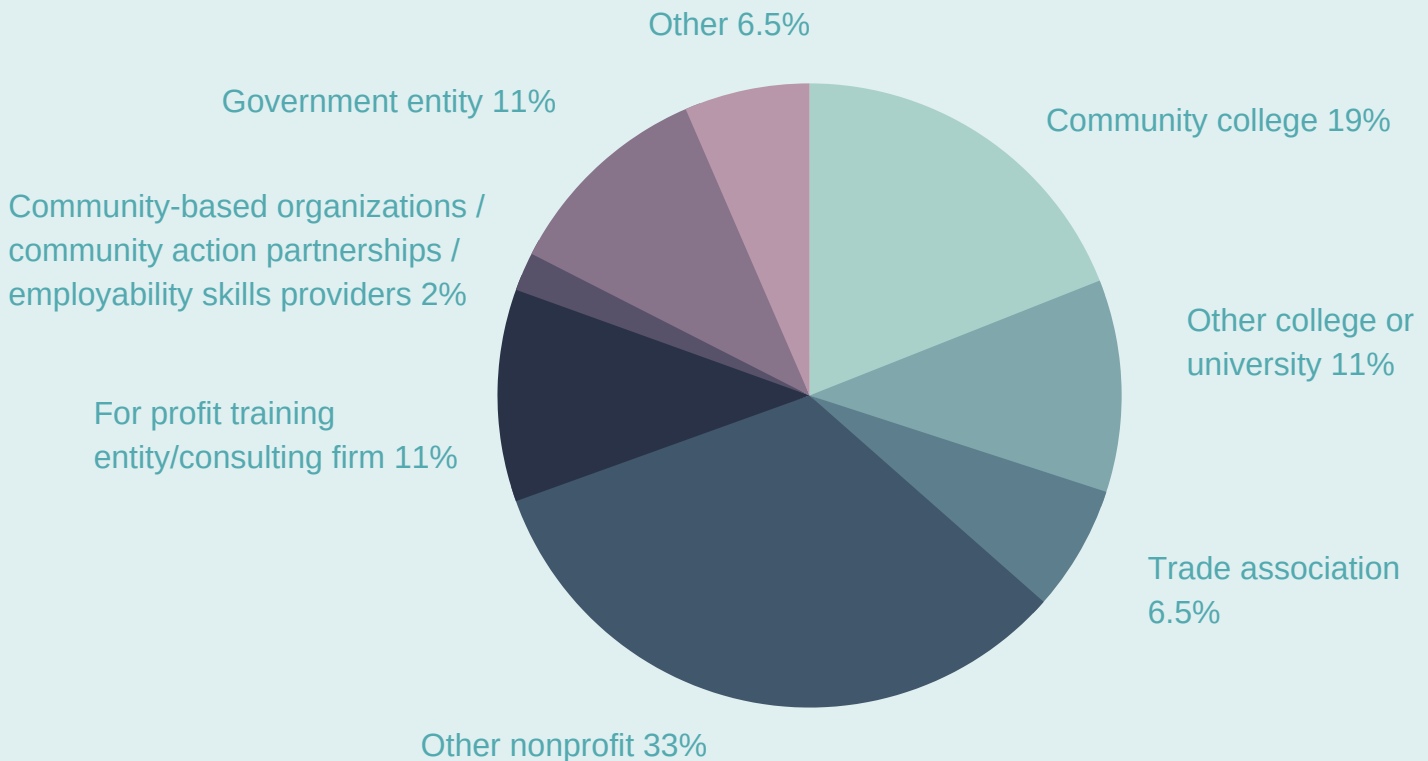




The National Clean Energy Workforce Alliance develops solutions to help build the diverse, highly-skilled workforce of the future. More than 350 organizations have already convened in 2022 to identify best practices and processes to support a healthy clean energy workforce ecosystem. This report features initial findings reported by clean energy training providers across the U.S.

Who Is Training the Clean Energy Workforce of the Future?

Alliance Training Provider Participants



What Tools and Resources Do We Need to Train the Clean Energy Workforce?

What in demand curricula are you missing?

1. Energy storage
2. Electric vehicle (EV)/EV infrastructure
3. Heat pump

What are the job roles corresponding to the curricula you need?

1. Installer/construction
2. Project manager
3. Operations & maintenance (O&M)

Besides curriculum, what other resources or support do you need to effectively educate clean energy workers?

- Funding/information about funding
- More students/diverse students
- Recruitment/resources about clean energy careers
 - Clean energy job quality data
 - Career exploration resources for K-12
 - Defined career pathways
 - Education for traditional trades on value of clean energy technology
- Instructors, subject matter experts, and guest speakers
- Professional development for trainers, including elearning and instructional design
- Hands-on training facilities, equipment, tools, and materials
- On-the-job (OJT) opportunities, including internships, job site access
- Instructional tools and technology, including animation software, VR, simulations, graphics, labs, pilot projects, and case studies
- More engagement from industry/better linkages with industry

What other resources or support do you need to work with diverse populations of learners?

- Funding
 - Free curriculum for under resourced colleges
- Recruitment
 - Recruitment in rural areas
 - Materials for K-12
 - Materials targeted to women
 - Social media strategies to reach youth and young adults
- Wrap around services/student support
 - Culturally responsive materials, including multi-lingual resources
 - Flexible format for curricula/training
 - Scholarships and paid training
 - Stipend support for living wage internships/fellowships
 - Diversity, equity, and inclusion (DEI) support, including training for instructors/administrators
 - Transportation/training in accessible locations
 - Support for long-term unemployed, underemployed candidates
 - Child care
 - Support acquiring tools
 - Access to reliable internet
 - Basic math, writing, reading, basic employability skills training
- Recruitment of diverse instructors/faculty
- Community engagement and trusted partners to develop good relationships with diverse communities
- Technical support for community-based organizations
- Employer cultural competency

What workforce issue or challenge do you think is most important for the Alliance to address?

- Need for more workers/recruitment
- Increasing diversity of workforce/inclusion of underserved populations
- Strong career services
- Job quality
 - Improve salaries
 - Clear career pathways
 - Employer education
 - Employer buy-in for DEI and family-sustaining wages
- Additional certifications, credentialing organizations
- Consistent curriculum embedded in existing training and education
- Stakeholder coordination/de-”silo-ing”
 - Building trust between communities, educators, employers, and government
 - Better leveraging of existing resources
- Curriculum that leads to actual jobs
- Proof that the jobs will stay
- Standardized curriculum for entry-level jobs
- Funding/Non-competitive funding
- Reduce barriers to entry
- Appealing to younger generations
- Accessibility to training
- Better connection to registered apprenticeships
- Job task analysis expansion

What Are Alliance Members Already Doing to Prepare the Workforce for the Clean Energy Transition?

Providing classroom and hands-on training in:

- Building, electrical, and energy codes
- Building automation system technologies
- Building electrification
- Building envelope
- Building science principles
- Community organizing/advocacy
- Electric trucks
- Energy efficiency (including multi-family)
- Energy management
- Energy storage
- Facility management (including commercial & industrial [C&I])
- Green construction
- Heat pumps, including sizing
- HVAC
- Sales
- Solar/solar PV
- Tower climbing safety
- Weatherization
- Wind energy

Training aligned with industry certifications:

- Building Performance Institute
- Building Operator Certification
- North American Board of Certified Energy Practitioners

Providing training for these audiences:

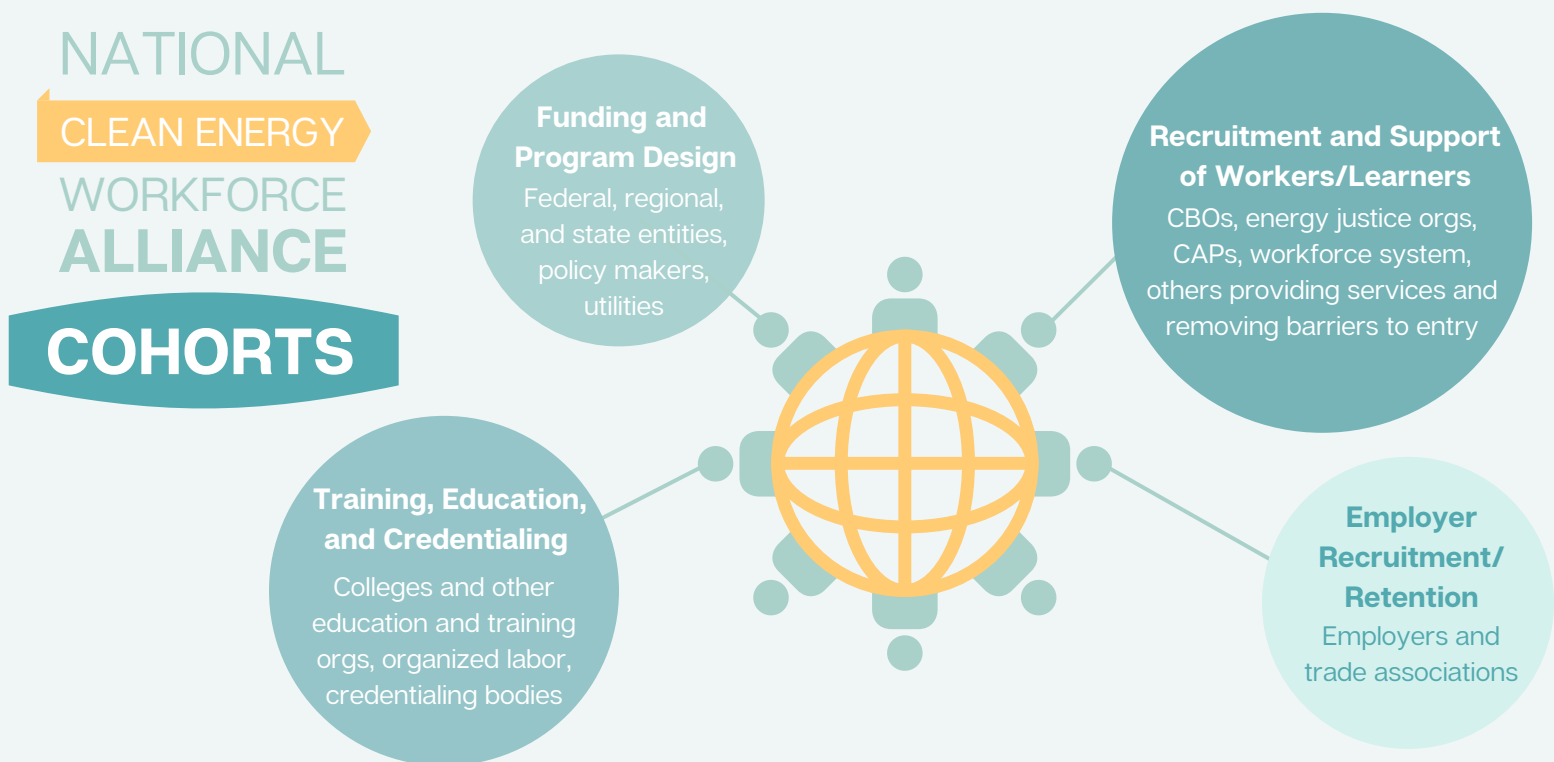
- Black, Indigenous, and people of color (BIPOC) individuals
- Code/safety officials
- Community members
- Environmental justice communities
- Faculty/instructors
- Green building professionals
- K-12 students and their teachers/counselors
- State agencies
- Under-served youth
- Youth leaders

(cont.) What Are Alliance Members Already Doing to Prepare the Workforce for the Clean Energy Transition?

- Providing pre-apprenticeship programs
- Developing apprenticeship programs
- Internship, mentorship, and fellowship programs
- Ensuring communities of color can access high wage, high demand jobs
- Incorporating clean energy into existing workforce and academic programs
- Combining youth leadership efforts with clean energy training
- Paid training opportunities
- Partnering with community based organizations:
 - Grant assistance
 - Technical skill development
 - Wraparound support for students
- Hosting classes taught by industry experts
- Creating new instructional resources for blended learning environments

Training Resources and Programs Shared by Alliance Members

- <https://www.nextiq.com/>
- http://catalog.indianhills.edu/preview_program.php?catoid=56&poid=6701&returnto=3359
- <https://solarpvtraining.com/>
- <https://becajobs.org/>
- <https://shop.need.org/>
- <https://www.uwsp.edu/cnr-ap/KEEP/Pages/default.aspx>
- <https://www.nationalskillsnetwork.in/>
- <https://www.youtube.com/watch?v=TSNeUE0uw5Q>
- <https://www.heatspring.com/courses/solar-career-pathways>
- <http://www.ritradeswomen.org/>



Learn more at irecusa.org/programs/the-national-clean-energy-workforce-alliance