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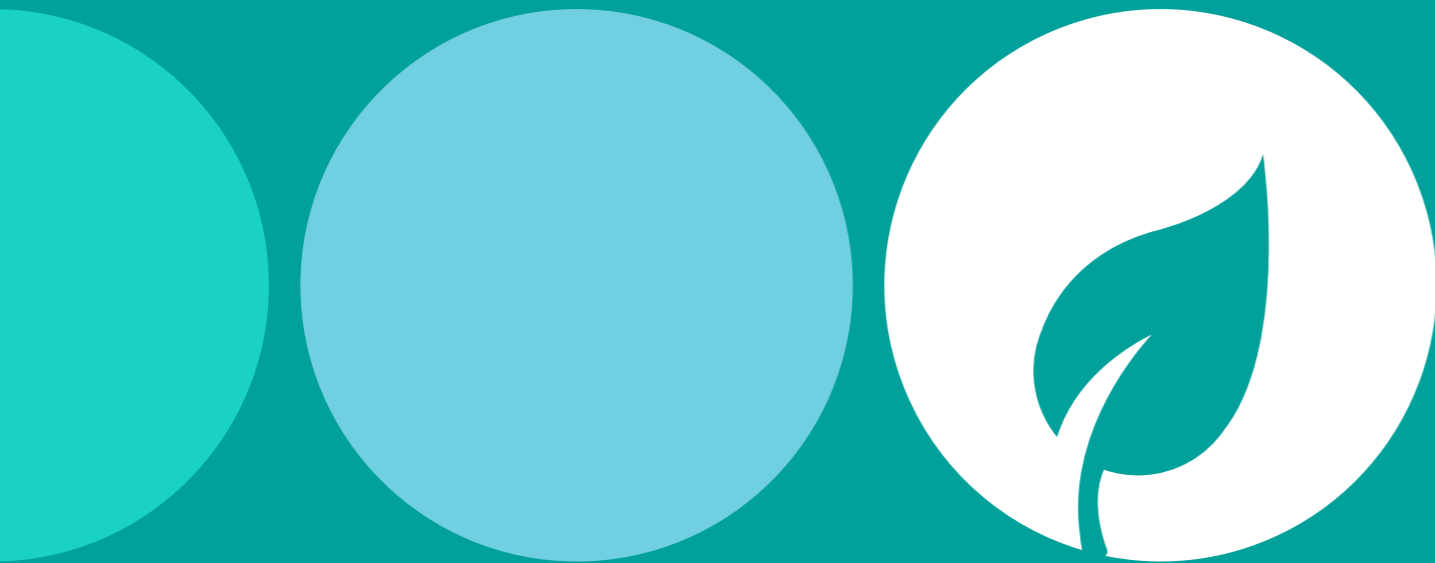


The retrofit challenge: playing our part

Scaling up the workforce and skills pipeline

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Summary

This report identifies the key learning points from recent analyses of the barriers and opportunities for retrofitting the UK's homes. It sets out:

- A reminder of why retrofitting the UK's housing stock is a top Net Zero priority, with co-benefits for society and the economy.
- A summary of the main issues holding back faster progress, with a closer look at the barriers and enablers for the householder.
- The state of play on skills and workforce needs, including Reed in Partnership analysis of recent job postings data.
- Ideas for next steps in scaling up the skills and workforce pipeline.



Key points

- Moving further and faster with retrofitting the UK's homes is not just a core Net Zero priority but contributes to better health, energy security and economic prosperity, as well as having a powerful "multiplier" effect in driving social value in other ways.
- Demand for workers with the skills to deliver domestic retrofit has been rising steadily, with online job postings for retrofit-related roles in March 2023 almost double what they were in March 2022.
- While London and Manchester are seeing the highest number of retrofit-related job postings, smaller cities such as Bristol or Glasgow are seeing higher levels of job postings in proportion to their population, illustrating how closely demand is related to local commitments and action.
- The top common skills listed in retrofit job postings are communication, management, planning and customer service, while the top specialist skills in demand are construction skills, procurement and Heating, Ventilation, and Air Conditioning (HVAC).
- Looking at where retrofit coordinators and Microgeneration Certification Scheme (MCS)-certified contractors are located it is positive that many are registered outside major cities. However, in some areas such as Northern Ireland there appear to be very few registrations.

Three things that Government, employers and stakeholders can do now to scale up the retrofit skills pipeline are to:

Support SMEs so that they can focus on delivering the high-quality work needed:

It needs to be easier for SME and self-employed contractors to upskill and enter the market, without compromising on quality or consumer protection. One approach could be to support small contractors with MCS certification costs.

Step up the drive to recruit trainers from industry:

Training cannot be expanded without the experienced industry professionals needed to teach courses in this emerging sector. This is not just about improving pay and conditions in the further education sector but forming stronger and wider partnerships between educators and business.

Build and market a flexible working culture in retrofit from the start:

We need to support the emerging retrofit sector to develop a strong flexible working culture and promote retrofit roles in this way, in order to attract the diverse workforce it will need. Flexible working patterns can support both diverse recruitment and responsive customer service at the same time.



I The challenge

Why is retrofit a priority for the UK?

Our homes use 35% of all the energy in the UK and emit 20% of CO2 emissions¹. Four-fifths of our housing stock in 2050 will be homes that are in use today². This means that it will not be possible for the UK to reach Net Zero carbon emissions without a major programme of retrofitting our homes to increase energy efficiency and decarbonising our heating systems. This is a strategic issue for the UK, described as an “infrastructure priority” by the UK’s Climate Change Committee, the UK’s independent adviser on climate change.

But progress over the past decade has been extremely slow, causing the CCC to refer to it as a “lost decade”³. In contrast to emissions from power and industry, which have been on a consistent downward path, those created by buildings have plateaued over the past decade, with stop-start policy and funding initiatives failing to make an impact.

The latest Government statistics show that the average number of household energy efficiency upgrades was around 10,000 in December 2022, around a tenth of what it was in March 2014⁴. This is partly because lower-cost measures such as loft insulation have largely been done, leaving harder cases and deeper retrofits needed. Meaning in turn that the challenge is getting more complex and expensive, but as yet without the scale that should bring the costs down.

It is partly such a complex challenge because, as the CITB points out, it is not a question of a blanket application of measures or schemes, but a different project and set of solutions for each individual household through the “diligent implementation of carefully designed retrofit programmes, which are effectively bespoke for every building”⁵. Each of these requires partnerships of multiple players at every level, whether this is the professionals and trades working with the householder on an individual retrofit, the community or regional partners delivering a local programme, or the cross-sector, cross-department collaborations needed to drive policy change across Government.

However, not only is this work essential for Net Zero but has multiple other social and economic benefits (see page 5). In fact, building retrofit is the Net Zero sector where the co-benefits are most clear – for the UK’s energy security and future economic prosperity and for our own health, wellbeing and living standards.

“We will not meet our targets for emissions reduction without near complete decarbonisation of the housing stock.”

Committee on Climate Change



The scale of the work needed is immense. For example, the Government’s announcement of the expanded Great British Insulation Scheme, expected to support insulation of around 300,000 homes⁶, is hugely welcome, however there are as many as 15 million homes out of the total of around 29 million that could need work in order to reach an EPC ‘C’ standard by 2035⁷.

While the UK aims to install at least 600,000 heat pumps each year by 2028⁸, the Boiler Upgrade Scheme has only received around 18,000 applications since it opened in May 2022⁹. While tackling fuel poverty and supporting low-income homes is a critical priority in itself, the largest contribution to reducing carbon emissions from homes

will have to come from motivating and incentivising non-fuel-poor households to take action (39% of 2035 abatement target compared to 5% from fuel-poor homes¹⁰).

One of the most critical barriers to the upscaling of the housing retrofit effort is skills and labour supply. The UK needs to rapidly attract and upskill a bigger retrofit workforce, to some extent before the demand for retrofit has fully materialised. This report focuses mainly on this issue, looking at the potential need and current/future demand for people to retrain or upskill into retrofit roles, and ways to meet this. But we also look at the need to keep the end customer – the householder – at the heart of policy, planning, partnerships and delivery.

“No other sector of the economy has the potential to accelerate the Net Zero ambition and create the same volume of high-quality jobs as the decarbonisation of our homes.”

Energy Systems Catapult report for the Gatsby Foundation

Why scale up and speed up retrofit?

Net Zero

- Heating UK buildings contributed more than a fifth of the UK's greenhouse gas emissions in 2021¹¹.
- We have made little progress in delivering carbon emission reductions from housing compared to other sectors - we need to catch up fast to deliver Net Zero by 2050 and achieve the milestones on the way.
- The UK has the oldest and most inefficient housing stock in Europe, with around three in five homes rated below Energy Performance Certificate (EPC) C¹². We need to retrofit because even by 2050, 80% of our housing stock will be homes that already exist today.

Energy security

- Over 90% of our homes are heated by fossil fuels. This dependence has left the country exposed to "the biggest global fossil fuel price shock since the 1970s" according to the House of Commons Environmental Audit Committee¹³.

Fuel poverty

- The cost of living crisis has dramatically increased the number of households living in fuel poverty. National Energy Action estimated that 6.7 million households were living in fuel poverty in April 2022, an increase of more than 50% in six months.
- A majority of fuel-poor households live in homes with poor energy efficiency ratings (88% of fuel-poor households in England live in properties with a Band 'D' EPC rating or below). Professional network LETI estimates that a 50% reduction in heating demand for these households could save them £390 in fuel costs, taking millions out of fuel poverty.

Economic opportunity

- Retrofit has the potential to create local jobs for local people more than any other green sector, especially in the "left behind" places that need it most. The IPPR found that those communities with the highest need for installers tended to be current or former industrial centres and coastal communities outside of London and the South East¹⁵.
- Each "green" job in retrofit could result in between 1.7 and 5.3 additional/supply chain jobs, according to consultancy PWC¹⁶.

Health

- Housing is a crucial determinant of health. Homes that are too cold or too hot negatively impact people's health in many ways. The Institute of Health Equity¹⁴ cites Local Government Association estimates that the NHS spends at least £2.5 billion each year treating illnesses derived from people's living conditions, a high proportion of which are directly linked to living in cold and damp homes.

Multiplier effect

- There are numerous other co-benefits that can feed through to jobs, wellbeing, health, income, economic activity and thriving neighbourhoods. There is evidence that progress on retrofit has a more powerful multiplier effect than other Net Zero interventions.
- Social housing charity HACT calculates the average social value return on a whole-house retrofit to be £4,640 in a year¹⁷.



There is evidence that progress on retrofit has a more powerful multiplier effect than other Net Zero interventions."

Energy Systems Catapult report for the Gatsby Foundation



What the UK needs to do by when

Install heat pumps and phase out gas boilers

Aim to install at least **600,000 heat pumps each year** by 2028 (UK Government).
 Install more than **one million heat pumps a year by 2030** (CCC pathway).
 Install up to 1.9 million heat pumps a year by 2035.
 Aim to phase out gas boilers in all existing buildings by 2035 (UK Government) 2033 (CCC).

In order to....

To make a major contribution to....

Reduce domestic energy use by 15% by 2030 (Climate Change Committee).
Reduce the UK's final energy consumption from buildings and industry by 15% by 2030 against 2021 levels (Autumn Statement 2022).
Reduce heat demand in buildings by at least 25% by 2035 (on 2019) to keep on track, with 50% of heat demand met by low-carbon sources.

Reducing greenhouse gas emissions below 1990 levels by:

- **51% by 2025** (UK's 4th carbon budget)
- **57% by 2030** (UK's 5th carbon budget)
- **78% by 2035** (UK's sixth carbon budget)

Reach **Net Zero emissions of all greenhouse gases** by 2045 in Scotland.
 Reduce UK emissions by at least 100% on 1990 levels - **to reach Net Zero by 2050.**
 Reach Net Zero much earlier in at least 300 local authority areas that are committed to earlier targets, including **182 with targets of 2030** or even sooner.

Improve home energy efficiency

Do the work needed to enable as many homes as possible to reach an **Energy Performance Certificate rating of 'C' by 2030.**

In order to....

2030

2033

2035

2050

2 Barriers and enablers

What are the barriers to speeding up the pace of quality domestic retrofit, and how do we overcome them?

We are at the start of what needs to be a very rapid escalation in the scale and pace of quality household retrofits if we are to meet Net Zero targets. There are emerging signs that the pace is building, with job postings for retrofit-related roles on an upward path (see page 17) and the latest statistics from the Microgeneration Certification Scheme (MCS)¹⁸ revealing solid growth in the installation of small-scale renewables, especially solar panels.

Compared to some green sectors, such as tidal power or hydrogen, housing retrofit is a relatively well-established sector, both in the market availability of its solutions and the growing wealth of expertise and experience. Consultancy PwC points out¹⁹ that the buildings sector has the largest intersection of any green sector between the scale of its potential impact on Net Zero and its market availability. However major barriers still stand in the way of stepping up the pace.

1 Policy uncertainty: Despite the progress made in clarifying the policies and actions that will deliver Net Zero in the Government's recent Net Zero Growth Plan²⁰ and Carbon Budget Delivery Plan²¹, the £6bn investment pledged in home energy efficiency over this Parliament and the planned clean heat market mechanism²², there are still widespread concerns that Government policy is not clear, long-term or compelling enough.

2 Skills and workforce: As numerous reports have illustrated, if the skills pipeline is not addressed before demand rises, this will create a break in demand, as evaluations of the short-lived Green Homes Grant Voucher Scheme²³ illustrated. The need for both reskilling and increased workforce supply is significant, as the figures on p.11 illustrate.

3 The relative price of electricity to gas: The fact that electricity is currently around four times more expensive than gas acts as a huge disincentive to installing a heat pump rather than sticking with a gas boiler, for example. Action to "rebalance" electricity and gas prices has been promised in the Government's response to the recent Net Zero Review carried out by Chris Skidmore MP²⁴, but is not anticipated to have any impact on prices until at least late 2024.

4 Multiple barriers for households: For the householder, retrofit can seem a daunting and complex undertaking. Some of the barriers and potential enablers most affecting household decisions on retrofit are illustrated on page 13.

Barriers and enablers for households

Some of the main barriers for households include:

- Wariness and lack of confidence in quality and competence of work
- Lack of awareness and understanding
- Cost, especially for whole-house retrofit
- Long time to recoup any benefit for some changes
- Inconvenience – Catapult's Electrification of Heat project found installation disruption to be the main barrier²⁵
- Not knowing how to find trusted tradespeople
- Ownership issues meaning split incentives (e.g. tenant and landlord)
- Believing your home is already energy efficient enough (biggest reason given in ONS surveys²⁶)
- Concern that solutions are future-proof in terms of technology; fear of making a bad choice they might regret²⁷
- Lack of examples and profile; for example, the vast majority of people will never have seen a home with a heat pump²⁸

Innovation agency Nesta, its subsidiary the Behavioural Insights Team and the Energy Systems Catapult are just some of the organisations that have been working on how to make the customer journey to retrofit easier and more attractive. Some of the insights from this work are summarised below:

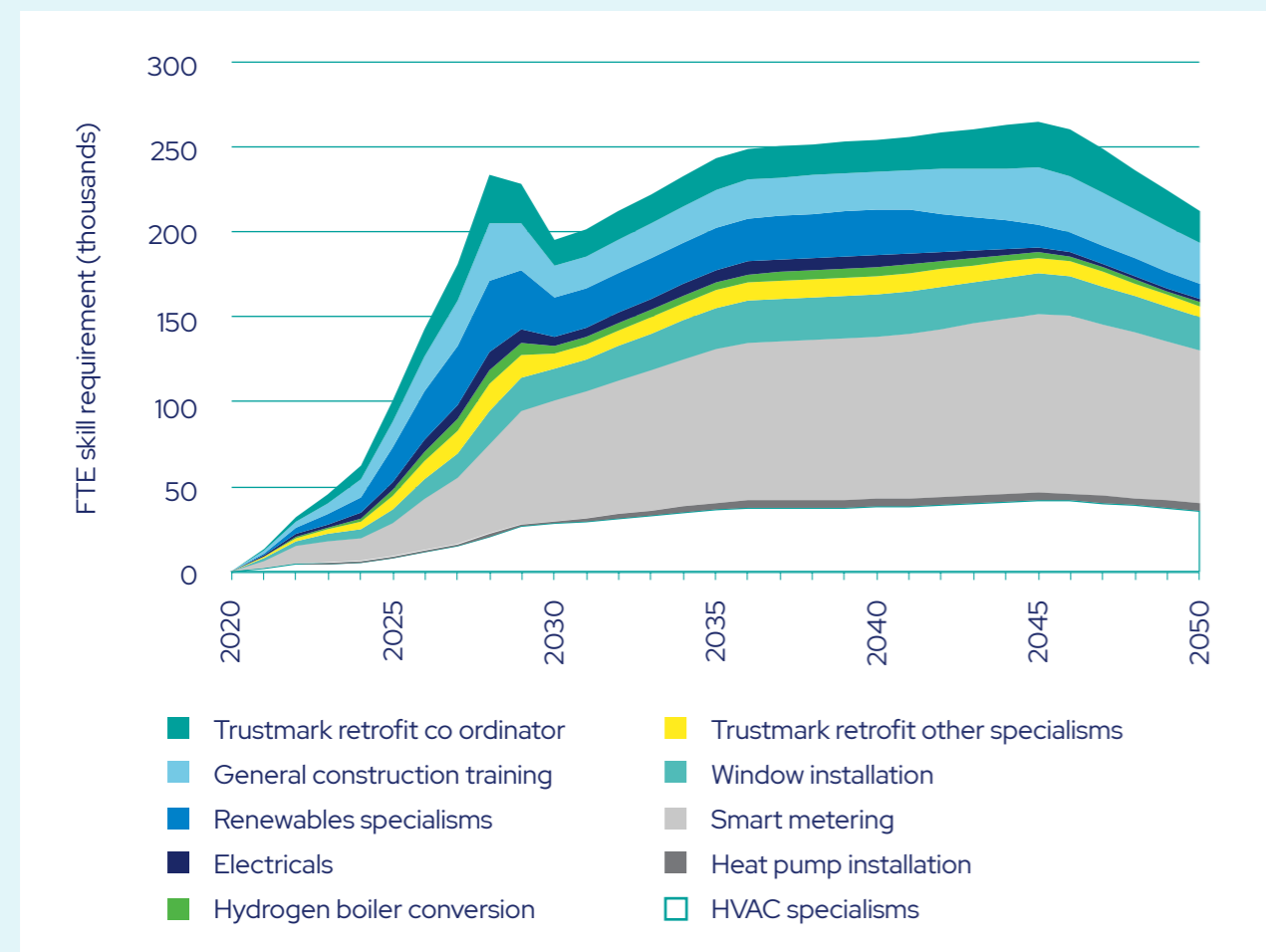
- A comprehensive public engagement strategy is needed²⁹.
- Addressing the disparity between gas and electricity prices is a priority to reduce cost.
- Consensus that we need to establish easy, visible ways for householders to access advice, services, trusted contractors and support from one place, whether this is a retrofit hub or a one-stop shop, possibly also coordinating bulk discounts and streamlined installation for street-by-street retrofits³⁰.
- Make heat pump adoption and energy efficiency retrofits more visible and normal, through signage, property listings and opportunities to see them in action³¹.
- Maintain, improve and raise the profile of the tried, tested and transparent set of standards and accreditations that exist to ensure quality.
- In addition to grants and incentives, providing low-cost, attractive finance options for owner-occupiers (see the findings of Nesta's recent randomised control trial of these in Wales³²). The Government has also announced a series of green finance pilots³³ to reward energy efficiency with lower mortgage rates or support landlords to fund improvements via mortgages.
- Revising the Energy Performance Certificate to make it a more active enabler of energy efficiency improvements (a Government consultation on this is promised by the end of 2023³⁴).

3 Building up the workforce and skills pipeline

How many people are likely to be needed to deliver retrofits? What skills will they need? What can we do on the supply side to overcome the barriers to growth?

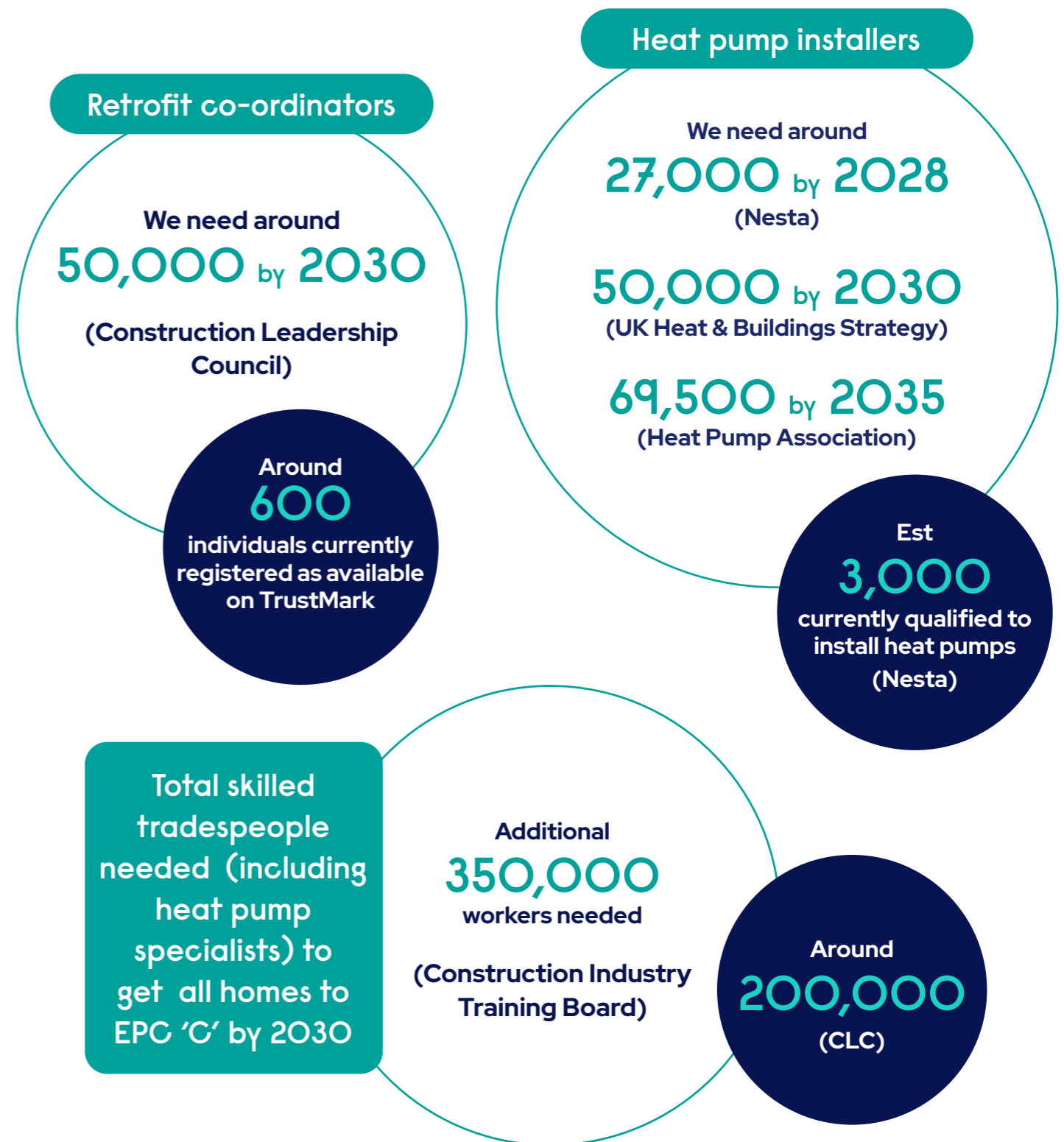
Chart 1: Decarbonising buildings: Additional people needed for each specialist skill

The chart below illustrates the rapid growth in the housing decarbonisation workforce needed between now and the end of this decade.



Source: Reproduced from Climate Change Committee’s independent assessment of the UK’s Heat and Buildings Strategy, March 2022, using estimates from Construction Industry Training Board (2021) Building Skills for Net Zero (2021). “TrustMark retrofit other specialisms” includes retrofit designers, installers, advisers and assessors.

Looking more closely at retrofit roles where we know there are gaps, we can see that a huge workforce boost is needed if we track back from current targets:



The projections above are approximate calculations based on working back from national targets, but give a sense of the scale of the challenge. At local level, numerous studies have now been done modelling the workforce required to deliver the specific numbers of retrofits needed to achieve local or regional targets for local emissions reductions³⁵.

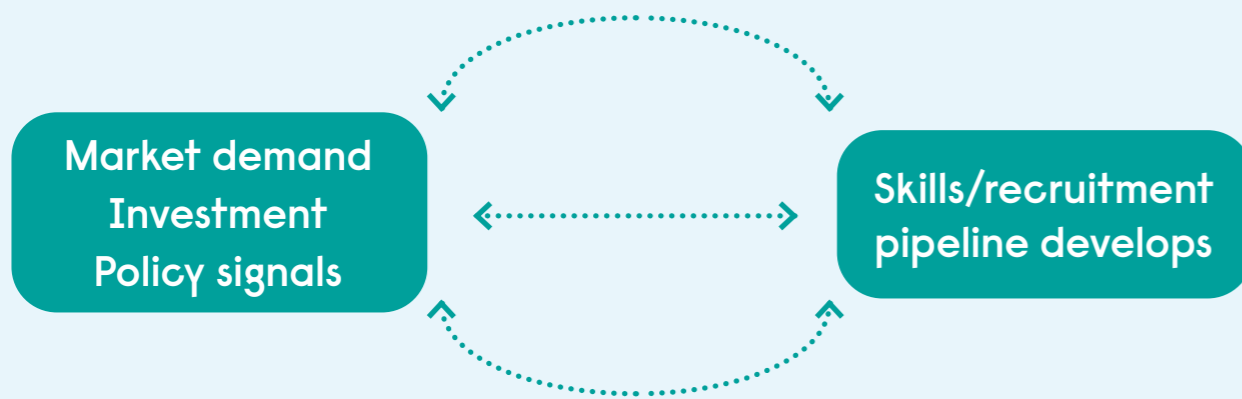
But the biggest national skills and workforce challenge that is universal to all geographies is that market demand has not yet scaled sufficiently to tip the balance for people and small firms to enter or reskill for retrofit-related roles (that in many cases take a few years to train up to do). Without a sufficient pipeline of people ready to work in the sector in time, however, then this will act as break

and slow down or prevent the necessary work being done.

Breaking this cycle requires progress on the policy signals, interventions and incentives described in section 2, but it also requires the skills and employment ecosystem to step up to the training and recruitment challenge – and be ready to support the growth we need.

The retrofit skills/market demand conundrum

If market demand surges without sufficient skills/workforce in place, then demand cannot be met....



....but if market demand is not consistently strong and rising, it's not worth people reskilling or entering the sector

Demand is rising

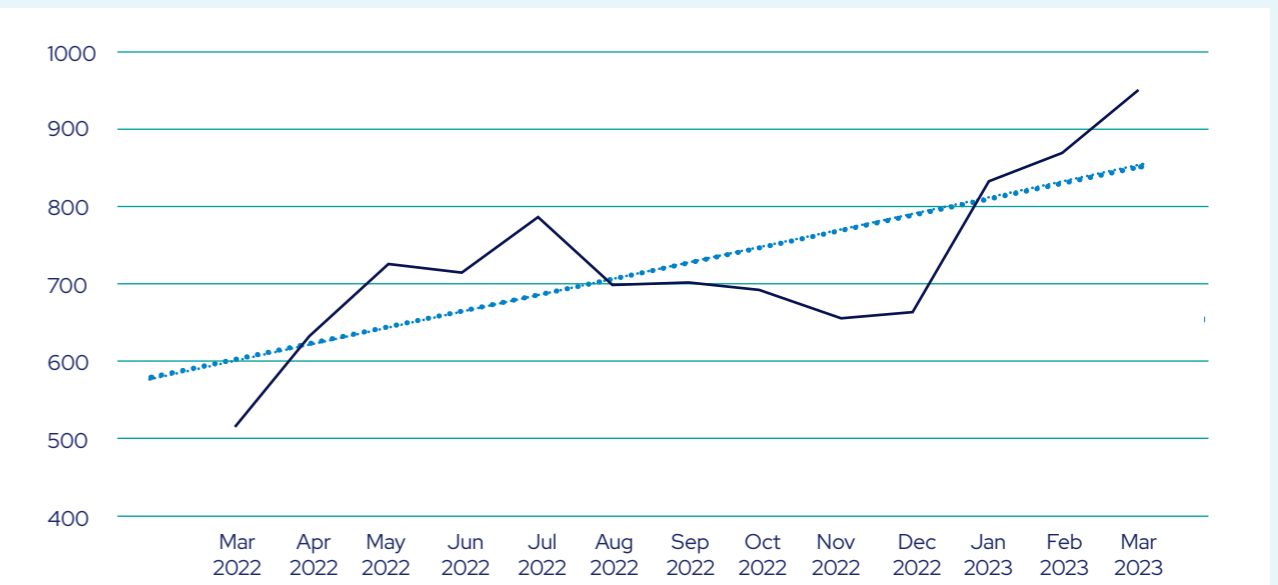
To what extent are the workforce increases required to deliver Net Zero actually visible in labour market demand so far?

Answering this question is challenging as not only are specifically retrofit-related roles not captured in the occupational classifications used by the Office for National Statistics,

but a great many of the installer roles needed for home retrofit may also be installing other measures as well, such as heating engineers who install both heat pumps and gas boilers, for example.

We carried out some analysis of online job postings collected by Lightcast³⁶, which

Chart 2: Number of unique online job postings for retrofit roles, Mar 2022 to Mar 2023



collects and deduplicates around three-quarters of a million job postings each month from thousands of job boards.

The following method was used:

- A search for the terms “retrofit”, “retrofitting” or “retro-fit”; combined with
- a list of 37 occupations most commonly involved in housing retrofit. These included roles such as energy assessor, insulation worker, dry liner or solar installer.
- Manual checks on job ads to check relevance.

This resulted in a total of 4,008 job postings between March 2022 and March 2023.

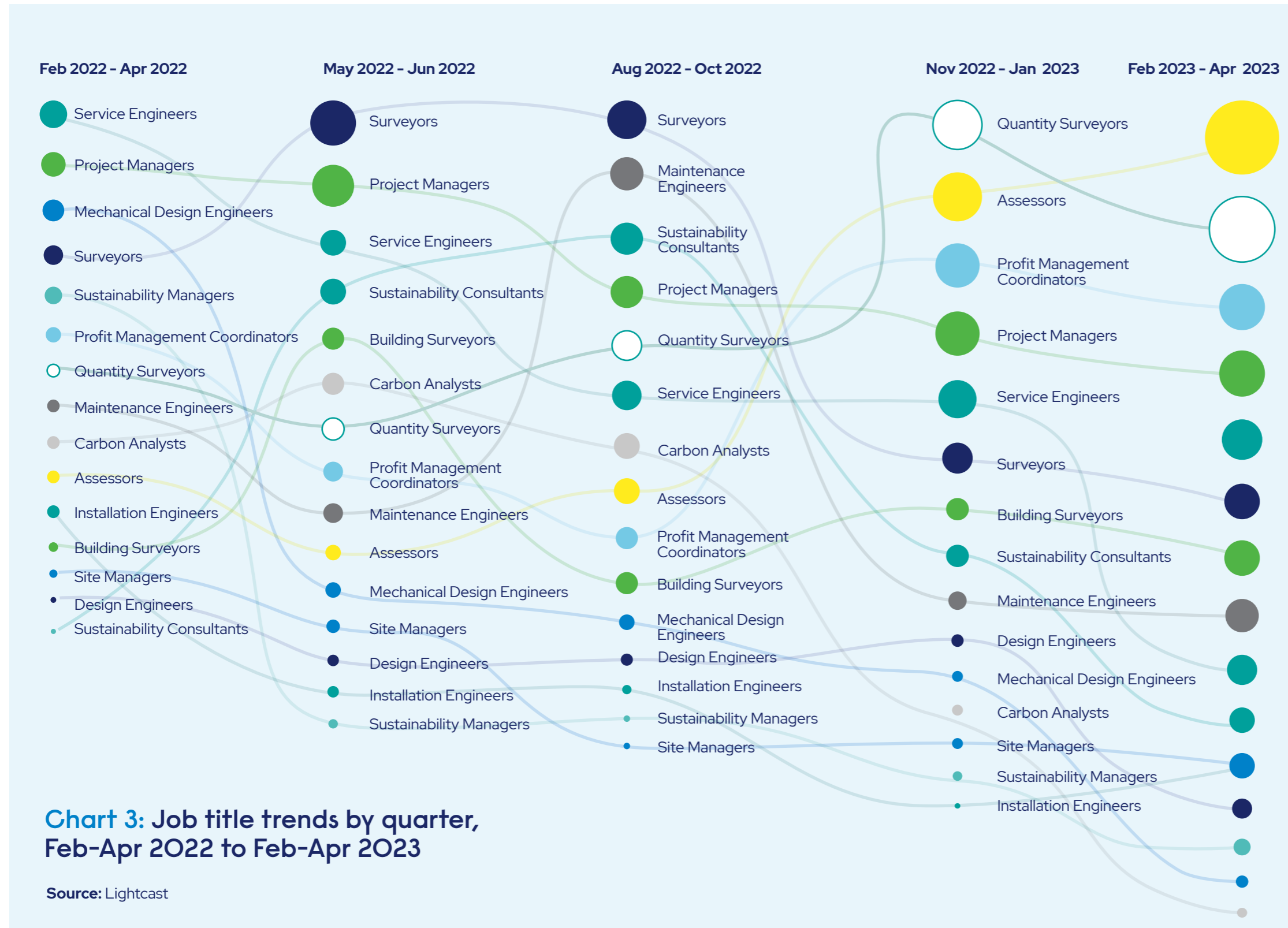
This is very likely to under-estimate roles that may have some involvement in home retrofit, from project managers for housing associations or local councils, for example, to the very wide range of installation and technical roles involved. It is a useful indication of trends, however.

It finds that:

- Online job ads for retrofit-related roles in March 2023 (952) were almost double what they were in March 2022 (514).
- The trend has been consistently upwards over the past year, as Chart 2 shows. This is promising, especially given that official statistics show slow progress over 2022 in delivering retrofit improvements. For example, only around 204,100 energy efficiency measures were installed through Government schemes such as the Energy Company Obligation, a decrease of 55% on the previous year³⁷.
- While demand is heading upwards, there is no sign as yet that demand is outstripping supply. Lightcast monitors posting intensity – the ratio of total job postings to unique (de duplicated) posts. This was running at around 2:1 for retrofit-related roles in March 2023, in line with the average for the whole economy.

Which roles are in demand?

Analysis of changing quarterly demand by job title suggests that assessors, surveyors and “profit management coordinators” are in demand (Chart 3). A closer look at the job postings with the latter title reveals that they are actually retrofit assessors.



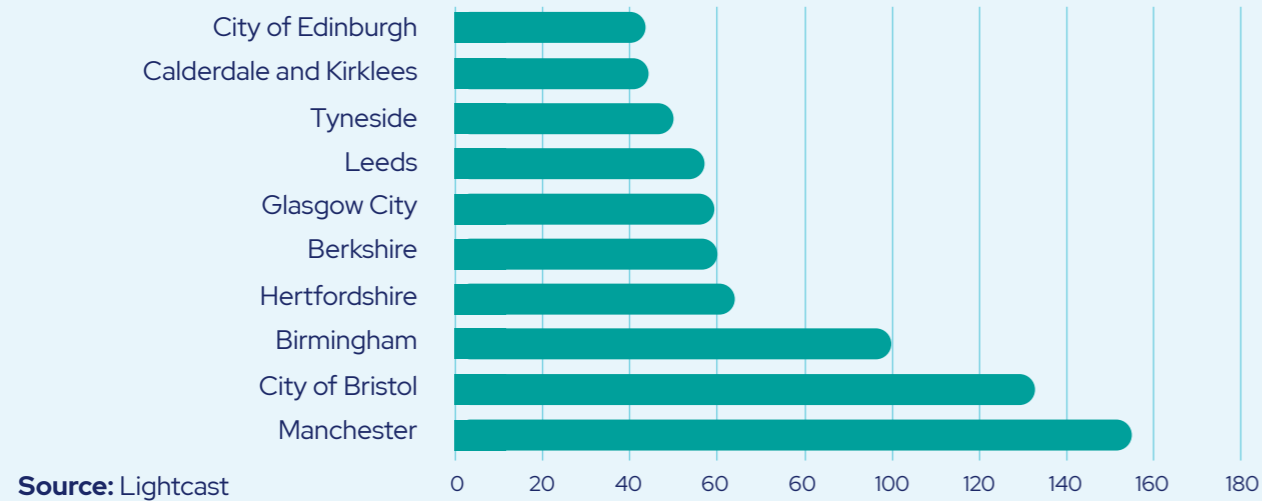
Job postings by geography

Chart 4 shows the counties or unitary local authorities where the highest number of retrofit job roles were advertised. London tops the list of cities where retrofit roles were advertised, followed by Manchester, Birmingham, Bristol, Leeds, Edinburgh and Glasgow. While this is a smaller sample and is not compared to population size, it illustrates how small cities such as Nottingham or Reading are visibly recruiting for retrofit in comparison to much bigger cities. Derby, Newcastle, Sheffield and Exeter were next on the list.

Top cities for retrofit job postings

- 1 London
- 2 Manchester
- 3 Bristol
- 4 Birmingham
- 5 Glasgow
- 6 Leeds
- 7 Edinburgh
- 8 Nottingham
- 9 Liverpool
- 10 Reading

Chart 4: Retrofit job postings by county or unitary authority, March 2022 to March 2023



Source: Lightcast

It is likely that demand is predominantly being driven by the local and regional governments that are pushing to get ahead on retrofit, especially those driven by demanding local Net Zero targets, such as Bristol for example, where job postings look to have been comparable to Birmingham over the past year. While there is not available data to verify this, the past couple of years have seen a step

change in regional action, with local projects and pilots set up such as Bristol City LEAP, the West Midlands Combined Authority's Net Zero neighbourhood pilots and the London Government's ongoing Retrofit Revolution, driven by local and combined authorities determined to try and meet ambitious, near-term Net Zero targets.

Mapping workforce supply against geography

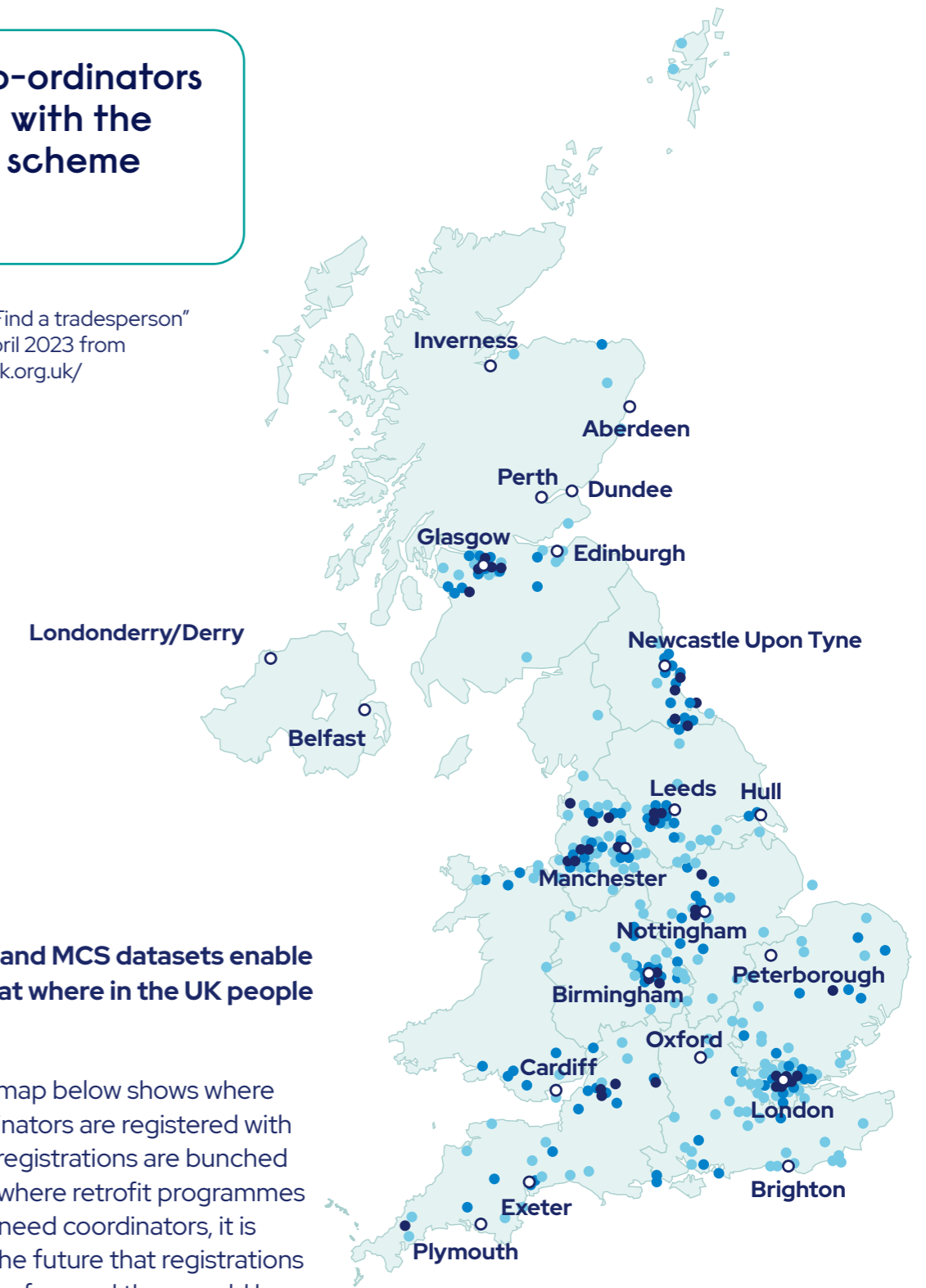
Other sources of useful data are the database of registered contractors kept by Trustmark, the quality scheme for the sector, and that of the Microgeneration Certification Scheme (MCS), which contractors must be certified with in order to install low-carbon heat measures to qualify for householder grants such as the Boiler Upgrade Scheme. These show that as at the end of March 2023 there were:



Retrofit co-ordinators registered with the TrustMark scheme

March 2023

Source: Trustmark "Find a tradesperson" data, downloaded April 2023 from <https://www.trustmark.org.uk/>



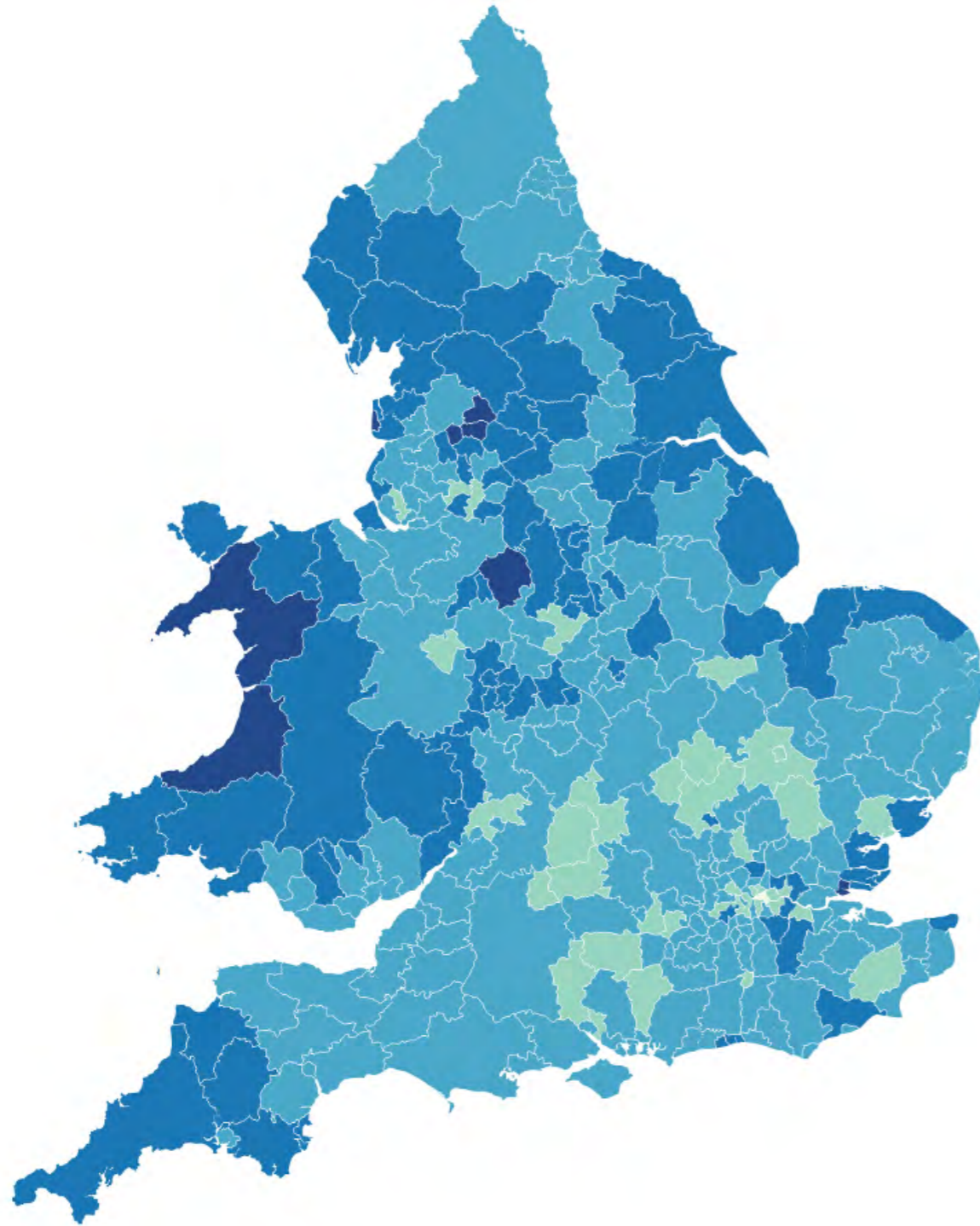
Both Trustmark and MCS datasets enable the user to look at where in the UK people are registered.

For example, the map below shows where the retrofit coordinators are registered with Trustmark. While registrations are bunched around the cities where retrofit programmes are most likely to need coordinators, it is encouraging for the future that registrations look to be less city-focused than would be true of many skilled occupations, given the increased need there will be to deliver retrofits in more rural places (see map on page 24 showing the highest proportions of homes in England and Wales with EPC certificates below 'C'). There are some areas where there appear to be virtually no coordinators registered, however, such as Northern Ireland.

The same is true of contractors registered under the MCS scheme. The highest volumes of contractors registered are in Cornwall, Dorset and Bournemouth, Christchurch and Poole, as well as the city of Glasgow. They show a good geographical spread although there are very few in NI (5 for the whole nation).

Percentage of homes with energy efficiency rating below EPC 'C', England and Wales

● < 36.29 ● < 36.29-48.7 ● < 48.7-61.1 ● < 61.1-73.51 ● > 73.51



Source: Office for National Statistics, Energy efficiency of Housing, England and Wales, local authority districts, October 2022.

Which skills are needed?

Decarbonising heating systems, improving the fabric of homes, adapting to changing technologies and managing a complex, customer-focused project with multiple contractors and partners to deliver high-quality, whole-house retrofits is no simple task. The skills, capabilities and expertise needed reflect this.

Many of the roles needed sit in the construction sector, especially those related to installing low-carbon heating or energy efficiency measures. This is where large numbers of new entrants are needed (see below) as well as retraining for existing skilled trades. The UK's low supply of electrical, plumbing and other trade skills is a

longstanding issue that the retrofit challenge brings into sharp focus.

Other retrofit roles, such as a retrofit assessor, have more in common with an energy assessor role, while the role of retrofit coordinator requires a complex level of project management, technical understanding and customer journey focus.

The key direct roles are set out in PAS 2035, which provides an end-to-end good practice framework for whole-house retrofit management. A further standard, PAS 2030: 2019 works alongside the PAS 2035 framework, covering the installation of specific measures.

In addition to technical and specialist skills, two themes emerge as crucial from sector studies and evaluations that need to underpin discussions about skills:

Quality:

The requirement to find people with the skills to deliver high-quality work. Simply put: "If done correctly, the change we are about to go through could save residents money whilst improving their safety, health and wellbeing; if done poorly and in an unmeasured way, the opposite will be true."

The Climate Emergency Retrofit Guide published by professional network LETI sets out the many ways in which poorly-done retrofits can create problems rather than solving them. This is also key to the consumer confidence and trust that is needed to increase demand.

Customer focus:

The ability to focus on the customer journey of the householder. The Energy Systems Catapult have done extensive work to map the customer journey, based on learning from a project installing around 750 heat pumps in customers' homes. However technical the role, listening to and communicating with the householder is paramount for successful retrofit. Customer service and communication feature high on the list of skills sought by employers in our analysis, below.



"Retrofit is a space where you really have to engage with the consumer. You're working in people's homes, so you need to bring them with you on that journey and build their trust."

Rob Hargraves, Retrofit Skills Advisor, Energy Systems Catapult

Skills currently in demand

The three bar charts below show the findings when we analysed job postings from labour market intelligence platform Lightcast over the period March 2022 to March 2023 (see p13).

Chart 5 illustrates the importance of interpersonal skills to delivering retrofit, as well as the fact that virtually all involved will be in



some sort of procurement, supply chain or partnership relationship and they will need the skills to manage this.

While the skilled trades are much in evidence when specialist skills are analysed (Chart 6), procurement and commissioning are also near the top of the list.

Chart 7 reveals the top software skills likely to be needed for retrofit-related roles, which include building modelling tools as well as data and process management software. This is likely to become increasingly key for all retrofit work as heat technology becomes more networked, for example, while assessment and monitoring are likely to be areas where digital tools continue to develop fast.

Chart 5: Top 10 common skills

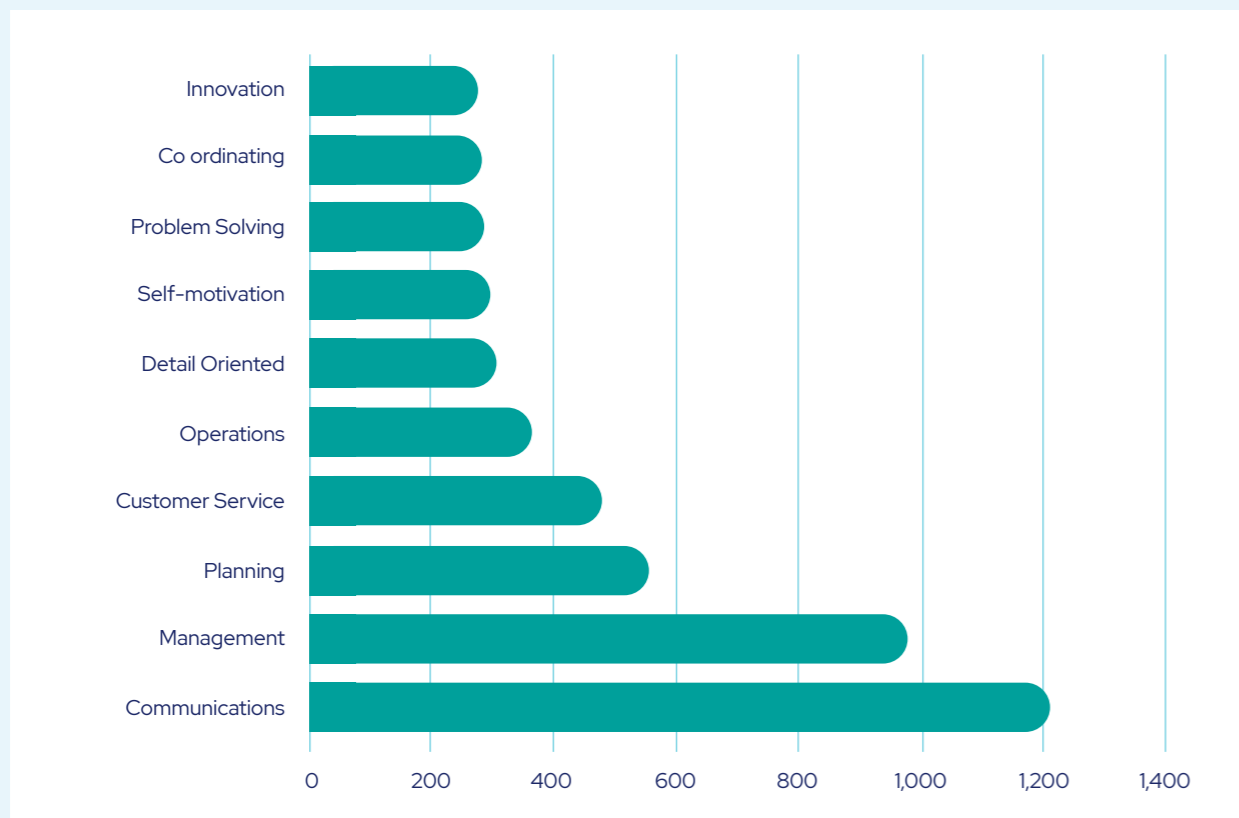


Chart 6: Top 10 specialist skills

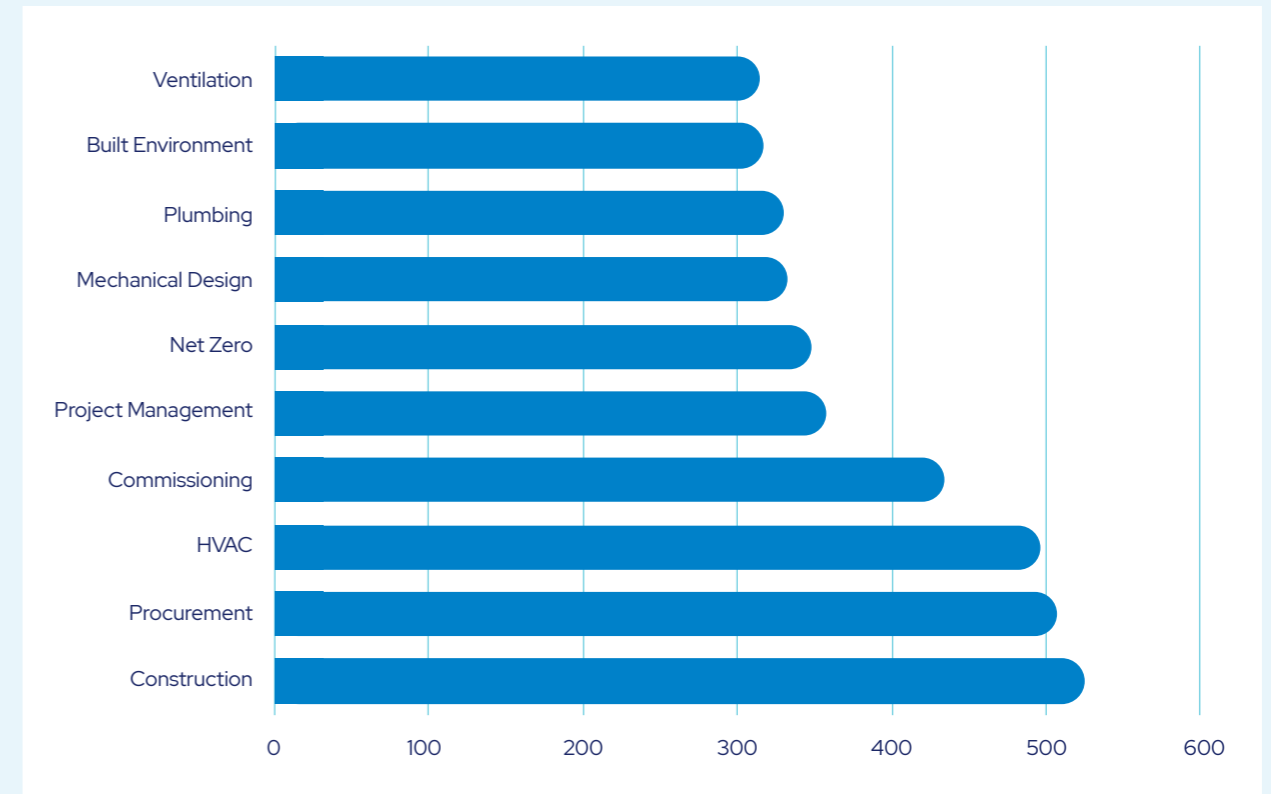
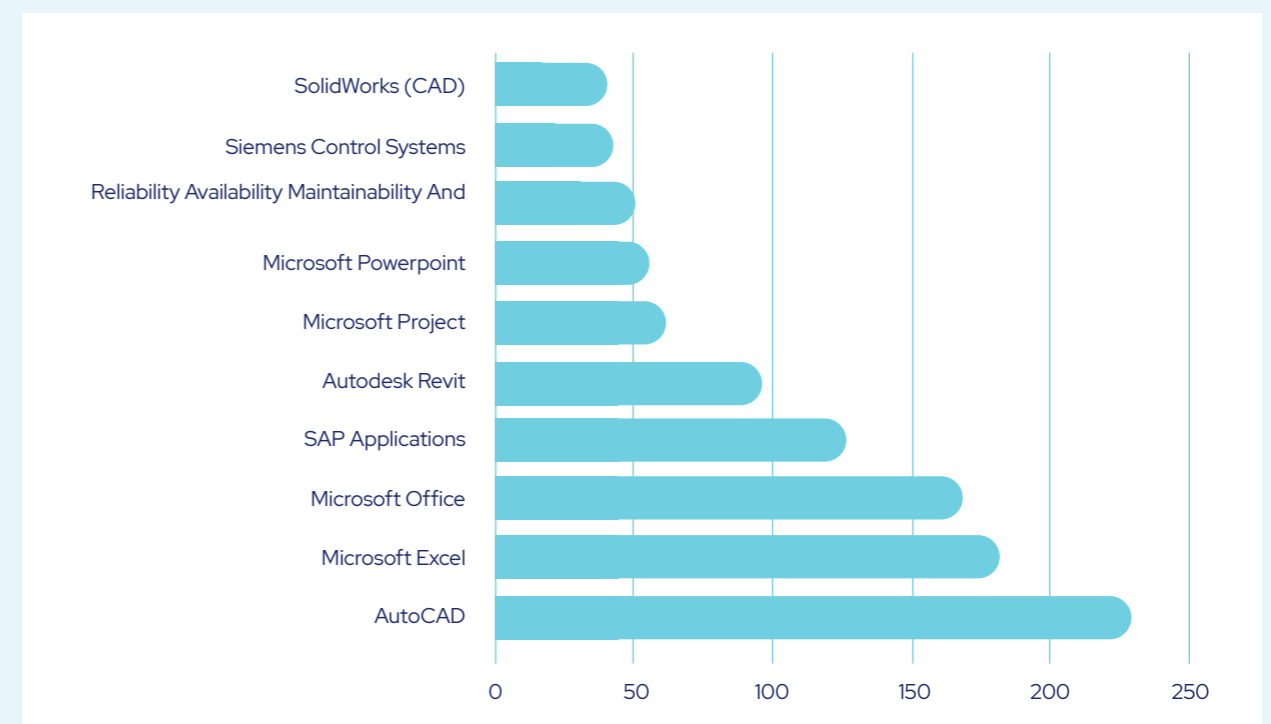


Chart 7: Top 10 software skills



Source: for charts 5,6,7: Analysis of 735 unique job postings live between January 2022 and January 2023 inclusive, Lightcast, March 2023

4 Next steps in building the retrofit skills and recruitment pipeline

What is needed to scale up the skills and recruitment pipeline into retrofit?

The key challenge for retrofit as a “core” Net Zero sector is clearly set out in a May 2023 report from the UK Climate Change Committee³⁸.

“The Net Zero transition will require much of our housing stock to be insulated and upgraded to low-carbon heating, such as heat pumps. This will require a rapid growth in the workforce, spread across the country. Those most likely to deliver this are small and medium-sized businesses (SMEs). These businesses are currently male-dominated.”



A number of landmark plans, reviews and strategies have now been published on how the UK can deliver this rapid growth in workforce with the necessary skills and training, while supporting SMEs in a way that increases workforce inclusion and diversity. Some of the areas where the consensus is most clear include the need to go “further and faster”⁴⁰ to put in place:

- The funding, awareness campaigns and consumer support for local areas to grow the number of retrofits, which will spur training demand and recruitment into the sector.
- Local retrofit hubs to coordinate and publicise support, advice and funding for households, as well as support and coordination for local contractors and supply chains.

- Long-term funding and incentives, rather than short-term funding pots that discourage people from investing in the training and certification needed to enter the market (as well as discouraging innovation).
- National coordination to ensure that the right training and qualifications framework is in place and can be used to communicate clear pathways into the sector for people at every life stage, from school-age young people considering their career to over-50 career-changers.



As well as these system improvements, there are some practical steps that we think will speed up and scale up the number of people entering or reskilling into retrofit.

Addressing the barriers for SMEs and self-employed contractors to upskill and get into the market - without compromising on quality or consumer protection.

Micro-enterprise (with seven or fewer employees) building practitioners deliver most current repair, maintenance and improvement activities in homes and represent 92% of construction firms and 77% of the construction workforce.⁴¹ Supporting these SMEs so that they can focus on delivering quality work is essential.

As many studies have identified⁴², it is much harder for SMEs to invest in cost and time for training and certification than larger organisations. A major issue flagged by contractors is the cost and time involved in becoming certified by the Microgeneration Certification Scheme, required to install low-carbon heat measures or microgeneration such as solar PV or heat pumps that attract funding from Government schemes such as the Boiler Upgrade Scheme or the Energy Company Obligation. The MCS’s last installer experience survey⁴³ found that installers

considered that the current certification process was restricting new market entrants. It is therefore welcome that the MCS is consulting on changes to the scheme.

Alongside changes to make the certification process more straightforward for contractors, the Government could consider introducing a UK-wide MCS Certification Fund to lessen barriers to entry while maintaining quality and assurance. The Scottish Government has introduced such a fund, providing heating engineers interested in heat pump installation with a grant towards the initial certification cost of up to £1,000⁴⁴. While this can represent a modest contribution to costs that can add up to near £3,000 each year plus a few days off work for refresher training, it is at least a start in seeking to overcome this significant barrier to entry which comes on top of other training and administration costs.

2

Step up the drive to recruit trainers from industry as a priority

FE colleges and other training providers are finding it difficult to recruit the trainers they need from industry to teach courses. As a recent report from the Lifelong Education Commission and Chartered Institution for Further Education pointed out, this has been a problem for years but has got worse.⁴⁵ They recommend a mix of incentives such as tax breaks for employers that enable their staff to teach part-time and targeted

incentives for the highest shortage areas, as well as a much more integrated strategy to attract industry professionals in much greater numbers. While the significant pay disparity between industry and further education is a big issue, it is not just about pay and job attractiveness. Much closer collaboration and partnerships between educators and business will be needed to support the retrofit sector to train up the people it needs.

3 Publicise and market retrofit as a flexible working opportunity to increase the diversity of the retrofit workforce and increase customer responsiveness

It has often been said that Net Zero is the opportunity to recruit a far more diverse workforce, but there is a likely danger of duplicating the lack of diversity in the UK's engineering and construction workforce, which is 14% female and 96% White.⁴⁶

Many organisations have been working hard to improve the recruitment of under-represented groups into the sector for many years, but little impact has been made on the sector's overall profile. Some of the newer retrofit roles, especially those involving shorter training courses not requiring a background in the sector, such as retrofit assessors, may provide another way to attract a more diverse workforce into the sector.

Flexible working can be a powerful tool to increase participation of under-represented groups in a sector, particularly on grounds of gender and disability.

One advantage of retrofit roles is their potential for flexible working – particularly roles such as retrofit assessors. Many householders are likely to want to arrange retrofit assessments outside of standard working hours, while assessments can be done for a limited number of hours a day. While this may be less true for installers and project managers, support organisations such as retrofit hubs, local business support and commissioners can support contractors with inclusive recruitment to flexible roles. This is important for responsive customer service as well as the skills pipeline.



“One advantage of retrofit roles is their potential for flexible working – particularly roles such as retrofit assessors.”

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