



OFFSHORE WIND SECTOR GUIDE

An introduction to the offshore wind sector for Armed Forces service leavers, veterans and spouses/partners considering it as a second career.



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1. Introduction

This guide is designed to provide the Armed Forces community with a general overview of the Offshore wind industry, including the varied roles that can be found within it. It provides some advice to the serving military community and veterans, including spouses/partners, with options to consider in their second career.

The Guide is produced by **Mission Renewable** for **Career Transition Partnership (CTP)** in collaboration with **RenewableUK**, and in conjunction with Offshore Wind Industry Council (OWIC) Military Working Group.

Thanks go to many individuals who have contributed to this information guide. Special thanks go to Dom Butler and Wayne Roycroft for their personal contributions.

Mission Renewable is an Armed Forces engagement initiative for the UK Renewable Sector. It is a Community Interest Company (non-profit) launched in 2022 to harness the opportunity for skills migration from the veteran community into jobs in the renewable energy sector.



<https://www.missionrenewable.org/>



The **Offshore Wind Industry Council (OWIC)** is a senior government and industry forum which is established to drive the development of the world-leading offshore wind sector in the UK.

<https://www.owic.org.uk/>

RenewableUK is the UK's leading not for profit renewable energy trade association.

<https://www.renewableuk.com/>



Forewards

"There are industries and employers who are known for their strong links to the Armed Forces over the years, but it is Renewables that will be the huge growth area for veterans, service leavers and their families. Already, between 1 in 10 and 1 in 5 of people working in offshore wind have a service background. They have prospects in a growing industry that are bright, and will allow them to support their families for years to come. This guide has been produced to support those considering careers in the offshore wind sector, and we are hugely grateful to veterans, to industry partners and MoD for their assistance.

Read, ask questions, network – and through community, when you are successful, help others up behind you."

James Cameron, CEO, Mission Renewable

"The renewable energy sector is expanding rapidly throughout the country and we urgently need people with the right level of skills and expertise to fulfil the wide variety of roles we have on offer. Women and men who come to us from a military background have a wealth of experience and talent which puts them in pole position for new careers in clean energy"

Dan McGrail, Chief Executive, RenewableUK

"The Offshore wind industry is expanding to become a key part of the Government's push for renewable energy. There are many different jobs available, and there will be more and more in the future. This guide is designed to help you, the veteran or spouse/partner, find a way into the industry and secure a job. It is clearly laid out, and easily readable. Using it we hope will make your journey into the industry easier and quicker. Good luck!"

Lieutenant General Richard Nugee, Non-Executive Director for Climate Change and Sustainability – MOD; formerly Chief of the Defence People, MOD

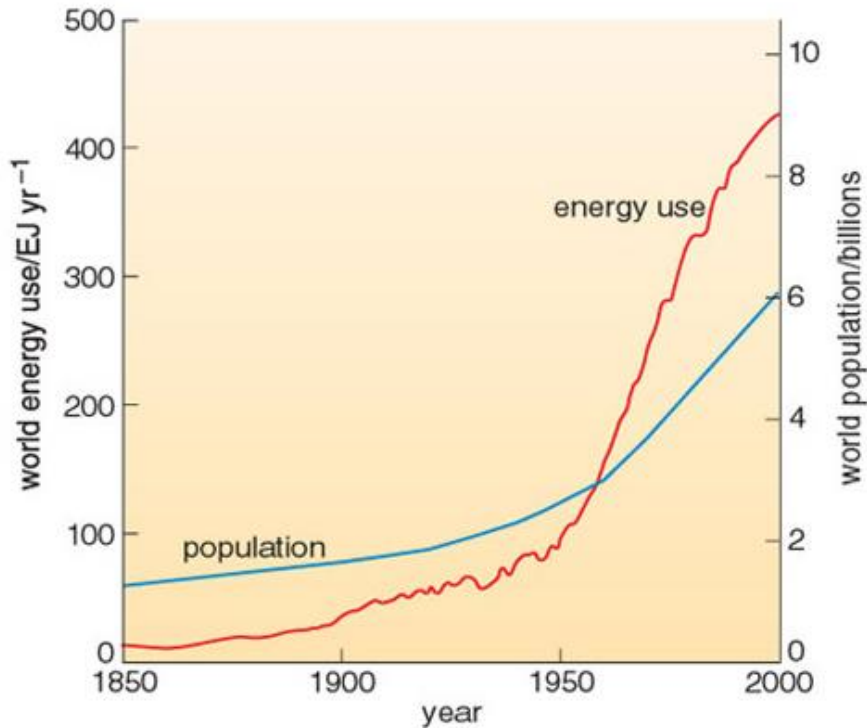
Mission Renewable Team,
team@missionrenewable.org

August 2022

2. Overview of Offshore Wind

Demand for electricity

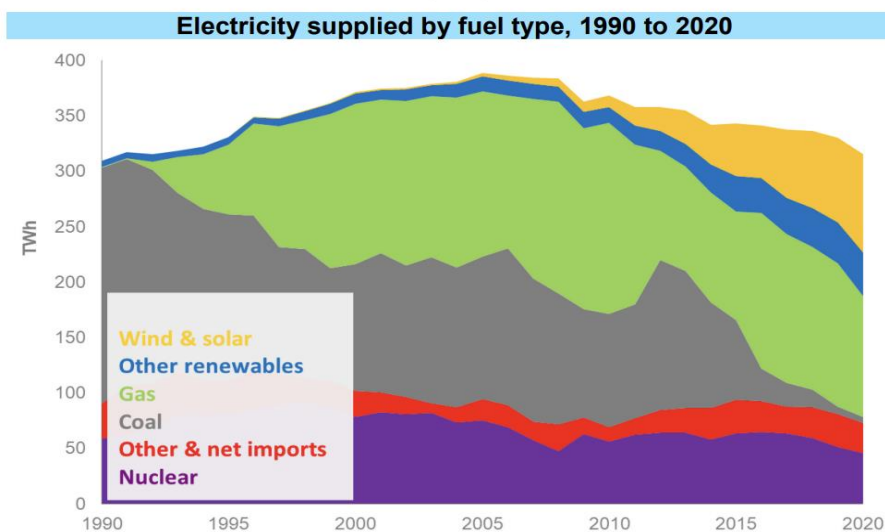
The overall demand for electricity worldwide is predicted to continue to increase per person in line with the historic trends already established and seen from the graph below:



When one considers that the global annual consumption of primary energy increased more than ten-fold during the 20th century, the importance of planning future energy supply becomes clear. The task facing the UK energy sector is to provide for this demand in a sustainable and environmentally sympathetic way.

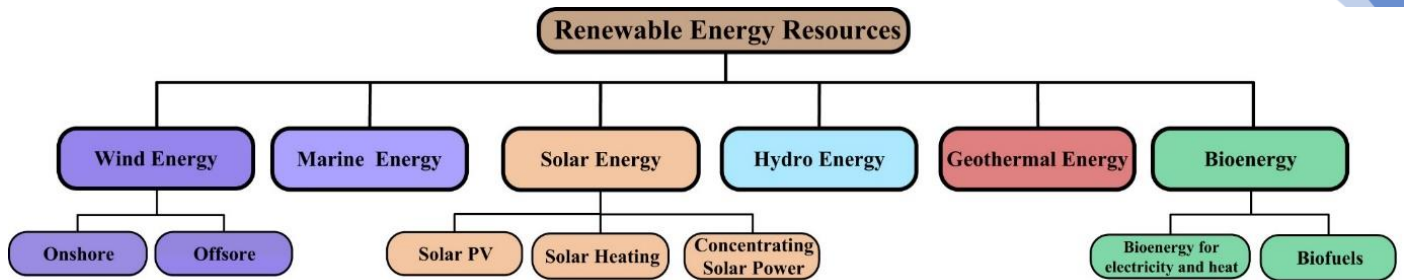
Breakdown of Technologies

The electrical energy that the UK currently consumes is sourced from the following technologies:



The proportion generated from renewable energy is increasing rapidly over time.

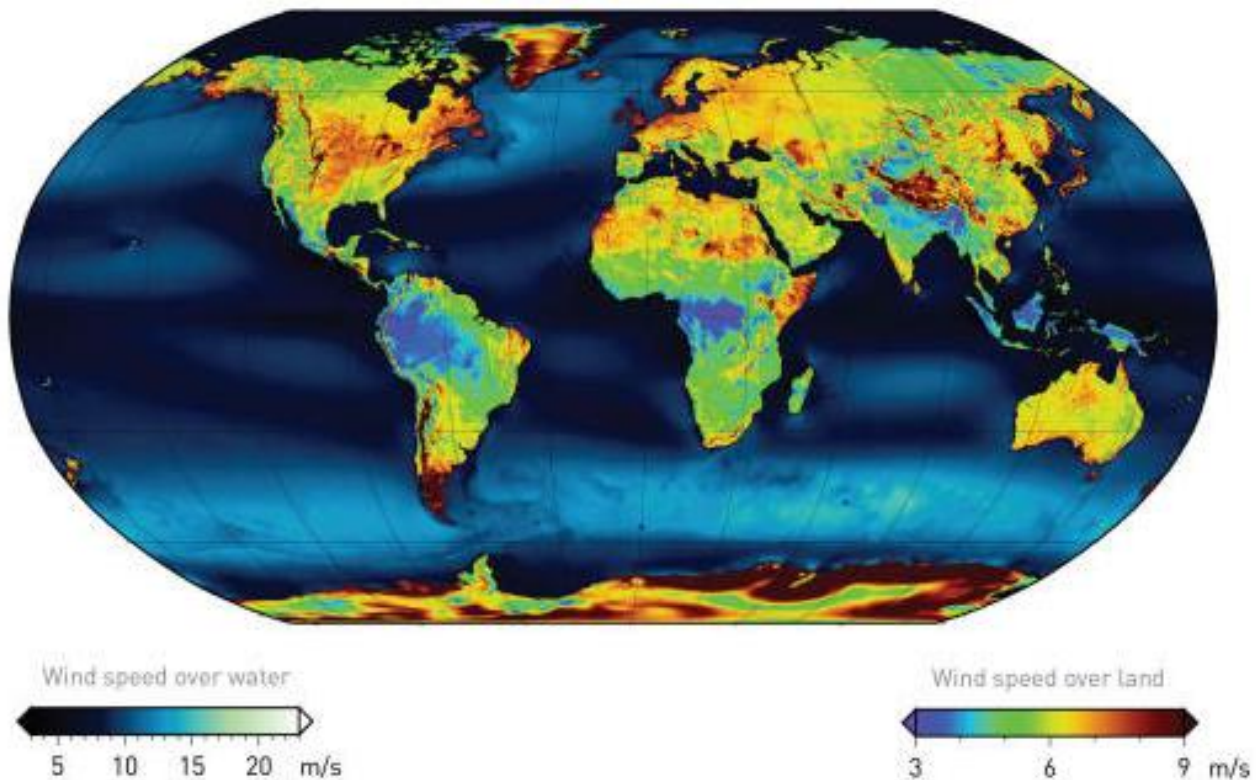
Renewable Energy resources can be broken down as follows:



Note: The nuclear energy industry is also a potential employment destination for those who have served in the armed forces. There is debate about whether nuclear energy is considered to be renewable, a discussion of which is beyond the scope of this information.

Why Wind?

The UK is uniquely placed to benefit from higher-than-average wind speeds throughout the year and comparatively short distances between the energy generation locations (the wind farms) and the populated areas that consume the most power.



Put simply, the UK is well placed to take advantage of wind for generation of energy.

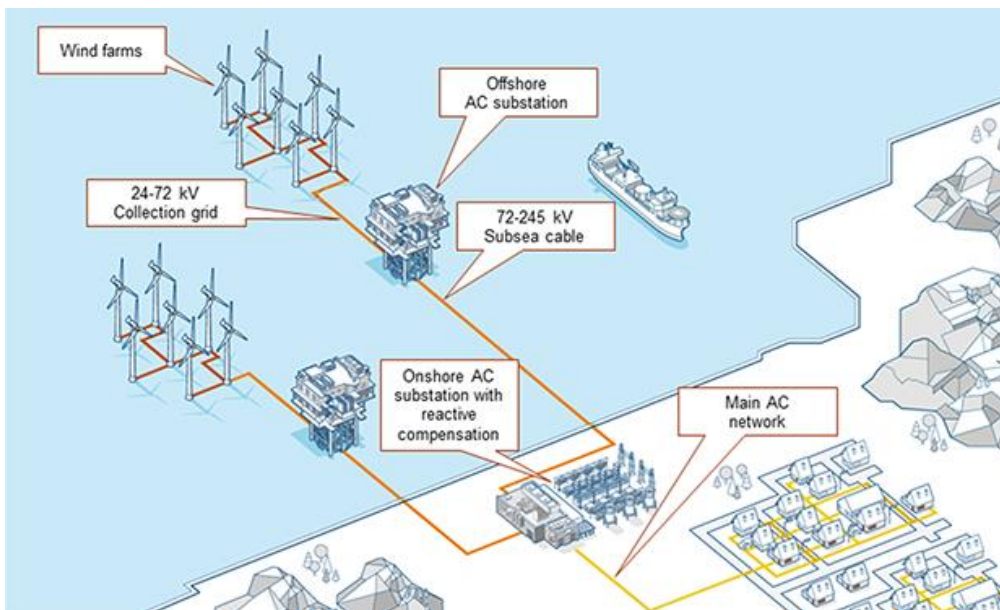
It is estimated that between 1 in 10 and 1 in 5 people who work already in the Offshore wind industry have previously served in the armed forces. Many private enterprises have already invested a considerable amount of money into wind farms, with backing from the UK government, and are on track to continue to do so. However, it is predicted that there will be a workforce and skills gap. With an expanding Offshore wind industry and the fact that approximately 1,400 service leavers leave the UK military each year, it means that there is a pool of highly trained, and highly motivated individuals with many relevant skills who could potentially help to meet the industry demand for roles. It is reasonable to encourage any service leavers and veterans who want to join this growing sector to do so.

With the current operating fleets in offshore wind, coupled with the projected increase in the number of assets being installed in UK waters, and the ever increasing size and scale of the design of the wind farms, there are roles that are needed to be filled in a wide range of both technical and non-technical roles. The roles are throughout the lifecycle of offshore wind projects:

- from early stage development roles focusing on permitting and consent and commercial feasibility
- to survey works and project management type roles through the construction and installation for onshore grid connections, offshore installations of foundations, turbines and substations
- finally commissioning the assets ready for operations and the generation of electricity to thousands of end users
- then, 25 to 30 years later, decommissioning commences.

During each phase there are technical roles needed to ensure the design, installation and maintenance of the assets are optimised and it is safe to generate. There are dozens of other roles which are key to ensure success, including procurement, legal, HSE, HR and recruiting, quality, marine services, project management, commercial and financial roles, all of which work together in a team environment to achieve a successful project and a successful operation.

Layout of a Wind Farm



The illustration gives a basic indication of the layout of an Offshore wind farm and the component parts which deliver power to the national grid.

There are job roles available in all the different areas of a wind farm operation, and during all stages of the lifecycle.

It is important to emphasise also that many of the job roles in the industry are located onshore, undertaking the many business, corporate and support functions (e.g. finance, planning, project management, HR etc.) that are necessary for running any business.

3. The Offshore wind industry skills landscape

Structure of the industry in the UK

The Crown Estate (and Crown Estate Scotland) manages the UK's seabed and lease the rights to the resources to develop renewable energy. Energy companies develop the leased areas into wind farms. The winning energy company will then employ many different companies to build the wind farm (including turbines), supply and install power lines and cables, build substations and many other things!

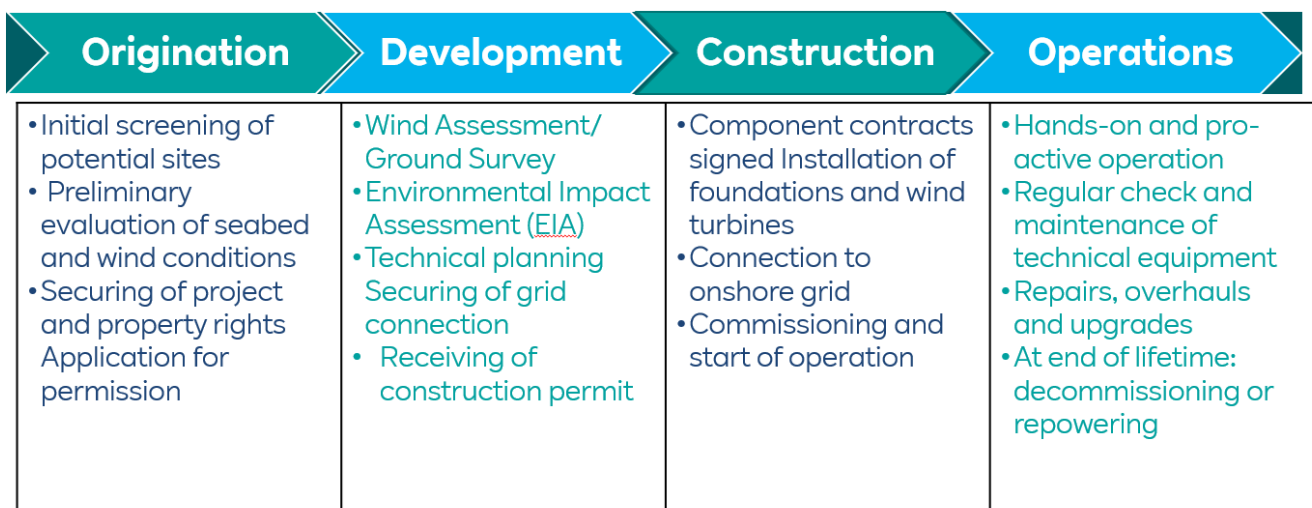
Like many other areas of the energy industry, an offshore wind farm requires an enormous amount of support throughout its life cycle, from planning and design to construction, operation, and maintenance through to repowering or decommissioning.

Project Phases & Timeline

A wind farm project will have an existence over a very long timescale, called the asset lifecycle. In any one operation, the employment opportunities will change over time according to the phase in the lifecycle of a wind farm project.

This can be summarized diagrammatically as follows:

Lifecycle Journey to Operations



The Development phase might typically be broken down further into Early stage development, Bidding Phase and pre-Final Investment Decision. Typically a Developer would out-source much of the work involved in these stages to specialist service providers.

Please refer to **The Crown Estate 'Guide to an offshore wind farm'** linked from Appendix 4 to read about phases and timeline of a wind farm project in more detail.

Organisations Involved

Typically, there will be a very large number of organisations involved over the life of a windfarm. Some of those organisation types are summarized as follows:

Developer & operator

The developer focuses on designing and developing a wind farm project, and usually generates the funds required to build the wind farm.

The operator is the organisation that runs the wind farm, usually on contract from the investor or owner. They are responsible for the day-to-day management of the asset, ensuring that they are operated, maintained, and running as efficiently as possible in order to maximize power output.

The developers and operators are sometimes referred to as the main tier 1 contractors. Most of these organisations have an international asset portfolio.

There are several wind farm developers and operators. They include:

- RWE
- Orsted
- Vattenfall Wind Power
- ScottishPower Renewables
- EDF Renewables
- Equinor
- SSE Renewables

New Entrants

Many of the “traditional” oil and gas companies are in the process of diversifying their portfolios to include offshore wind investments. BP renewables, Shell and Exxon Mobil are all investing heavily in offshore wind.

With the growth of floating offshore wind farms, there are other organisations who are joining the industry. For example:

- Simply Blue
- Total Energies

Manufacturer

The manufacturer is the organisation that builds the turbine for installation.

The main offshore wind turbine manufacturers include:

- Siemens Gamesa
- Vestas
- GE Renewables

Supply Chain Organisations

There are a huge number of companies which provide many different kinds of services to the developer and operator of a wind farm. For example: surveying, turbine towers, foundations, cable supply, installation support, turbine maintenance, structural inspection, cleaning, service logistics.

Collectively these are known as the ‘supply chain’ organisations, or the tier 2 and tier 3 suppliers in the industry. There are some organisations which specialise in providing contracting labour – that is people – to all the other organisations.

Logistics - Marine and Aviation

The marine sector that supports the Offshore wind industry is vast. The marine sector can provide vessels to support the construction of the wind farm, such as heavy jack up vessels to install monopiles and turbines, cable layers for subsea engineering support, Crew Transfer Vessels (CTVs) and Service Operation Vessels (SOVs) to transport/accommodate and support turbine technicians. Related to this is the marine survey industry with new

technology such as Remotely Operated Vehicles (ROVs). Use of helicopters and unmanned aircraft systems (UASs) can be used to complement marine logistics. These sectors are only touched upon in this guide.

Locations

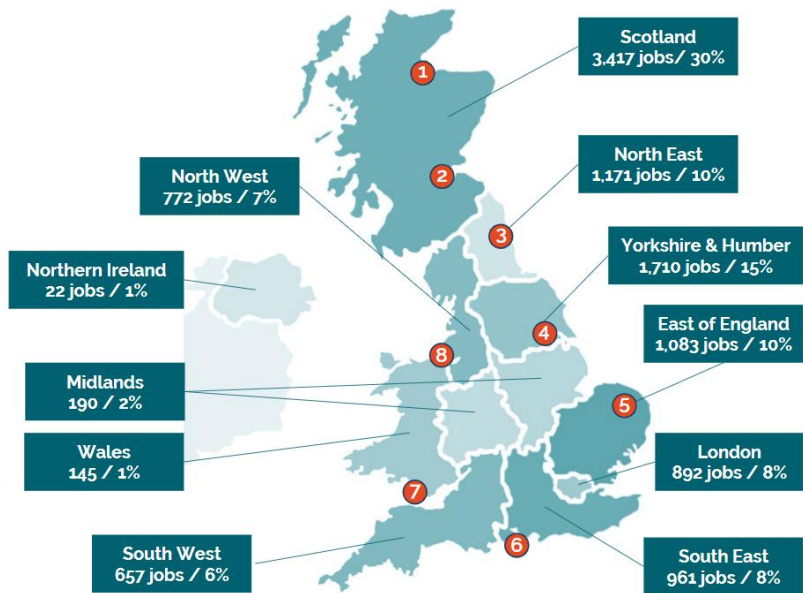
The following diagrams illustrate the distribution of Offshore wind industry jobs around the UK. A large proportion of opportunities are on the east side of England and Scotland.

UK Survey Results

Data shown by UK region.

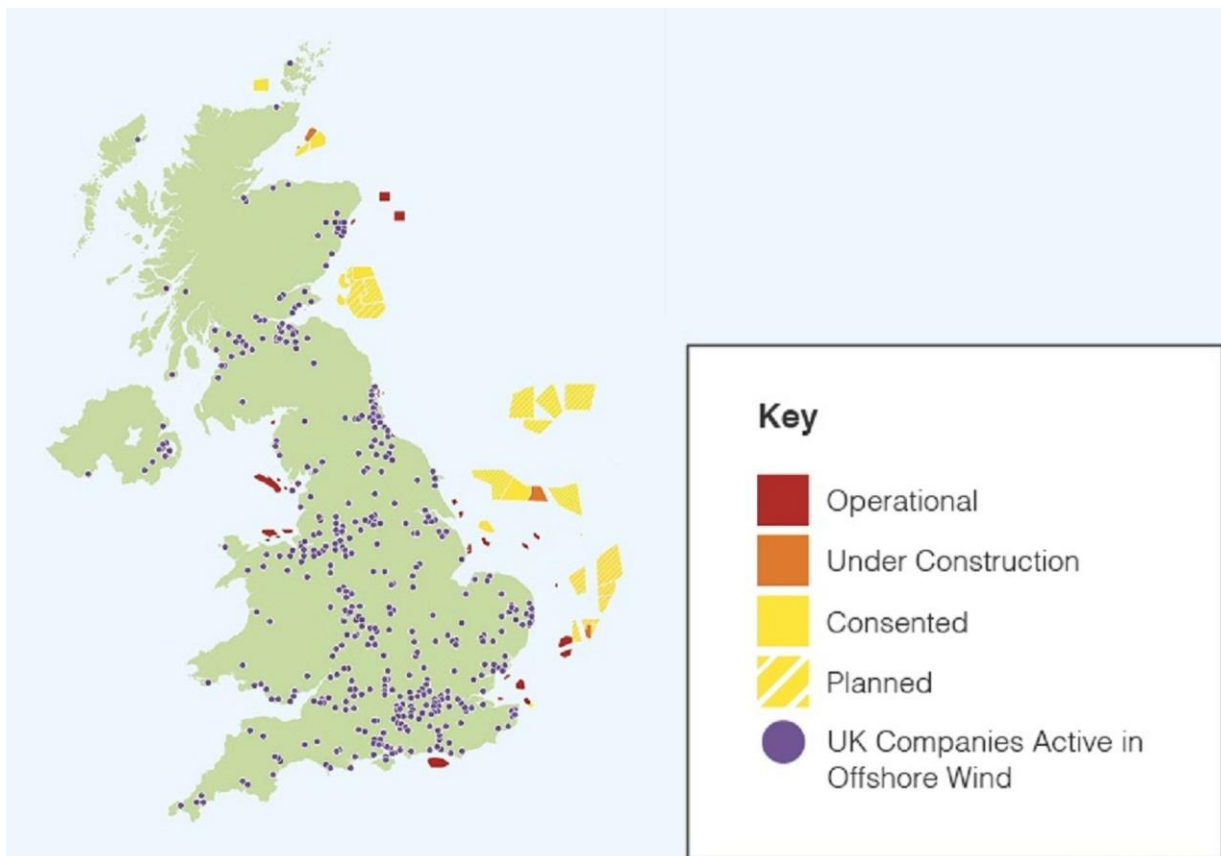
Map represents 44% of estimated total UK offshore wind workforce, based on actual data submitted for 11,365 jobs.

- represents Sector Deal 'Clusters'
- 1. DeepWind (North Scotland)
- 2. Forth and Tay Offshore
- 3. North East England
- 4. Humber
- 5. East Anglia
- 6. Solent
- 7. Celtic Sea Cluster
- 8. North West and North Wales



Source: NSAR Skills Intelligence Model Survey Results/Operry Ltd. January 2021

The following map of the UK shows where the Offshore wind industry is active. Note that this is a snapshot from early 2021, and things can change quickly over time.



Again, it is worth pointing out from this map that many Offshore wind industry jobs are located onshore!

Floating Offshore Wind

This is the new kid on the block, or rather, on the sea.

Currently, most of the offshore wind farms are made up of fixed bottom turbines. That is, the turbines are fixed to the sea bed. With floating offshore wind, technology is used whereby the turbines float on the surface of the water. This enables wind turbines to be located in much deeper water than is possible with fixed bottom turbines.

Following several successful prototypes and demonstration projects around the world, floating offshore wind is now taking the first steps in commercialisation. Floating offshore wind represents the next frontier in the green growth story of offshore wind, with the UK Government already committing to 5GW of floating wind by 2030. Floating wind represents an opportunity to grow the market for UK skills, products and expertise. It is anticipated that there will be an increasing demand for skills in this area of the industry, and there will be many employment opportunities become available in this area in the future.

4. Transition from HM Forces to Offshore Wind

Why Choose Offshore Wind?

The Offshore wind industry has a bright future and is set to expand. Jobs in offshore wind are set to double by 2030, where it is envisaged that 27,000 direct jobs will be supported. At a time of uncertainty when leaving the armed forces, it can be re-assuring to move into a growing industry where there is likely to be job security, and also the potential to progress. Like the armed forces, offshore wind is a varied and exciting place to work, potentially making it a 'soft landing' transition. For those working in offshore wind, you will also be playing an active contribution to securing a cheap and secure supply of energy, and working in the international effort to achieve 'net zero'.

Geographical Location

The drive for each person leaving the forces will be different; however there are some key themes. Many leave the forces for more stability, enabling them to settle in one location and spend more time with their families and friends. Others will want to travel. It is true that there are 'clusters' of offshore wind jobs, particularly around the coast of the country, and more particularly on the east coast of England and Scotland. Nevertheless, there is still a spread of opportunities throughout the UK.

Some who leave the armed forces will wish to work overseas. There are a huge number of opportunities throughout the world. Europe is an active region for offshore wind. APAC countries have development projects with the first offshore wind installations under construction. At the time of writing (2022), work has recently begun on the United States' first major offshore wind farm.

No "one size fits all"

When someone decides to end their career in the armed forces, there are a variety of motivations. Those transitioning and veterans will have an idea of what they want their second career to look like and the routine with which they would be happiest and most productive in their work.

To that end, there are many different kinds of work routines found within the Offshore wind industry.

For example:

- 9 to 5 Monday to Friday jobs
- Shift patterns (2 weeks on, 2 weeks off etc.)
- Home based and hybrid working
- UK wide travel
- International travel
- Individual contract work of varying different timescales

Transferable Skills

There are a vast number of transferrable skills that serving armed forces personnel and veterans can bring to the Offshore wind industry. For example, you may have served as an engineer and already have technical skills that are easily transferrable.

There are also many 'soft skills' which are desirable such as teamwork, adaptability, communication, leadership and organisational skills. Other soft skills might be described as 'learnt behaviours' which suit many of those who have served in the armed forces – for example, a willingness to travel to and work in remote / unusual / difficult environments, a willingness to work in shift patterns with extended periods away from home, a willingness to tackle problems head on with whatever resources are available.

5. Jobs in Offshore Wind

Roles and Lifecycle

The different roles in the offshore wind industry can be categorized in different ways. A diagrammatic representation of broad roles required, mapped to the lifecycle of a wind farm follows:

Development	Construction (including Installation and Commissioning)		Operations Maintenance and Service	Support Functions	
Technical Project Management	Technical Project Management	Stakeholder Management	Technical Project Management	HSE	Human Resources
Permitting and Consent	Quality Assurance	Permitting and Consent	Marine Coordination	Internal and External Communications and Media	Financial and Commercial
Stakeholder Management	Marine Coordination	Vessel Management	Vessel Management	Legal	Administration
Electrical Engineering	Onshore and Offshore Logistics	Electrical Engineering	Electrical Engineering	Aviation Experts	Technical Authors
Civil Engineering	Mechanical Engineering	Civil Engineering	Mechanical Engineering	Partnering and Investment Management	Procurement & Supply Chain Management
Mechanical Engineering	Onshore Engineering Technicians	Offshore Engineering Technicians	Engineering Technicians		
			Logistics		

What jobs are there?

The list of jobs which follows is comprehensive but not exhaustive. They have been divided into sub-headings which should be helpful, while not definitive. Some roles can be wide ranging and difficult to categorise. The diagram above will help in relating different job roles to where in the lifecycle they are needed. Note that Development phase jobs tend to be in the supply chain companies.

Construction

Cable Joiner: The cable joiner carries out the cable splicing and ensures the joints match the diameter and flexibility of the power cable. Academic qualifications are not essential, and entry may be through an apprenticeship. Vocational training, such as a City & Guilds qualification in electrical engineering or similar, is an advantage. Training is usually provided by the employer. The cable joiner works both onshore and offshore. The salary ranges between £29,000 and £40,000.

Carousel and Tensioner Operator: The carousel and tensioner operator is responsible for the operation, maintenance and repair of the specialist cable storage and handling equipment. This role requires an HNC in electrical engineering or equivalent. The carousel and tensioner operator works both onshore and offshore. The salary ranges between £20,000 and £30,000.

Rigger: The rigger is responsible for planning and implementing safe lifting and the movement of large structures that may involve crane operation. A rigger will require formal training and certification such as a Construction Skills Certification Scheme (CSCS) or National Vocational Qualification (NVQ) certificate from an accredited industry body. Knowledge of current Lifting Operations and Lifting Equipment Regulations (LOLER) and Provision and Use of Work Equipment Regulations (PUWER) is also desirable. The salary ranges between £18,000 and £30,000.

Crane Operator: The crane operator drives the machinery used to carry out lifting of heavy structures and equipment. The role requires training and experience in using heavy plant machinery, a Construction Plant Competence Scheme (CPCS) certificate and a college qualification in plant operations. The crane operator works both onshore and offshore. The salary ranges between £20,000 and £30,000 for an experienced crane operator.

Facilities manager: The facilities manager supervises staff, oversees operations, and ensures health and safety practices are adhered to. No formal qualifications are required, but several years' experience in management and warehouse operations is necessary. These roles are usually onshore. The salary ranges between £30,000 and £40,000.

Storeperson: The storeperson operates forklift and reach trucks as well as overhead cranes and gantries. Several storepersons may be employed in a storage facility. The role requires licences for each type of lifting equipment as well as a Construction Plant Competence Scheme (CPCS) certificate for the operation of cranes. The storeperson works both onshore and offshore. The salary ranges between £20,000 and £28,000.

Construction: These roles are required throughout the building and maintenance of the wind farm, and speciality in a wide range of construction skills is required, including but not limited to: *welders, plasterers, crane operators* and *scaffolders*. The salary ranges between £30,000 and £50,000

Marine Engineer: The marine engineer inspects and designs repairs of vessels and their equipment, with focus on mechanical systems such as propulsion and steering. The role requires a degree in marine engineering or similar. The marine engineer works onshore. The salary ranges between £30,000 and £40,000.

Shipwright: The shipwright undertakes a variety of marine fitting duties, including metalwork and carpentry to carry about repair and maintenance duties. A shipwright will have obtained a City & Guilds Yacht and Boatbuilding qualification or an equivalent technical certificate. The shipwright works onshore. The salary ranges between £25,000 and £33,000.

Fibre Optic Technician: The technician terminates and tests the fibre optic communication cables. Academic qualifications are not essential, but a vocational qualification or an apprenticeship is desirable. Training is usually provided by the employer. The technician works offshore. The salary ranges between £35,000 and £45,000.

Electrical Technician: The technician supports the activities of the jointer and fibre optic technician. Academic qualifications are not essential, but a vocational qualification or an apprenticeship is desirable. Training is usually provided by the employer. The technician works both offshore and onshore. The salary ranges between £30,000 and £40,000.

ROV Pilot: The pilot operates the Remote Operated Vehicle (ROV) underwater from the vessel. This involves operating cameras and robotic arms and judging site conditions to adjust the dive plan. The pilots complete 12-hour shifts and are rotated on a monthly basis. No specific qualifications are required, and training is provided by the employer. Many pilots have previous experience in the Royal Air Force or Navy. The ROV pilot works offshore. The salary ranges between £40,000 and £50,000.

Design Engineers and Electrical Technicians: A vital part of a wind farm is connecting the turbines to each other and then to bring the electricity generated back to shore to be exported into the electricity grid. Cables carry electricity from the turbines to substations, and from substations back to shore. There are a variety of roles that focus specifically on cables including Design Engineers and Electrical Technicians. The salary ranges between £30,000 and £60,000.

Operations, Maintenance and Service

Communications Network Technician: The communications network technician installs and maintains the communications network infrastructure. These networks operate over a range of media including fibre optics, satellite, point-to-point wireless, mesh radio networks and virtual private networks delivered by other third-party companies. An HNC in computer systems, network support or similar is required. Manufacturer-specific training, such as a Cisco Certified Internetwork Expert (CCIE) certification, may be needed. The communication network technician works onshore and offshore. The salary ranges between £25,000 and £45,000.



Rope Access and Blade Repair Supervisor: The rope access supervisor ensures the inspection and repair work is completed to IRATA International Code of Practice (ICOP) specifications. They supervise rope access and blade repair technicians. Supervisors need IRATA Level 3 certification, industry specific training on blade inspection and repair, and at least one year of hands-on experience. The supervisor works offshore. The salary ranges between £30,000 and £50,000.

Rope Access and Blade Repair Technician: The rope access and blade repair technician performs repairs on internal and external blade surfaces. They take photographs of damage and repairs to provide documentation for quality control. Technicians require IRATA Level 1 or 2 Certification along with industry specific training on blade inspection and repair. The technician works offshore. The salary ranges between £25,000 and £35,000.



Site Supervisor: The site supervisor manages the day-to-day activities of a team of wind turbine technicians. They ensure work is completed in line with health and safety procedures, prepare daily reports and plan annual service and maintenance schedules. A degree, Higher National Certificate (HNC) or Higher National Diploma (HND) in electrical or mechanical engineering is required, although an apprenticeship may be sufficient; for example a modern apprenticeship in wind turbine operation and maintenance. Five years of supervisory experience is desirable. The site supervisor works both onshore and offshore. The salary ranges between £30,000 and £50,000.

Wind Turbine Technician: The wind turbine technician maintains electrical and mechanical components on the wind turbine. They complete regular check-ups on components to ensure they are working correctly and respond quickly to faults. A degree, HNC or HND in electrical or mechanical engineering is required, although an apprenticeship may be sufficient, for example a modern apprenticeship in wind turbine operation and maintenance. The technician will also need offshore certificates, such as working at height and sea survival. A combination of generic, manufacturer-specific and turbine-type specific training is required. The technician works offshore. The salary ranges between £20,000 and £40,000 depending on experience and level.



Crane and Rigging Inspector: The crane and rigging inspector checks and re-certifies cranes, winches and other lifting equipment to ensure they are fit for purpose. In the event of a fault, the inspector identifies the spare parts required to reduce equipment downtime. A certification by a recognised industry body, such as the Lifting Equipment Engineering Association (LEEAA), and an HNC in mechanical engineering is required. Knowledge of current Lifting Operations and Lifting Equipment Regulations (LOLER) and Provision and Use of Work Equipment Regulations (PUWER) is also desirable. The crane and rigging inspector works offshore. The salary ranges between £25,000 and £35,000.

Diver: The diver inspects the foundation and determines if repair work is necessary. The diver is required to have an HSE Part 1 qualification and preferably HSE Part 2 and 3 qualifications. They also require a valid dive ticket and

Global Wind Organisation (GWO) BST module certificates. The diver works offshore. The salary ranges between £60,000 and £90,000.

Dive Supervisor: The supervisor is responsible for the safety of the diving team during a planned dive. This includes monitoring air and gas supply, communicating with the divers and implementing emergency plans is necessary. The supervisor must have an HSE Part 1 qualification and preferably HSE Part 2 and 3 qualifications. They also require a valid 'dive ticket' and GWO BST module certificates. The dive supervisor works offshore. The salary ranges between £50,000 and £75,000.

Diver Tender: The diver tender provides surface support to the diving team and handles the divers' umbilical cable. The diver tender is required to have a HSE Part 1 qualification and preferably HSE Part 2 and 3 qualifications. They also require a valid dive ticket and GWO BST module certificates. The role requires an annual dive medical. The diver tender works offshore. The salary ranges between £30,000 and £40,000.

Control Room Surveillance: 24/7 monitoring the operational wind farm & balance of plant performance, controlling access & egress to sites & individual assets, transfer of operational control for maintenance & reacting to alarms to minimise generation downtime. This is usually a shift pattern role & salary range is DOE £25000 - £45000

Cleaning

Technical Supervisor: The technical supervisor agrees with the client the best technical approach, cost, and schedule for the delivery of the cleaning services. The supervisor ensures cleaning activities comply with health and safety standards and quality procedures. Appropriate health and safety, and management qualifications, such as from the Institution of Occupational Safety and Health (IOSH), are required. Three years supervisory experience is desirable. The supervisor works onshore. The salary ranges between £30,000 and £50,000.

Team Leader: The team leader oversees a team of cleaning operators. The team leader requires certification from Global Wind Organisation for offshore survival and working at height, alongside appropriate health and safety, and management qualifications, such as from the Institution of Occupational Safety and Health (IOSH). They co-ordinate the resources, equipment and materials required to complete the cleaning activities to the client's requirements. The team leader works onshore and offshore. Two years supervisory experience is desirable. The salary ranges between £25,000 and £40,000.

Cleaning Operator: The operator uses specialist cleaning equipment and often works with chemicals and hazardous materials. Two to three cleaning operators are required to deliver a contract. The cleaning operator requires certification from GWO BST, alongside appropriate health and safety qualifications, such as from the Institution of Occupational Safety and Health (IOSH). They typically receive in-house high-pressure water jet training. The operator works offshore. The salary ranges between £20,000 and £30,000.

Other Roles

Warehouse Manager: The warehouse manager plans the day-to-day operations of the warehouse, interfaces with clients and ensures health and safety procedures are followed. No formal qualifications are required, but a degree in business, retail management or economics is desirable. Relevant Chartered Institute of Logistics and Transport (UK) Level 3 Certificates are also an advantage. The Warehouse Manager works onshore. The salary ranges between £20,000 and £40,000.

Warehouse Operative: The warehouse operative records and controls stock movement and manage the delivery of equipment to site. No formal qualifications are required, but a strong understanding of health and safety and experience with computer management software are desirable. If using Crew Transfer Vessels (CTVs), the warehouse operative works onshore. If using Service and Operation Vessels (SOVs), the warehouse operative may work both onshore and offshore. The salary ranges between £15,000 and £20,000.

Crew Manager (operations): The crew manager assigns crews to vessels and records qualifications, training and experience of the masters and deckhands. The crew manager works onshore. A degree level qualification is required in a relevant field such as maritime operations, business, or economics. The crew manager works onshore. The salary ranges between £20,000 and £30,000.

Field Service Engineer (maintenance): The field service engineer maintains electrical equipment on board vessels, for example generators and engines. A degree in mechanical or electrical engineering is required. The field service engineer works both onshore and offshore. The salary ranges between £20,000 and £35,000. Master, mate and deckhand job roles are also required for CTV and service operation vessel (SOV) operations and are detailed in the guard vessel's function

Health, Safety and Environment (HSE): A background in construction is helpful if you're interested in Health and Safety in development and construction phase. Some experience of maritime or offshore work is needed for HSE work in the operations phase, often with some kind of HSE qualification. Working on boats, from the air (and actually in the sea!) can be both difficult and dangerous, and companies always place the highest priority on employee safety. The salary ranges from £30,000 - £50,000.

Project Manager: The manager is responsible for the day-to-day operations, including project planning, staff management, financial reporting, and client engagement. One manager is typically required to deliver a contract. The manager works onshore. Degree level qualifications are required in a relevant field, such as environmental sciences, economics, or engineering. Project management qualifications are also desirable. The salary ranges from £55,000 and upwards.

With projects costing millions of pounds, it is essential that they are delivered on budget, in time and to the standards required. Some veterans have experience with project management. If this is supported with a PM qualification (such as APM), the prospects of employment are good.

Package Manager: A term used to describe someone who manages one part of a project, and may report to a Project Manager. The salary ranges between £40,000 and £50,000.

Each developer in offshore wind aims to run their company in a smooth and profitable manner. There are plenty of **Business Services, Financing** and **HR** roles which contribute to this.

6. Training and Qualifications

The requirement to gain specific qualifications to move into the Offshore wind industry is very dependent on the desired role. There are opportunities within the industry that do not require any specific qualifications. For example, roles such as business development and logistics require the soft skills you have developed from your time in the Armed Forces, such as management and organisational ability, rather than technical qualifications.

In contrast, there is a requirement to gain specific qualifications to move into a technical role such as a Wind Turbine Technician. Many technical roles require electrical training and qualifications of some kind. However, qualifications needed may be offset depending on your background and the qualifications you may have gained already while serving in the Armed Forces.

Offshore wind is an emerging industry around the world. This means that global training standards are emerging. So you can often take technical qualifications gained from one country to use in another country in the world.

GWO Basic Safety Training

People who work offshore on a wind farm **require** a valid Global Wind Organisation (GWO) Basic Safety Training (BST) certificate. The GWO BST is divided down into 6 modules:

- First Aid
- Manual Handling
- Fire Awareness
- Working at Heights
- Working at Heights & Manual Handling combined (can be taken instead of individual modules)
- Sea Survival

There are many training providers of this course, and they will all be very happy to take your money (or funding) and get you booked into a course. (see 'Training Providers' in Appendix 5.) Service leavers and veterans are encouraged to shop around and establish carefully the alternatives on offer at the time.

GWO BST training enables participants to support and care for themselves and others working in the industry by possessing the knowledge and skills required to work in the offshore environment. Some will say that obtaining this qualification acts as a '*passport*' to working offshore. However, it is important to say that having the GWO BST does not guarantee being given a job. So it is more accurate to say that the certificate is a '**requirement**', and not a '**passport**' for working offshore. (see also 'A tricky bit to explain' below)

Other Technical Training Courses

Getting technical training courses 'under your belt' could make you more employable, but does not guarantee that you will get a job.

GWO BTT – Basic Technical Training

This was introduced a few years ago to standardise the industry so that everybody new to the industry will receive the same basic technical training regardless of who they work for. It has different modules and covers electrical, mechanical and hydraulic training along with safety, and safe working practices specific to the wind industry.

IRATA Rope Access Level 1

This training will only be required if you wish to venture into the blade repair sector of the industry. The main rope access work involved is tower cleaning and painting, and blade inspection and repair.

Blade Repair

This training is specifically for people wanting to get into blade repairs, and is required in that specialised role. Some employers would put you through this training at their expense, if this is what is required of an employee.

CSCS – Construction Skills Certification Scheme

The CSCS card is provided for workers in the construction industry generally, although there are affiliated cards that cover different trades. CSCS cards provide proof that individuals working on construction sites have the appropriate training and qualifications for the job they do on site.

Funding of Training

This section aims to discuss funding options for qualifications which are required for certain roles within the Offshore wind industry. Due to the huge scope of the sector the list is non-exhaustive and provides just a few examples.

In Appendix 1, there are case studies written by veterans who now work in the industry.

Enhanced Learning Credits (ELCs)

Certain qualifications can be funded (or partially funded) under the Enhanced Learning Credits scheme run by ELCAS (Enhanced Learning Credits Administration Service). There is a limit to what providers and courses are available through ELC scheme funding. This is because (under MOD rules), the training provider must be registered with ELCAS, and training courses must conform to at least a level 3 standard.

So, for example, there are many types of electrical courses which could be taken with the use of ELCs. Those considering how best to use ELCs may want to look at City and Guilds courses and qualifications as being a worthwhile use of the credits. City and Guilds courses can also give UCAS points if you are wanting to go on later to Higher Education such as a degree course.

Individual Resettlement Training Costs (IRTC) and Standard Learning Credits (SLC)

IRTC grant is available to service leavers with 6 or more years service. It is also available to those who are medically discharged. IRTC funding is up to £534. SLC is available upto £175 per year.

See <https://www.ctp.org.uk/allowances-grants> for the official information.

Employer Funded

There are many examples where employers have hired veterans and paid for them to complete the requisite courses. Most employers are willing to fund the safety training such as BST if the candidate can demonstrate they have suitable technical, or job required skills/experience i.e. there are rarely candidates without competency gaps. However, this can depend on the type of employer, the job market at the time, and demand for the role.

Grant Funded

There are many fantastic charities and organisations that offer employment support to veterans. Some offer financial support which can be used to help fund courses, such as the Royal British Legion Employment Grant, or Armed Forces benevolent fund charities. (ABF, RAFBF, RNRMC)

Self-Funded

You may be able to financially support your own training courses, recognising that a short-term investment may open the door to a rapidly expanding industry, and pay dividends in the long term when you consider potential earnings. Whichever route you take, it is likely that you will have to contribute at least a proportion of training costs from your own resources towards training courses.

A tricky bit to explain!

At the time of writing, unfortunately, there is no Extended Learning Credit (ELC) funding support for the Global Wind Organisation (GWO) Basic Safety Training (BST) and Basic Technical Training (BTT) courses, because these courses do not conform to the requirement for ELC funding which is that any courses should lead to at least a level 3 qualification.

This is a slightly complex issue and a matter of controversy.

- Large offshore wind companies will say that all new employees will be taken through a GWO BST course anyway to obtain certification if they need it, funded by the employer companies. Therefore, there is *no point* using ELCs to fund this basic safety training; rather it is *better* to use ELCs to fund something more significant like electrical training and qualifications. Smaller companies in the Offshore wind industry - typically those in the supply chain and service companies and contracting organisations - will say that the GWO BST qualification acts as a 'passport' to the industry, and applicants need the 'passport' to be ready for work. It therefore improves the chances of service leavers getting a job if they have the GWO BST qualification 'in their pocket' when they apply for jobs. Therefore, the GWO BST course *should* be funded by ELCs.
- Some representations have been made to MoD (ELCAS comes under auspices of MoD) to allow GWO BST training courses to come within the exemptions such that they do qualify for ELCs funding. At the time of writing, there is no change, and the situation remains as stated at the beginning of this section.
- The matter is made a little more complex by some training organisations bolting on some aspects of technical training and/or employability training and/or skills training to the GWO BST to make a longer composite course, and thereby making it into a level 3 qualification, which then does qualify for ELC funding support. Service leavers may want to think carefully about what gives better value between using ELCs on these composite courses as against other options – for example, City and Guilds (or other) electrical courses.

7. What next?

There are many veterans who are employed in the Offshore wind industry, and a multitude of different routes by which they have got there! One of the challenges of writing this information resource is that there is no singular direction to point you in which gives you a clear pathway through to the industry.

What you as a service leaver or veteran needs to consider

- What skills and attributes have you already acquired during your military career?
- What job would you like to do in your second career?
- Are there geographical constraints as to where you want to be working?
- Are there any education or skills gaps that can be addressed by training or courses?
- How will training be funded? Is it possible to use the Careers Transition Partnership (CTP) to help you? What would be the best use of ELC scheme to fund any training? Are there other sources of help towards training?



The primary soft skills of any forces leaver are quality of character, work ethic, temperament and flexibility. These should be what makes you an asset to any organization. It is the day-to-day mechanics of each job which can be learned, for which training and experience each play their part.

What can I do now?

- Get your CV written. Allow others to review it and make suggestions. Think through how to express your experience and training in the armed forces, such that someone in the Offshore wind industry will understand what you bring to their organisation.
- Register on LinkedIn, and/or update your LinkedIn profile.
- Use LinkedIn to make connections. Join the group 'Military in the Offshore wind industry' <https://www.linkedin.com/groups/13791998/>
- Start to speak with people. Establish contact with anyone you know who is already working in the industry. Reach out to names you hear of people who are employed in offshore wind or know something about the industry. Especially if they are also ex-armed forces.
- Use a web browser to link to resources available which are listed in Appendix 4. There is heaps of information available.
- Start applying for roles which are advertised.

Some Top Tips

- Network, network, network. Use those who can help. Go and talk with (and listen to) people.
- Make the most of resettlement opportunities. Use resettlement courses.
- Responsibility lies with self. But lots of people will help you. Asking for help is not a sign of weakness
- Be persistent in your efforts. Determination and persistence will pay off eventually.

Into the future

Mission Renewable want to build up a portfolio of people who have transitioned from the armed forces into the Offshore wind industry. If you are already in the industry, please do get in touch with us – we would like to hear your story. When you become successful in finding employment in the Offshore wind industry, likewise we would like to hear from you, to hear your story, to learn tips and tricks from you, so that we can, in turn, help others; and encourage you to help those who are following behind you.

We hope that this information source has helped to give you a stepping stone into the Offshore wind industry. We wish you every success in your future career.

Appendix 1 - Veterans in Offshore Wind

Dom Butler – Wind Turbine Technician @ Boston Energy



Background

I was a Royal Marine from 2005 until 2015, I did three tours of Afghanistan and rose to the exultant rank of Corporal during my time. I'm very pleased that I joined the corps, it was an excellent job, and it gave me a considerable amount of confidence and life experience. But after ten years of almost constant war fighting, I felt that a more balanced lifestyle, a career with options that don't rely on brute strength, and a chance to focus on my education was the best path for me to proceed. So, I went to university to do a degree in Mechanical Engineering at the University of Hull. It was a five-year course; Foundation Year, three-year Bachelor's degree, and a one-year Master's degree. I took it pretty seriously and my approach was somewhat goal focused. I learned from my early mistakes and made sure that each assignment was the best I could do and my preparation for exams was structured. It paid off and I achieved a First with Honours.

What attracted me to Offshore wind?

I wanted to find a job where there was an element of physicality, where I could learn the realities of fixing and maintaining a complex mechanism, and where I could work on a shift basis where I would do a block of work, followed by a block of time off. My intention was always to work in the 'renewables' sector and I wasn't particularly fussed as to which one (hydro, geothermal, solar, nuclear) – just so long as my skills were compatible. In my final year of university, I did an Offshore wind energy module which had been co-authored by Siemens Gamesa (one of the larger turbine manufacturers) and taught by Prof Jim Gilbert who is one of the leading researchers and experts in Wind Energy theory & control circuits. This really exposed me to all the different areas of the wind industry and the infrastructure that needs to be built to support it. The projected growth of the sector, the technological advancements both in the pipeline and expected in the future all made it very appealing.

Whilst my degree got me in the door for the interview, my job does not require a mechanical engineering degree. Experience with either mechanisms, electrical systems, or some qualifications in either is all that you need in order to be able to put yourself into a position to apply.

I utilized my Enhanced Learning Credits (ELCs) to their full capacity by using them to pay for my university tuition fees. But had I not gone down this route, I would have used them to pay for some City & Guilds accredited electrical and mechanical courses plus perhaps a project management course.

My Current Role

My current role is as a Level 4 Technician for 3.2KV Siemens Gamesa Offshore wind Turbines. I completed my field training over the summer of 2021 at the London Array Wind Farm which has a control centre in Ramsgate, Kent. I live in Hull and commute to Ramsgate for each 2-week shift and my employer pays for a holiday rental for me to stay in close to the control center.

What I found once I started as a technician is that most of the job as a soldier is compatible with most of the job as a technician. The primary requirement for a technician is to be able to get yourself from the harbour pontoon to the nacelle of a wind turbine and be in a serviceable condition ready to do a task. It's early starts and long days but being able to administer yourself and keep nice and comfortable throughout the day is what you need in order to be able to finish the day in a good state, go home and prepare for the following morning. The simple things matter - like making sure your admin is squared away, your backpack has everything you need, you've got a decent packed lunch, a hot drink in a thermos, and all of your tools and protective equipment are to hand.

What surprised me most about the Offshore wind industry is how nice everybody is. With long days and sometimes rough seas, I was expecting many of the workers to be a bit gruff like in oil & gas or a building site. But what I have experienced is that everyone is very talkative, they like to get to know new people and, on a daily basis, seem to take an interest in each other's lives and are all generally of high calibre. Of course, there is banter and plenty of chat on the sea transits to the farm, but all good natured and inclusive.

The Future

Given that the offshore wind sector is expected to expand over the next 30 years both around the UK and globally, my short-term aspiration is to build up my knowledge base and become a level 5 technician (which is the civvi equivalent of a section commander in the RM). My ultimate career aspiration is to become what is called a Site Lead which is the equivalent of Troop Sergeant. During that journey my hope is to also be able to work overseas and pick up experience that way as well as at various sites around the UK.

My main advice for someone that's in their resettlement period and is looking at going into the Offshore wind industry is to not be too nervous about putting yourself forward. I would estimate that you already have 60% of the skills that are required to do the job. If you add some electrical or mechanical qualifications (or experience) that's another 20%, so the only thing left to acquire is the remaining 20% of hands-on experience. So, your CV and LinkedIn profile should reflect the fact that you have 60%-80% of the skills that wind farms are looking for, plus a proven work ethic and ability to work in teams.

Appendix 2 - Interview questions

Possible interview questions have been included here as a tool to help you think through how you might answer in an interview or informal conversation.

What was your background in the Forces?

When did you leave?

Why did you decide to leave?

Why did you leave at that point?

What attracted you to Offshore wind?

Did you consider any other industries?

What is your current role?

How did you progress to this role?

Where are you located? How flexible is this?

What were/are your most transferrable skills?

What qualifications did you gain while serving?

Why did you choose these qualifications and how useful were they?

Did you use ELCs or any other funding for courses?

What has surprised you the most (so far) about the Offshore wind industry?

What have you found similar to the Armed Forces? What do you think will be different to the Armed Forces?

What are your aspirations in your career?

What do you see for the future of the Offshore wind industry in the UK and internationally?

Some of the questions below are more in the style of what you might want to ask yourself, or questions you could ask those already in the industry.

What roles or functions within Offshore wind could I consider as a Service Leaver?

How can I best utilise my notice period to prepare for a role in Offshore wind?

What is job security like in Offshore wind?

Do I have geographical constraints on where I will a) live and b) work?

How transferrable will be any new skills and qualifications gained – for example, to another area of energy?

What advice would you give to a service person in the process of resettlement (specific to moving into Offshore wind)?

Appendix 3 - Illustrations

The following illustrations are here to give a flavour of the different aspects of Offshore Wind.

There are thousands of images available on the internet. See also links to films in Appendix 4.

From the factories and pre-assembly depots:



Siemens Gamesa's offshore wind blade factory in Hull, England is to be expanded by more than 41,000 square meters; it remains the largest offshore wind manufacturing facility in the UK. 200 new direct jobs are due to be added in 2022-2023.

GE Renewable Energy plans to open new offshore wind blade manufacturing plant in Teesside, England. It is due to start production in 2023, creating up to 750 direct renewable energy jobs and close to 1,500 indirect jobs in the area.

Vestas have a blade manufacturing plant in the Isle of Wight.

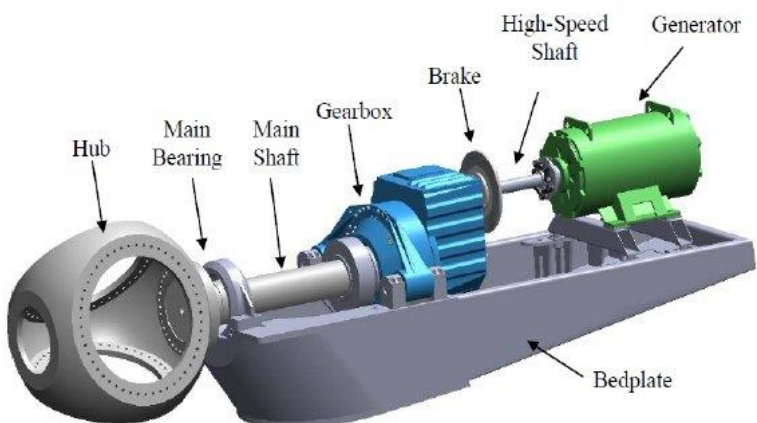
Strathclyde University has recently announced plans to develop a blade recycling centre.

... to blade repair and maintenance:





Operations and maintenance is undertaken by different organisations.
For example: Worley, Boston Energy



Just like a vehicle, the components within the nacelle of a wind turbine require regular inspections, oil & filter changes, component replacements and general maintenance.

Every area of the windfarm requires people to manage, operate, and maintain it.



Heavy jack-up vessels require sea farers and deck crew to safely assemble and install new turbines.



Appendix 4 - Other Resources

A listing of resources to read and view

Mission Renewable is an Armed Forces engagement initiative for the UK Renewable Sector.

<https://www.missionrenewable.org/>

OWIC Military Working Group

<https://www.owic.org.uk/military>

Renewable UK is the UK's leading not for profit renewable energy trade association

<https://www.renewableuk.com/>

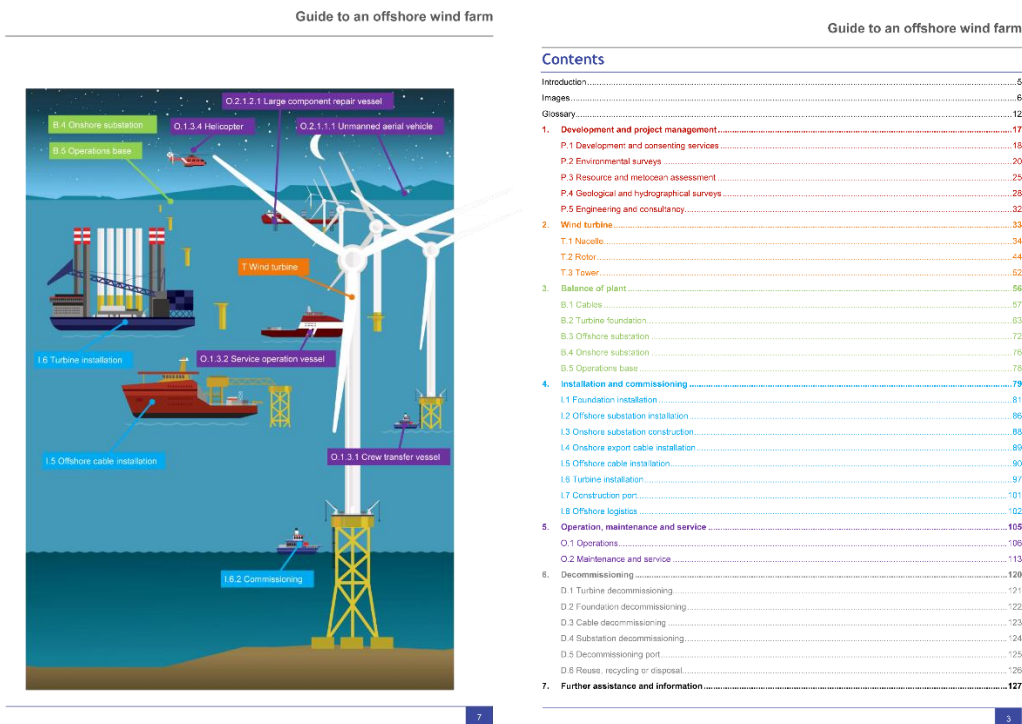
LinkedIn – Military in the Offshore Wind Sector Group

<https://www.linkedin.com/groups/13791998/>

Crown Estate 'Guide to an offshore wind farm'

<https://www.thecrownestate.co.uk/media/2861/guide-to-offshore-wind-farm-2019.pdf>

In 2019 the Crown Estate published an updated 'how to guide' for the planning, design, construction, maintenance & operation, and decommissioning of an offshore wind farm in UK waters. It is written in plain English and can be read and understood by someone with no previous education on the subject and no specialist knowledge. It can be used by someone who is interested in learning more about what a wind farm is, how one would go about building one, and the skills and trades required to become a useful member of the project. Therefore, in preparation for any interviews, or in composing a CV and cover letter for a job application, it is recommended that a service leaver has a read through the download in order to familiarise themselves with the bigger picture. It does not have to be read from front to back; simply dip in and out of the areas that are of interest and slowly build up the knowledge base.



Job Roles in Offshore Wind

Published by Green Port Hull and BVG Associates

<https://greenporthull.co.uk/business-support-job-seekers/help-for-job-seekers/job-roles-in-offshore-wind>

Offshore Wind Sector Deal

<https://www.owic.org.uk/osw-sector-deal>

Also, there is a 6 minute video about the Offshore wind sector deal, from 2019

Celia Anderson – People & Skills Directory – Renewable UK being interviewed

Follow link further down page at <https://www.owic.org.uk/people-skills>

OWIC Training Courses

These publically available web based training courses released in 2022 are available for everyone who is new to the Offshore wind industry. They are provided by OWIC under the banner of 'Pathways to Growth' (P2G)

<https://www.owic.org.uk/p2g-learn-osw-consenting>

Careers Sitrep with Alistair Halliday and guests – 22nd April 2022

Event by RFEA - The Forces Employment Charity. 60 minute discussion.

<https://www.linkedin.com/video/event/urn:li:ugcPost:6922110096927858688/>

First 30 minutes is about transition generically including the transition and translation of skills.

Second 30 minutes is more specifically about the renewable energy sector.

Energi Coast Film 2020 and Energi Coast Film 2021

Two nice little video introductions to offshore wind off the north east coast of England, with some great panoramic video shots. The 2021 production was made during lockdown.

<https://player.vimeo.com/video/478491440>

<https://www.youtube.com/watch?v=bxqUNtrg3mg&t=32s>

Offshore wind power – how it all comes together at sea

Siemens information film about installation of a wind power plant at sea. 4 minutes long and they make it look so easy!

<https://www.youtube.com/watch?v=zUQifpcGTrg>

Full story of Hywind Scotland – world's first floating wind farm

Fascinating 9 minute film about floating wind farm. It's a new technology and coming fast.

<https://www.youtube.com/watch?v=PUIfvXaISvc>

Indeed Career Guide – How to become a Wind Turbine Technician

<https://uk.indeed.com/career-advice/finding-a-job/how-to-become-wind-turbine-technician>

Indeed Career Guide – 8 Renewable Energy Careers

<https://uk.indeed.com/career-advice/finding-a-job/renewable-energy-careers>

More General Information websites

Career Transition Partnership (CTP) – Allowance and grants

<https://www.ctp.org.uk/allowances-grants>

Career Transition Partnership (CTP) Events

<https://www.ctp.org.uk/events>

Tri-service resettlement manual (JSP534)

<https://www.gov.uk/government/publications/tri-service-resettlement-manual-jsp-534>

We are not suggesting you read this, but the reference is here in case you need to get into the weeds of what you are entitled to as a service leaver!

National Transition Event

Organised by Mission Motorsport and Mission Renewable.

Starting in 2022, there were renewable energy employers at this event

<https://www.nationaltransitionevent.com/>

City & Guilds Training

<https://www.cityandguilds.com/what-we-offer>

Other Websites

These can provide a more industry focused insight into what is going on.

Offshore Wind Business News

<https://www.offshorewind.biz/>

Renewable Energy News

<https://renews.biz/offshore-wind/>

Offshore Wind Energy specific news

<https://renews.biz/offshore-wind/>

Greenhouse Communications – Green PR agency

<https://www.greenhouse.agency/>

Appendix 5 - Organisations and Terms to search for

Operators/developers

- Orsted
- Equinor
- Vattenfall
- RWE
- ScottishPower Renewables
- EDF Renewables
- SSE

New entrants

- BP
- Shell
- TotalEnergies
- Aker Offshore Wind

Manufacturers

- Siemens Gamesa
- Vestas
- Global Energy Group (GE)

Construction & fabrication

- DEME
- Babcock
- Balfour Beattie
- Smulders

Contractors

- James Fisher Renewables (EDS HV & Rotos 360)
- Worley
- CWind

Marine

- Boskalis
- Seajacks
- ROVCo

Consultancies

- BVG
- Opergy
- OWC
- Fugro

Staffing for Other Companies

- Boston Energy
- Global Wind Service
- LSP Renewables
- Correll Group
- James Fisher Renewables (EDS HV & Rotos 360)
- RES Group
- Skyform Wind
- Windhoist

Private Training Providers

- AIS Survivex
- Maersk Training
- Relyon Nutec
- OPS Training (Offshore Painting Services)
- CWind

Significant others

- Offshore Renewable Energy Catapult
- Global Wind Organisation (GWO)
- G plus Health and Safety Organisation
- Education & academia
- Statutory Nature Conservancy Bodies & Regulators - e.g. Marine Management Organisation, Natural Resources Wales, Maritime Coastguard Agency
- Trade associations/cluster bodies - e.g. RenewableUK, OWIC, NOF Energy, OWGP
- Regional cluster bodies – e.g. EEEGR, DeepWind, AREG, Forth & Tay Cluster

Intern/apprentice roles to search for:

- | | |
|----------------------------------|----------------------------|
| • Buyer | • Portfolio & Transactions |
| • Engineer | • Procurement Intern |
| • ICT Services Technician | • Public Affairs Intern |
| • Internship - MEECE | • ROV Pilot |
| • Logistics Controller | • Service Centre Trainee |
| • Market Analyst | • Shipping Controller |
| • Market Researcher | • Ships Agent |
| • Offshore Supervisor AT Trainee | • Stores person |
| • Operations Support Placement | • Survey Technician |
| • Policy Intern | • Surveyor |

Please note:

The names of most of the organisations involved in the Offshore wind industry are not ‘household names’. The ownership and governance structures of companies and organisations in the industry is rapidly changing, and inter-relationships can be quite complex. Typically, a new enterprise (e.g. a wind farm) will be a partnership of existing enterprises. Also names can appear, change and disappear. Hence the listings above should not be regarded as definitive. Also the categorisation of names into sub-headings is not definitive.

Appendix 6 - Sources Used

Future energy demand and supply:

<https://www.open.edu/openlearn/ocw/mod/oucontent/view.php?printable=1&id=2405>

Renewable Energy: Power for a Sustainable Future 4th Ed., Stephen Peake, Oxford University Press, 2018 – Fig 1.7

Energy Trends: UK electricity

Source: Ofgem

<https://www.gov.uk/government/statistics/electricity-section-5-energy-trends>

By Pahazzard - Own workchart showing renewable installed capacity in the United Kingdom, CC BY-SA 3.0, 2018. <https://commons.wikimedia.org/w/index.php?curid=18840882>

Wind Power – a helpful introduction

<http://www.energybc.ca/wind.html>

Wenbin Dong, Yihan Xing, Torgeir Moan, Time Domain Modeling and Analysis of Dynamic Gear Contact Force in a Wind Turbine Gearbox with Respect to Fatigue Assessment, Energies 5(11), 2012

Crown Estate – On the seabed and coast

<https://www.thecrownestate.co.uk/en-gb/what-we-do/on-the-seabed/>

Crown Estate – About the Offshore Wind Map

<https://www.thecrownestate.co.uk/en-gb/what-we-do/offshore-wind-map-how-does-the-map-work/>

Crown Estate Scotland – ScotWind project

<https://www.crownestatescotland.com/our-projects/scotwind>

Appendix 7 - List of Acronyms (Mission Renewable)

Acronym	Meaning
AED	Automatic external defibrillator (context: first aid and safety)
AFC	Armed Forces Covenant
AUV	Autonomous underwater vehicle
BEIS	Business, Energy, and Industrial Strategy (UK Government department)
BOEM	Bureau of Offshore Energy Management (USA)
BOSIET	Basic Offshore Safety Induction and Emergency Training (O&G industry)
BST	Basic Safety Training (GWO standard) [First Aid, Fire Awareness, Manual Handling & Working at Heights, Sea Survival]
BTT	Basic Technical Training (GWO standard) [Hydraulic, Mechanical & Electrical]
CfD	Contract(s) for Difference (CfD3 – 2019; CfD4 – 2022)
CIC	Community Interest Company
CCC	Climate Change Committee
Cobseo	Confederation of Service Charities (used to be “COBSEO”)
COP	Conference of the Parties (e.g. COP1 in 1995, COP26 in 2021 in Glasgow)
CSCS	Construction Skills Certification Scheme
CTP	Career Transition Partnership
CTV	Crew Transfer Vehicles
DECC	Department for Energy and Climate Change (old name for BEIS)
DRM	Defence Relationship Management
ECITB	Engineering Construction Industry Training Board
ED&I	Equality, Diversity, and Inclusion
EEEGR	East of England Energy Group
EIC	Environmental Impact Assessment
ELC	Enhanced Learning Credit
ELCAS	Enhanced Learning Credits Administration Services
EPD	Environmental Product Declaration
ESC	Electricity Settlements Company (wholly owned by govt to manage CfDs)

ESP	Energy Skills Partnership
FID	Final Investment Decision
GEAA	Geothermal Energy Advancement Association
GHG	Greenhouse Gas (what we are wanting to get rid of)
GOW	Global Offshore Wind (Exhibition)
GW	Gigawatt (1000 Megawatts)
GWO	Global Wind Organisation
H ₂	Hydrogen
HV	High Voltage
HVCs	High Value Campaigns
IEA	International Energy Agency
IFATE	Institute for Apprenticeships and Technical Education
IMCA	International Marine Contractors Association
IMRP	Intermittent Market Reference Price
IPCC	UN Intergovernmental Panel on Climate Change
LCCC	Low Carbon Contracts Company (wholly owned by government)
LCoE	Levelised Cost of Energy
LEP	Local Enterprise Partnership
MEECE	Marine Energy Engineering Centre of Excellence
MH	Manual Handling
MW	Megawatt
NOF	A business development organisation which works for members; Durham
O&G	Oil and Gas
O&M	Operations and Maintenance
OMWG	Offshore Military Working Group (sub group within OWIC / RenewableUK)
OPITO	Offshore Petroleum Industry Training Organisation (note: petroleum!)
ORE	Offshore Renewable Energy
OSW	Offshore Wind
OWIC	Offshore Wind Industry Council

OWGP	Offshore Wind Growth Partnership
OWIH TAG	Offshore Wind Innovation Hub Technical Advisory group
PV	Photovoltaic
RD&D	Research, Development and Demonstration
REA	Renewable Energy Association
RMT	National Union of Rail, Maritime and Transport workers
ROV	Remotely operated (underwater) vehicle
RTN	Renewables Training Network
RUKGOW21	Renewable UK Global Offshore Wind 2021 (exhibition) [22 for 2022 etc.]
SAP	Senior Authorised Persons
SCADA	Supervisory Control and Data Acquisition
SHEQ	Safety, Health, Environment and Quality
SL/V	Service Leaver / Veteran
SOV	Service Operation Vessel
STEM	Science, Technology, Engineering, Mathematics
TESRR	Training, Education, Skills, Recruiting and Resettlement
THMA	Team Humber Marine Alliance
WAH	Working at Height
WTG	Wind Turbine Generator
WTI	Wind Turbine Instructor
WTOI	Wind Turbine Operator Instructor
WTSR	Wind Turbine Safety Rules

Notes

This listing is designed to help decode acronyms wherever they may appear.

They will be useful as you navigate websites, read information, and understand job opportunities.

This list does not imply an encouragement to use acronyms!

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OFFSHORE WIND SECTOR GUIDE

