



Powering the future of wind energy careers

The shortage of wind technicians is one of the greatest threats facing the wind energy industry. While calling it a threat might sound dramatic, it's more accurate to say that this deficiency represents the industry's weakest link. Many countries are facing an alarmingly high demand for wind techs in the coming years to meet climate goals. In the US, the Bureau of Labor Statistics projects a 45% job growth in this field by 2032, highlighting the urgent need for change.



Several major industry players in Europe as well as in the US have established apprenticeship programs, which is good, but statistics from every corner of the world clearly show those programs won't fill all the jobs. Some say that the market will sort that out. But it won't; not unless we do a better job of reaching high school students interested in technical jobs, before they're directed into the better recognized jobs in the fossil fuels industry.

This isn't a gloom and doom story, though. We have seen the industry respond to this issue creatively over the past two years. Through The Uptime Wind Energy Podcast, we have interviewed technicians, representatives from schools and training facilities, safety equipment manufacturers, and recruiters, whose jobs depend on fixing the shortage of jobs in wind.

The question is not if their innovative approaches can improve hiring, training, and safety; they already are. BuildTurbines.com, launched in July 2024, is showcasing these small but mighty programs that are changing the industry outlook.

BuildTurbines.com serves as a free industry portal and one stop shop that compiles job openings, information, training programs, and links to facilities that offer certifications in specialty areas. These resources help newcomers learn how to move up in the industry and manage in this unique field.

Through our contact with companies in industry development, a few things have become very clear. First, growing the wind workforce requires robots, people, and institutions to work together. Robotics is part of the answer to solving workforce shortages, but it's ludicrous to suggest that drones and automated equipment will 'take jobs' from wind technicians.

Technology will make techs' work safer, but it can't replace workers. No matter how useful the robot is, anyone who has been in the field knows it's dangerous to rely on the promise of technology instead of developing the professional ranks of workers that we need. Technology and people must both be developed.

Formal knowledge sharing also must be part of the approach to solving our technician shortage. By formal, we mean documentation and practical knowledge application sharing on all available technology and equipment. This is not the time to be overly cautious about sharing skills and knowledge.

When it concerns safety and professional development, there's never a time to not share the information.

When it comes to filling jobs and ensuring they're as safe as possible, the largest issue to address is education. BuildTurbines.com features a training search tool, which allows people to search for training in their area of the US. Fortunately, a variety of companies and universities have made significant strides in offering better safety training, protocols, and professional development.

Brandon McKelvain, Training Manager at Safety Technology USA, emphasizes the importance of comprehensive workforce training. 'The standardized entry level training in the wind industry is good for safety and



rescue. However, there's more to working on wind turbines than PPE and transition pieces. At STL USA we are using our wind industry experience to develop training that helps technicians get ready for the field. Our WindStart program provides all the standard certificates plus an additional week of technical competency training.'

STL is also diligently reaching out to high schools, both locally in Texas and across the US, to recruit new graduates into the industry. Its WindStart program allows people with no wind experience to quickly and safely gain their qualifications and start working.

As the US approaches a critical mass of turbines, damages and repairs have become more complex. Blade repair is a crucial part of keeping turbines running. Alfred Crabtree, Founder and CEO of Blade Repair Academy in Dunlap, TN, highlights the need for specialized technicians. 'Blades have got bigger, and so have the repairs. A two meter repair was considered large eight years ago; now a 20 meter repair is considered large.' This increase in scale underscores the need for more advanced training and specialized skills in the workforce.

BuildTurbines.com supports and highlights programs across the United States that are leading the charge for a more accessible industry. The job functions of a technician have expanded 10 fold but information about the job has remained largely the same.

Career tracks for techs need to be well defined and account for specialty fields, certifications, pay premiums for extreme weather and other exceptional conditions. Comprehensive benefits and support are expensive, but the industry won't grow without it. If the wind industry wants to be as successful as related industries such as oil and gas, employers and trainers need to be as organized, straightforward, and prepared.

As the wind workforce grows, so does the chance of incidents in the workplace. Making sure new additions to the industry understand how to work safely is crucial to industry success. Active Training Team (ATT), based in the UK, offers innovative system wide safety training programs. Its immersive safety training takes a completely different approach from standard training. ATT utilizes actors to portray live action accident scenarios. Ørsted, Siemens Energy, RWE and several other big names in the industry have invested in it.

The training is effective because it engages the mind and body in a way no online training course can. That kind of training also empowers people at all levels of an organization to collaborate and think broadly about safety before, during, and after an 'incident' occurs.

Dermot Kerrigan of ATT highlights the goal behind their approach, 'We believe that everyone in an organization, regardless of rank or role, should feel empowered to challenge

constructively and accept challenges graciously. When it comes to safety, ATT believes that everyone is a leader.'

BuildTurbines.com compiles information about these programs in addition to serving as a platform for industry professionals to share their experiences and best practices. The website features articles, interviews, and case studies that highlight successful career paths in the wind energy sector, inspiring the next generation of wind energy professionals.

It also offers resources and guidance for those looking to move into management roles within the industry. Managing people in the field can be a challenge, and while it takes a certain personality, having skills in human resources and people management is imperative.

In the time since its launch, BuildTurbines.com has seen the development of many high quality training programs and professional pathways in the industry. This is a huge step for any maturing industry. As with the apprenticeships of the past, our existing wind professionals need to wrap their arms around the rising workforce. It facilitates this mentorship by connecting experienced professionals with newcomers to the industry.

The heart of the matter is this: without a robust and ready workforce of wind turbine technicians, the industry cannot continue to grow at the pace necessary to develop a clean energy future. BuildTurbines.com is playing a crucial role in addressing this challenge by serving as a comprehensive resource for career development, education, and networking in the wind energy sector.

For those looking to embark on an exciting career in wind energy or to take their existing career to new heights, it offers a powerful launchpad. As the industry races to meet ambitious clean energy targets, this innovative platform is ensuring that the wind energy sector has the skilled workforce it needs to power a sustainable future.

www.BuildTurbines.com
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