



CEWD[®]
Center for Energy
Workforce Development

Build the Energy Workforce

Call to Action:

Policymakers Can Support Historic Energy Workforce Needs Through Support of the New Energy and Natural Resources Career Cluster

The introduction of the new National Energy and Natural Resources Career Cluster (ENR CC) offers a watershed opportunity—the first of its kind in 25 years—to build the sector’s talent pipeline by bringing energy curriculum and the ENR CC into schools, particularly Career and Technical Education (CTE) classrooms where educators instruct 10 million Secondary and Post-Secondary students each year. We can now open doors of opportunity for today’s learners, exposing them to essential, in-demand, high-wage energy careers—and ensuring the availability of a workforce to support energy policy.

Seizing this opportunity requires engagement from all stakeholders. This includes national, state, and local leaders who focus on energy, economic development, education, workforce priorities, skills gaps, apprenticeship programs, sector strategies, and workforce planning, all of whom have a role to play to support people-readiness for critical energy career pathways.

Focused Attention to Develop the Energy Workforce is a National Imperative

- 76% of energy employers indicate they are challenged in finding talent for jobs (Source: U.S. Energy and Employment Report, 2024)
- Data center expansion, AI, on-shoring, and other technologies are driving increased electricity demands—potentially 15-20% in the next decade. The last time there was an increased need for power was before the early 2000s (Source: Department of Energy)
- The energy sector employs more than 5% of the nation’s workforce
- Growth in energy sector jobs has been outpacing the growth of the overall U.S. economy (U.S. Energy and Employment Report, 2024)
- There is a critical need to fill essential roles in the skilled trades, engineering, and cyber-security
- 50% of the utility workforce is or will be eligible for retirement soon

Action Agenda for Policy Makers:

1. Support Curriculum Integration and Education System Alignment

- Prioritize implementation of broad energy curriculum and adoption of the Energy and Natural Resources Career Cluster in local CTE systems, working state Departments of Education. Learn more at [CEWD.org/community-engagement/educating-policy-makers](https://cewd.org/community-engagement/educating-policy-makers).

2. Ensure Robust Funding for Institutions and Educators

- Designate significant funds to support community colleges, technical schools, and other training providers, prioritizing resources for equipment, training to develop qualified instructors, and curriculum development for regionally prioritized energy careers.
- Resource K–12 educators to adopt energy curriculum, particularly through professional development and procurement of essential equipment.

3. Enable Systems-Level Infrastructure and Partnerships

- Support national and state intermediary structures (associations, trade unions, non-profits, etc.) that will better connect educational opportunities, CTE learning, and industry.

4. Strengthen Work-Based Learning and Career Exposure

- Encourage creation of energy-focused youth apprenticeship programs that will arm learners with technical aptitudes for energy careers.
- Incentivize work-based learning that can offer students career exposure and school credit.
- Support the development of career exploration and apprenticeship readiness programs that prepare people for energy careers.

5. Drive Industry Engagement and Credentialing

- Incentivize industry to develop more alignment around universal credentials and industry-recognized, stackable credentials to make curriculum adoption more appealing to educators and attractive to students, and establish standardized competencies and frameworks for training to provide more uniform educational standards.



For more information on how to develop an energy talent pipeline in your area using the Energy and Natural Resources Career Cluster as a key driver, contact the **Center for Energy Workforce Development**.

Energy Industry Professionals

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Center for
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The Center for Energy Workforce Development is a national, non-profit intermediary that unites employers, labor, educators, non-profits and associations, community-based organizations, workforce systems, and other stakeholders working in partnership to ensure a highly skilled workforce for the energy industry.