



# Empowering the future of renewable energy through workforce training

**Words:** Nick Martocci, President & CEO, Tower Training Academy

As the global transition to renewable energy gains momentum, one issue continues to rise to the forefront: workforce readiness. The clean energy sector's long-term success hinges not only on technology and investment but on the availability of skilled professionals who can safely and efficiently build, maintain and operate energy infrastructure. The need is clear and urgent.

Bridging the gap between the labor market and the accelerating demands of the wind and battery energy storage sectors requires more than traditional education pathways. What's needed is a strategic, hands-on and mission-driven approach to workforce development. One organization has stepped into this space, not only preparing workers for technical roles, but empowering them to lead and shape the future of renewable energy.

## A growing industry, a growing challenge

Fueled by policy incentives, public-private partnerships and the increasing cost-competitiveness of renewables, clean energy deployment is scaling rapidly. The American Clean Power Association (ACP) forecasts that the US clean energy workforce will nearly double by 2030, reaching close to one million jobs. Wind energy, already a cornerstone of the transition, plays a central role in this surge, with additional support from solar and BESS technologies.

However, this expansion comes with a significant obstacle: workforce shortages. ACP and other industry leaders have identified a lack of qualified labor as a key threat to clean energy deployment timelines. Project managers, electrical technicians, engineers and maintenance professionals are in short supply, with many regions already struggling to staff existing projects, let alone future ones.

This talent gap risks becoming a bottleneck for growth. If clean energy is to meet its climate and economic potential, it must be supported by an equally ambitious and resilient workforce strategy. That includes

investing in people, creating accessible pathways into the industry and aligning training with the realities of fieldwork.

## Training that reflects the real world

Responding to this demand requires more than classroom-based learning. The most effective workforce development programs are those that provide real-world context, build confidence and emphasize safety and precision. In this model, mentorship plays a crucial role, not only in building competence but in cultivating leadership qualities that serve individuals and the broader industry alike.

A leading training provider in the wind and BESS space has built its programs around this exact philosophy. The learning environment is immersive and pragmatic, offering trainees the opportunity to work with real equipment, in real scenarios, under the guidance of experienced professionals. The goal is not just to pass certification exams, but to produce technicians who can step directly into demanding roles and thrive in them.

The curriculum aligns with ACP's recommended training standards, ensuring that learners graduate with industry-validated skills in installation, troubleshooting, maintenance and safety. By mapping training outcomes directly to sector needs, this approach enhances employability and reduces onboarding costs for hiring companies.

## Veterans: a critical talent pipeline

One of the most forward-looking elements of this workforce model is its focus on military veterans. Transitioning service members

represent a highly underutilized talent pool in clean energy and one with enormous potential. Veterans bring a wealth of transferable skills, including technical expertise, adaptability, teamwork and a strong work ethic. What they often need is targeted training and support to apply these abilities in a civilian context.

This training program has developed specialized pathways to help veterans transition into roles as wind turbine or BESS technicians. These pathways include hands-on instruction, mentorship from industry professionals, many of them veterans themselves and career services that go beyond job placement, including resume coaching, interview preparation and employer networking opportunities.

ACP data confirms that veterans are already playing a significant role in clean power. They are employed in the industry at a rate 34% above the national average, with especially high representation in wind energy. By creating structured programs designed around veterans' strengths and needs, this initiative is helping unlock even more of that potential and offering rewarding second careers to those who have served.

## Career services that deliver

Workforce development doesn't end with technical training. One of the factors that sets this model apart is its holistic commitment to student success. Recognizing that many trainees are entering the industry for the first time or returning after a career break, the program offers comprehensive career support.



Services include resume development tailored to the energy sector, mock interviews with industry professionals and job placement support through partnerships with employers across the wind and storage industries. These efforts ensure that graduates don't just have the skills to perform on the job, they also have the confidence and resources to navigate the hiring process and build sustainable careers.

These wraparound services also support employer needs by shortening time-to-productivity and improving retention. For

businesses facing talent shortages, hiring from a pipeline that combines technical excellence with professional readiness is a clear advantage.

#### Expanding access, expanding impact

As clean energy grows, so too must the commitment to equity and inclusion within the sector. The current energy transition presents a once-in-a-generation opportunity to build a workforce that reflects the diversity of the communities it serves. But that won't

happen by accident, it requires intentional outreach, access to affordable training and support systems that help underrepresented individuals succeed.

Future growth plans include scaling the program to reach more people, particularly in underserved communities. By expanding geographic reach and offering flexible learning formats, the program aims to make training more accessible, whether to rural workers, urban youths or displaced workers looking to transition into new careers.

This strategy supports ACP's broader efforts to improve representation in clean energy. The association is advancing diversity, equity, and inclusion (DEI) by supporting initiatives that enhance hiring, improve retention and create career advancement opportunities for women, people of color and other underrepresented groups. Training providers who share this mission are helping ensure that clean energy growth is both robust and inclusive.

#### Driving industry-ready results

The energy transition will be measured not just in gigawatts deployed, but in people empowered. A future powered by renewables requires a workforce that is not only technically skilled but adaptable, safety-conscious and ready to lead. That's exactly what this model delivers.

By focusing on hands-on experience, aligning with national standards and integrating veteran support and career services, it is helping build the human infrastructure behind clean energy progress. For project developers, OEMs and service providers, that means access to a more reliable and prepared talent pool. For communities, it means good jobs in a growing sector. For the industry as a whole, it means the foundation needed to meet its most ambitious goals.

#### Conclusion

In an energy landscape that is rapidly evolving, training is more than a box to check, it's a strategic investment in the future. Developing a skilled workforce is critical to the deployment, operation and maintenance of wind and BESS infrastructure. But it's also about more than technology. It's about people: empowering them with the skills, confidence and opportunities to succeed in a changing world.

Through a model that blends technical excellence with mentorship, veteran support and inclusive access, one training provider is setting a new standard in workforce development. By aligning closely with ACP priorities and staying focused on real-world results, this approach is delivering talent where it's needed most and helping shape the future of renewable energy, one technician at a time.

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