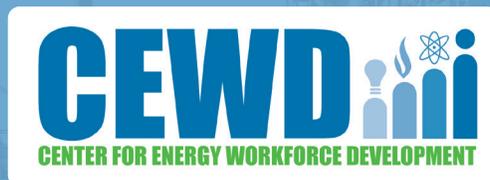
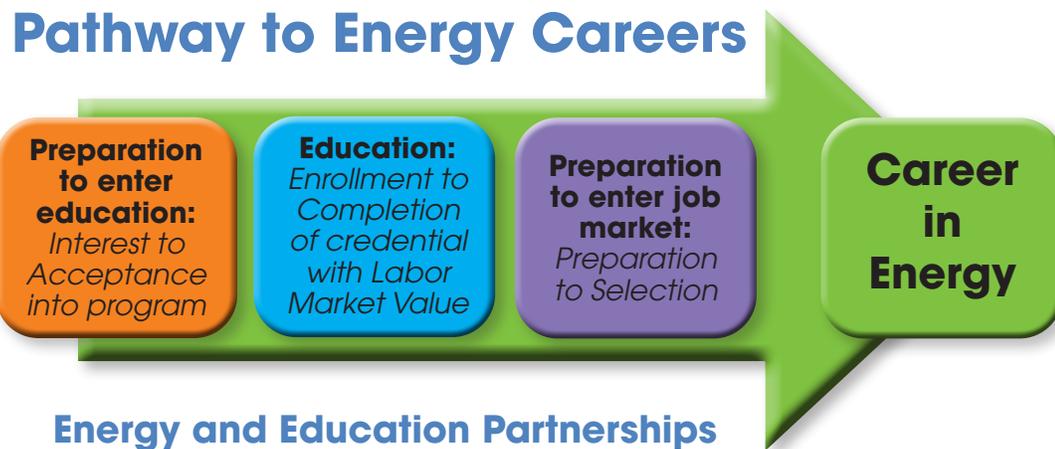




# Career Pathways for Skilled Energy Technicians



The Center for Energy Workforce Development (CEWD) has developed the *Get Into Energy (GIE) Career Pathways Model*, a roadmap for entry into skilled, energy technician positions in the Electric and Natural Gas Utility Industry. These positions include Lineworkers, Generation Technicians, Transmission and Distribution Technicians, Gas Technicians, and Plant/Field Operators. Details on each of the jobs along with resources for implementing the pathways models can be found on the CEWD website, [www.cewd.org](http://www.cewd.org). Successful implementation is dependent on partnerships between energy companies, educators, and other training providers to ensure that youth, military veterans, and transitioning adults can successfully enter energy careers.

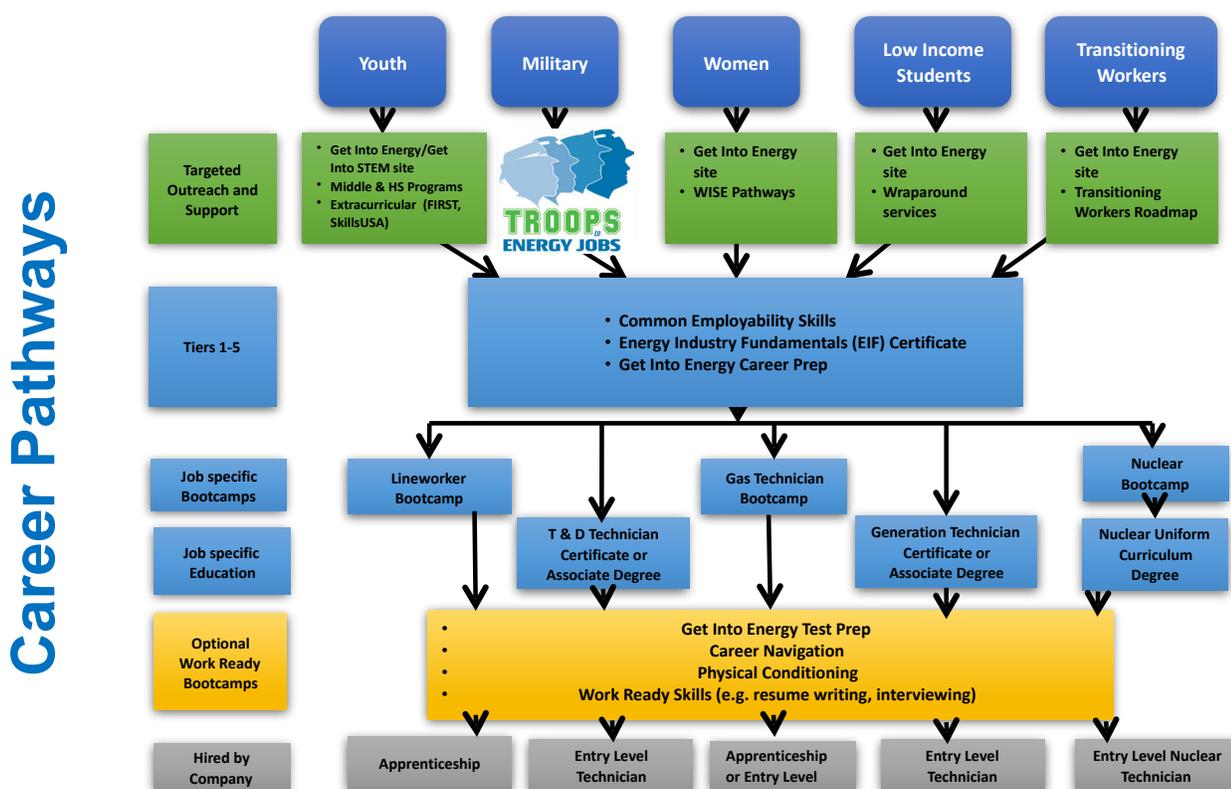


In general, the GIE Career Pathways Model has three key phases:

- **Preparation to enter education:** Preparing for and selecting the right education pathway is critical for those aspiring to a career in the energy industry. This phase covers steps involved in understanding energy careers, selecting and preparing for the appropriate education pathway, and ends with acceptance into a program of study for a specific job category. Resources for career awareness and career navigation range from the Get Into Energy website and career navigation materials to the Troops to Energy Jobs website created specifically for transitioning military and military veterans.
- **Education:** Steps in this phase start with enrollment in an appropriate program of study, to completion of defined credential(s) with labor market value. CEWD has defined specific education pathways and the competencies and credentials that will prepare potential applicants for success in energy careers.
- **Preparation to enter job market:** Upon completion of an energy pathway, candidates begin preparation to enter the job market. This phase may include research into a specific company's application requirements and preparation for pre-employment testing and screening. There are a number of best practices being used in the energy industry to help make this transition successful. These include providing support for pre-employment testing with CEWD's Get Into Energy Test Prep, using the Troops to Energy Jobs Roadmap for Veterans, or participating in a pre-employment preparation program like Women in Sustainable Employment (WISE) Pathway.

CEWD has focused on five key demographics: Youth, Military, Women, Low-Income Students, and Transitioning Workers. For each of these demographic groups, the pathway may look different based on a potential employee’s experience and skills. For example, adults may already have the appropriate educational credential and need to focus their efforts on career navigation and preparation for pre-employment screening. Youth will need to navigate the entire education pathway to gain the competencies and skills to enter an entry-level position. CEWD has created resources to support the specific needs of each demographic. Resources, roadmaps to specific jobs, and a real-time job posting website can be found on the Get Into Energy website at [www.getintoenergy.com](http://www.getintoenergy.com) and the Troops to Energy Jobs website at [www.troopstoenergyjobs.com](http://www.troopstoenergyjobs.com).

The GIE Career Pathways Model starts with targeted career awareness and support and ends with a candidate being hired into a specific job.



### Targeted Outreach and Support

The journey on an energy career pathway needs to start with awareness of energy careers. This includes learning about the industry, whether this is through the Get Into Energy website, an outreach event from a local energy company, or career fairs focused on a particular demographic like the military. Once an individual begins the journey through an energy pathway, we know that support makes the difference whether they stay on the pathway. Through CEWD’s experience and the extensive research in workforce development, students and other potential candidates need help “navigating” career pathways, which may include utilizing navigational tools such as mentoring or career coaching.

## **Competencies for Tiers 1-5**

CEWD, in partnership with the U.S. Department of Labor, has developed an Energy Competency Model (full graphic of the model is included on page 4) that defines basic competencies, industry fundamentals, industry technical competencies, and job-specific competencies in eight separate tiers. Tiers 1–4 define the common competencies required for any position in an electric and natural gas utility. Tier 5 identifies competencies that are unique to positions in four industry functions: Nuclear Generation, Non-Nuclear Generation (coal, natural gas, oil, hydro, solar, wind, biofuel, or geothermal), Electric Transmission & Distribution, and Gas Transmission & Distribution. The remaining tiers describe occupational-specific competencies.

Potential candidates on an energy career pathway require a solid foundation of personal effectiveness, as well as academic and workplace competencies (Tiers 1–3). These are also called “Common Employability Skills.” CEWD has a wealth of tools, resources, and curricula focused on Common Employability Skills that can be integrated into any secondary or postsecondary education program.

Candidates also need a high-level understanding of the energy industry (Tiers 4–5), which can be gained through earning CEWD’s industry-recognized credential, the Energy Industry Fundamentals (EIF) Certificate. CEWD has detailed curriculum for this 130-hour certificate program. Secondary and postsecondary education institutions must become Approved Course Providers to offer the course. Students, upon passing the final assessment, earn the EIF credential.

## **Job-Specific Bootcamps and Education for Tiers 6-8**

Once these are complete, potential candidates move into the pathway based on their skills and interests, aligning to positions such as Lineworker, Technician (Gas, Generation, or Transmission & Distribution [T&D]), or a nuclear-specific career, all of which require some type of postsecondary education. Some institutions also offer short-term bootcamps for accelerated skill development. Candidates are encouraged to participate in programs of study offered by members of CEWD’s National Energy Education Network (NEEN).

## **Optional Work-Ready Bootcamps**

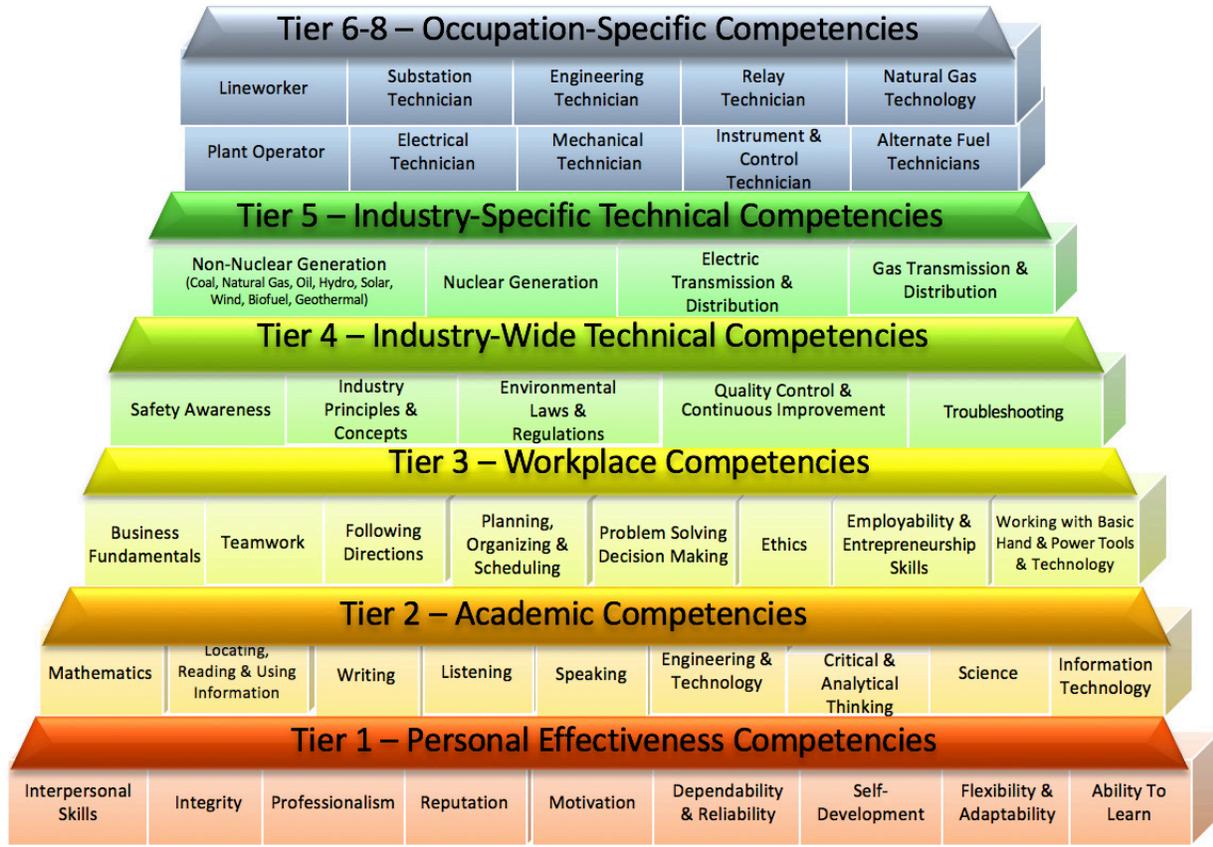
Before applying for a position, candidates may choose to enroll in some type of Work-Ready Bootcamp. As with job-specific bootcamps, they are short-term in nature. However, Work-Ready Bootcamps enable individuals to brush up on general, Work-Ready skills, such as preparing for pre-employment testing, resume writing, interviewing, and navigating one’s career. In addition, there are Work-Ready Bootcamps that can provide physical conditioning for those careers more physical in nature, such as Lineworker.

## **Hiring by Company**

Depending on the occupation, individuals may be hired as an apprentice (e.g., Lineworker or Gas Technician) or as an entry-level employee (e.g., Generation, T&D, or nuclear).

Careers in energy offer viable employment with competitive wages, comprehensive benefits, career advancement opportunities, and the ability to work for a company that values its connection with the community. The ultimate goal of the GIE Career Pathways Model is skilled, dedicated employees who stay in the industry and see their career pathway as just the beginning of a larger journey where they can grow with many opportunities.

**CEWD Energy Competency Model:  
Generation, Transmission & Distribution**



For more information on the Get Into Energy Career Pathways Model, competency models, educational resources, and information on the National Energy Education Network, visit [www.cewd.org](http://www.cewd.org).

Formed in March 2006, the Center for Energy Workforce Development (CEWD) is a non-profit consortium of electric, natural gas, and nuclear utilities, contractors, and their associations—Edison Electric Institute, American Gas Association, American Public Power Association, Nuclear Energy Institute, National Rural Electric Cooperative Association, and Distribution Contractors Association.

701 Pennsylvania Ave., NW,  
Washington, DC 20004-2696

**202-638-5802**

[www.cewd.org](http://www.cewd.org)

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**For information, please contact us  
at [staff@cewd.org](mailto:staff@cewd.org).**



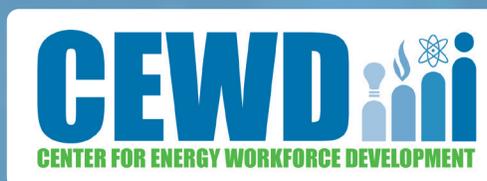
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Development



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