

CAREERS OF THE FUTURE GUIDE

## How to enter the wind industry



#### How will this guide help me?

This guide is aimed to provide you with details about the types of roles available within the industry and the pathways to help you get there. For a wider understanding of how to enter the wind energy industry you will need to conduct your own further research, but this guide will provide you with a good starting point.



# Introduction to the wind energy sector

The UK is on track to achieving their target of becoming carbon neutral by 2050, thanks to government investments helping to reduce emissions. Furthermore, the wind energy sector in the UK and across the North-West of Europe is thriving now more than ever before.

In fact, research shows that two of the emerging markets to watch will be Ireland and France. Ireland, currently installed with 25MW capacity, plan to grow to a 5GW offshore wind target by 2030 with 7 projects lined up between 2023-2026 requiring an estimated 2,500 local development and construction jobs, in addition to 700 local permanent operations and maintenance jobs.

Thousands of jobs have already been created following significant investment into the world's largest wind farm on the East Coast of England, which is currently under construction. The industry requires a wide variety of roles which will be covered throughout this guide, along with potential transferable skills that you may already have to give you a head start into the industry.









The wind industry has a strong track record of creating high-quality and long-term jobs and reviving communities through an array of industrial opportunities.

Ben Backwell – CEO at Global Wind Energy Council (GWEC)



### Job roles in the wind energy sector

There's more to working in the wind energy sector than becoming a 'Wind Turbine Technician'. Below is a breakdown of the different job roles you can expect to find in the sector.

#### PRE-ASSEMBLY TECHNICIAN

Pre-Assembly Technicians are embedded in a specialist project team on the dockside or a specifi¬c site. Primary duties include assembly of tower sections, installation and termination of cables inside the tower, preparing control systems for the offshore installation and installation of steel work into tower sections, to name a few. All works will be conducted in line with each project's requirements.

#### INSTALLATION/ CONSTRUCTION TECHNICIAN

Construction Technician teams spend a lot of time away working rotational work patterns and are responsible for building the wind farm. More commonly, these technicians will be subcontracted in during the construction phase, rather than being employed by the manufacturer (OEMs). On completion, they will move on to the next project.

#### SERVICE TECHNICIAN

Service technicians are responsible for the day to day running of a wind farm. This role can either be site based, within a set area where the technician is home every night or as a 'Travel Technician'. These technicians have essentially no base but travel around visiting different sites, both on and offshore. They provide first-line operation and maintenance of the turbines.



There are other specialist roles (For example High Voltage Authorised Persons etc) within the industry which you may wish to progress onto. Like any career, it is something to work towards once you are within the industry and have a better understanding of what career path you wish to take.

#### MAJOR COMPONENT /SPECIAL TASK TECHNICIAN

Employed by the turbine manufacturer, this is a specialist role where the team is solely responsible for repairing or replacing major components on the turbine. For example, replacing a damaged blade, generator or gearbox. These technicians tend to travel and live away during their shift but some companies may have these teams work on a rotational basis.

#### **BLADE TECHNICIAN**

Can either be employed by the manufacturer of the turbine or, by contracting companies who visit sites all over the country to repair blade damage. They either work on ropes or elevated work platforms. Technicians are specially trained engineers responsible for maintaining, repairing and inspecting the wind turbine blades. This work can be carried out onshore, offshore or in blade factories when the weather becomes an issue.

#### STATUTORY INSPECTION TECHNICIAN

This role is travel based and will require living away during the shift/rotation to visit sites wherever your employer sends you. These technicians are responsible for the inspections of internal safety and lifting equipment within the turbines. They inspect internal lifts, electric cranes/hoists, ladders, attachment points, and fi¬re extinguishers – to name a few.



### Initial training courses

The basic courses required, before you are able to enter a wind turbine are as follows:

#### **GWO BASIC SAFETY TRAINING COURSE (BST)**

(5 MODULES)

- Working at Height (2 days)
- First Aid (2 Days)
- Fire Awareness (1/2 Day)
- Manual Handling (1/2 Day)
- Sea Survival (2 Days)

#### **RUK/GWO MEDICAL**

#### (INCLUDING CHESTER STEP TEST)

Most training providers, including Complete Training Solutions, can provide medicals as part of your package, so make sure to check when you're booking your training. Please be aware that it needs to be an approved RUK/GWO clinic. Your medical certificate must be renewed every two years and combines the following tests as part of the examination process:

- Completion of Patient Questionnaire
- Consultation with a doctor
- Visual acuity and visual fields test
- Pulse and Blood Pressure Measurement
- Lung Function Test
- Audiogram (hearing test)
- Urinalysis routine urine test with an immediate result
- BMI a measurement of height, weight, and calculation of Body Mass Index
- Chester Step Test

#### **GWO BASIC TECHNICAL TRAINING (BTT)**

This training is part of the Global Wind Organisation course portfolio and is relatively new. It has been introduced to standardise the industry so every new technician will receive the same basic technical training, regardless of who they work for. It is an entry-level course and has different modules covering electrical, mechanical and hydraulic training, along with safety, and safe working practices specific to the wind industry. This is the first stage of a training program and from here you can conduct your employer's turbine specific training courses.

"Overall 10/10 for professionalism, feedback and organisation! Having used yourselves for training myself in the past I'm hearing off the member of staff I uploaded to the GWO Course, the training centre is following government guidelines ref Covid-19 strictly and professionally, but also making the modules enjoyable still at the same time! A big thanks to Ken again as one of my team members have thoroughly enjoyed the whole GWO course but particularly ones Ken has participated in, making the experience engaging, understandable, enjoyable and as always professional for an individual who is starting his career in the industry! So, in a nutshell thank you very much for your services provided and look forward to using complete training solutions in the near distant future for refresher and other accreditations!"







### Technical training courses

#### **IRATA ROPE ACCESS**

This training will only be required if you wish to venture into the blade repair sector of the industry. IRATA Rope Access Level 1 courses qualify you to work under supervision. You will be subject to a refresher if no hours are gained within any 6-month period and it is subject to a full reassessment after 3 years.

The course covers the basic principles of movement on ropes. For example, ascent, descent, changing from rope-to-rope, crossing a knot, aid climbing and traversing. Also included are passing re-anchors, deviations, using a back-up system, learning elementary rigging and rope management. For more advanced Technicians, IRATA Level 2 and Level 3 qualifications are available for further development

#### **BANKSMAN SLINGER**

This course is perfect for on and offshore personnel. For instance, individuals involved with the signalling of cranes and slinging of loads will benefit from this course. Moreover, you will enhance your skills to carry out tasks in a safe and correct manner. It will also provide advice on relevant safety precautions to abide by when working with cranes and loads. The course is a mix of both theoretical and practical assessment, during which you will be required to demonstrate a sound knowledge and understanding of the training programme.

#### **BLADE REPAIR**

For technicians wishing to get into blade repairs, this training is required. Certain employers may also require a different type of training. Siemens Gamesa, for instance, have their own blade training qualification.

#### ECITB CCNSG SAFETY PASSPORT

The CCNSG Safety Passport is specifically for those who work in the engineering construction industry and is recommended for the Wind Industry. The CCNSG Safety Passport involves a two-day training course followed by a test that provides qualification.

"It was nice to be on a course where you are given as much time as you need. I was quite nervous about attending this course but after seeing all the precautions that have been put in place, it filled me with confidence. CTS have gone above and beyond to ensure our health and safety during training. Overall outstanding!"

Ryan – IRATA Rope Access Course, May 2020.

### Contracts

Technicians in the wind energy sector usually work as temporary contractors on most projects in the UK and Europe. This is on PAYE (pay as you earn) basis. Normally, the contract is an annualised hours agreement whereby you are paid a salary equivalent to working a set number of hours per month.

Not all contracts shutdown, so sometimes work continues and a technician can "bank" hours. If they bank a good portion of their pay – as many do in the UK on 2/1 rotations – then winter is a rest period where a wage can be drawn from banked hours. Basically, the more work is done, the more that can be earned.



### Durations of work UK & EU

**GERMANY** – Usually from March to the end of September (off¬shore). Onshore may be longer as it is not weather and water/vessel transfer dependent. Germany (BMU 2006 and 2008) is the country where most wind-related jobs have been created, with around 38,000 directly attributable to wind energy companies and a slightly higher amount from indirect effects

**UK** – Usually from February to October. Some sites can continue throughout the winter months, but that is heavily dependent on need and skill of the person. In the UK, the importance of offshore wind energy and small-scale wind turbines is reflected by the existence of many job-creating businesses in this area. This country also has some of the most prestigious wind energy engineering and consultancy companies.

**HOLLAND** – October for the main campaigns. Some work can then extend on across winter also. Onshore assembly is all year round.







#### Did you know?

The average annual wage for a newly trained wind technician starts at £23,000 and goes up to £50,000 for an experienced technician? The working hours are usually between 30-40 hours per week. There is plenty of room for progression and development within this role and as with most jobs, with more experience and knowledge, comes a higher salary.



## Transition into the wind energy sector from the Armed Forces

Complete Training Solutions have joined the several businesses, charities, cadet forces and other communities who have shown their commitment to supporting the Armed Forces by signing the Armed Forces Covenant. The Covenant is a promise from the nation to those who have served or are currently serving in the Armed Forces, in that they and their families, will be treated fairly, and will have access to the same government and commercial services as any other citizen. As a result, we offer 10% discount on all training to military veterans.

### Transferrable Skills

Ex-Armed Forces personnel are often targeted for recruitment within the Wind Energy sector due to the high number of transferable skills between many positions across the industry.

- Logistics
- Project management
- Leadership
- Teamwork
- Engineering
- Problem-solving/troubleshooting
- Health and Safety
- Working in potential life and death situations
- Communication
- Working under pressure and in stressful circumstances
- Adaptability
- Working for long periods of time away from home







"Signing the Armed Forces Covenant was the first of many steps we will be taking a Complete Training Solutions to demonstrate our commitment to supporting the Armed Forces community. It was an honour to receive the Bronze award on behalf of Complete Training Solutions. Supporting the Armed Forces is something me and my team are committed to, and we will continue to do everything we can to help exservicemen and women retrain and support them with their re-settlement. We currently offer a range of support packages and discounts that are bespoke to ex-military and armed forces and will continue to develop the level of support we can provide to those individuals in the coming months and years."

Danielle Kershaw – Head of Renewables, Complete Training Solutions

You can gain all of your entry-level qualifications and safety certificates through Complete Training Solutions.



## Next steps

#### **1. RESEARCH**

This guide has provided the basic information you need to know on how to enter the wind industry. Use the knowledge you have gained from this guide to uncover further insights into a wind industry career. Try our website's Knowledge Hub that has several case studies, guides and tips from industry experts.

#### 2. BOOK YOUR TRAINING

Visit the CTS Website and book in your training dates. If you are still unsure, our knowledgeable and friendly team would be happy to assist – use out live chat feature or give us a call.

#### **3. START NETWORKING**

Building connections on LinkedIn is a great place to start. Set up a profile and start growing your Wind Industry network. Get in touch with industry professionals and recruiters, explain your situation and ask for advice. They may have some inside knowledge as to who is recruiting and some best practice tips to help you on your pathway into the industry.

#### 4. BUILD YOUR CV

Put together a CV that highlights any relevant work experience, transferrable skills and relevant qualifications. Finally, you're ready to start your career in the Wind Industry! Start applying and be persistent.



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