



Summary Minutes of the U.S. Department of Energy (DOE)'s 21st Century Energy Workforce
Advisory Board (EWAB)
Public Meeting September 18, 2023

Date and Time

- Monday, September 18, 2023
- 1-3:30pm Eastern

Location

- Hybrid – DOE's Forrestal Building (1000 Independence Ave SW, Washington D.C.) and Virtual

Purpose

- EWAB Public Meeting

Meeting Participants:

21st Century Energy Workforce Advisory Board Members

- Dr. Deeana Ahmed, Our Next Energy, Inc. (ONE)
- Amanda Cage, National Fund for Workforce Solutions
- Maureen Conway, Aspen Institute
- Becky Ervin, UAW
- Sarita Gupta, Ford Foundation
- Missy Henrikson, Center for Energy Workforce Development
- Chris Levesque, TerraPower
- Dr. Daniel (Dan) Marschall, George Washington University Institute of Public Policy
- Anne McMonigle, LA Apprenticeship Readiness Fund
- Dr. Girard Melancon, National Council for Workforce Education
- Kay Seven, Co-Chair, Nez Perce Tribe
- Dr. Jermaine Whirl, Augusta Technical College
- Allison Ziogas, Orsted

DOE Staff Presenting and Supporting the Meeting

- Betony Jones, Director, Office of Energy Jobs
- Maya Goodwin, Senior Advisor, Workforce and Economic Opportunity Policy, Office of Energy Jobs
- Piper O'Keefe, Policy Analyst and Designated Federal Official for the EWAB, Office of Energy Jobs

- Francisco Arzu, Contractor Support for the Office of Energy Jobs from U.C. Berkeley's Labor Center, Co-Director of the Labor Center's Green Economy Program
- Pam Egan, Contractor Support for the Office of Energy Jobs from U.C. Berkeley's Labor Center, Co-Director of the Labor Center's Green Economy Program
- Damaris Vargis, Contractor Support for of the Office of Energy Jobs from Evoke Consulting, Portfolio Director
- Stephanie Bostwick, Tribal College and University (TCU) Coordinator for the U.S. Department of Energy Office of Indian Energy Policy and Programs
- Julie Carruthers, Office of Scientific Workforce Diversity, Equity, and Inclusion, Office of Science
- Mary MacPherson, Program Manager, Office of State and Community Energy Programs (SCEP)
- Jeremy Avins, Supervisory Program Manager for Industrial Assessment Centers, Office of Manufacturing and Energy Supply Chains
- Sarah Wilder, Workforce Program Analyst / Technical Advisor, Solar Energy Technologies Office

Other DOE Staff

- Katy Clarke, Deputy Director, Office of Energy Jobs
- Melinda Higgins, Director of STEM Programs, Office of Nuclear Energy
- Nikki Luke, Workforce Advisor and Policy Fellow, Office of Energy Jobs
- Tomiwa Olufolabi, ORISE Science and Technology Policy Fellow, Office of Energy Efficiency and Renewable Energy
- Lino Pena-Martinez, Special Assistant, Office of Energy Jobs
- Kate Ringness, Senior Advisor and Chief Strategist, Office of Policy
- Kerene Tayloe, Management and Program Analyst, Office of Economic Impact and Diversity

Other Attendees

- Jason Fraser
- Otto Katt
- Vanessa Benedetti
- Valentina Salinas
- Griffin Reinecke

Meeting Summary

This is the first 21st Century Energy Workforce Advisory Board (EWAB) meeting. The meeting was physically conducted at DOE's Forrestal Building and virtually via Teams. The meeting was called to order at approximately 1:00pm Eastern. The meeting was attended by members of DOE's Office of Energy Jobs team, 13 EWAB members, members of the public, and others across DOE. Presentations and discussion focused on different workforce programs ran by DOE program offices.

Public Meeting

DFO Piper O'Keefe opened the meeting by addressing housekeeping and logistical items for the meeting. Ms. O'Keefe then took roll call to ascertain a quorum of attendees for the record (13 or 14 EWAB members responded as present). Upon completion of the roll call, she turned the meeting over to Maya Goodwin for an introduction of the EWAB's purpose.

The Office of Energy Jobs' **Maya Goodwin** gave an overview of the EWAB's purpose and expected outcomes, as spelled out by Section 40211 of the Infrastructure Investment and Jobs Act, Pub. Law 117-58 (42 U.S.C. § 18744) [available [here](#)]. She then turned the meeting back over to Piper O'Keefe to kick off DOE office workforce program presentations.

Piper O'Keefe presented on an inventory the Office of Energy Jobs conducted of past workforce activities/programming across DOE. Her slides (available on the EWAB's website) provided the EWAB with context about what DOE's historic workforce programs have looked like, what technology areas they've been in, who implemented them, who's benefited from them, and what the type of effort has been more broadly. She noted that the data was from FY 2011-2022, so before the Bipartisan Infrastructure Law and the Inflation Reduction Act started to be implemented. The report with these findings is going through the final stages of the review process and will be shared with the EWAB when released. She opened the floor for questions from the EWAB members.

Dr. Jermaine Whirl asked about the higher ed perspective, wanting to know if the investments in education and training mentioned had anything specific with the universities or was mostly just research feeding back to DOE.

Piper O'Keefe answered that the "education and training" category was mainly related to research, both in terms of developing research skills and conducting research itself.

Dr. Jermaine Whirl followed-up to clarify if students connected to these projects, then have any sort of placement in DOE/DOE contractor job opportunities when they're graduating.

Piper O'Keefe clarified that most of the programs did not necessarily have that direct link.

Maureen Conway then asked what sort of outcomes were tracked for the programs – as in, credential completion, etc.

Piper O'Keefe answered that the outcome metrics tracked varied by office and so the report is not able to capture that in a comprehensive way.

Dr. Girard Melancon asked if there is opportunity to redistribute the funding moving forward? And what some goals would be for the next year or two.

Maya Goodwin responded that the EWAB members could consider if re-orienting funding is a recommendation from the Board as that would be in their scope.

Betony Jones re-emphasized DOE's reorganization in the past year to expand from being a research and development agency to also an infrastructure agency. This means that the historic focus was reflective of the agency DOE was, not necessarily is today. She again flagged that this inventory was for programs before the passage of the Bipartisan Infrastructure Law. She added that she doesn't think that it's a matter of redistributing the pie. The EWAB is designed to suggest a comprehensive strategy and recommendations.

Dr. Deena Ahmed asked if there a rolled-up number like the 1.4 billion that is future state that's going to be deployed to specifically support job creation or any energy job creation at DOE?

Piper O'Keefe said that that was not in this report.

Betony Jones added that the deployment resources that we have through BIL (the Bipartisan Infrastructure Law) and the Inflation Reduction Act and CHIPS [Creating Helpful Incentives to Produce Semiconductors] and Science Act, amount to around \$100M of grants and then the Loans Office has \$400B of loan authority. She said that that's the pool of money for public investment in deployment, but it's also coupled with much larger private investment.

Amanda Cage said that she didn't realize how much workforce development work National Labs did and asked for an overview of what kind of work the labs do? And what kind of workforce development they support?

Piper O'Keefe answered that each of the labs have a specific technology area that they tend to focus on (for example, NETL is the National Energy Technology Lab), and so each of the 13 labs have their focus areas and they each have different approaches to workforce development or different people in their labs who work on it.

Amanda Cage followed up by asking if that was mostly at the college and graduate level of education?

Piper O'Keefe said that it depends, because there are some community college programs at the National Labs as well.

Betony Jones added that some labs have apprenticeship programs for their facilities staff.

Kay Seven added that, in terms of apprenticeship at a lab (if the Hanford Reservation is considered a lab), she received an e-mail that DOE unfunded the program accreditation back in the mid-1990s and removed it from a collective bargaining agreement. That was with the metal trades, so a recommendation could be to look at that again to open up the door of apprenticeship opportunity for the underrepresented populations.

Piper O'Keefe acknowledged that would be good to note down. She then turned the meeting over to Stephanie Bostwick for her presentation.

Stephanie Bostwick presented about the Office of Indian Energy's workforce development efforts with Tribal Colleges and Universities (TCU). Her slides (available on the EWAB's website) provided the EWAB with information about the Office of Indian Energy's Policy and Programs and TCU funding and engagement.

Kay Seven, who spoke of her role bringing Northwest Indian College to Idaho, asked whether Stephanie's office is talking to the Nez Perce Tribe and how they can become a part of the opportunity and what is involved.

Stephanie Bostwick confirmed that Northwest Indian College is included in conversations, but they're still in the planning phases of how the consortium will be structured with the American Indian Higher Education Consortium. Once it's formed, hopefully in the next year, it'll be a mechanism for at least getting funding out to the TCUs.

Kay Seven spoke about a meeting being held the following week with federal agencies under Public Law 102-477, saying that tribes could look at how to use funding from DOE and other federal agencies to provide wraparound services to Tribal communities.

Stephanie Bostwick recognized that idea and moved to the next question.

Anne McMonigle asked Stephanie where she can find a list of where the TCUs are located.

Stephanie Bostwick responded that the AIHEC's website has a list of the TCUs and a map of where they're located; adding that since they're the only TCU in the Pacific Northwest, they serve Washington, Idaho, Oregon, and hopefully, soon California.

Girard Melancon asked if the courses will be open source, or where they will be stored.

Stephanie Bostwick said that they were working on a platform to share the courses, likely as downloadable Canvas courses that can be shared among faculty.

Girard Melancon said that he will talk to her offline because his group is doing similar work with South Seattle Community College through Skills Common (created under DOL), so they have a shelf for open-source curriculum that may work for them.

Stephanie Bostwick agreed that that would be great to talk about.

Pam Egan then turned the meeting over to Julie Carruthers for her presentation.

Julie Carruthers presented about the Office of Science's workforce development efforts. Her slides (available on the EWAB's website) provided the EWAB with information about the Office of Science's mission, workforce development investments, and student training and workforce programs. She additionally shared about the new DOE STEM website that is a collaborative effort across all of DOE's R&D programs.

Chris Levesque said that he wasn't surprised the Office of Science (SC) supports development on radiochemistry and the particle accelerator work, because he thinks there aren't good academia programs for that. He was surprised about the focus on advanced computing because he thought that was an area where there probably is university support out there.

Julie Carruthers responded that there are growing programs now, but when they started 25 years ago, there were very few academic programs that taught computational science, computer science, and applied mathematics as they apply to the fastest computers in the world. Additionally, the program allows fellows to do a summer practicum at a National Lab and learn on the ground.

Maureen Conway asked about what support the Office of Science provides to the students they bring in to allow all students to take advantage of these types of opportunities.

Julie Carruthers responded that at the National Lab programs especially, they've placed an intentional focus on overcoming barriers to applying and participation. They pay a living wage for the internships, tried new outreach and engagement programs (including a "mini semester" where students come to the Labs for a week to tour the facilities), and have set up a support system (including a research mentor) for participants.

Kay Seven asked whether the programs reach K-12, non-academic programs, career/technical education programs, and apprenticeship programs.

Julie Carruthers responded that the Office of Science programs have been evolving because they do not want to duplicate what NSF does. Energy literacy has been a big component of some of the technology offices for them, such as funding the DOE National Science Bowl, which has been going on for 27 years

and focuses on competitions for high school and middle school students that inspires them to pursue careers in STEM. In recent years, as part of the RENEW Initiative, they've been targeting programs at the high school level to help bridge students into academic programs or STEM programs at the undergraduate level, and then bring them into the laboratories in their first year of undergrad.

Kay Seven asked about the possibility of partnerships with the TCUs especially related to teacher education programs.

Julie Carruthers said that she is eager to talk to Stephanie more about that and thinks there's an opportunity for DOE to do more intentional work with Tribal communities.

Jermaine Whirl asked if there is funding that could support a community or technical college's infrastructure to build up the labs at them?

Julie Carruthers responded that she thinks that's a great opportunity for DOE and mentioned their RENEW initiative is bringing more partners from community colleges.

Amanda Cage asked for clarification between the Office of Science (SC) and National Science Foundation's roles.

Julie Carruthers responded that SC tends to have longer term focus in their mission areas, and all of their program areas are tightly related to aspects of DOE's missions and the National Labs. They think about longer term support for areas to produce different technical scientific outcomes. As opposed to a broader, "thousand flowers blooming" focus, or re-competing research on a regular basis.

Deeana Ahmed asked how SC is looking at the research and manufacturing process development across the manufacturing sectors the federal government is heavily invested in.

Julie Carruthers said that SC is not integrally involved with cross-departments' planning in that space and it's outside of her knowledge base but she could get back to her with a more thorough response.

Pam Egan passed the conversation over to Mary MacPherson from DOE's Office of State and Community Energy Programs for her presentation.

Mary MacPherson presented about the Office of State and Community Energy Programs' (SCEP) workforce development efforts. Her slides (available on the EWAB's website) provided the EWAB with information about the Bi-Partisan Infrastructure Law (BIL) and Inflation Reduction Act (IRA) programs supporting the supply and demand of skilled green buildings workforce; BIL & IRA energy efficiency workforce development programs; and how DOE grantees will use BIL and IRA funding to identify needs, collaborate, gather materials, and prioritize equity.

Anne McMonigle asked about what SCEP was doing to make sure that the home energy auditing jobs were good jobs, citing that the American Recovery and Reinvestment Act in 2008/2009 did lead to jobs with career and upward mobility.

Mary MacPherson responded that SCEP shares that concern and is addressing it through community benefit plans (where they ask states to be really intentional about who they're targeting). She additionally mentioned that the energy auditor training program is seeking to match supply to demands; not just train as many workers as possible.

Kay Seven asked whether the career skills training was a one-time opportunity.

Mary MacPherson responded that it is only a one time opportunity and Congress would need to allocate more money to have the programs extended.

Kay Seven acknowledged Mary's response and mentioned that there was potential for collaboration with DOL's Youth Build program, other community organizations, and the U.S. Department of Housing and Urban Development.

Mary MacPherson agreed and mentioned that her supervisor used to work at the Department of Labor's Employment and Training Administration, so they talk to DOL frequently.

Girard Melancon spoke about how state energy offices can work in silos from community/technical colleges and other training entities that have some of the best training labs and asked about opportunities to get more training for inspectors working at the ground level.

Mary MacPherson responded that the contractor training grants have a big focus on electrification and could likely include electricians updating panels in the house. She said that they don't focus on energy efficiency in the residential sector, not building code compliance. She additionally said that states are scored on the strength of their partnerships outlined in their community benefits plans, and while community colleges are specifically required, she agrees they could be a natural partner.

Maureen Conway followed up about whether the jobs created are good jobs and what sort of tracking/goals SCEP has for good jobs.

May MacPherson responded that the metrics will vary program to program and they're still figuring some of them out, while also wanting to leave flexibility for states to set the metrics they think are appropriate. She cited the importance on job quality metrics, including potentially job placement, career growth, and wage data.

Anne McMonigle asked when the data will be published from the money that has gone out the door already.

Mary MacPherson said that she wasn't sure what data would be published and when. She said that the Building Training Assessment Centers' funding announcement was forthcoming, and they expect to make selections at the end of this year, for grants to go out to higher education institutions next year. The contractor, training grants applications are due in January, and she would expect the grants to roll out between this Fall and next Spring. She guessed the earliest that real program results could be seen would be maybe the end of 2024.

Pam Egan passed the conversation over to Sarah Wilder from the Solar Energy Technology Office (SETO) for her presentation.

Sarah Wilder presented about the Office of Energy Efficiency and Renewable Energy's Solar Energy Technology Office's (SETO) workforce development efforts. Her slides (available on the EWAB's website) provided the EWAB with an overview of SETO's workforce portfolio, its advancing equity through workforce partnerships funding announcement, and the portfolio of the recipients of those workforce partnership awards.

Dr. Jermaine Whirl asked if she has any national projections, in terms of what the workforce demand is going to be for solar tech implementers in the next decade?

Sarah Wilder responded that the national projections are somewhere around 1,000,000 workers, and the solar industry is currently about 250,000 workers who spend more than 50% of their time on solar; and about 316,000 people if you include those who spend less than 50% of their time on solar. She said that the demand is projected to really skyrocket across all different sectors of the industry, but specifically construction roles.

Maureen Conway appreciated the focus on making sure people are being trained for jobs to meet demand. She followed up by asking what their job quality standards are and how they're tracking them.

Sarah Wilder responded that they include wraparound support services, job quality standards in the roles that people are placed into, family sustaining wages, good benefits, and opportunities for advancement (such as through encouraging pre-apprenticeship and apprenticeship programs). She cited that the Inflation Reduction Act has certainly helped with promoting these since there are now prevailing wage requirements on all large solar construction projects, to get the full 30% investment tax credit.

Maureen Conway followed by asking what the reporting requirements look like.

Sarah Wilder said that she knows there are reporting requirements associated with the Bi-Partisan Infrastructure Law (BIL) funding such as number of people hired, wages, and community engagement, but she doesn't know the specifics.

Betony Jones added that for BIL and IRA funded programs, there is a standard reporting template that all offices use on job creation, job quality, and training outcomes for training programs.

Sarita Gupta asked Sarah to elaborate on any examples of wraparound services.

Sarah Wilder responded that transportation, childcare, and stipends were asked for most by applicants in their applications.

Sarita Gupta further asked if there were any best practices Sarah could cite.

Sarah Wilder said that they are honestly still in the discovery phase for best practices, and it depends by applicant. She gave an example of an award with the Native American Red Cloud Renewables that gave detail about exactly what the women attending their program 5-week needed, so a lot of the award is going to wraparound services.

Pam Egan turned the conversation over to Jeremy Avins from the Office of Manufacturing and Energy Supply Chains (MESCC)'s Industrial Assessment Center programs.

Jeremy Avins presented about the Office of Manufacturing and Energy Supply Chains (MESCC)'s workforce programs. His slides (available on the EWAB's website) provided the EWAB with an overview of MESCC's investments in manufacturing capacity and workforce, its Industrial Assessment Center program, and its battery and its battery and EV investments (BIL 40207, IRA 50143, and IRA 48C).

Anne McMonigle asked about whether there was a need/opportunity for stackable credentials that are universally recognized in manufacturing.

Jeremy Avins responded that it's something they're exploring. The IACs have a certificate and some degree of recognition but he thinks there could be more room to think about career pathways, workforce needs in connection to training certificates.

Dr. Deena Ahmed asked how DOE is looking to value the manufacturing jobs that are American generated with American IP in terms of being able to sustain manufacturing long term through investments such as the battery manufacturing grants.

Jeremy Avins responded that all BIL and IRA investments are subject to some sort of "Build America Buy America" requirements that provide a strong incentive, if not formal requirement to use and grow domestic supply chains.

Dr. Girard Melancon asked if carbon capture and hydrogen also fall under Jeremy's team, considering the manufacturing.

Jeremy Avins responded that DOE has a Hydrogen Fuel Technology Office and a Fossil Energy and Carbon management offices that have teams that dig in super deeply in the technology areas, but MESC's definitely thinks about these models for IACs and other programs.

Dr. Girard Melancon followed up with ideas about more potential credentials that could be connected to IACs, including working with the American Society For Nondestructive Testing, that could help make sure credentials are transferable and portable.

Maureen Conway asked whether or how this program connects with the manufacturing extension partnerships (MEP).

Jeremy Avins responded that every state has a manufacturing central partnership funded by National Institute of Standards and Technology at Commerce that works quite closely with them, and they're trying to deepen the work that IACs do with their MEPS; with some IACs already co-located with the MEPS.

Pam Egan thanked the presenters and then facilitated a discussion among the members. She started the discussion around the "so what?" What does DOE do? How can DOE be the most additive? What captured the members during the discussion and what do they want to know more about?

Amanda Cage asked about the "Equity in Energy Initiative" that was cited in the statute creating the EWAB.

Maya Goodwin responded that the "Equity in Energy Initiative" was started in the last administration and is overseen by the Economic Diversity Office (ED). As she understands the program, she said, it has several different threads. One of the main ones being an ambassador program where there are non-federal people who serve in ambassador roles to champion different issues, one of which is inclusive workforce development.

Dr. Deena Ahmed then said that it would be helpful to understand the answers to a number of questions for all of DOE's workforce programs – what are the standards for job creation across all of these programs? What are what are the frameworks that are being looked at when, especially when some of these grants are being evaluated? How are they being evaluated? Is it consistent across all of the programs? Are there some programs that have the apprenticeship and wage prevailing wage

requirements that have it have more structured or stringent requirements, and then how do some of the other things that we've been talking about inclusive of wrap around services come into those frameworks of evaluation?

Betony Jones answered that she could follow up with more information, but as an overview, DOE has developed the “Community Benefits Plans” framework. She explained that it is a framework to address the administration and Secretary’s equity and justice and job quality goals. That framework comprises 20% of a proposal score and is used across all of the BIL and IRA grants, funded programs and loan programs; though the loans have slightly different structure in terms of the scoring. She went on to say that there’s a website that lists the criteria for these priorities that DOE is considering. She explained that the plans are then scored by internal staff and external reviewers who are specifically recruited to review Community Benefits Plans and are experts in workforce issues, job quality issues, community engagement issues and separate platitudes from real commitments. Additionally, she said, there are certain guidelines about what would a what a good plan would be, but it's generally flexible to allow the project proponent to meet these criteria in a way that works for their project.

Chris Levesque then observed that there were a lot of dollar values cited in the different presentations which led him to think about what part of those dollars were workforce development? He also emphasized that there's a lot to be learned by doing in those capital projects.

Jermaine Whirl commented that he thinks there’s a big opportunity with the Office of Science research, especially in terms of community colleges, as they have 49% of the folks who are in any college or two-year college right now. He said that community college students aren’t necessarily thought of as being in research, but that thought eliminates half of the potential researchers and more should be done in terms of making pathways more seamless to becoming a four-year person. He made the point that to increase diversity in graduate students, we’ve got to get students there so they can even know that “I can be a researcher.”

Girard Melancon spoke about equity, and the opportunities to support community colleges and HBCUs that have been historically underfunded. He suggested that one path is to encourage large companies (like Siemens, Panasonic, or others) to give equipment to the labs at these schools to help establish training on new and up-and-coming technology and innovation.

Pam Egan acknowledged Girard’s comment and asked the members to talk about, given what they heard and the expertise they bring, what can be done?

Maureen Conway responded that she felt she heard an integrated way of thinking about workforce in the context of what it takes to build energy infrastructure. She emphasized that it’s really important to think about workforce in context, not isolation. She continued, that she thinks the EWAB could have an opportunity to focus on the job quality standards and the trends of jobs in a particular area over time.

Deeana Ahmed added that it’s important to contextualize what the Inflation Reduction Act tax credits do for job creation, though that was not discussed a lot today. She added that, when thinking about bringing equity into the workforce and energy workforce development, wrap around services are incredibly important, and she thinks that should be one of the EWAB’s core focuses.

Pam Egan reminded members that they have the opportunity to self-organize into subcommittees, and the focuses that Maureen and Deeana mentioned could be good topics to organize around.

Allison Ziogas reflected that she was disappointed to not see more focus on offshore wind, as it touches so many sectors (maritime, construction, manufacturing, ports, infrastructure, etc). It could be good for DOE to think about how to connect employers with community group and unions, especially to adapt curriculums to train for offshore wind jobs, as it's currently costly to get the necessary credentials – the cost is a burden for individuals and for apprenticeship programs.

Betony Jones responded that the Org Chart does not capture that the Office of Energy Efficiency and Renewable Energy has 12 technology offices – one of which is the solar office (that presented today); another is the wind office; another is geothermal, etc. She mentioned that all of those offices are engaging in workforce activities, and the EWAB members should let DOE know which offices, specifically, they'd like to hear from in future meetings.

Chris Levesque said that what Betony mentioned earlier about the DOE's reorganization stuck with him. His understanding, he said, is that reorg really extended the workforce lens to include the trades hourly workers; while DOE's historic focus is on scientists. He believes that the EWAB has a lot of opportunity to give advice to this new focus, as they probably need the advice more than established programs.

Betony Jones agreed, saying that it's like a block of clay that the EWAB can help shape from the get-go.

Sarita Gupta commented that she was glad to see the commitment to equity and inclusion across all of the presentations, and it left her wondering if there are different ways in which funding and resources are getting out the door to help under-resourced communities know about and apply for DOE funding. She was curious to learn what programs are learning about that and how they could help DOE understand and meet the goals of reaching underserved communities.

Pam Egan asked for clarification, if she how EWAB can support DOE in understanding, or also private philanthropy and the other groups represented on the board.

Sarita Gupta clarified that she was talking about the whole picture, and that it would be helpful to see if there is an assessment of DOE funding that has already gone out to see if it's reached its DEI goals.

Amanda Cage said that she would like to also figure out how to incorporate lessons learned from BIL and IRA into legacy programs in order to ensure durability.

Anne McMonigle went on to say that she appreciates the acceptance of labor standards in grant programs, but she would like to push further and deeper to look at a scoring mechanism. She emphasized that all employers should be held to the same standard, no matter where they're geographically located. She mentioned that she was also curious to see the results of some of the loan programs to see what's working and how that's working.

Deeana Ahmed added that she thinks it's important to consider what states are doing as well and how that fits into the intent of DOE programs. She thinks there's an opportunity to analyze what's working well, what's not, what the gaps are, etc, especially from the community organization perspective. Also which states are reaching community organizations to make sure they are getting ladder up to federal opportunities, and how can those lessons be shared. She said that Michigan seems to be doing a good job of this.

Betony Jones re-emphasized Deeaná’s message, saying that the workforce ecosystem is vast and complex, and DOE needs the EWAB’s help to figure out what role DOE should be playing in it – be it a coordinating/convening role, developing standardization, etc.

Pam Egan asked EWAB members to now consider the “how” – how do they want to get the information needed and turn that into recommendations.

Dan Marshall recommended that EWAB members form subcommittees and then funnel the material, research, and recommendations through a single entity that is responsible for drafting the report, with the entire board’s perspective and approval integrated throughout the process.

Girard Melancon was curious to know how Commerce and other agencies are supporting childcare; as in the specifics of how that is applied. He also wanted to know if Subcommittees could reach out to people on the group or at the federal level.

Piper O’Keefe responded that they are allowed to talk to external people. FACA just requires that subcommittees present all the findings and discussions to the whole group for discussion before adopting anything that’s proposed in the subcommittee itself.

Kay Seven commented that when the Workforce, Innovation, and Opportunity Act came out in 2014, Secretary of Labor Perez commented that there needed to be silo implosion between various federal agencies. She said that the EWAB has a great opportunity to reach across federal agencies and help DOE do its part better with the wrap-around services, potentially in working with another federal agency.

Pam Egan confirmed that she heard Kay highlight opportunities for the EWAB in terms of wrap-around services and in working with other federal agencies.

Missy Henriksen said that she had to leave to catch a train but wanted to share some thoughts on committee structure and the day’s takeaways. The first theme that popped out to her was unification – such as the silo busting Kay mentioned. She continued that another theme was wrap around services, that she believes could be broadened to “barriers to employment,” which includes wrap around services, childcare, transportation, pre-employment testing, and more. Other themes she saw were training (such as registered apprenticeships, the technical system), manufacturing, and diversity. She went on to say that she thought DEI should be intertwined with any subcommittee created, as it’s fundamental to success for all parts of the work.

Pam Egan acknowledged Missy’s summary and thanked her for joining.

Jermaine Whirl mentioned that he is on the Federal Reserve of Atlanta, a labor board. He said that Missy is right about the barriers people face to getting jobs with family sustaining wages; the Fed’s data show that people will stay in sub-par jobs because they could lose their TANF benefits, childcare subsidies, and more at a higher wage. So good jobs needs to be good enough for people to transition out of their current role. He went on to say that the Fed has a lot of data about labor economics and could be a good convener too.

Anne McMonigle emphasized what Jermaine brought up about the benefits cliff. She said that even as a first year apprentice, people start to make a lot of money and lose housing security within the first month of having a paycheck (for example, she’s seen single mothers drop out of the apprenticeship program because they could only afford a studio in Oakland instead of the 2-3 bedroom that was being

subsidized). She said that it's really important that there's the ability to work up to a point where you make the income that will replace your subsidies.

Girard Melancon continued on that point, emphasizing that federal policy is that a person must be below 100% of the federal poverty line to qualify for assistance. This makes it difficult for an electrician helper, for example, to go to a license or adjournment level attrition using benefits.

Maureen Conway said that she thinks that a "performance standards" subcommittee would be different than a "wrap around services/barriers" subcommittee. She said that they'll have to grapple with when people need barriers to be removed (pre-employment?); what does family support employment mean; and how do we structure both of these? She went on to say that there's a separate question of the role they expect employment to play in people's lives and what high quality jobs are – figuring out some performance standards could be really important.

Alison Ziogas mentioned that credentialing standards and transferability should be encompassed in some subcommittee. In off-shore wind, she went on to say, that's a big barrier, as well as determining where the gaps in the current system are.

Maureen Conway said that she thinks credentialing standards could fit in with performance standards, because there's an argument that when you give people more skills, they will be more productive and should earn more... but that is very rarely tracked. So pre-evaluation of what needs to be trained for implementation, and the during evaluation, you bring training into it.

Pam Egan and Maya Goodwin confirmed that the discussion over subcommittees would continue and turned the meeting over to public comment.

Piper O'Keefe opened the floor for public comment and then noted that there were none.

Pam Egan reopened the EWAB member discussion, asking if any had other thoughts on subcommittees and the general process for putting a report together.

Anne McMonigle noted Dan's point earlier, asking if the Berkeley team could help the EWAB members put together the report. She asked to make a formal motion for this.

[All EWAB members present vote "Aye" in favor of working with the Labor Center to draft their report]

Maya Goodwin emphasized that DOE is also a resource for EWAB members, and if the EWAB created subcommittees, they would surely play a large role in collating the recommendations. She said that there would be more discussion of process in future meetings.

Kay Seven said that it's helpful for her to have a mind map of the energy sector and where it's going, what's the impact on education, the suppliers of education training programs, and then going to be impact with the barriers. She's optimistic they can find solutions for those.

Jermaine Whirl agreed with Kay's summary, saying that there is the social and training side to consider. He said that the social side is really deeply prohibitive to growth and workforce development in this country. The EWAB, he believes, could come up with deliverables around that; the role of public/private/philanthropy; and the role of communities. He mentioned that there are a lot of barriers

to entry, exacerbated by COVID, and any strategies DOE proposed, college presidents would likely be happy to fit into.

Girard Melancon added onto Jermaine's point, saying that good community colleges can't always stand up programs well because they don't have the money to start top-notch geothermal, HVAC, etc training. He thinks there's an opportunity for DOE to invest and plant seeds there; replacing old equipment into the existing infrastructure. The EWAB could propose both a short term immediate solution to strengthen the programs for new technologies, as well as a long-term engagement strategy to build the pipeline and make sure people are entering those programs too.

Anne McMonigle suggested that, in terms of the supportive services, they make a footnote about what needs to be a policy change – she has run into barriers donating new CAT equipment to a sheet metal local but insurance won't let them donate to a school district.

Amanda Cage added that she would like the EWAB to focus on what is practical and can be implemented in their timeframe. She additionally noted that something like the Secretary saying that the number one issue getting us to be an energy efficient country is childcare like would be like a narrative changing conversation.

Sarita Gupta agreed and said that "narrative changes" could be interesting for a subcommittee to think about. She cited the need for the EWAB to center around a vision. She added geographic diversity has struck her as an important theme throughout the day, and believes DOE can play a big role in convening multi stakeholders across many geographies. She called for the EWAB to spell out what types of stakeholders specifically should be engaged by DOE moving forward.

Amanda Cage added that she would like to see a map of DOE's investment and other investments in energy.

Kay Seven mentioned that DOE will be at a meeting next week with Tribal nations, the Department of the Interior, and various other federal agencies. There is an opportunity for the Secretary of Energy to center workforce needs using the legislative authority of that group, and also a potential opportunity to partner with these agencies.

Amanda Cage added that, in her, mind there could be interactions between federal agencies beyond cooperation; it should play into the big investments that are being made.

Deeana Ahmed said that she believes she has seen maps that show investments related to jobs and either DOE or federal agencies collective have energy community maps too.

Betony Jones responded that DOE has recently published a map that shows all of the private investments, and (when the information was available) the jobs created. She also asked the EWAB to think about how the energy system is changing dramatically and will require different things of workers to be successful at having a resilient, clean, and competitive energy system. She asked, what is it that the industry and employers needs; what skills do workers needs; what is the role of workers in the energy system?

Jermaine Whirl went back to the "visioning" aspect, and said that he keeps thinking about FDR's PWA, which was a national movement to invest \$6 billion in the U.S. infrastructure that still serves us today. He thinks rebranding is important, noting that "DOE" means "Department of Education" to those

working in higher ed. He also seems a big opportunity to convene other partners and call to work together, not in isolation.

Deeana Ahmed added to Jermaine’s point about message that there is a need to give a public understanding of the energy jobs that exist/are being on shored. She also cited Danella Meadow’s work on systems thinking and believes it could be a good foundation for the EWAB’s work.

Maureen Conway emphasized the importance of visioning too. She said that she has been doing this work for years, and childcare, transportation, and housing are consistent problems – so it’s important for the EWAB to think about what’s funded and what’s never funded. She also added that research shows poverty lowers IQs and productivity, so job quality is vital for employers to have employees who are engaged and skilled.

Anne McMongile agreed with her, adding “no one wants a pizza party!”

Allison Ziogas added that the employers’ perspective is really important to make sure the work the EWAB is doing serves a purpose, because no one wants training for the sake of training, and the training should result in high quality jobs.

Amanda Cage added that we’re trying to build a workforce in the United States, which provide additional incentives.

Anne McMonigle responded that they should create subcommittees to answer the major points – how to incentivize good quality employers who will stay in the US, hire Americans, and will invest in their workers training? Maybe there’s also a way to bring smaller employers together to share and pull from a benefit pool?

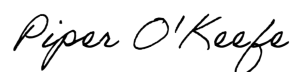
Girard Melancon added that employees owning their own business is also an important thing to think about.

Maya Goodwin thanked everyone for their ideas and shared that next steps would be following up about subcommittees and the next public meeting dates.

[The Meeting Adjourned](#) at approximately 3:30pm Eastern.

Respectfully submitted.

I hereby certify that these meeting minutes of the September 18, 2023 EWAB meeting are true and correct to the best of my knowledge.



Piper O’Keefe

Designated Federal Officer