

Workforce demand estimates – 2024 to 2030 The Power industry

Summary report September 2024 Skills for a greener world

Workforce demand estimates – 2024 to 2030

Power

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1 About this report

1.1 Introduction

- 1.1.1 This report is one in a series that contain estimates of the number of new jobs and people required across the UK energy and utilities sector by 2030.
- 1.1.2 This report focusses on the UK power industry, which includes:
 - Production of electricity (Construction, operation and maintenance of power generating assets)
 - Coal/Gas/Oil/Hydrogen
 - Energy from waste/Biomass
 - Hydropower
 - Nuclear
 - Offshore Wind
 - Onshore Wind
 - Solar
 - Carbon capture, utilisation & storage
 - Transmission of electricity
 - Distribution of electricity
 - Construction of utility projects for electricity and telecommunications
 - Trade of electricity

- 1.1.3 In addition to this report, individual reports are available for:
 - Energy and utilities sector (containing the aggregate analysis from across all five industry of the sector)
 - Gas networks (including the manufacture, distribution and retail trade of gas through the networks)
 - Gas utilisation (consisting of the domestic gas engineer workforce and related activities)
 - Waste and recycling (including the collection, treatment, disposal and recycling of waste)
 - Water (including the collection, treatment and supply of water; sewerage; the construction of water assets)
- 1.1.4 All sector and industry estimates are broken down into 19 occupations (based on the two-digit Standard Occupational Classification system).
 See Annex 1 for examples of industry job titles within each of these occupations and their associated skill level.
- 1.1.5 Two headline estimates are provided: (i) *New jobs* is an estimate of the number of jobs that are forecast to be created over the period and (ii) *New people required* is an estimate of the number of new people that will be needed by the sector over the period (this is the sum of new jobs plus forecast retirements).



1.2 Principal assumptions

- 1.2.1 In order to produce these estimates, we have applied two assumptions to the estimates of current employment:
 - Anticipated retirement age: We have assumed that all current workers will retire when they reach a certain age (see Figure 1). This assumption does not vary by industry.
 - New jobs: This is an estimate of the net number of additional jobs that are forecast to be created. These are taken either from either published research by an appropriate organisation (e.g. trade bodies) from or Lightcast.

These new jobs have been applied to each occupation within an industry/sub-industry/technology either as close as possible to source's original estimates or pro-rata as per the current occupational distribution of employment.

Figure 1: Retirement and staff turnover assumptions by occupation

Standard Occupation Classification	Retirement age
11 - Corporate Managers and Directors	59
12 - Other Managers and Proprietors	59
21 - Science, Research, Engineering and Technology Professionals	60
24 - Business, Media and Public Service Professionals	60
31 - Science, Engineering and Technology Associate Professionals	62
33 - Protective Service Occupations	62
34 - Culture, Media and Sports Occupations	62
35 - Business and Public Service Associate Professionals	62
41 - Administrative Occupations	65
42 - Secretarial and Related Occupations	65
51 - Skilled Agricultural and Related Trades	62
52 - Skilled Metal, Electrical and Electronic Trades	62
53 - Skilled Construction and Building Trades	62
71 - Sales Occupations	65
72 - Customer Service Occupations	65
81 - Process, Plant and Machine Operatives	64
82 - Transport and Mobile Machine Drivers and Operatives	64
91 - Elementary Trades and Related Occupations	65
92 - Elementary Administration and Service Occupations	65

1.2.2 Throughout this analysis, all estimates have been rounded to the nearest 100. Therefore, industry and occupation totals may not equal the sum of their constituent rows.



1.3 How these estimates were produced

- 1.3.1 These estimates have been produced by Energy & Utility Skills using a range of third-party data sources, including:
 - Lightcast Data is created from a collection of government sources covering more than 20 million data points describing labour market conditions¹
 - The Office for National Statistics (ONS) particularly the Business Register and Employment Survey (BRES) and Low carbon and renewable energy economy (LCREE) estimates
 - Estimates of future employment relating to the use of hydrogen in electricity production have been taken from *Economic Impact Assessment for the Hydrogen Sector to 2030*, Hydrogen UK, April 2024.
- 1.3.2 It should be noted that future employment estimates produced by the ONS and Lightcast do not necessarily reflect actual or planned investment plans by government or individual companies they essentially use the past to predict the future.
- 1.3.3 Where estimates of future workforce levels have been produced by third parties relevant to each industry/technology, these have been used instead of ONS or Lightcast estimates. Further details of the data sources used to produce these estimates are contained within each industry report.
- 1.3.4 Finally, these estimates have been tested and adjusted through direct engagement with our members and employer network groups.

¹ For further information on Lightcast's methodology, <u>click here</u>.



2 Estimated job creation and people requirements by 2030

2.1 Industry estimates

- 2.1.1 There are an estimated 158,600 people currently employed in the power industry. By 2030, this is forecast to increase to 290,300 an increase of 131,700 (up 83% on 2024 levels).
- 2.1.2 The majority of the jobs growth will be focussed in the production of electricity, specifically:
 - Carbon capture, utilisation and storage (+40,400; +5,775%)
 - Offshore Wind (+39,000; +223%)
 - Energy from waste/Biomass (+22,300; +290%)
 - Solar (+12,000; +171%)
- 2.1.3 Our headline estimates for the power industry for the period between 2024 and 2030 are:
 - 131,700 **new jobs** will be created (average of 18,800 per year)
 - 156,900 new people will be required to enter the industry's workforce for the first time (average of 22,400 per year)



	Total em	ployment	New jobs	New jobs created		ple required
Industry	2024	2030	Number	% Growth	Total	Average per year
Electricity Production	88,900	206,100	117,200	132%	131,500	18,800
Coal/Gas/Oil/Hydrogen	3,500	7,000	3,500	100%	4,100	600
Energy from waste/Biomass	7,700	30,000	22,300	290%	23,500	3,400
Hydropower	2,500	2,500	0	0%	400	100
Nuclear	45,000	45,000	0	0%	7,200	1,000
Offshore Wind	17,500	56,500	39,000	223%	41,800	6,000
Onshore Wind	5,000	5,000	0	0%	800	100
Solar	7,000	19,000	12,000	171%	13,100	1,900
Carbon capture, utilisation and storage	700	41,100	40,400	5,775%	40,500	5,800
Transmission of electricity	4,500	6,500	2,000	44%	3,000	400
Distribution of electricity	47,000	55,600	8,600	18%	15,700	2,200
Construction of electricity projects	10,400	13,700	3,300	32%	5,100	700
Trade of electricity	7,800	8,400	600	8%	1,700	200
Power	158,600	290,300	131,700	83%	156,900	22,400

Figure 2: Estimated number of new jobs created and new people required by industry



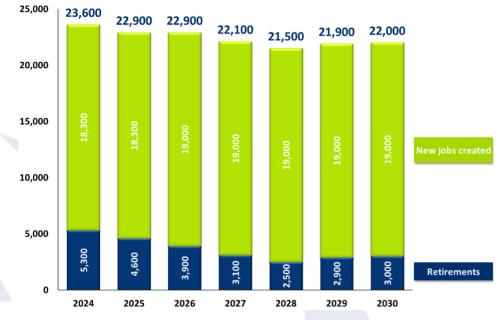


Figure 3: Number of new people required by the sector – by cause and year

2.1.4 Of the 156,900 new people required by the sector by 2030, 40% of them (63,600 people) will initially be working at RQF level 3 or below.

Figure 4: Estimates of new jobs and new people by skill level

	New job	s created	New peop	le required
Skill level	Number	% of total	Number	% of total
RQF 7-8 SCQF 11-12	13,300	10%	17,600	11%
RQF 6 SCQF 9-10	40,100	30%	47,100	30%
RQF 4-5 SCQF 7-8	25,300	19%	28,600	18%
RQF 3 SCQF 6	31,800	24%	38,700	25%
RQF 2 SCQF 5	5,900	4%	7,000	4%
RQF 1 SCQF 4	15,500	12%	17,900	11%
Sector total	131,700	100%	156,900	100%

2.1.5 16% of the workforce (25,200 people) are forecast to retire by 2030.

2.1.6 The number of people who will reach retirement age during each year is forecast to increase year-on-year through to 2030 – see Figure 5 below (from 2030 onwards, the number of retirements in each year are forecast to peak at 3,600 in 2034).



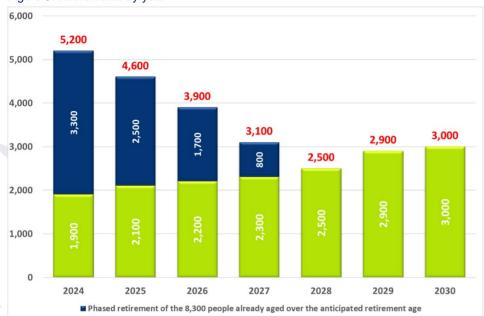


Figure 5: Retirements by year

2.1.7 These retirement estimates include 8,300 people who are already aged over their anticipated retirement age. In this analysis, these people have been "retired out" of the workforce over the next four years (the orange column in the figure below).



2.2 Occupational estimates

- 2.2.1 Across the power industry, all 19 occupational groups are forecast to increase their workforce size by 2030.
- 2.2.2 The occupations which are forecast to see the **largest increase in jobs** are:
 - 21 Science, Research, Engineering and Technology Professionals (+28,300; +91%)
 - **5**2 Skilled Metal, Electrical and Electronic Trades (+18,100; +74%)
 - 35 Business and Public Service Associate Professionals (+15,800; +92%)
 - 11 Corporate Managers and Directors (+11,800; +92%)
 - 24 Business, Media and Public Service Professionals (+11,800; +84%)
- 2.2.3 The occupations with the **highest** *number* of retirements are forecast to be:
 - 21 Science, Research, Engineering and Technology Professionals (4,500)
 - 52 Skilled Metal, Electrical and Electronic Trades (4,000)
 - 11 Corporate Managers and Directors (3,700)

- 2.2.4 However, the occupations with a **higher-than-average** *proportion* of **retirements** from the current workforce by 2030 are:
 - 51 Skilled Agricultural and Related Trades (36%)
 - 12 Other Managers and Proprietors (29%)
 - 11 Corporate Managers and Directors (29%)
 - 82 Transport and Mobile Machine Drivers and Operatives (24%)
 - 42 Secretarial and Related Occupations (19%)
 - 24 Business, Media and Public Service Professionals (18%)
 - 53 Skilled Construction and Building Trades (17%)
 - **52** Skilled Metal, Electrical and Electronic Trades (17%)
- 2.2.5 The occupations that will need to attract the **highest number of new people** into their workforce are:
 - 21 Science, Research, Engineering and Technology Professionals (32,800; 4,700 per year)
 - 52 Skilled Metal, Electrical and Electronic Trades (22,100; 3,200 per year)
 - 35 Business and Public Service Associate Professionals (17,900; 2,600 per year)
 - 11 Corporate Managers and Directors (15,400; 2,200 per year)



		Total em	ployment	yment New jobs creat		ted New people requir	
Skill level	Standard Occupation Classification	2024	2030	Number	% Growth	Total	Average per year
RQF 7-8	11 - Corporate Managers and Directors	12,800	24,600	11,800	92%	15,400	2,200
SCQF 11-12	12 - Other Managers and Proprietors	2,600	4,000	1,500	57%	2,200	300
RQF 6	21 - Science, Research, Engineering and Technology Professionals	31,300	59,600	28,300	91%	32,800	4,700
SCQF 9-10	24 - Business, Media and Public Service Professionals	14,100	25,900	11,800	84%	14,300	2,000
	31 - Science, Engineering and Technology Associate Professionals	8,600	17,500	8,900	104%	10,000	1,400
RQF 4-5	33 - Protective Service Occupations	300	500	200	82%	300	<100
SCQF 7-8	34 - Culture, Media and Sports Occupations	400	800	400	103%	400	<100
	35 - Business and Public Service Associate Professionals	17,200	32,900	15,800	92%	17,900	2,600
	41 - Administrative Occupations	14,300	23,200	9,000	63%	10,800	1,500
	42 - Secretarial and Related Occupations	1,600	2,900	1,300	79%	1,600	200
RQF 3 SCQF 6	51 - Skilled Agricultural and Related Trades	1,200	1,800	600	53%	1,000	100
	52 - Skilled Metal, Electrical and Electronic Trades	24,300	42,400	18,100	74%	22,100	3,200
	53 - Skilled Construction and Building Trades	2,400	5,200	2,800	113%	3,200	500
RQF 2	71 - Sales Occupations	3,900	5,600	1,700	43%	2,100	300
SCQF 5	72 - Customer Service Occupations	9,200	13,400	4,200	46%	4,900	700
	81 - Process, Plant and Machine Operatives	7,600	16,700	9,100	119%	10,300	1,500
RQF 1	82 - Transport and Mobile Machine Drivers and Operatives	2,300	4,600	2,300	101%	2,900	400
SCQF 4	91 - Elementary Trades and Related Occupations	1,500	2,300	800	50%	1,000	100
	92 - Elementary Administration and Service Occupations	3,100	6,400	3,300	105%	3,700	500
	Power	158,600	290,300	131,700	83%	156,900	22,400

Figure 6: Estimated number of new jobs created and new people required by occupation



Operational, technical and engineering occupations

2.2.6 The table below shows the headline estimates for those occupations that sit within the remit of Energy & Utility Skills and its membership.

Figure 7: Estimated number of new jobs created and new people required in operational, technical and engineering occupations

		Total em	Total employment Ne		s created	New people required	
Skill level	Standard Occupation Classification	2024	2030	Number	% Growth	Total	Average per year
RQF 6 SCQF 9-10	21 - Science, Research, Engineering and Technology Professionals	31,300	59,600	28,300	91%	32,800	4,700
RQF 4-5 SCQF 7-8	31 - Science, Engineering and Technology Associate Professionals	8,600	17,500	8,900	104%	10,000	1,400
RQF 3 SCQF 6	51 - Skilled Agricultural and Related Trades	1,200	1,800	600	53%	1,000	100
	52 - Skilled Metal, Electrical and Electronic Trades	24,300	42,400	18,100	74%	22,100	3,200
	53 - Skilled Construction and Building Trades	2,400	5,200	2,800	113%	3,200	500
	81 - Process, Plant and Machine Operatives	7,600	16,700	9,100	119%	10,300	1,500
RQF 1	82 - Transport and Mobile Machine Drivers and Operatives	2,300	4,600	2,300	101%	2,900	400
SCQF 4	91 - Elementary Trades and Related Occupations	1,500	2,300	800	50%	1,000	100
	92 - Elementary Administration and Service Occupations	3,100	6,400	3,300	105%	3,700	500
	Power	82,300	156,500	74,200	90%	87,000	12,400

- 2.2.7 Focussing on these occupations alone, employment levels are forecast to increase from 82,300 in 2024 to 156,500 in 2030 an increase of 74,200 **new jobs** (up 90% on 2024 levels).
- 2.2.8 87,000 **new people** will be required to enter the workforce in these occupations for the first time (average of 12,400 per year).



3 Sub-industry estimates

3.1 Electricity Production (aggregate)

- 3.1.1 There are an estimated 88,900 people currently employed in the whole of the electricity production industry. This is forecast to increase by 117,200 jobs (+132%) to 206,100 by 2030.
- 3.1.2 Our headline estimates for electricity production for the period between 2024 and 2030 are:
 - 117,200 **new jobs** will be created (average of 16,700 per year)
 - 131,500 new people will be required to enter the industry's workforce for the first time (average of 18,800 per year)

Figure 8: Estimated number of new jobs created and new people required by sub-industry

	Total em	Total employment New jobs created			New people required		
Industry	2024	2030	Number	% Growth	Total	Average per year	
Coal/Gas/Oil/Hydrogen	3,500	7,000	3,500	100%	4,100	600	
Energy from waste/Biomass	7,700	30,000	22,300	290%	23,500	3,400	
Hydropower	2,500	2,500	0	0%	400	100	
Nuclear	45,000	45,000	0	0%	7,200	1,000	
Offshore Wind	17,500	56,500	39,000	223%	41,800	6,000	
Onshore Wind	5,000	5,000	0	0%	800	100	
Solar	7,000	19,000	12,000	171%	13,100	1,900	
Carbon capture, utilisation and storage	700	41,100	40,400	5,775%	40,500	5,800	
Electricity production	88,900	206,100	117,200	132%	131,500	18,800	



- 3.1.3 Across the whole of electricity production, all occupations are forecast to 3.1.7 increase their workforce size by 2030.
- 3.1.4 The occupations which are forecast to see the **largest increase in jobs** are:
 - 21 Science, Research, Engineering and Technology Professionals (26,000; 134%)
 - **52** Skilled Metal, Electrical and Electronic Trades (15,300; 134%)
 - 35 Business and Public Service Associate Professionals (14,900; 116%)
- 3.1.5 The occupations with the **highest** *number* of retirements are forecast to be:
 - 21 Science, Research, Engineering and Technology Professionals (2,800)
 - 11 Corporate Managers and Directors (2,200)
 - **52** Skilled Metal, Electrical and Electronic Trades (1,900)
- 3.1.6 However, the occupations with a **higher-than-average** *proportion* of **retirements** from the current workforce by 2030 are:
 - 51 Skilled Agricultural and Related Trades (35%)
 - 12 Other Managers and Proprietors (29%)
 - 11 Corporate Managers and Directors (29%)
 - 82 Transport and Mobile Machine Drivers and Operatives (24%)
 - 42 Secretarial and Related Occupations (19%)
 - 24 Business, Media and Public Service Professionals (18%)

- The occupations that will need to attract the **highest number of new people** into their workforce are:
 - 21 Science, Research, Engineering and Technology Professionals (28,800; 4,100 per year)
 - 52 Skilled Metal, Electrical and Electronic Trades (17,200; 2,500 per year)
 - 35 Business and Public Service Associate Professionals (16,500; 2,400 per year)



		Total em	ployment	New jobs	created	New peop	ole required
Skill level	Standard Occupation Classification	2024	2030	Number	% Growth	Total	Average per year
RQF 7-8	11 - Corporate Managers and Directors	7,800	18,100	10,300	132%	12,500	1,800
SCQF 11-12	12 - Other Managers and Proprietors	800	1,900	1,100	139%	1,300	200
RQF 6	21 - Science, Research, Engineering and Technology Professionals	19,400	45,400	26,000	134%	28,800	4,100
SCQF 9-10	24 - Business, Media and Public Service Professionals	8,100	18,600	10,500	130%	11,900	1,700
	31 - Science, Engineering and Technology Associate Professionals	6,100	14,500	8,400	138%	9,200	1,300
RQF 4-5	33 - Protective Service Occupations	200	400	200	130%	200	<100
SCQF 7-8	34 - Culture, Media and Sports Occupations	300	600	400	153%	400	<100
	35 - Business and Public Service Associate Professionals	12,900	27,800	14,900	116%	16,500	2,400
	41 - Administrative Occupations	5,200	12,300	7,100	137%	7,800	1,100
	42 - Secretarial and Related Occupations	800	1,900	1,100	139%	1,200	200
RQF 3 SCQF 6	51 - Skilled Agricultural and Related Trades	300	700	400	163%	500	<100
	52 - Skilled Metal, Electrical and Electronic Trades	11,400	26,800	15,300	134%	17,200	2,500
	53 - Skilled Construction and Building Trades	1,800	4,300	2,500	144%	2,800	400
RQF 2	71 - Sales Occupations	1,000	2,200	1,200	124%	1,300	200
SCQF 5	72 - Customer Service Occupations	2,300	5,400	3,100	133%	3,300	500
	81 - Process, Plant and Machine Operatives	6,400	15,200	8,800	136%	9,800	1,400
RQF 1	82 - Transport and Mobile Machine Drivers and Operatives	1,600	3,800	2,200	134%	2,600	400
SCQF 4	91 - Elementary Trades and Related Occupations	400	900	500	141%	600	100
	92 - Elementary Administration and Service Occupations	2,300	5,500	3,100	135%	3,400	500
	Electricity Production	88,900	206,100	117,200	132%	131,500	18,800

Figure 9: Estimated number of new jobs created and new people required by occupation



3.2 Electricity Production – Coal/Gas/Oil/Hydrogen

- 3.2.1 There are an estimated 3,500 people currently employed in the production of electricity through Coal/Gas/Oil/Hydrogen. This is forecast to increase by 3,500 by 2030 to 7,000.
- 3.2.2 Our headline estimates for Coal/Gas/Oil/Hydrogen for the period between 2024 and 2030 are:
 - **3**,500 **new jobs** will be created
 - Average of 500 per year
 - 4,100 **new people** will be required to enter the industry's workforce for the first time
 - Average of 600 per year

Figure 10: Estimated number of new jobs created and new people required by subindustry

	Total employment		New jobs o	created	New pe	ople required
Industry	2024	2030	Number	% Growth	Total	Av. per year
Electricity Production – Coal/Gas/Oil/Hydrogen	3,500	7,000	3,500	100%	4,100	600



		Total em	ployment	New job	Total employment New jobs created New per		
Skill level	Standard Occupation Classification	2024	2030	Number	% Growth	Total	Average per year
RQF 7-8	11 - Corporate Managers and Directors	300	600	300	97%	400	<100
SCQF 11-12	12 - Other Managers and Proprietors	0	100	100	100%	0	0
RQF 6	21 - Science, Research, Engineering and Technology Professionals	800	1,500	800	103%	900	100
SCQF 9-10	24 - Business, Media and Public Service Professionals	300	600	300	97%	400	<100
	31 - Science, Engineering and Technology Associate Professionals	200	500	300	104%	300	<100
RQF 4-5	33 - Protective Service Occupations	0	0	0	N/A	0	0
SCQF 7-8	34 - Culture, Media and Sports Occupations	0	0	0	N/A	0	0
	35 - Business and Public Service Associate Professionals	500	900	400	84%	500	<100
	41 - Administrative Occupations	200	400	200	110%	200	<100
	42 - Secretarial and Related Occupations	0	100	100	100%	0	0
RQF 3 SCQF 6	51 - Skilled Agricultural and Related Trades	0	0	0	N/A	0	0
	52 - Skilled Metal, Electrical and Electronic Trades	500	900	500	102%	500	<100
	53 - Skilled Construction and Building Trades	100	200	100	114%	100	<100
RQF 2	71 - Sales Occupations	0	100	100	75%	0	0
SCQF 5	72 - Customer Service Occupations	100	200	100	100%	100	<100
	81 - Process, Plant and Machine Operatives	300	500	300	108%	300	<100
RQF 1	82 - Transport and Mobile Machine Drivers and Operatives	100	100	100	117%	100	<100
SCQF 4	91 - Elementary Trades and Related Occupations	0	0	0	N/A	0	0
	92 - Elementary Administration and Service Occupations	100	200	100	111%	100	<100
	Electricity Production – Coal/Gas/Oil/Hydrogen	3,500	7,000	3,500	100%	4,100	600

Figure 11: Estimated number of new jobs created and new people required by occupation



3.3 Electricity Production – Energy from waste/Biomass

- 3.3.1 There are an estimated 7,700 people currently employed in energy from waste/biomass. This is forecast to increase by 22,300 jobs (+290%) to 30,000 by 2030.
- 3.3.2 Estimates of current employment were provided by Office of National Statistics – Environmental Goods and Services Sector Estimates, Low Carbon and Renewable Energy Economy Survey, Business Register Employment Survey. Estimates of future employment are taken from UK Energy Jobs: Seize the Opportunity, X-Academy, 2023.
- 3.3.3 Our headline estimates for energy from waste/biomass for the period between 2024 and 2030 are:
 - 22,300 **new jobs** will be created
 - Average of 3,200 per year
 - 23,500 new people will be required to enter the industry's workforce for the first time
 - Average of 3,400 per year

Figure 12: Estimated number of new jobs created and new people required by subindustry

	Total employment New job		New jobs o	New jobs created		e required
Industry	2024	2030	Number	% Growth	Total	Average per year
Electricity Production – Energy from waste/Biomass	7,700	30,000	22,300	290%	23,500	3,400



- 3.3.4 Across energy from waste/biomass, all occupations that have a current workforce (18 out the 19 occupational groups) are forecast to increase their workforce size by 2030.
- 3.3.5 The occupations which are forecast to see the **largest increase in jobs** are:
 - 21 Science, Research, Engineering and Technology Professionals (+4,900; +293%)
 - 52 Skilled Metal, Electrical and Electronic Trades (+2,900; +293%)
 - 35 Business and Public Service Associate Professionals (+2,900; +265%)
- 3.3.6 The occupations with the **highest** *number* of retirements are forecast to be:
 - 11 Corporate Managers and Directors (200)
 - 21 Science, Research, Engineering and Technology Professionals (200)
 - **52** Skilled Metal, Electrical and Electronic Trades (200)
- 3.3.7 However, the occupations with a **higher-than-average** *proportion* of **retirements** from the current workforce by 2030 are:
 - 51 Skilled Agricultural and Related Trades (35%)
 - 11 Corporate Managers and Directors (29%)
 - 12 Other Managers and Proprietors (29%)
 - 82 Transport and Mobile Machine Drivers and Operatives (24%)
 - 42 Secretarial and Related Occupations (20%)
 - 53 Skilled Construction and Building Trades (18%)
 - 24 Business, Media and Public Service Professionals (18%)

- 3.3.8 The occupations that will need to attract the **highest number of new people** into their workforce are:
 - 21 Science, Research, Engineering and Technology Professionals (5,200; 700 per year)
 - 35 Business and Public Service Associate Professionals (3,100; 400 per year)
 - 52 Skilled Metal, Electrical and Electronic Trades (3,100; 400 per year)



		Total em	ployment	New jobs	s created	New peop	le required
Skill level	Standard Occupation Classification	2024	2030	Number	% Growth	Total	Average per year
RQF 7-8	11 - Corporate Managers and Directors	700	2,600	2,000	287%	2,100	300
SCQF 11-12	12 - Other Managers and Proprietors	100	300	200	300%	200	0
RQF 6	21 - Science, Research, Engineering and Technology Professionals	1,700	6,600	4,900	293%	5,200	700
SCQF 9-10	24 - Business, Media and Public Service Professionals	700	2,700	2,000	286%	2,100	300
	31 - Science, Engineering and Technology Associate Professionals	500	2,100	1,600	300%	1,700	200
RQF 4-5	33 - Protective Service Occupations	0	100	0		0	0
SCQF 7-8	34 - Culture, Media and Sports Occupations	0	100	100	350%	100	0
	35 - Business and Public Service Associate Professionals	1,100	4,100	2,900	265%	3,100	400
	41 - Administrative Occupations	500	1,800	1,300	298%	1,400	200
	42 - Secretarial and Related Occupations	100	300	200	300%	200	0
RQF 3 SCQF 6	51 - Skilled Agricultural and Related Trades	0	100	100	400%	100	0
	52 - Skilled Metal, Electrical and Electronic Trades	1,000	3,900	2,900	293%	3,100	400
	53 - Skilled Construction and Building Trades	200	600	500	313%	500	100
RQF 2	71 - Sales Occupations	100	300	200	288%	200	0
SCQF 5	72 - Customer Service Occupations	200	800	600	295%	600	100
	81 - Process, Plant and Machine Operatives	600	2,200	1,700	295%	1,700	200
RQF 1	82 - Transport and Mobile Machine Drivers and Operatives	100	600	400	293%	400	100
SCQF 4	91 - Elementary Trades and Related Occupations	0	100	100	333%	100	0
	92 - Elementary Administration and Service Occupations	200	800	600	300%	600	100
	Electricity Production – Energy from waste/Biomass	7,700	30,000	22,300	290%	23,500	3,400

Figure 13: Estimated number of new jobs created and new people required by occupation



3.4 Electricity Production – Hydropower

- 3.4.1 There are an estimated 2,500 people currently employed in hydropower. This is forecast to remain unchanged by 2030.
- 3.4.2 Estimates of current employment were provided by Office of National Statistics – Environmental Goods and Services Sector Estimates, Low Carbon and Renewable Energy Economy Survey, Business Register Employment Survey.
- 3.4.3 Our headline estimates for hydropower for the period between 2024 and 2030 are:
 - 0 new jobs will be created
 - 400 new people will be required to enter the industry's workforce for the first time

Figure 14: Estimated number of new jobs created and new people required by subindustry

	Total em	ployment	New jobs created		New people require	
Industry	2024	2030	Number	% Growth	Total	Av. per year
Electricity Production – Hydropower	2,500	2,500	0	0%	400	100



		Total em	ployment	New jobs	s created	New peo	ple required
Skill level	Standard Occupation Classification	2024	2030	Number	% Growth	Total	Average per year
RQF 7-8	11 - Corporate Managers and Directors	200	200	0		100	<100
SCQF 11-12	12 - Other Managers and Proprietors	0	0	0		0	0
RQF 6	21 - Science, Research, Engineering and Technology Professionals	600	600	0		100	<100
SCQF 9-10	24 - Business, Media and Public Service Professionals	200	200	0		0	0
	31 - Science, Engineering and Technology Associate Professionals	200	200	0		0	0
RQF 4-5	33 - Protective Service Occupations	0	0	0		0	0
SCQF 7-8	34 - Culture, Media and Sports Occupations	0	0	0		0	0
	35 - Business and Public Service Associate Professionals	400	300	0		0	0
	41 - Administrative Occupations	200	200	0		0	0
	42 - Secretarial and Related Occupations	0	0	0		0	0
RQF 3 SCQF 6	51 - Skilled Agricultural and Related Trades	0	0	0		0	0
	52 - Skilled Metal, Electrical and Electronic Trades	300	300	0		100	<100
	53 - Skilled Construction and Building Trades	100	100	0		0	0
RQF 2	71 - Sales Occupations	0	0	0		0	0
SCQF 5	72 - Customer Service Occupations	100	100	0		0	0
	81 - Process, Plant and Machine Operatives	200	200	0		0	0
RQF 1	82 - Transport and Mobile Machine Drivers and Operatives	100	100	0		0	0
SCQF 4	91 - Elementary Trades and Related Occupations	0	0	0		0	0
	92 - Elementary Administration and Service Occupations	100	100	0		0	0
	Electricity Production – Hydropower	2,500	2,500	0		400	100

Figure 15: Estimated number of new jobs created and new people required by occupation



3.5 Electricity Production – Nuclear

- 3.5.1 There are an estimated 45,000 people currently employed in nuclear. This is forecast this will remain unchanged by 2030.
- 3.5.2 Estimates of current employment were provided by Office of National Statistics – Environmental Goods and Services Sector Estimates, Low Carbon and Renewable Energy Economy Survey, Business Register Employment Survey.
- 3.5.3 Our headline estimates for nuclear for the period between 2024 and 2030 are:
 - 0 new jobs will be created
 - 7,200 new people will be required to enter the industry's workforce for the first time
 - Average of 1,000 per year

Figure 16: Estimated number of new jobs created and new people required by subindustry

	Total employment		New jobs	created	New peop	le required
Industry	2024	2030	Number	% Growth	Total	Average per year
Electricity Production – Nuclear	45,000	45,000	0	0%	7,200	1,000



- 3.5.4 Although the total headcount in nuclear is forecast to remain unchanged 3.5.7 between 2024 and 2030, the occupational profile of the workforce is expected to change slightly with three occupations forecast to increase their workforce and one forecast to reduce it:
 - 21 Science, Research, Engineering and Technology Professionals (+100; +1%)
 - 31 Science, Engineering and Technology Associate Professionals (+100; +1%)
 - 41 Administrative Occupations (+100; +2%)
 - 35 Business and Public Service Associate Professionals (-400; -7%)
- 3.5.5 The occupations with the **highest** *number* of retirements are forecast to be:
 - 21 Science, Research, Engineering and Technology Professionals (1,400)
 - 11 Corporate Managers and Directors (1,100)
 - 52 Skilled Metal, Electrical and Electronic Trades (1,000)
- 3.5.6 However, the occupations with a **higher-than-average** *proportion* of **retirements** from the current workforce by 2030 are:
 - 51 Skilled Agricultural and Related Trades (36%)
 - 12 Other Managers and Proprietors (29%)
 - 11 Corporate Managers and Directors (29%)
 - 82 Transport and Mobile Machine Drivers and Operatives (24%)
 - 42 Secretarial and Related Occupations (19%)
 - 24 Business, Media and Public Service Professionals (18%)

- The occupations that will need to attract the **highest number of new people** into their workforce are:
 - 21 Science, Research, Engineering and Technology Professionals (1,500; 200 per year)
 - 11 Corporate Managers and Directors (1,100; 200 per year)
 - 52 Skilled Metal, Electrical and Electronic Trades (1,000; 100 per year)



		Total em	oloyment	New jobs	created	New peo	ole required
Skill level	Standard Occupation Classification	2024	2030	Number	% Growth	Total	Average per year
RQF 7-8	11 - Corporate Managers and Directors	4,000	4,000	0		1,100	200
SCQF 11-12	12 - Other Managers and Proprietors	400	400	0		100	<100
RQF 6	21 - Science, Research, Engineering and Technology Professionals	9,800	9,900	100	1%	1,500	200
SCQF 9-10	24 - Business, Media and Public Service Professionals	4,100	4,100	0		700	100
	31 - Science, Engineering and Technology Associate Professionals	3,100	3,200	100	3%	500	100
RQF 4-5 SCQF 7-8	33 - Protective Service Occupations	100	100	0		0	0
	34 - Culture, Media and Sports Occupations	100	100	0		0	0
	35 - Business and Public Service Associate Professionals	6,500	6,100	-400	-7%	400	100
	41 - Administrative Occupations	2,600	2,700	100	2%	400	100
	42 - Secretarial and Related Occupations	400	400	0		100	<100
RQF 3 SCQF 6	51 - Skilled Agricultural and Related Trades	100	100	0		100	<100
	52 - Skilled Metal, Electrical and Electronic Trades	5,800	5,800	0		1,000	100
	53 - Skilled Construction and Building Trades	900	900	0		200	<100
RQF 2	71 - Sales Occupations	500	500	0		0	0
SCQF 5	72 - Customer Service Occupations	1,200	1,200	0		100	<100
	81 - Process, Plant and Machine Operatives	3,300	3,300	0		600	100
RQF 1	82 - Transport and Mobile Machine Drivers and Operatives	800	800	0		200	<100
SCQF 4	91 - Elementary Trades and Related Occupations	200	200	0		0	0
	92 - Elementary Administration and Service Occupations	1,200	1,200	0		200	<100
	Electricity Production – Nuclear	45,000	45,000	0	0%	7,200	1,000

Figure 17: Estimated number of new jobs created and new people required by occupation



3.6 Electricity Production – Offshore Wind

- 3.6.1 There are an estimated 17,500 people currently employed in offshore wind. This is forecast to increase by 39,000 jobs (+223%) to 56,500 by 2030.
- 3.6.2 Estimates of current and future employment are taken from *Offshore Wind Skills Intelligence Report*, OWIC, June 2023.
- 3.6.3 Our headline estimates for offshore wind for the period between 2024 and 2030 are:
 - **39,000 new jobs** will be created
 - Average of 5,600 per year
 - 41,800 new people will be required to enter the industry's workforce for the first time
 - Average of 6,000 per year

Figure 18: Estimated number of new jobs created and new people required by subindustry

	Total employment N		New jobs o	created	New pec	ple required
Industry	2024	2030	Number	% Growth	Total	Average per year
Electricity Production – Offshore wind	17,500	56,500	39,000	223%	41,800	6,000



- 3.6.4 Across offshore wind, all occupations that have a current workforce (18 out the 19 occupational groups) are forecast to increase their workforce size by 2030.
- 3.6.5 The occupations which are forecast to see the **largest increase in jobs** are:
 - 21 Science, Research, Engineering and Technology Professionals (+8,600; +226%)
 - 35 Business and Public Service Associate Professionals (+5,100; +201%)
 - 52 Skilled Metal, Electrical and Electronic Trades (+5,100; +227%)
- 3.6.6 The occupations with the **highest** *number* of retirements are forecast to be:
 - 21 Science, Research, Engineering and Technology Professionals (500)
 - **52** Skilled Metal, Electrical and Electronic Trades (400)
- 3.6.7 However, the occupations with a **higher-than-average** *proportion* of **retirements** from the current workforce by 2030 are:
 - 51 Skilled Agricultural and Related Trades (34%)
 - 12 Other Managers and Proprietors (29%)
 - 11 Corporate Managers and Directors (29%)
 - 82 Transport and Mobile Machine Drivers and Operatives (24%)
 - 42 Secretarial and Related Occupations (19%)
 - 24 Business, Media and Public Service Professionals (18%)

- 3.6.8 The occupations that will need to attract the **highest number of new people** into their workforce are:
 - 21 Science, Research, Engineering and Technology Professionals (9,200; 1,300 per year)
 - 52 Skilled Metal, Electrical and Electronic Trades (5,500; 800 per year)
 - 35 Business and Public Service Associate Professionals (5,400; 800 per year)



		Total em	ployment	New jobs	s created	New peo	ple required
Skill level	Standard Occupation Classification	2024	2030	Number	% Growth	Total	Average per year
RQF 7-8	11 - Corporate Managers and Directors	1,500	5,000	3,400	222%	3,900	600
SCQF 11-12	12 - Other Managers and Proprietors	200	500	400	225%	400	100
RQF 6	21 - Science, Research, Engineering and Technology Professionals	3,800	12,500	8,600	226%	9,200	1,300
SCQF 9-10	24 - Business, Media and Public Service Professionals	1,600	5,100	3,500	221%	3,800	500
	31 - Science, Engineering and Technology Associate Professionals	1,200	4,000	2,800	233%	2,900	400
RQF 4-5	33 - Protective Service Occupations	0	100	100	233%	100	<50
SCQF 7-8	34 - Culture, Media and Sports Occupations	100	200	100	240%	100	<50
	35 - Business and Public Service Associate Professionals	2,500	7,600	5,100	201%	5,400	800
	41 - Administrative Occupations	1,000	3,400	2,300	229%	2,500	400
	42 - Secretarial and Related Occupations	200	500	400	225%	400	100
RQF 3 SCQF 6	51 - Skilled Agricultural and Related Trades	100	200	100	260%	100	<50
	52 - Skilled Metal, Electrical and Electronic Trades	2,200	7,300	5,100	227%	5,500	800
	53 - Skilled Construction and Building Trades	400	1,200	800	237%	900	100
RQF 2	71 - Sales Occupations	200	600	400	211%	400	100
SCQF 5	72 - Customer Service Occupations	500	1,500	1,000	224%	1,100	200
	81 - Process, Plant and Machine Operatives	1,300	4,200	2,900	231%	3,100	400
RQF 1	82 - Transport and Mobile Machine Drivers and Operatives	300	1,000	700	225%	800	100
SCQF 4	91 - Elementary Trades and Related Occupations	100	200	200	243%	200	<50
	92 - Elementary Administration and Service Occupations	500	1,500	1,000	226%	1,100	200
	Electricity Production – Offshore wind	17,500	56,500	39,000	223%	41,800	6,000

Figure 19: Estimated number of new jobs created and new people required by occupation



3.7 Electricity Production – Onshore Wind

- 3.7.1 There are an estimated 5,000 people currently employed in onshore wind. This is forecast to remain unchanged by 2030.
- 3.7.2 Estimates of current employment are taken from ONS/LCREE.
- 3.7.3 Our headline estimates for onshore wind for the period between 2024 and 2030 are:
 - 0 new jobs will be created
 - 800 new people will be required to enter the industry's workforce for the first time
 - Average of 100 per year

Figure 20: Estimated number of new jobs created and new people required by subindustry

- 3.7.6 However, the occupations with a **higher-than-average** *proportion* of **retirements** from the current workforce by 2030 are:
 - 51 Skilled Agricultural and Related Trades (30%)
 - 11 Corporate Managers and Directors (29%)
 - 12 Other Managers and Proprietors (28%)
 - 42 Secretarial and Related Occupations (23%)
 - 82 Transport and Mobile Machine Drivers and Operatives (22%)
 - 53 Skilled Construction and Building Trades (19%)
- 3.7.7 The occupation that will need to attract the highest number of new people into its workforce 21 Science, Research, Engineering and Technology Professionals (200; <50 per year).</p>

	Total em	ployment	New jobs created		New people required		
Industry	2024	2030	Number	% Growth	Total	Average per year	
Electricity Production – Onshore wind	5,000	5,000	0	0%	800	100	

- 3.7.4 The total headcount in onshore wind is forecast to remain unchanged between 2024 and 2030.
- 3.7.5 The occupation with the **highest** *number* of retirements is forecast to be 21 Science, Research, Engineering and Technology Professionals.



		Total em	oloyment	New jobs	created	New people required	
Skill level	Standard Occupation Classification	2024	2030	Number	% Growth	Total	Average per year
RQF 7-8	11 - Corporate Managers and Directors	400	400	0		100	<50
SCQF 11-12	12 - Other Managers and Proprietors	0	0	0		0	0
RQF 6	21 - Science, Research, Engineering and Technology Professionals	1,100	1,100	0		200	<50
SCQF 9-10	24 - Business, Media and Public Service Professionals	500	500	0		100	<50
	31 - Science, Engineering and Technology Associate Professionals	400	400	0		0	0
RQF 4-5	33 - Protective Service Occupations	0	0	0		0	0
SCQF 7-8	34 - Culture, Media and Sports Occupations	0	0	0		0	0
	35 - Business and Public Service Associate Professionals	700	700	0		0	0
	41 - Administrative Occupations	300	300	0		0	0
	42 - Secretarial and Related Occupations	0	0	0		0	0
RQF 3 SCQF 6	51 - Skilled Agricultural and Related Trades	0	0	0		0	0
	52 - Skilled Metal, Electrical and Electronic Trades	700	700	0		100	<50
	53 - Skilled Construction and Building Trades	100	100	0		0	0
RQF 2	71 - Sales Occupations	100	100	0		0	0
SCQF 5	72 - Customer Service Occupations	100	100	0		0	0
	81 - Process, Plant and Machine Operatives	400	400	0		100	<50
RQF 1	82 - Transport and Mobile Machine Drivers and Operatives	100	100	0		0	0
SCQF 4	91 - Elementary Trades and Related Occupations	0	0	0		0	0
	92 - Elementary Administration and Service Occupations	100	100	0		0	0
	Electricity Production – Onshore wind	5,000	5,000	0		800	100

Figure 21: Estimated number of new jobs created and new people required by occupation



3.8 Electricity Production – Solar

- 3.8.1 There are an estimated 7,000 people currently employed in solar. This is forecast to increase by 12,000 jobs (+171%) to 19,000 by 2030.
- 3.8.2 Estimates of current employment are taken from ONS/LCREE. Estimates of future employment are taken from *Solar's role in addressing the energy crisis*, Solar Energy UK, March 2022.
- 3.8.3 Our headline estimates for solar for the period between 2024 and 2030 are:
 - 12,000 **new jobs** will be created
 - Average of 1,700 per year
 - 13,100 new people will be required to enter the industry's workforce for the first time
 - Average of 1,900 per year

Figure 22: Estimated number of new jobs created and new people required by subindustry

	Total employment		New jobs created		New people required	
Industry	2024	2030	Number	% Growth	Total	Average per year
Electricity Production – Solar	7,000	19,000	12,000	171%	13,100	1,900



- 3.8.4 Across solar, all occupations that have a current workforce (18 out the 19 occupational groups) are forecast to increase their workforce size by 2030.
- 3.8.5 The occupations which are forecast to see the **largest increase in jobs** are:
 - 21 Science, Research, Engineering and Technology Professionals (+2,700; +174%)
 - 35 Business and Public Service Associate Professionals (+1,600; +153%)
 - **52** Skilled Metal, Electrical and Electronic Trades (+1,600; +174%)
- 3.8.6 The occupations with the **highest** *number* of retirements are forecast to be:
 - 11 Corporate Managers and Directors (200)
 - 21 Science, Research, Engineering and Technology Professionals (200)
- 3.8.7 However, the occupations with a **higher-than-average** *proportion* of **retirements** from the current workforce by 2030 are:
 - 51 Skilled Agricultural and Related Trades (35%)
 - 12 Other Managers and Proprietors (30%)
 - 11 Corporate Managers and Directors (29%)
 - 82 Transport and Mobile Machine Drivers and Operatives (25%)
 - 24 Business, Media and Public Service Professionals (18%)

- 3.8.8 The occupations that will need to attract the **highest number of new people** into their workforce are:
 - 21 Science, Research, Engineering and Technology Professionals (2,900; 400 per year)
 - 35 Business and Public Service Associate Professionals (1,700; 200 per year)
 - 52 Skilled Metal, Electrical and Electronic Trades (1,700; 200 per year)



		Total em	ployment	New job	s created	New peo	ple required
Skill level	Standard Occupation Classification	2024	2030	Number	% Growth	Total	Average per year
RQF 7-8	11 - Corporate Managers and Directors	600	1,700	1,100	174%	1,200	200
SCQF 11-12	12 - Other Managers and Proprietors	100	200	100	183%	100	0
RQF 6	21 - Science, Research, Engineering and Technology Professionals	1,500	4,200	2,700	174%	2,900	400
SCQF 9-10	24 - Business, Media and Public Service Professionals	600	1,700	1,100	167%	1,200	200
	31 - Science, Engineering and Technology Associate Professionals	500	1,300	900	179%	900	100
RQF 4-5	33 - Protective Service Occupations	0	0	0		0	0
SCQF 7-8	34 - Culture, Media and Sports Occupations	0	100	<100	200%	0	0
	35 - Business and Public Service Associate Professionals	1,000	2,600	1,600	153%	1,700	200
	41 - Administrative Occupations	400	1,100	700	176%	800	100
	42 - Secretarial and Related Occupations	100	200	100	183%	100	0
RQF 3 SCQF 6	51 - Skilled Agricultural and Related Trades	0	100	<100	200%	0	0
	52 - Skilled Metal, Electrical and Electronic Trades	900	2,500	1,600	174%	1,700	200
	53 - Skilled Construction and Building Trades	100	400	300	186%	300	0
RQF 2	71 - Sales Occupations	100	200	100	150%	100	0
SCQF 5	72 - Customer Service Occupations	200	500	300	178%	300	0
	81 - Process, Plant and Machine Operatives	500	1,400	900	175%	1,000	100
RQF 1	82 - Transport and Mobile Machine Drivers and Operatives	100	400	200	169%	300	0
SCQF 4	91 - Elementary Trades and Related Occupations	0	100	<100	167%	100	0
	92 - Elementary Administration and Service Occupations	200	500	300	178%	300	0
	Electricity Production – Solar	7,000	19,000	12,000	171%	13,100	1,900

Figure 23: Estimated number of new jobs created and new people required by occupation



3.9 Electricity Production – Carbon capture, utilisation and storage (CCUS)

- 3.9.1 There are an estimated 700 people currently employed in CCUS. This is forecast to increase by 40,400 jobs (+5,775%) to 41,100 by 2030.
- 3.9.2 Estimates of current employment are taken from ONS/LCREE. Estimates of future employment are taken from *CCSA Workforce & Skills Position Paper*, Carbon Capture and Storage Association, July 2023.
- 3.9.3 Our headline estimates for CCUS for the period between 2024 and 2030 are:
 - 40,400 **new jobs** will be created
 - Average of 5,800 per year
 - 40,500 new people will be required to enter the industry's workforce for the first time
 - Average of 5,800 per year

Figure 24: Estimated number of new jobs created and new people required by subindustry

	Total employment		New jobs (created		people uired
Industry	2024	2030	Number	% Growth	Total	Average per year
Electricity Production – CCUS	700	41,100	40,400	5,775%	40,500	5,800



- 3.9.4 Across CCUS, all occupations are forecast to increase their workforce size by 2030. The occupations which are forecast to see the **largest increase in jobs** are:
 - 21 Science, Research, Engineering and Technology Professionals (8,900; 5,938%)
 - 35 Business and Public Service Associate Professionals (5,400; 5,448%)
 - 52 Skilled Metal, Electrical and Electronic Trades (5,200; 5,244%)
- 3.9.5 Due to the small size of the current workforce, very few retirements are expected by 2030. However, the occupations with a **high** *proportion* of **retirements** from the current workforce by 2030 are:
 - 12 Other Managers and Proprietors (30%)
 - 11 Corporate Managers and Directors (28%)
 - **82** Transport and Mobile Machine Drivers and Operatives (20%)
 - 24 Business, Media and Public Service Professionals (20%)
 - 42 Secretarial and Related Occupations (20%)
- 3.9.6 The occupations that will need to attract the **highest number of new people** into their workforce are:
 - 21 Science, Research, Engineering and Technology Professionals (8,900; 1,300 per year)
 - 35 Business and Public Service Associate Professionals (5,500; 800 per year)
 - 52 Skilled Metal, Electrical and Electronic Trades (5,300; 800 per year)



		Total employment		New jobs created		New people required	
Skill level	Standard Occupation Classification	2024	2030	Number	% Growth	Total	Average per year
RQF 7-8 SCQF 11-12	11 - Corporate Managers and Directors	100	3,600	3,500	5,911%	3,600	500
	12 - Other Managers and Proprietors	0	400	400	3,675%	400	100
RQF 6 SCQF 9-10	21 - Science, Research, Engineering and Technology Professionals	200	9,100	8,900	5,938%	8,900	1,300
	24 - Business, Media and Public Service Professionals	100	3,700	3,600	6,076%	3,700	500
RQF 4-5 SCQF 7-8	31 - Science, Engineering and Technology Associate Professionals	100	2,900	2,900	5,705%	2,900	400
	33 - Protective Service Occupations	0	100	100	N/A	100	<50
	34 - Culture, Media and Sports Occupations	0	100	100	N/A	100	<50
	35 - Business and Public Service Associate Professionals	100	5,500	5,400	5,448%	5,500	800
RQF 3 SCQF 6	41 - Administrative Occupations	0	2,400	2,400	6,023%	2,400	300
	42 - Secretarial and Related Occupations	0	400	400	3,675%	400	100
	51 - Skilled Agricultural and Related Trades	0	100	100	N/A	100	<50
	52 - Skilled Metal, Electrical and Electronic Trades	100	5,300	5,200	5,244%	5,300	800
	53 - Skilled Construction and Building Trades	0	900	800	8,458%	800	100
RQF 2 SCQF 5	71 - Sales Occupations	0	400	400	4,200%	400	100
	72 - Customer Service Occupations	0	1,100	1,100	5,338%	1,100	200
RQF 1 SCQF 4	81 - Process, Plant and Machine Operatives	100	3,000	3,000	5,962%	3,000	400
	82 - Transport and Mobile Machine Drivers and Operatives	0	800	700	7,467%	700	100
	91 - Elementary Trades and Related Occupations	0	200	200	N/A	200	<50
	92 - Elementary Administration and Service Occupations	0	1,100	1,100	5,367%	1,100	200
Electricity Production – CCUS		700	41,100	40,400	5,775%	40,500	5,800

Figure 25: Estimated number of new jobs created and new people required by occupation



3.10 Transmission of electricity

- 3.10.1 This sub-industry includes the operation of transmission systems that convey the electricity from the generation facility to the distribution system.
- 3.10.2 There are an estimated 4,500 people currently employed in the transmission of electricity. This is forecast to increase by 2,000 jobs (+44%) to 6,500 by 2030.
- 3.10.3 Estimates of current employment were provided by Lightcast. Estimates of future employment were based on estimates contained in *Electricity Networks Strategic Framework: Enabling a secure, net zero energy system* (Ofgem, 2022).
- 3.10.4 Our headline estimates for the transmission of electricity for the period between 2024 and 2030 are:
 - 2,000 **new jobs** will be created
 - Average of 800 per year
 - 3,000 new people will be required to enter the industry's workforce for the first time
 - Average of 400 per year

Figure 26: Estimated number of new jobs created and new people required by subindustry

	Total employment		New jobs o	created	New peop	le required
Industry	2024	2030	Number	% Growth	Total	Average per year
Transmission of electricity	4,500	6,500	2,000	44%	3,000	400



- 3.10.5 Across transmission of electricity, 11 of the 19 occupational groups are forecast to increase their workforce size by 2030 none are forecast to reduce their headcount.
- 3.10.6 The occupations which are forecast to see the **largest increase in jobs** are:
 - 11 Corporate Managers and Directors (+800; +45%)
 - 52 Skilled Metal, Electrical and Electronic Trades (+400; +41%)
 - 41 Administrative Occupations (+300; +48%)
- 3.10.7 The occupations with the **highest** *number* of retirements are forecast to be:
 - 11 Corporate Managers and Directors (500)
 - **52** Skilled Metal, Electrical and Electronic Trades (200)
- 3.10.8 However, the occupations with a **higher-than-average** *proportion* of **retirements** from the current workforce by 2030 are:
 - 51 Skilled Agricultural and Related Trades (36%)
 - 11 Corporate Managers and Directors (29%)
 - 12 Other Managers and Proprietors (29%)
- 3.10.9 The occupations that will need to attract the **highest number of new people** into their workforce are:
 - 11 Corporate Managers and Directors (1,200; 200 per year)
 - 52 Skilled Metal, Electrical and Electronic Trades (600; 100 per year)



		Total em	Total employment		s created	New peop	le required
Skill level	Standard Occupation Classification	2024	2030	Number	% Growth	Total	Average per year
RQF 7-8	11 - Corporate Managers and Directors	1,700	2,400	800	45%	1,200	200
SCQF 11-12	12 - Other Managers and Proprietors	300	400	100	48%	200	<100
RQF 6	21 - Science, Research, Engineering and Technology Professionals	100	100	<100	43%	0	0
SCQF 9-10	24 - Business, Media and Public Service Professionals	100	200	100	42%	100	<100
	31 - Science, Engineering and Technology Associate Professionals	100	100	<100	29%	0	0
RQF 4-5	33 - Protective Service Occupations	0	0	0		0	0
SCQF 7-8	34 - Culture, Media and Sports Occupations	0	0	0		0	0
	35 - Business and Public Service Associate Professionals	300	400	100	48%	200	<100
	41 - Administrative Occupations	600	900	300	48%	400	100
	42 - Secretarial and Related Occupations	0	0	0		0	0
RQF 3 SCQF 6	51 - Skilled Agricultural and Related Trades	100	200	100	46%	100	<100
	52 - Skilled Metal, Electrical and Electronic Trades	1,000	1,500	400	41%	600	100
	53 - Skilled Construction and Building Trades	0	0	0		0	0
RQF 2	71 - Sales Occupations	0	0	0		0	0
SCQF 5	72 - Customer Service Occupations	0	0	0		0	0
	81 - Process, Plant and Machine Operatives	200	300	100	43%	100	<100
RQF 1	82 - Transport and Mobile Machine Drivers and Operatives	0	0	0		0	0
SCQF 4	91 - Elementary Trades and Related Occupations	0	0	0		0	0
	92 - Elementary Administration and Service Occupations	0	100	<100	50%	0	0
	Power		6,500	2,000	44%	3,000	400

Figure 27: Estimated number of new jobs created and new people required by occupation



3.11 Distribution of electricity

- 3.11.1 This sub-industry includes the operation of distribution systems (e.g. lines, poles, meters, and wiring) that convey electric power received from the generation facility or the transmission system to the final consumer.
- 3.11.2 There are an estimated 47,000 people currently employed in the distribution of electricity. This is forecast to increase by 8,600 jobs (+18%) to 55,600 by 2030.
- 3.11.3 Estimates of current employment were provided by Lightcast. Estimates of future employment were based on estimates contained in *Electricity Networks Strategic Framework: Enabling a secure, net zero energy system* (Ofgem, 2022).
- 3.11.4 Our headline estimates for the distribution of electricity for the period between 2024 and 2030 are:
 - 8,600 **new jobs** will be created
 - Average of 1,200 per year
 - 15,700 new people will be required to enter the industry's workforce for the first time
 - Average of 2,200 per year

Figure 28: Estimated number of new jobs created and new people required by subindustry

	Total employment		New jobs (created	New peopl	e required
Industry	2024	2030	Number	% Growth	Total	Average per year
Distribution of electricity	47,000	55,600	8,600	18%	15,700	2,200



- 3.11.5 Across distribution of electricity, 11 of the 19 occupational groups are forecast to increase their workforce size by 2030 none are forecast to reduce their headcount.
- 3.11.6 The occupations which are forecast to see the **largest increase in jobs** are:
 - 21 Science, Research, Engineering and Technology Professionals (+1,700; +19%)
 - **52** Skilled Metal, Electrical and Electronic Trades (+1,600; +18%)
 - 41 Administrative Occupations (+1,200; +18%)
- 3.11.7 The occupations with the **highest** *number* of retirements are forecast to be:
 - 52 Skilled Metal, Electrical and Electronic Trades (1,500)
 - 21 Science, Research, Engineering and Technology Professionals (1,300)
- 3.11.8 However, the occupations with a **higher-than-average** *proportion* of **retirements** from the current workforce by 2030 are:
 - 51 Skilled Agricultural and Related Trades (36%)
 - 11 Corporate Managers and Directors (29%)
 - 12 Other Managers and Proprietors (29%)
 - 82 Transport and Mobile Machine Drivers and Operatives (24%)
 - 42 Secretarial and Related Occupations (19%)
 - 24 Business, Media and Public Service Professionals (18%)
 - 53 Skilled Construction and Building Trades (17%)
 - 52 Skilled Metal, Electrical and Electronic Trades (17%)

- 3.11.9 The occupations that will need to attract the **highest number of new people** into their workforce are:
 - 52 Skilled Metal, Electrical and Electronic Trades (3,200; 500 per year)
 - 21 Science, Research, Engineering and Technology Professionals (2,900; 400 per year)
 - 41 Administrative Occupations (2,000; 300 per year)



		Total employment		New jobs created		New people requi	
Skill level	Standard Occupation Classification	2024	2030	Number	% Growth	Total	Average per year
RQF 7-8	11 - Corporate Managers and Directors	1,600	1,900	300	20%	800	100
SCQF 11-12	12 - Other Managers and Proprietors	1,400	1,500	200	15%	600	100
RQF 6	21 - Science, Research, Engineering and Technology Professionals	9,000	10,600	1,700	19%	2,900	400
SCQF 9-10	24 - Business, Media and Public Service Professionals	4,100	4,800	800	19%	1,500	200
	31 - Science, Engineering and Technology Associate Professionals	1,700	2,000	300	18%	500	100
RQF 4-5	33 - Protective Service Occupations	100	100	<100	19%	<100	<100
SCQF 7-8	34 - Culture, Media and Sports Occupations	0	0	0		0	0
	35 - Business and Public Service Associate Professionals	2,400	2,900	500	19%	800	100
	41 - Administrative Occupations	6,500	7,700	1,200	18%	2,000	300
5050	42 - Secretarial and Related Occupations	600	700	100	17%	200	<100
RQF 3 SCQF 6	51 - Skilled Agricultural and Related Trades	700	900	100	19%	400	100
	52 - Skilled Metal, Electrical and Electronic Trades	9,200	10,800	1,600	18%	3,200	500
	53 - Skilled Construction and Building Trades	<100	<100	<100	19%	<100	<100
RQF 2	71 - Sales Occupations	2,300	2,700	400	19%	700	100
SCQF 5	72 - Customer Service Occupations	5,300	6,300	1,000	18%	1,400	200
	81 - Process, Plant and Machine Operatives	600	600	100	17%	200	<100
RQF 1	82 - Transport and Mobile Machine Drivers and Operatives	400	500	100	16%	200	<100
SCQF 4	91 - Elementary Trades and Related Occupations	800	900	100	19%	300	<100
	92 - Elementary Administration and Service Occupations	400	500	100	19%	100	<100
	Power	47,000	55,600	8,600	18%	15,700	2,200

Figure 29: Estimated number of new jobs created and new people required by occupation



3.12 Construction of electricity projects

- 3.12.1 This sub-industry includes the construction of distribution lines for electricity and telecommunications and related buildings and structures.
- 3.12.2 There are an estimated 10,400 people currently employed in the construction of electricity projects. This is forecast to increase by 3,300 jobs (+32%) to 13,700 by 2030.
- 3.12.3 Estimates of current employment were provided by Lightcast. Estimates of future employment were based on estimates contained in *Electricity Networks Strategic Framework: Enabling a secure, net zero energy system* (Ofgem, 2022).
- 3.12.4 Our headline estimates for the construction of electricity projects for the period between 2024 and 2030 are:
 - **3**,300 **new jobs** will be created
 - Average of 500 per year
 - 5,100 new people will be required to enter the industry's workforce for the first time
 - Average of 700 per year

Figure 30: Estimated number of new jobs created and new people required by subindustry

	Total employment New jobs created		created	New people required		
Industry	2024	2030	Number	% Growth	Total	Average per year
Construction of electricity projects	10,400	13,700	3,300	32%	5,100	700



- 3.12.5 Across construction of electricity projects, all occupational groups that have a current workforce are forecast to increase their workforce size by 2030 – none are forecast to reduce their headcount.
- 3.12.6 The occupations which are forecast to see the **largest increase in jobs** are:
 - **52** Skilled Metal, Electrical and Electronic Trades (600; 32%)
 - 21 Science, Research, Engineering and Technology Professionals (500; 32%)
 - **2**4 Business, Media and Public Service Professionals ((500; 32%)
- 3.12.7 The occupations with the **highest** *number* of retirements are forecast to be:
 - **52** Skilled Metal, Electrical and Electronic Trades (300)
 - 11 Corporate Managers and Directors (300)
- 3.12.8 However, the occupations with a **higher-than-average** *proportion* of **retirements** from the current workforce by 2030 are:
 - 51 Skilled Agricultural and Related Trades (38%)
 - 12 Other Managers and Proprietors (29%)
 - 11 Corporate Managers and Directors (29%)
 - 82 Transport and Mobile Machine Drivers and Operatives (24%)
 - 42 Secretarial and Related Occupations (19%)
 - 24 Business, Media and Public Service Professionals (18%)

- 3.12.9 The occupations that will need to attract the **highest number of new people** into their workforce are:
 - 52 Skilled Metal, Electrical and Electronic Trades (1,000; 100 per year)
 - 21 Science, Research, Engineering and Technology Professionals (800; 100 per year)



		Total employment		New jobs	created	New peop	le required
Skill level	Standard Occupation Classification	2024	2030	Number	% Growth	Total	Average per year
RQF 7-8	11 - Corporate Managers and Directors	1,100	1,400	400	32%	700	100
SCQF 11-12	12 - Other Managers and Proprietors	100	100	<100	33%	100	<100
RQF 6	21 - Science, Research, Engineering and Technology Professionals	1,600	2,200	500	32%	800	100
SCQF 9-10	24 - Business, Media and Public Service Professionals	1,400	1,900	500	32%	700	100
	31 - Science, Engineering and Technology Associate Professionals	500	700	200	31%	200	<100
RQF 4-5	33 - Protective Service Occupations	0	0	0		0	0
SCQF 7-8	34 - Culture, Media and Sports Occupations	<100	<100	<100	33%	<100	<100
	35 - Business and Public Service Associate Professionals	600	800	200	32%	300	<100
	41 - Administrative Occupations	1,000	1,300	300	32%	400	100
5050	42 - Secretarial and Related Occupations	200	200	100	31%	100	<100
RQF 3 SCQF 6	51 - Skilled Agricultural and Related Trades	<100	100	<100	25%	<100	<100
	52 - Skilled Metal, Electrical and Electronic Trades	2,000	2,600	600	32%	1,000	100
	53 - Skilled Construction and Building Trades	600	800	200	32%	300	<100
RQF 2	71 - Sales Occupations	<100	100	<100	25%	<100	<100
SCQF 5	72 - Customer Service Occupations	<100	100	<100	25%	<100	<100
	81 - Process, Plant and Machine Operatives	400	500	100	32%	200	<100
RQF 1	82 - Transport and Mobile Machine Drivers and Operatives	300	400	100	31%	200	<100
SCQF 4	91 - Elementary Trades and Related Occupations	300	400	100	30%	100	<100
	92 - Elementary Administration and Service Occupations	100	200	<100	31%	100	<100
	Power	10,400	13,700	3,300	32%	5,100	700

Figure 31: Estimated number of new jobs created and new people required by occupation



3.13 Trade of electricity

- 3.13.1 This sub-industry includes the sale of electricity to the user, including:
 - Activities of electric power brokers or agents that arrange the sale of electricity via power distribution systems operated by others
 - Operation of electricity and transmission capacity exchanges for electric power
- 3.13.2 There are an estimated 7,800 people currently employed in the Trade of electricity. This is forecast to increase by 600 jobs (+8%) to 8,400 by 2030.
- 3.13.3 Estimates of current and future employment were provided by Lightcast.
- 3.13.4 Our headline estimates for the trade of electricity for the period between 2024 and 2030 are:
 - 600 **new jobs** will be created
 - Average of <100 per year
 - 1,700 new people will be required to enter the industry's workforce for the first time
 - Average of 200 per year

Figure 32: Estimated number of new jobs created and new people required by subindustry

	Total employment New jobs created		New people required			
Industry	2024	2030	Number	% Growth	Total	Average per year
Trade of electricity	7,800	8,400	600	8%	1,700	200



- 3.13.5 Across Trade of electricity, most of the occupational groups that have a current workforce are forecast to increase their workforce size marginally by 2030 none are forecast to reduce their headcount.
- 3.13.6 The occupations with the **highest** *number* of retirements are forecast to be:
 - 11 Corporate Managers and Directors (200)
 - 21 Science, Research, Engineering and Technology Professionals (200)
- 3.13.7 However, the occupations with a **higher-than-average** *proportion* of **retirements** from the current workforce by 2030 are:
 - 51 Skilled Agricultural and Related Trades (40%)
 - 12 Other Managers and Proprietors (30%)
 - 11 Corporate Managers and Directors (29%)
 - 24 Business, Media and Public Service Professionals (18%)
 - 81 Process, Plant and Machine Operatives (18%)
 - 91 Elementary Trades and Related Occupations (18%)
 - 53 Skilled Construction and Building Trades (17%)
 - 52 Skilled Metal, Electrical and Electronic Trades (17%)
- 3.13.8 The occupations that will need to attract the **highest number of new people** into their workforce are:
 - 72 Customer Service Occupations (300; <100 per year)
 - 11 Corporate Managers and Directors (200; <100 per year)
 - 21 Science, Research, Engineering and Technology Professionals (200; <100 per year)



			Total employment		created	New people require	
Skill level	Standard Occupation Classification	2024	2030	Number	% Growth	Total	Average per year
RQF 7-8	11 - Corporate Managers and Directors	700	700	100	7%	200	<100
SCQF 11-12	12 - Other Managers and Proprietors	0	0	0		0	0
RQF 6	21 - Science, Research, Engineering and Technology Professionals	1,200	1,300	100	7%	200	<100
SCQF 9-10	24 - Business, Media and Public Service Professionals	400	500	100	14%	100	<100
	31 - Science, Engineering and Technology Associate Professionals	200	200	<100	0%	<100	<100
RQF 4-5	33 - Protective Service Occupations	0	0	0		0	0
SCQF 7-8	34 - Culture, Media and Sports Occupations	100	100	<100	9%	<100	<100
	35 - Business and Public Service Associate Professionals	1,000	1,000	100	6%	200	<100
	41 - Administrative Occupations	1,000	1,100	100	8%	200	<100
	42 - Secretarial and Related Occupations	100	100	<100	17%	<100	<100
RQF 3 SCQF 6	51 - Skilled Agricultural and Related Trades	0	0	0		0	0
	52 - Skilled Metal, Electrical and Electronic Trades	700	700	100	8%	200	<100
	53 - Skilled Construction and Building Trades	0	0	0		0	0
RQF 2	71 - Sales Occupations	600	700	100	8%	100	<100
SCQF 5	72 - Customer Service Occupations	1,500	1,600	100	9%	300	<100
	81 - Process, Plant and Machine Operatives	<100	100	<100	25%	<100	<100
RQF 1 SCQF 4	82 - Transport and Mobile Machine Drivers and Operatives	0	0	0		0	0
	91 - Elementary Trades and Related Occupations	0	0	0		0	0
	92 - Elementary Administration and Service Occupations	200	200	0		<100	<100
Power			8,400	600	8%	1,700	200

Figure 33: Estimated number of new jobs created and new people required by occupation



Annex 1 – Occupations and example job titles

Indicative skill/ education level	Standard Occupation Classification	Example industry job titles
RQF 7-8/SCQF 11-12	11 - Corporate Managers and Directors	Chief Executive; Operations Manager; Functional Managers/Directors
Master's Degree Doctorate	12 - Other Managers and Proprietors	Recycling Plant Managers; Scrap Metal Dealers; Environmental Manager
RQF 6/SCQF 9-10	21 - Science, Research, Engineering and Technology Professionals	Chemical/Biological/Physical/Environmental Scientist; Countryside Manager
Bachelor's Degree	24 - Business, Media and Public Service Professionals	Legal/Business/Quality/Regulatory Professional; Quantity Surveyor; Architect; Construction Project Manager; Public Relations Professional; Project Manager
	31 - Science, Engineering and Technology Associate Professionals	Electrical/Electronic Technician; Engineering Technician; Civil Engineering Technician; Laboratory Technician; Water Tester; IT Operations/User Support Technician
RQF 4-5/SCQF 7-8	33 - Protective Service Occupations	Security Manager
HNC/HND	34 - Culture, Media and Sports Occupations	Copywriters; Translator; Graphic Designer
Foundation Degree	35 - Business and Public Service Associate Professionals	Legal Executive; Estimator; Financial Analyst; Accounting Technician; Financial Controller; Account Manager; Credit Manager; Buyer/Purchasing/Procurement Officer; Marketing Executive; Business Development Manager/Executive; Ranger
	41 - Administrative Occupations	Administrator; Credit Controller; Book-Keeper; Finance Officer; Despatch Clerk; Stock Control Clerk; Office Manager/Supervisor
	42 - Secretarial and Related Occupations	Company Secretary; Personal Assistant/Secretary; Executive Assistant; Receptionist
RQF 3/SCQF 6	51 - Skilled Agricultural and Related Trades	Aboricultural Specialist; Tree Cutter/Surgeon;
A Level	52 - Skilled Metal, Electrical and Electronic Trades	Welder; Pipe Fitter;
	53 - Skilled Construction and Building Trades	Mechanical Engineer; Fabricator; Maintenance Fitter; Mechanic; Heating/Air Conditioning Engineer/Installer; Electrical/Electronic Fitter; Electrician; Cable Jointer; Telecoms Engineer; IT Hardware Engineer; Overhead Linesworker;
RQF 2/SCQF 5	71 - Sales Occupations	Sales Adviser/Assistant; Meter Reader; Debt Collector; Sales Supervisors
GCSE (grade A*-C)	72 - Customer Service Occupations	Call Centre Agent/Operator; Customer Service Adviser/Assistant/Representative; Call Centre Manager/Team Leader
ROF 1/SCOF 4	81 - Process, Plant and Machine Operatives	Chemical Process Technician; Gas Producer Operator; Process Worker; Boilerman; Control Room Operator; Power Station/Electricity Plant Operator; Water Treatment/Sewage Works Operator; Pump Attendant; Scaffolders; Cable Layer; Main/Service Layer
GCSE (grade D-G)	82 - Transport and Mobile Machine Drivers and Operatives	HGV/Tanker Driver; Crane Driver/Operator; Digger/Plant/Excavator Operator
	91 - Elementary Trades and Related Occupations	Forestry Workers; Electrician's Mate; Fitter's Mate; Ground Worker; Labourer
	92 - Elementary Administration and Service Occupations	Refuse Collector; Refuse Disposal Operative; Security Guards; Warehouse Assistant



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