



Jobs of the future

Research conducted by Social Market Foundation for EDF Energy



pretty.
curious

FOREWORD

As the UK's largest generator of low carbon electricity, EDF Energy is determined that its big investment in energy will have a far-reaching and positive impact on Britain's industrial capability. The rapid change to a low carbon economy and pace of digital innovation in customer's homes is a big opportunity for jobs and careers for today's young people.

It is essential that the UK workforce and economy can benefit from these changes by having the right skills in place. This legacy will go far beyond the 25,000 job opportunities at the new nuclear power station at Hinkley Point C. Our wide-ranging investments and commitment to innovation will strengthen UK industry for the long term, bringing new opportunities and capabilities. It will give people lifelong transferable skills and careers.

We know there aren't enough young people entering STEM professions and, critically, there aren't enough young women. Only one in five people working in core science, technology, engineering and maths occupations is female^[1]. To recruit the numbers needed to fulfil demand for the future, we need more girls to study science subjects at school, further education and higher education. This is why we are committed to encouraging girls as part of our long-term programme Pretty Curious, which addresses the under-representation of women working in STEM.

The programme shows the breadth of career opportunities available by pursuing science-based subjects at school and provides teenage girls with hands-on STEM experience at workshops and events. We commissioned this report from the Social Market Foundation to show the scale of the opportunity in 2023, the year pupils currently choosing their GCSEs will start to enter the workplace.

As a business, we are aiming to increase our intake of female STEM apprentices to 30% by 2018. The Pretty Curious programme is one of many initiatives EDF Energy runs to encourage young people into STEM and will help us achieve this stretching target. Our award-winning education programme, The Pod, reaches over 60% of UK schools; the Inspire programme in the south west has had over 110,000 student interactions in over 200 Education institutions; and the multi-million-pound investment in our Campus facility at Cannington Court will meet the training needs of EDF Energy, and allow collaboration with academic and industry partners.

This commitment to investment in education and skills will mean that as a business we will be well equipped to lead in innovation, be more diverse in how we approach solutions to tomorrow's problems and stand out to customers, communities and employees as a company that wants to make a positive difference.



Vincent de Rivaz CBE
CEO, EDF Energy



¹WISE, November 2016

ABOUT THE SOCIAL MARKET FOUNDATION

The Social Market Foundation (SMF) is a non-partisan think tank. It believes that fair markets, complemented by open public services, increase prosperity and help people to live well. The SMF conducts research and runs events looking at a wide range of economic and social policy areas, focusing on economic prosperity, public services and consumer markets. The SMF is resolutely independent, and the range of backgrounds and opinions among our staff, trustees and advisory board reflects this.

EXECUTIVE SUMMARY

This report explores the number of jobs that are expected to open between 2016 and 2023. It looks at where they are expected to be created and the contribution of science, research, engineering and technology to this number.

The key findings are:

- Jobs in science, research, engineering and technology will rise at double the rate of other occupations between now and 2023 (6% vs. 3%). The report attributes this growth to the pace of infrastructure investment and digital innovation and predicts the creation of 142,000 new jobs and 640,000 vacancies in these roles over the next six years, around 6% of all job openings.
- Computing skills will be the most in demand, with the most job openings and the highest number of new jobs (25%). Computer services will be the most science-dependent industry followed by scientific research, information services, telecommunications and computers.
- While across all industries, science, research, engineering and technology jobs are expected to account for 7.8% of all jobs in the UK, equivalent to 2,525,000 jobs.
- Science-focussed industries are projected to grow in size by 2023 in line with overall employment growth. By 2023, these sectors are expected to account for 28% of job openings, or just over 2.8 million jobs.
- The top five industries for core science, research, engineering and technology jobs (by net requirement will be: Computing services (88,000); Head Offices – Consultancy (57,000); Architecture and Related (38,000); Legal and Accounting (35,000); Scientific Research and Development (29,000) – for the top 20 see the full report.
- Demand for traditional science, research, engineering and technology jobs such as research and development and specialised construction will remain high, driven by the Government's commitment to ongoing investment in infrastructure. However, areas like retail, head offices, PR and consultancy and legal, accounting and financial services will also have high demand for science, technology and research based skills in 2023.
- The number of graduates and apprentices will fall short of the number of people needed to fill those roles, indicating the skills shortage that will exist. To recruit the numbers needed to fulfil the expected demand for roles in 2023, more girls will need to study science subjects at school, further education and higher education.
- In 2016 there were an estimated 462,000 women working in science, research, engineering and technology (19%); if there was gender parity that number would be 1.2 million. In addition, women are particularly underrepresented in the roles and industries identified in the report as likely to see the most job openings in the future.
- Graduates with science, engineering and maths qualifications are among the highest paid and if the skills gap continues, the salaries are likely to remain high.
- Across the UK computing services is the top industry in most regions and nations. However, in Scotland the top industry is 'Architectural and Related' and 'Public Administration and Defence' is the top industry for Wales.
- Future jobs will include: Computer coders; Geotechnical Design Engineers; Intelligence Consultants; Robotics Engineers; Data Scientists

THE SCIENCES AND THE UK ECONOMY

Science, technology, research and engineering jobs play a vital role in the UK economy. The UK's comparative strengths lie in science and innovation-intensive sectors.^A One estimate has put the contribution of the engineering sectors alone to UK GDP at 27%.^B This is based on the direct value created by the engineering sectors, combined with the demand that the engineering sectors create across the rest of their supply chains in sectors such as wholesale, support services, transport and financial services.

Innovation drives economic prosperity. Studies examining the period 2000 to 2008, the period leading up to the last downturn when UK productivity growth outpaced that of the rest of the G7, show that innovation was responsible for half of UK productivity growth.^C Investment in the sciences is crucial to maintaining innovation in the UK. Firms with more science graduates in their workforces are more likely to undertake research and development, and bring new products to market. Thus, highly innovative firms are much more likely to employ graduates in the sciences, engineering, technology and maths.^D

And the sciences are not simply about economic growth. Science and engineering research produces effective medicines and cleaner energy, improving the lives of people in the UK and around the globe.^E Areas where the UK has particular strengths include regenerative medicine, synthetic biology, robotics, satellite systems and energy.^F

However, maintaining the UK's position as a leader in innovation is an urgent priority. As the UK's Minister for Science, Jo Johnson, said in a recent speech, "We are outstanding at discovery science – and are getting much better at turning those discoveries into economic benefit - but we must do even better."^G As such, Government is pushing forward a range of initiatives to strengthen the research and innovation landscape.^H Beyond this, Government infrastructure plans rely heavily on the engineering sectors.

Delivering a high innovation, high investment and more prosperous economy is dependent on a labour force that is equipped with science, engineering, technology and maths skills. These skills are set to become more important in the future.

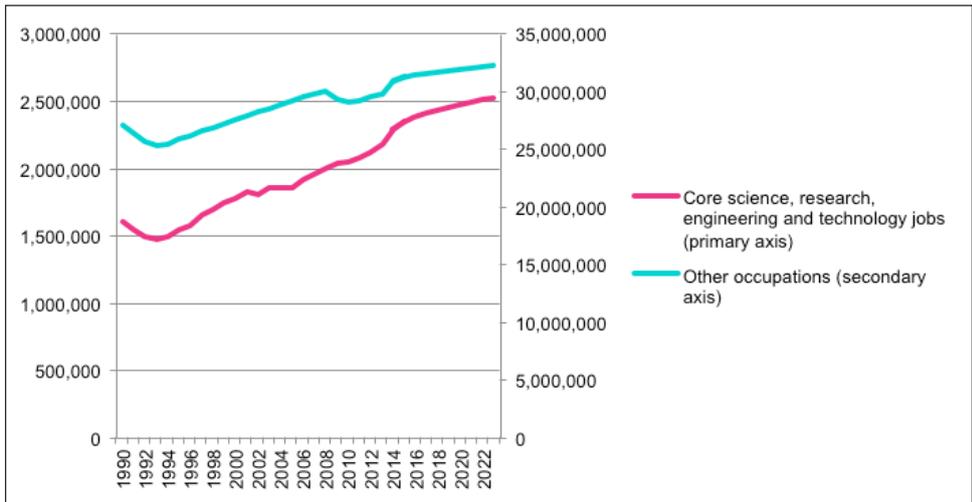
UK JOBS: WHICH OCCUPATIONS ARE GROWING?

According to the Working Futures data, 10,182,000 jobs are expected to open between 2016 and 2023. The number of core science, research, engineering and technology job openings (net requirement) by 2023 is expected to be just over 640,000, around 6% of all job openings.

The figures for core science, research, engineering and technology jobs cover occupations where those skills are closely tied to the day-to-day responsibilities and requirements of the occupation. These core science, research, engineering and technology jobs have seen a period of strong growth since the early 1990s. During this time, growth in core science jobs outpaced average growth in employment. Between 1990 and 2016, the numbers of core science jobs grew by 49%, compared to an average of only 16% across other occupations.

During the period 2016 to 2023, growth in these types of jobs is expected to continue outpacing overall growth in employment, as shown below. Over this period, the number of core science, research engineering and technology jobs is expected to rise by 6%, double the rate of other types of occupations (3%).

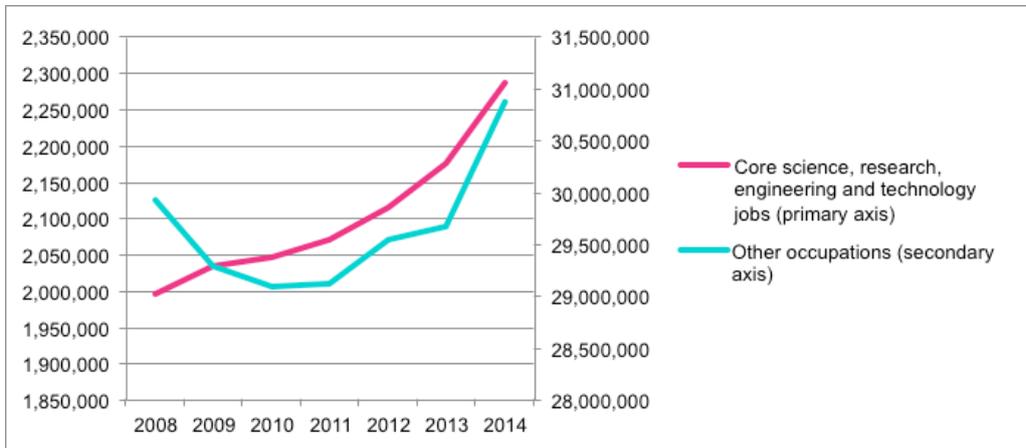
Total workforce size 1990 to 2023, by type of occupation



Source: SMF analysis of Working Futures data

Focussing in more detail on the last economic recession in the UK, in 2008-09, the chart below shows how core science, research, engineering and technology jobs fared compared to other occupations. Throughout the last downturn, the number of core science, research, engineering and technology jobs continued to grow whilst the number of overall jobs in other occupations actually fell, and only recovered to its 2008 level in 2014.

Total workforce size 2008 to 2014, by type of occupation



Source: SMF analysis of Working Futures data

This sustained growth over time means that in 2023, science, research, engineering and technology jobs are expected to account for 7.8% of all jobs in the UK, equivalent to 2,525,000 jobs. This is up from 2,384,000 in 2016 (7.6% of the workforce).

UK JOBS: WHICH INDUSTRIES ARE GROWING?

To fully understand the future contribution of science to the UK workforce, we also need to look at industries. Some sectors are highly science-dependent, with a large proportion of the workforce employed in core science, engineering, research, and technology jobs. The most dependent are computer services, scientific research, information services, telecommunications and computers, as shown in the table below.

Proportion of industry workforce that is made up of core science, research, engineering and technology jobs, 2016 (top five industries by dependence on core science, research, engineering and technology jobs)

Sector	Proportion
Computer services	45%
Scientific research	41%
Information services	30%
Telecommunications	28%
Computers	25%

Source: SMF analysis of Working Futures data

Note: Computing services includes computer programming, consultancy and facilities management services. Computers includes manufacture of computer components, consumer electronics, optical, magnetic and electronic equipment. Information services includes data processing, hosting, web portals, news agency activities.

In these science-dependent industries, there will also be many science-related jobs created as managers and directors and in other skilled roles. It is therefore helpful to understand how many jobs overall are likely to be created in these science-focussed industries. We define science-focussed sectors as ones which employ above average proportions of core science, research, engineering and technology professionals, as of 2016.

These science-focussed industries are projected to grow in size by 2023 in line with overall employment growth. By 2023, these sectors are expected to account for 28% of job openings, or just over 2.8 million job openings (net requirement).



THE ENERGY SECTOR

The energy sector is a vital element of UK infrastructure. Future investment in energy is a high priority for the UK to ensure security of supply as the economy grows and to help reduce the UK's greenhouse gas emissions. Whereas previously power generation was dominated by coal and gas, the sector is now switching towards other sources such as renewables, which now accounts for around a quarter of electricity generation in the UK, compared to around 16% for coal. Between 2014 and 2020, a further £100 billion investment may be required in the electricity system alone. A wide range of new jobs are expected to be created in the sector, for example, it is thought that there could be 250,000 jobs in low carbon generation by 2020.¹

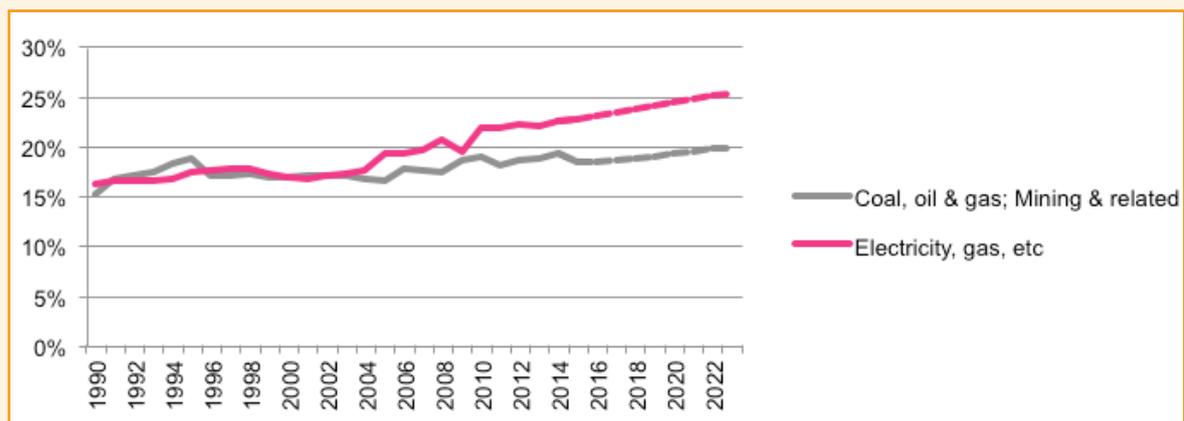
The Working Futures data contains two industries particularly relevant to the energy sector:

- Electricity and gas (Production, transmission, distribution, trade of electricity; manufacture, distribution, trade of gas; steam and air conditioning supply)
- Coal, oil & gas; mining & related industries (Mining, extraction and operations of coal, petroleum, natural gas and others)

As of 2016, around 22% of jobs in these three industries are core science, research, engineering and technology jobs. Overall, across these three industries, the number of workers is expected to slightly fall, from 328,000 in 2016 to 321,000 in 2023, although the need to replace retiring workers means that 72,000 job openings are still projected over that period.

However, it is notable that core science, research, engineering and technology jobs in these industries buck the trend. These jobs are expected to increase from 74,000 in 2016 to 77,000 in 2023. Effectively, these industries have been becoming more dependent on these core science jobs, and this dependency is expected to increase, as shown in the chart below. In total, 19,000 job openings in core science, research, engineering and technology jobs are expected between 2016 and 2023.

Core science, research, engineering and technology jobs as a proportion of total workforce, by industry (energy related sectors), 1990-2023



Source: SMF analysis of Working Futures data

WHAT IS DRIVING THE GROWTH?

A large proportion of total job openings are made up of “replacement demand”, that is, openings created when existing workers leave or retire. Of the total net requirement across all industries and all occupations, 90% are made up of “replacement demand”. However, this still leaves 977,000 brand new jobs being created.

These new jobs come from changes in industry size and in the types of workers firms are likely to want to hire. The Working Futures projections expects that industries will evolve in a similar way to the past. It expects construction-related sectors to grow the fastest, boosted by major infrastructure projects. It also expects some growth in manufacturing, although at lower levels than other sectors due to increasing competition from overseas manufacturers.¹

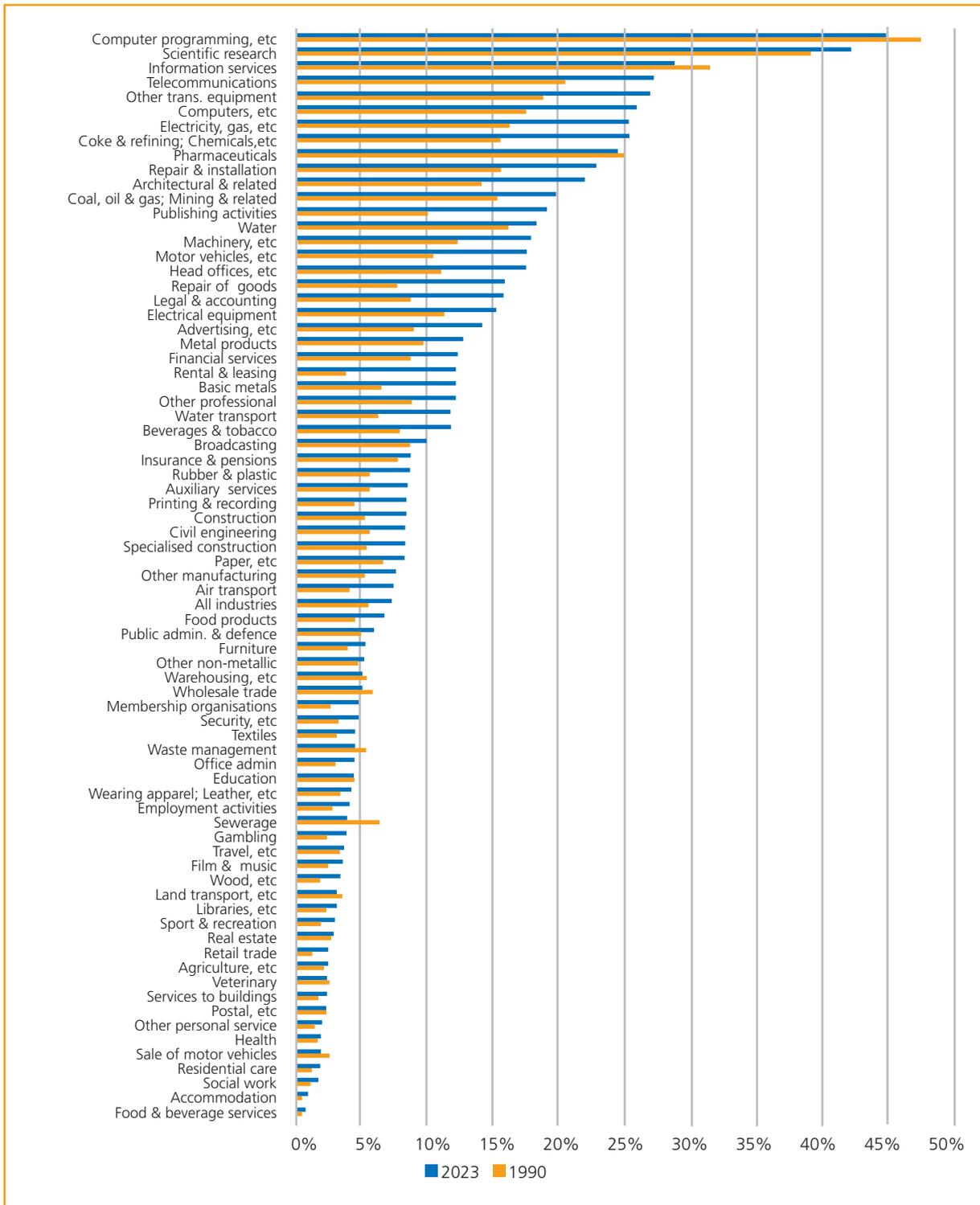
Across specific occupations, a continuation of the shift towards highly skilled occupations is expected. In particular, it is expected that the continued introduction of new technology, and especially automation will affect what types of workers firms will need to recruit. There is an increasing trend of technology convergence, creating new markets and novel applications of technology. An example is bioinformatics, which draws on a range of disciplines across computer science, statistics, biochemistry and physics. The way in which we produce goods and services is changing, as technologies such as 3D printing allow goods to be produced in a decentralised way, with greater scope for customisation and design.¹ Occupations that fall into core science, research, engineering and technology job groups will be crucial to developing these new types of technology that change the way different industries operate.

For core science, research, engineering and technology jobs specifically, around 78% of the net requirement between now and 2023 is made up of replacement demand, leaving 142,000 brand-new core science, research engineering and technology jobs being created.

These new jobs are being created in a range of areas, with some sectors becoming much more science-focussed over time, as shown the chart overleaf. Particularly notable is electricity and gas, where the proportion of the workforce that is core science, research, engineering and technology has risen from 16% in 1990 to a projected 25% in 2023. For publishing activities (which includes computer games), the figure has risen from 10% in 1990 to an expected 19% in 2023.



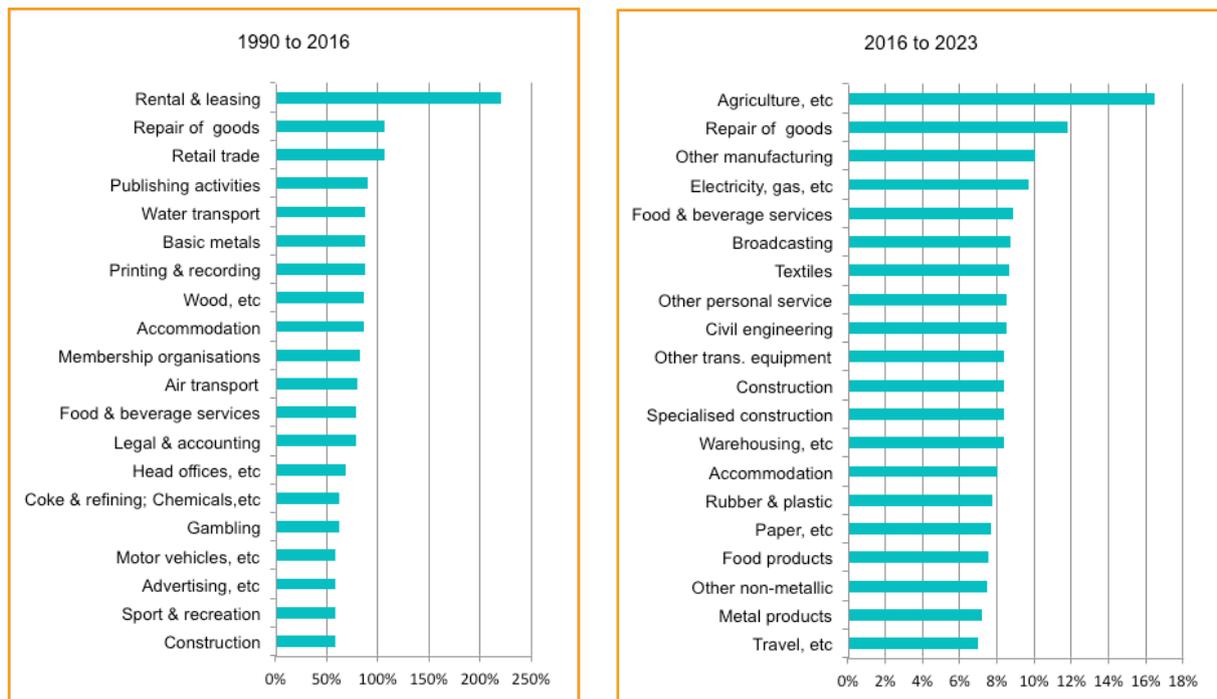
Proportion of industry workforce that is in a core science, research, engineering and technology job, 1990 to 2023



Source: SMF analysis of Working Futures data

In the following two charts, we rank industries by the growth in the proportion of the workforce that is core science, research, engineering and technology to show where the shifts have been greatest over time (1990 to 2016) and are projected to be greatest in the future (2016 to 2023), focussing on 20 most significantly shifting industries in each case. As can be seen, as well as some sectors where core science, research and engineering jobs are common, such as energy, there are also sectors where core science jobs are few in number, but expected to become more important over time, such as agriculture.

Growth in proportion of industry workforce that is in a core science, research, engineering and technology job, 1990 to 2023



Source: SMF analysis of Working Futures data

JOB HOTSPOTS FOR SCIENCE, RESEARCH, ENGINEERING AND TECHNOLOGY

So what types of science-related jobs are likely to see the most openings in the future? The following chart shows the top 20 sectors, by net requirement, for core science, research, engineering and technology jobs specifically. Jobs are expected to open across a whole range of sectors, from computer services to architectural services to publishing.

The top job role for core science, research, engineering and technology is in computing services (e.g. computer programming). 88,000 jobs openings are expected here by 2023. The list also contains a number of "traditional" science-related industries, for example, scientific research & development, specialised construction, and civil engineering.

However, it also includes some more surprising areas such as retail; head offices, PR and consultancy; business services such as legal and accounting; and financial services. This is likely to reflect two factors: firstly, these sectors' increased reliance on technology to help deliver their core products and services; and secondly, the overall size of these sectors and importance to the UK economy.

Top 20 industries for core science, research, engineering and technology jobs, ranked by net requirement 2106-2023

Rank out of 75	Industry	Net requirement 2016 - 2023 (000s)	Examples
1	Computing services	88	Programmer, coder, software engineer, network technician, systems analyst
2	Head offices, public relation and communication, business and management consultancy activities.	57	Operations consultant, technology advisers / chief technology advisers, business intelligence consultant, product engineer
3	Architectural and related	38	Architectural technician, mechanical systems designer, electrical systems designer, structural analyst
4	Legal and accounting	35	IT manager, network technician, database manager, accountancy software developer
5	Scientific research and development	29	Biologist, chemist, biotechnologist, lab technician, physicist, research scientist
6	Specialised construction	24	Demolition supervisor, site engineer, geotechnical design engineer
7	Retail trade	22	Data scientist, web designer, quality controller, maintenance engineer, IT manager
8	Construction	21	Mechanical systems designer, electrical systems designer, structural analyst
9	Education	21	Laboratory technician, IT manager, network technician, online course developers/programmers
10	Public administration and defence	20	Weapons engineer, robotics engineer, satellite engineer, systems analyst, telecommunications engineer
11	Wholesale trade	17	Quality controller, database manager, IT manager, data scientist
12	Employment activities	16	IT manager, network technician, database manager, HR software developer
13	Financial services	15	Quant trading engineer, data scientist, business intelligence engineer, quality assurance engineer
14	Civil engineering	13	Civil engineer, bridge inspector, site engineer, geographical information systems (GIS) technician
15	Publishing activities	12	Scientific editor, computer game developer, chief technology officer (CTO), product development engineer
16	Advertising, etc	11	Data scientist, design technologist, database manager
17	Electricity, gas, etc	10	Energy engineers, electrical engineer, heating and plumbing engineer, gas engineer, commissioning engineer
18	Other professional	10	Meteorologist, agronomist, environmental compliance consultant
19	Office administrative	10	Manufacturing engineer, IT manager, database manager, telecommunications engineer
20	Health	10	Health research scientist, laboratory testing technician, industrial engineer, network technician

The drivers of the net requirement for core science, research, engineering and technology jobs differs across sector. Computing services is expected to create the highest number of brand new jobs as well as the highest number of jobs required to replace workers who leave.

However, in other sectors, creation of brand new core science, research, engineering and technology jobs is a more important driver. In construction and specialised construction, 44% of the net requirement is expected to be made up of brand new jobs, compared to only 22% for core science, research, engineering and technology jobs as a whole. The net requirement in retail, and scientific research and development is also made up of a higher proportion of brand new jobs compared to the overall average.

WHERE WILL THESE NEW WORKERS COME FROM?

If the UK is to fulfil its potential in science, engineering and research, it will need to focus efforts on building up a workforce with the skills the country needs.

The data that we use above from Working Futures does not specify the types of qualifications required to fulfil the jobs expected to open over the coming years. However, a number of previous studies have shown that there are insufficient numbers of new graduates and school-leavers with science-related skills and qualifications to fill demand for science-related jobs now and in the future. For example, previous Social Market Foundation analysis found an annual shortfall of 40,000 science, technology, engineering and mathematics graduates, based on comparing current graduate numbers, their likely employment destinations, and estimates of future demand for these qualifications calculated by the Royal Academy of Engineering and the Big Innovation Centre.^K

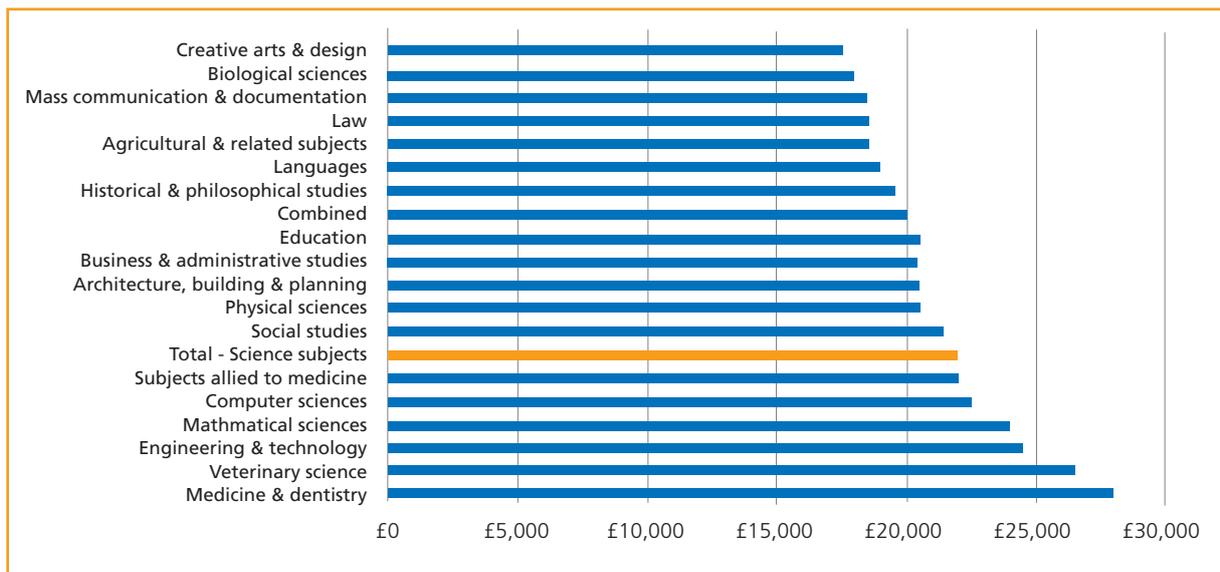
Encouragingly, A-level entries for maths and science subjects are rising. 29% of A-level students took Maths in 2015, compared to 25% in 2010. The proportion taking Chemistry rose from 15% to 16% over the same period, and the proportion taking Physics rose from 10% to 11%. The proportion taking Biology has remained relatively static.^L

However, employers are already reporting difficulties recruiting workers with the right skills. One survey found that 39% of UK firms reported difficulty recruiting candidates with the science, technology, engineering and maths skills critical to innovation.^M Another found that one in five employers in the manufacturing, engineering, hi-tech, IT and science sectors had difficulty recruiting graduates and technicians qualified in science, engineering and maths related subjects.^N

Science and mathematical skills are also important across the wider economy, and not simply in traditional scientific sectors and in traditional scientific occupations. One previous study found that around 18-29% of science, technology, engineering and mathematics graduates do not go into traditional science-created occupations.^O Mathematical skills are increasingly important for entry into the social sciences.^P And lack of numeracy skills are an especial concern of employers: 55% of employers in a Pearson/CBI survey said that they were concerned about the basic numeracy skills of their current workforce.^Q

Unsurprisingly, graduates with science, engineering and maths qualifications are among the highest paid. The top five highest paid subject areas for graduate salaries all relate to science, engineering, technology and mathematics. If the skills gap continues, salaries are likely to remain high.

Graduate salaries by subject area studied, 2014-15 graduates



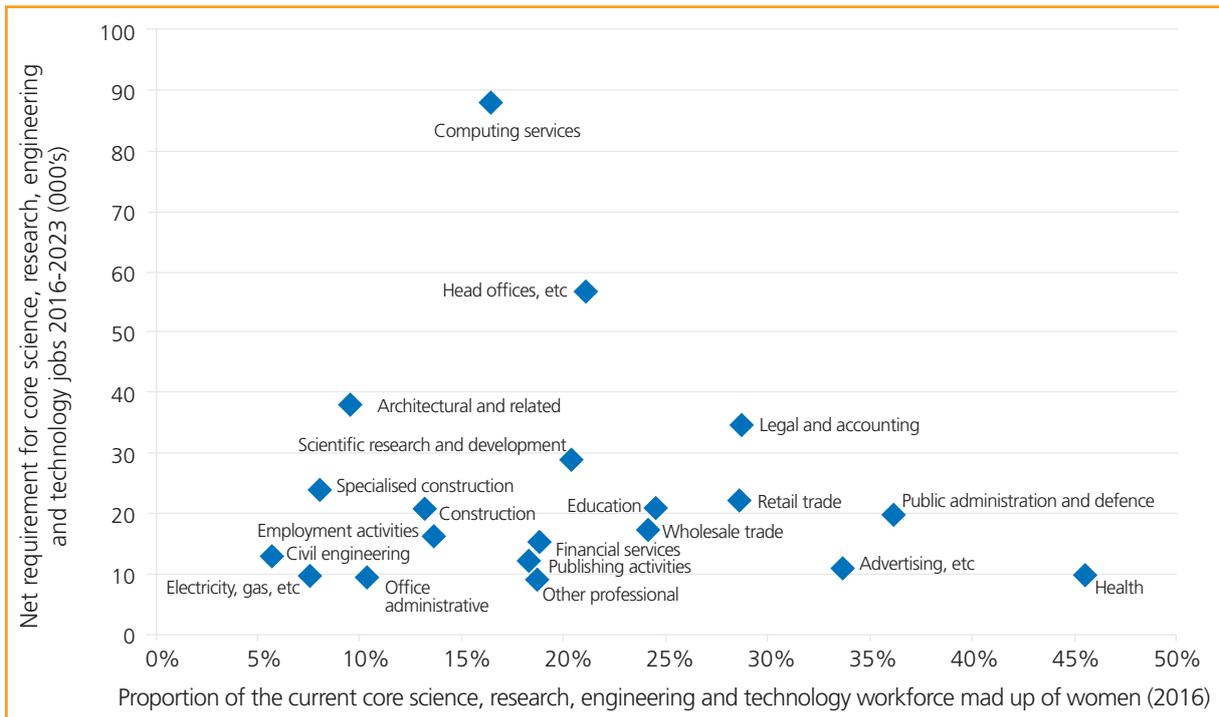
HESA, Destination of Leavers, Table 10 - UK domiciled full-time leavers who obtained first degree qualifications and entered full-time paid work in the UK

To recruit the numbers of workers the science sector needs, it will have to encourage more girls to take up science and maths subjects at school and into further and higher education. At the moment, across our definition of core science, research, engineering and technology workers, 19% are women.

Women are currently under-represented in core science, research, engineering and technology jobs across all industries. All industries need to do more to recruit more women. However, this task is especially important in industries where demand for more workers is set to be especially high.

Out of the top five job hotspots with the highest net job requirements, four currently have female representation at less than a quarter of their workforces. For example, in computer services, where the net requirement for these types of jobs is the highest, current female representation in these jobs is around 16%. Other industries where the net requirement for core science, research, engineering and technology jobs is expected to be especially high, but where female representation in these jobs is below half includes architectural and related services; scientific research and development; and head offices, public relations, communications and business/management consultancy services.

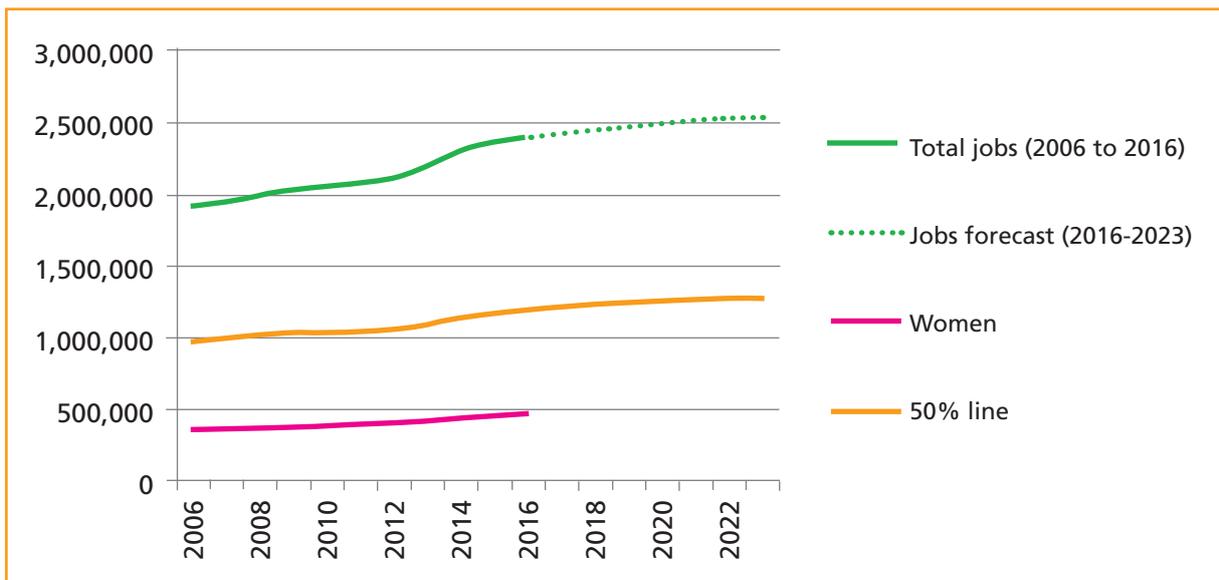
Net requirement for core science, research, engineering and technology jobs versus current proportion of workforce made up of women



Source: SMF analysis of Working Futures data

As shown in the chart below, whilst the number of women in core science, research, engineering and technology jobs is rising, there is room for many more women to enter these jobs. In 2016, there were an estimated 462,000 women working in these jobs. If there was gender parity, the number would be 1.2 million, equivalent to a gap of 730,000.

Number of core science, research, engineering and technology jobs in total, compared to the number of women working in the same jobs



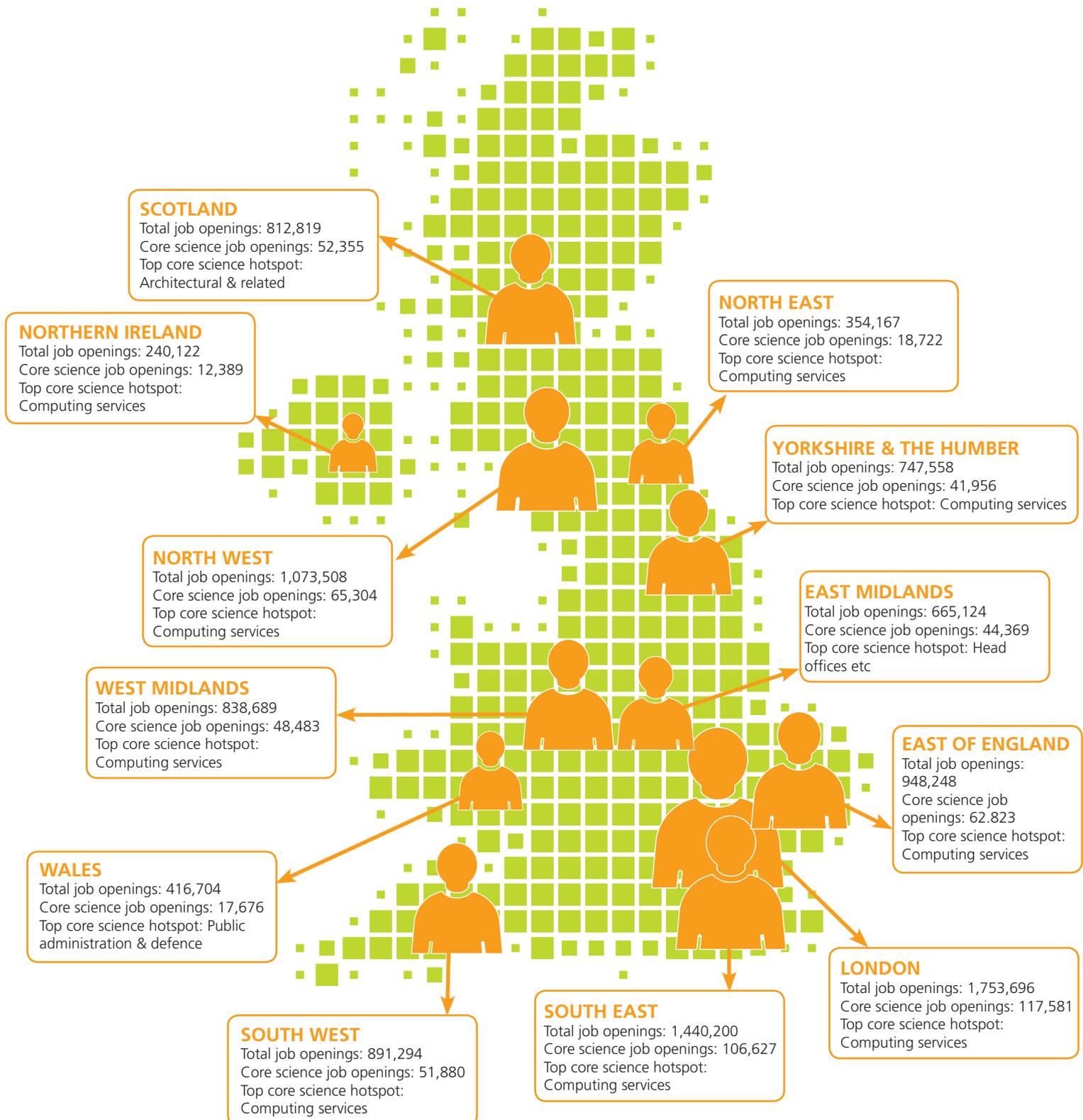
This means there is a clear potential for these industries to recruit more women as a way of filling future demand. For this to happen, it will be imperative that female take-up of science subjects at school, further education and higher education increases. Currently, only 36% of degree-level qualifications obtained by women are in science subjects, compared to 46% for men.^R And whilst there has been some progress, female students are still less likely than male students to take Maths, Chemistry and Physics at A-level.^S This is in spite of the fact that female students do slightly better than male students at GCSE level: in 2014-15, 71% of girls achieved an A*-C in Maths, compared to 70% of boys. 74% of girls achieve an A*-C in any science, compared to 69% of boys.^T



HOW DOES THE PICTURE VARY ACROSS THE UK?

In common with the UK-wide pattern, computing services is the top industry for core science, research, and engineering and technology jobs across most nations and regions of the UK. There are, however, some exceptions: architectural and related is the top industry for Scotland, and public administration and defence is the top industry for Wales.

Net requirement across nations and regions of the UK, 2016 to 2023, further detail



ANNEX

The Working Futures dataset breaks down occupations into 25 categories and industries into 75 categories. For full definitions of industries and occupations, please see UKCES, *Working Futures 2014 to 2024, Technical Report, April 2016*.

PROJECTIONS OF JOBS IN 2023

The numbers of jobs by 2023 set out in this report are taken from Working Futures projections. Working Futures is an assessment of the UK labour market carried out every 2-3 years and published by the UK Commission for Employment and Skills (UKCES).

The projections start with the current state of employment across sectors in the UK, and how patterns break down by type of occupation. Macroeconomic forecasts are used to develop projections for how the structure of the economy is likely to change, and therefore numbers of jobs in different parts of the economy.

As well as estimating future workforce size by sector and occupation, Working Futures also estimates the future “net requirement”. The net requirement is made up of expansion demand (the change in size of the workforce) and replacement demand. Replacement demand is the demand for workers resulting from the need to replace workers who leave, for example due to retirement. These are based on demographic factors such as age structure.

The most recent edition of Working Futures, covering the period 2014 to 2024, was published in April 2016. This edition uses 2014 official data as its baseline for how jobs are currently distributed across occupations and industries. 2015 and 2016 therefore constitute projections ahead of official data being available.

For further details, see UKCES, Working Futures, 2014-2024, Evidence Report 100, April 2016.

EU REFERENDUM EFFECTS

The Working Futures data that we draw on in this paper was published in April 2016, before the EU referendum. Ahead of the referendum, a range of independent forecasters expected that UK economic growth would be lower by if the UK left the EU. Estimates of the effect on the size of the economy by 2030 fell across a wide range, from -7% to -1.2%. A small minority expected a positive effect, of 0.6% to 4%. Many of these differences were driven by the assumptions different forecasters made about what the UK's future trading arrangements with the EU and the rest of the world would be.

Since the referendum, forecasters have largely revised down their short-term forecasts of growth, from above 2% in 2017 to around 1%. There continues, however, to be much uncertainty as to what the overall effect on growth will be in the mid-2020s and beyond, as reflected in the volatility of recent PMI survey results. The timing, size and direction of any effects are uncertain, and as it is not yet known what the UK's future trading arrangements will look like. Even more uncertain are the effects on specific occupations and industries.

We therefore have not adjusted Working Futures estimates in light of the EU referendum result. However, we believe that the figures still represent a good indication of where future job openings are likely to occur. As set out earlier, a large proportion of the net requirement is made up of replacement demand, rather than expansion demand, and so is less likely to be influenced by potential changes to sectoral growth.

For a summary of forecasts made before the referendum, see IFS, Brexit and the UK's public finances, May 2016. For a summary of short-term forecasts made since the referendum, see HM Treasury, Forecasts for the UK Economy, December 2016.

END NOTES

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- ^B CEBR, The contribution of engineering to the UK economy – multiplier impacts, 2015
- ^C Department for Business Innovation & Skills, Annual Innovation Report, 2012
- ^D Department for Business Innovation & Skills, Innovative Firms and Growth, 2014
- ^E Campaign for Science and Engineering, Why champion science and engineering, 2015
- ^F Department for Business Innovation & Skills, Eight great technologies, 2013
- ^G Department for Business Innovation & Skills, Leading the world in the new age of global science: speech by Jo Johnson, 2016
- ^H Department for Business Innovation & Skills, Leading the world in the new age of global science: speech by Jo Johnson, 2016
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- ^L Department for Education, Revised A-level and other level 3 results in England, 2014-15
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- ^O UK Commission for Employment and Skills, The supply of and demand for high-level STEM skills, 2011
- ^P British Academy, Society counts, 2012
- ^Q Cambridge Assessment, Research summary – A brief review of employers' views on numeracy, 2013
- ^R Higher Education Statistics Agency, Higher education student enrolments and qualifications obtained at higher education providers in the United Kingdom 2014/15, 2016
- ^S Department for Education, Revised A-level and other level 3 results in England, 2014-15
- ^T Department for Education, Revised GCSE and equivalent results in England, 2014-15

For more information, please visit the
EDF Energy Pretty Curious website:
www.edfenergy.com/prettycurious



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