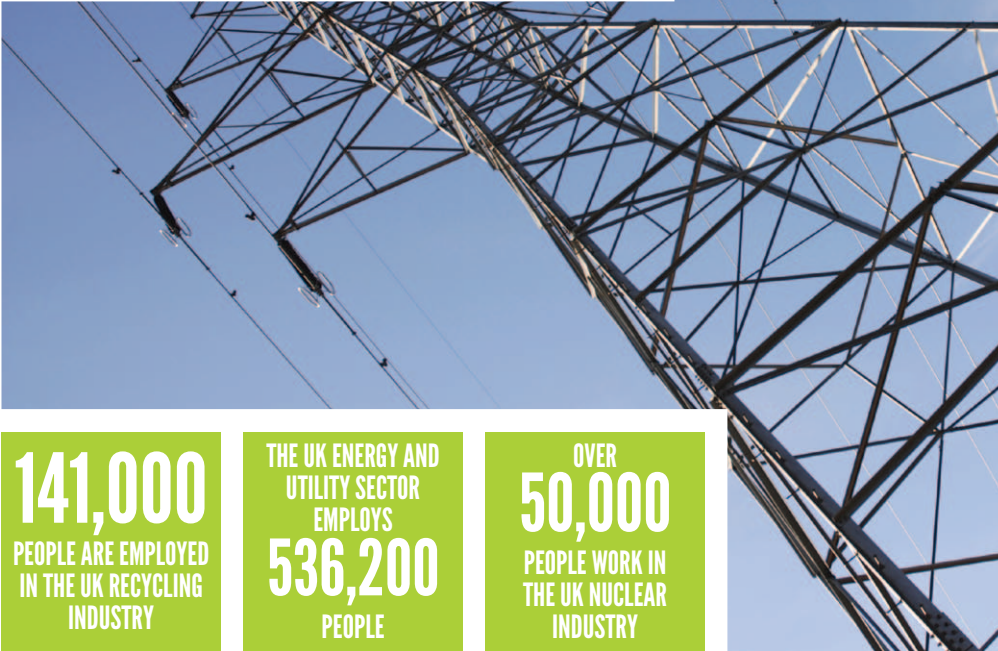


# Energy & Renewables



**141,000**  
PEOPLE ARE EMPLOYED  
IN THE UK RECYCLING  
INDUSTRY

THE UK ENERGY AND  
UTILITY SECTOR  
EMPLOYS  
**536,200**  
PEOPLE

OVER  
**50,000**  
PEOPLE WORK IN  
THE UK NUCLEAR  
INDUSTRY

**Saving the world; it's a term that's thrown around a lot these days, but this is the sector which is dedicated to doing just that. You don't have to dress like Superman (you can if you want but let's face it, you'll look ridiculous) because this is about working with renewable sources of power, such as wind turbines and solar panels. We'll be relying more and more on these resources as our fossil fuel supplies diminish, so now is the time to get involved!**

## You ask us...

### WHAT'S THE ENERGY & RENEWABLES SECTOR ALL ABOUT?

Fossil fuels are so yesterday man. They damage the environment and are now in short supply. Thankfully, new energy sources such as solar power, wind turbines and hydroelectric energy generators mean we can produce electricity without putting holes in our atmosphere. This sector employs people to not only maintain and design new forms of these systems, but also to fit such technologies in people's homes and explain to customers what it's all about.

### WHAT KIND OF SALARY CAN I EXPECT TO EARN?

Because this sector is very specialised and requires very technical training, you'll be paid a fairly high salary; **£22,000** is the average starting salary and this can rise depending on which sector in the industry you work in. Some of the earlier roles also have commission on top of the basic salary, so if you are competitive and work hard, you could earn a lot of money.

### WHAT KIND OF ENVIRONMENT WOULD I BE WORKING IN?

This is very much determined by the sector you choose. Hydroelectric operatives will be working on lakes or by the sea, solar panel fitters might be working on houses and you could even find yourself working in a nuclear plant with high tech machinery. Just like Homer Simpson (handy if you like donuts...).

### HOW DOES THIS SECTOR COMPARE TO OTHERS ACROSS THE COUNTRY?

More than **50,000** people work in the nuclear sector alone and that number is growing by the year. **89%** of the workforce is full time, while solar panelling sales are up by **50%** this year alone.

### WHERE IS THE WORK MOST CONCENTRATED?

Well, if you can go ten miles in any direction and not see a wind turbine, then you're either really short sighted or on the wrong planet. Renewable energy resources are springing up all over the country; the major production factories are on the outskirts of towns and cities, with nuclear plants spread across the country. Offshore oil rigs are also found out in the North Sea, around both England and Scotland.



## Careers Choices

The renewable energy sector is growing at pace; with less reliance on fossil fuels, the country needs to find alternative ways to generate power. Wind turbines, hydroelectric generators, solar panels and nuclear power are all being used to provide electricity to the national grid. While generally more expensive, renewable energy is better for the environment and is easier to run than your average coal fuelled power station. You'll surely have noticed the sudden rise in wind turbines; there are over 2300 dotted about our land, with a further 3000 commissioned for building in the near future.

### NUCLEAR TECHNICIAN

Nuclear power, while controversial, is a resource that provides the UK with around 17% of its total electricity. As you can imagine, safety is a top priority so you'll be responsible not just for the people in the plant, but also the surrounding country and even other parts of the world. Nuclear Technicians look after the generators, test new technology, make repairs and upgrade old equipment. The salaries in this sector are pretty high, due to the complex nature of the job. Salaries start at just under **£20,000**, but can easily exceed **£48,000** with full training and experience.

### LABORATORY TECHNICIAN

Lab Technicians work with complex chemicals to produce products we use in everyday life, such as petrol and perfume. These products are tested many times in various environments and situations before finally being passed fit for mass production. Salaries start at **£13,500**, but highly skilled technical staff or those in managerial roles can easily earn in excess of **£40,000**.

### OIL & GAS MAINTENANCE

Offshore oil rigs and ships require constant care and maintenance to ensure safety is kept to a maximum. This is no easy task, but it means that everybody working around you is able to fulfil their role knowing that nothing is going to explode or catch fire. Apprentice salaries are around **£15,000**, but you will earn more if you are based offshore.

### NETWORK OFFICER

You will have seen the pylons dotted across our landscape; these form the national grid, which is responsible for carrying power from the generators all the way to people's homes. As a Network Officer, you'll be in charge (no pun intended) of maintaining the grid and making sure there are no faults anywhere down the line. Starting salaries are usually around **£12,500** for Apprentices, but this quickly rises with training and qualifications.

### ELECTRICAL GENERATION WORKER

This involves harnessing the energy created by the different sources and turning it into useable electricity. This

process requires all sorts of complicated machinery, so it will come as no surprise that it's a highly skilled trade. Apprentices can expect to earn a starting salary of **£12,000**, rising to **£18,000** when qualified.

### RECYCLING OPERATIVE

Do you have a can do attitude? Okay, that was terrible, but working in recycling not only helps keep our Earth clean it provides reusable resources. Metals, glass, paper and plastic can all be reused to save money and other resources and the UK government have introduced better schemes to make recycling easier for households. Salaries start at around **£17,000** a year and rise with experience.

## Where to begin

### APPRENTICESHIPS

If you are aged 16 and over you could enter an Apprenticeship, which would teach you the skills you need while you work and earn a salary. You'll spend half your time in the classroom and half out on the job. Listed below are the apprenticeship

frameworks for this sector, which when completed will give you a Level 2 qualification in the form of a BTEC, Diploma or NVQ:

**Nuclear Working • The Power Industry • Laboratory and Science Technician • Sustainable Resource Management • The Water Industry**

### ADVANCED APPRENTICESHIPS

These are the equivalent to A-Levels and can usually be joined after completing the associated Intermediate Apprenticeship. They are ideal for people who want a practical role as they learn while gaining valuable employment experience. People with Advanced Apprenticeships tend to progress up the ladder a lot quicker than those without, as the skills they learn are more suited to management and supervisory roles. Here are some of the Apprenticeship Frameworks for this sector and all of these will result in a Level 3 qualification such as a BTEC, a Diploma or an NVQ.

**The Power Industry • Energy Assessment and Advice • Building Energy Management Systems • The Water Industry • Laboratory and Science Technician**

### A-LEVELS

A-Levels are the most popular gateway into university and are sought after by employers. Here are some of the relevant A-Levels for this sector: **Biology • Chemistry • Physics • Maths**

### FOUNDATION DEGREES

A Foundation Degree combines university lifestyle with practical, hands on work. It's sort of like a cross between an Apprenticeship and an Honours Degree. They are often used as gateway qualifications to a full time Degree as they count towards the first two years of an Honours Degree. They usually take two years to complete and you'll be both in the work place and on the university campus. There are a wide range of Foundation Degrees available for this sector, such as **Power Distribution and Sub-Sea Engineering**.

### COLLEGE COURSES

A college course is another way to get into this sector. For more information, check out [www.careersworld.co.uk](http://www.careersworld.co.uk). **CW**