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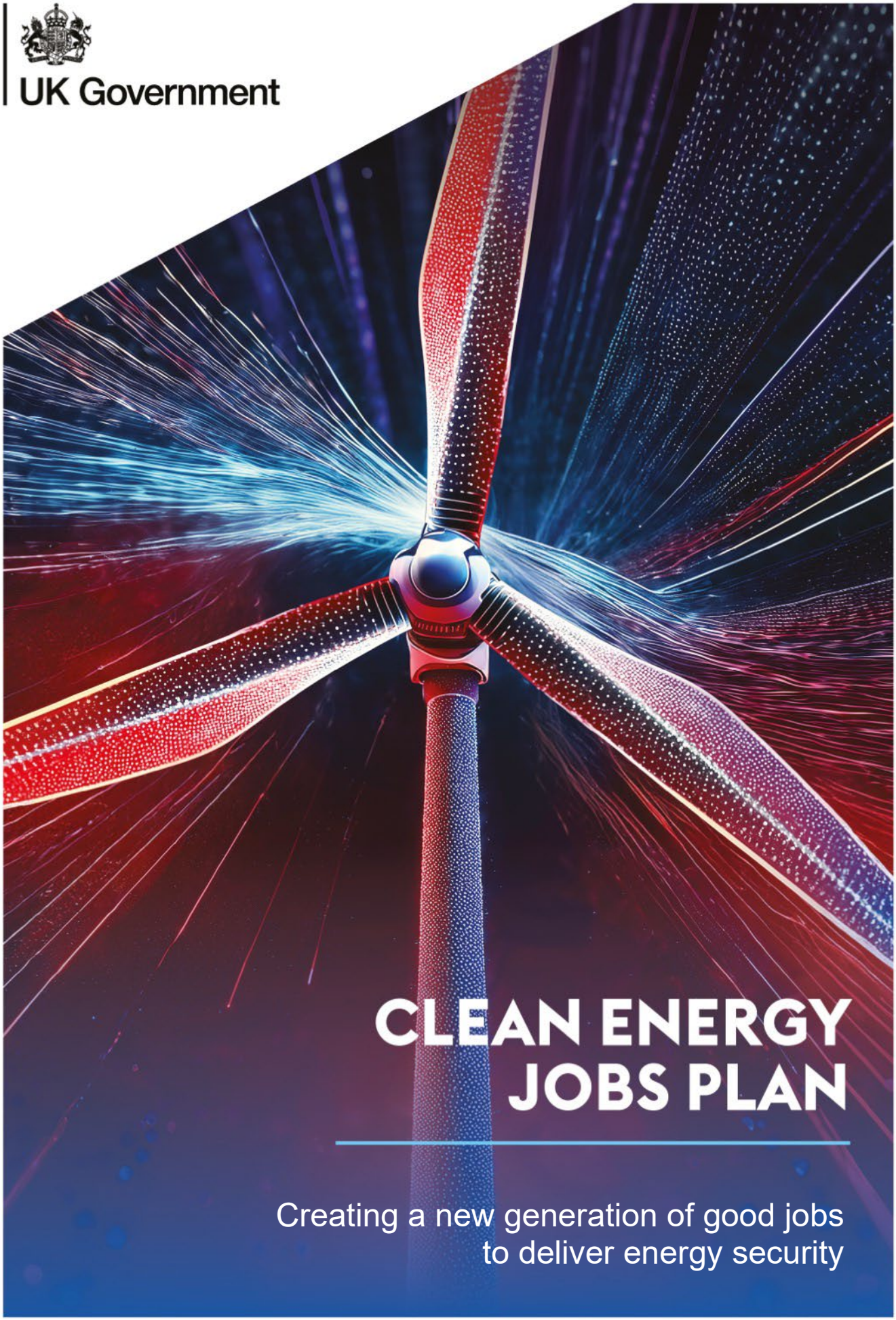

# CLEAN ENERGY JOBS PLAN

Creating a new generation of good jobs
to deliver energy security

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# Ministerial foreword

Britain's drive to homegrown, clean energy is creating a new generation of good jobs around the country. Whether it's building wind farms in the North Sea and the Irish Sea, delivering new nuclear from Suffolk to Somerset, harnessing tidal power off the coast of Wales, or pioneering carbon capture from Teesside to Aberdeen, the UK's clean energy industries are booming.

Our approach is working: the action we have taken has already delivered more than £50 billion of clean energy investment announcements since July 2024. This represents the biggest investment in homegrown clean energy in the UK's history and is allowing us to take back control from petrostates and dictators and bring down bills for good. But our mission to make Britain a clean energy superpower isn't just about energy security. It is the best opportunity we've had in a generation to deliver economic security for workers and their communities—creating hundreds of thousands of secure, well-paid jobs with strong trade unions, as we roll out clean energy infrastructure, upgrade millions of homes, and build our domestic supply chains.

Thanks to the clarity and ambition of our Clean Energy Superpower Mission, the number of jobs supported by clean energy industries could almost triple in Scotland and at least double in Wales, Northern Ireland and almost every region of England, as the sector grows from around 440,000 jobs in 2023 to support 860,000 jobs across the UK by the end of the decade.

This Clean Energy Jobs Plan sets out how the government will work in partnership with industry and trade unions to help workers in all parts of the country benefit from these opportunities—supporting our existing workforce to find new opportunities, training up the next generation, and supporting our young people to get good, unionised jobs.

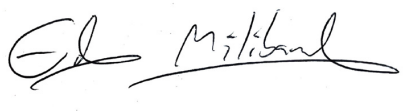
Creating good jobs means ensuring decent pay and the very best rights at work, and we are setting out a plan to do this. But it also means creating jobs that are accessible to the people who want to do them. It is not right that so many generations of young people searching for a secure and well-paid job have been forced to leave behind the place they grew up in, and the deep connections that come with it. Clean energy is the answer to this. Because where are clean energy jobs based? Everywhere. In every coastal and industrial community, in every city, every region and every nation of this country, and—crucially—in the hometowns of the next generation of workers. This plan will bring new opportunities to their doorsteps.

Britain is already powered by hundreds of thousands of skilled energy workers, and they will be a huge asset in getting ahead in the race to lead in the industries of the future. Oil and gas will play an important role for decades to come, but we know production in the North Sea is naturally declining. We have an obligation to ensure the clean energy revolution delivers for its workers and communities.

That is why this government is working with industry and unions on initiatives like our package of up to £20m to support the transition of North Sea workers; the expansion of the Energy Skills Passport; developing a fair work charter to ensure clean energy jobs are always good jobs; providing targeted support for veterans and service leavers; and launching five Clean Energy Technical Excellence Colleges to support learners to access new opportunities.

As we do so, our government is clear that trade unions are an essential part of a modern workplace. For too long, parts of the clean energy sector have been a union-free zone. I am delighted that over the last 12 months, workers have won union recognition at employers like EDF power solutions UK and Great British Energy - Nuclear, but there is much further to go—which is why we are committed to promoting union recognition and collective bargaining across the sector. This is good for workers and good for businesses, helping to improve job satisfaction, retention and productivity in the workplace.

This government is clear that the clean energy transition must deliver for the workers and communities that power it. This is our plan to not just create a new generation of skilled jobs, but to ensure these are good jobs located in every corner of this country.



**Rt Hon Ed Miliband MP**

**Secretary of State for Energy Security and Net Zero**

# Introduction

The clean energy transition is the defining economic opportunity of the twenty-first century and the UK is uniquely positioned to lead it. The government's Plan for Change set out our ambitious mission to make Britain a clean energy superpower, which will kickstart economic growth and break down the barriers to opportunity as we create a new generation of good jobs across every corner of the country to deliver energy security.

Someone is going to win the global race for the clean energy jobs of the future and we are determined that it should be the UK. The job opportunities on offer are huge, with roles available across a range of skill levels and occupations, from plumbers to production managers, engineers to electricians, and technicians to welders. This presents a significant opportunity to revitalise our industrial heartlands and ensure that our existing home-grown energy workforce can move flexibly into good clean energy roles.

Clean energy is already providing good jobs to hundreds of thousands of people across the UK. Jobs in Wind, Nuclear, and Electricity Networks all advertise average salaries of over £50,000, compared to the UK average of £37,000.[1] For young people, these jobs can offer higher levels of pay across occupations, with entry-level 'green' roles commanding a 23% average pay premium in around 60% of occupations.[2] These jobs also provide the security of a rapidly-growing sector, as new and emerging green jobs are less likely to be automated[3] and have had more resilience in demand than the wider jobs market in recent years.[4]

[1] DESNZ (2024) Assessment of the clean energy skills challenge. As of September 2024. Calculated as a 12-month rolling average, rounded to the nearest £1,000.
[2] 'Green' used in this instance as this is the categorisation used in the report: PWC (2023) Green Jobs Barometer
[3] Centre for Economic Performance, and others (2021) Are 'green' jobs good jobs?
[4] PWC (2023) Green Jobs Barometer

However, we know there is more to be done. While the clean energy workforce is growing rapidly in the UK, by around 8% and 10% per year in 2022 and 2023 respectively, other countries have far more jobs per capita.[5] For example, in 2023 Germany had almost 3 times as many renewable energy jobs per capita as the UK; Sweden and Denmark almost 4 and 5 times as many respectively.[6] Across the economy, industry investment in skills has been falling in recent years with evidence suggesting significant underinvestment in the UK compared to our European peers.[7]

The government's recent significant programme of investment in clean energy, alongside the Clean Energy Industries Sector Plan and this Jobs Plan, shows our firm commitment to ensuring Britain leads the world in the clean energy transition and creates the conditions needed for industry to accelerate investments in the skills system.

## Work to date

The Clean Energy Superpower Mission will drive investment, good jobs, and growth across the country. In the Department for Energy Security and Net Zero, we have taken immediate steps to secure more home-grown renewable energy – overturning the de facto onshore wind ban in England and kickstarting the solar rooftop revolution. We have delivered a record 127 new clean energy projects through our latest Contracts for Difference Allocation Round, and established Great British Energy, a publicly owned national champion that will ensure British taxpayers, billpayers, and communities reap the benefits of clean, secure, home-grown energy. Since July 2024 the confidence instilled by our Mission has seen the announcement of £50 billion in private investment into clean energy.[8]

We have set out our pathway to a clean power system by 2030 and the action required in the Clean Power 2030 Action Plan, in line with independent advice from the National Energy System Operator (NESO). We have also detailed how we will capture valuable clean energy supply chains in the UK through our Clean Energy Industries Sector Plan, as part of the Industrial Strategy. These ambitious plans will see hundreds of thousands of good quality jobs created across the country.

This is backed up by the most significant programme of clean energy, climate, and nature investment in British history in the most recent Spending Review, allocating £63 billion in capital funding. This includes £14.2 billion for Sizewell C in Suffolk - which will at peak construction create an estimated 10,000 jobs[9] - and £9.4 billion for Carbon Capture and

[5] ONS (2025) Low Carbon and Renewable Energy Economy, UK: 2023. Based on total (direct + indirect) FTEs.
[6] DESNZ analysis of IRENA (2024) Renewable energy and jobs: Annual review 2024
[7] Learning & Work Institute (2021) Learning at Work: employer investment in skills.
[8] See Clean Energy Jobs Plan - supplementary data.
[9] DESNZ (2025) Thousands of jobs to be created as government announces multi-billion-pound investment to build Sizewell C - GOV.UK

Storage, including development funding for Acorn in Scotland and Viking in the Humber which at peak construction could support 15,000 and 20,000 jobs respectively.[10]

Alongside this, the government has laid the foundations for delivering the skilled workforce needed to meet our clean energy superpower ambitions. We are leading a significant reform of the skills system in England to address the fragmented and complex skills landscape. By breaking down the barriers to opportunity, we will give young people the skills they need and secure the future pipeline of clean energy workers.

We will publish the joint Post-16 Education and Skills Strategy, setting out a renewed approach to education and skills beyond the age of 16. It will focus on equipping people with the capabilities needed to boost economic growth and removing barriers that limit access to opportunity. The strategy will prioritise employer engagement, high-quality training routes and coordinated support to help all individuals progress into secure, rewarding careers. It will also set out reforms to higher education teaching and research.

As announced in the Get Britain Working White Paper, the Department for Work and Pensions is radically reforming the employment system to tackle economic inactivity and build an inclusive and thriving labour market. Their new Jobs and Careers Service, focused on people's skills and careers, will help people move into good, well-paid clean energy jobs.

Following the recent Machinery of Government change, as of September 2025, responsibility for apprenticeships, adult further education, skills, training and careers, and Skills England, has moved from the Department for Education to the Department for Work and Pensions. Responsibility for higher education, and further education, skills, training and careers for those aged 19 years and under remains with the Department for Education.

## Our vision

By 2030, the UK will be a global leader in clean energy sector talent, having created hundreds of thousands of good clean energy jobs. We will build a highly skilled and diverse domestic clean energy workforce, with trade union representation embedded, that is able to meet the demands of Clean Power 2030 and beyond.

We are committed to delivering a fair and equitable transition for our highly skilled energy workforce, drawing on the deep expertise of communities that have long been the backbone of the UK's energy economy. By enabling workers to flexibly seize new opportunities in clean energy, we will ensure that no community is left behind. At the same time, we will continue to support the vital role that oil and gas will play in the coming decades, recognising its importance in maintaining energy security during the transition.

[10] DESNZ (2025) Funding secured for Britain's industrial future - GOV.UK

We will also create a strong pipeline of talent for the next generation of the clean energy workforce. These jobs will be high-quality—well-paid, stable, inclusive, safe, with good training, progression opportunities, and voice at work—and spread across the country, offering opportunities to all regardless of background or location.

Skills policy is delivered by national governments, so the UK government will work in partnership with the devolved governments in Wales, Scotland and Northern Ireland. In England, mayors and local authorities have a vital role to play in delivering the place-based skills interventions that will upskill the workforce and deliver the local pipeline of skills needed to meet our Clean Energy Superpower Mission.

The commitments set out in this Jobs Plan represent a crucial step in delivering the clean energy workforce of the future. We are:

- **Setting out workforce expectations and building certainty.** We will provide greater certainty for employers and create the conditions to increase investment into skills. By building on the work set out in the Clean Power 2030 Action Plan and NESO's Clean Power 2030 advice,[11] we have set out a clear pipeline of deployment projects and workforce needs.
- **Delivering the pipeline of skilled workers.** We are determined to meet the demand by training up the next generation of British workers to ensure we have the skills we need for the future, here at home.
- **Harnessing the potential of the UK workforce.** The majority of the 2030 workforce is already in employment.[12] Therefore we must ensure that people with the right skills to work in clean energy have clear, simple routes to transfer across sectors, and that we ensure those already working in the sector have ample opportunities to improve their skills and advance their clean energy careers.
- **Delivering not just jobs, but good jobs.** Clean energy will be one of the very best sectors to work for in the UK, offering good wages, stability, and the opportunity to progress in a varied and interesting career. We will work hand in glove with workers, industry, and trade unions to level-up pay, good conditions, and trade union recognition across the sector. By improving job quality, we will also ensure the jobs are attractive to enter and stay in.
- **Ensuring benefits for every nation and region.** We will ensure that no part of the UK misses out on the job opportunities from the clean energy transition. We will do this by supporting local leaders to coordinate with industry and education providers to develop bespoke local workforce plans, and by working closely with partners across the four nations.

[11] National Energy System Operator (2024) Clean Power 2030: Advice on Achieving Clean Power for Great Britain by 2030

[12] The Prince's Responsible Business Network (2022) Rebooting Lifelong Learning for a Skilled Workforce

We will monitor progress to enable successful delivery of the Jobs Plan's ambitions through key trends relating to, for instance, the workforce pipeline, quality of jobs, and workforce demographics.

## Key deliverables

We will work across government, industry, and trade unions to deliver this vision.

To deliver the pipeline of skilled workers we will:

- Align the skills system and employment support to our Industrial Strategy sectors, including clean energy industries. The government is providing an additional £1.2 billion per year to support skills development over the course of the parliament, which includes funding for 1.3 million 16-19 year-olds to access training, supporting an additional 65,000 learners per year.
- Invest over £100 million into the Engineering Skills Package to support engineering skills in clean energy occupations as well as other priority sectors, including £10m to support the provision of engineering T Levels and Higher Education Providers offering clean energy engineering courses at levels 4-5.
- Establish five Clean Energy Technical Excellence Colleges (TECs) to specialise in training skilled clean energy workforces for local and national businesses, in addition to the ten Construction TECs already confirmed.

To harness the potential of those already in the workforce we will:

- Provide up to £20 million of funding from UK and Scottish Government to aid the transition of North Sea workers into clean energy sectors.
- Deliver up to £2.5 million in funding across 2025-26 to support innovative regional skills interventions in Cheshire, Lincolnshire, and Pembrokeshire to support hundreds of individuals looking to move into clean energy.
- Support RenewableUK and Offshore Energies UK, in collaboration with the Scottish Government, to expand the Energy Skills Passport, which is an initiative to help workers from carbon-intensive industries access opportunities in new clean energy sectors. This expansion will include the addition of further clean energy sectors, such as electricity networks and nuclear.
- Develop and promote new employment pathways and career opportunities for veterans into the clean energy sector, working with the Office for Veterans' Affairs to prototype innovative training and job-matching approaches to harness their critical skills.
- Work with the Department for Work and Pensions to encourage reforms to the employment system to deliver for the clean energy sector, for example through their Trailblazers and Jobs and Careers Service.

To ensure clean energy jobs are always good jobs, we will:

- Support greater trade union recognition and promote collective bargaining across the clean energy sector as a mechanism to facilitate engagement with industry, improve job quality, secure fair work, and build a resilient workforce.
- Amend employment rights legislation with the aim of reducing discrepancies between the rights of offshore oil and gas and offshore low carbon and renewable energy workers.
- Leverage additional private investment into skills and strengthen workforce protections, through introducing workforce criteria across relevant Department for Energy Security and Net Zero grants and procurements, including in the Clean Industry Bonus (CIB).
- Develop a fair work charter with the wind sector and trade unions, which outlines a sector-wide commitment to providing high-quality employment through the CIB. We expect a fair work charter could include, but would not necessarily be limited to, pay, job security, health and safety, access to trade unions, and employee wellbeing.
- Embed the role of trade unions within policy making through relevant energy sector forums and partnerships—such as the board of Great British Energy and the Net Zero Council—and embed trade union representation as a marker of good governance and effective delivery.
- Improve the inclusivity and visibility of clean energy job opportunities through a new Social Inclusion Forum and an industry-led public awareness campaign.

To ensure that the clean energy transition delivers good jobs in every part of the UK, we will:

- Deliver funding to Local Net Zero Hubs to build a regional picture of clean energy skills and jobs with local authorities, and use this to produce more detailed regional jobs estimates.
- Co-develop guidance addressing the Clean Energy Superpower Mission and clean energy skills to support the next cycle of Local Skills Improvement Plans.
- Establish a Skills Forum and a Net Zero Network to bring together representatives of Industrial Strategy Zones across the UK.
- Work closely with Local Growth Plans and utilise the Department for Energy Security and Net Zero's Local Net Zero Delivery Group and Ministerial-led Mayoral Roundtables to identify opportunities for collaboration and alignment between central and regional government.

# The Office for Clean Energy Jobs

To drive progress on these actions and build the clean energy workforce of the future, we have set up the Office for Clean Energy Jobs (OCEJ), a cross-cutting team within the Department for Energy Security and Net Zero. It has led the development of this Jobs Plan and will coordinate work to support building a skilled clean energy workforce and ensure these are ‘good jobs’. It plays a crucial convening role between industry, trade unions, and training providers to identify critical skills gaps, align them with deployment plans across clean energy sectors, and ensure that job quality is kept at the forefront.

OCEJ collaborates widely as it builds a detailed understanding of the clean energy workforce through robust data analysis. It works closely with devolved governments and across central government, including the Department for Education, Skills England, the Department for Work and Pensions, the Department of Business and Trade, and the Home Office, to ensure training provision and workforce interventions match future workforce needs.

**Defining clean energy jobs**

'Clean energy jobs' are jobs that directly support the low-carbon energy transition, encompassing clean energy generation, transmission and distribution, greenhouse gas removals, clean heat, and energy efficiency.

This is not limited to those working in 'clean energy sectors' and can include roles through supply chains, as well as in traditional energy sectors linked to the energy transition or decommissioning, to meet our clean energy ambitions.

For the purpose of this Jobs Plan, 'clean energy jobs' refer to roles in clean energy subsectors including Offshore Wind; Onshore Wind; Solar; Fusion Energy; Nuclear Fission; Clean Flexibility and Smart Systems; Electricity Networks; Hydrogen; Carbon Capture Utilisation and Storage; Long Duration Energy Storage; Greenhouse Gas Removals; Domestic and Non-Domestic Heat Pumps; Heat Networks; Biomethane; Energy Efficiency and Retrofit. These sectors cut across traditional industries such as manufacturing, construction, and professional business services.

They cover a range of occupations, from technical jobs such as machine operators and welders to engineers and designers, to desk-based jobs such as planners and project managers.

'Clean power jobs' are a subset of clean energy jobs relating to jobs in sectors critical for meeting our ambitions to reach Clean Power 2030.[13] This includes generating sectors—such as offshore and onshore wind, solar, civil nuclear—and the enabling networks that facilitate transmission, storage and flexible use of power, such as long duration electricity storage and consumer-led flexibility.

Clean energy jobs are distinct from wider 'green jobs', which include nature-based roles such as tree planting, peatland restoration, biodiversity, and agriculture, as well as other areas such as electric vehicles.[14]

[13] DESNZ (2024) Clean Power 2030 Action Plan
[14] ONS(2025) Developing estimates of green jobs in the UK

# Section 1: Workforce requirements

# Workforce expectations and building certainty

The net zero economy is already booming, with the Confederation of British Industry finding that it is growing three times faster than the overall economy.[15] Our net zero transition is rapidly generating jobs across the country, with the Office for National Statistics data demonstrating a 53% increase in jobs in direct Low Carbon and Renewable Energy Sectors between 2019 and 2023.[16]

The Department for Energy Security and Net Zero (DESNZ) has produced experimental analysis on the scale of the workforce transition. This estimates how many roles will be needed to deliver our clean energy ambitions, including a prioritisation of occupations and skills, and maps these across the nations and regions of the UK. This has shown that meeting the twin targets of the Clean Energy Superpower Mission—Clean Power by 2030 and accelerating our transition to net zero—could see our clean energy workforce nearly double from around 440,000 in 2023 to around 860,000 jobs supported across clean energy sectors and their supply chains by 2030.[17]

This means an increase in jobs of around 10% on average per year between 2023 and 2030. We must ensure that as investment in clean energy continues to grow, this supports UK-based supply chains, meaning more good jobs for UK workers.

[15] CBI Economics (2025) The Future is Green: The economic opportunities brought by the UK's net zero economy. Refers to economic growth from 2023 to 2024.
[16] ONS (2025) Low Carbon and Renewable Energy Economy, UK: 2023
[17] See the accompanying Clean Energy Jobs Plan Technical Annex for details. This analysis captures clean energy generation, transmission and distribution, greenhouse gas removals, clean heat, and energy efficiency.

This analysis has been tested extensively with industry, trade unions, devolved governments, local government, and Skills England. It builds on work already published as part of the Clean Power 2030 Action Plan and complements DESNZ's Clean Energy Map, which shows projects supported by the Clean Energy Superpower Mission. This analysis will allow DESNZ, local governments, and industry to deliver more detailed and targeted workforce plans focused on the skills and occupations most in demand, whilst setting clear expectations and creating the certainty industry needs to invest.

The Office for Clean Energy Jobs will continue to work with stakeholders to refine this analysis in the coming months and years, building to upcoming publications such as the Strategic Spatial Energy Plan, which will provide greater clarity on the shape of our future energy system.

Skills England has been building a clearer picture of the UK's skills needs, with clean energy emerging as a key area of focus. Their first report, Driving Growth and Widening Opportunities (September 2024), highlighted the main challenges holding back economic growth and opportunity, including early signs of skills gaps linked to the green transition and the shift towards clean energy jobs. In Skills for Growth and Opportunity (June 2025), Skills England carried out a skills needs assessment for each of the ten priority sectors, including Clean Energy Industries. The report explored how the skills system could better support government goals to grow the economy and improve access to opportunity in these sectors, and identified where investment in training and education could make the biggest impact.

In August 2025, Skills England also published the Assessment of Priority Skills, which outlines future workforce demand and education supply into clean energy industries and the other nine priority sectors across priority occupations. This includes an earlier subset of this analysis, but reported only on direct employment in clean energy sectors.[18] The Skills England report finds that, of the ten priority sectors analysed, Clean Energy Industries are expected to require one of the largest increases in employment between 2025 and 2030 and will need to expand the fastest. The report also points out that essential roles for Clean Energy Industries, such as engineering, are highly sought after in other priority sectors, including Advanced Manufacturing, Defence, and Digital and Technologies, suggesting there may be competition between sectors to attract skilled workers.[19]

[18] Skills England (2025) Assessment of priority skills to 2030
[19] The Skills England report examines the future direct employment demand across 10 key sectors critical to the government's Industrial Strategy and Plan for Change.

**What is the scope of this analysis?**

We measure clean energy jobs as the number of jobs that are supported by the manufacture, deployment, and operation of clean energy technologies and their supply chains. This analysis covers both direct and indirect jobs, and these employment categories can be defined as:

*Direct jobs*: Employment that is directly within the primary industry or sector under consideration, for example, construction of wind farms and/or manufacturing of wind turbines, and installation of heat pumps.

*Indirect jobs:* Employment generated in industries that supply goods or services to the primary sector. This includes jobs supported lower down the supply chain related to production of intermediate inputs used by the primary sector, for example, manufacturing the compressors that are used in heat pump installation.

Induced jobs are excluded from this analysis, which is employment resulting from the spending of wages by workers in direct and indirect employment, leading to increased demand in other sectors.

This analysis does not measure net additional jobs across the economy. Some of the increase in workforce across clean energy sectors may involve workers who have transitioned from other sectors in decline; however, these effects are not accounted for as the evidence is not available. The analysis also does not capture replacement demand, meaning the new workers required to replace workers that leave the workforce.

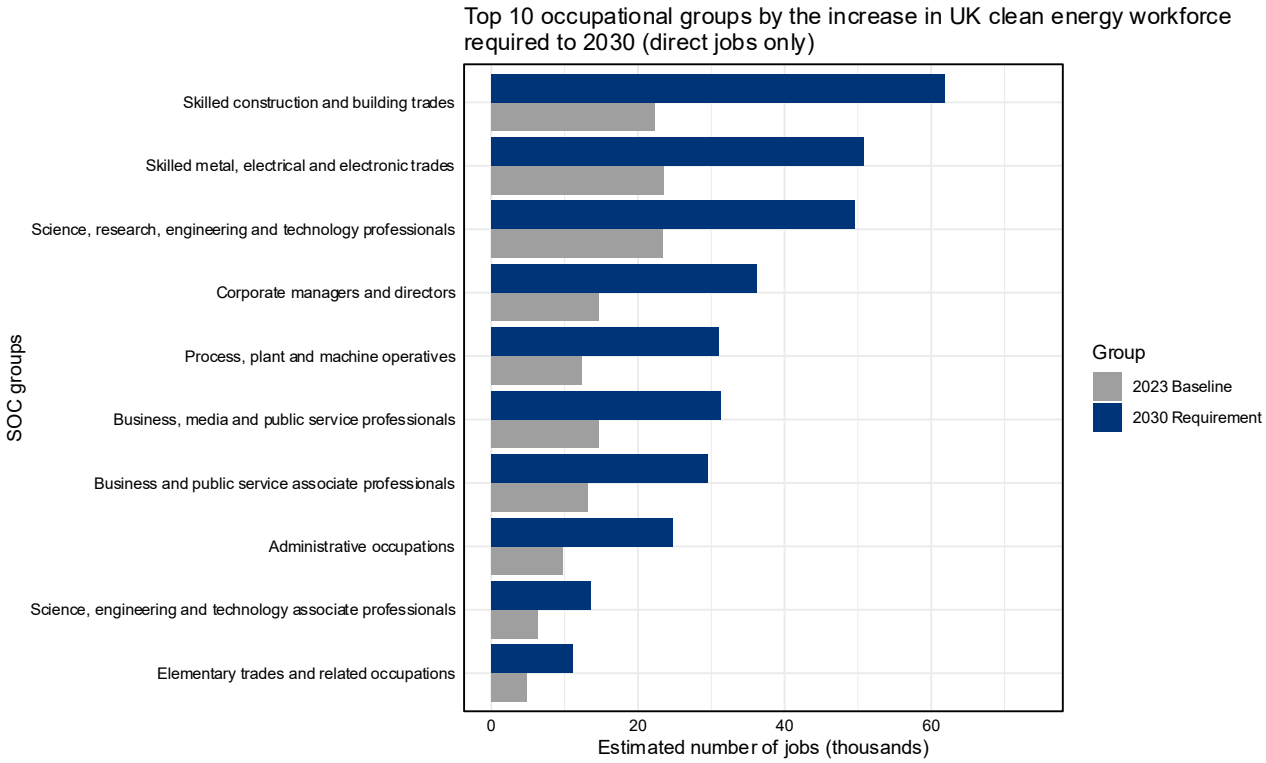
There is inherent uncertainty in estimating the size of the 2030 clean energy workforce. The estimates of workforce demand do not represent precise predictions—they are indicative of the orders of magnitude the clean energy workforce will need to increase by 2030 to meet demand in UK clean energy sectors and their supply chains (where possible, both domestic and global demand has been considered).

# Priority occupations for clean energy

The roles needed to meet our clean energy superpower ambitions span a range of occupations, skills levels, and regions. These roles will often be spread deep into supply chains, as feedback suggests that firms in this space use a large number of contracted workers. Building certainty across order books will therefore be essential for workers to realise the long-term benefits of our clean energy ambitions.

Key occupations needed in the clean energy sector consist of a range of technical, professional, and innovative roles. Figure 1 below outlines the expected 2030 workforce projections for the top 10 occupational groups, accounting for 86% of direct clean energy jobs in 2030.

**Figure 1: Top 10 occupational groups by the increase in UK clean energy workforce required to 2030 (direct jobs only)**




Source: Experimental DESNZ analysis of ONS Low Carbon and Renewable Energy Economy Estimates, ONS Annual Population survey and DESNZ workforce projections. See technical annex for details.

Alongside estimating the total workforce and occupational groups needed to deliver our clean energy ambitions, we have identified 31 priority occupations.[20] This list is a sub-set of all the occupations that will be needed, highlighting the occupations that will be both most in demand to meet our clean energy ambitions and most difficult to fill due to workforce supply constraints (see Table 1 below).[21] It is vital that we ensure the skills and employment systems as well as wider investments are focused on delivering these priority occupations.

These priority occupations encompass a range of roles at a variety of different skill levels, such as plumbers and heating installers, electricians and electrical engineers, engineering professionals, and project managers which will be vital to meeting our clean energy ambitions.

We recognise that there are many other critical occupations not captured by this high demand, high supply constraint definition. This will include essential roles which are required in relatively smaller numbers within the clean energy sector compared to the highest demand clean energy occupations (such as seafaring occupations), as well as newer roles associated with nascent clean energy technologies and new digital solutions. We will continue to assess challenges and develop policy to ensure sufficient supply across all occupations required to deliver our ambitions, including those not included in this priority list and those that relate to indirect jobs.

These 31 priority occupations represent around 150,000 workers and approximately 39% of the estimated direct 2030 workforce. Table 1 outlines the 31 priority occupations and Annex A provides further details, including historic occupation growth rates and skills shortage indicators.

The analysis of priority occupations for clean energy covers direct jobs only. Indirect jobs, which includes jobs supported lower down the supply chain, also make up a large share of the overall clean energy workforce and could account for nearly 460,000 jobs supported in 2030.[22] There is currently insufficient evidence available to assess the typical mix of occupations for indirect clean energy jobs.

[20] In total, there are 412 ONS Standard Occupational Codes (SOCs) at the 4-digit level. The Office for National Statistics use the Standard Occupational Classification (SOC) system to record and group all jobs across the economy.
[21] See the Clean Energy Jobs Plan Technical Annex for further information on the priority occupation approach. Demand metrics: estimated clean energy workforce increase by occupation required between [2022] and 2030 and required increase as a % of economy employment in each occupation. Supply metrics: share of vacancies by occupation hard to fill due to skills shortages (DfE, Employer Skills Survey, 2022) and size of UK population meeting skills requirement by occupation (ONS, Skills supply estimates, 2023).
[22] DESNZ experimental analysis (2025). See the accompanying Clean Energy Jobs Plan Technical Annex for details.

**Table 1: Priority Clean Energy Occupations**

| Occupation Group (SOC2020 – 2 Digit) | Occupation (SOC2020 – 4 Digit) | Required increase in jobs supported from 2023 to 2030 | Relative increase in required jobs supported from 2023 2030 | Most common highest-level qualification |
|---|---|---|---|---|
| Skilled construction and building trades (SOC 53) | Plumbers and heating and ventilating installers and repairers | 8,500 to 10,000 | More than double | A-level or equivalent |
| SOC 53 | Carpenters and joiners | 7,000 to 8,499 | More than double | A-level or equivalent |
| SOC 53 | Glaziers, window fabricators and fitters | 2,500 to 3,999 | More than triple | Qualifications below A-level or equivalent |
| SOC 53 | Floorers and wall tilers | 1,000 to 2,499 | More than double | Qualifications below A-level or equivalent |
| SOC 53 | Roofers, roof tilers and slaters | 1,000 to 2,499 | More than double | Qualifications below A-level or equivalent |
| SOC 53 | Plasterers | 1,000 to 2,499 | More than double | A-level or equivalent |
| SOC 53 | Bricklayers | 1,000 to 2,499 | More than double | A-level or equivalent |
| Skilled metal, electrical and electronic trades (SOC 52) | Electricians and electrical fitters | 7,000 to 8,499 | More than double | A-level or equivalent |
| SOC 52 | Metal working production and maintenance fitters | 4,000 to 5,499 | More than double | A-level or equivalent |
| SOC 52 | Telecoms and related network installers and repairers | 2,500 to 3,999 | Over a 50% increase | A-level or equivalent |
| SOC 52 | Electrical and electronic trades n.e.c. | 1,000 to 2,499 | Over a 50% increase | A-level or equivalent |
| SOC 52 | Welding trades | 1,000 to 2,499 | More than triple | A-level or equivalent |
| SOC 52 | Metal machining setters and setter-operators | 1,000 to 2,499 | More than double | A-level or equivalent |
| Corporate managers and directors (SOC 11) | Production managers and directors in manufacturing | 5,500 to 6,999 | More than double | Higher education |
| SOC 11 | Production managers and directors in construction | 2,500 to 3,999 | More than double | Higher education |
| Science, research, engineering and technology professionals (SOC 21) | Engineering professionals n.e.c. | 4,000 to 5,499 | Over a 50% increase | Higher education |

| Occupation Group (SOC2020 – 2 Digit) | Occupation (SOC2020 – 4 Digit) | Required increase in jobs supported from 2023 to 2030 | Relative increase in required jobs supported from 2023 2030 | Most common highest-level qualification |
|---|---|---|---|---|
| SOC 21 | Mechanical engineers | 2,500 to 3,999 | More than double | Higher education |
| SOC 21 | Civil engineers | 1,000 to 2,499 | More than double | Higher education |
| SOC 21 | Electrical engineers | 1,000 to 2,499 | More than double | Higher education |
| SOC 21 | Engineering project managers and project engineers | 1,000 to 2,499 | More than double | Higher education |
| SOC 21 | Production and process engineers | 1,000 to 2,499 | More than double | Higher education |
| SOC 21 | Electronics engineers | <1,000 | More than double | Higher education |
| Process, plant and machine operatives (SOC 81) | Plastics process operatives | 1,000 to 2,499 | More than triple | Qualifications below A-level or equivalent |
| SOC 81 | Construction operatives n.e.c. | 1,000 to 2,499 | More than double | Qualifications below A-level or equivalent |
| SOC 81 | Routine inspectors and testers | 1,000 to 2,499 | More than double | A-level or equivalent |
| SOC 81 | Metal working machine operatives | 1,000 to 2,499 | More than triple | A-level or equivalent |
| SOC 81 | Scaffolders, stagers and riggers | 1,000 to 2,499 | More than double | A-level or equivalent |
| Business, media and public service professionals (SOC 24) | Construction project managers and related professionals | 1,000 to 2,499 | More than double | Higher education |
| SOC 24 | Quantity surveyors | <1,000 | More than double | Higher education |
| Science, engineering and technology associate professionals (SOC 31) | Engineering technicians | 1,000 to 2,499 | Over a 50% increase | Higher education |
| SOC 31 | CAD, drawing and architectural technicians | 1,000 to 2,499 | More than double | Higher education |

Source: occupations list and required increase based on experimental DESNZ analysis - see technical annex for details / ONS (2024). Qualification mismatch estimates in England and Wales: 2021 / DfE, Employer Skills Survey, 2022 (Data transformed from SOC2010 to SOC2020) / ONS. Annual Population Survey (accessed from Nomis on 27 May 2025).

The required increase in jobs is presented as banded ranges due to the high uncertainty in estimating future employment at lower levels of occupational granularity. A colour scale has been used for ease of comparison.

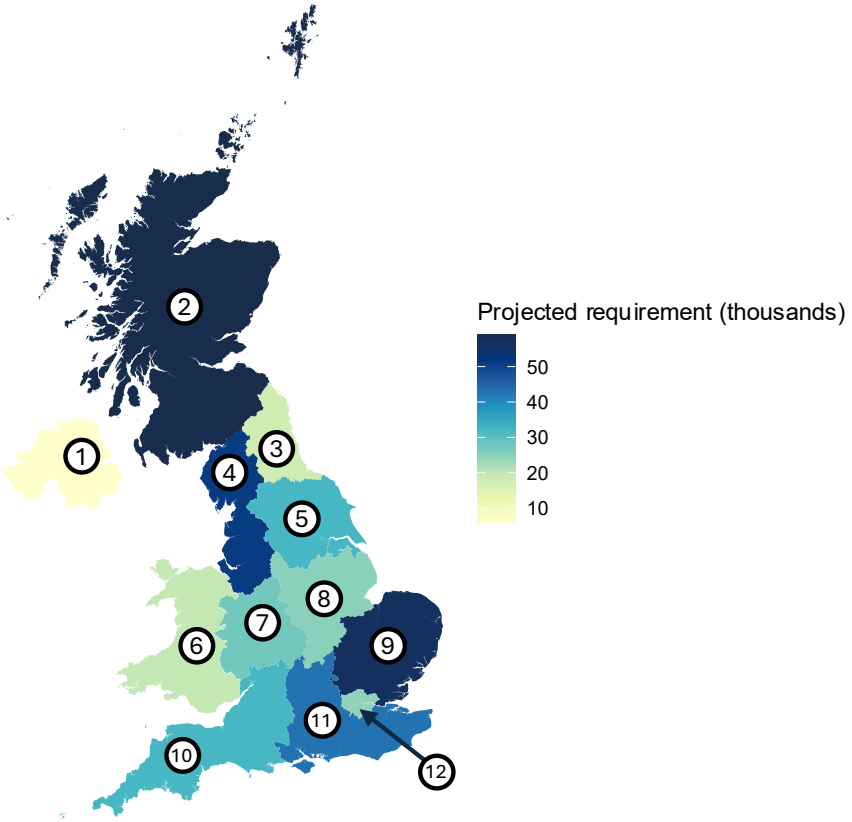
# Nations and regions

The Clean Energy Industries Sector Plan highlighted the investments taking place across clean energy clusters in every part of the UK. Our experimental analysis demonstrates the potential demand for direct clean energy jobs up to 2030 in different regions that will be driven by this new investment. Further indirect jobs (not captured in the regional analysis) will also be created across the UK.

Demand for clean energy jobs is expected to be particularly high in Scotland, where our analysis shows 55,000-60,000 direct clean energy jobs are expected to be located in 2030, an increase of 35,000-40,000 from 2023 levels. Demand is also expected to be high in East of England with 55,000-60,000 direct clean energy jobs, and North-West England with 50,000-55,000 direct clean energy jobs expected in 2030.[23]


[23] DESNZ experimental analysis (2025). See the accompanying Clean Energy Jobs Plan Technical Annex for details.

**Figure 2: Direct clean energy jobs in 2030 by UK region (direct jobs only)**




1 **Northern Ireland***
2023: Over 2,500 direct jobs
2030: Over 6,000 direct jobs

2 **Scotland**
2023: 20,000 - 25,000 direct jobs
2030: 55,000 - 60,000 direct jobs

3 **North-East England**
2023: 5,000 -10,000 direct jobs
2030: 15,000 - 20,000 direct jobs

4 **North-West England**
2023: 25,000 - 30,000 direct jobs
2030: 50,000 - 55,000 direct jobs

5 **Yorkshire and the Humber**
2023: 10,000 - 15,000 direct jobs
2030: 30,000 - 35,000 direct jobs

6 **Wales**
2023: 5,000 - 10,000 direct jobs
2030: 15,000 - 20,000 direct jobs

7 **West Midlands**
2023: 10,000 - 15,000 direct jobs
2030: 25,000 - 30,000 direct jobs

8 **East Midlands**
2023: 10,000 - 15,000 direct jobs
2030: 25,000 - 30,000 direct jobs

9 **East England**
2023: 15,000 - 20,000 direct jobs
2030: 55,000 - 60,000 direct jobs

10 **South-West England**
2023: 20,000 - 25,000 direct jobs
2030: 30,000 - 35,000 direct jobs

11 **South-East England**
2023: 15,000 - 20,000 direct jobs
2030: 40,000 - 45,000 direct jobs

12 **London**
2023: 5,000 - 10,000 direct jobs
2030: 20,000 - 25,000 direct jobs

*Data for Northern Ireland includes a reduced number of sectors so is likely to see an increase of more than [2,000-3,000]. Sectors included are Nuclear Fusion, CCUS and GGRs, Electricity Networks, Heat Networks and Energy Efficiency and Retrofit.

North East England has a high proportion of jobs supported by technologies which project further growth beyond 2030, such as Hydrogen and CCUS. As a result, 2030 projections are slightly lower than other English regions.

## Occupations by region

Skilled construction and building trades will be in high demand across all regions of the UK by 2030, encompassing at least one in eight of the clean energy workers needed in every region. In the East Midlands, North-East, and Scotland, around 10% of the existing skilled construction and building trades across all sectors would be required to meet the projected 2030 clean energy jobs demand.[24]

Over one in six science, research, engineering, and technology professionals working in clean energy are expected to be located in Scotland in 2030. Scotland and the East of England can expect science, research, engineering, and technology professionals to make up a larger proportion of their clean energy workforce than in other regions; over 15% of all clean energy jobs in these regions are projected to be in this occupational group, compared to a national average of 10% in 2030.

Demand for skilled metal, electrical and electronic trades in clean energy is expected to support at least 1 in 8 clean energy jobs in every region in 2030. This occupation group is likely to see relatively less growth from 2023 for clean energy when compared to other occupational groupings, with an average increase in demand of around two times across the UK. This will vary regionally, with estimates for the clean energy demand in London for skilled metal, electrical and electronic trades tripling from 2023 to 2030.

[24] Compared to DESNZ analysis of Annual Population Survey data 2024.

# Section 2: Actions

# Delivering the pipeline of skilled workers

**Vision statement:**

We will deliver a talented pipeline of skilled workers to match the growing demand of the clean energy workforce to 2030 and beyond.

**Key actions:**

- Supporting young people into priority sectors, including clean energy, through over £1.2 billion of additional investment per year in skills for young people by 2028-29. This includes funding to support 1.3 million 16-19-year-olds each year–including 65,000 additional leaners per year by 2028-29–to access high-quality education and training.
- We will invest over £100 million into the Engineering Skills Package to support engineering skills, including in clean energy occupations, including £10m to support the provision of engineering T Levels and Higher Education Providers offering clean energy engineering courses at levels 4-5.
- Establish five Clean Energy Technical Excellence Colleges (TECs) to specialise in training skilled clean energy workforces for local and national businesses, in addition to the ten Construction TECs already confirmed.
- The £625 million Construction Skills Package will deliver up to 60,000 additional skilled construction workers, which will support a range of priority clean energy occupations.
- The Growth and Skills Offer will provide greater flexibility for learners and employers, aligned with our Industrial Strategy sectors, including clean energy.

- Skills England will mobilise employers and partners across government to respond to national, regional and local needs, crucial for delivering the skills offer we need to support a clean energy workforce.

## The opportunities and challenges

Our Clean Energy Superpower Mission will create opportunities for good, secure, and skilled jobs for a whole new generation of workers. We must ensure that through our post-16 education system, whether through apprenticeships, technical education, or universities, our young people are aware of the range of fantastic careers in clean energy and are enabled to develop the skills to take advantage of those opportunities. This requires government to work with skills providers and employers to build a more strategic, flexible skills system in England, and ensure there is a skills pathway for all potential clean energy workers, from sector entry (Level 1) through to postgraduate (Levels 7-8).

It also requires a more targeted skills system, aimed at the priority occupations that are vital in meeting our Clean Energy Superpower Mission. There have been areas of misalignment between the training provided and skills needed, which are likely exacerbated by rapid technological advancements and the nascency of some clean energy sectors, therefore demand from industry has often outpaced the development of new training programmes.[25]

Nascent sectors have also struggled to find experienced trainers and develop curricula.[26] Certain roles in sectors such as nuclear, hydrogen and carbon capture, utilisation, and storage, operate in high hazard environments, restricting access to workers under 18. Consequently, 16-19 routes for work experience and industrial placements in clean energy have been limited, making it challenging to attract younger entrants.[27]

As with many sectors, there is a shortage of teachers and staff to adequately facilitate clean energy training programmes,[28] and there are barriers to attracting and retaining further and higher education teachers. Given that the UK has an ageing energy and utilities workforce, with 15.9% over 55,[29] and many individuals with the skills we need having left the workforce or retiring soon,[30] we need to explore incentives for these workers to transition into education to train the future workforce.

The government is taking significant action to address these issues head on, to build a world-class skills system where every individual who wants to work in the clean energy sector is not held back by a lack of training or skills provision.

[25] DfE (2025) Skills England Sector Skills Needs Assessment: Clean Energy Industries
[26] Hydrogen Skills Alliance (2025) Empowering the Future: A Strategic Skills Plan for the UK Hydrogen Economy
[27] DfE (2025) Skills England Sector Skills Needs Assessment: Clean Energy Industries
[28] DESNZ (2024) Clean Power Action Plan: Assessment of the clean energy skills challenge
[29] EU Skills (2024) Inclusion Measurement Framework
[30] DESNZ (2024) Clean Power Action Plan: Assessment of the clean energy skills challenge

Our priority is to grow the domestic skill base to meet the demand for clean energy workers. However, there may be exceptional cases where skilled workers from abroad may be required to fill critical workforce gaps. This Clean Energy Jobs Plan is a first for UK government, in line with our commitment in the Industrial Strategy to ensure that there is an appropriate plan in place to address skills shortages and increase local recruitment.

We will use the Labour Market Evidence Group's analysis to support the development of this Jobs Plan and work with employers to ensure they play their role in developing domestic skills. This Jobs Plan will help the Migration Advisory Committee, with support from the Labour Market Evidence Group, make their assessment in Spring 2026 on the Temporary Shortage List.

## Action plan

The government is leading a significant reform of the skills system in England to address the fragmented and complex skills landscape, which will harness the talent of the workforce, meet businesses' skills needs, and break down the barriers to opportunity. This will provide the certainty that further and higher education needs to invest in future skills needs. We are also providing £1.2 billion of additional investment in skills per year by 2028-29, supporting young people into priority sectors, including clean energy.[31] This includes funding to support 1.3 million 16-19-year-olds each year–including 65,000 additional learners per year by 2028-29–to access high-quality education and training.

This will help to build a high-skill, high-productivity workforce that is matched to employers' needs. These reforms will ensure that the skills system is aligned to Industrial Strategy priority sectors, such as clean energy. There are several programmes which will play a significant role in delivering the clean energy workforce:

**Action 1.1 Engineering skills package:** Recognising that engineering skills are at the heart of several of the Industrial Strategy priority sectors, we will provide investment of over £100 million over three years to support engineering skills in England, working with Skills England to determine how this can increase the pipeline of skills through further and higher education and apprenticeships. With capital funding provided via the Skills Mission Fund, this will include launching Technical Excellence Colleges to address shortages in engineering, which is critical to the skills needed in priority sectors including clean energy industries, advanced manufacturing, and digital and technologies. The package also includes £10m to support the provision of engineering T Levels and Higher Education Providers offering clean energy engineering courses at levels 4-5. Skills England will ensure that training and qualifications remain aligned with shifting workforce needs.

[31] HM Treasury (2025) Spending Review 2025

**Action 1.2 Technical Excellence Colleges (TECs):** We will introduce specialist TECs, transforming existing further education colleges to specialise in training skilled workforces for local and national businesses, including in clean energy industries. We will deliver five clean energy TECs, located in city regions and clusters identified as key to the delivery of Clean Power 2030 and the Clean Energy Industries Sector Plan. Selection processes for these TECs will start by the end of 2025, with delivery planned to begin from April 2026.

**Action 1.3 Construction skills package:** The government is committing £625 million in England over four years to deliver up to 60,000 additional skilled construction workers this Parliament, which will support a range of priority clean energy occupations. Across clean energy sectors, direct employment in Skilled Construction and Building Trades, which includes occupations such as plumbers and heating installers, carpenters, and bricklayers, is projected to grow from approximately 21,000 jobs in 2023 to around 57,000 jobs by 2030. Ten construction TECs have begun delivering from September 2025, which are in addition to the five clean energy TECs announced above. We will explore the possibility of including clean energy as part of construction skills provision as a requirement of their delivery plans. This will equip learners with the construction skills needed to support the growth of the clean energy sector.

**Action 1.4 Skills England:** Skills England will build our nation's world-class skills, enabling growth and opportunity, including in the delivery of clean energy. It will mobilise employers and partners across government to respond to national, regional, and local needs, which is crucial for delivering the skills offer we need to support a clean energy workforce.

- Skills England will build on the Institute for Apprenticeships and Technical Education's past work to ensure apprenticeships and technical qualifications deliver the green skills needed across clean energy sectors. This includes systematically considering green skills in the development of all apprenticeships and technical qualifications, engaging green stakeholders, and reviewing qualifications to ensure they cover relevant green content.
- Skills England will work with the Department for Energy Security and Net Zero and industry groups on occupational mapping to support the identification of qualifications and training routes, including for new entrants.
- Skills England will also work with the devolved governments to create a coherent and accessible skills system for Industrial Strategy priority sectors, including clean energy, across the UK.

**Action 1.5 Further Education Workforce - Recruiting and retaining skilled teachers:** The Targeted Retention Incentive (TRI) for further education teachers provides eligible early-career further education teachers in key STEM and technical shortage subjects with up to £6,000 after tax annually, in addition to their salary. The TRI is a key lever in retaining high-quality teaching talent, ensuring the further education sector has the workforce it needs to deliver the clean energy skills pipeline. The Taking Teaching Further programme also supports the recruitment of skilled professionals from businesses and industry to transition into further education teaching, including funding teaching qualifications and providing comprehensive early-career support. Additionally, the revised level 5 learning and skills teacher occupational standards requires all further education teachers to embed sustainability into their teaching.

**Action 1.6 Post-16 capacity:** We are investing to increase course provision for an additional 65,000 16–19-year-olds in England by 2028-29, including providing key pathways into priority occupations in the Industrial Strategy. This will be supported by additional funding to up-lift the High Value Courses Premia for key Industrial Strategy courses, such as in engineering, and providing £375 million of capital investment to support post-16 capacity. The government is also investing £1.7 billion capital funding from 2026-27 to 2029-30 to help colleges maintain the condition of their estate, including an annual allocation rising in line with inflation.

**Action 1.7 Post-16 Education and Skills Strategy**: We will shortly be publishing a comprehensive strategy for post-16 education and skills, which will set out our plans for breaking down barriers to opportunity, supporting the development of a skilled workforce, and driving economic growth through our industrial strategy. The strategy will be underpinned by a national view of skills needs, with more flexibility for employers to train their workforce, quality courses for all young people, and opportunities for adults to retrain at all levels. It will support the government's target of two thirds of young people participating in higher-level study – including apprenticeships.

**Action 1.8 Growth and skills offer:** The levy-funded growth and skills offer, with apprenticeships at its heart and aligned with our Industrial Strategy, will deliver greater flexibility for employers in England. As a first step, from academic year 2025-26, the levy will include foundation apprenticeships in targeted sectors and new flexibility over the duration of apprenticeships, meaning apprentices can be trained more quickly where employers agree that is appropriate. As part of this, the typical duration of the dual fuel smart meter installer apprenticeship has been reduced, supporting the government's clean energy ambition. We will also enable employers to use the levy on flexible, short courses in areas such as digital, artificial intelligence and engineering, which will help support Industrial Strategy sectors, including clean energy.

**Action 1.9 Skills Mission Fund:** This will provide capital funding to support providers to help tilt their curriculum offer to priority skills sectors to reduce skills gaps and contribute to economic growth. The total capital funding of £200 million will support investment in facilities and equipment to scale up delivery of technical programmes for priority sectors, including clean energy.

**Action 1.10 Strategic Priorities Grant:** We will ensure that the Strategic Priorities Grant (SPG) continues to support delivery of Science, Technology, Engineering, and Mathematics subjects. This will enable the higher education and further education sectors to contribute to meeting the skills needs of the future workforce for clean energy sectors. The SPG supports provision of expensive-to-deliver subjects, including science and engineering, participation in higher education by students from disadvantaged backgrounds, and world-leading specialist providers. In the 2025/26 academic year, two thirds of the £1.4 billion SPG budget is being directed to support the provision of high-cost courses, including for engineering and technology subjects, and specific labour market needs. In parallel, we are reforming the SPG to ensure it is effectively targeted towards priority provision which supports future skills needs and the Industrial Strategy priority sectors, including clean energy.

**Action 1.11 Refresh of the DfE Sustainability and Climate Change Strategy:** This strategy, launched in 2022 and informed by stakeholders and young people, has made significant progress in helping to create a sustainable future through education, developing the skills needed for a green economy, and supporting the Department for Education's (DfE) sectors to reach net zero targets. DfE is now in the process of refreshing and updating the government's strategic vision for sustainability across the education sector. This refresh will build on the initiatives set out in the initial strategy, to ensure that children and young people have the skills and knowledge to thrive and access meaningful opportunities, including those in the clean energy sector. The refresh will be completed in tandem with other departmental and cross-government work, such as the Curriculum and Assessment Review, Environmental Improvement Plan, and others.

**Action 1.12 The Independent Curriculum and Assessment Review:** The Review seeks to ensure a rich and broad curriculum that readies young people for life, work, and the future. Society is rapidly changing, and bringing new opportunities and challenges, including those presented by climate change, which require particular knowledge and skills. The Review's ongoing work in this area will consider whether there is sufficient coverage of this (and other) areas of knowledge and skills within subjects. Its interim report set out initial findings and key areas for further work, including ensuring the curriculum responds to social and technological change by securing learning in foundational subjects such as maths and science. The report also highlights the importance of equipping young people with the knowledge and skills to respond to climate change and make the most of the changing workforce, as well as noting calls for greater integration of sustainability across the curriculum. The Review's final report and recommendations will be published in autumn, at which point the government will respond.

**Action 1.13 T Levels:** Due to the involvement of employers, and regular updates to specifications, T Levels equip learners across a range of disciplines with the knowledge and skills needed for future careers in clean energy. T Levels cover areas including Engineering, Construction, Agriculture, and Science, with emerging technologies including those related to clean energy covered within the curriculum. Learners also have the opportunity to engage with clean energy technologies, and gain a passion for a career in the sector, through their industry placement.

# Harnessing the potential of the UK workforce

**Vision statement:**

We will create a highly skilled and transferable clean energy workforce with roles available at every qualification level, utilising the existing talent of the UK workforce to ensure the delivery of our clean energy ambitions.

**Key actions:**

- Provide up to £20 million of funding from UK and Scottish Government to aid the transition of North Sea workers into clean energy sectors.
- Deliver funding of up to £2.5 million for innovative skills pilots in three areas to support hundreds of individuals looking to move into clean energy.
- Continue to support RenewableUK and Offshore Energies UK to expand the Energy Skills Passport, including exploring the inclusion of additional clean energy sectors, such as electricity networks and nuclear.
- Develop and promote new employment pathways and career opportunities for veterans into the clean energy sector, working with the Office for Veterans' Affairs to prototype innovative training and job-matching approaches to harness their critical skills.
- Encourage reforms to the employment system to deliver for the clean energy sector, for example, through the Department for Work and Pension’s Trailblazers and Jobs and Careers Service.

# The opportunities and challenges

One in five jobs in the UK have skills for which demand could grow in the green economy or which could require some level of reskilling[32]—one of the largest labour market transitions in history. The majority of the workforce needed to meet our clean energy ambitions are already in employment.[33] The UK already has a highly skilled energy workforce who are well-matched for roles in growing renewable sectors. We must support the reskilling and upskilling of those already in work and enable workers that want to move into clean energy roles to easily transfer across sectors. This is especially urgent to deliver Clean Power 2030.

The UK has deep energy expertise built over generations and grounded in communities across the country. Whilst oil and gas will play a role for decades to come, the North Sea basin is in natural decline as these resources meet the end of their lifespan and the oil and gas industry has lost around a third of its direct workforce in the last decade.[34] The clean energy transition offers new opportunities for the energy sector and the North Sea. We will look to ensure training, skills, and secure jobs in clean energy for our energy workforce for those who want them.

Earlier this year, we launched a consultation on the future shape of the North Sea as a global leader in clean energy. We received around 400 responses from a broad range of stakeholder organisations and individuals, and approximately 500 campaign responses. We have been considering all responses in advance of publishing a government response later this year.

The government is determined to coordinate the scale-up of the industries which will shape the future of the North Sea, including offshore wind, carbon capture and storage, and hydrogen. This is vital for delivering the best outcomes for workers and communities, energy security, and sustainable economic growth.

Across the rest of the economy, the Department for Work and Pensions is transforming the employment system to tackle economic inactivity and build an inclusive and thriving labour market. Through the new Jobs and Careers Service, it will better integrate employment, skills, and careers support, making it easier for people to reskill. The service will also expand support to employers needing specialist skills critical to the clean energy mission. It will be locally embedded to meet the needs of regional labour markets, people, and businesses. The Department for Education and Department for Work and Pensions are also working together to take forward activity that will reduce the rates of young people who are Not in Education, Employment or Training (NEET). To do this, a new Youth

[32] LSE Grantham Institute / Place Based Climate Action Network (2021) Tracking Local Employment in The Green Economy: The PCAN Just Transition Jobs Tracker
[33] The Prince's Responsible Business Network (2022) Rebooting Lifelong Learning for a Skilled Workforce
[34] ONS Business Register and Employment Survey. From 2014 to 2022.

Guarantee is being developed with the ambition to give all young people aged 18 to 21 support to access high quality learning and earning opportunities.

Given the ongoing decline in industry investment in skills, there is more that industry can be doing to reskill the workforce to fill shortages. There are examples of best practice, such as CATCH, an employer-led training provider in the Humber, co-funded by industry and government, which supports reskilling in hydrogen, carbon capture, utilisation and storage, and process operation. Over the next five years, National Grid will recruit 2,300 apprentices and graduates to help deliver the largest overhaul of the grid in generations. Many of these people will be trained at their world-class residential training centre in Eakring, Nottinghamshire, which was the first apprenticeship provider to be rated 'Outstanding' by Ofsted on four consecutive inspections. This is alongside its Science, Technology, Engineering, and Mathematics outreach and upskilling initiatives, and innovative new approaches to strategic workforce planning, training for emerging skills and safety critical competencies.

# Clean energy transition sectors

## Context

The energy sector and its supply chains are a cornerstone of the UK economy, powered by an integrated energy workforce with unique skills. Workers in carbon-intensive areas of the energy sector—such as oil and gas—have opportunities to apply their expertise in support of the clean energy transition if they wish.[35] In 2023, around 37,000 workers were directly employed in sectors facing declining employment, with approximately 1 in 3 of these workers within the 31 clean energy priority occupations.[36] Robert Gordon University estimate that over 90% of the UK's oil and gas workforce have skills that have medium to high transferability to the offshore renewables, making them well-positioned to transition.[37]

This is critical to delivering Clean Power 2030. The growth of clean energy jobs in the UK is expected to be significantly higher than the loss of jobs in the oil and gas sector, but we recognise that there are transition risks.[38] The UK Government is supporting workers through the transition in Scotland and Lincolnshire, funding bespoke Training Guarantees for Grangemouth (in partnership with the Scottish Government) and Prax Lindsey refinery workers in Lincolnshire. The training guarantees will support workers to find job opportunities with local clean energy employers and ensure they have the skills needed for

[35] Climate Change Committee (2023) A Net Zero Workforce. Impacts will also be affected by global trends and supply chains, for example UK refineries only use a small proportion of domestically produced crude oil.
[36] Sectors included within analysis: mining of coal and lignite, extraction crude petroleum and gas, mining support service activities and manufacture of coke & refined petrol. These 'phase-down' sectors were taken from Climate Change Committee (2023) A Net Zero Workforce. Employment estimates taken from DESNZ analysis of ONS, Annual Population Survey, 2024, and ONS, Business Register and Employment Survey, 2023. See technical annex for further detail.
[37] Robert Gordon University (2023) Powering up the Workforce
[38] Robert Gordon University (2025) Striking the Balance

these roles. We are prioritising supporting this workforce to ensure their skills and expertise drive the future of clean energy.

In the North Sea Energy Future Consultation, an early assessment of the responses to the questions relating to the workforce, jobs, and skills consistently emphasised the need for clear and consistent policies to attract investment, support workforce planning, and align efforts at national, regional, and local levels. A major theme was the need for tailored retraining and upskilling programmes that are closely aligned with industry needs and accessible across all regions. Respondents emphasised that these programmes should reflect the specific demands of emerging sectors and be designed to support workers at various stages of their careers, recognising any prior training and applied knowledge.

## Action plan

**Action 2.1 North Sea workers announcement:** We are announcing up to £20 million of funding from the UK and Scottish Governments to support the transition of North Sea workers. Whilst North Sea oil and gas will continue to play an important role for decades to come, our ambition is to create a just, fair and prosperous transition for workers in the sector looking to retrain into new roles and for their communities. This will give our existing skilled workforce the opportunity to play a central role in future energy security through roles in clean energy industries.

We have already jointly launched the Oil and Gas Transition Training Fund, based in Aberdeen City/Aberdeenshire, as part of our programme of Regional Skills Pilots in 2025/26–with nearly £1m provided by the UK Government and an additional £450k provided by the Scottish Government this year. This will fund retraining for at least 300 oil and gas workers to support their transition into renewable and sustainable sectors.

In future years, we will substantially scale up this work, with up to £18 million, jointly funded between the UK and Scottish governments,[39] to extend and broaden the Oil and Gas Transition Training Fund over the next three years (2026/27 to 2028/29)–providing thousands more of Scotland's valued offshore oil and gas workers with access to bespoke careers advice and funding for the training they need to access roles in sustainable energy. Both governments will work with trade unions and industry to develop and promote this scheme and explore opportunities for additional private investment. We will also explore the development of a range of complementary tools and support for the North Sea energy skills transition, including guaranteed interview schemes, redeployment pools and skills passporting

**Action 2.2 North Sea's energy future:** The UK Government will publish a response to the consultation on the North Sea's Energy Future later this year. The response will draw on key aspects of the Clean Energy Industries Sector Plan and this Jobs Plan to ensure that our highly-skilled oil and gas workers have the support needed to access the

[39] All future Scottish Government funding remains dependent on the upcoming 2026/27 Scottish Budget, Scottish Spending Review and future annual Scottish Budgets.

opportunities resulting from a future internationally-leading offshore clean energy industry across the North Sea. It will also be important to ensure UK oil and gas supply chain companies, and their workforces, can access growing clean energy sectors.

**Action 2.3 Energy Skills Passport:** The Energy Skills Passport is an industry-led initiative overseen by RenewableUK and Offshore Energies UK, and supported by the UK and Scottish Governments to help workers from carbon-intensive industries access opportunities in new clean energy sectors. After launching the first phase of the Skills Passport in January 2025, the government will continue to support RenewableUK and Offshore Energies UK to expand the digital tool. This will include adding more offshore and onshore wind job roles and career pathways to the digital tool and expanding cross-sector career pathways for critical roles such as welding. We will also explore the inclusion of additional clean energy sectors, such as electricity networks and nuclear,[40] to support oil and gas worker transitions and enable cross-sector mobility.

**Action 2.4 Regional Skills Pilots:** In addition to the Aberdeen Oil and Gas Transition Training Fund, we are also announcing funding of up to £2.5m for delivery of innovative skills pilots in three other areas where we have identified opportunities from the clean energy transition. This follows skills mapping earlier this year to identify skills support needed to deliver Clean Power 2030 and support workers moving into clean energy. We have commissioned an independent evaluation of the pilots, and we will use the learnings to inform future policy.

- **In Cheshire West and Chester,** the North-West Net Zero Hub will pilot short employer-led courses for up to 160 workers that support the upskilling of priority clean energy occupations; provide advice and incentives to encourage supply chain SMEs to benefit from apprenticeships; and facilitate industry-led continuous professional development sessions for local further education provider staff.
- **In North and North-East Lincolnshire,** the Midlands Net Zero Hub will facilitate the delivery of technical and short introductory clean energy modules to up to 250 learners; offer financial assistance for the local workforce to access clean energy training; and engage with careers hubs to establish skill pathways, increasing local awareness about the benefits of clean energy jobs.
- **In Pembrokeshire,** the UK and Welsh governments will deliver Stackable Micro Skills Credentials to enable up to 200 economically inactive individuals and workers to gain skills in clean energy sectors.

**Action 2.5 Retraining barriers:** The Office for Clean Energy Jobs will establish a group, bringing together industry, trade unions, and training organisations to identify and remove unnecessary non-technical training barriers that prevent skilled workers in carbon-intensive sectors from transitioning into clean energy roles. This could include developing tailored redeployment programmes for critical workers or creating pathways that support

[40] In Scotland, any expansion of the Energy Skills Passport to nuclear would only be in relation to nuclear decommissioning.

mobility across clean energy sectors. We will build on the insights gained from the Grangemouth and Prax Lindsey Training Guarantees and the Regional Skills Pilot intervention in Aberdeen.

**Case study: Connected Competence by ECITB**

Connected Competence is an industry-driven initiative that is supported and enabled by the Engineering Construction Industry Training Board (ECITB). It aims to recognise the generic skills transfer across all sectors of the Engineering Construction Industry, including Oil and Gas and renewable energies, which will support a resilient, transferable workforce and aid the energy transition. This complements the Construction Skills Certification Scheme ambition in recognising routes to validating technical competency of the workforce.

Workers will also manage their own competence, ensuring recognition of their competence achievements move with them, be it when they change jobs within a sector, or transfer to another one. This benefits workers as they have transferable ownership of their own attainments without risk of them being withheld by employers. And for employers and stakeholders, it reduces time sourcing certificates, no duplication of training courses, lower overall costs, and a standardised, technically competent–and, above all, safe–workforce.

The Energy Skills Passport has been designed to enable integration with Connected Competence. This feature along with the potential of integrating digital badges would create a unified digital platform where oil and gas workers can access and manage all their qualifications in one place.

# Service leavers and veterans

## Context

Service leavers and veterans bring critical skills that drive clean energy and economic growth. Offering tailored career transition support helps them continue contributing to society while securing stability for themselves and their families.

Supporting veterans into meaningful work honours their service and supports smooth integration into civilian life. Many clean energy roles suit the armed forces community, particularly those with transferable engineering or marine skills.[41]

Each year, approximately one in six military leavers with known employment outcomes entered one of the 31 occupations we have identified as a priority for clean energy sectors.[42] This means military leavers are around twice as likely as other workers across

[41] Mission Renewable (2022) Renewable Energy Sector Guide
[42] Ministry of Defence (2025) Career Transition Partnership ex-service personnel employment outcomes statistics: index. Lower level occupation outcomes taken from 2020/2021 to 2023/2024.

the economy to be employed in priority occupations, demonstrating the high levels of in-demand clean energy skills among veterans.[43] With around 15,000 service leavers eligible for Career Transition Partnership support each year, an estimated 2,500 service leavers per year could have many of the skills for the 31 clean energy priority occupations alone.[44]

The potential to build on veteran's skills could be even greater when considering all of the occupations required across clean energy, and if the barriers that lead to over half of veterans reporting they have taken jobs below their skill level are addressed.[45]

The Offshore Wind Industry Council (OWIC) has already taken proactive steps to support veterans transition into offshore wind careers through the establishment of its Military Working Group. This initiative brings together industry leaders to recognise and harness the valuable skills of ex-service personnel, many of whom possess the engineering, technical, and leadership capabilities critical to the sector. The group promotes awareness of career opportunities, provides tailored advice and guidance, and fosters a peer support network of veterans already working in offshore wind. It also advises policymakers on training and policy needs to ensure a smooth transition for service leavers into meaningful roles in clean energy sectors.

Our vision is to build on this work to create a clear pipeline for veterans into other high-quality clean energy roles, such as solar installation and grid infrastructure–fostering collaboration between employers, veteran services, and various charity groups.

**Case study: Mission Renewable**

Mission Renewable is an initiative dedicated to supporting veterans, service leavers, and their families in transitioning into careers across the clean energy sector. By recognising the transferable skills of armed forces personnel–leadership, discipline, technical expertise–Mission Renewable, supported by the Veterans Industry Engagement Programme, bridges military talent with industry demand in areas such as offshore wind, solar, and nuclear.

Almost 2 million veterans live in the UK, with around 15,000 new service leavers a year. By connecting tailored training pathways, employer partnerships, and regional pilot schemes, Mission Renewable not only supports workforce growth, but also strengthens social value across clean energy projects. The non-profit initiative, which has been delivered in partnership with OWIC and RenewableUK and their members since 2022, builds and empowers Armed Forces communities across the sector.

[43] ONS (2024) Annual Population Survey. Approximately 1 in 13 people in the UK are employed in any of the 31 clean energy priority occupations.
[44] Ministry of Defence (2025) Career Transition Partnership ex-service personnel employment outcomes statistics: index. Armed forces service leavers eligible for Career Transition Partnership (CTP) values taken from 2020/2021 to 2023/2024. Assumes that the ratio of military leavers going into priority occupations (1 in 6) with known employment outcomes, is the same for all service leavers eligible for Career Transition Partnership support, which includes those without known employment outcomes.
[45] ONS (2025) Employment, skills and volunteering, UK armed forces veterans, UK: Veterans' Survey 2022

This vital work reflects the government's commitment to a just transition, ensuring that those who have served the nation play a vital role in powering our net zero future.

### Action plan

**Action 2.6 Service leavers:** We will work with the Office for Veterans' Affairs to develop and promote new employment pathways and career opportunities for veterans, and their families, into the clean energy sector. This includes supporting a 12-month pilot led by Mission Renewable to connect veterans and service leavers with clean energy careers in the East of England. In partnership with RenewableUK and Solar Energy UK, the pilot will map career pathways and use Op ASCEND and the Career Transition Partnership to support more armed forces leavers into high-demand roles in the region. The learning from this pilot will help identify future actions the government can take to strengthen veteran pathways into the clean energy sector across the UK.

## Getting Britain working

### Context

To build a thriving, inclusive labour market, we must tackle economic inactivity and help more young people to learn, earn, and start their careers.

In 2024, 13,700 out of work people in the UK were estimated to already meet all of the skills requirements to work in at least one priority clean energy occupation.[46] This rises to over 100,000 when including those who meet most, but not all, of the skills requirements. This gives an indication of the number of out of work people who could join a priority occupation with some training or support.

The most common priority occupations that those out of work and already meeting the skills requirements for are within skilled metal, electrical and electronic trades, skilled construction and building trades and science, research, engineering, and technology professions.[47] We will prioritise bringing individuals back into the workforce to fill critical clean energy roles.

[46] ONS (2025) People's ability to work in clean energy occupations in the UK, 2024. See table 4. 13,700 refers to the number of out of work people at the 100% skills match level, this rises to 137,000 at the 97% skills match level. See the cover note within the linked tables for methodology.
[47] ONS (2025) People's ability to work in other occupations in the UK, 2024.

## Action plan

The Department for Work and Pensions is reforming the employment system to reduce economic inactivity and tackle barriers such as long-term sickness. The Youth Guarantee will ensure all 18-21-year-olds in England can access education, training, or support to find jobs or apprenticeships. Several programmes are critical to building a clean energy workforce, especially for delivering Clean Power 2030, where reskilling is urgently needed to meet short-term demand.

**Action 2.7 The Jobs and Careers Service:** The Service will aim to get more people into work and support those seeking better opportunities with the means to find better paid work and careers. We will support people to take up roles in priority occupations through the nationwide network of Jobcentres and wider employment and careers support system. Building on this commitment and a pilot in Wales, we will make green upskilling, including a focus on clean energy, available for all staff in the Jobs and Careers Service to enhance awareness of clean energy roles, opportunities, and career pathways. We will work with clean energy firms to enhance workforce supply routes from Jobcentre Plus, and create Green Workforce hubs to co-locate Jobcentre Plus with careers advisors and offer Sector-based Work Academy Programmes and short modular training.

**Action 2.8 Trailblazers:** The current place-based Economic Inactivity and Youth Guarantee trailblazers are being mobilised to test new and innovative approaches to tackling economic inactivity and ensure better join-up of employment, education and training support. We will explore whether future programmes led by the Department for Work and Pensions could target specific clean energy priority regions to support young and economically inactive people to move into Level 2 or below clean energy jobs to meet regional demand.

**Action 2.9 The Youth Guarantee:** We will support young people to access careers in growth-driving sectors, including clean energy, through the new Youth Guarantee, led by Department for Work & Pensions. We will look to support pre-employment training to help give young people the skills they need to be prepared for work, and signpost opportunities for clean energy jobs. A number of our current Trailblazers are in areas with clean energy demand, and we are considering our approach to wider roll-out. We will also offer a guaranteed job to young people on Universal Credit who are unemployed for over 18 months, with further details to be set out at the Autumn Budget. This will provide an opportunity for young people to gain essential skills and experience and prevent the damaging effects of long-term unemployment.

**Action 2.10 Sector-based Work Academy Programme (SWAPs):** SWAPs offer those who are receiving certain benefits the opportunity of training towards a job in a particular industry, alongside a work placement and a guaranteed interview. The Department for Work and Pensions is increasing the numbers of people starting a SWAP from 80,000 to 100,000 in 2025/26.

**Case study: Solar Panel Installation SWAP**

Jobcentre Plus teamed up with Moulton College and Northamptonshire-based firm GenCarbon to deliver a bespoke SWAP on solar panel installation. The course prepares students for careers in solar installation by delivering pre-employment training, a work experience placement, and a guaranteed job interview. Over a three-week period, the course delivers practical, hands-on instruction on the installation of photo voltaic solar panels, alongside health and safety and teamwork skills.

To date, 6 cohorts of the SWAP have been delivered, with 75 learners starting a placement and 43 customers offered employment with GenCarbon. GenCarbon have reported a 64% retention rate, which is significantly higher than recruitment they experienced outside of the SWAP.

# Prison leavers

## Context

In 2024, 57,277 people left prison in England and Wales.[48] Supporting prison leavers who have been pre-screened for suitability into appropriate roles, like construction jobs, is vital for their rehabilitation. Employment is a key factor to reduce reoffending post-release, with evidence showing that securing a job within a year can cut the chance of reoffending by up to nine percentage points.[49] Prison leavers who enter steady employment after leaving prison are half as likely to reoffend in the 12 months after release.[50] Reoffending is costly to society, with the Ministry of Justice estimating that the total estimated economic and social cost of reoffending by adults was £16.7 billion in 2016.[51]

HM Prison and Probation Service (HMPPS) ensures education and training reflects labour market needs. It partners with the Department for Work and Pensions and other departments to identify priority skills gaps and target training, such as through the national ‘Unlocking Construction’ campaign. Several programmes help prisoners become job-ready and build careers, including HMPPS’ New Futures Network, the Future Skills Programme, and Apprenticeship programme.

[48] Ministry of Justice (2025) Prisons data: offender management, 2025. Sum of 2024 quarterly releases.
[49] Ministry of Justice (2013) Analysis of the impact of employment on re-offending following release from custody, using Propensity Score Matching
[50] Ministry of Justice (2013) Analysis of the impact of employment on re-offending following release from custody, using Propensity Score Matching
[51] Ministry of Justice (2019) Economic and Social Costs of Reoffending

## Action plan

**Action 2.11 Prison leavers:** Energy & Utility Skills, the Ministry of Justice, and HMPPS will collaborate with the Department for Energy Security and Net Zero to identify key regions with potential to address critical energy sector vacancies for non-violent offenders. For identified regions, innovative training and job-matching approaches will be prototyped depending on skills needs. Ideas being considered include upskilling local prison staff or long-term prisoners to deliver training and utilising training facilities in prisons.

**Action 2.12 Prison leavers campaign:** New Futures Network will deliver 'Unlocking Green Jobs' in November 2026, which is a prison-wide campaign to promote the green sector and encourage organisations to link with the Network and prisons to develop green employment. They will work with existing partners to design and deliver 'Green Shoots' events in prisons to promote employability in the sector, as well as 'Linking with the Green Scene' event to all Prison Employment Leads to encourage networking and connecting with local businesses.

**Case study: Murphy**

Murphy is an international engineering and construction company that delivers infrastructure in sectors including clean energy. It is the founding member of the first National Prison Employment Advisory Board in 2021, a unique initiative offering prison leavers an end-to-end journey into employment, starting on Week 1 of sentence. Murphy's nationally recognised Prison Leaver programme is now in its fourth year and continues to improve lives. This employment model received recognition in Parliament and is now being replicated in 91 prisons across the UK. Murphy's plans for 2025 and 2026 include expanding the Prison Leaver work into Scotland, working with more female prisons, and building on its unique autism employment programme to extend to neurodiverse prison leavers.

# Not just jobs, good jobs

**Vision statement:**

As the clean energy sector rapidly grows, it is crucial to ensure that clean energy jobs are not only plentiful, but also high-quality. We will work closely with trade unions and industry to ensure clean energy jobs are well paid, safe, accessible to everyone, and have good working conditions.

**Key actions:**

- Support greater trade union recognition and promote collective bargaining across the clean energy sector as a mechanism to facilitate engagement with industry, improve job quality, secure fair work, and build a resilient workforce.
- Amend employment rights legislation with the aim of reducing discrepancies between the rights of offshore oil and gas and offshore low carbon and renewable energy workers.
- Look to leverage additional private investment into skills and strengthen workforce protections, through introducing workforce criteria across relevant Department for Energy Security and Net Zero grants and procurements, including in the Clean Industry Bonus (CIB).
- Develop a Fair Work Charter with the wind sector and trade unions, which outlines a sector-wide commitment to providing high-quality employment through the CIB. Embed the role of trade unions within policy making through relevant energy sector forums and partnerships—such as the boards of Great British Energy and the Net Zero Council—and embed trade union representation as a marker of good governance and effective delivery.
- Improve the inclusivity and visibility of clean energy job opportunities through the Social Inclusion Forum and an industry-led public awareness campaign.

# The opportunities and challenges

Good jobs are the foundation of a fair and prosperous economy. Providing good jobs across the clean energy sector will attract skilled British workers and help us deliver our Clean Energy Superpower Mission. Government, industry, and trade unions must work together to raise awareness of key opportunities in clean energy careers and boost training uptake. This helps reduce job shortages and ensures a steady pipeline of skilled workers.

Our vision is that the clean energy sector will be one of the best sectors to work for in the UK, offering good wages, stability, and the opportunity to progress through a varied and interesting career. To achieve this, we need to work hand in glove with workers, industry, and trade unions to improve working conditions.

Increasing trade union recognition agreements and use of collective bargaining is one of the key mechanisms to facilitate this dialogue and drive outcomes. Recognition across renewable sectors currently offers a mixed picture, and whilst progress has been made in recent years with companies like EDF power solutions UK and Great British Energy - Nuclear announcing recognition agreements alongside a range of wider initiatives aimed at increasing the quality of jobs across the sector, there is more that needs to be done.

The government's 'Make Work Pay' plan is central to ensuring that new jobs are not only created, but are also good, secure, and fairly paid. It represents the biggest upgrade to workers' rights in a generation, tackling low pay, insecure work, and poor conditions, while building a new partnership between business, trade unions, and working people. By extending protections to millions more workers, the plan will make wages fairer, improve living standards, and support higher productivity.

Delivered through the Employment Rights Bill, this includes new duties on employers to inform workers of their right to join a union, rights of access for unions (including non-recognised unions) to recruit and organise, and reforms to the statutory recognition process. Recognition applications will continue to be overseen by the independent Central Arbitration Committee, but the rules will be modernised to make it easier for unions to secure recognition alongside stronger safeguards against unfair practices.

We are also committed to equal opportunity and working with employers to bring more women and those from a variety of different social and ethnic backgrounds into clean energy jobs.

Together, these measures underpin this Jobs Plan by ensuring that as the clean energy workforce doubles in size, all workers across the UK, regardless of background or location, can benefit from good jobs with stronger rights and a genuine voice.

# Ensuring the quality of clean energy jobs

## Context

Good quality jobs are essential for boosting productivity and driving economic growth. 'Job quality' covers multiple factors, and the Office for Clean Energy Jobs has created a taxonomy (Figure 3) to assess it. We must address each of these aspects through our work.

**Figure 3: Taxonomy of Quality of Jobs**


The government is committed to the role of trade unions in representing the voices of workers. By working with industry, using relevant national pay agreements such as The National Agreement for the Engineering Construction Industry, and expanding union recognition whilst promoting collective bargaining across the sector, we can ensure all clean energy jobs are good jobs.

Union recognition and collective bargaining support fairness and job quality, especially amid technological and structural shifts,[52] as well as supporting workers into old age by ensuring that they have access to suitable pension provisions and can access quality advice to help them plan for the future.

This is both good for workers and good for business. Independent analysis from organisations such as the Institute for Public Policy Research and the Organisation for Economic Co-operation and Development, highlights that stronger collective bargaining is linked with higher wages, stronger job satisfaction and retention.[53] Improving trade union access and recognition can also support diversity by encouraging fair, transparent practices that build inclusion across all backgrounds.[54] For example, Sizewell C will provide thousands of skilled, high-quality jobs, with its Tier 1 Contractors, GMB, and Unite signing agreements to provide 'best in class' employment conditions for construction workers[55].

We are also committed to using broader government levers to support the Department for Energy Security and Net Zero's measures to help accelerate investments in quality jobs and the necessary skills.

[52] OECD (2019) Negotiating Our Way Up: Collective Bargaining in a Changing World of Work; Eurofound (2024) Workplace democracy and participation: New evidence on voice and decision-making
[53] IPPR (2018) Power to the People; TUC (2019) A stronger voice for workers: How collective bargaining can deliver a better deal at work
[54] TUC (2020) Union Equality Reps Survey Report
[55] Sizewell C (2024) Sizewell C agrees 'best in class' conditions for workers

## Action plan

**Action 3.1 Trade Union recognition and collective bargaining:** The government wants to see more trade union recognition and promote collective bargaining across the clean energy sector, as these are among the most effective ways to improve job quality, secure fair work, and build a resilient workforce and strong communities. The government recognises the importance of unions in shaping working conditions–including health and safety standards–and is committed to working in partnership with industry to strengthen their voice as the sector transforms. There has been progress in recent months with a number of companies, such as EDF power solutions UK, signing recognition agreements. But there is more to be done. We want to build on reforms in the Employment Rights Bill to empower trade unions, making it easier for them to organise, represent, and collectively bargain on behalf of workers. We are committed to continuing to work with industry and trade unions to deliver greater trade union recognition and promote collective bargaining across the clean energy sector; mapping existing arrangements; working with stakeholders to simplify guidance; and tracking progress to meet our vision of delivering good jobs across the clean energy sector. We will also work with industry and trade unions to explore a range of other initiatives, including the potential for Framework Agreements and sector-specific arrangements to guide job quality standards for major infrastructure projects.

**Action 3.2 Protections for offshore renewable and low carbon energy workers:** We acknowledge that current definitions of offshore employment in legislation have left gaps in protections for offshore renewable and low carbon energy workers. In particular, this affects those working beyond UK territorial waters compared with the protections for offshore oil and gas workers working on the UK continental shelf. With sectors such as offshore wind expected to triple in size and play a key role in achieving our clean energy goals, we are committed to closing these gaps to ensure fair treatment and protect our domestic workforce from being undercut. We aim to amend the powers in employment legislation to extend employment rights to certain offshore workers, with the intention of reducing discrepancies between offshore oil and gas workers and offshore renewable and low carbon energy workers.

**Action 3.3 Fair Work Charter and workforce criteria in the Clean Industry Bonus:** The Clean Industry Bonus (CIB) supports offshore and floating offshore wind projects in building more sustainable supply chains. In its first round, we increased the budget to £544 million to boost investment in cleaner manufacturing, as well as factories and port infrastructure across the UK's industrial heartlands, coastal areas, and traditional oil and gas communities. The Department for Energy Security and Net Zero (DESNZ) is now exploring potential changes to expand the CIB's impact, including publishing a consultation on measures aimed at strengthening workforce protections and skills investment in offshore wind. The government's lead proposal for workforce protection is to develop a new and ambitious offshore wind fair work charter that is co-developed between industry and trade unions. We will be convening discussions ahead of Allocation Round 8, with the aim of developing a full charter by Allocation Round 9. The negotiations will explore how to improve issues such as working conditions, flexible work offers, and health and safety,

amongst others, but the final shape of the package is subject to negotiation between the parties. Once agreed and piloted through the CIB process, we will explore options to extend fair work charters to other clean energy sectors and DESNZ programmes. For skills investment, we are consulting on options for developers to either contribute towards a collaborative skills fund or invest in skills at the project level.

**Action 3.4 Workforce criteria in HMG Procurement and Social Value Model:** DESNZ will work with the Cabinet Office on any further developments in social value policy which is used to ensure alignment with strategic priorities across a range of relevant HMG procurements, ensuring that these are used to drive greater private investment in skills and delivering good-quality jobs. The Cabinet Office recently updated the Procurement Policy NOTE 002 Social Value Model to include new criteria on 'fair work', focused on working conditions, employee well-being, and employee voice. The government is consulting on further public procurement reform, including a common social value tool for the public sector. Within DESNZ, we will be adopting a commercial framework that default 'green procurement practices', 'fair work', and 'skills for growth' outcomes on DESNZ procurement contracts, where appropriate.

**Action 3.5 Workforce criteria in DESNZ grants and procurement:** DESNZ will extend social value requirements on fair work, skills, and green procurement to grants, allowing for case-by-case flexibility. We will also test and pilot innovative ways to drive fair work and skills in DESNZ grants and contracts, including through the Clean Industry Bonus and the newly formed Great British Energy. These new criteria will help accelerate investments in quality jobs and the necessary skills as part of wider government efforts to meet our 2030 targets.

**Action 3.6 Embedding Trade Unions within DESNZ policy-making:** Trade unions have a vital role to play, alongside industry and other stakeholders, in shaping policy-making to ensure that workers voices are at the heart of our Clean Energy Superpower Mission. We will continue to take steps to ensure that trade union and workers' voices, alongside those from industry, are heard throughout the DESNZ policy-making process. We will also set out clear expectations that key energy sector forums and partnerships include trade union voice as a marker of good governance and effective delivery, including on boards such as Great British Energy and Net Zero Council, and explore other DESNZ sponsored arm's length bodies.

# Growing awareness of clean energy jobs

## Context

To ensure we have a robust talent pipeline for the clean energy workforce, we must ensure that every section of the population is aware of the career opportunities in clean energy, from young people, to the unemployed, to those looking to transition into a new career. We know that we must do more to improve awareness of clean energy jobs, with Public First finding that only 27% of young people who have heard of the term 'green jobs'

are able to explain what it means.[56] A failure to communicate with, and attract talent from, diverse groups of society will undermine our ability to build the workforce we need as it narrows the pool of talent available.

We will proactively seek to reach diverse groups to promote both skills development and professional opportunities. Collectively, government, employers, and educational institutions need to better communicate that clean energy can provide well-paid, high-quality careers. We will need to ensure that we provide a targeted communications approach to different areas of the labour market who may need different messaging.

The government has established multiple communication channels focused on jobs and skills, including the Skills for Life campaign: It All Starts with Skills, which invites young people, adults and businesses to make the most of their potential by engaging in a range of government skills and technical education offers. There is also green careers advice available through the National Careers Service. This year, the Office for Clean Energy Jobs produced an Employer Handbook to help employers build and develop their workforce by identifying key public sector tools available that employers can access.

More broadly, the public wants government to show leadership with 69% of people saying it is important that the UK is a global leader in tackling climate change.[57] We will publish a net zero public participation strategy later this year which aims to empower individuals and communities to actively engage in the transition to net zero. This strategy will outline how the government plans to make climate policies more responsive to people's needs, while ensuring that everyone can access the benefits of this transition. By working in partnership with businesses, civil society, trade unions, and local government, the participation strategy will galvanise action and ensure widespread participation. We will ensure that this work highlights the opportunities our clean energy transition presents for good jobs and will coordinate engagement with other relevant initiatives.

## Action plan

**Action 3.6 Public awareness Campaign:** Energy & Utility Skills, with support from the Department for Energy Security and Net Zero and organisations including BEAMA, ECITB, Energy UK, EngineeringUK, and RenewableUK, are leading a UK-wide industry-led awareness and attraction campaign on job and career opportunities, launching next year. In parallel, a deep dive will be undertaken on several priority occupations with critical workforce needs to improve understanding of, and overcome, specific barriers to entry, whether that be lack of visibility of career pathways or attractiveness of roles.

**Action 3.7 Industry commitment:** The Careers and Enterprise Company will support industry, employers, and the sector to engage with young people, and enhance their understanding and take-up of the growing opportunities across clean energy. Employers and other partners will be able to utilise Careers Hubs which support schools, colleges,

[56] Public First (2023) Generation Green Jobs?
[57] DESNZ (2025) DESNZ Public Attitudes Tracker: Winter 2024

and employers to improve careers education. Further opportunities for more targeted interventions will be considered as the campaign evolves. Building on the learning, industry will consider broadening the campaign further.

**Action 3.8 Industry commitment:** In conjunction with the public awareness campaign, Energy & Utility Skills will work with industry to commence an initiative to pool talent. It focuses on already identified and screened talent who do not receive job or apprenticeship offers. They will be directed and supported to register their intent to be considered for wider opportunities across the sector. This will help enable improved talent retention within the sector and support building resilience for the supply chain.

# Widening access to develop the talent pipeline

## Context

Delivering our clean energy ambitions will require a significant expansion of the workforce. To meet this, we must take full advantage of the talent across the UK. Currently, the clean energy sector does not reflect the UK population: women make up 24% of the energy sector,[58] with variation between sectors (for example, women currently account for only 22% of the nuclear workforce,[59] and 21% of offshore wind[60]). Additionally, only 7% of the offshore wind[61] and 5% of the heat pump[62] workforce are from an ethnic minority background, and people with declared disabilities make up only 3.4% of the energy workforce.[63]

This underrepresentation is an economic issue. Evidence shows that widening access can bring significant benefits to organisations, particularly in relation to productivity and growth, with the most diverse companies (gender, ethnic and cultural) more likely to outperform non-diverse companies on profitability.[64]

Underrepresentation is also a fairness issue. It is essential that the clean energy sector attracts and retains untapped talent to avoid undermining successful delivery of our ambitions. We cannot risk overlooking a vast pool of talent at a time when the sector urgently needs to scale up. Widening access is essential to ensure that the benefits of clean energy jobs are shared more equitably, so that everyone, regardless of their background, can reap the benefits.

[58] TIDE (2025) Data Driven EDI: Results from Health Index and Inclusion Measurement Framework (energy sector)
[59] Cogent Skills (2025) Nuclear Workforce Assessment
[60] OWIC (2023) Offshore Wind Skills Intelligence Report 2023
[61] OWIC (2023) Offshore Wind Skills Intelligence Report 2023
[62] DESNZ (2023) Heating and Cooling Installer Study
[63] TIDE (2025) Data Driven EDI: Results from Health Index and Inclusion Measurement Framework (energy sector)
[64] McKinsey & Company (2020) Diversity Wins: How Inclusion Matters, McKinsey & Company (2025) Breaking the standstill: How social mobility can boost Europe's economy

**Women in the clean energy sector**

Progress has been made on female representation across the UK energy sector with more women on boards, more female directors, and more women in middle management roles in 2025 compared with 2024.[65] However, the broader picture is that this progress is incremental, and the sector needs to go further. The energy sector significantly lags behind female representation in the wider economy, where women make-up around 48% of UK workers.[66] With 30% representation on Boards, the sector still lags behind the FTSE350, which reached 40% board representation two years ago. Notably, 15% of UK energy companies still have no women on their boards at all, whereas all-male boards disappeared from the FTSE350 some time ago.[67] In addition, data suggests that women leave the sector at high rates.[68]

An example of an energy company successfully increasing female representation is bp. Louise Kingham (SVP Europe and UK Head of Country) sponsors BP's UK ambitions on inclusion, chairing their Diversity & Inclusion (D&I) council, and championing D&I across the sector. Since 2022, bp have seen a steady increase in female representation at senior leadership level (from 30.8% to 32.0%), and UK minority representation at senior and group leadership level (from 14.2% to 17.4%).

The Office of Equality and Opportunity have published a report incorporating the latest research on effective measures to help employers improve gender equality. Alongside this, detailed implementation guides have been published on four of the effective actions:

How to set effective targets

How to establish diversity leads and diversity task forces

How to run structured interviews

How to increase transparency of progression, pay and reward processes

There must be continued and expedited action at all stages of the employment lifecycle (attraction, recruitment, retention and progression) and at all employment levels to deliver the required workforce growth and maximise opportunities across the clean energy sector. There are a range of initiatives already in place to support inclusivity in the clean energy sector, including POWERful Women and Tackling Inclusion and Diversity in Energy (TIDE).

[65] POWERful Women (2025) POWERful Women State of the Nation's Report 2025
[66] ONS (2025) Labour market overview, UK: August 2025
[67] POWERful Women (2025) POWERful Women | Company statistics 2025
[68] Energy & Utilities Skills (2025) Inclusion Measurement Framework 2024 Report and Recommendations

Great British Energy has made a commitment through its governance frameworks to ensure that they will implement good practice and ensure that opportunities are accessible to all.

Clean energy jobs also have an important role to play in improving social mobility across the UK. The Social Mobility Commission's Social Mobility Index classifies 203 regions in the UK across four measures of social mobility: promising prospects; conditions of childhood; labour market opportunities for young people; and innovation and growth.[69] Chapter 5 sets out the government's plan to ensure that clean energy jobs bring benefits to every part of the UK.

**Case study: Driving social inclusion through supported work placements**

National Grid's EmployAbility 'Let's Work Together' supported internship programme supports students with additional educational needs and disabilities by providing the opportunity to gain real work-based skills and experience. The internship is a structured study programme for students aged 16-24 years old with autism and/or learning disabilities who have an Education and Health Care Plan. Interns spend an academic year at their Warwick office fully immersed in job placements and supported by a qualified job coach. The programme has been running since 2013 and, on average, 50% of interns move into paid employment. This is in the context of a national average of just 4.8% of adults with learning disabilities being in paid employment.

## Action plan

**Action 3.9 Social Inclusion Forum:** An industry-led Social Inclusion Forum, chaired by Energy & Utility Skills with support from POWERful Women and the Department for Energy Security and Net Zero, has been created to assess the impact of and allow better coordination between various social inclusion initiatives. The Forum includes representatives from government, industry, trade associations, professional bodies, and trade unions. The Forum will report on progress annually. It will build on and incorporate learning to deliver an improved working culture across the clean energy sector and its supply chains. Initial actions include:

- *Measurement:* Building on the success of POWERful Women, industry will align around quantitative and qualitative inclusive measurement tools, such as Energy and Utility Skills' Inclusion Measurement Framework and the EDI Health Index, to measure social inclusion, resulting in more robust data.

[69] More information can be found on the SMC's Data Explorer Tool

- *Attraction and Recruitment:* The Forum will drive the clean energy sector to refine recruitment practices, including using job descriptions with language to attract the widest possible talent pool, and recruiting using talent pools that better reflect diversity in the wider market.
- *Reporting:* Companies that are involved in the Forum will undertake ethnicity and disability pay gap reporting a year earlier than it will be mandated for larger employers. Reporting remains an important mechanism to increase transparency and provide visibility around any inequalities, enabling these to subsequently be tackled by organisations.

# Clean energy sectors

**Vision statement:**

Across the clean energy economy, we will ensure all sectors are supported so that they have access to the abundant, skilled, and flexible workforce we are delivering across the country.

**Key actions:**

- The onshore wind industry will conduct new workforce monitoring to provide demographic data, enabling targeted actions, including developing occupational profiles to identify crossover between sectors and supporting a RenewableUK-led wind industry skills survey.
- Grow awareness of career opportunities in the solar sector through initiatives such as careers fairs and guidance packs for schools as outlined in the Solar Roadmap.
- Continue to support the industry-led Nuclear Skills Plan.
- Work with electricity network operators and the supply chain to examine areas for greater collaboration on skills as part of the development of an industry-led Sector Growth Plan.
- Provide £400,000 of seed funding to Cogent Skills and the Hydrogen Skills Alliance to deliver a Hydrogen and Carbon Capture Skills Accelerator that will begin designing a comprehensive hydrogen and CCUS curriculum.
- Support training for skills in building retrofit and clean heat through the Warm Homes Skills Programme and Heat Training Grant.

Whilst many skills and workforce challenges and policy solutions are shared across clean energy sectors, different sectors vary in levels of maturity and market conditions, and many require specialised skills. As a result, they also face unique challenges that demand tailored solutions. Table 2 sets out estimates for the total jobs (direct and indirect) supported by different clean energy sectors, including the latest available current estimates and our projection for 2030. This chapter details the sector-specific actions government and industry are taking to deliver the clean energy workforce.

**Table 2: Total Jobs Supported in Clean Energy Sectors (direct + indirect)**

| Sectors | 2023 | 2030 |
|---|---|---|
| **Offshore Wind** | 31,000 | 100,000 |
| **Onshore Wind** | 13,000 | 45,000 |
| **Solar** | 20,000 | 35,000 |
| **Heat and Buildings** | 66,000 | 248,000 |
| **Other Clean Energy Sectors** | 307,000 | 428,000 |
| **Total Clean Energy** | **437,000** | **856,000** |

Estimates for renewables represent an upper bound scenario. Due to volatility in the LCREE solar estimates, particularly between 2022 and 2023, we have chosen to present a 3-year average to smooth out the year-on-year volatility.[70] Other clean energy includes nuclear fission and fusion, clean flexibility and smart systems, electricity networks, Hydrogen and Carbon Capture, Utilisation & Storage (including Greenhouse Gas Removals).

# Clean Power

Through the Clean Power 2030 Action Plan, government has given developers greater clarity and certainty over their routes to market so that they can plan and mobilise the workforce they need. This is being supported by accompanying sector-specific strategies such as the Onshore Wind Strategy and Solar Roadmap.

By 2030, our clean power system will be dominated by homegrown renewables, with nuclear delivering a backbone of firm power, and flexible, low carbon solutions to meet demand at peaks and for longer periods. We estimate that clean power sectors will support up to 590,000 jobs by 2030, both directly and indirectly.[71] Many of the key occupations (for instance technicians, welders, and engineers) in clean power sectors face competition from other critical sectors such as construction and defence. The Office for

[70] Sampling variation means there is high uncertainty surrounding year-on-year changes in the ONS LCREE survey, which is particularly acute for solar due to a relatively high share of SMEs within the rooftop sub-sector.
[71] DESNZ experimental analysis (2025). See the accompanying Clean Energy Jobs Plan Technical Annex for details.

Clean Energy Jobs is working with groups such as the Construction Skills Mission Board to ensure alignment of workforce priorities across sectors.

Industry is developing occupational profiles for clean power sectors, with the aim of supporting people to understand career pathways into clean energy jobs and develop appropriate competencies. In June 2025, Energy & Utilities Skills worked with the Offshore Wind Industry Council to deliver 16 occupational profiles for the offshore wind sector, and has recently confirmed 6 new occupational profiles to be developed for the solar sector, working with Solar Energy UK.

**Clean Power 2030: Supply Chains and Workforce Forum**

In 2025, the Clean Power 2030 Unit hosted three meetings of the Clean Power Supply Chains and Workforce Industry Forum, in close collaboration with the Office for Clean Energy Jobs. The Forum brought together participants from across government, industry, and trade unions to discuss supply chain and workforce challenges to delivering Clean Power 2030. The Forum developed a comprehensive view of the challenges posed by the scale of the transition needed by 2030, shed light on what areas require further focus, and demonstrated the opportunity to support economic growth by building domestic supply chains and growing the workforce.

Discussions through the Forum aligned with the key themes set out in this publication and helped inform the set of comprehensive actions presented. Areas identified for continued focus from the Clean Power 2030 Unit specifically included considering the impact of the visa system on short-term workforce needs in clean power sectors, including engaging with the Migration Advisory Committee on its review of the Temporary Shortage List for Skilled Worker Visas following the publication of the Immigration White Paper in May 2025, and considering the role of contractors in accessing much of the workforce needed for clean power projects.

The Clean Power 2030 Unit and the Office for Clean Energy Jobs will continue to work together to ensure that challenges to securing the Clean Power 2030 workforce are mitigated. Next steps for engagement regarding the Clean Power 2030 workforce beyond the Forum are set out in Chapter 6.

## Action plan

**Action 4.1 Offshore wind:** The Department for Energy Security and Net Zero (DESNZ) continues to play a central role in supporting the Offshore Wind Industry Council's (OWIC) Investment in Talent Group, which is the primary forum for aligning industry and government efforts on workforce development. This collaboration is key to delivering the ambitions set out in OWIC's People and Skills Plan, published in 2024.

In Autumn 2024, DESNZ, alongside the Scottish Government, became a project partner in the Energy Skills Passport initiative, which aims to create a transferable, industry-recognised record of skills and qualifications for offshore energy workers. The first phase of the Passport was successfully launched in January 2025, with over 480 users registered. Plans are now underway to expand its scope to include additional job roles and sectors, supported by regular engagement between DESNZ, Scottish Government, Offshore Energies UK, and RenewableUK, in partnership with the Energy Skills Passport steering committee, which includes industry and trade union representation.

OWIC has also established the Wind Sector Industrial Relations Collaboration Forum, a joint platform with trade unions to facilitate dialogue on employment practices and workforce transition. The Forum has commissioned two workstreams: one to baseline employment practices in the sector (reporting in November 2025), and another to produce a place-based skills report focused on two regions with upcoming offshore wind projects. The latter will map job opportunities, training routes, and transferable skills for workers transitioning from high-carbon sectors. OWIC is also working to meet a sector-wide 5% apprenticeship target and has published guidance on the Real Living Wage.

The sector has engaged with DESNZ on the development of the Clean Industry Bonus (CIB), committing to discussions as an industry body from Autumn 2025 on the potential content of a fair work charter with government and trade unions.

Chapter 3 outlined forthcoming reforms to employment legislation aimed at reducing discrepancies between offshore oil and gas and renewable energy workers, as well as how the Clean Industry Bonus may be used to strengthen workforce protections in offshore wind.

**Action 4.2 Onshore wind:** Increasing onshore wind deployment brings significant economic opportunities: we could see up to 45,000 direct and indirect onshore wind jobs across the UK by 2030. The absence of a complete dataset makes it challenging to qualify constraints and risks, and to identify opportunities. More research is needed to understand the specific skills barriers facing the onshore wind sector and design policy interventions to tackle them.

As set out in the Onshore Wind Taskforce Strategy, industry will conduct new workforce monitoring to provide demographic data, enabling targeted actions, including developing occupational profiles to identify crossover between sectors and supporting a RenewableUK-led wind industry skills survey. Combined with wider evidence, we will then explore options through the Onshore Wind Council for boosting skills and delivering on the needs of the onshore wind industry.

**Case study: Energy Central Campus**

This is a collaborative initiative located in Blyth, Northumberland, a partnership between the Port of Blyth, Northumberland County Council and Offshore Renewable Energy Catapult. The Campus aims to support the clean energy sector by providing education, training, and pathways to employment in the local community. The Energy Central Learning Hub, opened in September 2024, is a £15 million Science, Technology, Engineering, and Mathematics education and vocational training facility. There are plans for expansion of the Energy Central Institute: a new higher-level skills and innovation facility, developing expertise at degree and PhD level. Facilities will include research labs and a lecture theatre.

**Action 4.3 Solar:** Solar is a fast-growing sector, with capacity needing to dramatically increase by 2030. Facilitating this expansion will require raising awareness of the diverse jobs and opportunities on offer, from domestic to commercial to utility-scale solar. The recently published Solar Roadmap outlines plans to run regional careers fairs, issue guidance packs to schools, and promote content aimed at those transitioning from adjacent sectors. Additionally, government and industry have committed to clarifying the solar skills landscape and boosting the uptake of relevant courses by producing a comprehensive map of existing training provision. The Solar Council is overseeing the delivery of the Roadmap's recommendations.

**Action 4.4 Nuclear:** Our civil nuclear sector faces an ageing workforce[72] amidst growing demand to support new nuclear power plants and advanced nuclear technologies and expand decommissioning activities. DESNZ will continue supporting the industry-led Nuclear Skills Plan, which outlines actions to build a skilled workforce for the UK's nuclear ambitions. The Plan is already delivering for the sector, with nearly 4,000 early-careers starters entering the sector in 2024/25,[73] the launch of the first ever national recruitment campaign 'Destination Nuclear' to ensure opportunities in nuclear are visible and attractive to job seekers, and the establishment of Regional Skills Hubs to align workforce planning with regional skills needs.

**Action 4.5 Fusion energy:** This is a fast-growing sector where the UK has a global competitive advantage. We will support skills and jobs across the UK fusion programme, including through FOSTER, which will build the talent pipeline for fusion energy and train over 2,000 people. By developing this skills pipeline, we will enable the delivery of STEP, the UK's programme to build a prototype fusion powerplant by 2040, and growth in the UK's thriving private sector.

[72] Cogent Skills (2025) 2024 Nuclear Workforce Assessment
[73] MOD (2025) Defence Nuclear Enterprise 2025 Annual Update to Parliament

**Action 4.6 Electricity networks:** We are working with electricity network operators and the supply chain to examine areas for greater collaboration on skills as part of the development of an industry-led Sector Growth Plan. This will build upon existing work across different stakeholders to develop sector-wide solutions to workforce challenges. This includes raising the profile of the sector and attracting talent, drawing upon new research we are publishing into the barriers and motivations impacting students' decisions when considering a role in the electricity networks sector. This study examines different qualification routes and how demographic factors influence decisions to better understand how students could be encouraged to join the future workforce.

**Clean flexibility and smart systems**

A smarter, more flexible electricity system will be critical to achieving the government's Clean Energy Superpower Mission.

Clean flexibility is the ability to shift demand or supply of electricity while reducing emissions. It encompasses consumer-led flexibility, battery storage, interconnection with neighbouring countries, long duration electricity storage, and low-carbon dispatchable power. These technologies will work together to balance the grid, maximise use of low-cost renewable electricity, and provide resilience during periods of low generation. Clean flexibility is an integral part of a whole-system approach to delivering a clean power system. Increasing our flexible capacity will require growing a dynamic talent pool within flexibility industries. We have recently published the Clean Flexibility Roadmap, which sets out further detail.

Developing smart systems requires a diverse mix of skills, with industry and regional leaders working in partnership to develop the skills and workforce required. For example, the West Midlands Combined Authority (WMCA) has created the West Midlands Smart Energy Systems, which brings together key stakeholders from across the public, private, and academic sector. The WMCA is working with partners to develop the UK's first fully accredited battery manufacturing skills programme.

## Hydrogen and CCUS

Hydrogen and Carbon Capture, Utilisation and Storage (CCUS), including Greenhouse Gas Removals, will be vital technologies to achieve net zero by 2050 and maintain it beyond that by sequestering carbon and enabling decarbonisation of, and offsetting emissions from, hard-to-abate sectors.

The hydrogen and CCUS economies are nascent, and whilst the workforce in these sectors is currently small, they will need to rapidly grow, and therefore have a unique set of skills challenges to overcome. Alongside other clean energy sectors, Hydrogen and CCUS offer new opportunities for North Sea workers, creating high-quality jobs that draw on the UK's longstanding strengths in engineering, innovation and high-value technical design. Through the North Sea Transition Deal, the sector is supporting the development of a

skilled, adaptable workforce, enabling workers to transition into low-carbon sectors. Analysis by Robert Gordon University has found that the UK's oil and gas workforce has skills with medium or high transferability into hydrogen and CCUS.[74]

**Case study: Hydrogen Skills Framework**

The Hydrogen Skills Framework is the first deliverable from Empowering the Future: A Strategic Skills Plan for the UK Hydrogen Economy, a plan developed by the Hydrogen Skills Alliance, on behalf of the Hydrogen Delivery Council, to help create the UK hydrogen workforce of the future. It is an open source, new proof-of-concept skills framework to help employers develop their future workforces.

The framework, developed with key industry stakeholders, will help create new qualifications and quality assured training aligned to knowledge recognised by industry. It is free to use and will evolve over time, allowing employers to understand the skills their workforce will need in the dynamic hydrogen economy and enhance the visibility of career pathways.

### Action plan

**Action 4.7 Hydrogen and CCUS curriculum:** We are providing £400,000 of seed funding to Cogent Skills and the Hydrogen Skills Alliance to deliver a Hydrogen and Carbon Capture Skills Accelerator that will begin designing a comprehensive hydrogen and CCUS curriculum. Industry will play a central role in shaping this work, including by co-developing curriculum content and embedding industry expertise to ensure training is aligned with real-world needs.

**Action 4.8 Continuing engagement:** We will collaborate closely with industry and support the wider work of the Hydrogen Skills Alliance and Carbon Capture and Storage Association to support skills development and anticipate future workforce demand.

## Heat and buildings

Decarbonising the heating of buildings and improving energy efficiency is essential to meeting our net zero targets. Our estimates suggest that we must grow the workforce across these sectors from around 66,000 in 2023 to around 248,000 in 2030.[75] Note that estimates for the heat and buildings sector may be revised in the Warm Homes Plan.

[74] Robert Gordon University (2025) Striking the Balance: Building a Sustainable UK Offshore Energy Workforce
[75] DESNZ experimental analysis (2025). See the accompanying Clean Energy Jobs Plan Technical Annex for details.

The heat pump workforce has already seen significant growth, with around 9,000 individuals taking heat pump training in the UK in 2024.[76] The Heat Training Grant provides vouchers of up to £500 to support trainees in England taking courses relevant to heat pumps and heat networks, and has already supported the delivery of over 12,800 training courses between July 2023 and the end of September 2025. We know that the workforce will need to continue to grow to keep up with future demand and we will set out more detailed plans to support the heating workforce in the Warm Homes Plan.

There are, however, a range of challenges that are limiting the ability of the energy efficiency workforce to expand at the scale required to meet our targets. Previously, sector dependence on an uncertain pipeline of grant programmes and policy frameworks has created increased insecurity for businesses and job precarity. The sector is dominated by micro-enterprises, where consistency of training investment and job quality is more challenging to achieve. There are also constraints in training provider capacity, including a lack of retrofit course availability and shortages of qualified tutors. Finally, there is a lack of data, creating difficulties in identifying skills gaps.

## Action plan

**Action 4.9 Warm Homes Skills Programme:** This is an £8 million open grant competition that will deliver up to 9,000 heavily subsidised training places across England in its first phase (up to July 2026), providing opportunities for people to develop skills in areas that include solar panel installation, insulation installation, and assessing and coordinating retrofit. This builds on over £20 million invested in the previous competition to deliver over 23,000 training opportunities since 2020.

**Action 4.10 Heat Training Grant:** An extra £5 million has been provided to continue the Heat Training Grant, until March 2026, supporting 5,500 heat pump installers and 3,500 heat network professionals this financial year.

**Action 4.11 Apprenticeships:** We are also working with industry to develop retrofit apprenticeships to support the next generation into clean energy roles, having launched the Low Carbon Heating Technician Apprenticeship in 2023. Level 2 and level 3 insulation installation apprenticeships and a level 5 retrofit coordinator apprenticeship are expected to launch later this year.

[76] Heat Pump Association (2025) Statistics - Heat Pumps

**Warm Homes Plan**

There is a significant opportunity to grow a skilled, diverse, and future-ready workforce that can deliver high-quality retrofit outcomes at scale. While this Jobs Plan outlines actions aimed at supporting clean energy jobs broadly, they are not specifically targeted at retrofit. Specific initiatives for retrofit will be addressed separately within the Warm Homes Plan.

The Warm Homes Plan supports high quality, well-paid, and future proofed jobs in clean energy technologies like heat pumps, solar panels, battery storage and insulation. We are establishing a new Workforce Taskforce in partnership with the Trades Union Congress, and other leading organisations in the energy and construction sectors and trade unions, to guide the transition and ensure we have the right support in place for new entrants as well as the retraining and upskilling of existing workers.

# Benefits for every nation and region

**Vision statement:**

We will create a clean energy workforce that is not only abundant, but offers opportunities for people across the UK no matter where you live. This will require local skills systems that are attuned to the specific needs of clean energy sectors in their area. We are committed to working with local areas to ensure they have the tools to realise skilled good jobs across the UK.

**Key actions:**

- Deliver funding to Local Net Zero Hubs to build a regional picture of clean energy skills and jobs with local authorities.
- Engage with Mayoral Strategic Authorities and Skills England to improve the detail of our clean energy workforce demand estimates.
- Co-develop guidance addressing the Clean Energy Superpower Mission and clean energy skills to support the next cycle of Local Skills Improvement Plans.
- Establish a Skills Forum and a Net Zero Network to bring together representatives of Industrial Strategy Zones across the UK.
- Work closely with Local Growth Plans and utilise the Department for Energy Security and Net Zero's Local Net Zero Delivery Group and Ministerial-led Mayoral Roundtables to identify opportunities for collaboration and alignment between central and regional government.

# The opportunities and challenges

Clean energy jobs are not limited to one city, region, or nation of the UK. They are based in every corner of this country, with some clean energy sectors clustered in particular regions. Opportunities will not just be limited to cities and towns, but rural areas too, with our rural workforce playing an integral role in supporting the clean energy transition.

Devolved governments, Mayoral Strategic Authorities (MSAs), and local authorities are pivotal in shaping and delivering a responsive, place-based skills system. Each growing clean energy sector will require different skills; therefore local and devolved skills systems must be adaptable to respond to their own clean energy workforce needs.

Skills policy is devolved both at the national and regional level. The Office for Clean Energy Jobs works closely with devolved government partners on shared initiatives, such as the Regional Skills Pilots, and works to convene local and national partners to share best practice on clean energy skills. Local authorities also have a key role to play in delivering employment support schemes, such as Connect to Work, and sharing local intelligence to support skills interventions.

Every nation of the UK and region of England will have the opportunity to grow their clean energy workforces substantially. This means good jobs for every part of the country. Regions with the highest growth will need to see the greatest mobilisation of local skills systems to ensure that workforce needs are met.

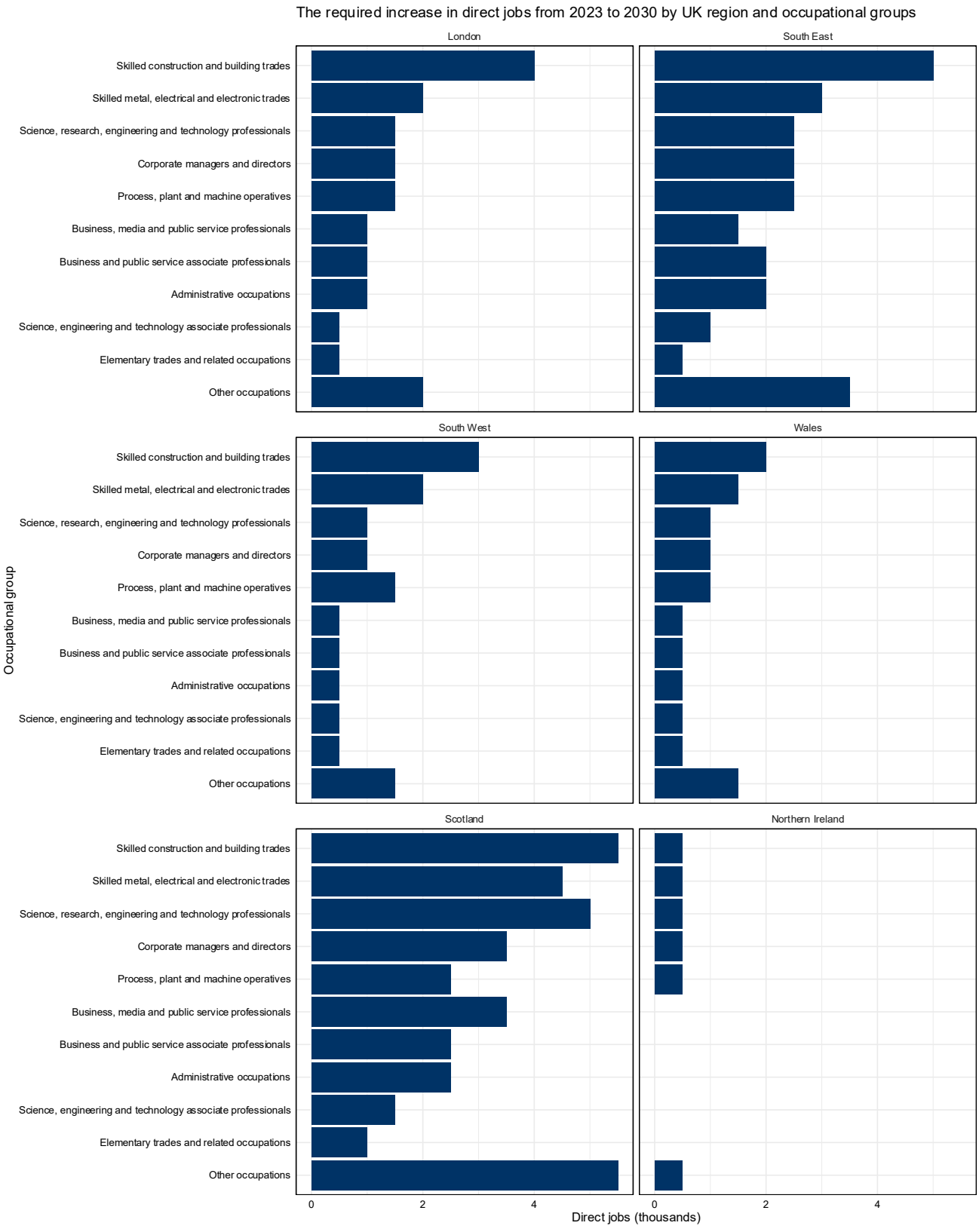
All four nations of the UK can expect to see strong growth in clean energy jobs to 2030. The workforce in Wales is expected to increase by around 110% to 2030, an increase of 10,000 to 15,000 direct jobs from 2023, and the demand for all priority occupations will double. In Northern Ireland, we expect demand to increase by around 130% across all occupations, with particular need for roles in skilled construction and building trades, where the demand could more than triple up to 2030. Scotland offers fantastic opportunities for clean energy jobs–we estimate that at least 15% of all direct UK clean energy jobs will be located in Scotland in 2030.[77]

Across the English regions, most will need to at least double the size of its clean energy workforce. The exceptions to this are the South-West and North-West; these regions together supported over 35% of England's total direct clean energy jobs in 2023 and will need to increase their workforce by over 50% to 2030. The clean energy workforce in the East of England and London will see the highest growth rates, with clean energy workforces in both regions needing to grow by at least three times their current size by 2030.

[77] DESNZ analysis of ONS (2024) Annual Population Survey

## Figure 4: Experimental Analysis of Increase of Direct Jobs Supported by Occupational Group and Region, 2023 to 2030 (FTE values rounded to nearest 500)[78]


[78] DESNZ experimental analysis (2025). See the accompanying Clean Energy Jobs Plan Technical Annex for details.




'Other occupations' is the sum of the remaining occupational groups (2-digit SOC codes) which do not rank in the top 10 largest by 2030 workforce required. This includes occupational groups such as health professionals, culture, media and sports occupations, skilled agricultural and related trades, etc.

Data for Northern Ireland includes a reduced number of sectors so is likely to see an increase of more than 2,000-3,000. Sectors included are Nuclear Fusion, CCUS and GGRs, Electricity Networks, Heat Pumps, Heat Networks and Energy Efficiency and Retrofit.

# Action plan

## UK Government

**Action 5.1 Regional mapping:** We are providing funding to Local Net Zero Hubs to build a regional picture of clean energy skills and jobs within local authority areas in England. To support this work, the Department for Energy Security and Net Zero will set up a cross-hub working group on clean energy skills and jobs. The Local Net Zero Hubs programme is helping local authorities and communities in England play a leading role in the Clean Energy Superpower Mission, including in clean energy skills and workforce initiatives. For example, the Warm Homes Skills Programme will offer subsidised training to workers to be delivered across all five net zero hub regions in England, ensuring comprehensive regional involvement and collaboration.

**Action 5.2 Improving data:** We will engage with Mayoral Strategic Authorities (MSAs) and Skills England to improve the detail of our clean energy workforce demand estimates. Currently, we can only show workforce estimates at the highest regional classification[79] due to data limitations. By engaging with MSAs to improve data, we will support regions to plan localised skills interventions targeted at priority occupations and sectors.

**Case study: Net Zero Go**

Delivered by Energy Systems Catapult, Net Zero Go aims to increase and improve clean energy skills and workforce capacity and capability within local authorities, with targeted upskilling content for a variety of different roles: energy project officers, programme managers, technical officers, and sustainability officers. This includes case studies on skills topics, domestic retrofit skills assessment, and information on the previous Public Sector Low Carbon Skills Fund.

**Action 5.3 Industrial Strategy Zones:** As set out in the Industrial Strategy Zones (ISZ) Action Plan, we are establishing a new ISZ Skills Forum, bringing together skills representatives from ISZs, Skills England, and the Scottish and Welsh governments, as well as establishing a Department for Energy Security and Net Zero (DESNZ)-led ISZ Net Zero Network. ISZs, comprising the UK's Freeports and Investment Zones, have a key role to play in facilitating the transition to clean energy sectors by fostering the development of local skill bases in clean energy industries. Many ISZs have a particular focus on clean energy industries, including Humber Freeport, Thames Freeport, Celtic Freeport, and the Cromarty Firth Green Freeport. Freeports' skills and workforce plans should consider the Clean Energy Jobs Plan and, where relevant, prioritise clean energy jobs creation.

[79] International Territorial 1 is a geocode standard for referencing the subdivisions of the United Kingdom for statistical purposes, used by the Office for National Statistics (ONS).

**Case study: Teesside Freeport**

Construction work on Net Zero Teesside Power – a world-first gas-fired power station with carbon capture – will commence from mid-year, with Northern Endurance Partnership building the CO2 transportation and storage infrastructure to serve the power station and future carbon capture projects in the region.

Financially supported by Net Zero Teesside Power and the Northern Endurance Partnership, 141 industry scholarships have been created for young people (age 16+) across the Tees Valley region. The scholarships will aim to create skilled workers in key industrial roles that will be crucial to the success of Tees Valley's net-zero ambitions. The scholarships will equip the young people with the skills in a chosen discipline that include welding, instrumentation, electrical engineering, and civil operations.

Participants will receive £100 per week in term time during their training, which can last up to two years, helping to support them financially as they develop the skills required to thrive in the clean energy sector.

**Action 5.4 Local Growth Plans:** We will work closely with Mayoral Strategic Authorities on their Local Growth Plans (LGPs) and will utilise DESNZ's Local Net Zero Delivery Group and Ministerial-led Mayoral Roundtables to identify opportunities for collaboration and alignment between central and regional government as LGPs move into delivery. We have published guidance for drafting LGPs which encourage MSAs to engage with the Office for Clean Energy Jobs throughout the design and delivery of LGPs where relevant.

MSAs will deliver 10-year LGPs, which will set out how they will use their powers and funding to drive growth in their region, with several MSAs identifying clean energy as a key growth sector and highlighting the importance of skills to delivering those ambitions.

**Case study: Engineering Construction Industry Training Board - Regional Skill Hubs**

The Engineering Construction Industry Training Board (ECITB) is the statutory skills body for the Engineering Construction Industry in Great Britain. It is committed to investing over £3 million in the Regional Skills Hub funding initiative, established to address skill shortages in key industrial clusters central to the UK's decarbonisation agenda. To date, this funding has supported five projects. The first recipient was CATCH, a Humber-based training provider, which received £300,000 in January 2024 to upgrade its welding, pipefitting, and electrical training facilities in Stallingborough, near Grimsby.

**Action 5.5 Adult Skills Funding:** DESNZ, Skills England, and the Department for Work and Pensions, in collaboration with the Department for Education, will work with MSAs and local areas on sharing best practice in what works when delivering clean energy skills training, including Skills Bootcamps.

**Action 5.6 Local Skills Improvement Plans (LSIPs):** Skills England will work with DESNZ to develop advice on addressing the Clean Energy Superpower Mission and clean energy skills for inclusion in the statutory guidance, which will underpin the development of the LSIPs. LSIPs set out the skill priorities for an area and the actions that providers, employers, and others can take to meet them. Work to develop the next cycle of LSIPs will begin in Autumn 2025 and will cover 2026-2029. In areas with clean energy clusters, we would expect LSIPs to show how the pipeline of skills will drive growth in this sector.

## Devolved governments

The Clean Energy Superpower Mission is a UK Government mission, and this Jobs Plan focuses on UK Government policy to deliver the clean energy workforce. The Office for Clean Energy Jobs works closely with devolved governments in Wales, Northern Ireland and Scotland to develop the UK's clean energy workforce, including on issues such as workforce transition and alignment of skills policy across the four nations, to create a stable investment environment for the sector.

### Scotland

The Scottish Government's Green Industrial Strategy (GIS), published in September 2024, is designed to help Scotland realise the economic growth opportunities from the global transition to net zero.[80] The GIS identifies skills as a key enabler to growth and sets the overall strategy across a range of areas.

#### *Support for oil and gas workers to transition*

The Scottish Government is working with UK Government and other partners to deliver a just transition for Scotland's valued and highly skilled oil and gas workforce. These workers have already made an invaluable contribution to the UK's energy sector. It is now critical to enable them to continue accessing opportunities, ensuring their vital skills and experience can support our transition to net zero. This will help to build a pipeline of skilled energy professionals with sufficient capacity to meet demand.

#### *Grangemouth*

The Scottish Government and the UK Government's Office for Clean Energy Jobs are jointly funding a skills intervention for Petroineos workers facing redundancy at the Grangemouth refinery and Finnart Terminal. This is supporting the transition of impacted workers through the job market into in-demand industries, including into clean energy

[80] Green Industrial Strategy (www.gov.scot)

sectors. Forth Valley College are the delivery provider, in collaboration with Unite the Union and Skills Development Scotland.

The intervention has assessed workers' existing skills, qualifications and training needs through self-assessment and one-to-one interviews. Training needs have informed the provision of training courses to affected workers, either through the College or an external provider. Uptake of the intervention has been high, with most eligible workers opting to take up the offer. Close working between Scottish and UK Governments, trade unions, Skills Development Scotland, and Forth Valley College has been critical to ensuring the intervention's success. Amongst the training underway are courses with a clean energy focus, including facilitating the transition of workforce out of a carbon-intensive industry into areas critical to Scotland's transition to net zero. The Scottish Government and the UK Government's Office for Clean Energy Jobs recently announced an extension of this skills intervention to INEOS Olefins and Polymers employees of the neighbouring INEOS Olefins and Polymer plant at Grangemouth, who were part of shared services for the Grangemouth oil refinery and who are facing redundancy as a direct result of the Refinery's closure. This intervention builds on what was put in place for Petroineos workers.

In June 2025, the Scottish Government published the Grangemouth Just Transition Plan - outlining a first-of-its-kind vision for Scotland's core manufacturing cluster. The Plan details 21 actions across a range of critical themes including skills. This work will be developed in collaboration with local industry and will centre around developing STEM outreach programmes as well as a tailored and flexible pre-apprenticeship programme.

**Case study: Oil and gas to wind cross-skill pilot paves the way for just transition**

A pilot programme in Grangemouth and Aberdeen has paved the way for 15 oil and gas workers, including former mechanical technicians from Grangemouth Oil Refinery, co-funded by the UK and Scottish Government and the Engineering Construction Industry Training Board (ECITB) to transition to roles in wind.

Developed by the ECITB, in partnership with the Global Wind Organisation and the Offshore Renewable Energy Catapult, the programme supports two-way deployments across oil and gas and wind infrastructure. Niall Gibb was one of the learners at Grangemouth: "The training and support provided were instrumental in helping me secure a role with GE Vernova, where I will be joining the team as a lead electrical commissioning technician at Dogger Bank – the world's largest offshore wind farm."

### *Oil and Gas Transition Training Fund 2025-2026*

The Scottish and UK governments have worked in partnership to launch the Oil and Gas Transition Training Fund (TTF) 2025-26 for Aberdeen City and Aberdeenshire on 23rd June 2025. The pilot phase is supported with nearly £1m provided by the UK Government and an additional £450k provided by the Scottish Government for 2025-26. The TTF is delivered by Skills Development Scotland and funded by the UK Government's Office for Clean Energy Jobs. Through this funding, oil and gas workers and associated supply chain workers are offered targeted individual support for retraining and or upskilling, preparing them for jobs in clean energy sectors.

### *Energy Skills Passport*

The Scottish Government has previously provided £3.7 million of support through the Just Transition Fund for the North-East and Moray for the industry-led development of an Energy Skills Passport, working with the UK Government. An initial version of the Passport was launched by industry partners in January 2025. We are looking forward to now seeing the Passport develop further, providing more options and pathways for workers to transition between sectors.

### *Just Transition Fund for the North-East and Moray*

Through our pioneering Just Transition Fund, the Scottish Government has been supporting upskilling, reskilling, and the transferability of workforces to meet the needs of the net zero transition, both now and in the future. An example of skills intervention support in North East and Moray is the £4.5 million provided to the Energy Transition Skills Hub to support 1,000 people into energy transition roles across five years; and £1 million to support a National Energy Skills Accelerator pilot scheme to assess the energy transition skills landscape to 2030, identifying demand and gaps, and design and deliver training to support the transition.

### *Support for development of skills and workforce for offshore wind*

The Scottish Government's estimates suggest that between 10,400 and 54,000 jobs could be supported in Scotland's offshore wind sector over the coming decades.[81] These will be good quality, diverse and meaningful roles, offering opportunities for those entering the job market for the first time and those who want to change careers as part of a just transition. Collective action is required to ensure that we have the right people, with the right skills, in the right place at the right time. The Scottish Government has taken the following actions to support the Scottish Offshore Wind workforce:

- Convened an Offshore Wind Skills Short Life Working Group with industry and public sector partners to develop and deliver an evidence-based offshore wind skills action plan by autumn 2025.

[81] Scottish Government (2024) Offshore Wind Focus

- Provided targeted funding to the college sector in 2025-26 to establish an Offshore Wind Skills Programme, helping to create region-specific training hubs for offshore wind skills.

***Other support for development of skills and workforce during the energy transition***

In 2024, the Scottish Government commissioned three research projects mapping current and future workforce and skills requirements in the solar and onshore wind industries to 2030 and to quantify existing provision of skills development and training pertinent to those industries. [82] This research included further and higher education courses and apprenticeships and made recommendations for enhancement. The Scottish Government is working with industry to consider the recommendations to enhance skills and training provision across Scotland.

The Scottish Government is also supporting the energy planning workforce through:

- The Future Planners Programme, which will support students to gain invaluable experience in planning and renewable energy consenting.
- The National Planning Skills Campaign, which includes trebling the number of bursaries for post-graduate study of planning.
- Setting up the National Planning Hub, which will support planning authorities to make quicker planning decisions on projects like onshore wind and hydrogen.

## Northern Ireland

2023 research by Northern Ireland's Department for Economy estimated that 105,000 people were employed in Northern Ireland in the industries most closely aligned to 'green energy' with a projected increase of 15.2% to 121,00 in 2035.[83] The report also indicated that around 50,000 people were employed in occupations within similar sectors, and therefore could transition into the clean energy sector in the future.

The industry-led Green Skills Delivery Group, a sub-group of the Northern Ireland Skills Council and advisory body to the Northern Ireland government, recently published a Green Skills Action Plan. This provides a comprehensive framework to guide government, employers, educationalists and individuals on what is needed to deliver the green skills and jobs for the future. The Plan included 28 targeted actions across four priority areas: reviewing the skills ecosystem; building a responsive, partnership-led skills system; raising awareness of green careers and opportunities; developing a skilled, inclusive workforce.

The Plan provides a roadmap for embedding green competencies into education and training, ensuring a workforce that is resilient, adaptable, and aligned with the needs of the green economy, including clean energy sectors. A well-functioning skills ecosystem is

[82] ClimateXChange (2025) Training provision in Scotland's onshore wind and solar industries
[83] Energy & Utility Skills (2023) Skills for the Energy Transition in Northern Ireland. Sectors included in these statistics are broader than in DESNZ analysis and cover Large Scale Energy Production, Infrastructure, Domestic Low Carbon Energy Technologies and Energy Efficiency, Industrial Processes, Circular Economy, Transport, Agriculture and Fisheries and Marine Environment.

critical to supporting the clean energy transition. The Group will assess local systems, reduce duplication, and encourage resource sharing to better meet industry needs. Apprenticeship frameworks will be reviewed for clean energy content, and more flexible models will be explored.

Key actions from the Action Plan include:

- Creating competency pathways for green careers
- Scoping a Green Skills Curriculum Hub
- Exploring green skills criteria in public sector procurement

By implementing the Green Skills Action Plan, a skilled workforce can be created to meet the demands of the clean energy sector and the wider green industries to help deliver net zero targets and achieve a more sustainable and energy secure future.

### Wales

Wales has a strong cross-sector skills offer to support the needs of businesses and the development of a future ready workforce. The Welsh Government is working closely with developers, employers and our colleges and Universities to shape the skills offer in our key sectors, including clean energy.

A critical element of this work is identifying clear career pathways in clean energy. From expanding STEM learning in Welsh schools and ensuring Wales has the right, flexible qualification frameworks in place at colleges and universities, through to supporting businesses in the sector to upskill their existing workforce.

The Welsh Government has been working closely with the Offshore Wind Task and Finish Group, which is setting clear actions for sector stakeholders across Wales. Skills is one of the emerging themes of the group. The Welsh Government has also committed to co-produce a Renewable Energy Sector Deal with industry, which will include skills.

# Facilitating engagement and driving stakeholder action

**Vision statement:**

We will continue to work in partnership with industry, trade unions, and other stakeholders to drive the change needed to build a skilled, inclusive, and resilient workforce across clean energy sectors. This will support delivery of Clean Power 2030 and accelerating to net zero beyond that.

**Key actions:**

- Establish a Minister-led central delivery group to support joined-up implementation across the UK Government, devolved governments, and regions.
- Continue regular discussions with the Trade Union General Secretaries, focusing on social partnerships, trade union recognition, and feedback into policy design and delivery.
- Continue to engage with stakeholders on specific themes, including social inclusion and regional issues.

# Action plan

The Office for Clean Energy Jobs (OCEJ) was set up in July 2024, to provide strategic co-ordination of clean energy skills and workforce policy across government, industry and trade unions.

OCEJ has engaged with a variety of external stakeholders to strengthen our wider partnerships, including collaborating with trade unions on issues relevant to improving the quality of clean energy jobs. Engagements have included:

- Roundtables with Trade Unions, led by the Secretary of State for Energy Security and Net Zero.
- Minister-led meetings with industry leaders, including the Clean Energy Workforce Forum, which had sessions led jointly with Ministers from the Department for Education and Department for Work and Pensions.
- Clean Power 2030 Supply Chains and Workforce Forum, chaired by Chris Stark, Head of Clean Power 2030 Mission Control.
- A Social Inclusion Roundtable, chaired by the Minister for Climate, with industry leaders, trade associations, non-governmental organisations, and trade unions.
- Skills England-led engagement with key industry stakeholders to inform Skills England publications.
- Ongoing engagement by the Office for Clean Energy Jobs with industry, trade unions, devolved governments, and other partners.

To ensure the commitments of this Jobs Plan are implemented and outcomes are delivered through close collaboration with stakeholders, we will take the following actions:

**Action 6.1 Clean Energy Jobs Steering Group:** We will establish the Clean Energy Jobs Steering Group, a strategic steering group chaired by the Secretary of State (DESNZ), bringing together government, industry, education providers, trade unions, and regional stakeholders to provide strategic oversight and drive joined-up implementation across departments, devolved governments, and regions. The Office for Clean Energy Jobs will act as Secretariat, ensuring coordination, evidence gathering, and follow-up across all partners.

**Action 6.2 Engagement with Trade Unions:** We will continue regular discussions with the Trade Unions, chaired by the Secretary of State for Energy Security and Net Zero, to provide structured, quarterly engagement with trade unions on clean energy workforce and skills development. The group will focus on social partnerships, trade union recognition, and feedback into policy design and delivery. This will continue the current arrangement with the Office for Clean Energy Jobs acting as the Secretariat and ensuring alignment with the Clean Energy Jobs Steering Group.

**Action 6.3 Wider stakeholder engagement:** We will continue to engage with stakeholders on specific themes, including social inclusion and regional issues. The Office for Clean Energy Jobs will be an ongoing hub for engagement on clean energy workforce and skills. We will also collaborate with other critical sectors, such as construction, to address shared challenges.

## Monitoring progress

For the successful delivery of the Clean Energy Superpower Mission, we must see a positive change on a range of outcomes for the clean energy workforce. The government is committed to the monitoring of relevant clean energy jobs and skills trends to ensure timely and effective progress towards the Clean Energy Superpower Mission. We will work with stakeholders to identify any additional trends.

Through the actions set out in this Jobs Plan, we will build a highly-skilled and diverse clean energy workforce able to meet the demand of Clean Power 2030 and beyond.

| Vision statement | Examples of key measurable trends |
|---|---|
| Delivering the Pipeline of Skilled Workers | Trends could include areas such as apprenticeship starts, university enrolments, T levels, and sector-entry roles. |
| Realising the Potential of the UK Workforce | Trends could include number of vacancies, including unfilled vacancies, and data on specific entrants such as military leavers. |
| Not Just Jobs, Good Jobs | Trends could include representation of protected characteristics, pay, and trade union coverage. |
| Benefits for Every Nation and Region | Trends could include occupation-level employment statistics by region. |

**Action 6.4 Monitoring clean energy jobs and skills trends:** We will monitor clean energy jobs and skills trends from publication and provide regular updates on the progress in delivering the objectives of the Jobs Plan.

# Annex A: Priority occupation list for Clean Energy Superpower Mission

| Occupation Group (SOC2020 – 2 Digit) | Occupation (SOC2020 – 4 Digit) | Required increase in jobs supported from 2023 to 2030 | Relative increase in required jobs supported from 2023 2030 | Most common highest-level qualification | Share of vacancies reported as hard to fill due to skills shortage (%) | Historic economy-wide annual average growth in jobs in occupation group, 2015-24 (%) |
|---|---|---|---|---|---|---|
| Skilled construction and building trades (SOC 53) | Plumbers and heating and ventilating installers and repairers | 8,500 to 10,000 | More than double | A-level or equivalent | 59 | -1.7 |
| SOC 53 | Carpenters and joiners | 7,000 to 8,499 | More than double | A-level or equivalent | 65 | -1.7 |
| SOC 53 | Glaziers, window fabricators and fitters | 2,500 to 3,999 | More than triple | Qualifications below A-level or equivalent | 71 | -1.7 |
| SOC 53 | Floorers and wall tilers | 1,000 to 2,499 | More than double | Qualifications below A-level or equivalent | 62 | -1.7 |
| SOC 53 | Roofers, roof tilers and slaters | 1,000 to 2,499 | More than double | Qualifications below A-level or equivalent | 55 | -1.7 |
| SOC 53 | Plasterers | 1,000 to 2,499 | More than double | A-level or equivalent | 54 | -1.7 |
| SOC 53 | Bricklayers | 1,000 to 2,499 | More than double | A-level or equivalent | 51 | -1.7 |
| Skilled metal, electrical and electronic trades (SOC 52) | Electricians and electrical fitters | 7,000 to 8,499 | More than double | A-level or equivalent | 61 | -1.4 |
| SOC 52 | Metal working production and maintenance fitters | 4,000 to 5,499 | More than double | A-level or equivalent | 51 | -1.4 |

| Occupation Group (SOC2020 – 2 Digit) | Occupation (SOC2020 – 4 Digit) | Required increase in jobs supported from 2023 to 2030 | Relative increase in required jobs supported from 2023 2030 | Most common highest-level qualification | Share of vacancies reported as hard to fill due to skills shortage (%) | Historic economy-wide annual average growth in jobs in occupation group, 2015-24 (%) |
|---|---|---|---|---|---|---|
| SOC 52 | Telecoms and related network installers and repairers | 2,500 to 3,999 | Over a 50% increase | A-level or equivalent | 75 | -1.4 |
| SOC 52 | Electrical and electronic trades n.e.c. | 1,000 to 2,499 | Over a 50% increase | A-level or equivalent | 64 | -1.4 |
| SOC 52 | Welding trades | 1,000 to 2,499 | More than triple | A-level or equivalent | 54 | -1.4 |
| SOC 52 | Metal machining setters and setter-operators | 1,000 to 2,499 | More than double | A-level or equivalent | 69 | -1.4 |
| Corporate managers and directors (SOC 11) | Production managers and directors in manufacturing | 5,500 to 6,999 | More than double | Higher education | 49 | 0.9 |
| SOC 11 | Production managers and directors in construction | 2,500 to 3,999 | More than double | Higher education | 40 | 0.9 |
| Science, research, engineering and technology professionals (SOC 21) | Engineering professionals n.e.c. | 4,000 to 5,499 | Over a 50% increase | Higher education | 53 | 5.6 |
| SOC 21 | Mechanical engineers | 2,500 to 3,999 | More than double | Higher education | 60 | 5.6 |
| SOC 21 | Civil engineers | 1,000 to 2,499 | More than double | Higher education | 61 | 5.6 |
| SOC 21 | Electrical engineers | 1,000 to 2,499 | More than double | Higher education | 54 | 5.6 |

| Occupation Group (SOC2020 – 2 Digit) | Occupation (SOC2020 – 4 Digit) | Required increase in jobs supported from 2023 to 2030 | Relative increase in required jobs supported from 2023 2030 | Most common highest-level qualification | Share of vacancies reported as hard to fill due to skills shortage (%) | Historic economy-wide annual average growth in jobs in occupation group, 2015-24 (%) |
|---|---|---|---|---|---|---|
| SOC 21 | Engineering project managers and project engineers | 1,000 to 2,499 | More than double | Higher education | 52 | 5.6 |
| SOC 21 | Production and process engineers | 1,000 to 2,499 | More than double | Higher education | 52 | 5.6 |
| SOC 21 | Electronics engineers | <1,000 | More than double | Higher education | 59 | 5.6 |
| Process, plant and machine operatives (SOC 81) | Plastics process operatives | 1,000 to 2,499 | More than triple | Qualifications below A-level or equivalent | 33 | -1.8 |
| SOC 81 | Construction operatives n.e.c. | 1,000 to 2,499 | More than double | Qualifications below A-level or equivalent | 54 | -1.8 |
| SOC 81 | Routine inspectors and testers | 1,000 to 2,499 | More than double | A-level or equivalent | 54 | -1.8 |
| SOC 81 | Metal working machine operatives | 1,000 to 2,499 | More than triple | A-level or equivalent | 52 | -1.8 |
| SOC 81 | Scaffolders, stagers and riggers | 1,000 to 2,499 | More than double | A-level or equivalent | 51 | -1.8 |
| Business, media and public service professionals (SOC 24) | Construction project managers and related professionals | 1,000 to 2,499 | More than double | Higher education | 57 | 5.9 |
| SOC 24 | Quantity surveyors | <1,000 | More than double | Higher education | 43 | 5.9 |

| Occupation Group (SOC2020 – 2 Digit) | Occupation (SOC2020 – 4 Digit) | Required increase in jobs supported from 2023 to 2030 | Relative increase in required jobs supported from 2023 2030 | Most common highest-level qualification | Share of vacancies reported as hard to fill due to skills shortage (%) | Historic economy-wide annual average growth in jobs in occupation group, 2015-24 (%) |
|---|---|---|---|---|---|---|
| Science, engineering and technology associate professionals (SOC 31) | Engineering technicians | 1,000 to 2,499 | Over a 50% increase | Higher education | 44 | 1.0 |
| SOC 31 | CAD, drawing and architectural technicians | 1,000 to 2,499 | More than double | Higher education | 30 | 1.0 |

Source: occupations list and required increase based on experimental DESNZ analysis - see technical annex for details / ONS (2024), Qualification mismatch estimates in England and Wales: 2021 / DfE, Employer Skills Survey, 2022 (Data transformed from SOC2010 to SOC2020) / ONS, Annual Population Survey (accessed from Nomis on 27 May 2025). Occupations ending in 'n.e.c' refer to occupations not elsewhere classified within that minor group.[84] Electrical and electronic trades n.e.c. can refer to a varied range of roles including assembly of electronic equipment, erection of poles or towers to carry overhead lines, and connecting or installing transformers. Construction operatives n.e.c. covers a variety of roles including operative who operate insulating equipment, fix plasterboard to ceilings and walls, help construct, maintain, repair and demolish buildings and clean and resurface eroded stonework, lay, join and examine pipe sections for drainage, gas, water or similar piping systems, install lighting systems in roads, domestic and commercial settings and carry out a variety of other construction operative tasks not elsewhere classified in minor group 815. Engineering professionals n.e.c. refers to a variety of professional engineering functions not elsewhere classified in minor group 212- these occupations will usually be performed by chartered engineers with an accredited university degree.

[84] Further information about the Standard Occupations Classification can be found in ONS (2025), Standard occupational classification 2020, Volume 1: Structure and description of unit groups

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