

# Continuing to Make an Impact Beyond Your Term of Service with a Career in Clean Energy

Presented by Service Year Alliance and Apprenticeships in Clean Energy (ACE) Network

ACE is a national coalition of industry, training, and workforce development leaders who are expanding Registered Apprenticeships for clean energy. This initiative is led by the Interstate Renewable Energy Council (IREC).



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## Energy Job Demographics

Women remained underrepresented in the energy workforce (26% compared to 47% in overall workforce), but their participation in the workforce has grown. Over half of the jobs added in 2022 were held by women.

There was a slightly higher percentage of nonwhite workers in energy, 24% compared to 23% of the entire U.S. workforce. However, the energy workforce had a lower-than-average percentage of Black or African American workers.



## Clean Energy Careers

### What is Clean Energy?

- Energy that does not directly emit greenhouse gases or release air pollutants (ex. solar, wind, geothermal, etc.)
- Energy saved by energy efficiency measures, weatherization, etc.
- Energy storage is critical to clean energy as it enables the production of clean energy when it's abundant, so it can be stored, and used when needed.

### Example Job Categories:

- Skilled Trades & Construction
- Engineers
- Construction/Project Management
- Manufacturing
- Research and Development
- Policy/Government Affairs
- Business Functions
- Sales
- System Design
- Project Development
- Asset Management

## What are Registered Apprenticeships?

**Industry-Led** – Occupations are industry-vetted and approved to ensure alignment with business needs.

**Paid Job** – Apprentices are paid employees who produce high-quality work while they learn skills that enhance their employers' needs.

**Structured On-the-Job Learning** – Develops skilled workers through structured learning in a work setting under supervision of a skilled mentor.

**Supplemental Education** – Related instruction supports attainment of job knowledge and skills through virtual or in-person education.

- The Segal Education award can, in many cases, be used to help pay for education expenses that may not be covered by the employer/sponsor.

**Diversity** – Regulations ensure RAs have strong non-discrimination, anti-harassment, and equal employment opportunity recruitment practices.

**Quality and Safety** – Apprentices are covered by workplace protections on the job and taught safety practices in the field and related instruction.

**Credentials** - Often offers portable, nationally-recognized credential to be issued at the completion of the program; and may include other industry credentials as part of the program (I.E. OSHA 10).

## Clean Energy Apprenticeship Occupations

This list will help you select your potential occupations.

### Construction & Skilled Trades

**Energy Efficiency:** Carpenter, Construction Craft Laborer, Electrician (Interior), Glazier, HVAC Installer/Technician, Insulator, Pipefitter, Plumber, & Weatherization Technician

**Solar-Plus-Storage:** Carpenter (Pile Driver), Construction Craft Laborer, Electrician (Interior), Electrician (Lineworker), Electrician (Residential), Electrician (Substation), Iron Worker (Structural), Operating Engineer, Roofer

**Wind:** Cement Mason, Construction Craft Laborer, Crane Operator, Electrician (Lineworker), Electrician (Substation), Iron Worker (Reinforcing), Millwright, Operating Engineer, Rigger, Wind Turbine Technician

### Non-Construction

Customer Service Representative, Cybersecurity Specialist, Designer Drafter, Energy Auditor, Human Resources Specialist, Maintenance Repairer, Network and Computer Systems Administrator, Manufacturing Technician, Mechanical Engineer, Mechatronics Technician, Operations Manager, Project Manager, Purchasing Agent, Software Developers, Technical Sales Representative, Recruiter, Training and Development Specialist, Transportation Storage and Distribution Manager, Wind Turbine Technician, ... and many more!

## Tools and Resources

- <https://greenworkforceconnect.org>
- <https://www.energy.gov/eere/jobs/find-clean-energy-jobs>
- <https://www.apprenticeship.gov/apprenticeship-occupations/listings>

### Interested in a Registered Apprenticeship with a Labor Union?

- **Visit** - <https://nabtu.org/apprenticeship-and-training/> for info on training centers around the country for Apprenticeship Readiness Programs and Apprenticeships with the

International Brotherhood of Electrical Workers (IBEW), Laborers International Union of North America (LIUNA), International Union of Operating Engineers (IUOE), Ironworkers (IW), etc.

- **Visit** - <https://www.carpenters.org/join-us/> for info on United Brotherhood of Carpenters Apprenticeship & Training programs.

## Solar Career Resources

### Introductory Training

- [Free Course: SEI's Introduction to Renewable Energy](#)
- [Solar Energy International's Women in Solar Power Training](#)

### Career Exploration

- [Clean Energy Sector Career Maps](#)
- [Exploring Careers in the Solar Industry](#)
- [Career Trends in Clean Energy - RE-volv](#)
- [Solar for Women](#) (for solar installation & technical roles)

## Solar and Clean Energy Job Boards

- [Solar Energy Industries Association Job Board](#)
  - Also Google for other state/regional clean energy associations ex. [CA Solar & Storage Association](#)
- [Solar Energy International Job Board](#)
- [American Solar Energy Society](#)
- [American Clean Power Association Job Board](#)
- [Women in Renewable Industries & Sustainable Energy \(WRISE\)](#)
- [Renewables Forward](#)

## Government Careers

- U.S. Dept. of Energy Career Opportunities:
  - <https://www.energy.gov/CleanEnergyCorps>
  - <https://www.energy.gov/eere/clean-energy-jobs>

Similar state and local government opportunities may exist.