

# Energy

The energy sector is dynamic and growing, employing millions of Americans and supporting critical infrastructure across the nation. As energy systems continue to evolve and integrate advanced technologies – throughout the entire energy sector, including nuclear – employers are strengthening their workforce strategies by expanding training opportunities, investing in upskilling, and refining recruitment approaches to meet industry needs. Registered Apprenticeship is a proven solution for recruiting, training, and retaining world-class energy talent by combining paid, on-the-job learning with structured education aligned to employer demand. In 2025, more than 29,081 registered apprentices were served in the energy industry, representing a 53 percent increase over the past five years.<sup>1</sup>

## THE NEED FOR REGISTERED APPRENTICESHIP IN ENERGY

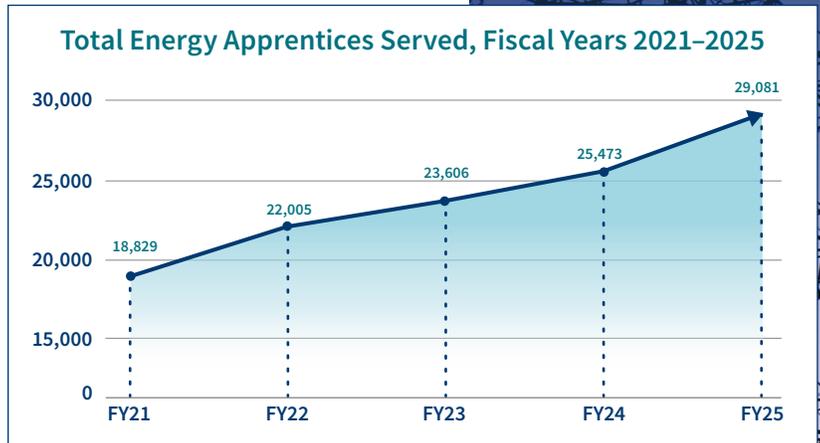
A growing demand for newly skilled energy workers to support large-scale, technologically complex energy systems, including baseload generation and grid-reliant infrastructure. The energy industry is critical to the country’s infrastructure and economic competitiveness. The challenge? Significant talent shortages are slowing employers’ efforts to expand, innovate, and excel.<sup>2</sup> Among these challenges:

- ▶ An aging energy workforce with outdated skills;
- ▶ A growing demand for newly skilled energy workers to meet the demands of more technologically complex, renewable energy systems; and
- ▶ Energy worker retirements outpacing the rate at which new energy apprentices are being trained.

These workforce challenges impact companies’ productivity and profitability. The good news? There is a proven solution to meet the talent challenges: **Registered Apprenticeship**. It can be integrated into your organization’s current training and workforce development strategy.

## WHAT IS REGISTERED APPRENTICESHIP?

Registered Apprenticeship is an industry-driven, high-quality career pathway through which employers can develop and prepare their future workforce, and individuals can obtain paid work experience with a mentor and receive progressive wage increases, classroom instruction, and a portable, nationally-recognized credential. Registered Apprenticeships are industry-vetted and approved by the U.S. Department of Labor or a State Apprenticeship Agency.



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## REGISTERED APPRENTICESHIP: THE TOP TALENT DEVELOPMENT SOLUTION FOR EMPLOYERS

Employers in the energy sector in the U.S. use the Registered Apprenticeship training model to recruit, train, and retain workers with the right skills. Registered Apprenticeship has been the most effective training model for enhancing companies' performance and competitiveness.

### HOW CAN REGISTERED APPRENTICESHIP HELP COMPANIES?

Energy employers realize several benefits from implementing Registered Apprenticeship programs. Through apprenticeship, employers will:

- ▶ Engage and leverage the expertise of experienced employees to mentor new workers and support effective succession planning;
- ▶ Recruit and develop a highly-skilled workforce to meet current and future energy industry needs;
- ▶ Vet workers and instill the company's culture;
- ▶ Improve productivity, profitability, and the company's bottom line;
- ▶ Reduce turnover, improve loyalty, and retain top talent; and
- ▶ Demonstrate investment in the community.

Partner with the Office of Apprenticeship, your respective State Apprenticeship Agency [or our investment partners](#) to access a nationwide network of expertise, customer service, and support. Our apprenticeship team creates business solutions and helps you quickly achieve workforce results.



*"We're passionate about scaling this 'earn and learn' model in the U.S. Siemens knows first-hand how valuable apprenticeships are to growing the workforce needed to be successful."*

—David Etwiler, CEO, Siemens Foundation

### SNAPSHOT: EXAMPLES OF ENERGY- RELATED APPRENTICEABLE OCCUPATIONS

- ▶ Line Maintainer;
- ▶ Electrician;
- ▶ Power-Line Distribution Erector;
- ▶ Gas-Main Fitter;
- ▶ Water Treatment Specialist;
- ▶ Substation Operator;
- ▶ Electrical Maintenance Technician;
- ▶ Radiation Monitor; and
- ▶ Power Plant Operator.

<sup>1</sup> Apprenticeship counts reflect available EDP data for energy-related occupations and industries.

<sup>2</sup> Building an Energy Workforce for the 21st Century, ([www.energy.senate.gov/public/index.cfm/files/serve?File\\_id=4269D9FB-3713-4371-AD66-CE9117A54E5D](http://www.energy.senate.gov/public/index.cfm/files/serve?File_id=4269D9FB-3713-4371-AD66-CE9117A54E5D))

## Explore Registered Apprenticeship Today!

Want to learn more? Visit the U.S. Department of Labor's one-stop source for all things apprenticeship: [www.apprenticeship.gov](http://www.apprenticeship.gov) or email us at [apprenticeship@dol.gov](mailto:apprenticeship@dol.gov).

**APPRENTICESHIPUSA™**  
★★★