategy for the Department.	Concur.	OEJ
	III.1.A.i. Request a continuous source of funding for the Energy Workforce Needs Assessment, a projection-focused companion report to the U.S. Energy and Employment Jobs Report (USEER). Establish a regular cadence for updating and publishing the Energy Workforce Needs Assessment, perhaps every two years. This report should assess and project occupational demand by geography and timeline, assess gaps in	Concur. DOE should continue its plan to publish Energy Workforce Needs Assessment and should consider requesting a continual source of funding to execute the Energy Workforce Needs Assessment. DOE should show progress within one year.	OEJ

<p>effective workforce training infrastructure relative to strategic occupational growth, and map transition-related dislocation, among other objectives.</p>		
<p>III.1.A.ii. Add analysis on critical topics to the annual USEER. Include measures of quality, education and credential requirements of energy jobs, occupational segregation, and demographic disparities across key occupations. Assess the jobs impacts on energy communities and dislocated workers affected by the clean energy transition.</p>	<p>Concur with amendments. DOE has taken steps to incorporate additional critical topics, such as job quality, to the annual USEER, but USEER is not the appropriate tool for most of these questions due to the survey design and limits on survey burden.</p> <p>Some of the information sought—occupational segregation and demographic disparities—can be analyzed with other data sources, such as LCPTracker, while other research methods are required for assessing education and credential requirements and job impacts on dislocated workers.</p> <p>DOE should show progress within one year.</p>	<p>OEJ</p>
<p>III.1.A.iii. Assess the existing workforce development capacities, research, and activities across all the National Laboratories as it relates to the energy workforce. Develop a concerted strategy for how the Department utilizes the laboratories to support workforce development for the energy sector.</p>	<p>Concur. DOE is conducting an inventory and analysis of the existing workforce development capacities, research and activities across the National Laboratory complex. It should then develop a strategy for utilizing the Laboratories in the Department’s workforce strategy.</p> <p>DOE should show progress within one year.</p>	<p>OEJ</p>

	<p>III.1.A.iv. To identify future critical gaps and opportunities for DOE’s workforce strategy, request funding for OEJ (at a minimum of \$8 million to start) to lead analysis on additional critical topics, including:</p> <ul style="list-style-type: none"> (1) The impact of new energy technologies on the workforce (e.g., change in skills requirements related to cybersecurity developments); (2) Barriers to the energy workforce (e.g., assessing the barriers facing workers with criminal legal system involvement, workers with disabilities, and women); (3) Career pathways that are meaningful and opportunities to construct new pathways; and (4) Workforce analyses to be meaningful directions on the workforce needs and labor standards implications in different policy areas that are the focus of DOE’s liftoff reports. 	<p>Concur with parts of this. DOE should lead analysis on some of these questions and should consider analyzing additional topics as capacity and funding allows.</p> <p>DOE should show progress within one year.</p>	<p>OEJ</p>
	<p>III.1.A.v. Use the data to prioritize critical needs and inform the Department’s resource allocation.</p>	<p>Concur.</p>	<p>Across the Department</p>
<p>III.2.</p>	<p>Continue, and in some cases, expand DOE’s investment in training engineers and scientists.</p>	<p>Concur.</p>	<p>Under Secretary for Science and Innovation, in particular, SC, NE, FECM, EERE</p>

<p>III.2.A.</p>	<p>Build on DOE’s and the National Laboratories’ leadership in STEM education.</p>	<p>Concur.</p>	
	<p>III.2.A.i. Continue funding (at approximately the same relative levels) training for undergraduate and graduate students through the National Laboratories and university-based centers, including Tribal Colleges and Universities (TCU), Historically Black Colleges and Universities (HBCU), and other Minority Servicing Institutions (MSI).</p>	<p>Concur. DOE should continue this work through a wide array of existing programs.</p>	<p>Under Secretary for Science and Innovation, in particular, SC, NE, FECM, EERE</p>
	<p>III.2.A.ii. Continue funding for DOE collaboration with faculty on curricula development in key science and engineering disciplines.</p>	<p>Concur. DOE should continue this work through a wide array of existing programs.</p>	<p>Under Secretary for Science and Innovation, in particular, SC, NE, FECM, EERE</p>
	<p>III.2.A.iii. Define success and measure the impact of these investments, especially for students from underrepresented and socioeconomically disadvantaged populations. This should entail, at a minimum, as related to these populations, outreach efforts, completion of training, receipt of certifications,</p>	<p>Concur. In particular, DOE STEM Science and Energy Tech Team (STEM SETT) should lead an effort to define success and develop a plan to measure the impact of these investments.</p> <p>DOE should show progress within one year of this response report.</p>	<p>Under Secretary for Science and Innovation, in particular,</p>

	obtain and maintaining employment in a good quality, related job.		SC, NE, FECM, EERE
	III.2.A.iv. Improve useability to maximize the DOE STEM website’s function as the agency’s online hub for STEM education resources.	Concur. DOE STEM should show progress within one year in improving the website’s functionality with an aim of helping external audiences learn of resources that are relevant to their needs.	SC
Recommendation III.2.B.	Maximize the role played by community and technical colleges, TCUs, HBCUs, and MSIs in developing a diverse pipeline of engineers and scientists.	Concur.	Under Secretary for Science and Innovation, in particular, SC, NE, FECM, EERE
	III.2.B.i. Facilitate connections between community and technical colleges, TCUs, HBCUs, and MSIs with emerging energy employers, sector initiatives and DOE workforce resources. Consider funding R&D collaboration/partnerships involving MSIs with leading R1 institutions in various research fields.	Concur. FECM’s University Training and Research program should continue working to creating these connections. EERE’s Clean Energy Education Prize Partnerships Track should continue making connections between HBCUs, energy industry companies, national labs, and R1 institutions in research fields in clean energy.	Under Secretary for Science and Innovation, in particular, SC, NE,

		DOE should show progress within one year.	FECM, EERE
	III.2.B.ii. Facilitate a pilot project to connect participants in entry-level energy technical training programs (i.e., weatherization) to associate degree programs or registered apprenticeship programs in science and engineering, with the aim of creating meaningful career pathways. Noting that this requires funding to implement.	Concur. Weatherization Assistance Program should continue implementing a project akin to this recommendation. Additional resources from Congress would be required to further implement this. DOE should show progress within one year.	OEJ, Under Secretary for Infrastructure
	III.2.B.iii. Explore/pilot an initiative to bolster access to critical energy-related engineering careers through registered apprenticeship. For example, such a program could create a pathway for graduates of two-year postsecondary engineering-related programs to enter into earn-while-learn programs that also earn credit towards four-year degrees.	Concur. DOE’s Office of Science should continue working with the Princeton Plasma Physics Laboratory to build on its existing Registered Apprenticeship programs that train people for careers in a variety of technical occupations. DOE should show progress within one year.	OEJ with SC
	III.2.B.iv. Set stretch targets for the inclusion of TCU/HBCU/MSIs hosting DOE programs and/or create a task force/advisory committee on how to build more relationships with these institutions, the strategies for which are likely to vary by institutional type.	Concur. Office of Indian Energy should continue its work to implement a taskforce, which will address this aim for TCUs, among other objectives. Additional offices have expressed intent to collaborate on this recommendation.	IE with EERE, EJE, SC, FECM
III.2.C.	Expand DOE STEM K-12 programs and partnerships, especially in disadvantaged communities.	Concur.	

	<p>III.2.C.i. Assess DOE and National Labs’ elementary, secondary, and CTE STEM outreach efforts to K-12 educators, counselors, students and parents. Do this broadly but with special attention paid to schools in disadvantaged communities. Deepen investment, where gaps exist. (Include this in the survey of National Labs.)</p>	<p>Concur. These topics will be incorporated into the aforementioned analysis of National Labs’ activities and capacities related to workforce development.</p> <p>DOE should show progress within one year.</p>	<p>OEJ</p>
	<p>III.2.C.ii. Work with stakeholders (e.g. Department of Education, educators, counselors, parents, students, state education agencies and Career and Technical Education (CTE) directors)) to expand the use of career and technical education programming in K-12 settings with connections to employers, geared towards high-need, in-demand energy subsectors. There is especially an opportunity to fund pre-apprenticeship programming with direct articulation and advanced placement to registered apprenticeship programs.</p>	<p>Concur. DOE should explore ways to encourage more career and technical education programming with connections to employers in energy subsectors, including through programs such as MESC’s Industrial Training and Assessment Centers. DOE may consider requesting additional funding from Congress to implement this.</p>	<p>OEJ</p>
<p>III.3.</p>	<p>Strengthen and expand a cohesive, sector-focused skills development infrastructure with direct connection to critical trade, technical, and operations jobs.</p>	<p>Concur.</p>	<p>OEJ</p>
<p>III.3.A.</p>	<p>Build new sector initiatives, support existing sector partnerships, and build up the capacities of stakeholders and workforce intermediaries to execute these strategies.</p>	<p>Concur.</p>	<p>OEJ</p>
	<p>III.3.A.i. Build the capacity of unions, employers, workforce intermediaries, and internal DOE staff to effectively engage in sector initiatives with technical</p>	<p>Concur. DOE launched several placed-based initiatives in 2023 that are in part aimed at building up the capacity of a variety of workforce</p>	<p>OEJ</p>

<p>assistance, training, and staff development. Develop a roadmap for how to make this happen.</p>	<p>and economic development stakeholders to address workforce opportunities in growing energy industries and occupations. The nascent Battery Workforce Initiative (BWI) aims to seed a national sector workforce strategy in battery manufacturing.</p> <p>DOE should explore a strategy for DOE to have a more place-based regional structure, similar to other Federal agencies.</p> <p>DOE should show progress within one year.</p>	
<p>III.3.A.ii. Establish a set of job quality, inclusion, and effectiveness guidelines for all DOE-sponsored or funded sector initiatives, e.g., initiatives will document a long-term plan for job quality in the targeted sector or occupations.</p>	<p>Concur with clarification. DOE should tap the expertise of the EWAB to develop these guidelines.</p> <p>DOE should show progress within one year.</p>	<p>OEJ with EWAB contributions</p>
<p>III.3.A.iii. Identify and prioritize an initial set of four to five energy subsectors or technical and operations occupations with projected rapid growth, e.g., cybersecurity, advanced nuclear, energy storage, hydrogen, etc. Convene labor and employers in each of the targeted subsectors to seed the development of new sector partnerships modeled after—and improving on—the BWI.</p>	<p>Concur. DOE should develop a plan to prioritize an initial set of energy subsectors or technical and operations occupations. DOE may request additional funding from Congress to seed specialized initiatives in these areas.</p> <p>DOE should convene labor and employers around key occupations in the battery manufacturing industry to deploy a demonstration project to illustrate how convening these stakeholders can</p>	<p>OEJ in consultation with the EWSC</p>

		<p>accelerate adoption of high-quality workforce training pathways.</p> <p>DOE should show progress within one year of this response report.</p>	
	<p>III.3.A.iv. Following the initial cohort, fund ongoing support for DOE-initiated sector strategies, bringing together industry partners, labor, Community Based Organizations (CBO), TCUs, HBCUs, and other MSIs, and community colleges to develop and maintain comprehensive, sustained training infrastructure and curriculum for emerging key technologies.</p>	<p>Concur. DOE should consider requesting additional funding to implement this recommendation.</p>	<p>OEJ with EERE</p>
	<p>III.3.A.v. Fund curriculum development, instructor development, and training equipment for existing sector-based partnerships targeted toward energy-critical industries and new technologies. Assess gaps in effectiveness of these partnerships and provide support, where needed. As a near-term action, document and assess this work as part of BWI and make adjustments accordingly to the plans of future initiatives.</p>	<p>Concur. Funding additional efforts would require requesting funding from Congress.</p> <p>DOE concurs with the near-term action that DOE should document and assess this work involved in the BWI.</p>	<p>OEJ</p>
	<p>III.3.A.vi. Prioritize programs that are aligned with career pathways. Fund the development of stackable and portable credentials that are widely recognized and adopted industry wide. Ensure sector initiatives do not just look to develop industry recognized credentials and document skills needs, but also foster activities that have scale best practices to recruit, train and retain</p>	<p>Concur with clarification. This is an on-going effort that should be embedded into III.3.A.ii.</p>	<p>OEJ with EWAB contributions</p>

	underrepresented and disadvantaged populations. Start with building this into the BWI.		
Recommendation III.3.B.	Deepen investment in registered apprenticeship.	Concur with clarifications.	Across the Department
	III.3.B.i. Partner with DOL to fund activities to maximize use of registered apprenticeship in skilled construction trades, advanced manufacturing, and other critical and developing energy occupations. This includes funding activities to assist employers and workforce intermediaries in establishing or growing registered apprenticeship programs, and critically to significantly improve access to information for workers, especially those from historically marginalized backgrounds or with low historic participation in related Registered Apprenticeship Programs (RAPs), on how they can connect to registered apprenticeship programs. This likely requires Congressional action to increase flexibility in authority to use funds across agencies and greater DOE input into resource allocations related to RAPs in critical energy occupations.	Concur. DOE and DOL should continue collaborating on funding opportunities and workforce initiatives, as detailed in a Memorandum of Understanding (MOU) between the agencies. DOE and DOL should explore ways to deepen this partnership as it relates to shaping and issuing funding opportunities, which may require additional authorities from Congress.	OEJ
	III.3.B.ii. Request funding to pilot an initiative in partnership with DOL to provide funding for curriculum upgrades, train the trainer initiatives, and equipment in key trades for market forward technologies that are still risky for apprenticeship programs to fund themselves.	Concur. DOE, with consultation from DOL, should explore this. Additional resources from Congress would be required to fully implement.	

	<p>III.3.B.iii. Encourage entry-points to energy careers but always prioritize entry-points that have a structure in place to help people connect to or continue in a broader career. For example, build on existing programs that fund training for solar installation to instead fund training for broader energy careers, e.g. electricians. Or fund training for Heating, ventilation, and air conditioning (HVAC), glazing, and other construction trades careers, rather than funding activities to train people just for weatherization jobs which often lack connections to long-term quality employment. Likewise, promote add-on certifications for existing occupations (e.g., Electric Vehicle Infrastructure Training Program (EVITP) rather than training for near-term task needs (e.g. short-term training for jobs in electric vehicle infrastructure installation). In many cases, this requires authority from Congress to alter what existing workforce funding streams can be used for.</p>	<p>Concur with clarification this should continue to be an on-going priority, rather than a near-term distinct step.</p>	<p>Across the Department</p>
	<p>III.3.B.iv. Strongly incentivize the use of CBAs or PLAs that include registered apprenticeship requirements in DOE funding opportunities and procurement, to the extent allowable under the appropriate funding authority and with exceptions where this would be difficult to do (i.e., Tribal Reservations). Encourage embedding inclusive goals, commitments, and activities in these project-specific workforce agreements.</p>	<p>Concur. DOE should continue incentivizing the use of Project Labor Agreements (PLA) or Community Benefit Agreements (CBA) in its competitive funding opportunities for deployment and demonstration. DOE should explore ways to encourage use of registered apprenticeship and inclusive goals, commitments, and activities into project-specific agreements, where possible and</p>	<p>Under Secretary for Infrastructure and OEJ</p>

		to the extent allowable under the funding authority. DOE should show progress within one year.	
III.4.	Break down barriers and build on-ramps to high-quality energy jobs, especially for disadvantaged communities, underrepresented populations, displaced and unemployed energy workers, veterans, and youth.	Concur.	OEJ, with offices across the Department
III.4.A.	Continue and amplify DOE investment across STEM programs in education institutions serving disadvantaged and underrepresented populations.	Concur.	Various offices
	III.4.A.i. See recommendations III.2.	See implementation under III.2.	
	III.4.A.ii. Increase targeted investment in STEM curriculum and advanced technology in HBCUs, TCUs, and MSIs.	Concur. DOE should continue implementing this through the HBCU Clean Energy Education prize and the Faculty-Applied Clean Energy Sciences (FACES) Program. DOE should consider requesting increased funding from Congress to implement this in areas of critical need.	Under Secretary for Science and Innovation, in particular, SC, EERE, IE, as well as EJE
	III.4.A.iii. Request increased funding and conduct targeted outreach for well-paid graduate and post-graduate training research positions for disadvantaged communities and underrepresented populations.	Concur. DOE should consider requesting increased funding from Congress to implement this in areas of critical need.	Under Secretary for Science and Innovation, in

			particular, SC, EERE, IE, as well as EJE
	III.4.A.iv. Convene stakeholders—graduate students from underrepresented populations , HBCUs, TCUs, MSIs, energy employers, and community resource organizations—to develop a plan to increase paid internships with clear career pathways and to increase student and early career access to mentorship and communities of interest.	Concur. DOE should continue doing this in several areas to support its R & D mission.	Under Secretary for Science and Innovation, in particular, SC, EERE, IE, as well as EJE
III.4.B.	Partner with the DOL to increase investment in proven on-ramps to quality apprenticeship for disadvantaged communities and underrepresented populations and support retention and completion efforts in registered apprenticeship.	Concur.	Various Offices
	III.4.B.i. Request or direct funding where allowable to establish and scale high-quality pre-apprenticeship programs with articulation agreements for preferred or direct entry into high-quality registered apprenticeships.	Concur. DOE, with consultation from DOL, should explore this and may request funding from Congress to implement this in areas of critical need.	
	III.4.B.ii. Go further to leverage CBPs to encourage employer investment in work supports for workers in training, including pre-apprentice participants, and apprentices, with special emphasis on child, family, and elder care. Do this by making applications with	Concur. DOE should explore feasible ways to implement this, including the near-term step of making it clear to applicants that project funds can in certain instances be used to support these activities.	Under Secretary for Infrastructure, and

<p>these commitments more competitive and as a near-term step, make it clear to applicants how project funds can be used to support these activities.</p>	<p>DOE should show progress on this recommendation within one year.</p>	<p>OEJ, EJE, IE</p>
<p>III.4.B.iii. Map apprenticeship readiness program (ARPs) and energy-critical joint apprenticeship programs in disadvantaged communities; identify gaps and target investment to increase access and capacity.</p>	<p>Concur. DOE should explore ways to accomplish this, including collaborating with DOL to leverage existing related resources, including DOL’s High Road to the Middle-Class map.</p>	<p>OEJ</p>
<p>III.4.B.iv. Increase technical assistance to connect DOE FOA applicants, involving projects with large-scale construction work, to pre-apprenticeship and apprenticeship programs in disadvantaged communities to facilitate connection to high-quality jobs and development of meaningful CBPs. Could do this by augmenting funding for the Community Workforce Readiness Accelerator for Major Projects (RAMP) initiative to facilitate these connections.</p>	<p>Concur. The Under Secretary for Infrastructure should develop tools to provide these connections to FOA applicants in a systemic way. For example, EERE should provide technical assistance for pre-apprenticeship and apprenticeship programs in disadvantaged communities to connect to DOE projects and applicants. DOE’s place-based workforce initiatives should continue its work to identify these programs and facilitate connections to DOE projects.</p> <p>DOE, with consultation from DOL, should explore this and work with Congress to assess funding to implement this in areas of critical need.</p> <p>DOE should show progress within one year.</p>	<p>Under Secretary for Infrastructure, EERE, OEJ</p>
<p>III.4.B.v. Invest in apprentice mentorship programs and wrap-around services, including flexible caregiving supports, to improve retention among</p>	<p>Concur. DOE should explore this. Additional funding from Congress would be required to implement this in areas of critical need. At</p>	<p>OEJ, Under Secretary for</p>

<p>underrepresented populations. Similar to above, this could be accomplished by providing implementation funding to RAMP locations to support the programs their workforce collaboratives deem vital to accomplish their goals.</p>	<p>minimum, DOE should explore and clarify where these costs are allowable expenditures within broader deployment projects.</p> <p>DOE should show progress within one year.</p>	<p>Infrastructure</p>
<p>III.4.B.vi. Leverage the American Climate Corps (ACC) and Job Corps infrastructure to create more on-ramps to critical clean energy careers for young people. Embed more relevant workforce training and service programs that DOE supports into the ACC so that participating young people can better access those programs. Map more widely opportunities that DOE does not fund, such as the above mapping of pre-apprenticeship and registered apprenticeship programs. Create more training and service opportunities for ACC members, e.g., as a near-term action, fund relevant service opportunities through AmeriCorps.</p>	<p>Concur. DOE should continue to collaborate with the ACC implementing agencies and work to create more participating training and service opportunities for ACC members.</p> <p>DOE should show progress within one year.</p>	<p>OEJ</p>
<p>III.4.B.vii. Allocate sufficient funding to provide technical assistance support to workforce intermediaries and employers so they can increase their capacity for recruiting and hiring workers with disabilities into energy-focused inclusive apprenticeships. Such technical assistance would include but is not limited to providing reasonable accommodations, using inclusive hiring practices, planning for accessible information and communication technology, and establishing accountability and continuous improvement mechanisms.</p>	<p>Concur. DOE, with consultation from DOL, should explore this and may request funding from Congress to implement.</p>	<p>OEJ</p>

III.4.C.	Increase DOE technical assistance to support effective, inclusive place-based workforce strategies.	Concur.	Various offices
	III.4.C.i. Increase technical assistance to match pre-apprenticeship, apprenticeship, sector, and high road workforce partnerships with FOA applicants to facilitate development of PLAs and CBAs.	Concur. DOE’s place-based initiatives should continue to work on this in communities with concentrated investments under the Investing in America (IIA) laws. Additionally, DOE should bolster technical assistance and resources in this area. DOE should show progress within one year.	OEJ, S3, EJE
	III.4.C.ii. Provide funding for expert organizations with a track record of success to provide technical assistance to tribes, community-based organizations, and environmental justice organizations to help them engage in the development and enforcement of quality CBAs.	Concur. DOE should show progress within one year.	OEJ, Under Secretary for Infrastructure, EERE, EJE
	III.4.C.iii. Provide technical assistance and deploy place-based activities to improve adoption of project-specific workforce agreements with provisions aimed at inclusive workforce development. For example, these activities should aim to bolster goals, commitments, and partnerships into project-specific workforce agreements (e.g., PLAs, CBAs) related to recruitment, training, and retention of underrepresented populations and disadvantaged populations.	Concur. DOE should continue its work to do this through place-based initiatives. DOE should show progress within one year.	OEJ, EERE, EJE
III.4.D.	Strengthen incentives or requirements for energy employers receiving DOE funds on large-scale	Concur.	Various Offices

	<p>deployment projects to invest in inclusive, effective workforce development practices.</p>		
	<p>III.4.D.i. Make public the workforce commitments connected to DOE deployment investments, including commitments to job quality; inclusive recruitment and hiring; neutrality agreements; child, family, and elder care and other work supports; and other workforce strategies. If legal reasons prevent this, establish a plan going forward for how the Department can have the ability to disclose those commitments in future rounds of funding.</p>	<p>Concur. DOE should explore ways to build on existing progress. DOE should show progress within one year.</p>	<p>Under Secretary for Infrastructure</p>
	<p>III.4.D.ii. Identify critical strategies that should be required when encouragement through CBPs was not sufficient. Start by looking at that were not meaningfully adopted into CBPs when encouragement alone was found to be insufficient, where it makes sense to do so (i.e., workforce development and formula funds should not have the same encouragements in a CBP as large-scale deployment projects seeking funding through competitive programs). Then, look at legal authorities to more strongly incentivize adoption in competitive projects. Most notably and as an example, this would likely include switching to a requirement that projects provide flexible, high-quality childcare, family, and elder care supports for workers when applications seek a certain investment amount.</p>	<p>Concur with parts of this. This would require additional authority from Congress to require certain workforce strategies be connected to competitive funding awards.</p> <p>DOE should show progress within one year.</p>	<p>Under Secretary for Infrastructure, OEJ, EJE, IE</p>

<p>III.4.E.</p>	<p>Target resources to workers and communities impacted by and vulnerable to dislocation as a result of the energy transition.</p>	<p>Concur</p>	<p>IWG on Energy Communities</p>
	<p>III.4.E.i. Participate in the Interagency Working Group on Coal and Power Plant Communities to identify and lead strategies to mitigate the impact of job loss, accelerate re-employment for dislocated workers in the energy transition, and target transition efforts to communities impacted by dislocation in the sector. Identify and coordinate workforce transition opportunities with the Office of the Undersecretary for Infrastructure (S3) and other DOE offices that have flexible funding and are driving deployment investments in the clean energy transition to support transition pathways and identify additional opportunities for workers and community representatives impacted and projected to be impacted by job loss to participate in DOE projects.</p>	<p>Concur. Undersecretary for Infrastructure programs should continue prioritizing investments in energy communities. Specifically, MESC, SCEP, and LPO are already prioritizing energy communities through BIL provision 40209, SCEP’s Local Government Energy Program (LGEP) and Communities Local Energy Action Program (LEAP), and LPO’s Energy Infrastructure Reinvestment program.</p> <p>MESC’s Battery Manufacturing Grants include prioritization for dislocated fossil workers.</p> <p>DOE should show progress within one year.</p>	<p>IWG on Energy Communities</p>
	<p>III.4.E.ii. With respect to anticipated or announced coal plant retirements, develop a strategy to support re-employment and industrial planning, engage workers and their unions early around planned retirements.</p>	<p>Concur. The IWG should continue working to refine its understanding where future plants will close. DOE and EPA should continue to coordinate to maintain awareness of coal plant retirements.</p> <p>The IWG should continue actively developing a strategy to engage and support workers prior to future closures. DOE and its agency partners should continue their work to develop a strategy</p>	<p>IWG on Energy Communities</p>

		<p>to support re-employment and industrial planning, and to engage workers and their unions early around planned retirements.</p> <p>The implementation of such a strategy will require additional appropriations/authorizations to provide:</p> <ul style="list-style-type: none"> (1) community assistance directed to energy communities to catalyze economic development. (2) substantial worker support in advance of a future closure. <p>DOE should show progress within one year.</p>	
	<p>III.4.E.iii. Continue the work of the IWG on Coal and Power Plant Communities and Economic Revitalization to identify subsectors and specific communities vulnerable to dislocation as far in advance as possible. Develop a Departmental plan, including the funding needs, to support planning around transitioning fossil energy workers.</p>	<p>Concur. The IWG should continue to actively identify specific communities vulnerable to dislocation.</p> <p>DOE should develop a Departmental plan, including funding needs, to support planning for fossil energy workers. The implementation of the plan would require funding for DOE and its agency partners to engage communities and drive job-creating economic development projects in geographies where closures will occur.</p> <p>Additional funding with wider authority for DOL (and possibly other agencies) is needed to provide proactive support to transitioning fossil energy</p>	<p>IWG on Energy Communities</p>

		<p>workers instead of reactive support. The benefits currently available could be enhanced with additional funding.</p> <p>DOE should show progress within one year.</p>	
	<p>III.4.E.v. Support the IWG on Coal and Power Plant Communities and Economic Revitalization by funding a set of pilot projects to convene community partnerships in transition-vulnerable communities around workforce planning. Provide technical assistance to ensure robust worker, community, public sector, and employer participation. Document the work of these partnerships to develop guidance on best practices for early action transition plans that address impacts on workers and communities, impacts on local/regional tax bases, and on downstream employers, and that connect these communities to clean energy employers and investment opportunities.</p>	<p>Concur. The IWG recently established a new Energy Communities partnership with AmeriCorps that can support convening and workforce development in collaboration with its Rapid Response Teams. This should continue.</p> <p>EPA is piloting a Technical Assistance (TA) program dedicated to energy communities that facilitates community convening and will document best practices.</p> <p>Additional agencies are providing TA that can help meet this objective. Among them, DOE, Adaptation Resource Center, Economic Development Administration (EDA), and U.S. Department of Agriculture’s (USDA) Rural Partners Network have programs targeting energy communities explicitly.</p> <p>Additional funding is needed for the IWG and its agency partners, particularly EPA, to build out and dedicate their TA programs to energy communities.</p>	<p>IWG on Energy Communities</p>

<p>III.4.E.v. Instead of focusing solely on rapid response workforce interventions, which occur after dislocation is announced, work with DOL to develop and fund an early-action transition planning program, with robust supports for workers like those provided under Trade Adjustment Assistance. An early action program driven by worker, employer, and community organizations can incorporate best practices from rapid response (peer counseling, career mentorship, co-location of services, etc.) and services like those offered to displaced workers eligible for Trade Adjustment Assistance. It can also address long-term economic development and planning that benefits communities, historic inequity and occupational segregation, and transition-related stresses on public services and resources.</p>	<p>DOE should show progress within one year.</p> <p>Concur. The IWG and its workforce agency partners such as DOL, should continue actively exploring what more can be done for workers in advance of future closures. The IWG will work with DOL to develop an early-action transition planning program with robust worker supports.</p> <p>DOL will require broader authorization and additional funding to support workers in advance of closures with a level of support similar to Trade Adjustment Assistance.</p> <p>DOE should show progress within one year.</p>	<p>IWG on Energy Communities</p>
<p>III.4.E.vi. Partner with DOL to develop a resource documenting transferable skills of workers/occupations in declining energy sectors. Convene worker representatives, employer representatives, and other subject matter experts to inform the work. Crosswalk transferrable skills with those required in growing energy subsectors. Identify gaps and upskilling opportunities, including information on the time and resource investment required for workers to transition across subsectors.</p>	<p>Concur. DOE is funding a project to catalog skills of incumbent fossil workers and identify a skills match with other industries and occupations.</p> <p>The IWG should continue its work to partner with DOL to document transferable skills of workers, hold convenings, identify industries with compatible workforce skill needs, and identify gaps and upskills opportunities including information on the time and resource investment required for workers to transition across subsectors.</p>	<p>IWG on Energy Communities</p>

		DOE should show progress within one year.	
	<p>III.4.E.vii. Increase investment in communities impacted by the energy transition whenever possible.</p> <p>(1) Deploy clean energy projects in impacted communities.</p> <p>(2) Expand and an enhance programs like the Title 17 Clean Energy Financing Program to “finance projects that “retool, repower, repurpose, or replace energy infrastructure that has ceased operations or enable operating energy infrastructure to avoid, reduce, utilize or sequester air pollutants or greenhouse gas emissions.”ⁱ</p>	<p>Concur. Many existing programs are prioritizing investments in energy communities and should continue. Specifically, MESC, SCEP, and LPO are already prioritizing energy communities through BIL provision 40209, SCEP’s LGEP and Communities LEAP, and LPO’s Energy Infrastructure Reinvestment program.</p> <p>Expanding the Title 17 Clean Energy Financing Program will require congressional guidance and additional appropriations and/or loan authority. Many DOE program offices are restricted from directly targeting energy communities or dislocated fossil energy workers given existing congressional guidance.</p> <p>DOE should show progress within one year.</p>	IWG on Energy Communities
Strategy III.5.	Document the state of job quality and drive improvements, where needed, in the energy sector.		
III.5.A.	Implement an intra-agency initiative to enhance measurement, impact, and reporting of job quality in energy workforce investments.	Concur.	OEJ
	III.5.A.i. Define a set of job quality metrics, starting with measures of the eight components outlined in the DOC/DOL Good Jobs Principles: recruitment and hiring; benefits; diversity, equity, inclusion, and accessibility (DEIA); empowerment and	<p>Concur. DOE should continue to explore ways to more effectively embed these into DOE workforce research and funding activities.</p> <p>DOE should show progress within one year.</p>	OEJ with EWSC input

<p>representation; job security and working conditions; pay; and skills and career advancement.</p>		
<p>III.5.A.ii. Develop a plan to add available data on these metrics to the Department’s USEER.</p>	<p>Concur. Per recommendation, III.1.A.ii., DOE has taken steps to incorporate wage data into USEER. Some measures of job quality may not be able to be added due to survey burden constraints.</p> <p>DOE should show progress within one year.</p>	<p>OEJ</p>
<p>III.5.A.iii. Uplift real models and best practice actions companies have taken to deliver upon the components of the Good Jobs Principles and can serve as examples for other businesses within the sector.</p>	<p>Concur. LPO should continue its work to highlight models and best practices taken by borrowers.</p> <p>DOE should show progress within one year.</p>	<p>LPO</p>
<p>III.5.A.iv. Explore ways to collect more job quality data—such as workers’ receipt of essential benefits, detailed pictures of wages, and employer investment in training and upskilling—to be embedded into the annually produced USEER.</p>	<p>Concur. Per III.1.A.ii., DOE has taken steps to consider this recommendation and add wage data to USEER.</p> <p>DOE should show progress within one year.</p>	<p>OEJ</p>
<p>III.5.A.v. Train Department staff and contractors across all DOE program offices and the National Laboratory Complex on job quality definitions and mechanisms so that there is an understanding that job quality should be embedded in all DOE investments. Start with the Workforce Development Community of Practice, run by OEJ.</p>	<p>Concur. DOE should tap the expertise on the EWAB to support trainings for program offices as part of the Workforce Development Community of Practice and extend these trainings to the National Laboratory Complex.</p> <p>DOE should show progress within one year.</p>	<p>OEJ</p>
<p>III.5.A.vi. Explore ways to require—rather than encourage—strong job quality in Department</p>	<p>Concur. DOE should identify opportunities to require strong job quality in direct workforce</p>	<p>OEJ and S3</p>

	deployment projects, in addition to in direct workforce development investments. Make requests of Congress for this authority, if that is needed to accomplish this action.	development investments. In terms of deployment projects, this is likely to require authority from Congress to include this in funding terms. DOE should show progress within one year.	
	III.5.A.vii. Capture and report job quality and improvement benchmarks in all DOE workforce programs and funded energy investments. Make this information available in a public dashboard.	Concur. DOE should explore strategies to implement this.	OEJ, S3
III.5.B.	Lead an inter-agency effort to increase the use of job quality mechanisms for energy sector jobs.		
	III.5.B.i. Continue convening and expand workforce program leaders' collaboration across Federal agencies impacting critical energy sector investments.	Concur. DOE should continue to collaborate with other agencies as part of the implementation of the Investing in America's Workers Executive Order.	OEJ
	III.5.B.ii. Coordinate the design, implementation, and evaluation of job quality mechanisms and tools in joint workforce projects (see: DOL Tool Kit, DOE CBP toolkit, DOC Good Jobs Principles) across agencies; share best practices and replicate successes.	Concur. DOE should continue to collaborate with DOL in a focus on job quality across shared initiatives.	OEJ
	III.5.B.iii. Partner to fund and implement high road sectoral workforce strategies that place an emphasis on raising job quality in priority sectors where needed.	Concur. This is part of the principles on sector strategies that should be developed in consultation with the EWAB (III.3.A.ii.) and the strategy to support sector workforce development (III.3.A.iii. - III.3.A.vi). DOE should show progress within one year.	OEJ
Strategy III.6.	Define success, set benchmarks, refine the strategy.		

III.6.A.	Apply consistent evaluation processes relevant to workforce imperatives across critical DOE investments.	Concur.	OEJ
For investments that are principally focused on workforce development:			
III.6.A.i. Identify outcome goals and benchmarks for workforce investments across the Department.	Concur. DOE should tap the expertise of the EWAB to develop these benchmarks for direct workforce investments. DOE should show progress within one year.	OEJ, EWAB and EWSC	
III.6.A.ii. Build on the data collection recommendations in the DOL’s Job Quality Toolkit to design a consistent data collection and reporting methodology for all DOE workforce development programs and supported projects.	Concur. DOE should continue its work to assess existing data collection and reporting on job quality outcomes across its workforce development programs and then identify ways to bolster data collection, as feasible and in consultation with DOL.	OEJ	
III.6.A.iii. Request funding from Congress to incorporate process and performance evaluations of funded partner workforce outcomes.	Concur. This should continue as an on-going priority.	Across the Department	
For broader DOE investments, such as deployment projects grants and loans:			
III.6.A.iv. Strongly enforce the requirement (and make required where not currently) that deployment projects input their payroll records into LCPTracker. Use data available in LCPTracker to measure and report the impact of DOE’s investments on underserved workers and communities in terms of jobs, including racial and ethnic minorities, Indian Tribes, women, veterans, and socioeconomically disadvantaged communities .	Concur. DOE released a website that explains this requirement to applicants. The requirement that BIL applicants comply with Davis-Bacon reporting requirements through use of LCPTracker should continue as planned to be included in funding assistance templates going forward. For LPO investments that are being tracked in borrowers’ systems, it should be required that borrowers provide DOE access to this data.	S3	

		DOE should show progress within one year.	
	III.6.A.v. Using that baseline data, set goals for the Department’s investments to improve upon the hiring and retention of underrepresented populations, especially for women per the significant underrepresentation of this demographic group in the energy workforce.	Concur. DOE should start with a plan to grow representation of women in the construction energy workforce. This requires first obtaining baseline data.	OEJ
For both types of investments, as it relates to workforce outcomes:			
	III.6.A.vi. Set a cadence to review and report on progress toward benchmarks, and a process to adjust programs, resources, and strategies accordingly.	Concur. This should continue as an on-going priority.	OEJ

Within one year of submission the Department should provide the board with:		
Item	DOE Response	DOE Office(s) Driving Implementation
<p>An analysis of workforce development efforts relevant to the energy sector that are funded by DOE and involve the National Labs.</p> <ul style="list-style-type: none"> • Additionally, a strategy from the Department on how to leverage the National Laboratories Complex effectively towards a comprehensive workforce development strategy for the energy workforce. 	<p>Concur. As described in the above, OEJ should continue its work to conduct an inventory and analysis of workforce development capacities and activities in the National Labs, and then develop a strategy for the Department to leverage National Labs more strategically to support its workforce strategy.</p>	OEJ

Enclosure

<p>The start of a plan for how the Department will kick start sectoral workforce development initiatives, starting with specific strategies that reflect this report’s recommendations as related to the BWI.</p>	<p>Concur. OEJ should lead an effort to develop a comprehensive plan to kick start sectoral workforce development initiatives and share that with the EWAB for feedback.</p>	<p>OEJ, in consultation with the EWAB</p>
<p>A plan for breaking down barriers and improving hiring in the energy sector for certain underrepresented populations, starting with people with criminal legal records and women.</p>	<p>Concur. DOE should fund an analysis (filling a critical gap in the field) of barriers facing workers with criminal legal records to succeed in the energy workforce and develop a plan for the Department to build on existing efforts to improve access for these workers.</p> <p>DOE should drive more equal representation of women in the energy workforce.</p>	<p>OEJ, in consultation with EJE</p>
<p>A briefing on how the research and analysis work recommended here progressed, including identifying what data is mission critical.</p>	<p>Concur. DOE should provide a briefing to the EWAB on this.</p>	<p>OEJ</p>
<p>An assessment of funding and staffing needs for a centralized jobs office to begin implementing priorities in this report.</p>	<p>Concur with clarification. DOE can explore funding and staffing needs.</p>	<p>N/A</p>