ENERGY & UTILITY SKILLS

Workforce demand estimates – 2026 to 2032
Power Generation

Summary report
November 2026



Workforce demand estimates – 2026 to 2032

Power Generation

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Power Generation 2026 – 2032

Skills to deliver the UK's future

ENERGY & UTILITY SKILLS

Turning workforce evidence into action for a resilient power generation sector.

Our ambition
A resilient power generation sector that keeps the UK healthy, supports growth and protects the environment.

Our Growth
Creating jobs, skills and investment to deliver vital infrastructure across the UK.

Our Opportunity
Good careers. Stronger communities. A cleaner, greener future.

Research
Trusted evidence for action renewed every two years.

Core requirement of **99,600** people by 2032

73% of the current workforce

Robust workforce evidence to guide investment and delivery.

- Credible, transparent forecasts and methodology.
- A consistent framework for monitoring industry progress and the accuracy of our forecasts.
- Insight across sub-industries, geographies, skill levels and occupations.

Trusted insights to inform decisions today and tomorrow.

Attract
Bring new people into the industry.

We forecast **76,300** new jobs by 2032

56% growth in total employment

That's around **10,900** new jobs each year.

- More apprenticeships and training opportunities.
- A diverse and inclusive workforce.
- Rewarding, meaningful careers.

Attracting new talent is essential to deliver a safe, reliable and resilient power generation sector.

Develop
Grow skills and embrace new technology.

Core requirement of **21,600** at RQF 3/SCQF 6 by 2032

76% of the current workforce

Split across 14,400 in technical occupations and 7,200 in business support occupations.

- Increase productivity through innovation and technology.
- The adoption of AI and automation could reduce the core requirement by up to 3,600 people.

A more productive, higher skilled workforce that can deliver more.

Retain
Keep and develop our talented people.

We expect **23,300** retirements by 2032

That's **17%** of today's workforce – around **3,300** people each year

- Improve job quality, health, safety and well-being.
- Create clear career pathways and progression.
- Through continuous improvement in workforce retention the industry could mitigate the effect of normal staff turnover by up to **31,700 people**.

Retaining our people protects expertise, builds stronger teams and keeps the sector moving forward.

Real economic impact. Stronger communities.

Growth as a % of current workforce
Scotland = **58%**
Northern Ireland = **57%**
England = **55%**
Wales = **52%**

76,300 new jobs could create **£3.3 billion** of additional earnings.

By 2032, total GVA could reach between **£67 billion** and **£122 billion.**

1 About this report

1.1 Introduction

1.1.1 This report is one in a series that contain current workforce estimates and forecasts for the number of new jobs and people required across the UK energy and utilities sector between 2026 and 2032 inclusive, including:

- **Energy and utilities sector** (containing the aggregate analysis from across all six industries of the sector)
- **Community & domestic low carbon technologies** (including community and district heating, and the installation and repair of domestic gas boilers, heat pumps, smart meters, solar PV and battery storage and EV chargepoints)
- **Electricity networks** (including electrical equipment manufacturing, construction and installation, operation and maintenance and the trade of electricity)
- **Gas networks** (including the manufacture, distribution, construction of gas utility projects and retail trade of gas through the networks)
- **Power generation** (including thermal power and clean energy technologies)
- **Waste and recycling** (including the collection, treatment, disposal and recycling of waste)
- **Water and wastewater** (including the collection, treatment and supply of water; sewerage; the construction of water assets)

1.1.2 This report focuses on the UK's power generation industry, which includes:

- Thermal Power:
  - Gas and hydrogen combustion
- Clean Power:
  - Energy from waste/Biomass
  - Hydropower
  - Nuclear
  - Offshore Wind
  - Onshore Wind
  - Utility-Scale Solar & battery storage
  - Carbon capture, utilisation and storage (CCUS)

1.2 From workforce evidence to strategic action

1.2.1 This report provides a factual estimate of the workforce required by the UK Power Generation industry between 2026 and 2032. Its central purpose is to identify the gap between the number and mix of people the industry will require and the workforce available to meet that requirement.

1.2.1 The findings support the four pillars of the Energy and Utilities Skills Strategy 2025-2030[1] in distinct ways:

- **Research** provides the definitions, evidence, methodology and update cycle that make the estimates credible
- **Attract** identifies the core requirement for additional jobs and replacement of people retiring from the workforce
- **Develop** considers how productivity, artificial intelligence, automation and new working methods could reduce or reshape that requirement
- **Retain** shows how movement out of the industry could increase the number of new people who must be recruited.

1.2.2 These pillars are not separate forecasts. **Attract** provides the central workforce requirement, while **Develop** and **Retain** test the factors that could move it. **Research** establishes the credibility of the forecasts.

[1] https://euskills.co.uk/about/our-strategy/

2 Industry headlines

Figure 1: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032

Sub-Industry	Total employment		New jobs created		Retirements		Core requirement for people		
	2025 baseline	2032	Number	% Growth	Number	% of current workforce	Total	% of current workforce	Average per year
Gas/Hydrogen	2,300	6,100	3,800	*168%*	500	*24%*	4,400	*191%*	600
Hydropower	1,600	1,600	<100	*3%*	200	*12%*	200	*16%*	<100
Nuclear	51,400	52,900	1,600	*3%*	6,500	*13%*	8,000	*16%*	1,100
Offshore Wind	39,900	70,900	31,000	*78%*	8,200	*21%*	39,200	*98%*	5,600
Onshore Wind	15,200	21,600	6,400	*42%*	2,300	*15%*	8,800	*58%*	1,300
Utility-Scale Solar & Battery Storage	18,800	29,900	11,100	*59%*	3,000	*16%*	14,100	*75%*	2,000
Carbon Capture, Utilisation & Storage	500	20,800	20,400	*4,527%*	1,500	*324%*	21,800	*4,851%*	3,100
Energy from Waste/Biomass	7,500	9,500	2,000	*27%*	1,000	*14%*	3,000	*41%*	400
Power Generation	**137,000**	**213,300**	**76,300**	*56%*	**23,300**	*17%*	**99,600**	*73%*	**14,200**

Note: Figures may not sum to the grand total due to rounding.

2.1 Attract: The core workforce requirement

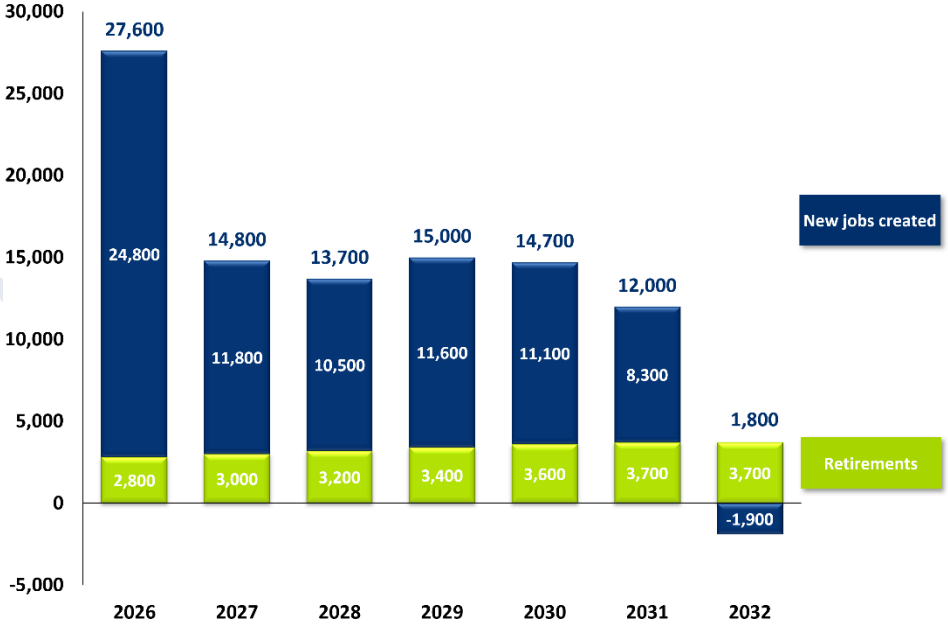
2.1.1 Across power generation, total employment is forecast to increase from 137,000 to 213,300 in 2032, creating 76,300 new jobs (+56%). The industry has a core requirement for 99,600 people by 2032, equivalent to 73% of the current workforce. Demand is primarily driven by 76,300 new jobs, alongside 23,300 retirements.

2.1.2 Offshore Wind has the largest requirement at 39,200 people, while Carbon Capture, Utilisation & Storage faces the greatest relative challenge, with demand equivalent to 4,851% of its current workforce.

2.1.3 Annual workforce demand is heavily front-loaded, peaking at 27,600 people in 2026 before generally declining to 12,000 in 2031 and 1,800 in 2032. The particularly sharp fall in 2032 reflects negative net job creation in that year and should be interpreted in the context of increasing uncertainty towards the end of the forecast period.

2.1.4 The decline in annual demand is driven by falling new job creation, from 24,800 people in 2026 to 8,300 in 2031. Retirements remain comparatively stable at around 2,800–3,700 people per year.

Figure 2: Core requirement for people by year and cause



Note: Figures may not sum to the grand total due to rounding.

2.2 Develop: Potential impact of artificial intelligence and automation on 'At Risk of Reduction' occupations

2.2.1 Section 3 below systematically assesses how artificial intelligence, automation and associated technologies might affect workforce demand across individual occupations. It applies low, medium and high adoption scenarios across seven dimensions of technological adoption and classifies each occupation according to whether workforce demand is *At Risk of Reduction, Significantly Impacted, Augmented* or subject to *Limited Impact*.

2.2.2 The following occupations are *At Risk of Reduction* in their core workforce requirements as a result of these new technologies:

- 71 - Sales Occupations
- 72 - Customer Service Occupations
- 41 - Administrative Occupations
- 42 - Secretarial and Related Occupations
- 92 - Elementary Administration and Service Occupations
- 34 - Culture, Media and Sports Occupations
- 62 - Leisure, Travel and Related Personal Service Occupations

2.2.3 Together, these occupations have a core requirement of 14,500 people by 2032, equivalent to 15% of the overall core requirement. This identifies the part of the forecast most exposed to potential workforce demand reduction; it does not imply that the core requirement for people by 2032 could be reduced by 14,500.

2.2.4 Our analysis indicates that the potential impact of AI and automation on the *At Risk of Reduction* occupations (listed in paragraph 2.2.2 above) could be:

- 440 people under the low adoption scenario (equivalent to a reduction of up to 3%)
- Between 580–1,740 under the medium adoption scenario (equivalent to a reduction of between 4% to 12%)
- Between 1,885–3,625 under the high adoption scenario (equivalent to a reduction of between 13% to 25%)

2.2.5 These are illustrative sensitivity assumptions rather than forecasts of job losses.

2.2.6 Section 3 presents the detailed occupation-level assessment under each adoption scenario, with the full analytical framework set out in Annex A2.4.

2.3 Retain: Replacement demand sensitivity

2.3.1 In addition to the core requirement for people based on new job creation and retirements, we must consider the extent to which people might leave the workforce in order to take up employment in other sectors of the economy (or move overseas).

2.3.2 For this analysis we have not included any vacancies that may be created by one person leaving their job in the Power Generation industry and taking up another position within the same industry.

2.3.3 As detailed in Annex 2.2, we have assumed a proportion of the workforce will leave each year for reasons other than retirement – these annual proportions range from 2% to 5% depending on the occupation.

2.3.4 In total, in addition to the core requirement for 99,600 people by 2032, an additional 31,700 people may be needed to fill vacancies by those who leave the workforce for other reasons

Figure 3: Potential additional vacancies (over-and-above the core requirement)

Sub-Industry	Number	*% of current workforce*
Gas/Hydrogen	700	*32%*
Hydropower	300	*17%*
Nuclear	8,800	*17%*
Offshore Wind	11,200	*28%*
Onshore Wind	3,200	*21%*
Utility-Scale Solar & Battery Storage	4,100	*22%*
Carbon Capture, Utilisation & Storage	2,000	*441%*
Energy from Waste/Biomass	1,400	*19%*
Power Generation	**31,700**	***23%***

Note: Figures may not sum to the grand total due to rounding.

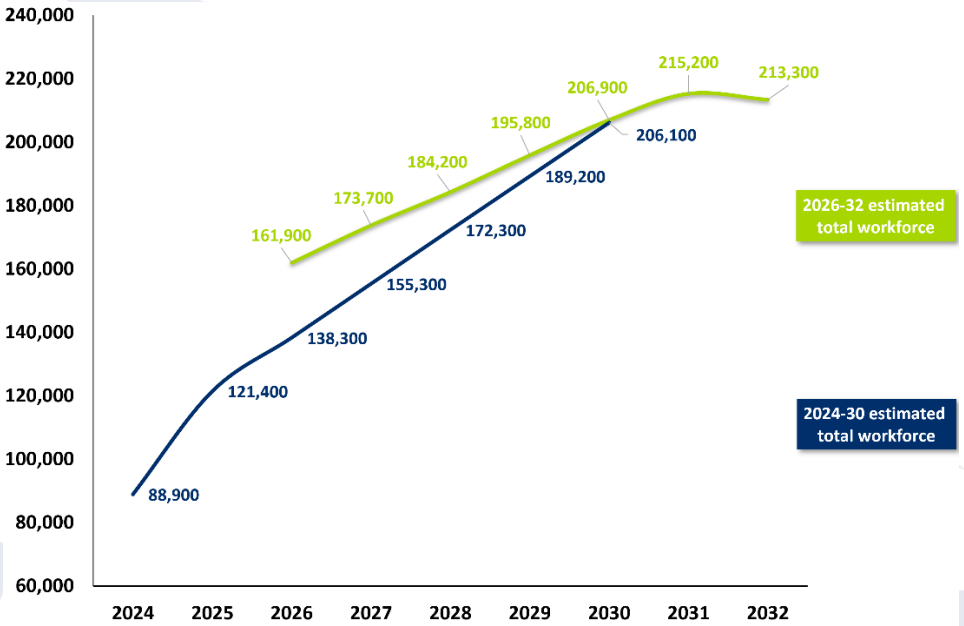
2.3.5 The challenge for the industry will be to minimise these additional vacancies, while recognising that some level of staff turnover is generally considered positive in terms of bringing in a diversity of people, experiences and ideas. Commitment 3: Retain experience and widen access to opportunity in the Call to Action below provides further information on how the sector might achieve improvements in workforce retention.

2.4 Research: Maintaining the credibility of these forecasts

2.4.1 These workforce demand estimates were published for the first time in 2024 and will be updated every two years.

2.4.2 In order to assess how our forecasts of workforce growth have changed since our 2024 forecasts, the figure below presents our latest forecasts side-by-side.

Figure 4: Forecast total workforce for 2026-32 compared to 2024-30 forecast



2.4.3 Our new forecast for 2026 is 23,600 higher than we estimated it would be back in 2024.

2.4.4 The principal reason behind this variance is that the various third-party research and data sources that have been used for each sub-industry have been updated on the basis of the latest industry and government investment plans and roll-out trajectories. In some cases, these have changed significantly since our 2024 estimates, mainly as a result of the Labour government implementing its energy strategies.

2.4.5 Four generating technologies employ fewer people in 2026 than was previously predicted:

- CCUS: -14,700
- Energy from Waste/Biomass/BECC: -9,500
- Hydrogen/Gas: -1,400
- Hydropower: -900

2.4.6 The (CCUS) and EfW/Biomass/BECCS) industries employ fewer people than predicted due to widespread project delays, economic headwinds, and policy uncertainty – also, previously forecasts were based on aggressive timelines for industrial decarbonization clusters.

2.4.7 According to data from the Carbon Capture and Storage Association (CCSA), more than 27 major capture projects have been paused or cancelled, and remaining projects have faced an average delay of two years[2].

2.4.8 Policy delays, such as the postponement of integrating waste incinerators and Energy from Waste (EfW) facilities into the UK ETS scheme, have stalled investment, meaning developers have delayed building operational workforces[3].

[2] CCSA CCUS Delivery Plan Update 2025 - CCSA.

[3] UK delays carbon market entry for waste incinerators | S&P Global

2.4.9 Four generating technologies employ more people in 2026 than was previously forecast:

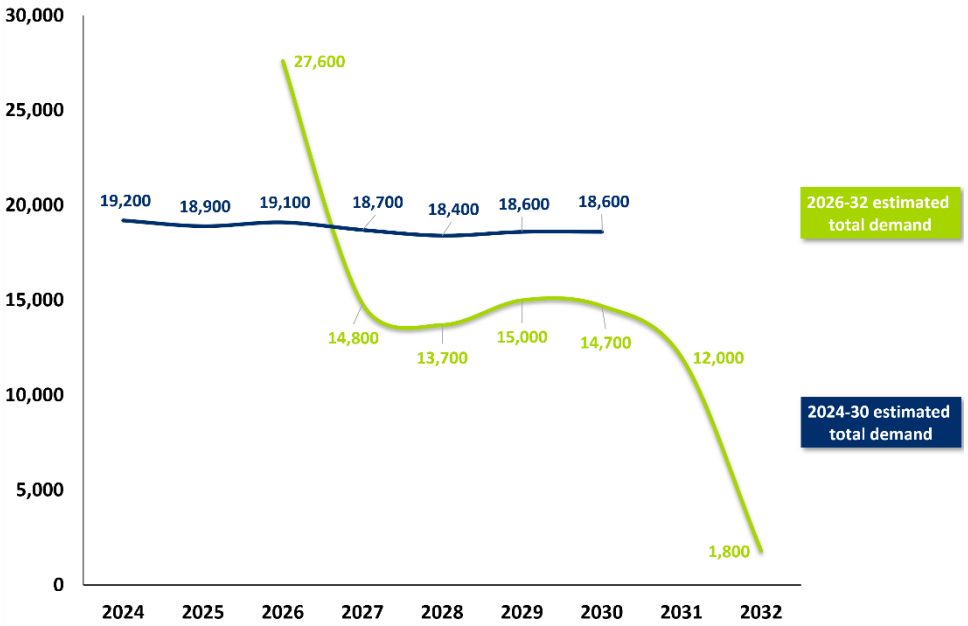
- Offshore: +20,900
- Onshore: +13,900
- Utility-Scale Solar & Battery Storage: +8,200
- Nuclear: +7,000

2.4.10 Higher than expected growth in the UK wind industry was caused by government lifting restrictive planning constraints on English onshore wind development in July 2024[4], triggering a massive wave of new project submissions and site planning that drastically increased labour demand. Major construction activity also ramped up rapidly, with gigawatts of capacity entering simultaneous installation and final investment decision stages[5]. Finally, governmental commitments to double wind capacity by 2030 compelled developers and the Offshore Wind Industry Council to scale up hiring and technical training well ahead of baseline models[6].

2.4.11 However, both overall forecasts converge by 2030.

2.4.12 In terms of our forecasted trajectory for the total demand for people (see figure 5) there is a clear difference in 2026. As explained above, this is due to higher than expected demand for people in Offshore Wind, Onshore Wind, Solar & Battery Storage, and Nuclear industries.

Figure 5: Forecast total demand for 2026-32 compared to 2024-30 forecast



2.4.13 As explained in paragraph 2.4.8 above, the fall-off in workforce growth in 2032 is likely a reflection of future plans and investments being currently unknown, rather than a true, expected reduction in workforce growth.

2.4.14 Our aim, wherever possible, is to improve the accuracy of these workforce demand estimates with each update.

[4] UK onshore wind farm pipeline tops 50 GW, RenewableUK says | Onshore Wind News | Renewables Now

[5] UK wind and global offshore wind: 2024 in review

[6] Wind industry skills intelligence report 2025 | RenewableUK

2.5 Nations and regions

2.5.1 England accounts for the majority of workforce demand, requiring 79,200 of the 99,600 people needed by 2032

2.5.2 Scotland faces the greatest relative workforce pressure, requiring 17,100 people, equivalent to 75% of its current workforce. This compares with 73% in Northern Ireland, 72% in England and 68% in Wales.

2.5.3 London has the largest regional workforce requirement, at 23,000 people by 2032, followed by the North West (12,600) and South West (11,600). The greatest relative pressure is in the East of England, where the core requirement is equivalent to 131% of the current workforce.

Figure 6: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 by nation and region

Nation & Region	Total employment		New jobs created		Retirements		Core requirement for people		
	2025 baseline	2032	Number	*% Growth*	Number	*% of current workforce*	Total	*% of current workforce*	Average per year
England	109,700	170,400	60,700	*55%*	18,500	*17%*	79,200	*72%*	11,300
Northern Ireland	1,400	2,200	800	*57%*	200	*17%*	1,000	*73%*	100
Scotland	22,700	35,800	13,100	*58%*	4,000	*18%*	17,100	*75%*	2,400
Wales	3,200	4,900	1,700	*52%*	500	*16%*	2,200	*68%*	300
United Kingdom	**137,000**	**213,300**	**76,300**	***56%***	**23,300**	***17%***	**99,600**	***73%***	**14,200**
English regions									
East of England	6,600	14,100	7,400	*111%*	1,300	*20%*	8,700	*131%*	1,200
East Midlands	2,400	3,600	1,200	*48%*	400	*16%*	1,500	*64%*	200
London	22,200	40,800	18,600	*84%*	4,400	*20%*	23,000	*104%*	3,300
North East	3,600	6,600	3,000	*84%*	700	*19%*	3,700	*103%*	500
North West	30,600	38,700	8,200	*27%*	4,400	*14%*	12,600	*41%*	1,800
South East	12,900	19,100	6,200	*48%*	2,100	*16%*	8,300	*64%*	1,200
South West	21,000	29,300	8,300	*40%*	3,300	*16%*	11,600	*55%*	1,700
West Midlands	3,500	4,900	1,400	*41%*	500	*16%*	2,000	*57%*	300
Yorkshire & The Humber	6,900	13,300	6,400	*93%*	1,400	*20%*	7,800	*113%*	1,100

Note: Figures may not sum to the grand total due to rounding.

2.6 Skills and occupations

Skill levels

2.6.2 RQF 6 occupations have the largest core workforce requirement, requiring 29,700 people by 2032. This accounts for around 30% of the 99,600 people required across Power Generation.

2.6.3 RQF 3 occupations have the second-largest requirement at 21,600 people, followed by RQF 4–5 at 20,600 people. Together, these three skill levels account for 71,900 people, equivalent to around 72% of total workforce demand.

2.6.4 RQF 1 occupations face the greatest relative recruitment pressure, with the core requirement equivalent to 80% of the current workforce. This is followed by RQF 7–8 at 78% and RQF 3 at 76%.

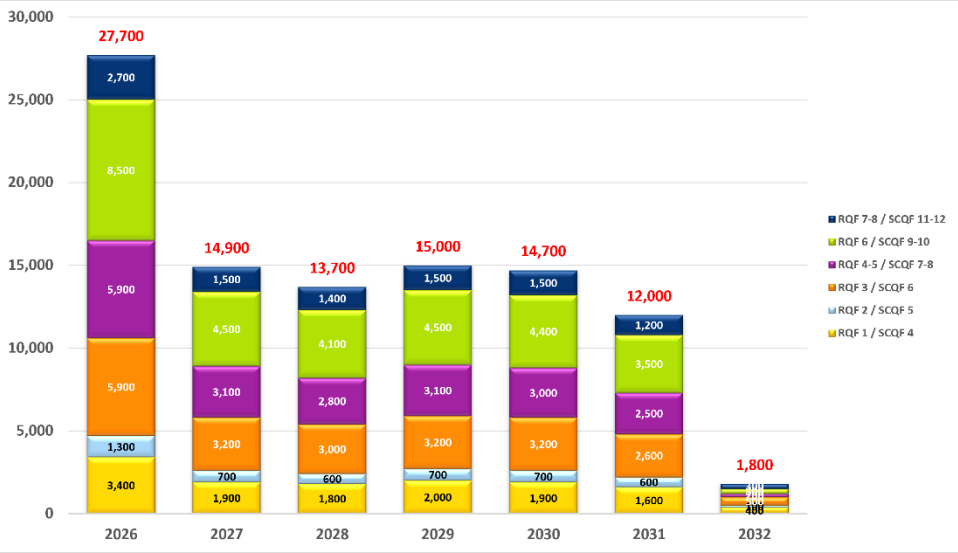
Figure 7: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 by skill level

RQF/SCQF Level	Total employment		New jobs created		Retirements		Core requirement for people		
	2025 baseline	2032	Number	*% Growth*	Number	*% of current workforce*	Total	*% of current workforce*	Average per year
RQF 7-8 SCQF 11-12	12,700	19,800	7,100	*56%*	2,900	*23%*	10,000	*78%*	1,400
RQF 6 SCQF 9-10	43,300	67,400	24,100	*56%*	5,600	*13%*	29,700	*69%*	4,300
RQF 4-5 SCQF 7-8	29,600	46,100	16,500	*56%*	4,100	*14%*	20,600	*70%*	2,900
RQF 3 SCQF 6	28,500	44,400	15,900	*56%*	5,700	*20%*	21,600	*76%*	3,100
RQF 2 SCQF 5	6,600	10,200	3,600	*56%*	1,000	*15%*	4,600	*71%*	700
RQF 1 SCQF 4	16,300	25,400	9,100	*56%*	3,900	*24%*	13,000	*80%*	1,900
Power Generation	**137,000**	**213,300**	**76,300**	*56%*	**23,300**	*17%*	**99,600**	*73%*	**14,200**

Note: Figures may not sum to the grand total due to rounding.

2.6.5 The next figure breaks these annual numbers down by skill level.

Figure 8: Core requirement for people by skill level and year



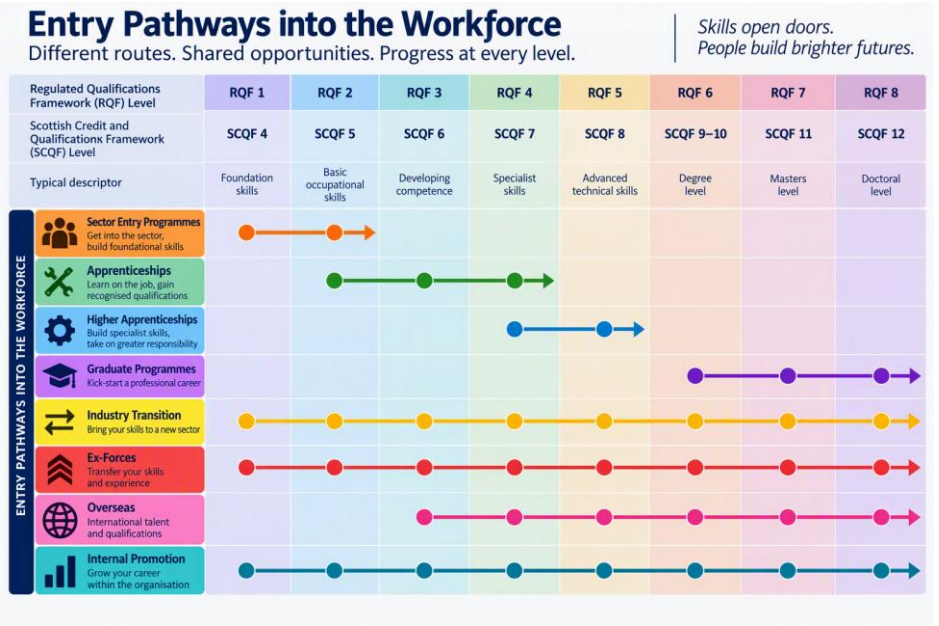
Note: Figures may not sum to the grand total due to rounding.

2.6.6 The entry pathways into the workforce will vary depending upon the skill level of the occupation. Each entry pathway will have its unique characteristics in terms of lead-time to competency and entry point into the workforce.

2.6.7 At skill levels 1 and 2 (4-5 in Scotland), sector entry-type programmes could provide an immediate solution. At skill levels 3-5 (6-8 in Scotland), a number of entry pathways may be appropriate, but lead-times to competency will determine the extent to which they are able to satisfy immediate demands (e.g. with training lead-times of 3 years+ for an apprentice (and the associated need for trainers, assessors and mentors), increasing the volume in the pipeline now will not produce positive outcomes until the turn of the decade).

2.6.8 Transitioning in experienced workers from other sectors will be a priority, as will developing the existing workforce and enabling career progression via internal promotions. However, this process cannot be rushed to point where people are promoted prematurely.

Figure 9: Potential entry pathways into the workforce



2.6.9 Industry will make use of range of different recruitment and training pathways, providing a balanced approach to meeting both short-term and longer-term demands for people.

Occupations

2.6.10 This analysis is based on UK's Standard Occupational Classification system at the two-digit – sub-major group – level.

2.6.11 All our estimates and forecasts have been broken down by 26 occupations – based on the two-digit Standard Occupational Classification taxonomy. Furthermore, these have been grouped into five occupational groups (more information can be found in Annex 1):

- **Managerial**: Directors and functional managers
- **Technical Professional**: Typically, science and engineering professional engineers
- **Business Support**: Typically, roles including media, marketing, site security, and specialist roles such as quantity surveyor, estimator and procurement
- **Front Line Technical**: Typically, operative and craft level workers such as Maintenance Fitter, Pipe Fitter, Steel Erector, Control Room Operator, etc.
- **Other**: In the main, these occupations are generally not directly relevant to the core activities of the industry, but data collection processes may result in a small number of people being reported (e.g. nurses/first aiders, community development specialists, etc.).

2.6.12 Business Support occupations have the largest core workforce requirement, requiring 37,100 people by 2032.

2.6.13 Technical Professional occupations have the second-largest requirement at 26,800 people, followed by Front Line Technical occupations at 24,700 people. Together, these three groups account for 88,600 people, around 89% of the total core requirement.

2.6.14 Figure 11 below breaks down these broad occupational groups into 26 two-digit SOC.

Figure 10: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 by broad occupational group

Broad Occupational Group	Total employment		New jobs created		Retirements		Core requirement for people		
	2025 baseline	2032	Number	*% Growth*	Number	*% of current workforce*	Total	*% of current workforce*	Average per year
Managerial	12,700	19,900	7,100	*56%*	2,900	*23%*	10,000	*78%*	1,400
Technical Professional	39,300	61,200	21,900	*56%*	4,900	*13%*	26,800	*68%*	3,800
Business Support	51,700	80,400	28,800	*56%*	8,300	*16%*	37,100	*72%*	5,300
Front Line Technical	32,100	49,900	17,800	*56%*	6,900	*22%*	24,700	*77%*	3,500
Other	1,200	1,900	700	*56%*	200	*20%*	900	*75%*	100
Power Generation	**137,000**	**213,300**	**76,300**	*56%*	**23,300**	*17%*	**99,600**	*73%*	**14,200**

Note: Figures may not sum to the grand total due to rounding.

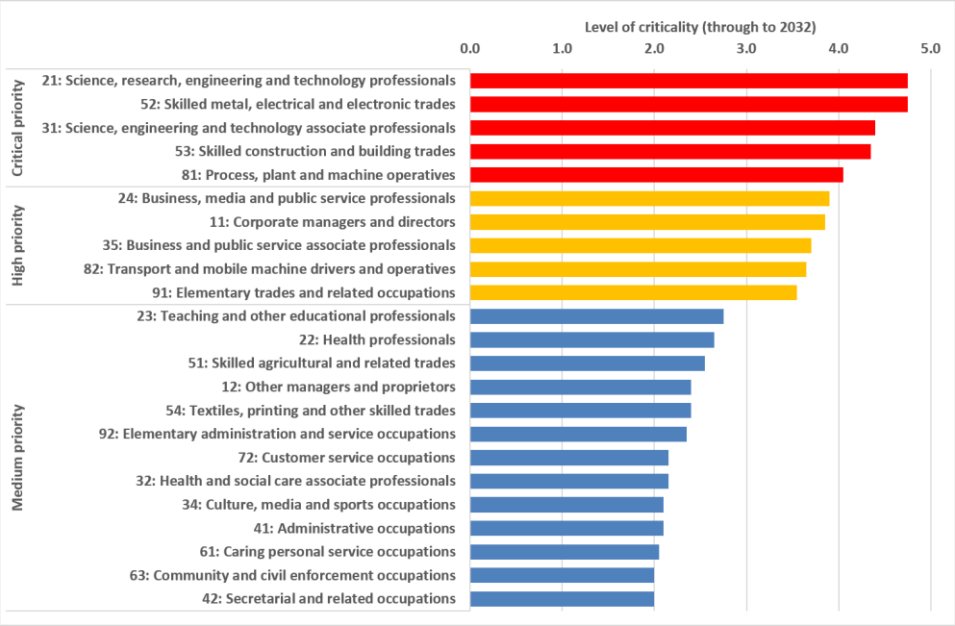
Figure 11: Current workforce estimates and forecast number of new jobs created, replacement demand and new people required by occupation

Skill level	Standard Occupational Classification (Sub-Major Group)	Total employment		New jobs created		Retirements		Core requirement for people		
		2025 baseline	2032	Number	% Growth	Number	% of current workforce	Total	% of current workforce	Average per year
RQF 7-8 SCQF 11-12	11 - Corporate Managers and Directors	11,700	18,100	6,500	56%	2,600	23%	9,100	78%	1,300
	12 - Other Managers and Proprietors	1,100	1,700	600	56%	200	23%	900	78%	100
RQF 6 SCQF 9-10	21 - Science, Research, Engineering and Technology Professionals	30,300	47,200	16,900	56%	3,600	12%	20,400	68%	2,900
	22 - Health Professionals	400	600	200	56%	100	18%	200	73%	<100
	23 - Teaching and Other Educational Professionals	0	0	0	--	0	--	0	--	0
	24 - Business, Media and Public Service Professionals	12,600	19,600	7,000	56%	2,000	16%	9,000	71%	1,300
RQF 4-5 SCQF 7-8	31 - Science, Engineering and Technology Associate Professionals	9,000	14,100	5,000	56%	1,300	15%	6,400	70%	900
	32 - Health and Social Care Associate Professionals	0	0	0	--	0	--	0	--	0
	33 - Protective Service Occupations	300	400	200	56%	<100	10%	200	66%	<100
	34 - Culture, Media and Sports Occupations	300	400	200	56%	<100	12%	200	68%	<100
	35 - Business and Public Service Associate Professionals	20,000	31,200	11,100	56%	2,800	14%	13,900	69%	2,000
RQF 3 SCQF 6	41 - Administrative Occupations	7,900	12,400	4,400	56%	1,600	21%	6,100	76%	900
	42 - Secretarial and Related Occupations	1,200	1,900	700	56%	400	30%	1,100	85%	200
	51 - Skilled Agricultural and Related Trades	300	400	200	56%	100	37%	200	93%	<100
	52 - Skilled Metal, Electrical and Electronic Trades	16,600	25,800	9,200	56%	3,100	19%	12,300	74%	1,800
	53 - Skilled Construction and Building Trades	2,500	3,800	1,400	56%	500	20%	1,900	75%	300
	54 - Textiles, Printing and Other Skilled Trades	0	0	0	--	0	--	0	--	0
	61 - Caring Personal Service Occupations	300	400	100	56%	100	21%	200	76%	<100
	62 - Leisure, Travel and Related Personal Service Occupations	500	900	300	56%	100	21%	400	76%	100
	63 - Community and Civil Enforcement Occupations	0	0	0	--	0	--	0	--	0
RQF 2 SCQF 5	71 - Sales Occupations	1,600	2,600	900	56%	300	18%	1,200	73%	200
	72 - Customer Service Occupations	4,100	6,400	2,300	56%	500	13%	2,800	68%	400
RQF 1 SCQF 4	81 - Process, Plant and Machine Operatives	9,700	15,100	5,400	56%	2,300	24%	7,700	79%	1,100
	82 - Transport and Mobile Machine Drivers and Operatives	2,300	3,600	1,300	56%	800	33%	2,000	88%	300
	91 - Elementary Trades and Related Occupations	700	1,100	400	56%	100	22%	500	77%	100
	92 - Elementary Administration and Service Occupations	3,500	5,600	2,000	56%	700	20%	2,700	75%	400
Power Generation		137,000	213,300	76,300	56%	23,300	17%	99,600	73%	14,200

2.6.15 In order to assess how critical each occupation is to success of the industry through to 2032, we have developed a criticality framework based on 11 criteria. Further details of this methodology can be found in Annex 2.

2.6.16 The figure below ranks each of the above occupations in terms of their level of priority through to 2032 based on a range of eleven criteria (including taking in account each occupation's importance to delivery and level of shortage in the UK) – those ranked as low priority are not shown.

Figure 12: Forecasted level of occupational criticality through to 2032



2.6.17 Five occupations are ranked as critical:

- 21: Science, research, engineering and technology professionals
- 52: Skilled metal, electrical and electronic trades
- 31: Science, engineering and technology associate professionals
- 53: Skilled construction and building trades
- 81: Process, plant and machine operatives

2.6.18 These occupations are likely to be a major constraint on infrastructure delivery by 2032., typically combining high delivery criticality, significant shortages, long training lead times, safety/regulatory importance and limited scalability. It is likely that immediate intervention is required, including targeted workforce strategies, apprenticeships, retraining programmes, recruitment campaigns and supply-chain action.

2.6.19 By 2032, these five critical occupations will employ an additional 37,900 people and need to attract 48,700 new people to enter their workforces.

2.6.20 Five occupations are ranked as high priority:

- 24: Business, media and public service professionals
- 11: Corporate managers and directors
- 35: Business and public service associate professionals
- 82: Transport and mobile machine drivers and operatives
- 91: Elementary trades and related occupations

2.6.21 These occupations present a significant workforce risk and are likely to experience recruitment pressure but are not expected to be a critical bottleneck across the industry. Active monitoring and targeted interventions are required.

2.6.22 By 2032, these five high priority occupations will employ an additional 26,300 people and need to recruit 34,500 new people into enter their workforces.

2.6.23 In total, some 64,200 new jobs will be created in occupations that are either critical or high priority occupations; requiring more than 83,200 new people to enter their workforces.

2.6.24 Furthermore, we have applied this same methodology to a more detailed taxonomy of occupations – the four-digit Unit Group of occupations.

2.6.25 12 detailed occupations have been identified as being a critical priority for the power generation industry over the next seven years. These are listed in the table below, along with estimates of the current and future workforce, new jobs created, retirements and the core requirement for people.

2.6.26 These critical detailed occupations are forecast to grow by 24,200 jobs and need 31,400 new people by 2032.

2.6.27 Electricians and electrical fitters will require the most new people to enter their workforce – 5,500 (or 800 per year). Energy plant operatives follow, requiring 3,400 new people (500 per year).

Figure 13: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 in critical priority

Skill level	Standard Occupational Classification (Unit Group)	Total employment		New jobs created		Retirements		Core requirement for people		
		2025 baseline	2032	Number	*% Growth*	Number	*% of current workforce*	Total	*% of current workforce*	Average per year
RQF 3 SCQF 6	**5241 – Electricians and electrical fitters**	7,300	11,400	4,100	*56%*	1,400	*19%*	5,500	*75%*	800
RQF 1 SCQF 4	**8133 – Energy plant operatives**	4,300	6,700	2,400	*56%*	1,000	*23%*	3,400	*79%*	500
RQF 6 SCQF 9-10	**2123 – Electrical engineers**	3,900	6,100	2,200	*56%*	500	*13%*	2,700	*69%*	400
RQF 6 SCQF 9-10	**2122 – Mechanical engineers**	3,300	5,200	1,900	*58%*	400	*12%*	2,300	*70%*	300
RQF 6 SCQF 9-10	**2127 – Engineering project managers and project engineers**	2,200	3,400	1,200	*55%*	300	*14%*	1,500	*68%*	200
RQF 6 SCQF 9-10	**2152 – Environment professionals**	1,900	3,000	1,100	*58%*	200	*11%*	1,300	*68%*	200
RQF 6 SCQF 9-10	**2482 – Quality assurance and regulatory professionals**	1,800	2,700	900	*50%*	300	*17%*	1,200	*67%*	200
RQF 6 SCQF 9-10	**2129 – Engineering professionals n.e.c**	5,500	8,600	3,100	*56%*	700	*13%*	3,800	*69%*	500
RQF 3 SCQF 6	**5223 – Metal working production and maintenance fitters**	4,100	6,300	2,200	*54%*	800	*20%*	3,000	*73%*	400
RQF 7-8 SCQF 11-12	**1123 – Production managers and directors in mining and energy**	3,000	4,700	1,700	*57%*	700	*23%*	2,400	*80%*	300
RQF 4-5 SCQF 7-8	**3113 – Engineering Technicians**	4,300	6,700	2,400	*56%*	600	*14%*	3,000	*70%*	400
RQF 3 SCQF 6	**5224 – Precision instrument makers and repairers**	1,800	2,800	1,000	*56%*	300	*17%*	1,300	*72%*	200
Power Generation– Critical priority detailed occupations		**43,400**	**67,600**	**24,200**	***56%***	**7,200**	***17%***	**31,400**	***72%***	**4,500**

Note: Figures may not sum to the grand total due to rounding.

3 Impact of artificial intelligence and automation on workforce demands

3.1.1 Currently, AI and automation are more likely to change tasks, working practices and occupational mixes in power generation than cause widespread job losses.

3.1.2 Skills England identifies a growing use of AI in clean energy, including predictive maintenance, energy efficiency optimisation, generation forecasting, storage optimisation and carbon capture monitoring.[7]

3.1.3 As a result, demand for skills is shifting rather than shrinking. Maintenance and engineering roles increasingly require capabilities in predictive analytics, digital twins and algorithm-based modelling.

3.1.4 The impact of AI and automation varies across power generation sub-industries:

- **Gas and Hydrogen** — Automated plant control and predictive maintenance could reduce routine operational activity, while hydrogen conversion creates demand for new process, safety and control expertise.
- **Hydropower** — Remote monitoring, automated dispatch and predictive maintenance could reduce routine attendance, although physical maintenance of dams, waterways and generating equipment remains essential.
- **Nuclear** — Digital twins, robotics and remote handling can reduce exposure to hazardous tasks, but stringent safety and regulatory requirements make large-scale workforce substitution unlikely.
- **Offshore Wind** — Drones, autonomous vessels, remote monitoring and robotic inspection could reduce inspection visits and vessel-based activity, although specialist intervention remains necessary.
- **Onshore Wind** — Remote condition monitoring and drone inspections may allow technicians to manage more assets, increasing productivity.
- **Utility-Scale Solar and Battery Storage** — Highly automated operations, remote monitoring, robotic cleaning and automated dispatch could limit ongoing operational staffing requirements.
- **CCUS** — Automation may reduce routine plant operation requirements, but this is likely to be offset initially by construction, commissioning and demand for specialist skills.
- **Energy from waste/Biomass** — Automated process control, sorting, combustion monitoring and predictive maintenance may reduce routine operating activity, but fuel handling and complex maintenance remain labour intensive.

3.1.5 Offshore wind and nuclear are expected to experience some of the greatest operational transformation within power generation. Robotics, remote monitoring and digital twins are likely to automate a larger share of hazardous and routine activities than in other power-generation technologies. However, the need for specialist technical expertise, regulatory compliance and safety assurance means these changes are more likely to reshape roles than eliminate them.

[7] Sector Skills Needs Assessment – Clean Energy, Skills England, August 2026

3.1.6 There are, however, roles which are highly exposed to automation. These include:

- **Radiation Protection Technician** — Routine contamination monitoring, surveying, sampling and work in radiological areas can be undertaken remotely using robotics, sensors and computer vision.
- **Wind Turbine Technician** — Drones, digital twins and predictive maintenance can reduce routine inspection activity and improve productivity, while technicians increasingly focus on diagnostics, intervention and complex maintenance.
- **Control Room Operator** — Increasing use of AI-enabled plant control systems, automated dispatch, digital twins and predictive analytics can automate many routine monitoring and control tasks.
- **Business Support Administrator** — Administrative processes such as document management, reporting, scheduling, data entry and workflow coordination are increasingly handled by AI assistants and process automation tools.
- **Switchboard Operator** — AI-enabled call routing, virtual assistants and automated communications systems can replace much of the traditional switchboard function.

3.1.7 Given the safety-critical and highly regulated nature of power generation, AI and automation are expected to reduce routine tasks and increase productivity rather than replace engineering and technical occupations entirely. Workforce impacts are therefore likely to arise through changes in skill requirements and lower staffing intensity, rather than large-scale job displacement.

3.1.8 The following assessment considers how workforce demand may be affected under different levels of AI and automation adoption within the power generation industry. Occupational groups have been classified according to their likely workforce-demand response to AI and automation adoption:

- **At Risk of Reduction** – Fewer workers may be required because AI and automation increase productivity and automate routine tasks.
- **Significantly Impacted** – Workforce demand remains broadly stable, but roles undergo substantial redesign as tasks, skills, responsibilities and workflows change significantly.
- **Augmented** – AI and automation improve productivity, decision-making and performance, but primarily enhance rather than redesign core roles, and demand for workers remains strong.
- **Limited Impact** – Little expected effect on workforce demand because activities continue to depend heavily on physical intervention, human interaction or site-based work.

3.1.9 Both *Significantly Impacted* and *Augmented* occupations are expected to experience widespread adoption of AI and automation. The key difference is that significantly impacted occupations are expected to undergo substantial job redesign, while augmented occupations primarily experience productivity and performance improvements with limited changes to the core nature of the role.

3.1.10 Low, medium and high adoption scenarios have been developed using a seven-dimension framework covering:

- investment and pace of adoption;
- technology maturity and autonomy;
- breadth of deployment;
- depth of workflow integration;

- task automation and augmentation;
- job redesign and skills transformation;
- productivity ambition.

3.1.11 These adoption scenarios describe the extent to which AI and automation are deployed within the industry. The occupational assessment then considers how different occupations may be affected under each adoption scenario.

3.1.12 The scenarios are intended to illustrate a range of plausible outcomes through to 2032 rather than predict a single future state:

- **Low Adoption** — AI and automation adoption remains relatively limited and focused on specific use cases. Organisations deploy individual tools for activities such as information retrieval, reporting, scheduling, basic analytics or administrative support, but these technologies are not extensively integrated into operational workflows. Most work continues to be undertaken using existing processes and workforce-demand impacts are limited.
- **Medium adoption** — AI and automation become mainstream across many organisations and functions. Proven technologies are integrated into business processes and support activities such as planning, monitoring, customer engagement, decision support and predictive maintenance. Roles and skill requirements begin to evolve, productivity improves and organisations increasingly use technology to redesign workflows and operating practices.
- **High adoption** — AI and automation are extensively embedded across organisational processes, operational activities and decision-making. Technologies are integrated with core systems, data and workflows, enabling significant automation, augmentation and workflow redesign. Organisations achieve substantial productivity gains and workforce demand is affected according to the exposure of the occupation group, with impacts ranging from workforce reduction in some roles to significant augmentation in others.

3.1.13 Potential workforce effects are assessed separately through the occupational risk categories and scenario analysis.

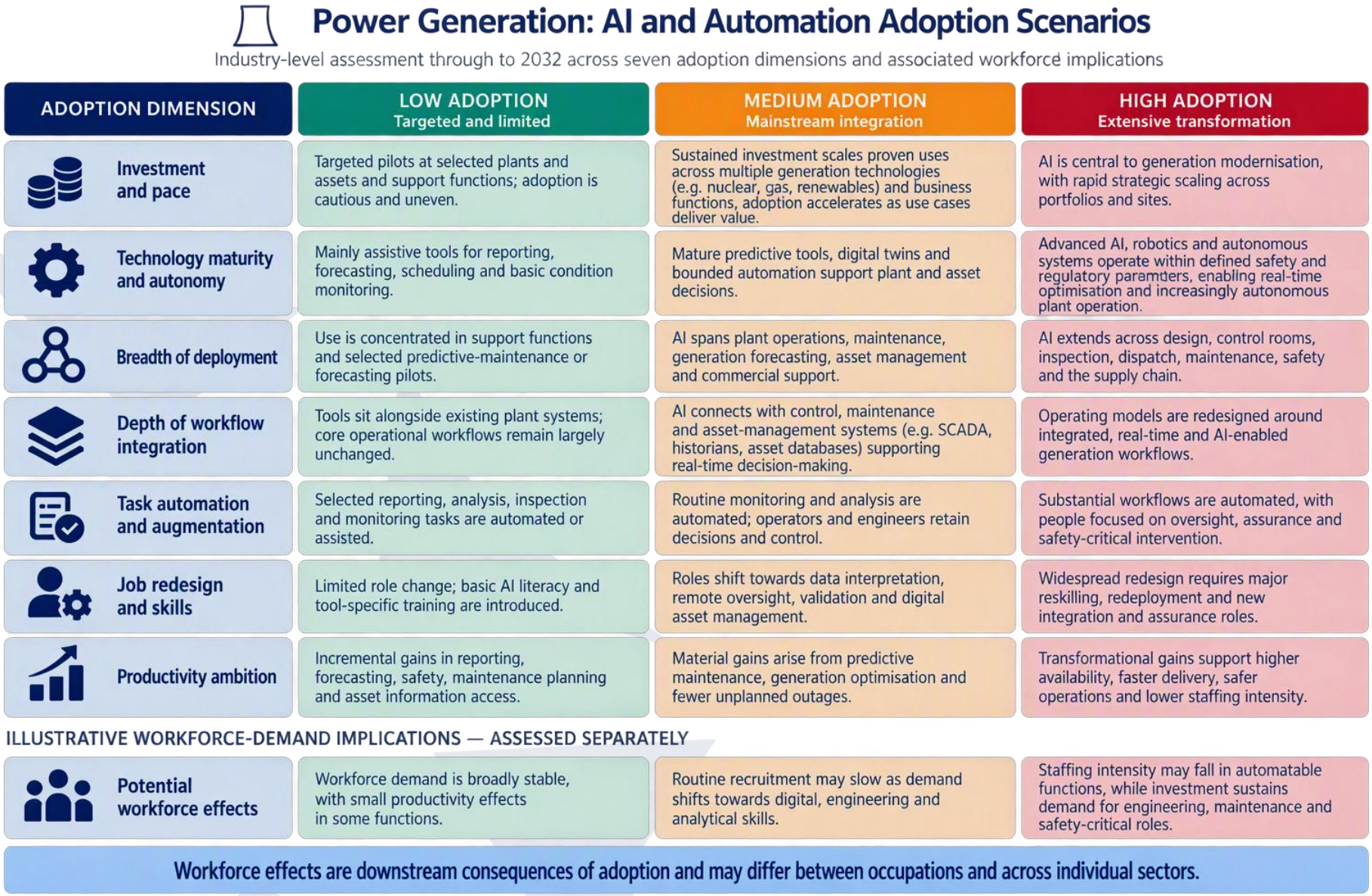
3.1.14 It is important to note that higher levels of AI and automation adoption do not automatically result in workforce reductions; impacts vary according to the characteristics of individual occupations and the extent to which tasks can be automated. Actual workforce outcomes will also depend on wider drivers including investment levels, regulatory requirements, infrastructure programmes, technological maturity and future demand for power generation services.

Figure 5: Assessment of AI and automation risk by occupation

Risk category	Standard Occupational Classification	Occupational Group	Adoption Scenarios		
			Low Adoption	Medium Adoption	High Adoption
At Risk of Reduction	71 - Sales Occupations 72 - Customer Service Occupations 41 - Administrative Occupations 42 - Secretarial and Related Occupations 92 - Elementary Administration and Service Occupations 34 - Culture, Media and Sports Occupations	Business Support	AI is used mainly for document drafting, reporting, scheduling and basic customer-service activities. Most work remains human-led and workforce demand remains broadly stable.	AI is routinely used for reporting, maintenance documentation, contractor scheduling, procurement administration and commercial support activities. Productivity improves while recruitment demand slows as routine tasks are increasingly automated.	AI is deeply integrated across administrative, customer-service and commercial support functions. Automated workflows, virtual agents and AI-generated reporting significantly reduce routine support activities and lower staffing intensity.
	62 - Leisure, Travel and Related Personal Service Occupations	Other	AI supports content creation, communications, translation and routine service coordination. Human oversight remains central to most activities.	Generative AI becomes widely used for content development, communications, scheduling and travel coordination. Routine work becomes increasingly automated.	AI automates large elements of content creation, communications production and service coordination, reducing demand for repetitive support activities.
Significantly Impacted	24 - Business, Media and Public Service Professionals 35 - Business and Public Service Associate Professionals	Business Support	AI supports research, reporting, project support, procurement and regulatory activities. Most professional judgement remains unchanged.	AI becomes embedded within project controls, procurement, regulatory compliance, commercial analysis and performance reporting. Roles increasingly focus on validation, interpretation and assurance.	AI undertakes significant portions of reporting, forecasting, commercial analysis and project-support activities. Roles are redesigned around oversight, governance and decision-making, requiring substantial reskilling.
	54 - Textiles, Printing and Other Skilled Trades	Other	AI-assisted design and production tools support existing workflows, with limited changes to role requirements.	Intelligent design and production systems automate routine content and digital-production activities, increasing demand for digital skills.	AI is integrated throughout production and design workflows. Workers increasingly manage and quality-assure machine-generated outputs rather than producing them manually.
	31 - Science, Engineering and Technology Associate Professionals	Technical Professional	AI supports diagnostics, condition monitoring and technical reporting across generation assets. Existing technician roles remain broadly unchanged.	Predictive maintenance, remote monitoring and digital twins become increasingly common across power stations, wind farms, solar farms and battery-storage assets. Technicians increasingly use AI to identify faults and monitor asset health.	AI is deeply integrated into asset diagnostics, performance optimisation and maintenance planning. Roles shift towards interpreting AI outputs and overseeing autonomous inspection, monitoring and maintenance systems.
	81 - Process, Plant and Machine Operatives	Front Line Technical	Automation mainly supports plant monitoring, condition monitoring and operational reporting. Control-room and plant operators remain responsible for routine operational decisions.	AI-enabled process optimisation, predictive maintenance and automated dispatch become widespread across generation assets. Workers spend less time on routine monitoring and more time responding to AI-generated insights.	Automated plant control systems, digital twins, robotics and advanced optimisation significantly reshape operational roles. Workers increasingly manage exceptions, safety-critical interventions and system assurance rather than routine operations.

Risk category	Standard Occupational Classification	Occupational Group	Adoption Scenarios		
			Low Adoption	Medium Adoption	High Adoption
Augmented	11 - Corporate Managers and Directors	Managerial	Managers use AI for reporting, information retrieval and performance monitoring of generation assets. Decision-making remains largely unchanged.	AI supports generation forecasting, maintenance planning, workforce allocation and operational performance management, enabling more data-driven management.	AI is embedded across operational planning, asset-performance management and regulatory reporting. Managers achieve significant productivity gains while retaining accountability for safety and operational outcomes.
	12 - Other Managers and Proprietors				
	21 - Science, Research, Engineering and Technology Professionals	Technical Professional	AI supports engineering analysis, asset-performance reviews and process optimisation studies.	AI-enabled modelling, digital twins and advanced simulations improve generation forecasting, reliability and maintenance planning.	AI is deeply embedded in plant design, operational optimisation, generation forecasting and asset management. Productivity improves significantly while demand for engineering professionals remains strong.
	22 - Health Professionals	Other	AI supports training preparation, information management and administrative activities, with limited impact on workforce demand.	AI enhances workforce training, knowledge management and professional support activities, increasing demand for digital skills.	AI supports learning, skills analysis and workforce planning, making training and occupational-health activities more data-driven while workforce demand remains stable.
	23 - Teaching and Other Educational Professionals				
	32 - Health and Social Care Associate Professionals				
	33 - Protective Service Occupations	Business Support	AI supports surveillance, monitoring and risk-detection activities, with limited changes to working practices.	Intelligent monitoring systems improve threat detection, situational awareness and incident management.	AI significantly improves monitoring, threat detection and response coordination. Human judgement remains essential in high-security and safety-critical environments such as nuclear generation.
	51 - Skilled Agricultural and Related Trades	Front Line Technical	AI supports inspection planning, work scheduling, equipment monitoring and basic diagnostics. Most physical maintenance activities remain unchanged.	Predictive maintenance, drone inspections and AI-assisted diagnostics improve maintenance efficiency across wind, solar, nuclear and thermal generation assets. Workers increasingly use digital decision-support tools.	AI enhances maintenance planning, condition monitoring, inspection scheduling and asset diagnostics. Workers use AI-generated insights and remote inspection technologies, but physical maintenance, repair and site operations remain essential.
	52 - Skilled Metal, Electrical and Electronic Trades				
Limited Impact	53 - Skilled Construction and Building Trades	Front Line Technical	AI is limited to digital work instructions, scheduling tools and basic diagnostics, with little change to core physical work.	AI supports maintenance planning, safety management and project coordination, but construction and site activities remain labour-intensive.	Physical construction, installation and site-based work remain essential across generation assets. AI improves productivity and safety but has limited impact on workforce demand.
	82 - Transport and Mobile Machine Drivers and Operatives				
	91 - Elementary Trades and Related Occupations				
	61 - Caring Personal Service Occupations	Other	AI provides limited administrative support but has little influence on core activities.	Digital tools improve coordination and access to information, although work remains heavily dependent on human interaction and judgement.	Technology supports planning and information management but does not significantly alter workforce demand due to the inherently interpersonal nature of the work.
	63 - Community and Civil Enforcement Occupations				

Figure 6: Power generation AI and automation adoption scenarios



Power Generation: AI and Automation Adoption Scenarios

Industry-level assessment through to 2032 across seven adoption dimensions and associated workforce implications

ADOPTION DIMENSION	LOW ADOPTION Targeted and limited	MEDIUM ADOPTION Mainstream integration	HIGH ADOPTION Extensive transformation
Investment and pace	Targeted pilots at selected plants and assets and support functions; adoption is cautious and uneven.	Sustained investment scales proven uses across multiple generation technologies (e.g. nuclear, gas, renewables) and business functions, adoption accelerates as use cases deliver value.	AI is central to generation modernisation, with rapid strategic scaling across portfolios and sites.
Technology maturity and autonomy	Mainly assistive tools for reporting, forecasting, scheduling and basic condition monitoring.	Mature predictive tools, digital twins and bounded automation support plant and asset decisions.	Advanced AI, robotics and autonomous systems operate within defined safety and regulatory parameters, enabling real-time optimisation and increasingly autonomous plant operation.
Breadth of deployment	Use is concentrated in support functions and selected predictive-maintenance or forecasting pilots.	AI spans plant operations, maintenance, generation forecasting, asset management and commercial support.	AI extends across design, control rooms, inspection, dispatch, maintenance, safety and the supply chain.
Depth of workflow integration	Tools sit alongside existing plant systems; core operational workflows remain largely unchanged.	AI connects with control, maintenance and asset-management systems (e.g. SCADA, historians, asset databases) supporting real-time decision-making.	Operating models are redesigned around integrated, real-time and AI-enabled generation workflows.
Task automation and augmentation	Selected reporting, analysis, inspection and monitoring tasks are automated or assisted.	Routine monitoring and analysis are automated; operators and engineers retain decisions and control.	Substantial workflows are automated, with people focused on oversight, assurance and safety-critical intervention.
Job redesign and skills	Limited role change; basic AI literacy and tool-specific training are introduced.	Roles shift towards data interpretation, remote oversight, validation and digital asset management.	Widespread redesign requires major reskilling, redeployment and new integration and assurance roles.
Productivity ambition	Incremental gains in reporting, forecasting, safety, maintenance planning and asset information access.	Material gains arise from predictive maintenance, generation optimisation and fewer unplanned outages.	Transformational gains support higher availability, faster delivery, safer operations and lower staffing intensity.
ILLUSTRATIVE WORKFORCE-DEMAND IMPLICATIONS — ASSESSED SEPARATELY			
Potential workforce effects	Workforce demand is broadly stable, with small productivity effects in some functions.	Routine recruitment may slow as demand shifts towards digital, engineering and analytical skills.	Staffing intensity may fall in automatable functions, while investment sustains demand for engineering, maintenance and safety-critical roles.

Workforce effects are downstream consequences of adoption and may differ between occupations and across individual sectors.

4 Sub-industry forecasts

4.1 Gas & Hydrogen

Figure 7: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 by sub-industry

Sub-Industry	Total employment		New jobs created		Retirements		Core requirement for people		
	2025 baseline	2032	Number	% Growth	Number	% of current workforce	Total	% of current workforce	Average per year
Power Generation — Gas/Hydrogen	**2,300**	**6,100**	**3,800**	***168%***	**500**	***24%***	**4,400**	***191%***	**600**

Note: Figures may not sum to the grand total due to rounding.

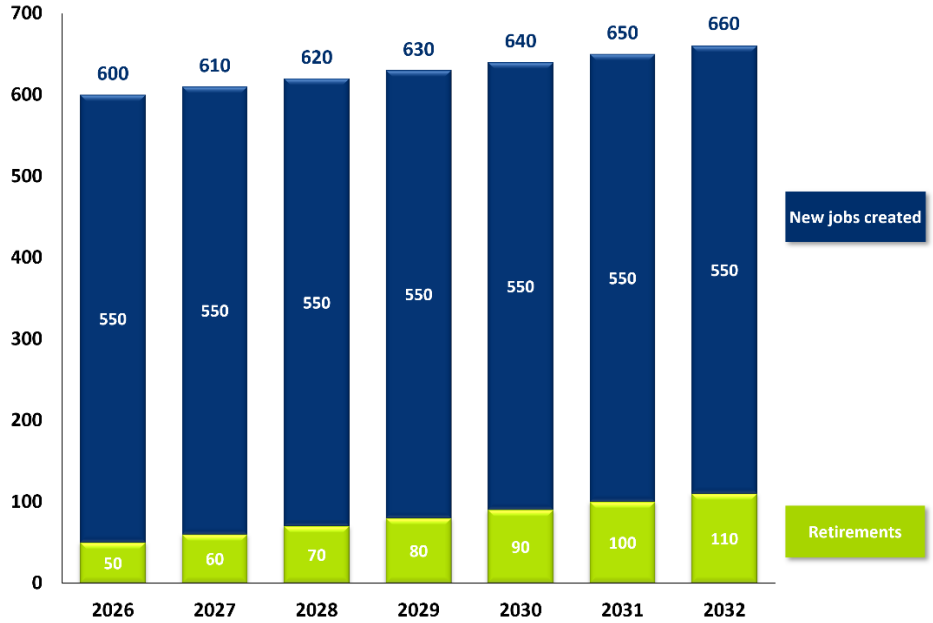
4.1.1 Current workforce estimates and future forecasts were produced by Energy & Utility Skills. Forecast employment growth assumptions were applied to reflect continued gas-fired flexibility requirements and the emergence of hydrogen-to-power generation.

4.1.2 Gas/Hydrogen faces a strongly growth-led workforce challenge, with employment projected to increase from 2,300 to 6,100 by 2032, creating 3,800 new jobs (168% growth). Including around 500 retirements, the sub-industry has a core requirement for 4,400 people, equivalent to 191% of the current workforce.

4.1.3 Annual workforce demand increases gradually throughout the forecast period, rising from 600 people in 2026 to 660 in 2032.

4.1.4 New job creation is the main driver of workforce demand, remaining constant at around 550 people per year. Retirements increase steadily from 50 people in 2026 to 110 in 2032, meaning workforce renewal becomes a gradually larger component of annual demand while growth remains dominant.

Figure 8: Core requirement for people by year and cause



Note: Figures may not sum to the grand total due to rounding.

4.1.5 England accounts for the majority of the Gas/Hydrogen workforce requirement, requiring 3,400 of the 4,400 people needed by 2032.

4.1.6 Scotland requires 700 people, Wales 200 and Northern Ireland around 100 by 2032. Across all four nations, the core requirement is equivalent to 191% of the current workforce, reflecting the scale of projected workforce expansion.

4.1.7 London has the largest regional workforce requirement at 700 people by 2032, followed by the North West and South West at 600 people each. The East of England, South East and Yorkshire & The Humber each require around 400 people.

Figure 9: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 by nation and region

Nation & Region	Total employment		New jobs created		Retirements		Core requirement for people		
	2025 baseline	2032	Number	*% Growth*	Number	*% of current workforce*	Total	*% of current workforce*	Average per year
England	1,800	4,700	3,000	*168%*	400	*24%*	3,400	*191%*	500
Northern Ireland	<100	100	<100	*168%*	<100	*24%*	100	*191%*	<100
Scotland	400	1,000	700	*168%*	100	*24%*	700	*191%*	100
Wales	100	300	200	*168%*	<100	*24%*	200	*191%*	<100
United Kingdom	**2,300**	**6,100**	**3,800**	***168%***	**500**	***24%***	**4,400**	***191%***	**600**
English regions									
East of England	200	500	300	*168%*	<100	*24%*	400	*191%*	<100
East Midlands	100	200	100	*168%*	<100	*24%*	100	*191%*	<100
London	400	1,000	600	*168%*	100	*24%*	700	*191%*	100
North East	100	300	200	*168%*	<100	*24%*	200	*191%*	<100
North West	300	900	600	*168%*	100	*24%*	600	*191%*	100
South East	200	500	300	*168%*	<100	*24%*	400	*191%*	<100
South West	300	800	600	*168%*	100	*24%*	600	*191%*	100
West Midlands	<100	<100	<100	*168%*	<100	*24%*	<100	*191%*	<100
Yorkshire & The Humber	200	500	300	*168%*	<100	*24%*	400	*191%*	<100

Note: Figures may not sum to the grand total due to rounding.

4.1.8 Business Support occupations have the largest core workforce requirement in Gas/Hydrogen, requiring 1,600 people by 2032.

4.1.9 Technical Professional and Front Line Technical occupations have the next-largest requirements, at 1,200 and 1,100 people respectively. Together with Business Support, these groups account for around 89% of the total core requirement.

Figure 10: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 by broad occupational group

Broad Occupational Group	Total employment		New jobs created		Retirements		Core requirement for people		
	2025 baseline	2032	Number	*% Growth*	Number	*% of current workforce*	Total	*% of current workforce*	Average per year
Managerial	200	600	400	*168%*	100	*32%*	400	*199%*	100
Technical Professional	700	1,800	1,100	*168%*	100	*17%*	1,200	*185%*	200
Business Support	900	2,300	1,400	*168%*	200	*22%*	1,600	*190%*	200
Front Line Technical	500	1,400	900	*168%*	100	*30%*	1,100	*198%*	200
Other	<100	<100	<100	*168%*	<100	*27%*	100	*195%*	<100
Power Generation — Gas/Hydrogen	**2,300**	**6,100**	**3,800**	***168%***	**500**	***24%***	**4,400**	***191%***	**600**

Note: Figures may not sum to the grand total due to rounding.

4.1.10 Figure 20 shows demand is concentrated in a small number of occupations:

- Science, Research, Engineering and Technology Professionals — 900 people
- Business and Public Service Associate Professionals — 600 people
- Skilled Metal, Electrical and Electronic Trades — 500 people

Figure 11: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 by occupation

Skill level	Standard Occupational Classification	Total employment		New jobs created		Retirements		Core requirement for people		
		2025 baseline	2032	Number	% Growth	Number	% of current workforce	Total	% of current workforce	Average per year
RQF 7-8 SCQF 11-12	11 - Corporate Managers and Directors	200	500	300	168%	100	32%	400	199%	100
	12 - Other Managers and Proprietors	<100	<100	<100	168%	<100	32%	<100	199%	<100
RQF 6 SCQF 9-10	21 - Science, Research, Engineering and Technology Professionals	500	1,400	800	168%	100	16%	900	184%	100
	22 - Health Professionals	<100	<100	<100	168%	<100	25%	<100	192%	<100
	23 - Teaching and Other Educational Professionals	0	0	0	--	0	--	0	--	0
	24 - Business, Media and Public Service Professionals	200	600	400	168%	<100	22%	400	190%	100
RQF 4-5 SCQF 7-8	31 - Science, Engineering and Technology Associate Professionals	200	400	300	168%	<100	21%	300	188%	<100
	32 - Health and Social Care Associate Professionals	0	0	0	--	0	--	0	--	0
	33 - Protective Service Occupations	<100	<100	<100	168%	<100	14%	<100	181%	<100
	34 - Culture, Media and Sports Occupations	<100	<100	<100	168%	<100	16%	<100	184%	<100
	35 - Business and Public Service Associate Professionals	300	900	600	168%	100	19%	600	187%	100
RQF 3 SCQF 6	41 - Administrative Occupations	100	400	200	168%	<100	29%	300	196%	<100
	42 - Secretarial and Related Occupations	<100	100	<100	168%	<100	41%	100	209%	<100
	51 - Skilled Agricultural and Related Trades	<100	<100	<100	168%	<100	52%	<100	220%	<100
	52 - Skilled Metal, Electrical and Electronic Trades	300	700	500	168%	100	26%	600	194%	100
	53 - Skilled Construction and Building Trades	100	100	100	168%	<100	27%	100	195%	<100
	54 - Textiles, Printing and Other Skilled Trades	0	0	0	--	0	--	0	--	0
	61 - Caring Personal Service Occupations	<100	<100	<100	168%	<100	29%	<100	196%	<100
	62 - Leisure, Travel and Related Personal Service Occupations	<100	<100	<100	168%	<100	29%	<100	196%	<100
	63 - Community and Civil Enforcement Occupations	0	0	0	--	0	--	0	--	0
RQF 2 SCQF 5	71 - Sales Occupations	<100	100	<100	168%	<100	25%	100	192%	<100
	72 - Customer Service Occupations	100	200	100	168%	<100	18%	100	185%	<100
RQF 1 SCQF 4	81 - Process, Plant and Machine Operatives	200	400	300	168%	100	33%	300	201%	<100
	82 - Transport and Mobile Machine Drivers and Operatives	<100	100	100	168%	<100	45%	100	213%	<100
	91 - Elementary Trades and Related Occupations	<100	<100	<100	168%	<100	30%	<100	198%	<100
	92 - Elementary Administration and Service Occupations	100	200	100	168%	<100	27%	100	195%	<100
Power Generation — Gas/Hydrogen		**2,300**	**6,100**	**3,800**	***168%***	**500**	***24%***	**4,400**	***191%***	**600**

Note: Figures may not sum to the grand total due to rounding.

4.2 Hydropower

Figure 12: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 by sub-industry

Sub-Industry	Total employment		New jobs created		Retirements		Core requirement for people		
	2024 baseline	2032	Number	% Growth	Number	% of current workforce	Total	% of current workforce	Average per year
Power Generation — Hydropower	**1,600**	**1,600**	**<100**	***3%***	**200**	***12%***	**200**	***16%***	**<100**

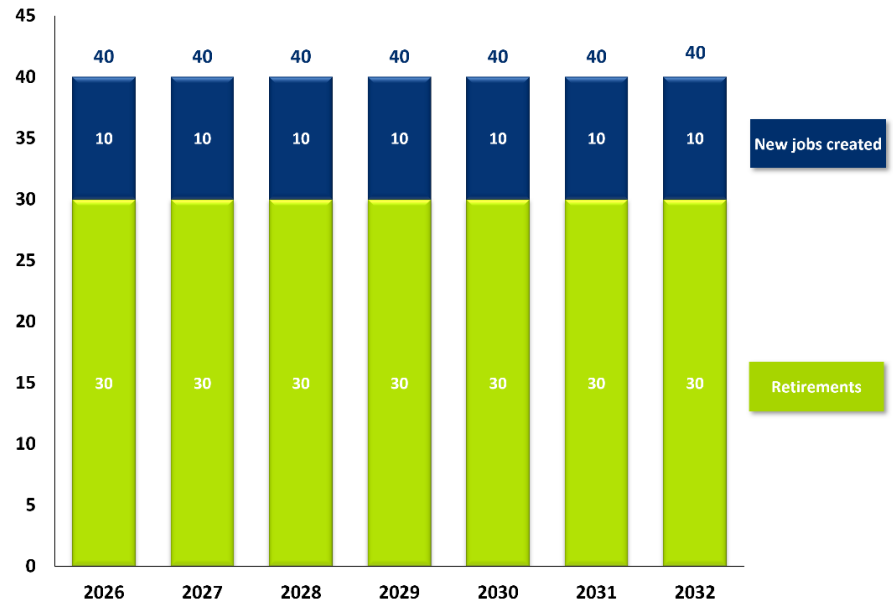
Note: Figures may not sum to the grand total due to rounding.

4.2.1 Estimates of current workforce were provided by Office for National Statistics – Low Carbon and Renewable Energy Economy Survey[8]. Energy & Utility Skills has assumed marginal growth based on a limited investment pipeline of major new projects and that most viable schemes have already been developed. Therefore, the majority of forecast workforce demand will be driven by replacement demand rather than new jobs growth. Current workforce figures are from 2024 as this is the most up-to-date data available.

4.2.2 Hydropower has a relatively stable workforce outlook, with employment remaining at around 1,600 through to 2032. The core requirement is around 200 people, equivalent to 16% of the current workforce, with retirements accounting for the majority of demand.

4.2.3 Annual workforce demand remains constant at around 40 people per year throughout the forecast period, indicating a small but steady recruitment requirement.

Figure 13: Core requirement for people by year and cause



Note: Figures may not sum to the grand total due to rounding.

[8] Office for National Statistics – Low Carbon and Renewable Energy Economy Survey

4.2.4 Scotland accounts for the majority of the Hydropower workforce, with around 1,100 of the 1,600 workers located there. England accounts for around 300 workers, while Wales and Northern Ireland each have around 100.

4.2.5 Workforce requirements remain relatively modest across all four nations. The core requirement is equivalent to 16% of the current workforce, with demand primarily driven by retirements rather than employment growth.

4.2.6 Hydropower employment and workforce demand are limited across all nine English regions. London, the North West and South West each have around 100 workers, while employment in the remaining regions is fewer than 100; workforce requirements are below 100 in every English region.

Figure 14: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 by nation and region

Nation & Region	Total employment		New jobs created		Retirements		Core requirement for people		
	2024 baseline	2032	Number	*% Growth*	Number	*% of current workforce*	Total	*% of current workforce*	Average per year
England	300	300	<100	*3%*	100	*12%*	100	*16%*	<100
Northern Ireland	100	100	<100	*3%*	<100	*12%*	<100	*16%*	<100
Scotland	1,100	1,100	<100	*3%*	100	*12%*	100	*16%*	<100
Wales	100	100	<100	*3%*	<100	*12%*	<100	*16%*	<100
United Kingdom	**1,600**	**1,600**	**<100**	***3%***	**200**	***12%***	**200**	***16%***	**<100**
English regions									
East of England	<100	<100	<100	*3%*	<100	*12%*	<100	*16%*	<100
East Midlands	<100	<100	<100	*3%*	<100	*12%*	<100	*16%*	<100
London	100	100	<100	*3%*	<100	*12%*	<100	*16%*	<100
North East	<100	<100	<100	*3%*	<100	*12%*	<100	*16%*	<100
North West	100	100	<100	*3%*	<100	*12%*	<100	*16%*	<100
South East	<100	<100	<100	*3%*	<100	*12%*	<100	*16%*	<100
South West	100	100	<100	*3%*	<100	*12%*	<100	*16%*	<100
West Midlands	<100	<100	<100	*3%*	<100	*12%*	<100	*16%*	<100
Yorkshire & The Humber	<100	<100	<100	*3%*	<100	*12%*	<100	*16%*	<100

Note: Figures may not sum to the grand total due to rounding.

4.2.7 Business Support occupations have the largest core workforce requirement, requiring 100 people by 2032. This is primarily driven by retirements, with new job creation remaining below 100.

4.2.8 Front Line Technical occupations also require around 100 people by 2032, with retirements again accounting for the majority of demand.

Figure 15: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 by broad occupational group

Broad Occupational Group	Total employment		New jobs created		Retirements		Core requirement for people		
	2024 baseline	2032	Number	*% Growth*	Number	*% of current workforce*	Total	*% of current workforce*	Average per year
Managerial	100	100	<100	*3%*	<100	*16%*	<100	*20%*	<100
Technical Professional	500	500	<100	*3%*	<100	*9%*	<100	*12%*	<100
Business Support	600	600	<100	*3%*	100	*12%*	100	*15%*	<100
Front Line Technical	400	400	<100	*3%*	100	*16%*	100	*19%*	<100
Other	<100	<100	<100	*3%*	<100	*14%*	<100	*17%*	<100
Power Generation — Hydropower	**1,600**	**1,600**	**<100**	***3%***	**200**	***12%***	**200**	***16%***	**<100**

Note: Figures may not sum to the grand total due to rounding.

4.2.9 Figure 25 breaks these groups down into occupation.

Figure 16: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 by occupation

Skill level	Standard Occupational Classification	Total employment		New jobs created		Retirements		Core requirement for people		
		2024 baseline	2032	Number	% Growth	Number	% of current workforce	Total	% of current workforce	Average per year
RQF 7-8 SCQF 11-12	11 - Corporate Managers and Directors	100	100	<100	3%	<100	16%	<100	20%	<100
	12 - Other Managers and Proprietors	<100	<100	<100	3%	<100	16%	<100	20%	<100
RQF 6 SCQF 9-10	21 - Science, Research, Engineering and Technology Professionals	400	400	<100	3%	<100	9%	<100	12%	<100
	22 - Health Professionals	<100	<100	<100	3%	<100	13%	<100	16%	<100
	23 - Teaching and Other Educational Professionals	0	0	0	--	0	--	0	--	0
	24 - Business, Media and Public Service Professionals	200	200	<100	3%	<100	11%	<100	15%	<100
RQF 4-5 SCQF 7-8	31 - Science, Engineering and Technology Associate Professionals	100	100	<100	3%	<100	11%	<100	14%	<100
	32 - Health and Social Care Associate Professionals	0	0	0	--	0	--	0	--	0
	33 - Protective Service Occupations	<100	<100	<100	3%	<100	7%	<100	10%	<100
	34 - Culture, Media and Sports Occupations	<100	<100	<100	3%	<100	9%	<100	12%	<100
	35 - Business and Public Service Associate Professionals	200	200	<100	3%	<100	10%	<100	13%	<100
RQF 3 SCQF 6	41 - Administrative Occupations	100	100	<100	3%	<100	15%	<100	18%	<100
	42 - Secretarial and Related Occupations	<100	<100	<100	3%	<100	21%	<100	25%	<100
	51 - Skilled Agricultural and Related Trades	<100	<100	<100	3%	<100	27%	<100	30%	<100
	52 - Skilled Metal, Electrical and Electronic Trades	200	200	<100	3%	<100	14%	<100	17%	<100
	53 - Skilled Construction and Building Trades	<100	<100	<100	3%	<100	14%	<100	17%	<100
	54 - Textiles, Printing and Other Skilled Trades	0	0	0	--	0	--	0	--	0
	61 - Caring Personal Service Occupations	<100	<100	<100	3%	<100	15%	<100	18%	<100
	62 - Leisure, Travel and Related Personal Service Occupations	<100	<100	<100	3%	<100	15%	<100	18%	<100
	63 - Community and Civil Enforcement Occupations	0	0	0	--	0	--	0	--	0
RQF 2 SCQF 5	71 - Sales Occupations	<100	<100	<100	3%	<100	13%	<100	16%	<100
	72 - Customer Service Occupations	100	100	<100	3%	<100	9%	<100	12%	<100
RQF 1 SCQF 4	81 - Process, Plant and Machine Operatives	100	100	<100	3%	<100	17%	<100	20%	<100
	82 - Transport and Mobile Machine Drivers and Operatives	<100	<100	<100	3%	<100	24%	<100	27%	<100
	91 - Elementary Trades and Related Occupations	<100	<100	<100	3%	<100	16%	<100	19%	<100
	92 - Elementary Administration and Service Occupations	100	100	<100	3%	<100	14%	<100	17%	<100
Power Generation — Hydropower		**1,600**	**1,600**	**1,600**	**<100**	**200**	**12%**	**200**	**16%**	**<100**

Note: Figures may not sum to the grand total due to rounding.

4.3 Nuclear

Figure 17: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 by sub-industry

Sub-Industry	Total employment		New jobs created		Retirements		Core requirement for people		
	2024 baseline	2032	Number	% Growth	Number	% of current workforce	Total	% of current workforce	Average per year
Power Generation — Nuclear	**51,400**	**52,900**	**1,600**	***3%***	**6,500**	***13%***	**8,000**	***16%***	**1,100**

Note: Figures may not sum to the grand total due to rounding.

4.3.1 Current workforce estimates and future forecasts were taken from the Cogent Skills – Nuclear Workforce Assessment[9]. The report states 54% of the total nuclear workforce accounts for civil roles. This proportion has been applied to calculate the proportion of civil workforce within each region. Current workforce figures are from 2024 as this is the most up-to-date data available.

4.3.2 Major construction for Sizewell C starts in 2029 and is forecast to peak in 2032.[10] It is anticipated an additional 8,000 people will enter the workforce at peak construction. One third of this workforce will be in the East of England.[11] As this falls across the forecast period, 2,400 additional jobs have been distributed across the occupational structure and added to the 1,200 people already employed in the region. Indirect jobs are not included in this analysis, therefore no employment growth as a result of Sizewell C has been included in other regions.

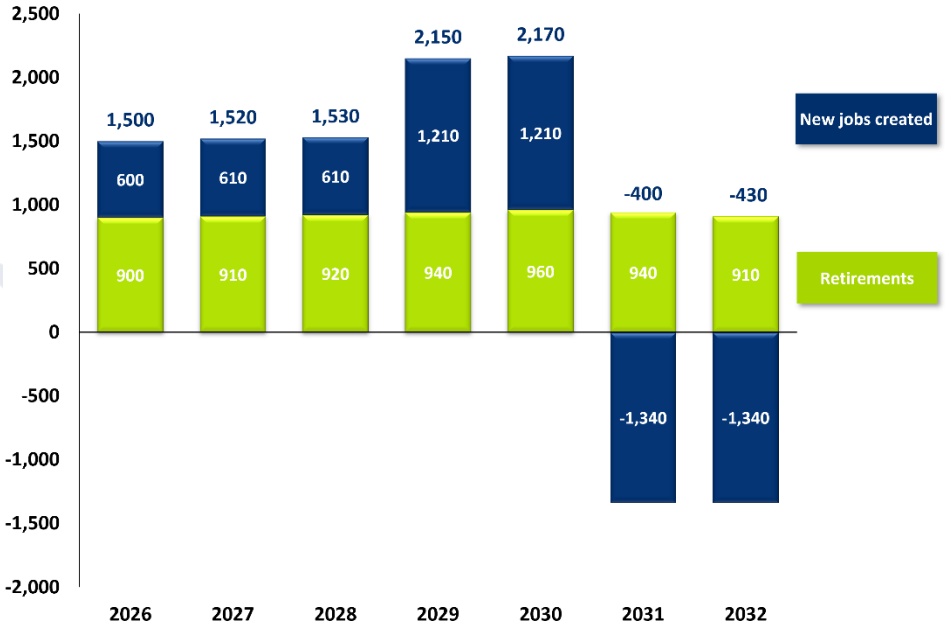
4.3.3 No additional employment has been included for Wylfa, but there is possibility that construction might start in early 2030s subject to Final Investment Decision in 2029 – which would add an additional requirement for people over and above those detailed in this report.

[9] Nuclear Workforce Assessment – Cogent Skills, March 2025

[10] The Economic Impact of Sizewell C

[11] Sizewell C Nuclear Power Station, EDF

Figure 18: Core requirement for people by year and cause



Note: Figures may not sum to the grand total due to rounding.

4.3.4 Annual workforce demand rises from 1,500 people in 2026 to a peak of 2,170 in 2030, before falling sharply and becoming negative in 2031 and 2032.

4.3.5 Retirements remain relatively stable at around 900–960 people per year, while new job creation varies significantly. New jobs rise from 600 in 2026 to 1,210 in 2029–2030, before falling to -1,340 in 2031 and 2032, resulting in net annual demand of -400 and -430 people respectively.

4.3.6 England accounts for the majority of Nuclear workforce demand, requiring 7,400 of the 8,000 people needed by 2032.

4.3.7 Scotland requires around 600 people by 2032, with retirements offsetting a small projected reduction in employment. Wales has a requirement of fewer than 100 people, while no Nuclear workforce is recorded in Northern Ireland.

4.3.8 The East of England has the largest regional core requirement at 2,600 people, driven by significant employment growth, followed by the North West (2,400) and South West (1,400). The East of England also faces by far the greatest relative pressure, with demand equivalent to 217% of its current workforce.

Figure 19: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 by nation and region

Nation & Region	Total employment		New jobs created		Retirements		Core requirement for people		
	2024 baseline	2032	Number	*% Growth*	Number	*% of current workforce*	Total	*% of current workforce*	Average per year
England	45,700	47,400	1,700	*4%*	5,800	*13%*	7,400	*16%*	1,100
Northern Ireland	0	0	0	--	0	--	0	--	0
Scotland	5,500	5,400	-100	*-2%*	700	*12%*	600	*11%*	100
Wales	200	100	<0	*-2%*	<100	*12%*	<100	*11%*	<100
United Kingdom	**51,400**	**52,900**	**1,600**	***3%***	**6,500**	***13%***	**8,000**	***16%***	**1,100**
English regions									
East of England	1,200	3,600	2,400	*197%*	200	*20%*	2,600	*217%*	400
East Midlands	1,500	1,500	<0	*-2%*	200	*12%*	200	*11%*	<100
London	0	0	0	--	0	--	0	--	0
North East	500	600	<100	*-2%*	100	*12%*	100	*11%*	<100
North West	22,000	21,600	-400	*-2%*	2,700	*12%*	2,400	*11%*	300
South East	6,100	6,000	-100	*-2%*	800	*12%*	700	*11%*	100
South West	12,700	12,500	-200	*-2%*	1,600	*12%*	1,400	*11%*	200
West Midlands	1,500	1,500	<0	*-2%*	200	*12%*	200	*11%*	<100
Yorkshire & The Humber	200	100	<0	*-2%*	<100	*12%*	<100	*11%*	<100

Note: Figures may not sum to the grand total due to rounding.

4.3.9 Business Support occupations have the largest core workforce requirement in Nuclear, requiring 2,900 people by 2032.

4.3.10 Front Line Technical occupations have the second-largest requirement at 2,300 people, followed by Technical Professional occupations at 1,800 people. Together with Business Support, these groups account for 7,000 people, around 88% of the total core requirement.

Figure 20: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 by broad occupational group

Broad Occupational Group	Total employment		New jobs created		Retirements		Core requirement for people		
	2024 baseline	2032	Number	*% Growth*	Number	*% of current workforce*	Total	*% of current workforce*	Average per year
Managerial	4,800	4,900	100	*3%*	800	*17%*	900	*20%*	100
Technical Professional	14,700	15,200	500	*3%*	1,400	*9%*	1,800	*12%*	300
Business Support	19,400	19,900	600	*3%*	2,300	*12%*	2,900	*15%*	400
Front Line Technical	12,000	12,400	400	*3%*	1,900	*16%*	2,300	*19%*	300
Other	500	500	<100	*3%*	100	*15%*	100	*18%*	<100
Power Generation — Nuclear	**51,400**	**52,900**	**1,600**	***3%***	**6,500**	***13%***	**8,000**	***16%***	**1,100**

Note: Figures may not sum to the grand total due to rounding.

4.3.11 There are four occupations where demand is most concentrated:

- Science, Research, Engineering and Technology Professionals — 1,300 people
- Skilled Metal, Electrical and Electronic Trades — 1,100 people
- Business and Public Service Associate Professionals — 1,000 people
- Corporate Managers and Directors — 900 people

Figure 21: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 by occupation

Skill level	Standard Occupational Classification	Total employment		New jobs created		Retirements		Core requirement for people		
		2024 baseline	2032	Number	% Growth	Number	% of current workforce	Total	% of current workforce	Average per year
RQF 7-8 SCQF 11-12	11 - Corporate Managers and Directors	4,400	4,500	100	3%	700	17%	900	20%	100
	12 - Other Managers and Proprietors	400	400	<100	3%	100	17%	100	20%	<100
RQF 6 SCQF 9-10	21 - Science, Research, Engineering and Technology Professionals	11,400	11,700	300	3%	1,000	9%	1,300	12%	200
	22 - Health Professionals	200	200	<100	3%	<100	13%	<100	16%	<100
	23 - Teaching and Other Educational Professionals	0	0	0	--	0	--	0	--	0
	24 - Business, Media and Public Service Professionals	4,700	4,900	200	3%	600	12%	700	15%	100
RQF 4-5 SCQF 7-8	31 - Science, Engineering and Technology Associate Professionals	3,400	3,500	100	3%	400	11%	500	14%	100
	32 - Health and Social Care Associate Professionals	0	0	0	--	0	--	0	--	0
	33 - Protective Service Occupations	100	100	<100	3%	<100	7%	<100	10%	<100
	34 - Culture, Media and Sports Occupations	100	100	<100	3%	<100	9%	<100	12%	<100
	35 - Business and Public Service Associate Professionals	7,500	7,700	200	3%	800	10%	1,000	13%	100
RQF 3 SCQF 6	41 - Administrative Occupations	3,000	3,100	100	3%	500	15%	500	18%	100
	42 - Secretarial and Related Occupations	500	500	<100	3%	100	22%	100	25%	<100
	51 - Skilled Agricultural and Related Trades	100	100	<100	3%	<100	28%	<100	31%	<100
	52 - Skilled Metal, Electrical and Electronic Trades	6,200	6,400	200	3%	900	14%	1,100	17%	200
	53 - Skilled Construction and Building Trades	900	900	<100	3%	100	15%	200	18%	<100
	54 - Textiles, Printing and Other Skilled Trades	0	0	0	--	0	--	0	--	0
	61 - Caring Personal Service Occupations	100	100	<100	3%	<100	15%	<100	18%	<100
	62 - Leisure, Travel and Related Personal Service Occupations	200	200	<100	3%	<100	15%	<100	18%	<100
	63 - Community and Civil Enforcement Occupations	0	0	0	--	0	--	0	--	0
RQF 2 SCQF 5	71 - Sales Occupations	600	600	<100	3%	100	13%	100	16%	<100
	72 - Customer Service Occupations	1,500	1,600	100	3%	100	9%	200	13%	<100
RQF 1 SCQF 4	81 - Process, Plant and Machine Operatives	3,600	3,800	200	3%	600	18%	800	21%	100
	82 - Transport and Mobile Machine Drivers and Operatives	900	900	<100	3%	200	24%	200	27%	<100
	91 - Elementary Trades and Related Occupations	300	300	<100	3%	100	16%	100	19%	<100
	92 - Elementary Administration and Service Occupations	1,300	1,300	<100	3%	200	15%	200	18%	<100
Power Generation — Nuclear		**51,400**	**52,900**	**1,600**	**3%**	**6,500**	**13%**	**8,000**	**16%**	**1,100**

Note: Figures may not sum to the grand total due to rounding.

4.4 Offshore Wind

Figure 22: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 by sub-industry

Sub-Industry	Total employment		New jobs created		Retirements		Core requirement for people		
	2025 baseline	2032	Number	% Growth	Number	% of current workforce	Total	% of current workforce	Average per year
Power Generation — Offshore Wind	**39,900**	**70,900**	**31,000**	***78%***	**8,200**	***21%***	**39,200**	***98%***	**5,600**

Note: Figures may not sum to the grand total due to rounding.

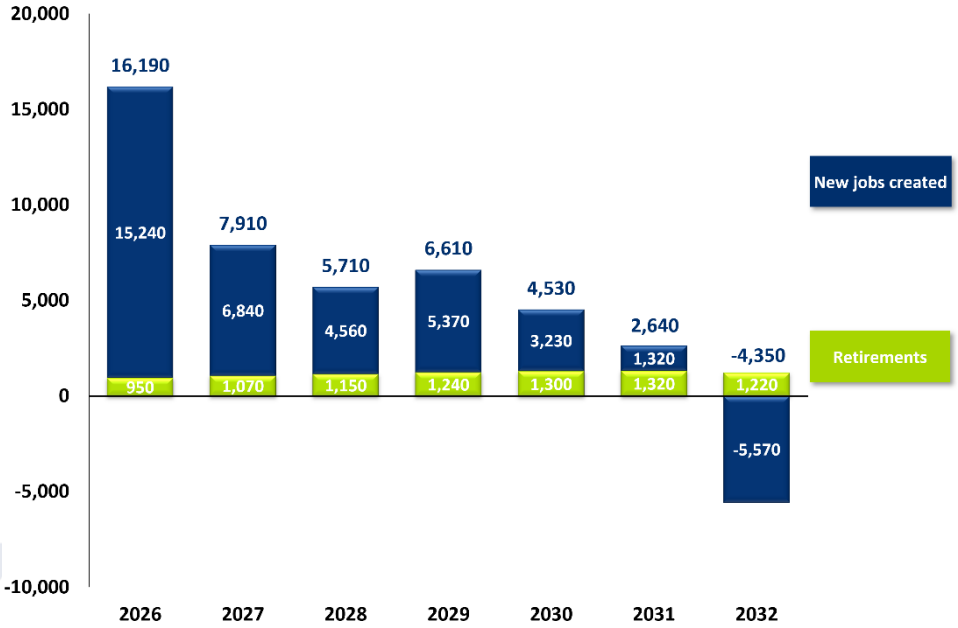
4.4.1 Current workforce estimates and future forecasts were provided by the Offshore Wind Industry Council – Skills Intelligence Report[12]. The Offshore Wind Industry Council – Skills Intelligence Model was used to obtain detailed regional and annual workforce data.

4.4.2 Offshore Wind faces a substantial growth-led workforce challenge, with employment projected to increase from 39,900 to 70,900 by 2032, creating 31,000 new jobs (78% growth). Including 8,200 retirements, the sub-industry has a core requirement for 39,200 people, equivalent to 98% of the current workforce.

4.4.3 Annual workforce demand is heavily front-loaded, falling from 16,190 people in 2026 to 2,640 by 2031, before turning negative in 2032. This indicates that the greatest recruitment pressure is concentrated in the early years of the forecast period.

4.4.4 The decline in workforce demand is driven by falling new job creation, which reduces from 15,240 people in 2026 to 1,320 in 2031, before falling to -5,570 in 2032.

Figure 23: Core requirement for people by year and cause



Note: Figures may not sum to the grand total due to rounding.

[12] Wind Industry Skills Intelligence Report – Offshore Wind Industry Council, June 2025

4.4.5 England accounts for the majority of Offshore Wind workforce demand, requiring 28,800 of the 39,200 people needed by 2032

4.4.6 Scotland has the second-largest workforce requirement at 9,600 people, while Wales requires 500 and Northern Ireland 300. Across all four nations, the core requirement is equivalent to 98% of the current workforce.

4.4.7 London has by far the largest workforce requirement among the English regions, requiring 13,100 people by 2032, followed by the South East and Yorkshire & The Humber at 3,400 each and the South West at 3,000.

Figure 24: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 by nation and region

Nation & Region	Total employment		New jobs created		Retirements		Core requirement for people		
	2025 baseline	2032	Number	*% Growth*	Number	*% of current workforce*	Total	*% of current workforce*	Average per year
England	29,300	52,100	22,800	*78%*	6,000	*21%*	28,800	*98%*	4,100
Northern Ireland	300	600	300	*78%*	100	*21%*	300	*98%*	<100
Scotland	9,800	17,400	7,600	*78%*	2,000	*21%*	9,600	*98%*	1,400
Wales	500	800	300	*78%*	100	*21%*	500	*98%*	100
United Kingdom	**39,900**	**70,900**	**31,000**	***78%***	**8,200**	***21%***	**39,200**	***98%***	**5,600**
English regions									
East of England	1,400	2,500	1,100	*78%*	300	*21%*	1,400	*98%*	200
East Midlands	100	100	<100	*78%*	<100	*21%*	<100	*98%*	<100
London	13,300	23,600	10,300	*78%*	2,800	*21%*	13,100	*98%*	1,900
North East	1,100	1,900	800	*78%*	200	*21%*	1,100	*98%*	200
North West	2,200	4,000	1,800	*78%*	500	*21%*	2,200	*98%*	300
South East	3,500	6,300	2,800	*78%*	700	*21%*	3,400	*98%*	500
South West	3,000	5,400	2,400	*78%*	600	*21%*	3,000	*98%*	400
West Midlands	1,200	2,100	900	*78%*	200	*21%*	1,200	*98%*	200
Yorkshire & The Humber	3,500	6,200	2,700	*78%*	700	*21%*	3,400	*98%*	500

Note: Figures may not sum to the grand total due to rounding.

4.4.8 Business Support occupations have the largest core workforce requirement in Offshore Wind, requiring 14,600 people by 2032. This accounts for around 37% of the 39,200 people required across the sub-industry.

4.4.9 Technical Professional occupations have the second-largest requirement at 10,600 people, followed by Front Line Technical occupations at 9,700 people. Together with Business Support, these groups account for 34,900 people

- Corporate Managers and Directors — 3,600 people

Figure 25: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 by broad occupational group

Broad Occupational Group	Total employment		New jobs created		Retirements		Core requirement for people		
	2025 baseline	2032	Number	% Growth	Number	% of current workforce	Total	% of current workforce	Average per year
Managerial	3,700	6,600	2,900	*78%*	1,000	*28%*	3,900	*105%*	600
Technical Professional	11,500	20,400	8,900	*78%*	1,700	*15%*	10,600	*93%*	1,500
Business Support	15,000	26,700	11,700	*78%*	3,000	*20%*	14,600	*97%*	2,100
Front Line Technical	9,300	16,600	7,200	*78%*	2,400	*26%*	9,700	*104%*	1,400
Other	400	600	300	*78%*	100	*24%*	400	*102%*	100
Power Generation — Offshore Wind	**39,900**	**70,900**	**31,000**	***78%***	**8,200**	***21%***	**39,200**	***98%***	**5,600**

Note: Figures may not sum to the grand total due to rounding.

4.4.10 There are four occupations where demand is most concentrated:

- Science, Research, Engineering and Technology Professionals — 8,100 people
- Business and Public Service Associate Professionals — 5,500 people
- Skilled Metal, Electrical and Electronic Trades — 4,800 people

Figure 26: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 by occupation

Skill level	Standard Occupational Classification	Total employment		New jobs created		Retirements		Core requirement for people		
		2025 baseline	2032	Number	% Growth	Number	% of current workforce	Total	% of current workforce	Average per year
RQF 7-8 SCQF 11-12	11 - Corporate Managers and Directors	3,400	6,000	2,600	78%	900	28%	3,600	105%	500
	12 - Other Managers and Proprietors	300	600	300	78%	100	28%	300	105%	<100
RQF 6 SCQF 9-10	21 - Science, Research, Engineering and Technology Professionals	8,800	15,700	6,800	78%	1,300	14%	8,100	92%	1,200
	22 - Health Professionals	100	200	100	78%	<100	22%	100	99%	<100
	23 - Teaching and Other Educational Professionals	0	0	0	--	0	--	0	--	0
	24 - Business, Media and Public Service Professionals	3,700	6,500	2,800	78%	700	19%	3,500	97%	500
RQF 4-5 SCQF 7-8	31 - Science, Engineering and Technology Associate Professionals	2,600	4,700	2,000	78%	500	18%	2,500	96%	400
	32 - Health and Social Care Associate Professionals	0	0	0	--	0	--	0	--	0
	33 - Protective Service Occupations	100	100	100	78%	<100	12%	100	90%	<100
	34 - Culture, Media and Sports Occupations	100	100	100	78%	<100	14%	100	92%	<100
	35 - Business and Public Service Associate Professionals	5,800	10,300	4,500	78%	1,000	17%	5,500	94%	800
RQF 3 SCQF 6	41 - Administrative Occupations	2,300	4,100	1,800	78%	600	25%	2,400	103%	300
	42 - Secretarial and Related Occupations	400	600	300	78%	100	36%	400	114%	100
	51 - Skilled Agricultural and Related Trades	100	200	100	78%	<100	46%	100	123%	<100
	52 - Skilled Metal, Electrical and Electronic Trades	4,800	8,600	3,700	78%	1,100	23%	4,800	100%	700
	53 - Skilled Construction and Building Trades	700	1,300	600	78%	200	24%	700	102%	100
	54 - Textiles, Printing and Other Skilled Trades	0	0	0	--	0	--	0	--	0
	61 - Caring Personal Service Occupations	100	100	100	78%	<100	25%	100	103%	<100
	62 - Leisure, Travel and Related Personal Service Occupations	200	300	100	78%	<100	25%	200	103%	<100
	63 - Community and Civil Enforcement Occupations	0	0	0	--	0	--	0	--	0
RQF 2 SCQF 5	71 - Sales Occupations	500	900	400	78%	100	22%	500	99%	100
	72 - Customer Service Occupations	1,200	2,100	900	78%	200	16%	1,100	93%	200
RQF 1 SCQF 4	81 - Process, Plant and Machine Operatives	2,800	5,000	2,200	78%	800	29%	3,000	106%	400
	82 - Transport and Mobile Machine Drivers and Operatives	700	1,200	500	78%	300	40%	800	117%	100
	91 - Elementary Trades and Related Occupations	200	400	200	78%	100	26%	200	104%	<100
	92 - Elementary Administration and Service Occupations	1,000	1,900	800	78%	200	24%	1,100	102%	200
Power Generation — Offshore Wind		**39,900**	**70,900**	**31,000**	**78%**	**8,200**	**21%**	**39,200**	**98%**	**5,600**

Note: Figures may not sum to the grand total due to rounding.

4.5 Onshore Wind

Figure 27: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 by sub-industry

Sub-Industry	Total employment		New jobs created		Retirements		Core requirement for people		
	2025 baseline	2032	Number	% Growth	Number	% of current workforce	Total	% of current workforce	Average per year
Power Generation — Onshore Wind	**15,200**	**21,600**	**6,400**	***42%***	**2,300**	***15%***	**8,800**	***58%***	**1,300**

Note: Figures may not sum to the grand total due to rounding.

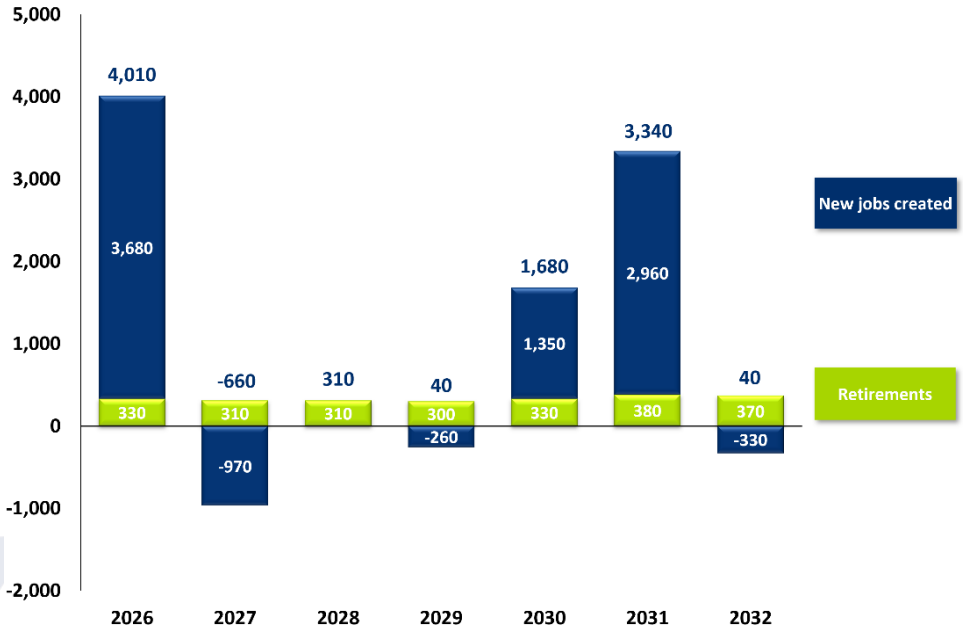
4.5.1 Current workforce estimates and future forecasts were provided by the Offshore Wind Industry Council – Skills Intelligence Report[13]. The Offshore Wind Industry Council – Skills Intelligence Model was used to obtain detailed regional and annual workforce data.

4.5.2 Onshore power generation is expected to grow by 42%, creating demand for 8,800 people by 2032—equivalent to 58% of the current workforce.

4.5.3 Demand is highly variable across the forecast period, with major peaks in 2026 and 2031. Total workforce demand reaches 4,010 people in 2026 and 3,340 in 2031, driven primarily by new job creation of 3,680 and 2,960 respectively.

4.5.4 Several years show workforce contraction, but replacement demand remains consistent. New jobs created are negative in 2027 (-970), 2029 (-260) and 2032 (-330).

Figure 28: Core requirement for people by year and cause



Note: Figures may not sum to the grand total due to rounding.

[13] Wind Industry Skills Intelligence Report – Offshore Wind Industry Council, June 2025

4.5.5 England accounts for the majority of Onshore Wind workforce demand, requiring 6,100 of the 8,800 people needed by 2032.

4.5.6 Scotland has the second-largest workforce requirement at 2,100 people, followed by Wales (500) and Northern Ireland (100). Across all four nations, the core requirement is equivalent to 58% of the current workforce.

4.5.7 London has the largest regional workforce requirement, requiring 2,200 people by 2032, followed by the North West (1,100) and East of England (900).

Figure 29: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 by nation and region

Nation & Region	Total employment		New jobs created		Retirements		Core requirement for people		
	2025 baseline	2032	Number	*% Growth*	Number	*% of current workforce*	Total	*% of current workforce*	Average per year
England	10,500	15,000	4,500	*42%*	1,600	*15%*	6,100	*58%*	900
Northern Ireland	100	100	<100	*42%*	<100	*15%*	100	*58%*	<100
Scotland	3,600	5,200	1,500	*42%*	600	*15%*	2,100	*58%*	300
Wales	1,000	1,300	400	*42%*	100	*15%*	500	*58%*	100
United Kingdom	**15,200**	**21,600**	**6,400**	***42%***	**2,300**	***15%***	**8,800**	***58%***	**1,300**
English regions									
East of England	1,600	2,200	700	*42%*	200	*15%*	900	*58%*	100
East Midlands	<100	<100	<100	*42%*	<100	*15%*	<100	*58%*	<100
London	3,800	5,400	1,600	*42%*	600	*15%*	2,200	*58%*	300
North East	400	600	200	*42%*	100	*15%*	300	*58%*	<100
North West	1,800	2,600	800	*42%*	300	*15%*	1,100	*58%*	200
South East	800	1,200	400	*42%*	100	*15%*	500	*58%*	100
South West	800	1,100	300	*42%*	100	*15%*	400	*58%*	100
West Midlands	600	900	200	*42%*	100	*15%*	300	*58%*	<100
Yorkshire & The Humber	700	1,000	300	*42%*	100	*15%*	400	*58%*	100

Note: Figures may not sum to the grand total due to rounding.

4.5.8 Business Support occupations have the largest core workforce requirement in Onshore Wind, requiring 3,300 people by 2032.

4.5.9 Technical Professional occupations have the second-largest requirement at 2,300 people, closely followed by Front Line Technical occupations at 2,200 people. Together with Business Support, these groups account for 7,800 people, around 89% of the total core requirement.

Figure 30: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 by broad occupational group

Broad Occupational Group	Total employment		New jobs created		Retirements		Core requirement for people		
	2025 baseline	2032	Number	*% Growth*	Number	*% of current workforce*	Total	*% of current workforce*	Average per year
Managerial	1,400	2,000	600	*42%*	300	*20%*	900	63%	100
Technical Professional	4,400	6,200	1,800	*42%*	500	*11%*	2,300	54%	300
Business Support	5,700	8,100	2,400	*42%*	800	*15%*	3,300	57%	500
Front Line Technical	3,600	5,100	1,500	*42%*	700	*19%*	2,200	62%	300
Other	100	200	100	*42%*	<100	*18%*	100	60%	<100
Power Generation — Onshore Wind	**15,200**	**21,600**	**6,400**	***42%***	**2,300**	***15%***	**8,800**	***58%***	**1,300**

Note: Figures may not sum to the grand total due to rounding.

4.5.10 There are four occupations where demand is most concentrated:

- Science, Research, Engineering and Technology Professionals — 1,800 people
- Business and Public Service Associate Professionals — 1,200 people
- Skilled Metal, Electrical and Electronic Trades — 1,100 people
- Corporate Managers and Directors — 800 people

Figure 31: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 by occupation

Skill level	Standard Occupational Classification	Total employment		New jobs created		Retirements		Core requirement for people		
		2025 baseline	2032	Number	% Growth	Number	% of current workforce	Total	% of current workforce	Average per year
RQF 7-8 SCQF 11-12	11 - Corporate Managers and Directors	1,300	1,800	500	42%	300	20%	800	63%	100
	12 - Other Managers and Proprietors	100	200	100	42%	<100	20%	100	63%	<100
RQF 6 SCQF 9-10	21 - Science, Research, Engineering and Technology Professionals	3,400	4,800	1,400	42%	400	11%	1,800	53%	300
	22 - Health Professionals	<100	100	<100	42%	<100	16%	<100	58%	<100
	23 - Teaching and Other Educational Professionals	0	0	0	--	0	--	0	--	0
	24 - Business, Media and Public Service Professionals	1,400	2,000	600	42%	200	14%	800	57%	100
RQF 4-5 SCQF 7-8	31 - Science, Engineering and Technology Associate Professionals	1,000	1,400	400	42%	100	13%	600	56%	100
	32 - Health and Social Care Associate Professionals	0	0	0	--	0	--	0	--	0
	33 - Protective Service Occupations	<100	<100	<100	42%	<100	9%	<100	51%	<100
	34 - Culture, Media and Sports Occupations	<100	<100	<100	42%	<100	11%	<100	53%	<100
	35 - Business and Public Service Associate Professionals	2,200	3,200	900	42%	300	12%	1,200	55%	200
RQF 3 SCQF 6	41 - Administrative Occupations	900	1,300	400	42%	200	19%	500	61%	100
	42 - Secretarial and Related Occupations	100	200	100	42%	<100	27%	100	69%	<100
	51 - Skilled Agricultural and Related Trades	<100	<100	<100	42%	<100	34%	<100	76%	<100
	52 - Skilled Metal, Electrical and Electronic Trades	1,800	2,600	800	42%	300	17%	1,100	59%	200
	53 - Skilled Construction and Building Trades	300	400	100	42%	<100	18%	200	60%	<100
	54 - Textiles, Printing and Other Skilled Trades	0	0	0	--	0	--	0	--	0
	61 - Caring Personal Service Occupations	<100	<100	<100	42%	<100	19%	<100	61%	<100
	62 - Leisure, Travel and Related Personal Service Occupations	100	100	<100	42%	<100	19%	<100	61%	<100
	63 - Community and Civil Enforcement Occupations	0	0	0	--	0	--	0	--	0
RQF 2 SCQF 5	71 - Sales Occupations	200	300	100	42%	<100	16%	100	58%	<100
	72 - Customer Service Occupations	500	600	200	42%	100	12%	300	54%	<100
RQF 1 SCQF 4	81 - Process, Plant and Machine Operatives	1,100	1,500	500	42%	200	21%	700	64%	100
	82 - Transport and Mobile Machine Drivers and Operatives	300	400	100	42%	100	29%	200	72%	<100
	91 - Elementary Trades and Related Occupations	100	100	<100	42%	<100	20%	100	62%	<100
	92 - Elementary Administration and Service Occupations	400	600	200	42%	100	18%	200	60%	<100
Power Generation — Onshore Wind		**15,200**	**21,600**	**6,400**	**42%**	**2,300**	**15%**	**8,800**	**58%**	**1,300**

Note: Figures may not sum to the grand total due to rounding.

4.6 Utility-Scale Solar & Battery Storage

Figure 32: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 by sub-industry

Sub-Industry	Total employment		New jobs created		Retirements		Core requirement for people		
	2024 baseline	2032	Number	% Growth	Number	% of current workforce	Total	% of current workforce	Average per year
Power Generation – Utility-Scale Solar & Battery Storage	**18,800**	**29,900**	**11,100**	***59%***	**3,000**	***16%***	**14,100**	***75%***	**2,000**

Note: Figures may not sum to the grand total due to rounding.

4.6.1 Current workforce estimates and future forecasts were provided by Solar Energy UK – The Economic Impact of Solar and Battery Storage report[14]. The report covers the activities required to deploy, build, install, operate and maintain utility-scale and commercial/industrial solar and battery storage assets.

4.6.2 Energy & Utility Skills has applied the solar capacity trajectory of approximately 20GW in 2024 to approximately 90GW by 2035. Energy & Utility Skills has applied the battery storage capacity trajectory of approximately 7.5GW in 2024 to approximately 50GW by 2035. Current workforce figures are from 2024 as this is the most up-to-date data available. A compound annual growth rate from 2024 to 2035 has been used to estimate the future workforce growth by 2032.

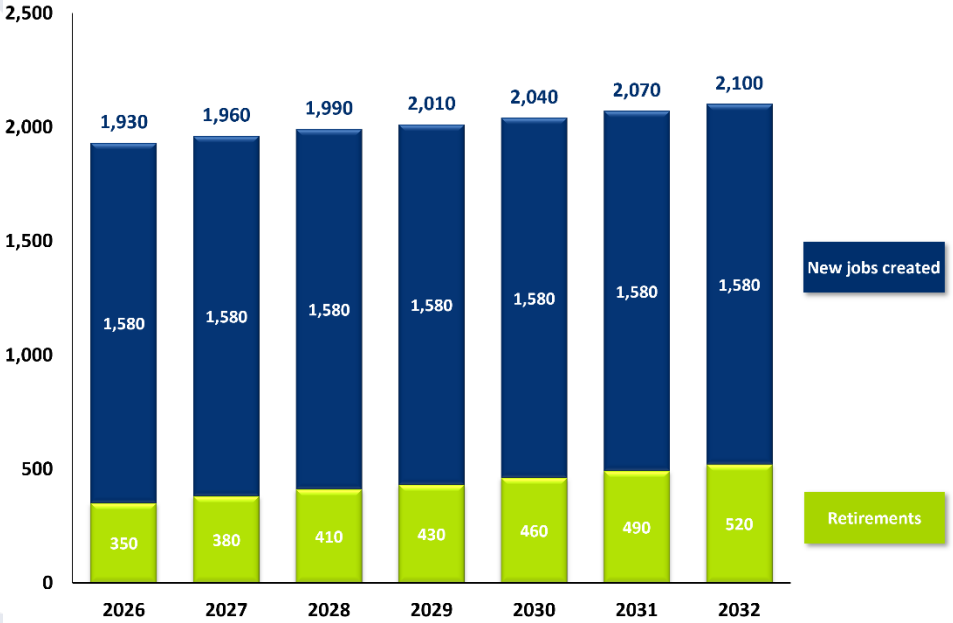
4.6.3 Utility-Scale Solar & Battery Storage faces a significant growth-led workforce challenge, with employment projected to increase from 18,800 to 29,900 by 2032, creating 11,100 new jobs (59% growth). Including 3,000 retirements, the sub-industry has a core requirement for 14,100 people, equivalent to 75% of the current workforce.

[14] The Economic Impact of Solar and Battery Storage – Solar Energy UK, April 2025

4.6.4 Annual workforce demand increases gradually throughout the forecast period, rising from 1,930 people in 2026 to 2,100 in 2032.

4.6.5 New job creation is the main driver of workforce demand, remaining constant at around 1,580 people per year. Retirements rise steadily from 350 people in 2026 to 520 in 2032, meaning workforce renewal accounts for an increasing share of annual demand over time.

Figure 33: Core requirement for people by year and cause



Note: Figures may not sum to the grand total due to rounding.

4.6.6 England accounts for the majority of Utility-Scale Solar & Battery Storage workforce demand, requiring 11,600.

4.6.7 Scotland requires 1,200 people, Wales 800 and Northern Ireland 500.

4.6.8 Within England, workforce demand is highest in London, requiring 2,400 people by 2032, followed by the North West (2,200) and South West (2,100).

Figure 34: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 by nation and region

Nation & Region	Total employment		New jobs created		Retirements		Core requirement for people		
	2024 baseline	2032	Number	*% Growth*	Number	*% of current workforce*	Total	*% of current workforce*	Average per year
England	15,500	24,600	9,100	*59%*	2,500	*16%*	11,600	*75%*	1,700
Northern Ireland	600	1,000	400	*59%*	100	*16%*	500	*75%*	100
Scotland	1,600	2,500	900	*59%*	200	*16%*	1,200	*75%*	200
Wales	1,100	1,800	700	*59%*	200	*16%*	800	*75%*	100
United Kingdom	**18,800**	**29,900**	**11,100**	***59%***	**3,000**	***16%***	**14,100**	***75%***	**2,000**
English regions									
East of England	1,600	2,500	900	*59%*	300	*16%*	1,200	*75%*	200
East Midlands	600	900	300	*59%*	100	*16%*	400	*75%*	100
London	3,200	5,100	1,900	*59%*	500	*16%*	2,400	*75%*	300
North East	1,000	1,600	600	*59%*	200	*16%*	700	*75%*	100
North West	2,900	4,600	1,700	*59%*	500	*16%*	2,200	*75%*	300
South East	1,600	2,500	900	*59%*	200	*16%*	1,200	*75%*	200
South West	2,800	4,500	1,700	*59%*	400	*16%*	2,100	*75%*	300
West Midlands	100	200	100	*59%*	<100	*16%*	100	*75%*	<100
Yorkshire & The Humber	1,700	2,700	1,000	*59%*	300	*16%*	1,300	*75%*	200

Note: Figures may not sum to the grand total due to rounding.

4.6.9 Business Support occupations have the largest core workforce requirement in Utility-Scale Solar & Battery Storage, requiring 5,300 people by 2032.

4.6.10 Technical Professional and Front Line Technical occupations have the next-largest requirements, at 3,800 and 3,500 people respectively. Together with Business Support, these groups account for 12,600 people, around 89% of the total core requirement.

Figure 35: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 by broad occupational group

Broad Occupational Group	Total employment		New jobs created		Retirements		Core requirement for people		
	2024 baseline	2032	Number	*% Growth*	Number	*% of current workforce*	Total	*% of current workforce*	Average per year
Managerial	1,700	2,800	1,000	*59%*	400	*22%*	1,400	*80%*	200
Technical Professional	5,400	8,600	3,200	*59%*	600	*12%*	3,800	*71%*	500
Business Support	7,100	11,200	4,200	*59%*	1,100	*15%*	5,300	*74%*	800
Front Line Technical	4,400	7,000	2,600	*59%*	900	*20%*	3,500	*79%*	500
Other	200	300	100	*59%*	<100	*19%*	100	*78%*	<100
Power Generation – Utility-Scale Solar & Battery Storage	**18,800**	**29,900**	**11,100**	*59%*	**3,000**	*16%*	**14,100**	*75%*	**2,000**

Note: Figures may not sum to the grand total due to rounding.

4.6.11 There are four occupations where demand is most concentrated:

- Science, Research, Engineering and Technology Professionals — 2,900 people
- Business and Public Service Associate Professionals — 2,000 people
- Skilled Metal, Electrical and Electronic Trades — 1,700 people
- Corporate Managers and Directors — 1,300 people

Figure 36: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 by occupation

Skill level	Standard Occupational Classification	Total employment		New jobs created		Retirements		Core requirement for people		
		2024 baseline	2032	Number	% Growth	Number	% of current workforce	Total	% of current workforce	Average per year
RQF 7-8 SCQF 11-12	11 - Corporate Managers and Directors	1,600	2,500	900	59%	300	22%	1,300	80%	200
	12 - Other Managers and Proprietors	200	200	100	59%	<100	22%	100	80%	<100
RQF 6 SCQF 9-10	21 - Science, Research, Engineering and Technology Professionals	4,200	6,600	2,400	59%	500	11%	2,900	70%	400
	22 - Health Professionals	100	100	<100	59%	<100	17%	<100	76%	<100
	23 - Teaching and Other Educational Professionals	0	0	0	--	0	--	0	--	0
	24 - Business, Media and Public Service Professionals	1,700	2,700	1,000	59%	300	15%	1,300	74%	200
RQF 4-5 SCQF 7-8	31 - Science, Engineering and Technology Associate Professionals	1,200	2,000	800	59%	200	14%	900	73%	100
	32 - Health and Social Care Associate Professionals	0	0	0	--	0	--	0	--	0
	33 - Protective Service Occupations	<100	100	<100	59%	<100	9%	<100	68%	<100
	34 - Culture, Media and Sports Occupations	<100	100	<100	59%	<100	11%	<100	70%	<100
	35 - Business and Public Service Associate Professionals	2,800	4,400	1,600	59%	400	13%	2,000	72%	300
RQF 3 SCQF 6	41 - Administrative Occupations	1,100	1,700	700	59%	200	20%	900	79%	100
	42 - Secretarial and Related Occupations	200	300	100	59%	<100	28%	100	87%	<100
	51 - Skilled Agricultural and Related Trades	<100	100	<100	59%	<100	36%	<100	94%	<100
	52 - Skilled Metal, Electrical and Electronic Trades	2,300	3,600	1,300	59%	400	18%	1,700	77%	200
	53 - Skilled Construction and Building Trades	300	500	200	59%	100	19%	300	78%	<100
	54 - Textiles, Printing and Other Skilled Trades	0	0	0	--	0	--	0	--	0
	61 - Caring Personal Service Occupations	<100	100	<100	59%	<100	20%	<100	79%	<100
	62 - Leisure, Travel and Related Personal Service Occupations	100	100	100	59%	<100	20%	100	79%	<100
	63 - Community and Civil Enforcement Occupations	0	0	0	--	0	--	0	--	0
RQF 2 SCQF 5	71 - Sales Occupations	200	400	200	59%	<100	17%	200	76%	<100
	72 - Customer Service Occupations	600	900	300	59%	100	12%	400	71%	100
RQF 1 SCQF 4	81 - Process, Plant and Machine Operatives	1,300	2,100	800	59%	300	22%	1,100	81%	200
	82 - Transport and Mobile Machine Drivers and Operatives	300	500	200	59%	100	31%	300	90%	<100
	91 - Elementary Trades and Related Occupations	100	100	100	59%	<100	21%	100	79%	<100
	92 - Elementary Administration and Service Occupations	500	800	300	59%	100	19%	400	78%	100
Power Generation – Utility-Scale Solar & Battery Storage		18,800	29,900	11,100	59%	3,000	16%	14,100	75%	2,000

Note: Figures may not sum to the grand total due to rounding.

4.7 Carbon Capture, Utilisation and Storage (CCUS)

Figure 37: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 by sub-industry

Sub-Industry	Total employment		New jobs created		Retirements		Core requirement for people		
	2024 baseline	2032	Number	% Growth	Number	% of current workforce	Total	% of current workforce	Average per year
Power Generation — CCUS	**500**	**20,800**	**20,400**	***4,527%***	**1,500**	***324%***	**21,800**	***4,851%***	**3,100**

Note: Figures may not sum to the grand total due to rounding.

4.7.1 Current workforce estimates were provided by Office for National Statistics – Low Carbon and Renewable Energy Economy Survey[15]. In this dataset, for CCUS, data for Wales and Northern Ireland has been supressed for confidentiality reasons and are therefore not presented separately in this analysis. Current workforce figures are from 2024 as this is the most up-to-date data available. Future forecasts were provided by the Green Jobs Delivery CCS Task and Finish Group report[16].

4.7.2 CCUS faces the most significant relative workforce expansion challenge within Power Generation. Employment is projected to increase from 500 to 20,800 by 2032, creating 20,400 new jobs, while the core requirement reaches 21,800 people, equivalent to 4,851% of the current workforce.

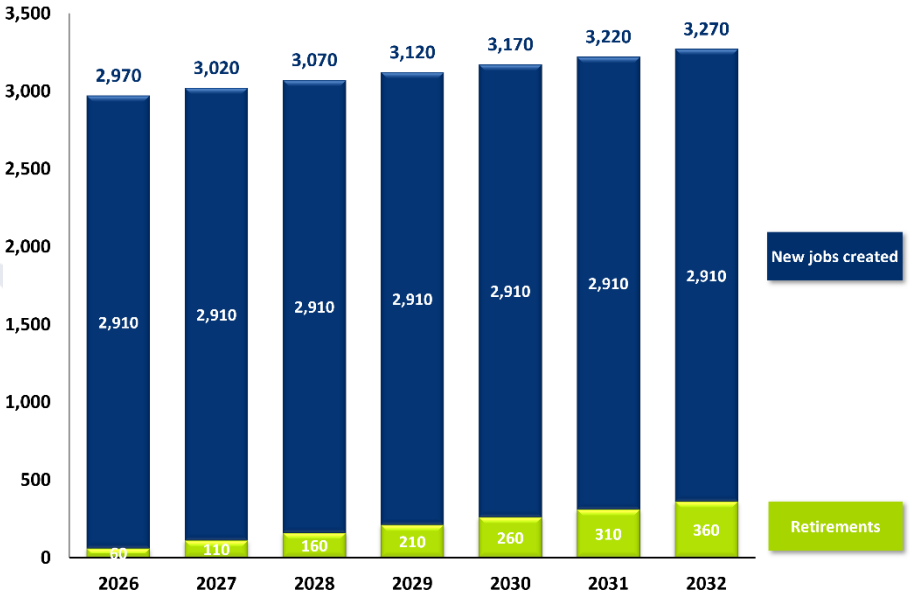
4.7.3 Annual workforce demand increases steadily across the forecast period, rising from 2,970 people in 2026 to 3,270 in 2032.

4.7.4 New job creation is overwhelmingly the main driver of workforce demand, remaining at around 2,910 people per year. Retirements increase from 60 people in 2026 to 360 in 2032 but remain a relatively small component of overall demand.

[15] Office for National Statistics – Low Carbon and Renewable Energy Economy Survey

[16] Findings and recommendations of the group – Green Jobs Delivery Group – CCS Task and Finish Group, 2024

Figure 38: Core requirement for people by year and cause



Note: Figures may not sum to the grand total due to rounding.

4.7.5 England accounts for the majority of CCUS workforce demand, requiring 19,400 of the 21,800 people needed by 2032, equivalent to around 89% of the total core requirement.

4.7.6 Scotland requires a further 2,400 people, while no workforce requirement is recorded for Wales or Northern Ireland.

4.7.7 Within England, workforce demand is highest in London, requiring 4,000 people by 2032, followed closely by the North West (3,700) and South West (3,600).

Figure 39: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 by nation and region

Nation & Region	Total employment		New jobs created		Retirements		Core requirement for people		
	2024 baseline	2032	Number	% Growth	Number	% of current workforce	Total	% of current workforce	Average per year
England	400	18,500	18,100	*4,527%*	1,300	*324%*	19,400	*4,851%*	2,800
Northern Ireland	n/a	n/a	--	--	--	--	--	--	--
Scotland	100	2,300	2,300	*4,527%*	200	*324%*	2,400	*4,851%*	300
Wales	n/a	n/a	--	--	--	--	--	--	--
United Kingdom	**500**	**20,800**	**20,400**	***4,527%***	**1,500**	***324%***	**21,800**	***4,851%***	**3,100**
English regions									
East of England	<100	1,900	1,900	*4,527%*	100	*324%*	2,000	*4,851%*	300
East Midlands	<100	700	700	*4,527%*	100	*324%*	700	*4,851%*	100
London	100	3,900	3,800	*4,527%*	300	*324%*	4,000	*4,851%*	600
North East	<100	1,200	1,100	*4,527%*	100	*324%*	1,200	*4,851%*	200
North West	100	3,500	3,400	*4,527%*	300	*324%*	3,700	*4,851%*	500
South East	<100	1,800	1,800	*4,527%*	100	*324%*	1,900	*4,851%*	300
South West	100	3,400	3,300	*4,527%*	200	*324%*	3,600	*4,851%*	300
West Midlands	<100	100	100	*4,527%*	<100	*324%*	200	*4,851%*	<100
Yorkshire & The Humber	100	2,000	2,000	*4,527%*	100	*324%*	2,100	*4,851%*	300

Note: Figures may not sum to the grand total due to rounding.

4.7.8 Business Support occupations have the largest core workforce requirement in CCUS, requiring 8,200 people by 2032.

4.7.9 Technical Professional occupations have the second-largest requirement at 6,100 people, followed by Front Line Technical occupations at 5,200 people. Together with Business Support, these groups account for 19,500 people, around 89% of the total core requirement.

Figure 40: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 by broad occupational group

Broad Occupational Group	Total employment		New jobs created		Retirements		Core requirement for people		
	2024 baseline	2032	Number	*% Growth*	Number	*% of current workforce*	Total	*% of current workforce*	Average per year
Managerial	100	1,900	1,900	*4,527%*	200	*433%*	2,100	*4,959%*	300
Technical Professional	100	6,000	5,800	*4,527%*	300	*239%*	6,100	*4,765%*	900
Business Support	200	7,800	7,700	*4,527%*	500	*308%*	8,200	*4,835%*	1,200
Front Line Technical	100	4,900	4,800	*4,527%*	500	*411%*	5,200	*4,937%*	700
Other	<100	200	200	*4,527%*	<100	*376%*	200	*4,903%*	<100
Power Generation — CCUS	**500**	**20,800**	**20,400**	***4,527%***	**1,500**	***324%***	**21,800**	***4,851%***	**3,100**

Note: Figures may not sum to the grand total due to rounding.

4.7.10 There are four occupations where demand is most concentrated:

- Science, Research, Engineering and Technology Professionals — 4,700 people
- Business and Public Service Associate Professionals — 3,200 people
- Skilled Metal, Electrical and Electronic Trades — 2,700 people
- Business, Media and Public Service Professionals — 2,000 people

Figure 41: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 by occupation

Skill level	Standard Occupational Classification	Total employment		New jobs created		Retirements		Core requirement for people		
		2024 baseline	2032	Number	% Growth	Number	% of current workforce	Total	% of current workforce	Average per year
RQF 7-8 SCQF 11-12	11 - Corporate Managers and Directors	100	1,800	1,700	4,527%	200	433%	1,900	4,959%	300
	12 - Other Managers and Proprietors	<100	200	200	4,527%	<100	433%	200	4,959%	<100
RQF 6 SCQF 9-10	21 - Science, Research, Engineering and Technology Professionals	100	4,600	4,500	4,527%	200	226%	4,700	4,752%	700
	22 - Health Professionals	<100	100	100	4,527%	<100	339%	100	4,865%	<100
	23 - Teaching and Other Educational Professionals	0	0	0	--	0	--	0	--	0
	24 - Business, Media and Public Service Professionals	100	1,900	1,900	4,527%	100	301%	2,000	4,828%	300
RQF 4-5 SCQF 7-8	31 - Science, Engineering and Technology Associate Professionals	<100	1,400	1,400	4,527%	100	282%	1,400	4,809%	200
	32 - Health and Social Care Associate Professionals	0	0	0	--	0	--	0	--	0
	33 - Protective Service Occupations	<100	<100	<100	4,527%	<100	188%	<100	4,715%	<100
	34 - Culture, Media and Sports Occupations	<100	<100	<100	4,527%	<100	226%	<100	4,752%	<100
	35 - Business and Public Service Associate Professionals	100	3,000	3,000	4,527%	200	263%	3,200	4,790%	400
RQF 3 SCQF 6	41 - Administrative Occupations	<100	1,200	1,200	4,527%	100	395%	1,300	4,922%	200
	42 - Secretarial and Related Occupations	<100	200	200	4,527%	<100	564%	200	5,091%	<100
	51 - Skilled Agricultural and Related Trades	<100	<100	<100	4,527%	<100	715%	<100	5,241%	<100
	52 - Skilled Metal, Electrical and Electronic Trades	100	2,500	2,500	4,527%	200	357%	2,700	4,884%	400
	53 - Skilled Construction and Building Trades	<100	400	400	4,527%	<100	376%	400	4,903%	100
	54 - Textiles, Printing and Other Skilled Trades	0	0	0	--	0	--	0	--	0
	61 - Caring Personal Service Occupations	<100	100	<100	4,527%	<100	395%	<100	4,922%	<100
	62 - Leisure, Travel and Related Personal Service Occupations	<100	100	100	4,527%	<100	395%	100	4,922%	<100
	63 - Community and Civil Enforcement Occupations	0	0	0	--	0	--	0	--	0
RQF 2 SCQF 5	71 - Sales Occupations	<100	200	200	4,527%	<100	339%	300	4,865%	<100
	72 - Customer Service Occupations	<100	600	600	4,527%	<100	244%	600	4,771%	100
RQF 1 SCQF 4	81 - Process, Plant and Machine Operatives	<100	1,500	1,400	4,527%	100	451%	1,600	4,978%	200
	82 - Transport and Mobile Machine Drivers and Operatives	<100	400	400	4,527%	<100	621%	400	5,147%	100
	91 - Elementary Trades and Related Occupations	<100	100	100	4,527%	<100	414%	100	4,940%	<100
	92 - Elementary Administration and Service Occupations	<100	500	500	4,527%	<100	376%	600	4,903%	100
Power Generation — CCUS		**500**	**20,800**	**20,400**	**4,527%**	**1,500**	**324%**	**21,800**	**4,851%**	**3,100**

Note: Figures may not sum to the grand total due to rounding.

4.8 Energy from waste and Biomass

Figure 42: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 by sub-industry

Sub-Industry	Total employment		New jobs created		Retirements		Core requirement for people		
	2024 baseline	2032	Number	% Growth	Number	% of current workforce	Total	% of current workforce	Average per year
Power Generation – Energy from waste/Biomass	**7,500**	**9,500**	**2,000**	***27%***	**1,000**	***14%***	**3,000**	***41%***	**400**

Note: Figures may not sum to the grand total due to rounding.

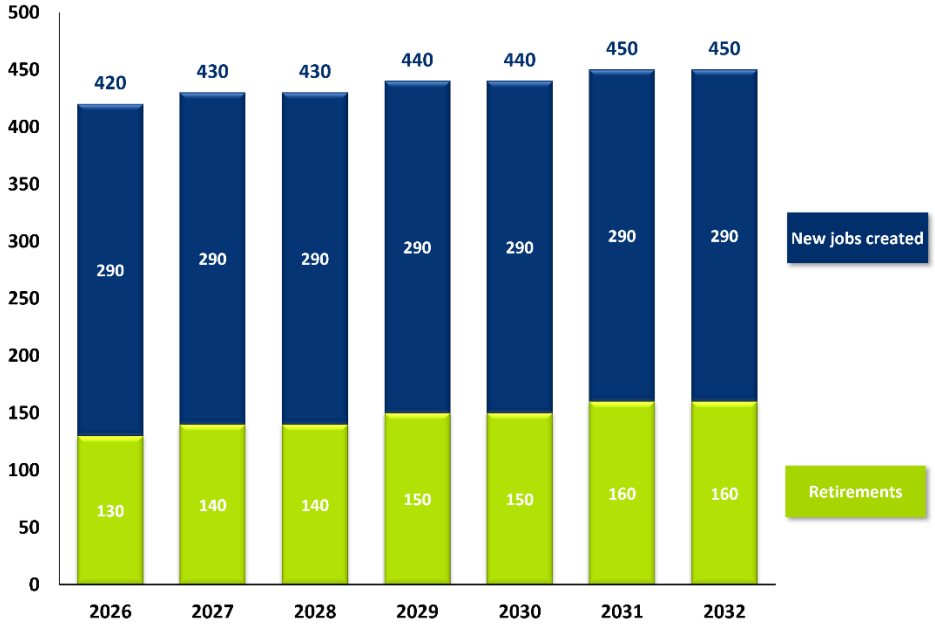
4.8.1 Current workforce estimates were provided by Office for National Statistics – Low Carbon and Renewable Energy Economy Survey[17]. Current workforce figures are from 2024 as this is the most up-to-date data available. Future forecasts were produced by Energy & Utility Skills based on future construction and operations of known projects within the time period.

4.8.2 Energy from Waste/Biomass has a core workforce requirement for 3,000 people by 2032, equivalent to 41% of the current workforce. Employment is projected to grow by 2,000 jobs (27%), while a further 1,000 people will be required to replace retiring workers.

4.8.3 Annual workforce demand increases gradually across the forecast period, rising from 420 people in 2026 to 450 people by 2031–2032.

4.8.4 New job creation is the main driver of workforce demand, remaining stable at around 290 people per year. Retirements increase gradually from 130 people in 2026 to 160 by 2031–2032, accounting for a growing share of annual workforce demand.

Figure 43: Core requirement for people by year and cause



Note: Figures may not sum to the grand total due to rounding.

[17] Office for National Statistics – Low Carbon and Renewable Energy Economy Survey

4.8.5 England accounts for the majority of Energy from Waste/Biomass workforce demand, requiring 2,500 of the 3,000 people needed by 2032.

4.8.6 Scotland and Wales each require around 200 people, while Northern Ireland requires around 100.

4.8.7 Within England, workforce demand is highest in London, the North West and South West, which each require around 500 people by 2032.

Figure 44: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 by nation and region

Nation & Region	Total employment		New jobs created		Retirements		Core requirement for people		
	2024 baseline	2032	Number	% Growth	Number	% of current workforce	Total	% of current workforce	Average per year
England	6,200	7,900	1,700	*27%*	900	*14%*	2,500	*41%*	400
Northern Ireland	300	400	100	*27%*	<100	*14%*	100	*41%*	<100
Scotland	600	700	100	*27%*	100	*14%*	200	*41%*	<100
Wales	400	500	100	*27%*	<100	*14%*	200	*41%*	<100
United Kingdom	**7,500**	**9,500**	**2,000**	***27%***	**1,000**	***14%***	**3,000**	***41%***	**400**
English regions									
East of England	600	800	200	*27%*	100	*14%*	200	*41%*	<100
East Midlands	200	300	100	*27%*	<100	*14%*	100	*41%*	<100
London	1,300	1,600	300	*27%*	200	*14%*	500	*41%*	100
North East	400	500	100	*27%*	<100	*14%*	200	*41%*	<100
North West	1,200	1,500	300	*27%*	200	*14%*	500	*41%*	100
South East	600	800	200	*27%*	100	*14%*	200	*41%*	<100
South West	1,100	1,400	300	*27%*	200	*14%*	500	*41%*	100
West Midlands	100	100	<100	*27%*	<100	*14%*	<100	*41%*	<100
Yorkshire & The Humber	700	900	200	*27%*	100	*14%*	300	*41%*	<100

Note: Figures may not sum to the grand total due to rounding.

4.8.8 Business Support occupations have the largest core workforce requirement in Energy from Waste/Biomass, requiring 1,100 people by 2032.

4.8.9 Technical Professional and Front Line Technical occupations each require around 800 people by 2032. Together with Business Support, these groups account for 2,700 people, around 90% of the total core requirement.

Figure 45: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 by broad occupational group

Broad Occupational Group	Total employment		New jobs created		Retirements		Core requirement for people		
	2024 baseline	2032	Number	*% Growth*	Number	*% of current workforce*	Total	*% of current workforce*	Average per year
Managerial	700	900	200	*27%*	100	*19%*	300	*45%*	<100
Technical Professional	2,200	2,700	600	*27%*	200	*10%*	800	*37%*	100
Business Support	2,700	3,600	700	*27%*	400	*13%*	1,100	*40%*	200
Front Line Technical	1,800	2,200	500	*27%*	300	*18%*	800	*44%*	100
Other	100	100	<100	*27%*	<100	*16%*	<100	*43%*	<100
Power Generation – Energy from waste/Biomass	**7,500**	**9,500**	**2,000**	***27%***	**1,000**	***14%***	**3,000**	***41%***	**400**

Note: Figures may not sum to the grand total due to rounding.

4.8.10 There are four occupations where demand is most concentrated:

- Science, Research, Engineering and Technology Professionals — 600 people
- Business and Public Service Associate Professionals — 400 people
- Skilled Metal, Electrical and Electronic Trades — 400 people
- Corporate Managers and Directors — 300 people

Figure 46: Current workforce estimates and forecast number of new jobs created, retirements and the total core requirement for people by 2032 by occupation

Skill level	Standard Occupational Classification	Total employment		New jobs created		Retirements		Core requirement for people		
		2024 baseline	2032	Number	% Growth	Number	% of current workforce	Total	% of current workforce	Average per year
RQF 7-8 SCQF 11-12	11 - Corporate Managers and Directors	700	800	200	27%	100	19%	300	45%	<100
	12 - Other Managers and Proprietors	100	100	<100	27%	<100	19%	<100	45%	<100
RQF 6 SCQF 9-10	21 - Science, Research, Engineering and Technology Professionals	1,700	2,100	400	27%	200	10%	600	36%	100
	22 - Health Professionals	<100	<100	<100	27%	<100	15%	<100	41%	<100
	23 - Teaching and Other Educational Professionals	0	0	0	--	0	--	0	--	0
	24 - Business, Media and Public Service Professionals	700	900	200	27%	100	13%	300	40%	<100
RQF 4-5 SCQF 7-8	31 - Science, Engineering and Technology Associate Professionals	500	600	100	27%	100	12%	200	39%	<100
	32 - Health and Social Care Associate Professionals	0	0	0	--	0	--	0	--	0
	33 - Protective Service Occupations	<100	<100	<100	27%	<100	8%	<100	35%	<100
	34 - Culture, Media and Sports Occupations	<100	<100	<100	27%	<100	10%	<100	36%	<100
	35 - Business and Public Service Associate Professionals	1,100	1,400	300	27%	100	11%	400	38%	100
RQF 3 SCQF 6	41 - Administrative Occupations	500	600	100	27%	100	17%	200	44%	<100
	42 - Secretarial and Related Occupations	100	100	<100	27%	<100	24%	<100	51%	<100
	51 - Skilled Agricultural and Related Trades	<100	<100	<100	27%	<100	31%	<100	57%	<100
	52 - Skilled Metal, Electrical and Electronic Trades	900	1,200	300	27%	200	15%	400	42%	100
	53 - Skilled Construction and Building Trades	100	200	100	27%	<100	16%	100	43%	<100
	54 - Textiles, Printing and Other Skilled Trades	0	0	0	--	0	--	0	--	0
	61 - Caring Personal Service Occupations	<100	<100	<100	27%	<100	17%	<100	44%	<100
	62 - Leisure, Travel and Related Personal Service Occupations	<100	<100	<100	27%	<100	17%	<100	44%	<100
	63 - Community and Civil Enforcement Occupations	0	0	0	--	0	--	0	--	0
RQF 2 SCQF 5	71 - Sales Occupations	100	100	<100	27%	<100	15%	<100	41%	<100
	72 - Customer Service Occupations	200	300	100	27%	<100	10%	100	37%	<100
RQF 1 SCQF 4	81 - Process, Plant and Machine Operatives	500	700	100	27%	100	19%	200	46%	<100
	82 - Transport and Mobile Machine Drivers and Operatives	100	200	<100	27%	<100	27%	100	53%	<100
	91 - Elementary Trades and Related Occupations	<100	<100	<100	27%	<100	18%	<100	44%	<100
	92 - Elementary Administration and Service Occupations	200	200	100	27%	<100	16%	100	43%	<100
Power Generation – Energy from waste/Biomass		**7,500**	**9,500**	**2,000**	**27%**	**1,000**	**14%**	**3,000**	**41%**	**400**

Note: Figures may not sum to the grand total due to rounding.

5 Future labour supply

5.1 The UK population

5.1.1 These are conditional projections showing what would happen if assumptions about fertility, mortality and migration were realised. They are not forecasts of government policy, economic conditions, visa rules or international events. The principal long-term assumptions are:

- annual net international migration of 230,000 from mid-2027 onwards;
- long-term fertility of 1.42 children per woman;
- continuing improvements in mortality.

5.1.2 The 2024-based projections indicate that the UK population is projected to remain broadly stable through to 2040. However, this stability masks two labour supply pressures:

- declining birth rates, resulting in fewer young people entering the workforce;
- continued reliance on migration to sustain population growth and the working-age population.

5.1.3 These pressures become increasingly apparent after 2030, particularly in sectors with ageing workforces and long training lead times.

5.2 Falling birth rates and the domestic entrant pipeline

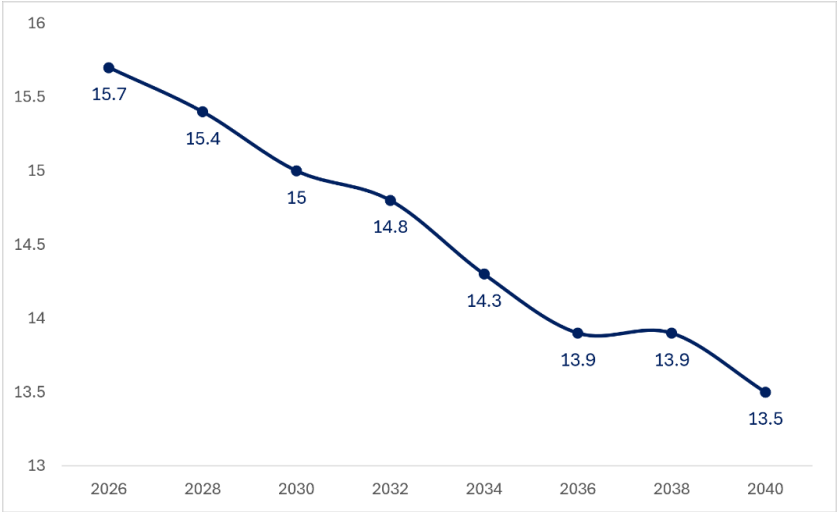
5.2.1 Birth rates in England and Wales have fallen steadily since the early 2010s. The total fertility rate declined from 1.94 children per woman in 2012 to 1.39 in 2025, including a fall from 1.41 in 2024.[18]

5.2.2 These lower birth rates will directly affect workforce entrants during the period covered by this analysis:

- people entering employment at age 18 in 2032 were born in 2014;
- those entering at age 18 in 2040 were born in 2022;
- young people entering apprenticeships at age 16 between 2032 and 2040 were born approximately between 2016 and 2024.

5.2.3 Reflecting these demographic trends, the number of people aged under 20 is projected to fall from 15.7 million in 2026 to 13.5 million by 2040.

Figure 47: Population projections for people aged 0-19 from 2026 to 2040 in millions[19]



[18] Births in England and Wales: 2025, ONS, September 2026

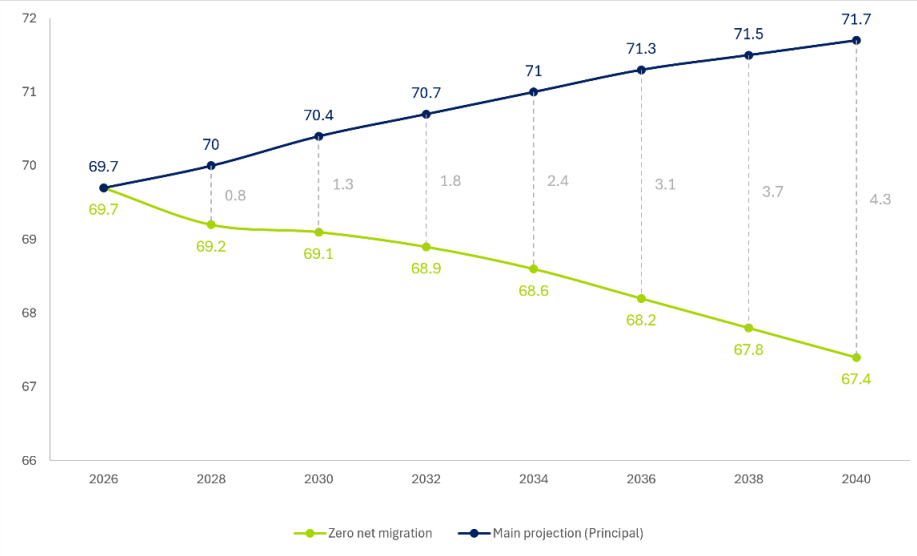
[19] UK Population Projection Explorer, ONS, April 2026

5.2.4 This decline indicates that fewer young people will be available to enter employment and training during the 2030s, resulting in a tighter domestic talent pipeline. As a result, workforce demand will increasingly need to be met through higher retention, retraining, productivity improvements and, where appropriate, migration.

5.3 Migration and sustaining the working-age population

5.3.1 Under the principal projection, migration is the sole source of long-term population growth. The UK population is projected to increase from around 69.7 million in mid-2026 to 71.6 million by 2040.

Figure 48: UK population projections under principal and zero net migration scenarios from 2026 to 2040 with the widening population gap shown in millions[20]



5.3.2 Under the zero net migration variant, the population begins to decline as deaths exceed births, falling towards 67 million by 2040. This illustrates the extent to which future population growth is dependent on migration.

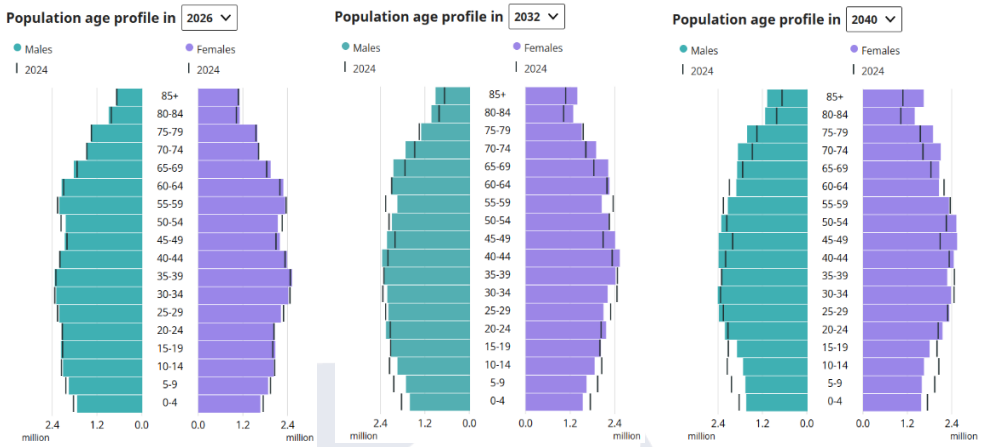
5.3.3 In 2025, there were an estimated net migration of 204,000.[21] This was two-thirds lower than a year earlier (649,000). Net migration remains an important contributor to population and workforce growth, but the decline from 649,000 to 204,000 within a year demonstrates that migration flows can change rapidly in response to policy, economic and international factors. This introduces uncertainty for sectors that rely heavily on migration to meet workforce requirements.

5.3.4 Figure 58 illustrates how the UK's age structure is projected to change between 2026 and 2040. The base of the population pyramid narrows over time, reflecting lower birth rates and a reduced flow of future labour market entrants. At the same time, older age groups become larger as life expectancy improves and larger cohorts move into later life. The working-age population remains substantial throughout the projection period, but its age profile shifts upwards. This suggests that workforce pressures are likely to arise less from an overall shortage of people and more from increasing replacement demand as larger cohorts approach retirement while fewer younger workers enter the labour market.

[20] UK Population Projection Explorer, ONS, April 2026

[21] Long-term international migration, provisional: year ending June 2025, ONS, May 2026

Figure 49: UK population age profile, 2026, 2032 and 2040[22]



5.4 Implications for the sector

5.4.1 Future labour supply will be shaped by a narrowing domestic entrant pipeline and continued reliance on migration.

5.4.2 As the youth population declines, energy and utilities employers will face growing competition for engineering and technical talent from construction, advanced manufacturing, transport, defence, digital and wider infrastructure sectors.

5.4.3 Migration can also provide targeted labour supply in occupations facing shortages. The Migration Advisory Committee found that sponsored engineering workers are concentrated in younger age groups, particularly between ages 26 and 35, while the domestic engineering workforce is more evenly distributed across the working-age population.[23]

5.4.4 Migration can also help where training lead times are long, skills are internationally transferable and recruitment supports time-limited infrastructure delivery. However, it is should not be considered a substitute for sustained domestic workforce development.

5.4.5 The principal workforce challenge from 2032 onwards is therefore not overall population decline, but the interaction of four factors:

- a smaller domestic entrant pipeline;
- high replacement demand from an ageing workforce;
- increasing competition for technical skills;
- continued dependence on migration to sustain labour supply.

[22] UK Population Projection Explorer, ONS, April 2026

[23] Professionals in IT and engineering, Migration Advisory Committee, May 2025

6 Potential economic and social benefits

6.1.1 Attracting and recruiting the required 99,600 people could cost the industry an estimated £271 million just in recruitment costs alone[24] (excluding any additional training or other costs incurred once new recruits are on-boarded).

6.1.2 However, the economic benefits to the industry and to UK PLC are significantly higher.

6.1.3 Assuming that each of the 76,300 additional people in the workforce earns the median salary for their occupation[25], this could create an estimated £3.3 billion of additional earnings entering the economy by 2032. Approximately 11% of this - c£371 million - would be paid out to the 12,300 new recruits in entry-level occupations.

Figure 50: Estimated additional salaries paid out to new recruits by 2032

Skill level	Standard Occupational Classification	Additional jobs by 2032	Median Salary	New Income Generated
RQF 7-8 SCQF 11-12	11 - Corporate Managers and Directors	6,500	£63,350	£410,770,266
	12 - Other Managers and Proprietors	600	£40,799	£24,898,487
RQF 6 SCQF 9-10	21 - Science, Research, Engineering and Technology Professionals	16,900	£52,297	£881,662,774
	22 - Health Professionals	200	£46,131	£10,557,172
	23 - Teaching and Other Educational Professionals	0	£47,479	£0
	24 - Business, Media and Public Service Professionals	7,000	£49,513	£347,488,569
RQF 4-5 SCQF 7-8	31 - Science, Engineering and Technology Associate Professionals	5,000	£35,945	£180,973,872
	32 - Health and Social Care Associate Professionals	0	£29,652	£0
	33 - Protective Service Occupations	200	£42,806	£6,530,884
	34 - Culture, Media and Sports Occupations	200	£36,510	£5,570,258
	35 - Business and Public Service Associate Professionals	11,100	£41,404	£461,135,556
RQF 3 SCQF 6	41 - Administrative Occupations	4,400	£30,787	£136,216,218
	42 - Secretarial and Related Occupations	700	£28,388	£19,489,952
	51 - Skilled Agricultural and Related Trades	200	£28,980	£4,421,421
	52 - Skilled Metal, Electrical and Electronic Trades	9,200	£39,942	£368,679,196
	53 - Skilled Construction and Building Trades	1,400	£35,764	£49,107,977
	54 - Textiles, Printing and Other Skilled Trades	0	£29,208	£0
	61 - Caring Personal Service Occupations	200	£26,859	£4,097,824
	62 - Leisure, Travel and Related Personal Service Occupations	300	£27,911	£8,516,651
	63 - Community and Civil Enforcement Occupations	0	£32,945	£0
RQF 2 SCQF 5	71 - Sales Occupations	900	£26,121	£23,911,372
	72 - Customer Service Occupations	2,300	£28,485	£65,188,492

[24] Based on recruitment costs of: Managerial = £9,000; Technical Professional = £6,000; Front Line Technical = £3,500; Business Support = £2,100; Other = £2,000.

[25] Source: Earnings and hours worked, occupation by four-digit SOC: ASHE Table 14, 23rd October 2025.

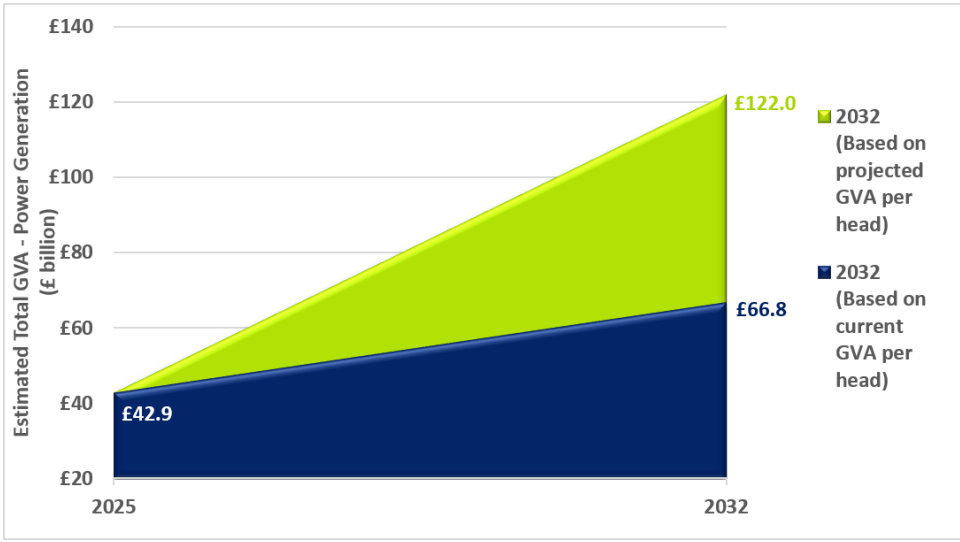
Skill level	Standard Occupational Classification	Additional jobs by 2032	Median Salary	New Income Generated
RQF 1 SCQF 4	81 - Process, Plant and Machine Operatives	5,400	£31,158	£168,756,837
	82 - Transport and Mobile Machine Drivers and Operatives	1,300	£36,869	£47,812,751
	91 - Elementary Trades and Related Occupations	400	£28,259	£10,778,548
	92 - Elementary Administration and Service Occupations	2,000	£27,486	£54,515,292
Power generation		**36,300**	**--**	**£3,291,080,368**

Note: Figures may not sum to the grand total due to rounding.

6.1.4 An approximate estimate of total GVA produced by the power generation industry in 2025 is £43 billion (based on output per worker in the electricity and gas industry multiplied by the total workforce).

6.1.5 By 2032, total GVA could reach between £67 billion (based on 2025 output per worker) and £122 billion (based on annual growth of 9% in output per worker – continuing the growth trajectory seen over the past five years)[26].

Figure 51: Estimated total GVA created by the power generation industry (£ billions)



[26] Energy & Utility Skills' estimate of GVA per head in the power generation industry is based on Output per job, UK, ONS, 18th August 2026 and headcount estimates produced for this analysis.

7 Conclusions

7.1.1 The power generation industry faces a substantial workforce challenge over the period to 2032. The workforce is projected to grow from 137,000 to 213,300, creating 76,300 additional jobs. Combined with around 23,300 retirements, the industry has a core requirement for 99,600 people over the forecast period, equivalent to 73% of the current workforce and an average of around 14,200 people per year.

7.1.2 The core requirement is heavily front-loaded, with demand peaking at 27,600 people in 2026 before declining as new job creation slows. Retirements remain comparatively stable throughout the period. In addition, staff turnover could create a further 31,700 vacancies by 2032 if people leave the industry for employment elsewhere or overseas, emphasising the importance of retention alongside attraction.

7.1.3 The scale and nature of workforce demand varies considerably between generation technologies. Offshore Wind has the largest core requirement, at 39,200 people, followed by CCUS at 21,800 and Utility-Scale Solar & Battery Storage at 14,100. CCUS faces by far the greatest relative challenge, with its core requirement equivalent to 4,851% of its current workforce, reflecting the scale of forecast workforce expansion from a small existing base. Nuclear, by contrast, has a core requirement of 8,000 people despite relatively limited employment growth, with retirements accounting for most of the requirement.

7.1.4 Demand is distributed across the UK but differs considerably in volume and intensity. England accounts for 79,200 of the 99,600 people in the core requirement, while Scotland requires 17,100 people and faces the greatest relative pressure among the four nations, with demand equivalent to 75% of its current workforce. London has the largest requirement among the English regions, at 23,000 people, while the East of England faces the greatest relative pressure, with its core requirement equivalent to 131% of the current workforce.

7.1.5 Professional, technical and vocational skills remain central to delivery. RQF Level 6 / SCQF Levels 9–10 has the largest core requirement, with 29,700 people needed by 2032, followed by RQF Level 3 at 21,600 and RQF Levels 4–5 at 20,600. Together, these three skill levels account for 71,900 people, around 72% of the total core requirement. However, pressures extend across the skills spectrum, with RQF Level 1 facing the greatest relative recruitment pressure at 80% of the current workforce.

7.1.6 Business Support occupations account for the largest workforce requirement, with 37,100 people needed by 2032. Technical Professional occupations have the second-largest requirement at 26,800 people, followed by Front Line Technical occupations at 24,700. Together, these three groups account for 88,600 people, around 89% of the industry's total core requirement.

7.1.7 Five broad occupational groups are assessed as critical to delivery:

- Science, Research, Engineering and Technology Professionals
- Skilled Metal, Electrical and Electronic Trades
- Science, Engineering and Technology Associate Professionals
- Skilled Construction and Building Trades
- Process, Plant and Machine Operatives

7.1.8 These critical occupational groups are forecast to create 37,900 additional jobs and require 48,700 people to enter their workforces by 2032. A further five occupational groups are assessed as high priority. Together, critical and high-priority occupational groups account for around 64,200 additional jobs and require more than 83,200 people to enter their workforces, highlighting the concentration of demand in occupations important to infrastructure and operational delivery.

7.1.9 At a more detailed level, 12 occupations are assessed as critical priorities. Together, they are forecast to create 24,200 additional jobs and require 31,400 people by 2032. Electricians and electrical fitters have the largest requirement at 5,500 people, followed by engineering professionals n.e.c. at 3,800, energy plant operatives at 3,400, and metal working production and maintenance fitters and engineering technicians at 3,000 each.

7.1.10 Future labour supply is likely to become more constrained as the domestic entrant pipeline narrows. The number of people aged under 20 is projected to fall from 15.7 million in 2026 to 13.5 million by 2040, while power generation will continue to compete with other sectors for engineering and technical talent. Migration can help address occupation-specific shortages, particularly where training lead times are long, but is unlikely to substitute for sustained domestic workforce development.

7.1.11 AI and automation are expected to change how work is undertaken more than overall employment levels. Seven occupational groups, with a combined core requirement for 14,500 people, are identified as at risk of workforce-demand reduction. Under the high-adoption scenario, the analysis indicates a potential reduction of up to approximately 3,625 workers from this requirement. Across much of the workforce, however, technology is more likely to reshape tasks, skills and working practices or augment workforce capability, particularly in engineering, technical and safety-critical roles.

7.1.12 No single recruitment or training route can deliver the number and mix of people required. Industry will need to use a range of entry pathways, including sector-entry programmes, apprenticeships, graduate programmes, industry transitions, experienced-hire recruitment and internal progression. Lead times to competence mean that expanding some pipelines will not meet immediate demand, making the transition of experienced workers, development of the existing workforce and retention of critical skills particularly important.

7.1.13 Meeting this workforce requirement would also bring substantial economic benefits. Attracting and recruiting the 99,600 people represented by the core requirement and potential additional turnover vacancies is estimated to cost around £271 million before training and onboarding costs. The 76,300 additional jobs are estimated to generate approximately £3.3 billion in additional earnings, while the industry's total GVA could increase from approximately £43 billion in 2025 to between £67 billion and £122 billion by 2032.

7.1.14 The workforce requirement is therefore both a major delivery challenge and a significant economic opportunity. Meeting it will require coordinated action to attract new people, expand routes to competence, retain experience and critical knowledge, support workforce mobility and use technology responsibly to increase delivery capacity. Workforce investment will need to be planned alongside investment in generation assets if the industry is to secure the people needed to deliver future generation capacity.

8 Call to action

8.1 Ambition, growth and opportunity

8.1.1 The UK's power generation industry is entering a period of significant investment and transformation. Power generation companies must maintain safe, reliable and resilient electricity generation while supporting the transition to a secure, affordable and lower-carbon energy system.

8.1.2 The industry is expected to deliver major programmes of work to develop, construct, operate, maintain, upgrade and decommission generation assets, support the transition to low-carbon generation, improve energy security and resilience, and enable sustainable economic development. At the same time, companies must continue to operate and maintain essential generation infrastructure that households, businesses and the wider economy rely upon every day.

8.1.3 Delivering this ambition will require a skilled, productive and adaptable workforce. The challenge is not simply one of replacing retiring workers or filling vacancies. It is about ensuring that the industry has the capability, capacity and competence required to design, construct, operate, maintain and decommission increasingly complex power generation assets and systems.

8.1.4 The opportunity extends across every nation and region of the UK. It includes engineering, science, environmental management, operations, construction, project delivery, digital and data professions, skilled technical trades and a wide range of supporting occupations. It creates opportunities for young people entering the labour market, experienced workers progressing within the sector, people transitioning from related industries and those who have traditionally faced barriers to employment.

8.1.5 Workforce investment must be treated as a critical enabler of industry outcomes rather than a consequence of them. Infrastructure investment and workforce investment must be planned together. Employers, governments, regulators, education and skills providers, professional bodies and supply-chain partners all have a role to play in ensuring that workforce capability grows at the pace required.

8.1.6 The commitments that follow bring together three interconnected themes:

- **Ambition**: delivering safe, reliable, resilient and sustainable power generation while meeting environmental, regulatory and economic objectives.
- **Growth**: ensuring the industry has the workforce capacity and capability required to deliver future investment and operational requirements.
- **Opportunity**: creating pathways that enable people and communities across the UK to access rewarding, long-term careers in the power generation industry.

8.1.7 This approach reflects the four interconnected pillars of the Skills Strategy 2025–2030:

- **Research:** developing the insight, evidence and intelligence needed to understand workforce demand, identify emerging challenges and support informed decision-making
- **Attract:** raising awareness of sector careers, broadening access to opportunities and attracting the diverse talent needed to meet future workforce requirements
- **Develop:** supporting the continuous development of a safe, skilled and productive workforce through learning, progression and skills development
- **Retain:** creating the conditions for people to build long-term careers within the sector by supporting inclusion, progression, wellbeing and workforce resilience

8.1.8 Equality, Diversity and Inclusion, AI and Technology, and Productivity provide cross-cutting themes through which activity under the four pillars should be considered.

8.2 Safety is the foundation of delivery

8.2.1 Safety and occupational competence must remain the foundation of workforce growth. They are not barriers to expansion, new entry routes, productivity improvement or technological change. They are the conditions that enable these changes to be delivered responsibly and sustainably.

8.2.2 Engineering professionals, engineering technicians and skilled electrical trades are among the occupations most critical to delivery. Across the five broad occupational groups identified as critical, 48,700 new entrants will be required by 2032. Many of these roles demand specialist expertise, recognised competence and substantial periods of training and workplace development.

8.2.3 Expanding the workforce must not dilute occupational standards, reduce the quality of training or lead to people being deployed before they are competent. Employers must also avoid placing unsustainable pressure on the trainers, assessors, mentors and supervisors responsible for supporting new entrants and developing the existing workforce.

8.2.4 The same principle applies to artificial intelligence, automation and other digital technologies. Technology should be adopted where it can improve safety, quality, productivity or service. However, safety-critical and regulatory decisions must remain subject to clear human accountability. Data, models and automated outputs must be appropriately validated and assured, and affected workers must be supported to develop the capabilities required by redesigned roles.

8.3 Five commitments for delivery

8.3.1 The scale and timing of demand mean that no single organisation can close the workforce gap independently. Employers must lead, supported by coordinated action from supply-chain organisations, governments, regulators, education and skills providers, trade unions, professional and standards bodies, and the Energy & Utility Skills Partnership.

Commitment 1: Plan and invest against evidenced workforce demand

8.3.2 The workforce requirement is immediate, significant and unevenly distributed. Demand varies by occupation, sub-industry, region and year.

8.3.3 Employers and supply-chain organisations should convert the forecasts into practical, funded and regularly updated workforce plans covering:

- Critical occupations and job roles
- Annual and regional demand

- Recruitment, retention and progression
- Routes to occupational competence
- Training, supervision, mentoring and assessment capacity
- Dependencies on suppliers, contractors and other infrastructure sectors

8.3.4 Plans should be reviewed as investment profiles, delivery schedules and labour-market conditions change. Regulation, price controls, procurement and contracting arrangements should give employers and their supply chains sufficient visibility and certainty to invest ahead of demand.

8.3.5 Primary ownership sits with:

- **Employers and supply-chain organisations** should produce, fund and deliver workforce plans
- **Governments and regulators** should align policy, regulation, investment and contracting arrangements with credible workforce delivery
- **The Energy & Utility Skills Partnership** should maintain the shared evidence base and provide a consistent framework for workforce planning

8.3.6 Alignment with the 2025-2030 Skills Strategy and EUSP CEO Council 2026/27 priorities:

- This commitment principally supports the **Research** pillar. It also supports the **Develop** and **Retain** pillars because effective workforce plans must address competence, progression and retention
- It directly aligns with the priorities to:
  - Update workforce demand estimates so that industry and government plan using one set of workforce-planning assumptions (**G2**)
  - Champion workforce and skills decisions based on nationally recognised, employer-informed evidence (**P1**)
  - Use industry evidence to inform regulation, price controls and contracting periods for long-term workforce planning (**UK1**)
- It also supports the wider priorities to maintain a current research programme (**G3**) and strengthen evidence-led workforce planning through partnership (**P2**)

Commitment 2: Expand safe routes to competence

8.3.7 Demand is concentrated in technical and vocational occupations. Apprenticeship and graduate routes cannot meet the earliest demand on their own because some pathways take three years or more to produce an occupationally competent worker.

8.3.8 Employers, education and skills providers, governments and standards bodies should jointly increase the capacity and range of routes into competent employment by:

- Increasing apprenticeship and graduate provision in critical occupations
- Expanding trainer, assessor, mentor, supervisor, facility and placement capacity
- Scaling sector-entry programmes linked to genuine vacancies and progression opportunities
- Developing funded modular provision aligned with sector-specific occupational requirements

- Creating progression routes for experienced workers whose capability is not fully represented by prior academic attainment
- Supporting career transitions from sectors with transferable skills
- Using targeted migration where urgent shortages cannot be filled domestically within the required timeframe

8.3.9 Every pathway must lead towards clearly defined occupational competence. Faster entry must not mean weaker standards or premature deployment into safety-critical work.

8.3.10 Primary ownership sits with:

- **Employers** should provide vacancies, placements, mentors, assessors and progression opportunities
- **Education and skills providers** should expand responsive provision and demonstrate how learning leads to recognised competence
- **Governments** should improve the flexibility, accessibility and consistency of skills funding across the UK
- **Regulators, professional bodies and standards organisations** should protect competence and quality while enabling proportionate innovation in delivery
- **The Energy & Utility Skills Partnership** should coordinate occupational profiles, standards, pathway design and cross-sector transferability

8.3.11 Alignment with the 2025-2030 Skills Strategy and EUSP CEO Council 2026/27 priorities:

- This commitment principally supports the **Develop** pillar. It also supports **Attract**, by creating credible entry routes, and **Retain**, by enabling progression and continued development.
- It directly aligns with the priorities covering:
  - Occupational profiles and occupational mapping (**G6**)
  - Standards and workforce competence (**G7**)
  - Expansion of Sector Entry provision and learner places (**P6**)
  - Flexible routes towards RQF Level 3 competence through apprenticeship units (**P7**)
  - Protection of safety and competence during apprenticeship reform (**UK2**)
  - Alternative progression routes for experienced workers into RQF Level 4 and above (**UK5**)
  - Simpler and more consistent apprenticeship funding, administration and delivery (**UK6**)
  - Removal of disincentives for frontline workers to become trainers and assessors (**UK7**)
- It also supports:
  - Development of a Youth Guarantee model (**G8**)
  - Effective use of skills investment and the levy (**P8**)
  - Sustainable routes from economic inactivity and unemployment into the sector (**UK3**)
  - Place-based adult skills investment (**UK4**)
  - Pathways for skilled workers moving from other industries (**P10**)

Commitment 3: Retain experience and widen access to opportunity

8.3.12 Employers should treat retention, succession and knowledge transfer as essential infrastructure-delivery activities by:

- Identifying retirement and turnover exposure in critical roles
- Strengthening career development and internal progression
- Protecting time for experienced workers to train and mentor others
- Improving job quality, inclusion, wellbeing and workforce experience
- Retaining unsuccessful applicants and displaced workers within the wider sector talent pool
- Opening routes for people who are unemployed, economically inactive, under-represented or moving from other industries

8.3.13 UK-wide action should be combined with place-based delivery so that people can access genuine vacancies, appropriate support and clear progression from entry-level roles into skilled employment.

8.3.14 Primary ownership sits with:

- **Employers** should improve retention, succession, progression and knowledge transfer
- **Governments and public employment services** should connect employment, welfare, careers and skills policy to evidenced sector demand
- **Education and skills providers** should create accessible entry and progression pathways that reflect regional labour markets
- **The Energy & Utility Skills Partnership** should coordinate talent referral, inclusion, attraction and cross-sector transition activity

8.3.15 Alignment with the 2025-2030 Skills Strategy and EUSP CEO Council 2026/27 priorities:

- This commitment principally supports the **Retain** and **Attract** pillars. It also supports **Develop** through mentoring, knowledge transfer and career progression.
- It directly aligns with the priorities to:
  - Retain skilled people and unsuccessful candidates within the sector and its supply chains (**G9**)
  - Launch the evaluated Inclusion Measurement Framework, supported by best practice and recommendations (**P9**)
  - Create pathways for skilled workers moving from industries undergoing programme-driven transitions (**P10**)
  - Reduce economic inactivity and unemployment while strengthening progression from entry-level roles into apprenticeships and skilled occupations (**UK3**)
- It also supports:
  - Development of the Youth Guarantee model (**G8**)
  - Access to careers, routes, tools and insight through the sector platform (**P4**)
  - Inclusive attraction and recruitment activity through Destination Energy (**P5**)
  - Progression by experienced workers into higher-level opportunities (**UK5**)
  - The use of experienced workers as trainers and assessors (**UK7**)

Commitment 4: Adopt technology responsibly to increase safe delivery capacity

8.3.16 Digital technologies, automation, artificial intelligence, smart assets, advanced monitoring systems and digital twins are expected to change tasks, skills and working practices across the power generation industry. Many technologies have the potential to improve operational performance, environmental outcomes, reliability and workforce productivity. However, technology should augment workforce capability rather than be viewed solely as a substitute for labour.

8.3.17 Employers should adopt AI, automation and digital technologies where they can demonstrably improve delivery. Implementation should be governed by:

- Task-level assessment of safety, competence and operational risk
- Workforce involvement in workflow and job redesign
- Clear human accountability for safety-critical and regulatory decisions
- Validation and assurance of data, models and automated outputs
- Structured reskilling and redeployment
- Measurement of productivity, quality, safety and service outcomes.

8.3.18 Where technology releases capacity, employers should seek to redirect it towards higher-value, safety-critical or shortage-constrained work. Adoption should respond to clearly defined operational needs rather than an assumption that technology automatically substitutes for labour.

8.3.19 Primary ownership sits with:

- **Employers** should select appropriate use cases, manage risk, redesign work and reskill affected workers
- **Regulators** should establish clear and proportionate expectations for assurance, accountability and evidence
- **Education and skills providers** should embed relevant digital and AI capabilities within technical and professional learning
- **The Energy & Utility Skills Partnership** should gather evidence, share effective practice and identify common implications for occupations, standards and workforce planning

8.3.20 Alignment with the 2025-2030 Skills Strategy and EUSP CEO Council 2026/27 priorities:

- This commitment principally supports the **Develop** pillar because it addresses new capabilities, occupational competence, reskilling and the redesign of work.

  It also supports **Research**, through evidence and workforce intelligence, and **Retain**, where reskilling and redeployment allow people to continue contributing within the sector.
- The commitment also advances the Skills Strategy's cross-cutting themes of **AI and Technology** and **Productivity**. These are cross-cutting themes rather than additional strategic pillars.
- No single 2026/27 priority corresponds directly and comprehensively to responsible AI and automation adoption. The commitment nevertheless supports the priorities covering:
  - Research and evidence needed to identify emerging workforce challenges (**G3**)
  - Occupational profiles and occupational mapping (**G6**)
  - Continuous improvement in standards and workforce competence (**G7**)
  - Workforce and skills decisions based on employer-informed evidence (**P1**)

- Investment in skills and improved productivity (**P8**)
- Protection of competence and safety as skills provision changes (**UK2**)

- This supporting alignment should not be interpreted as making any one of these priorities a standalone AI or automation priority

Commitment 5: Champion the people delivering the UK's future

8.3.21 Workforce growth will depend not only on creating opportunities but also on making those opportunities visible, credible and attractive. The industry and its partners should champion, amplify and celebrate the people and teams who design, manufacture, build, operate and maintain and decommission the UK's power generation infrastructure.

8.3.22 This should include:

- Creating a shared, evidence-led account of the contribution made by the power generation workforce
- Using authentic stories from employees, apprentices, career changers, trainers, mentors and supply-chain teams
- Showcasing the breadth of technical, professional, operational and support careers available across the UK
- Recognising employers and partnerships that widen access, uphold competence and improve workforce experience
- Connecting communications to genuine jobs, training, work experience and progression opportunities
- Making careers information accessible to young people, educators, careers advisers, jobseekers and workers in transition
- Measuring whether activity improves awareness, engagement and entry into the industry, rather than reporting communications reach alone.

8.3.23 This is more than a communications commitment. It supports attraction by showing people where opportunities exist, development by making pathways and competence requirements clear, and retention by recognising the contribution of the existing workforce and demonstrating that the industry offers meaningful, long-term careers.

8.3.24 Primary ownership sits with:

- **Employers and supply-chain organisations** should provide authentic workforce stories, career information and examples of effective practice
- **Trade unions, employee networks and workforce representatives** should help ensure that communications accurately reflect the work and the workforce experience
- **Education, careers and employment partners** should bring these messages to schools, colleges, universities, jobseekers and local communities
- **The Energy & Utility Skills Partnership** and sector communications networks should coordinate and amplify a consistent industry narrative

8.3.25 Alignment with the 2025-2030 Skills Strategy and EUSP CEO Council 2026/27 priorities:

- This commitment principally supports the **Attract** pillar

  It also supports **Retain**, through recognition and an authentic employee proposition, and **Develop**, by explaining career pathways, progression and competence requirements
- It directly aligns with the priorities to:

- Align communications and marketing with the agreed CEO Council priorities (**G10**)
- Deliver coordinated sector attraction and recruitment activity through Destination Energy (**P5**)

- It also supports the priorities to:
  - Deepen partnerships and clarify engagement routes (**G4**)
  - Support worker transitions through the North Sea Worker service (**G5**)
  - Use occupational profiles to make careers and pathways clearer (**G6**)
  - Retain candidates and skilled people within the sector talent pool (**G9**)
  - Provide access to careers, routes, tools and insight through the sector platform (**P4**)
  - Promote inclusive workforce practice and recommendations (**P9**)
  - Make transition pathways visible to workers in adjacent industries (**P10**)
  - Strengthen entry routes and progression from economic inactivity or unemployment into skilled work (**UK3**)

Summary of strategic alignment

8.3.26 The following table distinguishes between:

- **Direct alignment:** the commitment would materially contribute to delivery of the priority
- **Supporting alignment:** the commitment contributes to the priority but would not deliver it by itself

Commitment	2025-2030 Skills Strategy alignment	EUSP CEO Council 2026/27 priority alignment (Direct)	EUSP CEO Council 2026/27 priority alignment (Supporting)
1. Plan and invest against evidenced workforce demand	**Primary:** Research. **Supporting:** Develop and Retain.	G2, P1, UK1	G3, P2
2. Expand safe routes to competence	**Primary:** Develop. **Supporting:** Attract and Retain.	G6, G7, P6, P7, UK2, UK5, UK6, UK7	G8, P8, UK3, UK4, P10
3. Retain experience and widen access to opportunity	**Primary:** Retain and Attract. **Supporting:** Develop.	G9, P9, P10, UK3	G8, P4, P5, UK5, UK7
4. Adopt technology responsibly to increase safe delivery capacity	**Primary:** Develop. **Supporting:** Research and Retain. **Cross-cutting:** AI and Technology; Productivity.	No single priority directly covers the full commitment	G3, G6, G7, P1, P8, UK2
5. Champion the people delivering the UK's future	**Primary:** Attract. **Supporting:** Retain and Develop.	G10, P5	G4, G5, G6, G9, P4, P9, P10, UK3

8.3.27 The mapping identifies the priorities to which each commitment makes the clearest direct or supporting contribution. It does not imply that a commitment is solely responsible for delivering those priorities. The four pillars are interconnected, and action under one commitment may contribute to outcomes across more than one pillar.

8.4 The immediate commitment

8.4.1 The workforce requirement is not a distant 2032 issue. There are significant, immediate workforce requirements, while many technical and professional pathways can take years to produce an occupationally competent worker.

8.4.2 The industry and its partners should therefore commit now to:

1. **Produce funded workforce and supply-chain plans** for critical occupations, regions and delivery programmes
2. **Expand training, supervision, mentoring and assessment capacity** ahead of demand
3. **Scale entry, progression and transition routes** without weakening competence or safety standards
4. **Retain experienced workers and protect critical knowledge** through succession planning, progression and mentoring
5. **Adopt AI, automation and digital technologies responsibly**, with clear human accountability
6. **Champion the people and opportunities behind power generation investment**, connecting communications to genuine jobs, training and careers
7. **Report progress collectively**, using shared workforce outcomes and escalating barriers that individual organisations cannot resolve

8.4.3 By their next workforce-planning cycle, major employers and participating supply-chain organisations should be able to demonstrate how their plans:

- Respond to evidenced occupational demand
- Increase routes to competence
- Protect safety
- Expand delivery capacity
- Support retention

8.4.4 The industry's infrastructure programme will move only as quickly as the workforce behind it. Investment in people must therefore be planned, funded and governed with the same urgency as investment in power generation infrastructure itself.

Annex 1 – Occupations and example job titles

Skill Level	Standard Occupational Classification	Occupational Group	Example job titles
RQF 7-8 SCQF 11-12	11 - Corporate Managers and Directors	Managerial	Chief Executive Officer; Managing Director; Operations Director; Other Directors
	12 - Other Managers and Proprietors	Managerial	Functional Managers
RQF 6 SCQF 9-10	21 - Science, Research, Engineering and Technology Professionals	Technical Professional	Electrical Engineer; Mechanical Engineer; Civil/Structural Engineer; Control and Instrumentation Engineer; Process Engineer; Nuclear Safety Engineer; Wind Turbine Design Engineer; Solar/BESS Design Engineer
	22 - Health Professionals	Other	Occupational Health Adviser; Site Paramedic
	23 - Teaching and Other Educational Professionals	Other	Apprenticeship Trainer/Lecturer; Education Manager
	24 - Business, Media and Public Service Professionals	Business Support	Quantity Surveyor; Construction Project Manager; Chartered Land/Wayleave Surveyor; Infrastructure Planning and Consents Professional; Regulatory Affairs Manager; Quality Assurance Manager; Public Relations Manager; Project/Programme Manager; Nuclear Safety Case Author
RQF 4-5 SCQF 7-8	31 - Science, Engineering and Technology Associate Professionals	Technical Professional	Wind Turbine Technician; Electrical/Mechanical Technician; Control and Instrumentation Technician; Radiation Protection Technician; CAD/Draughting Technician; Solar and Battery Operations Technician
	32 - Health and Social Care Associate Professionals	Other	Occupational Health Technician; Workplace Health Trainer; Employee Assistance Programme Counsellor; Vulnerable Customer Outreach Worker; Community Development Officer; Health & Safety Officer
	33 - Protective Service Occupations	Business Support	Civil Nuclear Constabulary Police Officer; Critical Infrastructure Security Manager; Fire Safety Officer
	34 - Culture, Media and Sports Occupations	Business Support	Technical Author; Copywriter; Translator; Corporate Videographer; Aerial/Drone Photographer; Technical Illustrator
	35 - Business and Public Service Associate Professionals	Business Support	Estimator; Project Planner; Project Support Officer; Data Analyst; Buyer/Procurement Officer; Business Development Manager; HR Adviser; Standards and Regulatory Inspector
RQF 3 SCQF 6	41 - Administrative Occupations	Business Support	Business Support Administrator; Project Administrator; Finance Officer; Credit Controller; Payroll Administrator; Purchase Ledger Clerk; Stock Controller; Despatch Clerk; Logistics Coordinator
	42 - Secretarial and Related Occupations	Business Support	Executive Assistant; Personal Assistant; Legal Secretary; Receptionist
	51 - Skilled Agricultural and Related Trades	Front Line Technical	Utility Arborist; Arboricultural Consultant; Vegetation Management Arborist; Countryside Ranger; Grounds Maintenance
	52 - Skilled Metal, Electrical and Electronic Trades	Front Line Technical	Electrician; Electrical Fitter; Electrical Craftsperson; Mechanical Maintenance Fitter; Welder; Pipe Fitter; Sheet-Metal Fabricator; Skilled Trades Supervisor
	53 - Skilled Construction and Building Trades	Front Line Technical	Steel Erector; Bricklayer; Carpenter/Joiner; Plumber; Heating and Ventilation Installer; Construction Foreman; Site Construction Supervisor
	54 - Textiles, Printing and Other Skilled Trades	Other	Digital Printer; Depot Canteen Chef
	61 - Caring Personal Service Occupations	Other	Pest Control Officer
	62 - Leisure, Travel and Related Personal Service Occupations	Other	Offshore Accommodation Housekeeper; Site Caretaker; Corporate Travel Adviser
	63 - Community and Civil Enforcement Occupations	Other	Not applicable

Skill Level	Standard Occupational Classification	Occupational Group	Example job titles
RQF 2 SCQF 5	71 - Sales Occupations	Business Support	Renewable Equipment Sales Adviser; OEM Spare-Parts Sales Adviser; Telephone Salesperson; Field Sales Representative; Sales Supervisor.
	72 - Customer Service Occupations	Business Support	Customer Service Representative; Complaints Officer; Vulnerable Customer Adviser; Contact Centre Dispatcher; Switchboard Operator; Customer Service Supervisor
RQF 1 SCQF 4	81 - Process, Plant and Machine Operatives	Front Line Technical	Power Station Operator; Control Room Operator; Turbine Operator; Boiler Operator; EfW Plant Operator; Biomass Fuel-Handling Operator; Hydroelectric Plant Operator; Nuclear Process Operative; Battery Storage Control-Room Operator; Electrical-Product Assembly Operative
	82 - Transport and Mobile Machine Drivers and Operatives	Front Line Technical	HGV Driver; Biomass Delivery Driver; Mobile Crane Operator; Fork-lift Truck Driver; Excavator Operator; Offshore Wind Crew-Transfer Vessel Operative; Workboat/Marine Operative; Mobile Plant Operator
	91 - Elementary Trades and Related Occupations	Front Line Technical	Groundworker; Construction Labourer; Electrician's Mate; Fitter's Mate; Rigger's Mate; Forestry Worker; Cable-Laying Labourer; General Site Operative; Decommissioning Labourer
	92 - Elementary Administration and Service Occupations	Business Support	Security Guard; Gatehouse Security Officer; Warehouse Operative; Stores Assistant; Delivery Operative; Canteen Assistant

Annex 2 – Methodology

A2.1 Current workforce estimates and future employment forecasts

A2.1.1 Current workforce estimates use the latest available baseline for each sub-industry. Most estimates relate to 2025, although some use 2024 data where that is the latest available source. Forecasts are presented for 2032 and represent the best estimate based on information available at the time of publication, including known policy, investment and project plans. As with all forecasts, uncertainty increases over time and future workforce requirements may differ if assumptions, investment decisions, delivery timescales or economic conditions change.

A2.1.2 The estimates and forecasts contained in this report are based on research and employment data from a range of credible sources – all of which are based on what is known at the time of being published (such as known government policies/strategies and industry investment plans). Where published workforce forecasts were unavailable, Energy & Utility Skills has developed forecasts using industry investment plans, workforce data and employer evidence.

A2.1.3 The sources used to generate our forecasts for each sub-industry are stated at the beginning of each sub-industry's chapter of this report. The workforce data used in this analysis are drawn from the most recently available published sources for each sub-industry. As publication dates vary across sub-industries, the current workforce estimates are not all from the same year, with some of the latest available sources dating to 2024. Where relevant, the source year is noted, and the baseline year presented in the tables reflects the publication date of the underlying workforce estimate.

A2.1.4 This analysis includes forecast workforce growth in the 2026 calendar year, through to the end of 2032 – seven full years.

A2.1.5 Estimates are rounded to the nearest 100. As a result, the sum of sub-industries and tables may not equal published totals. Users should exercise caution when interpreting small differences between estimates and forecasts or changes over time, as these may reflect the effects of rounding rather than underlying variation.

A2.2 Retirement and staff turnover assumptions

A2.2.1 Retirement forecasts have been calculated on the assumption that the proportion of the current workforce in each occupation who are aged 55+ will retire over the next ten years – therefore, we have taken one-tenth of that percentage as the annual retirement rate (see the table opposite).

A2.2.2 Staff turnover, although not an element of the core requirement for people, is based on the assumption that a small proportion of the workforce will leave the industry each year to take up employment in other sectors. Leavers through staff turnover that remain in the energy & utilities sector are not reported in this analysis (as they do not need to be replaced).

Standard Occupational Classification	Annual Retirement Rate	Annual Staff Turnover Rate
11 - Corporate Managers and Directors	2.3%	2%
12 - Other Managers and Proprietors	2.3%	2%
21 - Science, Research, Engineering and Technology Professionals	1.2%	2%
22 - Health Professionals	1.8%	2%
23 - Teaching and Other Educational Professionals	1.7%	2%
24 - Business, Media and Public Service Professionals	1.6%	2%

Standard Occupational Classification	Annual Retirement Rate	Annual Staff Turnover Rate
31 - Science, Engineering and Technology Associate Professionals	1.5%	2%
32 - Health and Social Care Associate Professionals	2.0%	2%
33 - Protective Service Occupations	1.0%	2%
34 - Culture, Media and Sports Occupations	1.2%	2%
35 - Business and Public Service Associate Professionals	1.4%	2%
41 - Administrative Occupations	2.1%	5%
42 - Secretarial and Related Occupations	3.0%	5%
51 - Skilled Agricultural and Related Trades	3.8%	2%
52 - Skilled Metal, Electrical and Electronic Trades	1.9%	2%
53 - Skilled Construction and Building Trades	2.0%	2%
54 - Textiles, Printing and Other Skilled Trades	1.9%	2%
61 - Caring Personal Service Occupations	2.1%	5%
62 - Leisure, Travel and Related Personal Service Occupations	2.1%	5%
63 - Community and Civil Enforcement Occupations	1.9%	5%
71 - Sales Occupations	1.8%	5%
72 - Customer Service Occupations	1.3%	5%
81 - Process, Plant and Machine Operatives	2.4%	2%
82 - Transport and Mobile Machine Drivers and Operatives	3.3%	2%
91 - Elementary Trades and Related Occupations	2.2%	2%
92 - Elementary Administration and Service Occupations	2.0%	2%

A2.3 Estimating occupational criticality

A2.3.1 Our approach to assessing the absolute and relative criticality of each occupational group (2-digit SOCs) and detailed occupation (4-digit SOCs) is based on the weighted average of each occupations scores against the following 11 criteria.

Criterion	Description
Occupational relevance to the industry	Importance of occupation to the industry
Infrastructure delivery criticality	Importance of occupation to infrastructure delivery
Workforce shortage severity	Current or forecast workforce shortage level
Training lead time	Time required to reach competency
Replacement demand risk	Exposure to retirement and attrition
Regional concentration risk	Geographic availability constraints
Supply chain dependency	Reliance on contractors/subcontractors
Scalability of workforce	Ability to rapidly increase workforce numbers
Technology substitution potential	Potential for AI, robotics or automation to reduce workforce requirement
Regulatory / safety criticality	Importance to safety-critical or regulated activities
Future system relevance	Importance to future digital, DSO and whole-system requirements

A2.3.2 Each occupation is given a rating out of five against each criterion set out above and each score is multiplied by a weighting. The overall weighted average is then calculated and assigned to a level of criticality:

Score	Level of criticality	Suggested response
4.0 - 5.0	Critical priority	Immediate intervention required
3.0 - 3.9	High priority	Active monitoring and targeted interventions
2.0 - 2.9	Medium priority	Longer-term workforce planning
<2.0	Lower priority	Monitor only

A2.4 AI and automation adoption framework

A2.4.1 Our approach to assessing the impact of AI and automation on the future workforce is based on three adoption scenarios (low, medium and high adoption) assessed across seven dimensions of AI and automation adoption, as set out in the table below.

A2.4.2 Potential workforce effects are assessed separately and are not a defining characteristic of AI and automation adoption. Workforce impacts may vary between occupations operating under the same adoption scenario.

A2.4.3 The distinction between Significantly Impacted and Augmented occupations is important. Occupations classified as Significantly Impacted are expected to experience substantial changes to role content, responsibilities, skills and workflows, resulting in meaningful job redesign. Occupations classified as Augmented may also experience significant AI and automation adoption, but technology primarily enhances productivity, decision-making and performance while the core nature of the role remains broadly unchanged.

Dimension	Low Adoption	Medium Adoption	High Adoption
1. Investment and pace	Selective, cautious and uneven; scaling remains slow	Sustained investment in proven cases; adoption accelerates	Strong strategic investment; rapid scaling is prioritised
2. Technology maturity and autonomy	Established, low-risk tools; mainly assistive or rule-based	Mature predictive, generative and workflow tools; bounded autonomy	Agentic AI, machine vision, robotics and autonomous systems expand
3. Breadth of deployment	Selected teams, support functions and isolated operational uses	Multiple core and support functions; adoption still varies by organisation	Most feasible functions, supply-chain areas and lifecycle stages
4. Depth and operating-model integration	Tools sit alongside existing processes; pilots and local solutions dominate	Tools enter business-as-usual workflows, data platforms and governance	Processes are designed around AI; systems coordinate across workflows
5. Task automation and augmentation	Assists workers, removes discrete routine tasks and improves information access	Automates task clusters while augmenting judgement and decisions	Automates substantial sequences or selected end-to-end processes
6. Job redesign and skills	Local working-practice changes and basic AI literacy; little formal redesign	Material role redesign, structured upskilling and some redeployment	Widespread redesign, substantial reskilling and new oversight roles
7. Productivity ambition	Incremental gains in efficiency, quality, safety or service	Material productivity and capacity gains pursued across functions	Transformational gains; higher output, faster delivery or lower labour intensity

Risk Category	Definition
At Risk of Reduction	Fewer workers may be required because AI and automation increase productivity and automate routine tasks.
Significantly Impacted	Workforce demand remains broadly stable, but roles undergo substantial redesign as tasks, skills, responsibilities and workflows change significantly.
Augmented	AI and automation significantly improve productivity, decision-making and performance, but primarily enhance rather than redesign core roles, and demand for workers remains strong.
Limited Impact	Little expected effect on workforce demand because activities continue to depend heavily on physical intervention, human interaction or site-based work.

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