CEWD has helped to launch and continues to support and reinvigorate State Energy Workforce Consortia representing more than 27 states, with membership from the energy industry, educational institutions, government, unions, and contractors. Representatives from these collaborative organizations gathered for their National Forum at the Crystal City Marriott in Arlington, VA, to share best practices and learn about new tools and resources to aid them in their mission of developing a qualified, diverse energy workforce for America.

The Value of a State Consortium

Some attending the Forum have been members of State Energy Workforce Consortia work since CEWD was formed in 2006, noted Ann Randazzo, Executive Director, CEWD, greeting participants fresh from the organization's Executive Council meeting.

“Our Executive Council helps us understand what's important to the industry and what we need to focus on,” she said, “but state consortia are a big part of that conversation, because the work that you do is invaluable to our industry. You are the ones who are building the alliances and partnerships and getting the work done. We can leverage a small group of people to get things done nationally, because of the work that you do.”

Randazzo pointed out that consortia members play dual roles as energy industry, government, or educational staff in addition to their consortia work, but explained that those roles should be a complement to one another, rather than an added burden. “If your consortium is not helping you in your real job, now is the time to bring in one of CEWD's consultants to fix that,” she said.

Randazzo outlined three keys to a successful consortium: creating a strategic plan; assigning each member a specific role; and getting executive buy-in and participation.

“What's going on nationally might not be the same as what's happening in your state,” Randazzo cautioned. “Your plan has to be tailored to the needs of companies in your state or it won't be effective.”

Randazzo also noted that many State Energy Workforce Consortia were going through changes. Some, such as Oklahoma, are just coming on board, while others, such as Texas and a regional consortium in the Northeast, are dissolving. There are currently 25 active consortia covering 27 states. A map of all State Energy Workforce Consortia is available to members at https://cewd.org/about/state-consortia/state-consortia-2/.

In preparation for the National Forum, CEWD sent surveys to all consortia leads, Randazzo said, and received 21 responses regarding which issues were currently of greatest importance.

“What matters most to the consortia is career awareness,” said Randazzo. “It's because it's one of those things that you can really collaborate on. For example, Careers in Energy Week events are critical for everybody, regardless of your company’s size.”
Diversity and inclusion were rated second in importance to energy companies, she said, but last for educators. “That’s a gap that we need to begin to work on.”

Other concerns included a lack of qualified job applicants, financial support for the work they were doing, and competition for the talent pool.

It’s in everyone’s best interest, Randazzo noted, to work together to build a larger talent pool by using some of the tools and resources CEWD has developed, such as the test prep workshop.

The workshop can be used to better prepare potential applicants for industry pre-employment tests, which still have a pass rate of about 50 percent. The workshop is available free to members who register with Valerie Taylor, Consultant, CEWD, on condition they share their results with CEWD. That helps CEWD to improve and to know what’s working. Those who use the workshop as designed report pass rates of 70 percent, Randazzo said.

“It saves you time and money if you get better results using this workshop,” she said.

Randazzo said the survey also revealed that only 71 percent of consortia are using a strategic workforce plan. “The real question is, what are the rest of you doing? If you don’t have a plan for where you’re going and what your needs are, how do you know that your consortium is making progress?”

Finally, Randazzo reminded consortia members to use metrics to measure the success of their work, “to be sure the investment you are making is paying off.”

The Value of Diversity in State Consortia Membership

State Energy Workforce Consortia are most effective when there is diversity among their membership, said Rosa Schmidt, Consultant, CEWD, who led a panel discussion on the topic. This type of diversity, she said, does not refer to race or gender but to the many types of energy companies and energy stakeholders. “That type of diversity is very, very powerful,” she said, when advocating for change, because “it’s the entire energy industry speaking with one voice.”

Consortia members, she added, should be “passionate and active. You need people with buy-in and commitment, who will want to be part of the solution.”

The panel included Brooke Perez, Education and Workforce Development Manager, Georgia Power; Troy Schneider, Vice President, Central Transmission and Distribution, Michels; and Matt Kellam, Military and Recruitment Program Coordinator, Dominion Energy.

Having a diverse membership—including companies as large as Georgia Power and as small as municipalities and co-ops—with participation from the executive level allows the Georgia Energy and Industrial Construction Consortium (GEICC) to work efficiently and effectively, said Perez. “When we have our meetings, we are getting stuff done because everybody’s in the room who is able to make decisions.”

GEICC also has participation from Career and Technical Education representatives and statewide organizations such as FIRST Robotics. But no one member has more power than another.
“Georgia Power is one of the largest companies,” Perez noted. “In some cases, we might give more resources and provide more funding, but at GEICC you see equal representation. If you have a few leaders with the resources and people to make really good stuff happen at the state level, you can make it easier for some others to participate and you’re going to have a lot more success.”

Because co-ops and municipalities are smaller, it’s sometimes more difficult to get them involved, she conceded. She advised others not to give up on them, but search within the organization for “the right leader or functional person to get behind the work. If you can’t get them with passion, get ’em in their pocketbooks,” she said. “Show them how this can help lower their costs.”

She also said consortia have to be understanding about the limited resources smaller organizations could contribute. For example, one of their members can’t make it to every meeting but contributes whenever possible. “The work is not going to be evenly distributed,” she acknowledged. “Be flexible in your structure. Let them host something and highlight something that they do.”

Schneider, who represents contractors, said being involved in the consortium was both meaningful and productive because the group wanted to include an operations perspective. “That excited me, because they were trying to identify the gaps of information that they knew they didn’t have. They didn’t understand what contractors went through to hire people and they knew they needed that. They didn’t bring me in as dressing. I have full involvement. I have a voice on the committee.”

Even when there is turnover on the consortium, the commitment to including an operations perspective remains, said Schneider. “They recognize that it’s important to continue with that trend.”

For a contracting company, it’s important to have these relationships with utilities, he said, because it helps them understand how many people they’ll need to hire in the coming years. “We need to look five years in advance. At a utility, you can do that. But it’s harder for a contractor unless you are involved with some kind of organization like the consortium.”

“We value greatly our contractor partners,” said Kellam, who added that he appreciated the opportunity to hear about what other consortia are doing that works. “We have so much to learn from everyone else in the room. That’s the best part about this CEWD community. When you are ready to move forward with something, you can go to others from these summits to figure out how they did it well.”

Kellam said the Virginia Energy Workforce Consortium (VEWC) had 100 members, including more than 35 secondary and postsecondary educators, 30 energy employers (including contractors and suppliers), 15 government agencies, and 10 associations.

“We now that’s the industry speaking with one voice,” said Schmidt.

However, when Virginia developed its past state energy plans, VEWC wasn’t included in the discussions, said Kellam. “With workforce development mentioned in Virginia’s past energy plans, I wondered how the state was going to address this challenge, when we’re not part of the plan,” he said.

Over the past five years, VEWC has leveraged much of the work done and resources provided by CEWD to implement a number of energy education and career pathway options, said Kellam. These include working with the Virginia Department of Education and Virginia community colleges to add more energy education into what public schools are teaching, including the Energy Industry Fundamentals course and Power Line Worker Training programs, as well as having several VEWC members participate in the Troops to Energy Jobs program. They’re also advocating for an energy pathway with the Department of Education. “We’re going to keep doing this legwork,” he said. “We have to make sure we are involved.”
The consortium’s diverse membership gives it greater credibility in these efforts, he said. “We have a unified message. When we go to meetings with state-level organizations, we are able to have representatives from each sector of our industry with us. We have to show up together, so they see that we’re not siloed and that the VEWC’s efforts align with the state’s energy, workforce, and economic objectives.”

**Consortia Insights: The Value of Collecting Data and Measuring Results**

Whatever work a consortium chooses to do, it’s important to remember to collect data and measure progress toward your goals, said Ray Kelly, Consultant, CEWD. “How do you know where you are or if you’re getting what you need without measuring?” he asked.

Kelly invited Amber Lopez, Manager, Human Resources Workforce Planning, Entergy, and leader of the WFP Committee of the Louisiana Energy Workforce Consortium, and Joan Turba, Business Development Manager, Northeast Wisconsin Technical College, and Executive Committee Member of the Wisconsin Energy Workforce Consortium, to discuss how they use metrics to measure progress.

On Kelly’s advice, the Louisiana consortium collected data on supply and demand shortly after it launched 18 months ago. “One driver for us coming together was a huge need for lineworkers,” said Lopez. “[Kelly] told us that we needed to measure that demand on the front end.”

Some employer members were reluctant to discuss how many lineworkers they thought they’d need over the next five years, she said, so when they collected the data, they agreed to publish it regionally, without identifying the need at individual companies.

Once they had the demand numbers, they began looking at supply, said Lopez, asking the questions: “If you need 500 lineworkers in the next five years, what do we need to produce from the classroom? How many classes and how many graduates do we need? Demand drives supply.”

Candidate tracking is also important, she said, explaining that they had to identify how many people would need to show initial interest, attend information sessions, pass background checks, be accepted into the programs, show up for class, secure funding with grant dollars, and graduate in order to be hired. “How many have to be interested in a program to ensure we end up with the appropriate number of graduates?”

Lopez put all of this data into an Excel “scorecard” and broke it down by school, including information on demographics so they could measure diversity, as well. “The scorecard is proving very, very important,” she said. “It shows productivity and helps us to get grant money.”

In fact, the metrics were so useful they decided to replicate the system in Arkansas, said Lopez. “The hardest part is getting consortium members to trust you enough to give you the data.”

In Wisconsin, five large utilities came together to launch a consortium in 2014 and invited the Northeast Wisconsin Technical College (NWTC) to join them, said Turba, who co-chairs the workforce demand and supply task force for the consortium. When asked about the number of graduates and where they go after graduation, however, she said they had a tough time answering because “there are 16 technical colleges in the system that operate independently. It was hard to gather data.”
Other challenges arose because early on, the consortium did not have representation from contractors and didn’t know how many graduates were really needed, she said. Contractors needed more information about utility forecasting needs in order to estimate their own hiring needs. Once the consortium invited contractors to join and gathered both utility and contractor hiring needs data, NWTC and the other Wisconsin technical colleges had a better understanding of the number of graduates needed to meet the future workforce demands in Wisconsin.

Each of the Wisconsin technical colleges was already conducting a required graduate follow-up study for all of their academic programs, said Turba. Out of the 16 technical colleges in Wisconsin, only six have an Electrical Power Distribution (EPD) program and only one college (NWTC) has a gas utility construction program. “Curating and totaling data from the six EPD colleges and NWTC’s own gas utility proved enlightening,” she said, as it provided evidence of the total supply of EPD and gas graduates in the state and if they were gaining employment in their local technical college district, elsewhere in the state, or out of state.

They discovered that the number of students hired out of state was high, given the in-state demand for workers, said Turba. “While the students generally were agreeable to work anywhere in the state, out-of-state employment was typically not their first choice. This fit well with Wisconsin utility and contractor desires to hire local talent with roots in the community,” she said. “All too often, we find hiring students from out of state locations creates a higher turnover.”

Kelly noted that knowing when students would graduate was as important as how many would graduate and companies needed to align hiring efforts with those dates.

Gathering that data helped them understand that local energy companies needed more of a presence on campus and needed to set up interviews to track with upcoming graduations, said Turba.

It also became apparent that there was a shortage of gas utility construction graduates in the state, she said. Using this data, NWTC helped four additional technical colleges start gas utility programs to increase the supply of graduates to meet hiring needs.

The Wisconsin Graduate Follow-Up study gathers data from students for five years after they graduate, using the same survey for each of the schools, said Turba. The survey asks whether the student has been hired in their chosen field, who hired them, and how much they are earning. “The biggest problem is getting the surveys back,” she said.

The Value of Starting (or Restarting) a State Consortium

Five states have been working hard over the past year to get their consortia organized, said Beth Britt, Consultant, CEWD, who asked representatives from consortia in Arizona, Arkansas, the Carolinas, Missouri, and Nevada to answer a series of questions. A sampling of their responses follows.

What are the driving forces that led you to start a consortium?

Kimberly Erskine, Manager of Workforce Development, Ameren, said the Missouri consortium had dissolved after a number of people changed roles. “Due to good legislation and a need to build programs across the state, we all got together and decided we needed to get back up and running this year.”

To make the consortium stronger, they put together a sponsorship group of each member’s vice presidents and other executive leadership. “We meet with them quarterly to make sure we are accountable and aligned,” said Erskine.
The Arkansas consortium, which held its first meeting in July, grew out of the need for greater diversity and a way to fill the talent gap, said Michael Considine, Director of Customer Service, Entergy.

“The skills we’ll need in the future are different than the skills we need today,” he said. “We realized we needed to do something different.”

Southwest Gas wanted to build resources for its employment pipelines, said Kirsten Derasmo, Human Resource Administrator, so they began reaching out to community colleges to form a consortium. “We heard early on that we also needed to partner with contractors,” she said. They are forming a consortium that covers both Nevada and part of Arizona.

Arizona had a very strong consortium from 2011 to 2015, said JoLee Bracamonte, Talent Acquisition Specialist, Tucson Electric Power, but it grew inactive until this past year, “when we hit the ground running again. We’re really focused on building a quality workforce and established pipelines. Our overall theme is to learn what we can do better as a group than individually.”

A need for lineworkers, a phone call, and an email from CEWD Consultant Rosa Schmidt spurred the creation of a consortium in the Carolinas, said Chris Hage, Director of Workforce Planning and Development, Duke Energy.

“We’ve been very active since last August,” he said. “We started small, and it’s grown from that point.”

Who did you talk to as you pulled together your consortium?

Derasmo said the Nevada consortium relied heavily upon advice from CEWD Consultant Ray Kelly in getting its feet off the ground, as well as best practices shared by CEWD members. “[Kelly] was a huge resource for us getting started,” she said.

Hage said he spoke with members from other state consortia, especially those in Georgia and Virginia. “We’ve learned along the way from them what works and what doesn’t.”

What have you struggled with most?

In Arizona, a federal grant was successful in helping to build education pathways and “the group slowly lost momentum,” said Bracamonte. “Getting back together, the challenge is having people come to the table and demonstrate what the return on investment will be now. I think it will happen, but it will take time. We’re starting from scratch again, updating our strategic plan.”

In Arkansas, “the challenge has been keeping the engagement,” said Considine. “It’s difficult when people return to their regular jobs to keep that momentum going. I was trying to get 40–50 people to show up, but you really just need 10 to dig in.”

“Our first challenge was getting the right people in the room right away,” said Erksine. “First we went to the boots on the ground and then back to the executives. We have to help educators understand the purpose of CEWD, get the right players from government, and get it moving as fast as we can.”

“Availability is tough for everyone,” added Derasmo. “Being able to follow through could be a challenge.”
What have you accomplished so far?

“We started last August and we quickly split into two committees, one for education and one for career awareness,” said Hage. “We really hit the ground running on the education side. Among all our energy partners, we have agreement on a common curriculum for a lineworker program. We have approval for the curriculum from the colleges and now we will have a standard program that’s recognized by all the community colleges.”

Hage said they had also been able to identify where more lineworker programs were needed based on demand. “We’ve pinpointed the colleges we want to work with and started the year with four active programs. We have two more coming on board next year in North Carolina, and a few in South Carolina as well. Our goal was to increase the capacity of our lineworker programs and we talked about that a lot in the first few months. We’re now talking about sustaining capacity.”

In Arizona, grant money was used to establish a program at a community college and now efforts are being made to make programs stackable so that they are more beneficial to students, said Bracamonte. Utility partners APS, TEP, Southwest Gas, and others are meeting to discuss best practices. For example, “we learned about the internships they have at APS and they learned about our military internships. You can’t be great at everything,” she said. “That’s the best thing about this consortium, is being able to share ideas.”

“We really focused on spending time with high school students,” said Derasmo, who explained that they have developed presentations to get the kids interested in energy programs. “We would like to start earlier than high school, but right now that’s our main focus.”

Considine said the Arkansas consortium had identified three educational partners that are geographically dispersed, along with contractor partners and other employers. “Our plan is to have a lineworker program up and running with students in 2019.”

Erskine said her group was still in the planning stages but had a “solid plan to get the right parties in play.”

What short-term and long-term goals have come out of the work you are doing so far?

In the short-term, Bracamonte said, her group is focused on understanding game changers and seeing “what’s already established so that we don’t recreate the wheel.” In the long-term, they want to work with community colleges to create summer STEM camps in city schools, particularly for female students, and work on becoming a unified group with a unified message.

The Carolinas are focusing upon expanding membership in the short-term to include gas companies, said Hage. In the long-term, they hope to create an energy career pathway.

Is there one thing you would have done differently?

“Realizing you don’t have to do everything at once,” said Derasmo. “It can be overwhelming.”

“I would not have produced a map with the demand, because those numbers are still out there even though we’ve already met that demand,” said Hage.
Any advice to people who have no consortium?

“Take a step back and see where you really need the work,” said Bracamonte. “Determine what you are missing. There are so many resources in the community that we do not use to full capacity. Take a step back and see what is already established and leverage the community to work toward a common goal.”

“We all have small teams and limited resources,” said Erskine. “It can be overwhelming. Make economies of scale and make a big impact by working with others. I’m super appreciative of all the help.”

2018 Highlights from Consortia

California, Connecticut, and Colorado are in the rebuilding phase.

The Dakotas spent the past year establishing a strategic planning process, adding contractors to their membership, and building partnerships with state entities. They put up a website with a members-only section where members can learn about what other consortia are doing.

Florida held two Careers in Energy Week events, including an open house that targeted families and guidance counselors and showcased energy careers. They received a proclamation from the governor, which was delayed by a hurricane. They are also working with the state Department of Education to identify all energy programs and share them with NEEN. They are working on how to get educators to come to their summer meetings.

GEICC (Georgia) was unable to make the progress it had hoped for on diversity and is revisiting the recruitment lifecycle in schools. They located high schools close to technical schools that align with where they have the biggest hiring needs and asked local businesses to partner with schools in those areas, so there is a targeted engagement all year long. Activities include hosting a teacher externship during the summer and hosting utility days during which students can learn to climb poles and learn about relevant technical college programs.

Iowa held its first Career Awareness event during Careers in Energy Week, at a municipal training field. They recognize the need for a succession plan.

Kansas has been working with the state Department of Education to shift the energy career pathway out of the agriculture cluster and into engineering, which should happen by next year. Kansas has undergone a leadership change and a new leader from Evergy has been identified.

Louisiana has been developing lineworker training programs and has two up and running. They are also beginning to work on natural gas technician programs in partnership with the Louisiana Gas Association. They also held Careers in Energy Week events and are working on a succession plan.

Michigan’s consortium celebrates its 10-year anniversary this December. Six secondary schools and five community colleges are now offering the EIF program; Henry Ford Community College is offering stackable credentials; and a pre-apprenticeship program has been helping students pass both the EIF course and CASS tests. DTE and Consumers Energy are sponsoring Michigan Career Quest, which teaches 10,000 students about career paths in the skilled trades. The consortium continues to be heavily involved in FIRST Robotics, which holds its world competition in Detroit. Finally, during Careers in Energy Week, the consortium launched a series of videos from a variety of employees in energy jobs and hosted a social media contest for high school students. They held eight tours and three open houses for 300 students, generating 22 media hits.
Minnesota has outlived its first five-year plan and is now creating a second one, which they expect to have ready by spring. Sponsored by the McKnight Foundation, a documentary called *The Power of Minnesota* was developed by the consortium and tells the story of how wind and solar power have grown in the state. The documentary, which was shown during the Forum, can be found at [powerofmn.com](http://powerofmn.com). Also, the consortium launched an Energy and Construction Academy, where teachers can book one of two energy trailers that include hands-on science kits for students. Last year, more than 800 students were able to use the kits and this year they hope to reach 1,000. Working with the Legacy I’ program, Xcel, a member of the consortium, was also able to make progress in its diversity efforts by bringing five African American young men into the power line program.

Several years ago, Nebraska piloted a “Girls in the Trades” program during Careers in Energy Week that initially targeted middle and high school students. They have now added a similar program for boys and expanded the program to multiple cities, adding a day for career counselors and advisors. They are also using the Legacy I’ program, which had an 88 percent graduation rate at the end of the year, with 83 students getting internships and advancing to postsecondary education. They have started a second cohort of 30 students and are seeking consortia members who can train and employ some of the students, most of whom are African American or Latino. Going forward, they will focus on diversity programs for students starting as early as kindergarten. They are engaging the state Department of Education to take part in the consortium.

The New York consortium is in a transition period. It had focused on Troops to Energy Jobs, through a program with ConEd and Jefferson Community College. National Grid wants to expand beyond this focus but has met resistance. There may be a need for a New England consortium.

Virginia is pursuing an energy career education cluster. It continues to hold discussions regarding stackable credential models with schools and has partnered with the Virginia Chamber of Commerce to hold a Get Into Energy challenge. They recognize the need for better contractor and supply data, as well as graduation and hiring data.

Wisconsin has become a 501(c)(3) nonprofit and will soon be able to collect dues, which will give them the funds they need to hire a project manager. They drew on experience with a project manager model in the manufacturing sector. Northeast Wisconsin Technical College, one of the consortium educational partners, has several new efforts underway to support gas contractors, thanks to a National Science Foundation grant.

Following the state summaries, CEWD Consultant Beth Britt asked each state consortium to provide an updated membership roster to their CEWD lead.

“What is it that adds value to a consortium?” asked CEWD Executive Director Ann Randazzo, as she brought the day to a close. “Planning, measuring the effectiveness of what you do, passionate leadership and engaged partners, collaborating and sharing openly. We hear those things over and over and over and over.”