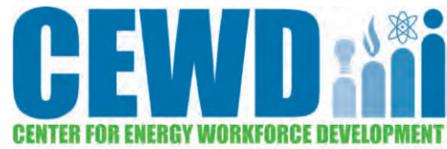


CEWD 2019 ANNUAL REPORT



Powerful Progress Toward Effective Workforce Solutions





The Center for Energy Workforce Development (CEWD) is a non-profit consortium of electric, natural gas, and nuclear utilities and their associations—American Gas Association, American Public Power Association, Edison Electric Institute, Nuclear Energy Institute, National Rural Electric Cooperative Association, and the Distribution Contractors Association. More than 120 utilities, organizations, and unions are working in partnership and engaging educational institutions and government entities to ensure the energy industry is poised to recruit and retain the best and brightest talent.

Through CEWD's leadership, driven by committed industry executives and supported by a professional staff team, the organization is:

- ◆ Building awareness of the need for a diverse, skilled energy workforce
- ◆ Preparing students for jobs in the industry
- ◆ Responding to critical workforce development needs for the industry's immediate and long-term success
- ◆ Creating national workforce solutions that can be tailored, scaled, and implemented locally
- ◆ Launching national, state, and individual networks that are implementing workforce solutions
- ◆ Supporting individual companies with their workforce development needs





2019

A Power-Packed Year of Accomplishments

2019, CEWD's 13th year as an innovator and trusted authority on workforce development solutions for the industry, delivered another year of accomplishments for the organization and those it serves.

Expanded workforce development materials for **WOMEN ENGINEERS, INDIVIDUALS WITH DISABILITIES, AND VETERANS**



Students who earned the Energy Industry Fundamentals Certificate: **3,000**

Revised the Strategic Workforce Planning Template



Educated, connected, and supported more than

500

energy professionals through regional meetings, the Annual Summit, and webinar trainings



Debuted **DIVERSITY AND INCLUSION NATIONAL TEMPLATE**

Pass rates in the **80–100%** range for the majority of students taking the CAST test after completing CEWD-created Get Into Energy Test Prep

GAPS IN THE ENERGY WORKFORCE SURVEY

data released, offering insightful information

Veterans registered on Troops to Energy Jobs Site:

2,000

Partnering with **240** educational institutions through the National Energy Education Network, representing



400 energy programs

Industry careers spotlighted to **100,000+** through social media and online platforms

Workforce Planning

Identifying and responding to industry's most critical workforce needs

Strategic workforce planning has become more critical each year as the transformation of the industry impacts the timing, skills, and number of jobs that are needed in the future. CEWD's strategic workforce planning efforts are guided by the Workforce Planning Council, a cross-section of industry practitioners who work extensively to assess the industry's future landscape.

Focus on having the right number of employees with the right skills at the right time.

POTENTIAL REPLACEMENTS BY 2023

29,000

Lineworkers

31,000

Technicians

15,000

Plant / Field Operators

12,000

Engineers

27,000

Nuclear

101,000

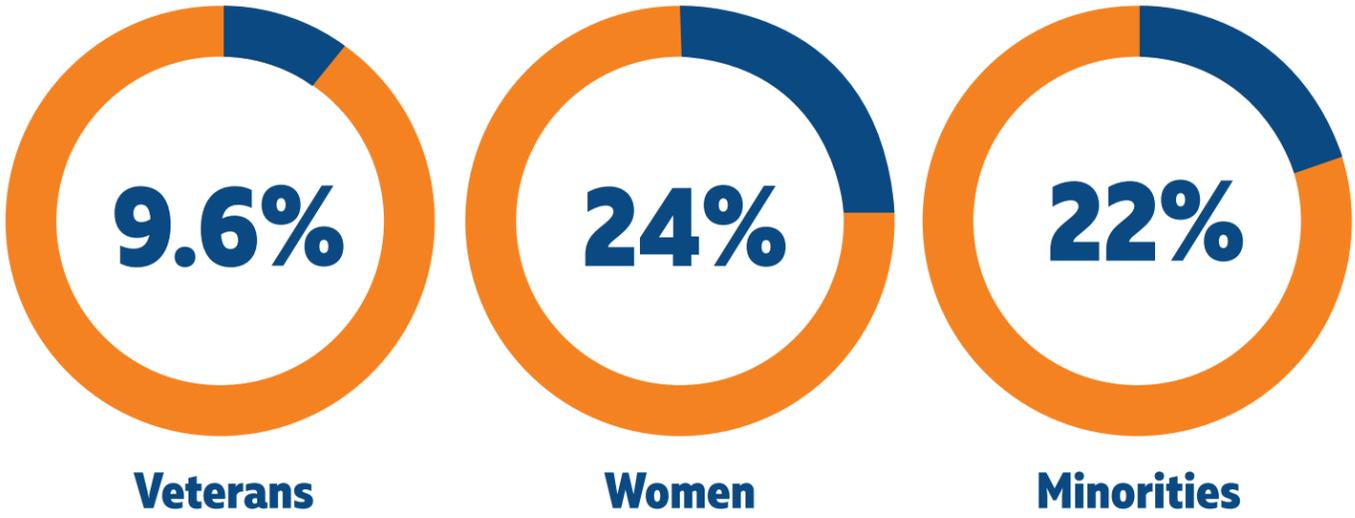
Other Corporate and Field Positions



The transformation of the industry impacts the timing, skills, and number of jobs that are needed in the future.



ELECTRIC & NATURAL GAS UTILITIES Workforce Composition



Source: CEWD Gaps in the Energy Workforce Survey (2019)

Gaps in the Energy Workforce Survey

CEWD conducted its sixth Gaps in the Energy Workforce Survey in 2019. The data from the survey are the sole source of comprehensive numbers on the current and future state of the electric and gas utility industry workforce. The survey results provide national, regional, and state views of the workforce and the demand for future employees and are used by federal and state government agencies as input into workforce training and development programs. State Energy Workforce Consortia use the data to determine what type and how many pipeline programs will be needed to meet the demand for a new workforce. Individual companies can benchmark their own workforce planning efforts against the national and regional numbers.

Sixty-two companies participated in the 2019 data collection, representing about 67% of the electric and natural gas industry, including all companies that own and operate nuclear generation facilities. The results of the survey indicate that the age of the workforce is starting to flatten, showcasing that more younger people are being hired and that retirements are reaching levels from the pre-2008 recession.

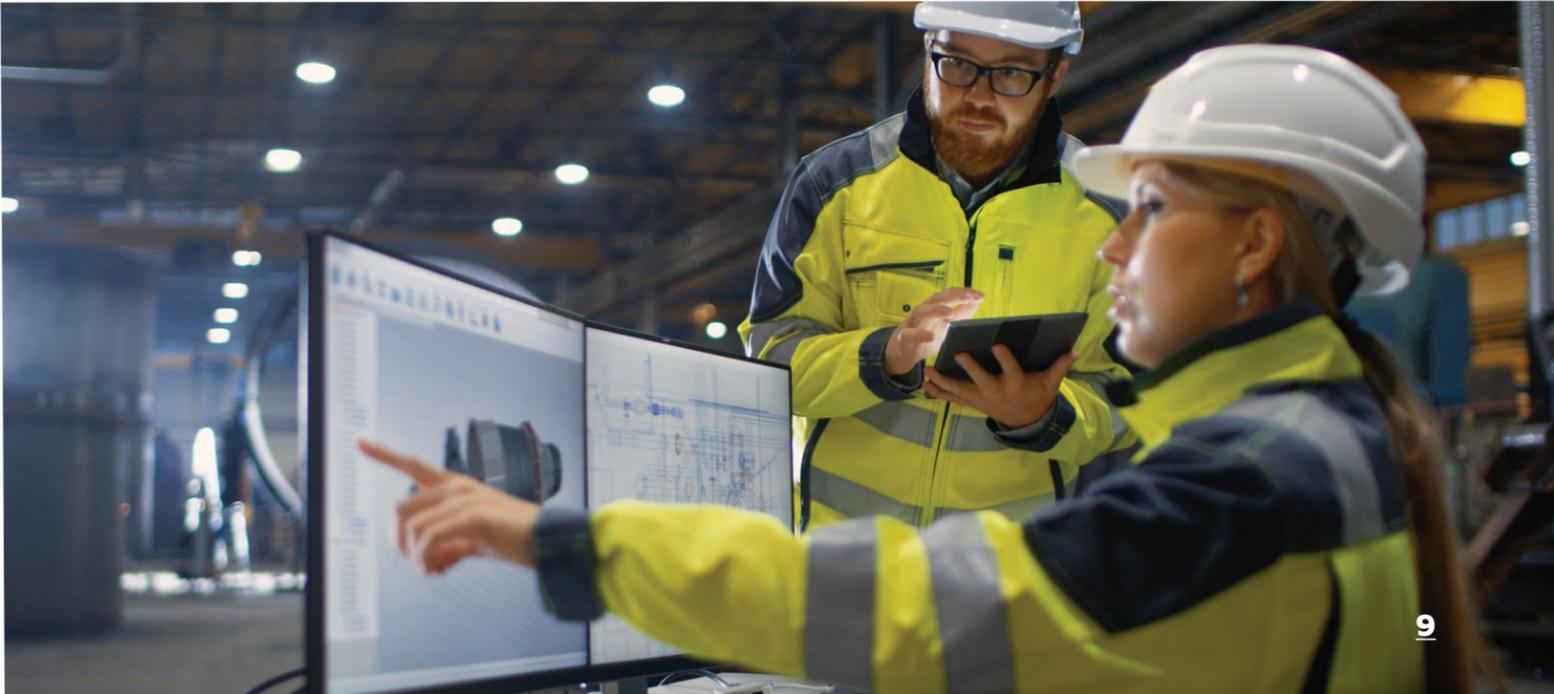
Demographics of the Energy Workforce

- 1% Gen Z
- 29% Millennials
- 37% Gen X
- 33% Baby Boomers

Source: CEWD Gaps in the Energy Workforce Survey (2019)

Strategic Workforce Planning Template

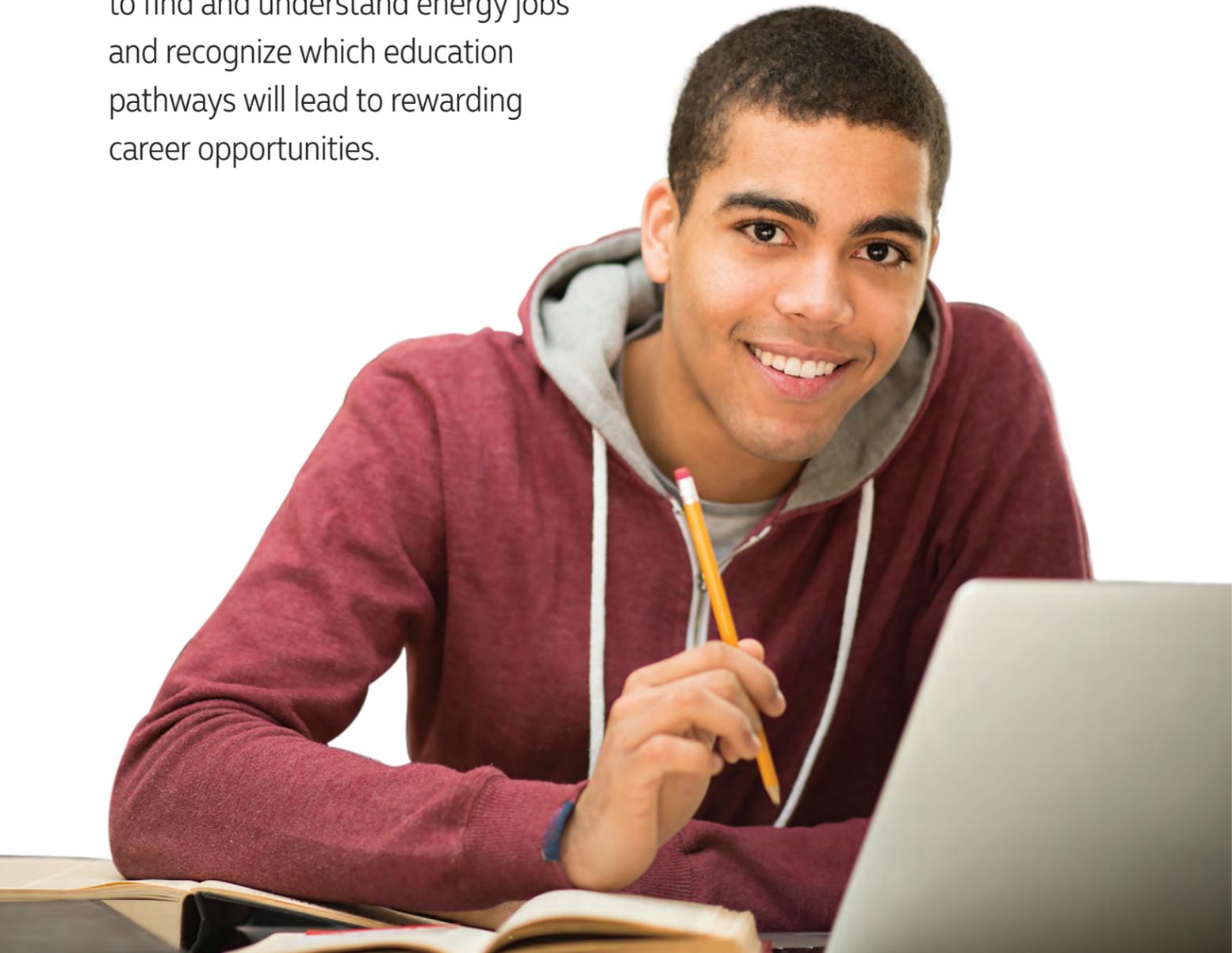
The [Strategic Workforce Planning Template](#) was updated this year to better support the needs of industry utilities and contractors focusing on having the right number of employees with the right skills to support the company's viability and profitability.



Career Awareness

Building awareness of the need for a diverse, skilled energy workforce

CEWD engaged in a wide variety of activities in 2019 to build awareness about the profession, especially initiatives directed at youth, low-income students, women, veterans, and transitioning workers. CEWD is making it easier for students and jobseekers to find and understand energy jobs and recognize which education pathways will lead to rewarding career opportunities.



Online Information Hubs

2019 saw numerous upgrades to CEWD's platforms about the industry and its career opportunities. The **Get Into Energy** [website](#) provides resources for students and jobseekers to understand the pathways to critical jobs, where to find training, and job vacancies with CEWD members. The **Get Into Energy/Get Into STEM** [companion site](#), geared specifically to middle and high school students and teachers, now has more sizzle to get young people energized about the profession. These platforms connect jobseekers with our [job board](#) that lists postings exclusively from CEWD members.

CEWD and its members support a variety of STEM programs, introducing students to energy careers.

Telling the Industry's Story

Careers in the energy industry should not be a well-kept secret! CEWD is telling the story for all to hear, with an expanded social media presence, now regularly reaching tens of thousands of career prospects. Follow along to repost, retweet, and re-tell the tales about heroes in our communities.

We are also shining a light on the men and women who energize communities across the country with the "I Got Into Energy" Campaign. CEWD members can use the updated ["I Got Into Energy" Campaign Toolkit](#) to spotlight those who have their own stories to tell. 2019 saw additional resources to help highlight engineering professionals and veterans. #IGotIntoEnergy



Careers in Energy Week

This annual observance was celebrated in October of 2019 with state proclamations, visits by utilities to local schools, job shadowing days, contests, and trending stories on social media. CEWD provided ready-to-use resources, including posters and brochures, and connected jobseekers with local events.

Careers in Energy Week 2020 will be October 19–23.



Calling All Veterans

CEWD is helping veterans successfully transition from the military to rewarding careers in the energy industry—and 2019 was an active year on this front. From direct support for 600 inquiring veterans, to a new LinkedIn account creating a community for former military information-seekers, to new regular resources and tools for members interested in engaging with vets, to targeted resources to guide those with military training, CEWD is helping increase the visibility of the industry through its extensive Troops to Energy Jobs initiative. The focus of attention on the veterans' community enabled a 15% increase in connections with Troops to Energy Jobs Employers.



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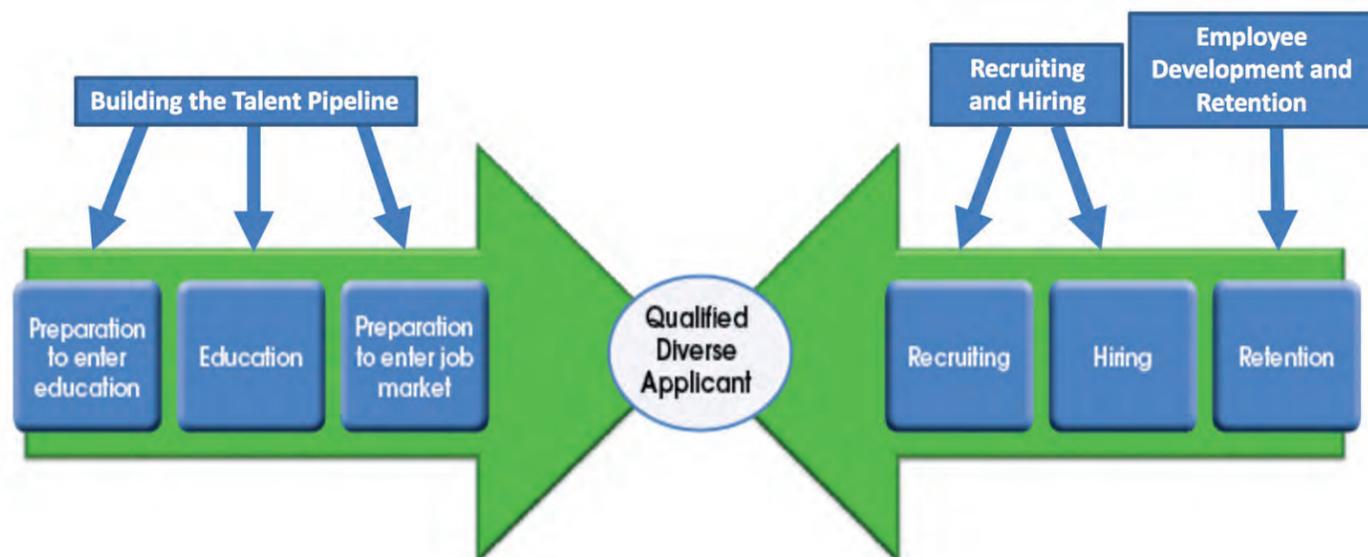
CEWD members have exclusive access to dozens of resources—including research reports, toolkits, planning guides, best practices, and more—at cewd.org.

Education

Implementing short- and long-term education solutions to build a pipeline of skilled workers

CEWD focuses on national solutions to creating a diverse, qualified talent pipeline that can be implemented regionally and locally. Over the past several years, CEWD's repertoire of tools for Diversity & Inclusion has grown, from an assessment tool and playbook to an online national template stocked with tools, resources, and best practices from member companies. Equal in importance is the quality of the talent pipeline, for which CEWD has created education solutions, such as an [Energy Industry Competency Model](#), defined [energy career pathways](#), a [Common Employability Skills Model](#), and the [Energy Industry Fundamentals Certificate](#). These resources are being utilized through partnerships between member companies and educators across the country through the National Energy Education Network (NEEN).

Get Into Energy Careers Pathways Model



Low-Income Students Pathways Model

Recognizing that 41% of today's children grow up in low-income families and have the potential to be the emerging energy workforce, CEWD released a new resource, [Supporting Low-Income Students Throughout the Energy Talent Pipeline](#), which details potential barriers for this target population and offers insight into ways energy companies and their education partners can support these candidates to be on equal footing with their peers.

Diversity and Inclusion

With the debut of the Making the Connection to a Diverse, Qualified Workforce [Assessment Tool, Playbook](#), and [Member Showcase](#) in 2018, the focus for CEWD's 2019 Diversity and Inclusion (D&I) initiatives was on supporting industry companies in implementation. New resources include an online [D&I National Template](#), rebranded D&I print materials, a new version of the [Making the Connection Member Showcase](#), and collateral to support [women engineers](#) and [individuals with disabilities](#) was published.

NEEN

The [National Energy Education Network \(NEEN\)](#) now includes more than 240 educational institutions representing nearly 400 energy programs at high schools, technical and community colleges, and universities.



A woman wearing a blue hard hat, safety glasses, and a high-visibility yellow-green jacket is smiling. She is working on a blue gas valve with a yellow label that says "AS GAS".

CSM Pilot Program

CSM, a personalized online education tool, trains and certifies High Performance skills and competencies that lead to employees with strong skills, a focus on quality work, higher engagement, and the ability to be promoted and grow in their careers. Because these components map so well to CEWD's Common Employability Skills Model, CSMlearn and three member companies participated in a pilot program in 2019. While each company—Pepco Holdings, Ameren, and OPPD—focused on different target audiences, all three companies reported those who completed the CSM course and earned the credential gained valuable skills as a result. Read the [Pilot Report](#) to find out more.

Get Into Energy Test Prep

This instructor-led program that is being used by companies and their NEEN partners across the country to help prepare candidates for the CAST, MASS, and POSS tests was revised in 2019. Impressive results are being seen in community colleges, community-based organizations, and company programs, including instances where close to or 100% of candidates have passed the CAST test.

EPRI U

A partnership was formed with EPRI U to develop a one-day upskilling course for EPRI and CEWD members. The course was developed similar to a benchmarking event where CEWD/EPRI members presented on topics, such as cybersecurity threats and augmented and virtual reality upskilling solutions.

Energy Industry Fundamentals

There are now 75 Energy Industry Fundamentals (EIF) Approved Course Providers. From inception to date, 4,463 students have taken the EIF assessment and over 3,000 individuals have received their EIF Certificates, a significant milestone. Portions of the EIF student guides were used to develop a new [Energy Industry Fundamentals for New Employees](#) document for companies to package together versions that best match the mission of their companies to distribute during new employee orientation programs.

Structure & Support

Supporting the needs of CEWD members

CEWD members are leaders and change-agents. Their investment in critical workforce development initiatives is supporting the entire energy industry. Accordingly, we support our stakeholders daily through one-on-one support and through exclusive education and networking opportunities.

Annual Summit

CEWD's 14th Annual Summit enjoyed record attendance of 175 workforce development professionals. The Summit featured keynote speakers from McKinsey and Company, who presented highlights from their 2018 Women in the Workplace report and specific data from the utility industry, and Johnny C. Taylor, President and CEO of the Society for Human Resource Management (SHRM), who spoke about trends of the current and future workforce. A summary of the Summit can be accessed at <http://cewd.org/documents/summit2019/CEWD-2019-SummitSummary.pdf>.

Regional Meetings

CEWD went on the road in 2019 to meet its members in the regions they serve. In each of four meetings across the country, the CEWD team provided updates to members on strategies, trends, and resources; facilitated collaboration on regional challenges; and helped members connect quickly with others to learn about how they may be solving some of the same problems. The 2019 Regional Meetings saw record attendance, with nearly 200 members gathering across four venues. Presentations and materials from all regional meetings are available at <https://cewd.org/regional-meetings/>.



The 2019 Regional Meetings saw record attendance, with nearly

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National Forum

In conjunction with the Annual Summit, CEWD hosted its 14th National Forum for State Energy Workforce Consortia leadership. This year's event was organized around CEWD's four pillars: Workforce Planning; Career Awareness; Workforce Development/Education; and Structure & Support. A summary of the National Forum can be accessed at <http://cewd.org/documents/summit2019/CEWD-2019-NationalForumSummary.pdf>.

Virtual Learning

CEWD hosted several webinars in 2019, covering topics from Partnering with School Boards to Build a Quality Energy Workforce Pipeline, to Funding Sources for Students Pursuing Energy Career Pathways, to Get Into Energy Test Prep, and more. Recordings of the webinars are available at <https://cewd.org/webinars/>.



Professional Networking

CEWD provides opportunities for members to connect with one another around specific areas of interest through several Communities of Practice (COP):

- **Contractors Community**

During 2019, contractor members worked with CEWD to develop and refine a Contractor Demand Resource Guide for use by State Energy Workforce Consortia to quantify the workforce demand of state contractor members so their forecasts can be included in assessing key job needs within the states. The toolkit will be piloted in 2020.

- **Troops to Energy Jobs Community**

The Troops to Energy Jobs Community of Practice meets virtually to discuss the latest developments around veteran recruiting, hiring, and retention. During 2019, they also heard presentations from CEWD's military partners/alliances about how they are messaging to veterans about careers in the energy industry.

- **Energy Industry Fundamentals (EIF) Community**

The EIF Community of Practice shared best practices for teaching EIF, reviewed the EIF assessment, and discussed how to best engage with the Approved Course Providers sponsoring member company.

- **Diversity & Inclusion (D&I) Community**

The D&I Community of Practice allows member companies to share D&I challenges and best practices on topics such as Employee/Business Resource Groups, CEO Diversity Commitment Statements, and culture/climate surveys.

For more information or to join a CEWD community of practice, contact staff@cewd.org.

Charging Ahead: A Look at 2020

The past year was one of critical change, complex challenges, and incredible progress. 2020 will deliver more of the programs and progress the industry has come to expect from CEWD, thanks to the leadership of volunteers driving our critical workforce development agenda. Some of the highlights of the 2020 workplan include:

- ◆ Utilize results of the 2019 Gaps in the Energy Workforce Survey to drive messaging and action for 2020
- ◆ Publish and communicate the 2020 National Energy Strategic Workforce Plan: Game Changers, with expanded research on future skills
- ◆ Develop a focused Get Into Energy awareness campaign for girls and women, including an “I Got Into Energy” social media campaign that highlights women in the industry
- ◆ Launch a nationwide Get Into Energy/Get Into STEM innovation challenge to be implemented by state consortia in connection with the GIE/GIS website
- ◆ Review the competency model and applicability to the contractor workforce and develop a set of stackable credentials for the contractor community
- ◆ Develop tools to assist companies with using ERGs to attract, hire, and retain more women and minorities at all levels of the company

A complete list of CEWD’s 2020 goals are available at cewd.org/about/strategies-initiatives/.

CEWD is leading the industry’s response to what matters most in building a diverse, qualified energy workforce:

- Attracting jobseekers to the industry
- Ensuring diverse candidates are recruited, hired, and retained
- Retaining the know-how lost through attrition
- Building partnerships with educators and within communities
- Creating and implementing strategic workforce plans

While 2019 closed a chapter on the careers of many staff members who helped develop CEWD, 2020 begins the next chapter—one to be written from the passion and commitment of the members, leadership, and staff poised to ensure CEWD delivers on its promise to recruit and retain the talents needed by the energy industry. The future is bright.

CEWD initiatives are funded primarily through the generous contributions of our electric, nuclear, and natural gas members, contractor members, and the major trade associations (AGA, APPA, DCA, EEI, NRECA, and NEI), and through substantial in-kind contributions for back office support from EEI. For more information on CEWD and its mission, visit www.cewd.org.

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ONE Gas

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Ozarks Electric Cooperative
Pacific Gas & Electric
Philadelphia Gas Works
Pike Enterprises
PNM Resources
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CEWD is grateful for the companies, volunteers, educators, labor partners, and other stakeholders who enable our work.

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For information, please contact us at staff@cewd.org.

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