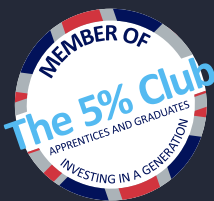


The Journey to Green Jobs

Taking the pulse on the transition
to green skills and jobs



The Journey to Green Jobs: Taking the pulse on the transition to green skills and jobs



Foreward

By Jim Coleman

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We are continually faced with messages and headlines about both the opportunities and the challenges of achieving the UK Government's Net Zero 2050 targets.

And this is true, the opportunity for new jobs and businesses to emerge as we simultaneously address the tricky technical and organisational tests inherent in getting to 2050 is happening in real time. The prescient labour market challenge – creating a skilled and flexible workforce to address challenges and respond to opportunities is an essential prerequisite in progressing successfully to 2050, but we all too often hear that this is also the major sticking point. There are just not enough people and an insufficient skills base to move things along at the required pace.

It is the intention of this report to showcase exactly what is happening across employers. Through a series of detailed industry case studies and employer commentary, the report explains what is underway now in terms of innovative business practice and what else is possible with some scaling up, more resources and funding, and the organisational wherewithal to coordinate action across multiple industries and public stakeholders.

A range of noteworthy elements emerge from this work. The ongoing riddle of actually defining a 'green job' or a 'green skill' is tackled head-on with presentation of a deft typology that can cover almost all possibilities. Alongside this, the discussion of how we will eventually move from thinking in these quite limited terms to eventually all jobs being green at some point in the future is also considered. All the better that we think this way, if we are to create the basis for a wholesale change in the carbon emissions of our economy. Furthermore, the need for a multi-sectoral approach, and the transitioning to new business models for organisations across all industries, not only those directed squarely at decarbonisation or energy activities, will be necessary.

One of the most interesting and often overlooked aspects of the green jobs and skills evolution, is the capacity of this process in itself to create important co-benefits. A key example illustrated in this report is the possibility of engendering much greater diversity in the workforce as new green roles emerge which, by their very nature, appeal to a broader cross section of the workforce and wider community.

This will be a crucial process in sectors such as construction and transport, where transition to new green business models, services and products could rapidly change their workforce profiles in a very positive way.

A big part of workforce development and skills upgrade aimed at achieving Net Zero is inevitably a practical function of training, both on the job and within education and training providers. The report shows us that use of AI processes and models could enhance this process enormously, both in the depth of training undertaken and in its flexibility and reach across different types of firms and businesses.

One further issue that comes up often, both here and in other research, is the limited understanding that young people currently have of green skills and jobs and the industries where these will be most critical for the decarbonisation process: construction, transport, energy and also agriculture and land use planning. Concerns about how young people make choices continue to pervade education, training and skills development stakeholder groups. This report and its findings should therefore form part of a very important effort to ensure that the right types of information reach the right places, telling a compelling story about how the world of work is changing and how sectors that young people may not have looked at before are, in fact, the industries of the future.

It is in this context that the 5% Club can play a vital role, corralling as it does, the collective efforts, influences and activities of a wide range of employers critical to the future of a decarbonised UK economy. The role of influencers who can showcase new ways of embedding green skills within organisational architecture, the attractiveness of new technologies and services, as well as the call for funding directed in the right ways, will only be taken forward with the backing of a well-articulated, collective industry voice. The time is right for this voice to be heard, as the new UK Government begins the process of crafting this parliament's policy landscape. This effort should include both an ongoing 'headline' message about the need for industry to transition to green jobs and skills, but also more practical, policy-specific recommendations such as necessary modifications to the apprenticeship levy or to training design mechanisms that enable more intertwined work and training pathways. Nothing will be more important in this effort than the real-world evidence contained within this report about what already works well and why.



"One further issue that comes up often is the limited understanding that young people currently have of green skills and jobs and the industries where these will be most critical for the decarbonisation process."

Jim Coleman

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Executive Summary

A "green job" is one that contributes to protecting or restoring the environment, including mitigating and adapting to climate change.

Green jobs can be categorised into three types: entirely new roles driven by the green transition, existing roles adapted with new green skills, and traditional roles where the green element is supplementary.

In the UK, definitions and data collection for green jobs are guided by recent work from the Office for National Statistics (ONS) and the Green Jobs Taskforce. Current estimates suggest a significant increase in green jobs, with projections ranging from 135,000 to 725,000 new positions by 2030. Despite a recent dip in the job market, green job listings are growing in share, indicating their resilience and increasing importance.



The CBI estimates that the emerging low carbon economy could contribute £37 to £57 billion of annual GDP by 2030, equaling 14-20% of total GDP. But this is at risk if we do not have enough people to do the work. According to LinkedIn data, only one in eight workers possesses at least one green skill, while demand for these skills grows at a faster rate than the available talent pool. Specific sectors likely to experience the biggest skills gap include energy, expected to see a shortfall of around 200,000 workers by 2030, and construction, with around 230,000 in retrofit related jobs alone.

The UK education system has traditionally focused on academic qualifications, leading to a mismatch with the vocational training needed for most green jobs. The pace of reskilling existing workers is insufficient to meet the growing demand, and there is a lack of awareness about green careers among young people. Educational institutions and training programmes are adapting, but more coordination is needed to ensure they meet evolving industry requirements.

Policy support at the national level has been inadequate, although there are promising local and regional initiatives. Initiatives from the new Labour Government, such as forming Skills England and reforming the Apprenticeship Levy are steps in the right direction, but their major policies to support house building and scale up clean energy will require even more people with green skills.

Several case studies highlight challenges and transferable good practice in the field. Companies have successfully integrated green skills training by embedding it into existing roles and processes, ensuring that all employees, not just those in technical jobs, acquire the necessary knowledge to meet green standards. They have employed a mix of formal training programmes and on-the-job learning, often partnering with local educational institutions and utilising resources like the Supply Chain Sustainability School to build competencies.

Some companies have created internal frameworks and role-specific training plans to systematically address the skills gap, promoting green skills as part of their broader sustainability and business objectives. This comprehensive approach not only enhances the skills of the workforce but also improves employee engagement and aligns the workforce with the company's sustainability strategy.

This document serves as a practical guide for businesses to navigate the green skills landscape, emphasising the importance of resource planning and investment in green skills for long-term relevance and success.

To get started, employers are encouraged to engage with local resources like green skills hubs and FE colleges. Innovations in training, such as using AI for practical simulations, are emerging to help address skills development needs more effectively.



Approach

We produced this document as a practical guide to embedding green skills and jobs in your organisation. In order to understand what was really happening in the market, we first conducted an online employer survey. This was followed up with a series of interviews with 5% Club members and others active in the green skills ecosystem. The document features pertinent findings and quotes from the survey and a series of case studies to bring to life the real world experience of a range of professionals who are navigating the green jobs transition.

The question we wanted to help you address is do green skills and jobs matter for your business; is it worth putting precious management time into analysing them and resources into making progress? Is there value in considering green skills as a distinct set of skills required for your business to continue to be successful, or perhaps even be more successful. Do you have discernible green jobs or is your challenge more about shrinking the carbon footprint of all your existing jobs?

The companies that participated in this survey are on various points of their journey. Each had learning and experience to share. We hope this document helps you identify and follow your own pathway through the green economic transition.



QINETIQ

“We are at the start of the ‘green’ journey and are building our knowledge of where we need to focus investment in people development to maximise a green return. As part of this we need to understand better the green skills that are appropriate for our organisation and from there will be able to build green career pathways, beginning with Earn and Learn Opportunities.”

Chris Shirley, QinetiQ

What is a green job?

It's a term that is used more and more frequently as a distinct, emerging feature of the labour market, but pinning down what is a green job has proven to be a moving target. We often hear 'all jobs will be green jobs' and that is the direction of travel. Clearly once we get there, as the economic transition picks up pace, the term may become redundant. Or it may evolve, just as tech jobs have not gone away, as environmental objectives – like biodiversity – and solutions mature.

A number of international studies have wrestled with this question. In the UK, the government's Green Jobs Taskforce¹ took an extensive look at coming up with a practical definition. If you are interested in exploring the background to defining green jobs, NESTA's rapid evidence review on Green Jobs² took a deep dive on the subject. For our report, we decided to align to the recent ONS work that built on the Green Job Task Force definition and will be the basis of official data collection and analysis in future.

"Employment in an activity that contributes to protecting or restoring the environment, including those that mitigate or adapt to climate change"

In our survey 71% firms said that they have employees in green job roles, based on this definition.

Green jobs do of course go hand in hand with the green skills which can be thought of as one identifier: are there new skills required to perform this role? But this is not the complete picture as there are jobs related to the green transition that don't require new skills. For example, as retrofit scales, it will drive a significant demand for painters and decorators and other trades. A useful way to consider green jobs is in the following three groups based on the degree to which they are new or existing jobs driven by the green transition:



Source: Based on the USA Occupational Information Network (O*NET) definition of Green Job typologies

Perhaps the most useful way to think about green jobs in your business is what is the new economic activity, in your transition to a low carbon business model? What has changed in the products and services you sell, in the regulations that govern them, in the decarbonisation of the related operations and their measurement? These factors and others will determine how jobs are changing in number, scope and skills to meet these requirements. Understanding this will help identify requirements in terms of recruiting and skills development to ensure your business remains competitive.

As an introduction to our review on the current status and likely future of green skills, we asked a deep expert in vocational skills to put them in the context of their evolution within the broader skills system.

Case Study:

Wyn Prichard on the Evolution of Green Skills



Profile:

Wyn Prichard has spent his career building the capacity and quality of vocational skills in Wales. This experience was built in a number of roles including Director of Construction Skills and Strategy at the NPTC Group of Colleges and Wales Director for CITB. In addition to now acting as a Senior Strategic Consultant to Hydrogen Safe, he sits on several skills related government committees and industry bodies.

Take on green skills and jobs:

I am not sure there is a green job in the longer term as we are all on a journey to a green job. Every job will evolve with an element of green, some dramatically to where the job no longer exists and is being replaced by a new job in a new technology, but more will be where the person's individual job needs to be done in a more sustainable way. There will be some training requirement for the worker to make this transition. We do need to do a better job of communicating the emergence of new jobs where they compensate for the loss of jobs in high emitting sectors.

Looking purely at sectors in the traditional sense for skills requirements can be limiting. We are now seeing a mix of sectors involved in economic activity, for example the use of manufacturing and robotics in construction. Low carbon buildings clearly have a strong reliance on the ability to source and use low carbon energy efficiently.



Main challenges:

We frequently see large estimates of skills shortages but the missing piece of the puzzle is clarity on what the skills shortages actually are. This is necessary for the training to fall into place and deliver people with required skills. However this is difficult as the estimates need to reflect how these industries are undergoing dramatic change. Part of this will be the impact of AI, both in terms of how work is done and how training is delivered. We also need to ensure that the skills estimates include not just the work to build or complete the project, but also what is needed to manage and service it post build.

Training still needs to catch up with the multi sectoral approach to industry described above. It also needs to adapt to the transition to new business models, for example moving from oil and gas to hydrogen. Businesses will move to a more solutions based response to these changes and the education system needs to help them be more innovative.

Construction faces continuing challenges around employment that predate the emergence of green jobs. Achieving real diversity is a long standing problem and while there has been progress, we have not yet made the big step forward. However green skills provide the opportunity to attract a more diverse workforce, moving away from the perception that this is purely for men from certain backgrounds.

What has worked well?

Training has become more accessible, more varied and engaging in the way it is delivered. We are also moving beyond traditional careers advice where the number of predicted GCSEs determines whether you're going to university or to train for a trade. There are a number of engagement organisations who are doing good work in schools to open up and bring to life job opportunities and move beyond stereotypes. This will lead to a bottom up demand for skills courses to match where they now want their career to go.

To catalyse interest in green careers means we need to look at how sustainability is taught in schools and relate it to their career choices. Real progress is being made in Wales in this regard. I was pleased to be involved with the WJEC and the Future Generations commission to create the new Sustainability Qualifications. This is leveraging an approach in Wales to put the rights of future generations into legislation and use its powers and scale to analyse real world requirements, for example the Net Zero Skills Action Plan.

★ Top Tip

Start thinking through how AI can revolutionise the way skills are developed in your organisation or sector. For example, AI can be used to simulate work situations where there are dangers, like a hydrogen leak, in a way that can't be done in a regular classroom or training environment. The ability to run through scenarios and let the student practise what they would do is a real advance in building competencies. Being able to train on the 'what ifs' in combination with traditional training methods will be very valuable. It can also more effectively support different learning styles and help to train more diverse workforces and provide more cost effective delivery into organisations that struggle with the one day off site – on campus model.

Where are we now?



The economic impacts of the net zero transition are broad ranging and driving new activity, business models, investment, productivity gains and job creation. According to the CBI, 27 specific green growth ‘prizes’ could contribute £37 to £57 billion of annual GDP by 2030³ and could represent 14–20% of total GDP growth between now and 2030.

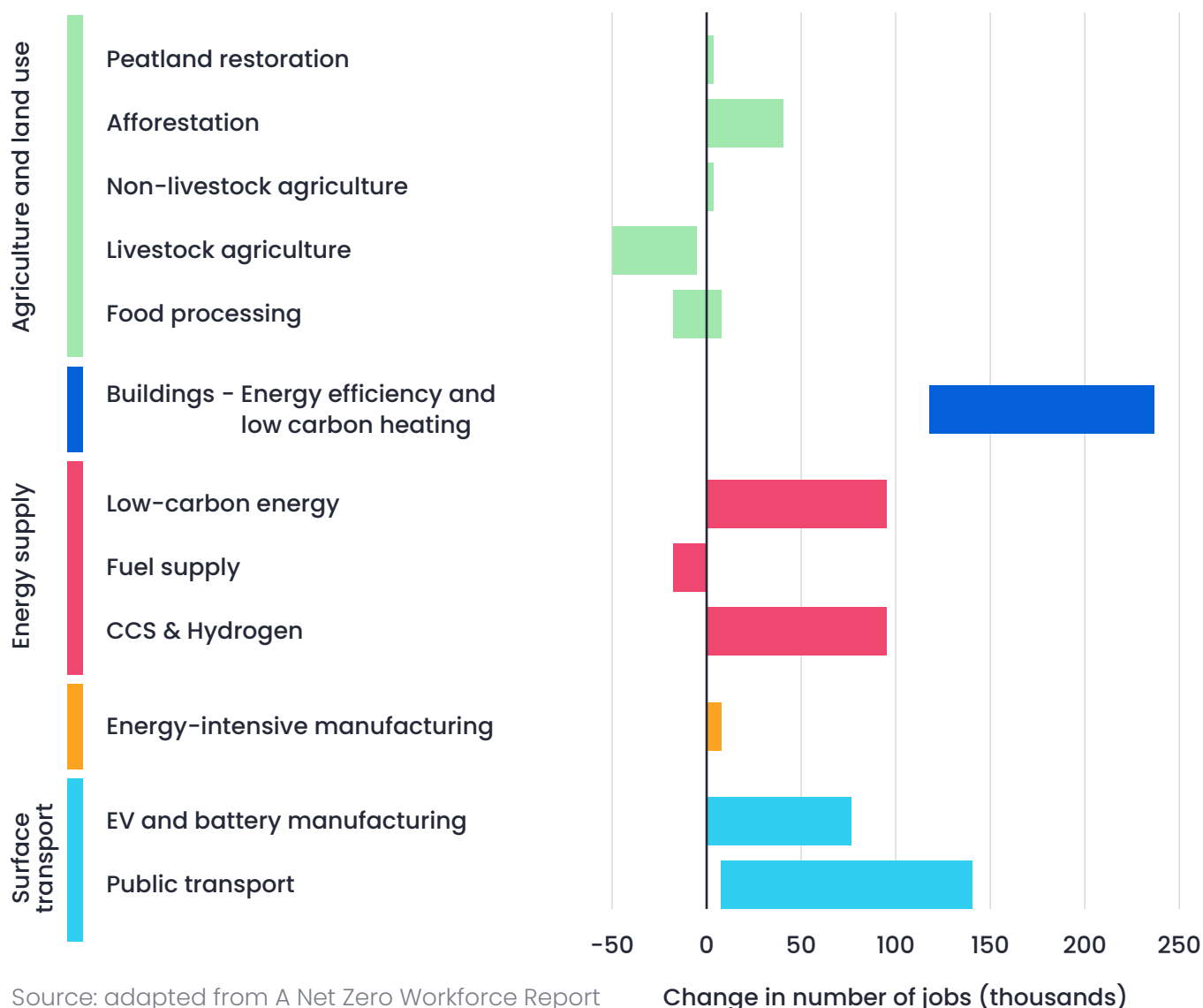
They make a good argument for capitalising on some core strengths of the UK but also call out how we are starting to lag the US and the EU in core areas including investment and suggest 15 policy areas where we can ‘outsmart where we cannot outspend, including supporting green skills.

The Climate Change Committee (CCC) is an independent, statutory body that advises the UK government on emissions targets and progress towards them. They estimated that “between 135,000 and 725,000 net new jobs could be created by 2030 in low-carbon sectors, such as buildings retrofit, renewable energy generation and the manufacture of electric vehicles”⁴. These are net new jobs as they factor in potential job losses in the transition from high carbon producing activities.

They recognise the wide range of this estimate due to a number of uncertainties but it can be viewed as indicative, along with the Government’s Green Jobs Taskforce estimated 250,000 jobs by 2030 and the Government’s stated ambition from 2020 of 2 million green jobs by 2030.

The following graph is based on the CCC’s summary of the range of estimates of the direct employment impacts of decarbonisation by 2030.

Employment impact



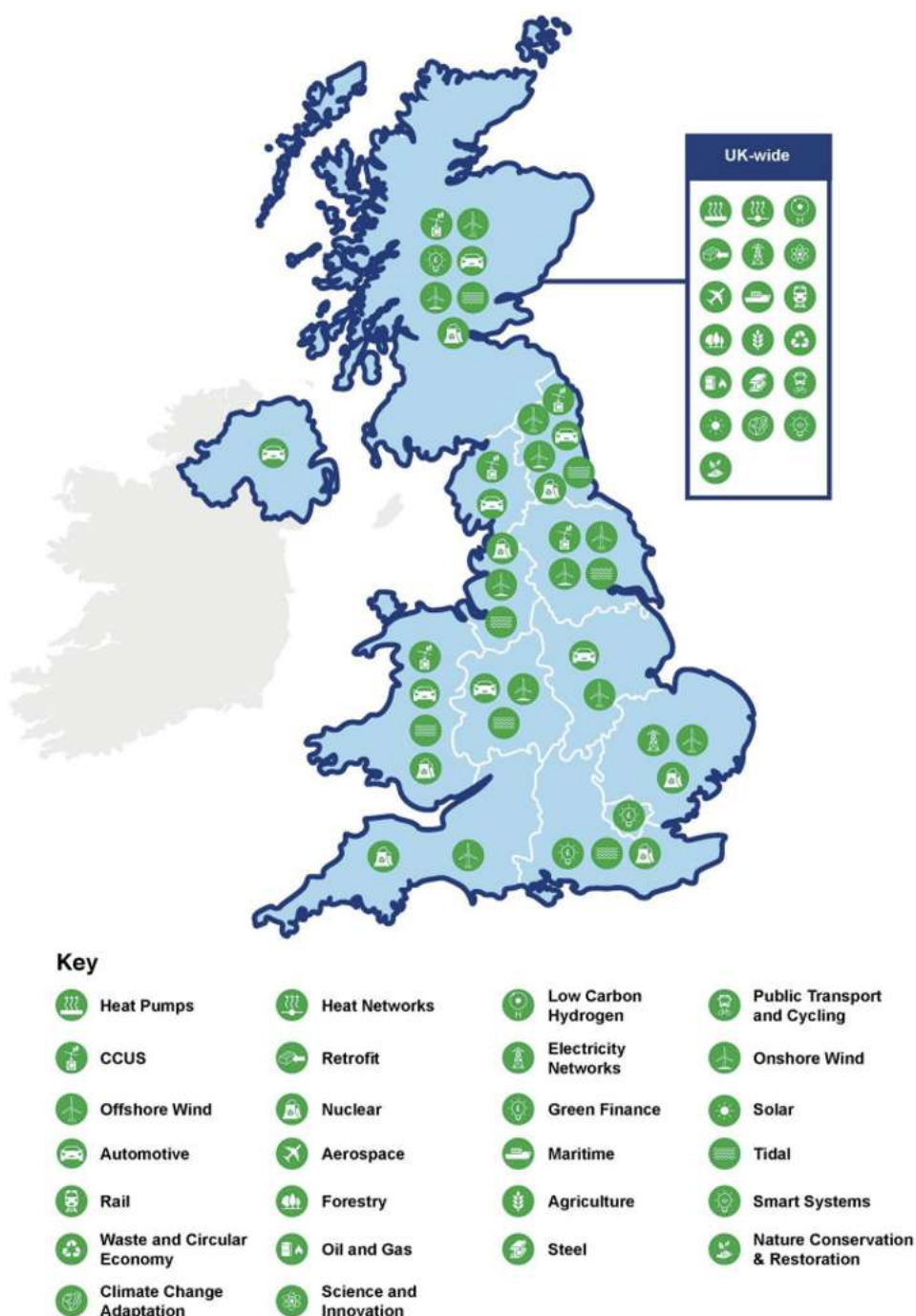
Source: adapted from A Net Zero Workforce Report
- Climate Change Committee, May 2023, fig. 2.5

Beyond forecasts, we are seeing a growing number of green jobs being listed in the market. According to Totaljobs data⁵, demand for green roles increased 677% between 2019 and 2023, despite a general slowdown in hiring. The most recent edition of PWC's Green Jobs Barometer⁶ saw that the number of green jobs being advertised fell 26% versus an increase of 14.5% in 2022. This fall was lower than the fall in other UK jobs; 29%. They noted that this relative resilience in green jobs had increased the proportion of green jobs in the labour market to 2.3% but that a long term growth rate similar to the prior year will be required in order to make our 2030 and 2050 net zero targets.

So if we accept that there will continue to be a growing number of new jobs due to the Net Zero transition over the longer term, it is useful to look at how they will be distributed across the regions and sectors. The PWC report saw a worrying trend continue where new green jobs are more concentrated in London and the South East, with Scotland and the North West coming next. Therefore action will need to be taken if a unique opportunity to level the UK job market is not to be missed.

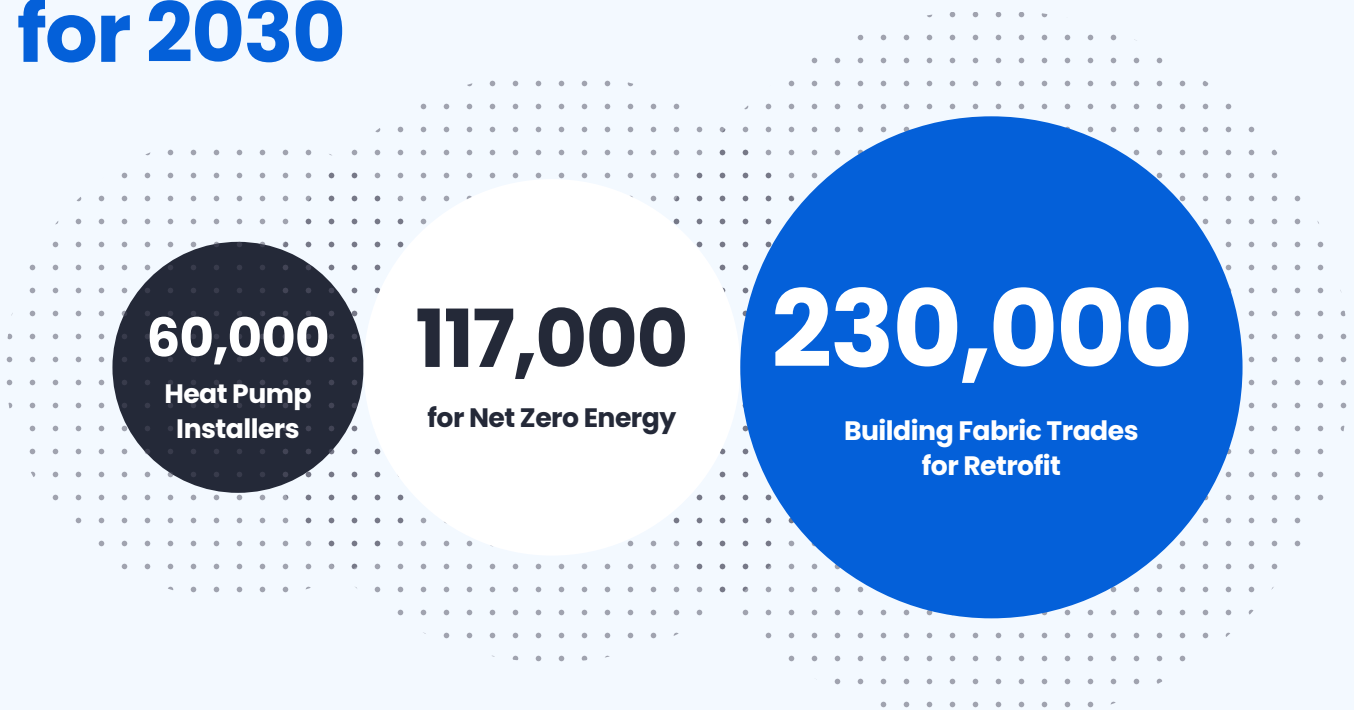
While traditionally green jobs have required degree level qualifications, the nature of the next phase of decarbonisation will mean that green jobs are increasingly vocational and will be concentrated in the core sectors for the next carbon budget, including the Built Environment, Energy and Transport.

Some regions will have specific job demand driven by strategic location – often in the industrial clusters – of new green industries like Hydrogen and Carbon Capture, Usage and Storage (CCUS). The following map from the Green Jobs Taskforce illustrates well the regional distribution of employment opportunities, in addition to those that will exist nationwide.



Source: Green Job Taskforce Report to Government, Industry and the Skills Sector

New Green Job Hotspots for 2030



The skills market is always changing to meet new economic realities, for example the decline of coal and steel or the long term shift to a service based economy. In the meantime, the labour market continues to adapt to digitisation, automation, flexible working patterns and an ageing workforce. It is in this context that we have started to see the shift in the skills required for net zero jobs, including new green skills but also covering digital skills and 'softer' employability skills. Finding people during the current market wide employee shortages with the required mix of skills including green will be increasingly challenging, especially in sectors with ageing workforces.

According to the LinkedIn Green Jobs data⁷, only one in eight workers have at least one green skill. They also identified a mismatch between supply and demand, showing that job postings requiring green skills are growing at 35% while 'green talent' has grown at 26%. According to PWC, "the biggest barrier to green jobs is skills shortages". On a global scale, BCG has calculated that the skills gap in the green economy will rise to 7 million workers by 2030.

To give a sense of how this gap could grow over the next few years, PWC estimated there will be a shortfall of around 200,000 workers in the energy sector alone. Research for National Grid⁸ said the UK energy sector would need 400,000 by 2050 with 117,000 by 2030. Interestingly, these jobs will be well distributed through the regions and nations of the UK. This suggests that the next big wave of decarbonisation will require and provide more work everywhere. Building retrofit and EV charging infrastructure will be similarly required in every community. It has been estimated that we will require between 230,000 in building fabric related trades and 60,000 heat pump installers for the retrofit of 29 million homes in the UK (Green Jobs Taskforce).

To give an example of a single organisation leading in the green energy transition, OVO Energy's Plan Zero set a target to support 15,000 new green jobs by 2035 and committed £10 million on green skills development.

Several interrelated factors contribute to the green skills gap:

- **Workforce Composition and Demographics:** The UK faces an ageing workforce, with many skilled workers nearing retirement. This creates an additional replacement need in workers, particularly where they have or could transfer to green jobs, for example electricians and boiler installers. Additionally, there is the geographic imbalance in green job opportunities.
- **Education and Training Mismatch:** The UK education system has focused on academic qualifications; vocational training in green skills is gearing up but remains insufficient. Without accurate job estimates, creating and running courses at the right capacity is challenging. There is also a skills gap in tutors with the practical experience for vocational education.
- **The Pace of Reskilling Existing Workers:** The opportunity to upskill and reskill current workers is not yet occurring at the pace to help them transition to green jobs or the greener version of their existing job. Training provision in this area is not yet robust. In some cases, the continual evolution in green technologies requires ongoing reskilling of the workforce, placing additional pressure on employers and training providers.
- **Low Awareness of Green Careers:** Many individuals, particularly young people, lack understanding of the wide range of green job opportunities available. Sectors like construction struggle to attract young and more diverse talent despite there being good green jobs available. The influence of parents, teachers and careers advisers often ignores these opportunities and recommends established career pathways, despite a shifting economic reality.
- **Inadequate policy support:** Above all else, there has not been a national policy framework to support the significant workforce transition required for Net Zero, despite a volume of reports and studies laying out roadmaps and recommendations. While there is often good work happening at a local and regional levels, this is held back by required changes at the system level, for example more flexibility in apprenticeships.



These challenges are further discussed in this document, with real insight from the case studies of experts and in the field:

In their 2022 Green Job Barometer report⁹, PWC highlighted the outsized impact these skills shortages have on SMEs, using retrofit as an example where demand for work and therefore workers is too variable and training pathways are often not suitable for SME work patterns. The next case study brings these challenges to life.

Case Study:

Eco Efficient Home Solutions



Profile:

Eco Efficient Home Solutions is a retrofit installation firm serving the South East market, with a growing presence in social housing retrofit programmes. Managing Director Raja Naveed is active in highlighting the pivotal role of SMEs in delivering retrofits and supporting initiatives to build a suitably skilled workforce across the sector.

Take on green skills and jobs:

Our primary focus is External Wall Insulation, a task that demands a variety of skilled trades to execute seamlessly. However, the labour-intensive nature of this work highlights the need for a younger skilled workforce. Unfortunately, the current workforce is predominantly ageing, struggling to keep pace with evolving regulations and standards.

As a result, the industry faces a significant skills shortage, leading to escalated labour costs amidst soaring demand. We need more skilled workers and a shared understanding of the knowledge, skills, and behaviours required for successful retrofit projects.

The education and training sector has a vital role to play in equipping new workers and upskilling existing professionals. But it takes a village! We need the government, industry, and education providers to collaborate on a long-term national strategy, incentivise retrofit work, and develop comprehensive competence frameworks.



Main challenges:

Insufficient consistency and limited opportunities prevail within the UK's green skills landscape. The industry suffers from unpredictable fluctuations, resulting in a continuous cycle of skilled workers entering and exiting. This recurrent pattern poses challenges for employers like us in retaining a stable workforce.

Furthermore, the industry's capacity is often misaligned with priorities. While the "fabric first" policy offers a solid framework, its effective implementation is hindered by inadequate funding and budget constraints. Too much work is selected on price. For example, we looked at loft insulation and it is not cost effective to deliver.

What has worked well?

We realised that we need to plan ahead to overcome the stop start nature of this sector. The recent downturn in new builds has increased the interest from existing workers in the trades, however there are simply not enough experienced and motivated people in the industry to do the work when it becomes available. We are now looking at what we can do to support trades people to upskill for retrofit.

Part of the solution for the longer term is bringing in young people from different sources and backgrounds. For example, we brought in an aeronautical engineer student who we trained to be our in house designer, helping to ensure quality is built in at the start of the process.

We also took on an English graduate who helps with administration and customer relations. This helps ensure our written communications with clients and Tier 1 contractors are clear and accurate.

We can train these new entrants on working in the sector, for example we put them through Understanding Domestic Retrofit from the Retrofit Academy. We have job pathways to project management, compliance, and reporting. A critical part of working with young people is being honest about expectations and not talking down to them. We want them to quickly feel part of the team and take responsibility for their personal development.

★ Top Tip

Think differently. How can we streamline the service or deliver it as a complete package? Occasionally on site we see how poor standards of delivery from some in the supply chain impacts the quality of the retrofit, requiring remediation. We focus on working to fully meet compliance at the end – what we do in preparing and delivering work ensures we meet standards and we are promoting this mindset across the sector. This approach means that we are now often being appointed as Managing Agents. We want the sector to grow the right way. This is why we invest our time in supporting initiatives like the London Homes Coalition and the Greater South East Net Zero Hub.

What support is available?

There is an evolving ecosystem to nurture the growth of green skills and jobs, often place based. As well as supporting and enabling the net zero transition, it is also seen as important to ensuring there are viable employment opportunities for the future. This also ties with making sure that these changes are inclusive, bringing into the workforce those who are disadvantaged.

These organisations, local government services and networks can help you in navigating your organisation's journey to a green workforce and open up new channels to available talent and training provision. We signpost a number of these in the Useful Resources section at the end of this document.

One recent and innovative example is the new 'Fleet' Green Construction and Digital Skills Hub in the Fleet Street Quarter, reusing a 'meanwhile' space while the building undergoes design and planning for retrofit. If successful, this model can be replicated in other commercial properties nationally. Community Coworking is the organisation driving the setup and management of the hub.



Case Study:

Community Coworking and the Green Skills Ecosystem



Profile:

Jo Tasker is the Founder of Community Coworking Ltd (CCL), a social enterprise set up to enable new ways of working & learning through activating places on the high street. CCL evolved from a mix of co-working and digital poverty initiatives to ensure 'no one is left behind' by the digitisation of society. An increasingly important part of their work is the development of green skills and delivering to people in need of good work with a future.

Take on green skills and jobs:

In a similar way that digital skills became sector agnostic – so in time will green skills. Currently there is also an early confusion regarding the definition of green skills and similar questions are being asked, as they were in the nascence of digital, and this is creating a fragmented transitional approach to the development of these new skills.

In 2022 the DfE launched the Strategic Development Fund (SDF) to enable areas across England to reshape their teaching and training provision and update their facilities in preparation for the rollout of local skills improvement plans (LSIPs). The 'green' pathways to be developed by and for FE provision were defined as: Retrofit; PV Solar & Thermal; EV; Heat Pumps; BIM & CAD and Smart Building Infrastructure. The approach to the delivery and uptake has been varied. One notable success is that the SDF enabled the creation of practical green workshop labs in FE colleges to support the teaching of these defined pathways.



Main challenges:

However, the colleges face their own barriers to the take up and delivery of these new green skills due to teacher/tutor shortages and lack of time and resources for re/upskilling teaching staff. Employers, both large & small, face similar barriers in resourcing against the industry's ever growing skills gap. A catch-22, especially when taking into account historically low consumer demand for solutions like retrofitting, low carbon heating or electric vehicles. While Industry and National Net Zero deadlines started to increase demand for electric vehicles and home energy efficiency measures, this stalled when deadlines were relaxed or dropped by the last Government and this constrained the development of the skills ecosystem for, as one example, EV infrastructure technicians.

The recent election manifestos of all parties had some commitment to skills & productivity and early indications are that the new government will deliver a more sustained and connected approach to vocational skills, plus their policies will prime both the supply and demand for renewable energy. Over the past year we have seen the galvanising of industry bodies together with the education sector in initiatives such as the Local Skills Improvement Plan (LSIP), The City of London's Skills for a Sustainable Skyline, various grants & funds dedicated to skills development, and grassroots organisations leading the charge with some excellent skills interventions.

What has worked well?

Organisations which can help employers solve their training & recruitment needs more easily will help drive wider take-up and productivity. FE & other vocational training providers seek additional support to get closer to employers to open opportunities up for learners from all ages & backgrounds.

The development of independent Skills Hubs can provide a 'satellite' centre to support all stakeholders. One such example is The Fleet: A skills hub developed as a meanwhile activation of a commercial building in retrofit in Central London.

Designed to the LSIP requirements, The Fleet brings together industry, grassroots educational VCSEs and FE & HE training and apprenticeship providers to support the enrichment, reskilling & upskilling of both young students and existing job seekers in green & digital skills for construction.

The space provides opportunities for practical workshops for learners in a real life environment; access to pathways from L1 to Level 6 degree apprenticeships and school & outreach engagement. As an end to end approach from engagement through training to signposting pathways and securing industry placements, these hubs can provide the extra reach and support for stakeholders to help drive employability, widening participation and connectivity between learners and industry.

★ Top Tip

As employers, seek out the resources in your community that are keen to support you. Search for local career, employment or skills hubs where they are available, support and work with local FE colleges or speak to the employment and skills officers in local and combined authorities. While it can be difficult at first to find the right place to access these resources, once connected you will be introduced to a range of relevant solutions to train staff, engage with your community and access skilled new talent, whilst potentially boosting your social value contribution.

What's coming next?

A continued rise in green jobs is inevitable if we are to make the carbon emission reduction targets, encapsulated in the current and forthcoming carbon budgets in the UK legal framework for Net Zero. In their recently published assessment¹⁰ of the UK Government's progress to our targets, the Climate Change Committee concluded that emission reductions need to speed up and broaden to more sectors. Noting that we need to move beyond reductions from energy supply, they stated that "contributions from transport, buildings, agriculture, land and removals will need to accelerate fast". They concluded with a set of priority actions for a "reset of the UK's direction", including a strategy to support workers in sectors that need to grow or transition.

There is clearly a shift occurring in the national policy landscape, both in terms of skills building and a recommitment to Net Zero. The Labour Government have outlined how they see learning skills as a fundamental prerequisite for economic growth and social cohesion, as outlined in their Council of Skills Advisors' Report¹¹. This links strongly with green skills and the Net Zero transition, recognising the need to make the skills system far more agile and responsive to the fast changing nature of work and jobs. One example given is helping teachers develop an understanding of these jobs through time to take work experience.

Writing in the early days of the new government, we are already seeing signs of a serious commitment to reengineer the skills system. This starts with establishing Skills England as a new body to bring together government, training providers, businesses, and unions to identify skills needs, drive training opportunities, and align skills policy with economic needs. Other plans include transforming Further Education colleges into specialised Technical Excellence Colleges, implementing a Youth Guarantee of training, apprenticeships or help finding work for 18-21 year olds, improving careers advice in schools and devolving adult skills funding to Combined Authorities.

They have also made reform of the Apprenticeship Levy a core element of their plans. They propose to turn this into a Growth and Skills Levy, which would allow businesses to spend up to 50% of their levy contributions on a wider range of training qualifications. Whilst the full range of qualifications eligible for funding has not yet been defined, Labour have said this will include modular courses that relate to their industrial strategy, including digital and green skills.

There are other elements of Labour's plans that are relevant to the demand for green skills and jobs. First and foremost is the plan to have 1.5 million new homes built in five years. As these will have to be built to the Future Home Standard – a series of revisions and additions to the building regulations to achieve significantly better energy efficiency and lower emissions from January 2025 – it will require not just the expansion of the construction workforce, but also significant upskilling in order to deliver work consistently to these standards. And it is interesting to note that we are already seeing various industry bodies stating that skills gaps will prevent us meeting this target.

While there is much still to be defined, there are a number of Labour policies which will stimulate green jobs, not least the creation of publicly owned Great British Energy to complete the transition to green energy by 2030. This and other elements of Labour's Green Prosperity Plan like the Warm Homes Plan were estimated to create a total 650,000 new jobs, although some of this like home retrofits has presumably already been counted in the existing green job estimates quoted in this document.

As has been seen in other countries, particularly the US with the green stimulus baked into the Inflation Reduction Act, green policies do drive economic activity and job demand. It is not lost on the authors of this report that the respondent firms who have progressed furthest with their development of green skills are those with a significant part of their business based on delivering retrofit work. We see policy like the Social Housing Development Fund as an example of what could follow as similar policies stimulate demand in low carbon jobs.

One barrier mentioned in this report is the missing step between recognising that there is a skills gap and defining these gaps in terms of specific job roles and required skills profiles. There is practical work underway to determine the future needs for the workforce and we should see better forecasts of where the green jobs are and will be, which will then help to direct green skills training and development across colleges. There is extensive work in Wales¹² to define net zero skills requirements over the next ten years and map them to training and apprenticeship requirements. For example, a map of all whole house retrofit tasks with the relevant training courses and apprenticeships. Similar evidence based work is underway in Scotland under the Climate Emergency Skills Action Plan¹³ and several of the Combined Authorities.

With better ability to manage demand, training provision can ramp up to meet it in a way that fits the requirements of employers. We are still some way from meeting this core requirement. With retrofit being at the vanguard of green jobs, the Report “Ready for Retrofit” for the Gatsby Foundation is an interesting piece of academic research on the coverage of Retrofit roles in the LSIPs¹⁴. This work identified wide variation in their coverage of job estimates and skills requirements and noted that this meant that some regions will be much more able to meet housing retrofit targets than others.

Finally, It is important not to lose the social context of green jobs. They should be better jobs with a long term future. They also help deliver better places, better lives for residents, thereby delivering better social outcomes. Green jobs should be part of, and aligned with, the organisation’s broader programmes towards their environmental and social objectives.

“We launched formal ESG committee that meet quarterly, comprised of different functions within the company, to share ideas on what we currently do and what we can look to do in terms of the environment and any opportunity to build on green skills” MCFT

Claire Toomey-Robinson, Head of Marketing and Communications at AD Construction illustrates how an organisation can develop their own green skills system across the business in a market where green standards and methods are still emerging.



Case Study:

AD Construction – Building the future workforce

Profile:

One of the leading privately-owned, public-sector specialist providers of property refurbishment services, with a geographical coverage across London, Southeast and the Home Counties. Works are delivered under three streams – planned maintenance, fire safety and energy efficient homes. AD provides services to clients (and their residents) via bespoke contracts, long-term partnering agreements and DPS / frameworks.

Take on green skills and jobs:

Sustainable construction and retrofit of existing hard to treat buildings (those with poor energy performance) is becoming an increasingly important part of our workload and is a strategic priority for our businesses – and the country as whole for achieving net zero targets. Therefore many of our staff require green skills training. Don't wrongly assume these skills only apply to site and trades personnel; all staff need low carbon skills, knowledge and training in order to understand how to explain the options and processes in tenders and to produce specifications, or even undertake audits and reporting for example.

Fortunately, we are not finding it hard to convince our staff to engage and adopt these skills. We have the advantage of employing people who are already passionate about sustainability and who actively seek out ways to learn these new skills and best practices. As a result our teams are better positioned to win low-carbon contracts and deliver them successfully. Our graduates are particularly enthusiastic, having often covered sustainability quite extensively in their coursework. Our existing staff are also becoming excited about and engaged with these initiatives, as more projects involve at least some element of decarbonisation.



Main challenges:

Delivering publicly procured work such as projects funded by the Social Housing Decarbonisation Fund (SHDF) requires dealing with difficult project timelines, red tape and uncertainty. Needing to find the required specialist partners and workforce in a compressed time frame and managing the stop start nature of this work can make it difficult to ensure that good resources are available when it is time to deliver.

The supply chain often presents significant challenges; the shortage of people who can install low carbon technologies, which in turn escalates the costs, making it harder to keep prices low and competitive – is a key concern from conception, to mobilisation and during delivery. Critical path planning is crucial. For example, if there is a large-scale new build development locally, you may find all the expert solar panel producers/installers will have minimal availability or flexibility. While we see this as an opportunity to create the workforce for the future, is there enough to keep these people in work now – ready to scale up delivery when the projects demand it? As with anything new the supply of work is inconsistent. Additionally, projects often have strict deadlines that must be met despite weather uncertainties and access considerations – complicating workforce planning further.

What has worked well?

As this is still a relatively new area, we have adopted successful strategies with a learning-by-doing approach, which has given us a head start. For example, we undertook two practical research projects for the Technology Strategy Board (TSB) and this helped shape what they, and we do now. For example, we fully retrofitted one house with over £145,000 of different measures in order to learn what efficiencies are really delivered by certain solutions and interventions and which have the best outcomes.

We are continuously learning from various projects and property archetypes. Some solutions, despite their potential benefits, prove too difficult or costly to install, making them inefficient compared to the results they achieve. Also importantly, we learn which measures are not popular with residents who have to live through the installation process and with the technologies installed. We are continuously building on our training with our own practical knowledge and in training residents to effectively use the installations applied.



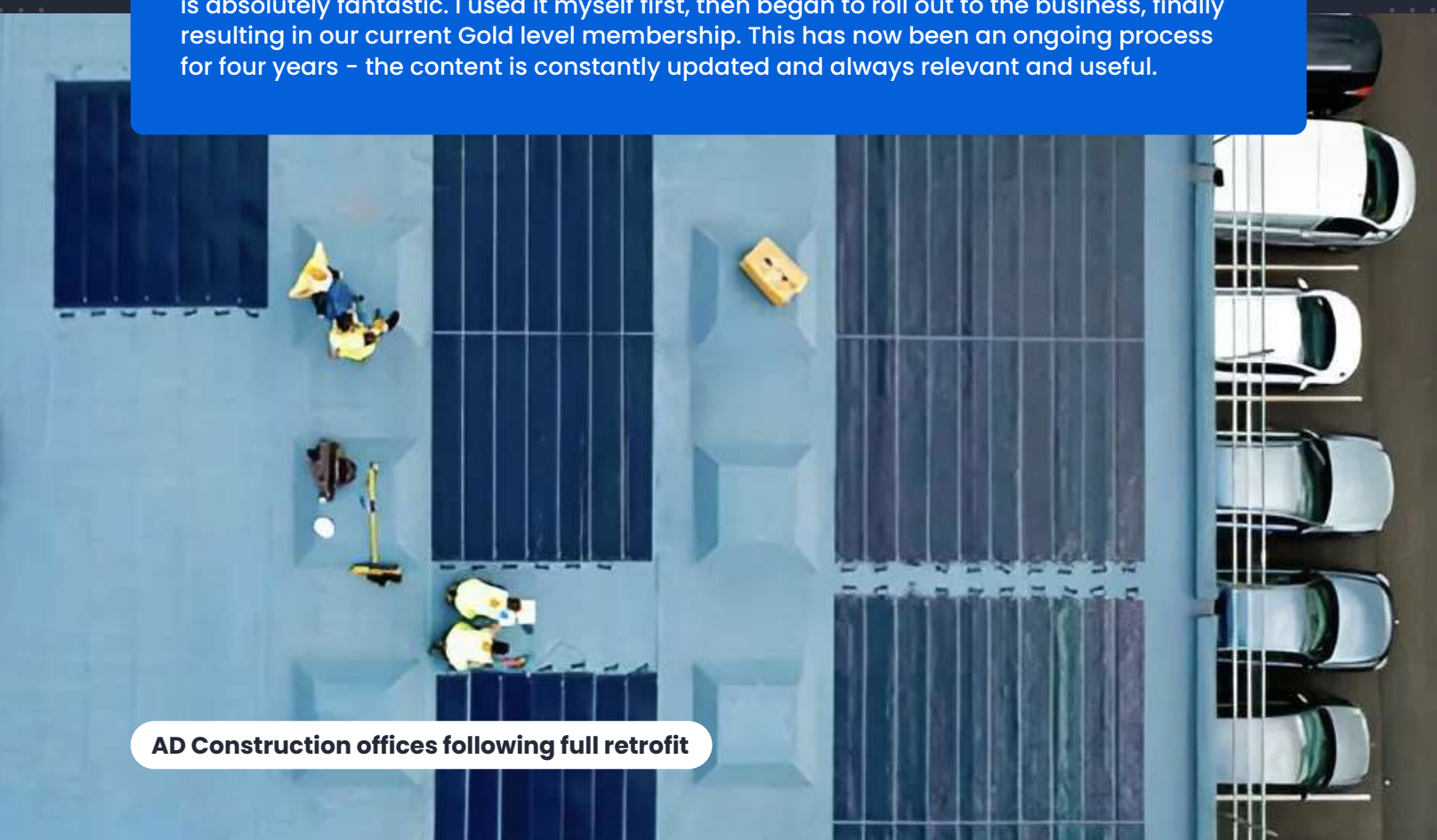
We all have a responsibility to reduce carbon and therefore it is imperative to work collaboratively as an industry.

We run training courses for suppliers and have net zero round tables with key clients and industry experts. This helps to workshop ideas and identify how we can work together more efficiently. Retrofit work has a lot of administration and the PAS assessment 'golden thread' has to be completed in a timely manner. To improve this process we offered an upskill opportunity to an existing apprentice who had a keen interest in our retrofit projects; she now leads this compliance based business process on a day to day basis.

We avoid making green skills training just another mandatory requirement. Initially, we encouraged all staff to undergo the Retrofit Academy 101 course and then promoted further courses for those with an interest. We rolled out low-carbon training to new starters first as an element of the induction training. We also use incentives to encourage further training via our Green Champions Programme and regularly invite staff to undertake training modules and attend webinars. Using our existing 'role by role' skills matrix tool, which covers all disciplines within the business – we identify opportunities to add appropriate 'green skill' training into role-specific plans – with managers and supervisors leading by example and cascading the training to their teams.

★ Top Tip

Use the free resources that are out there. The Supply Chain Sustainability School (SCSS) is absolutely fantastic. I used it myself first, then began to roll out to the business, finally resulting in our current Gold level membership. This has now been an ongoing process for four years – the content is constantly updated and always relevant and useful.

An aerial photograph of a construction site. In the foreground, there are several large, rectangular solar panels laid out on the ground. Two workers in high-visibility yellow vests are visible near the panels. To the right, a row of white cars is parked. The background shows a large, light-colored building structure.

AD Construction offices following full retrofit

Facilitating green skills

Beyond the requirement for green skills in the sectors experiencing the largest transition to low carbon, there are also emerging skills needed in sectors that facilitate or enable activity in these sectors. We look at two of the more significant supporting sectors; planning and finance.

Planning and building control

We were interested in how the planned increase in housing numbers and the Future Homes Standard may lead to related skills shortages. With the recent additions of O on overheating and S on infrastructure for charging EVs, there are now 16 parts to the Building regulations. FLOS is used to refer to the parts changing under the Future Homes Standard, the others being revisions on ventilation (F) and energy conservation (L).

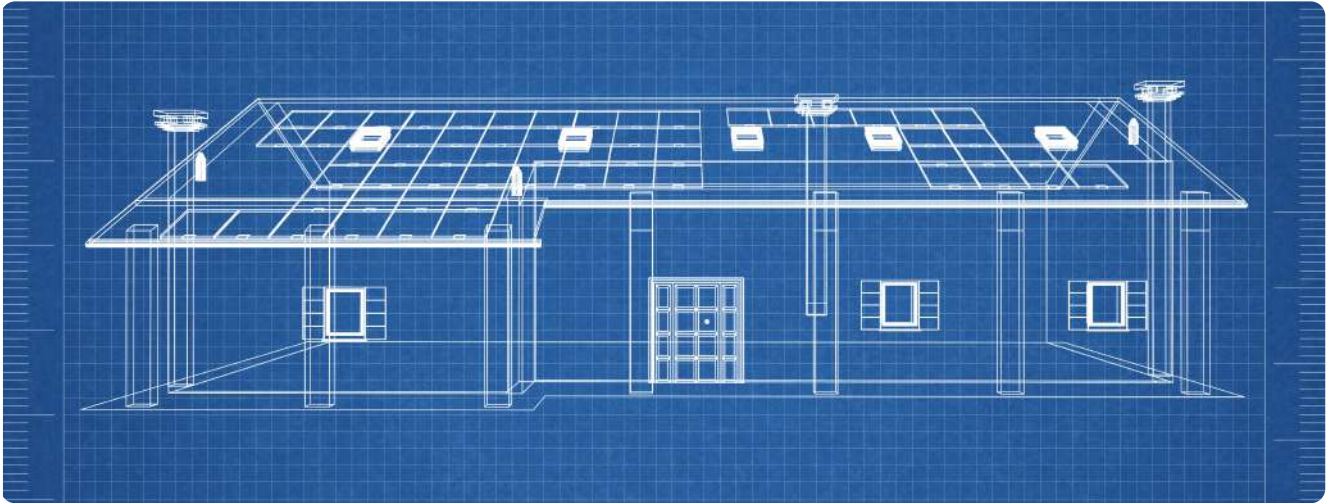
John Somer, Senior Lecturer, Architecture and Cities. University of Westminster, identified some knowledge and skills challenges relating to planning. With the government's new plans, many local planning authorities have seen their housing targets double since the new targets were released. For example, Lichfield, near Birmingham, has recently had their housing target go from the need to deliver around 300 dwellings per annum to approximately 800 dwellings. The proposed new towns could be net zero and support a 'homes for heroes' experience, but this will require financing and specifying work to this standard.

A core challenge is how do we avoid knocking down and starting again and the success of M&S in their high court challenge indicated that this is not yet core to decision making. There is a skills gap in knowing what you can now do and achieve in building, what are the materials that are available now and what outcomes they support. We need upskilling for decisions, for example helping members of the planning committee understand why a well designed low carbon home may look different to the more conventional designs they consider popular. Technology is also having a bigger impact across built environment design and this is also not always well understood by many in planning.

At Westminster, we are developing an understanding of green skills as they apply to planning within the MA Urban and Regional Planning (RTPI Apprenticeship) programme. For example, we use professional practice weeks to help them experience real world challenges and opportunities. The government has recently announced that they want to generate 300 new planners for local authorities by 2026. This compares with about 700 planners through the apprenticeship levy in the last five years, in both the public and private sector.

Through the Architecture and Sustainable Heritage MA we are also trying to encourage students to broaden their understanding of sustainability in heritage buildings. While there is real interest in young people in this subject, we need a catalyst in terms of policy support to stimulate demand and get students more involved.

Mark Wendon, Head of Major Projects at Hertfordshire Building Control, outlined the impact of new low carbon regulations across the Planning and Building Control process. All the regulations are constantly evolving and are part of the CPD for our Building Control Surveyors. Local Authority Building Control (LABC) is very good at filtering down to us. Part of my day is reading and researching the regulations, knowing where to find specific requirements when relevant.



He often sees a difference between large and small developers. The larger firms have specialist consultants to get them up to speed, advising the design team. Usually once it reaches my desk, it is a compliant design. For smaller developers, things are not so consistent. There is a varied interpretation as to what needs to be done. Some have not yet changed practices to meet them comprehensively, for example continuing to fit trickle vents when designing for airtight dwellings.

But it is understandable that there is a challenge to remain up to date with the regulations. I am looking at hundreds of applications a year, builders see just a few. There are also challenges as the work progresses, for example, a big hurdle is evidencing under the new energy efficiency requirements, including time stamped photographic evidence. For smaller developments, this is another job for the site manager who may not have the necessary guidance from a design team to do this well.

Green Finance

Finance is another sector that facilitates decarbonisation across the economy. Green skills in finance have so far largely been centred around specific roles that relate to financing areas of the green economy, like clean energy infrastructure investing and lending for net zero buildings. It typically falls to specialists in products like sustainable funds and green bonds to understand and value the economic value and risks associated with these activities. These skills and models are still evolving as these markets mature and colleagues in sales and credit rely heavily on their expertise. Understanding issues like climate and biodiversity is also becoming increasingly important in risk roles that price potential loss and impact on asset values across banking and insurance.

Green finance skills for these specialist roles are being progressively embedded into established accreditation pathways from organisations like the Chartered Banker Institute, the Chartered Institute for Securities & Investment and the Corporate Finance Institute. Green skills training across other workers in financial services is currently focused on sustainability and carbon literacy. There is an emerging skills gap in sales, service and operations staff, who need to understand green finance products to promote, process and service them. A good example where this gap is being addressed is the industry led Green Mortgage Advice Initiative. The Green Finance Institute is also active in this space, including their comprehensive handbook for Mortgage Brokers¹⁵.

A consistent theme here is that where specific roles in these facilitating sectors require upskilling for low carbon requirements, this is developed into their professional education. But this knowledge is becoming increasingly siloed with the experts. What is not happening quickly enough is to ensure each participant across the value chain has the green know-how to be able to adapt to the new standards, methods, products and reporting involved in the low carbon activities of their employer.

Green jobs and young people

We have heard and read many times that young people want to do work that aligns with their desire to be sustainable, protect the environment, and address climate change. But there is a disconnect as young people tend not to perceive that there are green jobs available for them or meeting their priorities for work.

The well researched report from the Princes Trust and Public First¹⁶ on Gen Z's readiness for the Net Zero skills revolution is not encouraging if we assume that young people will need to fill a significant part of the green skills gap. Amongst their findings are that young people:

- Find many green jobs, particularly the roles most in demand, unattractive;
- Have a very limited understanding of how Net Zero will impact industries, jobs and their own lives;
- Are unfamiliar with green jobs - which makes them less willing to consider applying for a role or entering training;
- See Green jobs as being for those who take an academic route

They go on to warn “without significant efforts to change young people’s awareness and perceptions of green jobs, there is a significant risk that these roles will not be filled and that the benefits of the highly skilled, highly paid employment they create will not be felt by the next generation.”



A similar recent report commissioned by the MCS Foundation entitled Getting Gen Z into Green Jobs¹⁷ also found the attraction of green jobs may not be as strong as often assumed. “Gen Z did have interest in having a job which has a positive impact on the environment, but this was not a dominating factor in their motivations”. Their study suggests that it is a factor, but not as important as factors like an enjoyable work experience and pay. They also found that ongoing economic uncertainty made them more likely to prioritise financial security. However, this is potentially an unseen benefit of green jobs given the years of work in the pipeline to decarbonise sectors like the built environment and transport.

This point about increasing the awareness of green jobs and their benefits is well supported by their research “The variety of jobs available that had a positive impact on the environment felt unexplored for many participants. They wanted to understand qualifications required for the range of jobs – this is especially important in relation to promoting apprenticeships as a viable route into the sector”.

We were interested to find out how green skills and outcomes may feature in promoting apprenticeship schemes, as well as the content taught.

In our survey 62% of firms said that when they are promoting Earn and Learn programmes, they mention green skills, green jobs or the benefit of working on positive economic and social outcomes.



“All job positions mention our company strategy 'building a sustainable tomorrow' and also how sustainability is part of the company values. We seek to employ people who want to work in our business which cares about sustainability and is a key part of enabling sustainable outcomes through the work the business undertakes.”

BAM UK and Ireland



“Becoming carbon neutral is part of our corporate objectives and this is mentioned in our promotional material that the work will contribute to that” Broadacre Housing Association

One challenge mentioned by several respondents is that it is hard to consider a green apprenticeship when they are not yet part of the standard. As we heard from Chris Shirley of QinetiQ, “At this stage this is not clear how it will factor into earn and learn positions -. Apprenticeships look at knowledge and skills. We ‘teach to the test’ so this has to go back to IfATE. Should green skills not be reflected in the standards? If it's not in the standard, it's hard for us to integrate it into the apprenticeship”

Other respondents are not sure that the apprenticeship is the right time to introduce green skills, preferring to build the core skills and then apply green knowledge on top of that base. “Upskilling once a standard apprenticeship is completed to green skills is preferable as we will have had time to get to know the individuals and their career expectations and personal capabilities” Bagnalls

IfATE have recognised the need to update occupational standards to reflect Net Zero and started to address this, initially through providing their Green Toolkit¹⁸ to help the ‘trailblazing’ group of employers update their programmes with useful guidance themes. Meanwhile they have been progressing with developing standards for green roles and embedding sustainability into other standards, following the work of their Green Apprenticeships and Technical Education Advisory Panel. We should note here the recent announcement that the functions of IfATE will pass to Skills England and hope this accelerates the wider incorporation of green skills into the apprenticeship system and other technical education.

Green skills and jobs are increasingly seen as a way to bring a broader group of people to these sectors where most of the jobs are, and where like construction and energy, they have often struggled to achieve a more diverse workforce. We wanted to explore this question of whether green jobs help attract new people.



In our survey just over half (53%) of firms agreed that providing green skills and careers through Earn and Learn programmes can help attract a more diverse workforce to our business.

We would have to explore the reasons behind this but as mentioned above green skills will often come after the completion of the earn and learn programme. 5% Club member Seddon provided us with an instructive personal profile that illustrates how the path to a green role in construction can be the result of a series of progressive steps and lays out a blueprint for rapid reskilling across the workforce.

Personal Profile:

Seddon Construction

Upskilling for a Green Future

Regan Costello's career at Seddon Construction Limited serves as a prime example of the potential for career development within the green construction sector. Starting as a trainee estimator while completing a Quantity Surveying degree, Regan has progressed to the role of Preconstruction Manager for Retrofit and Decarbonisation. His journey, which includes multiple green skills qualifications such as a Level 3 Award in Energy Efficiency for Older and Traditional Buildings, highlights the essential need for upskilling within the current workforce to meet the increasing demand for green construction expertise.



Challenges and Solutions in Workforce Development

Our current workforce already has the foundation needed to deliver a pool of highly talented experts in green construction. However, traditional apprenticeship routes can be time consuming and impractical for many, especially for those with established careers or those seeking a sector change. While full qualifications such as diplomas and NVQs are valuable, there is a strong case for faster, hands-on learning methods that support the value of the current workforce. Many labourers in the industry are willing and capable of becoming competent in the necessary skills through on-site experience in as little as four to six weeks. At Seddon, we have successfully upskilled our semi-skilled and skilled workforce without extensive downtime for green training programs.

The Role of Collaboration in Achieving Net Zero

Collaboration is key to overcoming the challenges of upskilling and meeting net zero targets. Using the pre-construction phase to collaborate across the design team, retrofit coordinators, retrofit assessors, and principal contractors ensures that the necessary skills are available within the required timeframes. The government must also collaborate with the industry to provide clear pipelines of work, which are essential for planning resources and training effectively.

Learning from Past Mistakes

Mistakes made in the past due to the urgency to insulate homes within a short timeframe highlight the need for better regulation and oversight. To avoid repeating these errors, the industry should adopt a more integrated approach, ensuring that all parties involved in a project are aligned from the start. This strategy helps identify and address skill gaps early, allowing for timely training and upskilling.

Investing in the Future Workforce

While long-term investment in the next generation of the workforce is crucial, the current skills gap requires immediate action. The industry needs to embrace rapid, hands-on learning methods to equip the current workforce with the necessary skills to meet net zero targets. By investing in and empowering the current workforce, the construction industry can bridge the skills gap and secure a sustainable future for generations to come.

The transition to a net zero future promises significant employment opportunities, but it also presents challenges, as the industry faces a skills crisis and a shortage of trained professionals to meet the demand for retrofitting existing homes. Regan Costello's development exemplifies the effective combination of formal education and practical experience in addressing these challenges.



Case Study:

Bell Group – How to Lead on Green Skills

For our final case study, Julie Lawrenson of the Bell Group provides a useful roadmap of how an employer can embed green skills into their training and development programmes, making progress even where the skills system has yet to evolve to meet new requirements driven by regulation and client needs.

Profile:

Bell is one of the largest Property Services contractors in the UK, both in terms of our geographical coverage and our directly employed workforce. Services include Painting, Roofing, Flooring, Passive and Active Fire Protection, Kitchen and Bathroom Replacements, Multi-Disciplinary Fabric Upgrades, Retrofit and Energy Services and Response and Void Maintenance Contracts.

Take on green skills and jobs:

Retrofit is an increasingly important part of our work, especially for housing partners supported by the Social Housing Decarbonisation Fund. We have a growing number of people in roles such as Retrofit Coordinators and Retrofit Installers delivering a range of measures including Cavity Extraction, Underfloor Insulation, Loft Top Ups. EWI and IWI as well as Solar PV, Heating Controls and Heat Pumps.

Alongside this, the related Operational Managers have undertaken the Level 2 Understanding Domestic Retrofit Award, Level 3 Energy Efficiency for Older and Traditional Buildings and the Level 5 Retrofit Assessor programme through the Retrofit Academy and have a clear understanding of PAS2030 and PAS2035 and the organisational vision and direction.

While there are no current apprenticeship standards for these specific roles, we are working with a range of public sector organisations and national training providers to develop the green skills offering and engage in government funded skills bootcamps to support those furthest from the employment ladder.

We are also upskilling our existing teams. As all our clients have decarbonisation targets, green skills are increasingly important across our range of property services portfolio.

We are represented on the National Home Decarbonisation Group, and I personally am engaged in the Green Skills Working Group and there is a lot of good work being done around Green Skills training and qualifications nationally including the development of a Skills Roadmap.

Main challenges:

Installer training and upskilling is limited across the UK. Bell are working closely with several colleges to integrate Green Skills and through collaborative working and are able shape specific training programmes to improve the skills being taught within our sector.

However, as this training does not always lead to formal qualifications for installers, the onus is on us as the employer to provide the relevant vocational qualification through a network of qualified industry assessors, to evidence the relative competencies. If apprenticeships and other earn to learn programmes promoted green skills specifically, we believe the take up would be high.

Another challenge is the speed at which qualifications are being developed to support green skills development. This includes the additional units required to be embedded into construction trade apprenticeships.

What has worked well?

As early adopters of PAS2035, we trained our staff to become some of the first qualified Coordinators in the sector. Bell was also one of the first contractors in the UK to achieve the PAS 2030 accreditation for the installation of energy efficiency measures in existing dwellings. Bell are driving Retrofit at scale and are now delivering multiple programmes across the country of 100 to 300 units and as a result have reduced the average cost for bringing a house up to EPC level C from £25,000 to £12,000.

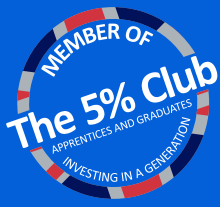
Our Operations Teams of trades people working on retrofits have completed training and accreditation with the Retrofit Academy and a range of professional, accredited organisations. Through developing our own highly skilled local workforce, we are not only providing long term employment, but also benefiting the communities in which we operate. We also prioritise local supply chains to create and sustain local jobs.

The Government's Social Housing Decarbonisation Fund Wave 2.1 has been a huge success and has provided further opportunity for Bell. Through effective training and development, we not only reduce carbon emissions efficiently but also foster a low carbon sustainable local economy that thrives now and in the future.

★ Top Tip

Use green skills training as a way to build employee engagement throughout the company. We offer this as an opportunity to all operational staff across the business and engage apprentices in this conversation as part of our Aspiring Leaders programme. We appreciate that the face of construction is changing and to attract and retain talent, it is a necessity for us to focus on green skills in line with our client and contract demands.





The 5% Club Perspective

This report highlights several implications associated with the understanding and embedding of “green skills”, which The 5% Club has noted and will work with our members to inspire positive action for their resolution, as follows:

1. Increased Emphasis on Green Skills Training – The demand for green skills is rising rapidly, driven by climate change initiatives and government policies. The 5% Club commits to raising awareness of the need to prioritise the integration of green skills into employer training programs to ensure that members' employees are equipped to meet future environmental and regulatory requirements.
2. Enhanced Collaboration with Educational Institutions – The need for specialised green skills underscores the importance of collaboration between businesses and educational institutions. Through increased alignment with colleges and training providers, members of The 5% Club can help tailor training programs to the evolving green job market.
3. Focus on Regional Development and Equity – Green jobs are currently concentrated in specific regions, creating regional disparities. The 5% Club encourages members to support efforts to widen regional access to green job opportunities and training.
4. Adoption of Innovative Training Technologies – The use of AI and other advanced technologies in training can enhance learning outcomes and adaptability. The 5% Club will continue to monitor and explore the impact of these technologies, and how they can be used by employers to improve the effectiveness of their training programs.
5. Alignment with Government Skills Strategies – Government reforms and initiatives, such as the Skills England and the Growth and Skills Levy, will shape the future skills landscape. The 5% Club will stay aligned with these strategies to leverage government support and inform members on approaches that will align employer member training programs with local and national priorities, strategies, and funding opportunities.

In championing an understanding and the resolution of the challenges in these areas, The 5% Club will better support its members in adapting to the changing job market, contributing to environmental goals, and fostering a skilled workforce with the “green skills” required for the future.



Five Main Takeaways

1 Where is your organisation?

Take some time to think through where your organisation is on this journey to green skills and jobs. Where will green jobs fit in now, and during the next five years? Is the low carbon transition underway or looming in your sector? What are your competitors doing? Are there green job listings out there already to illustrate where the market is? Or are you more in a space where all jobs will gradually become green jobs. And based on these answers, what does this mean for your talent acquisition and training requirements?

2 Local resources

Seek out the local resources that can help you make progress on this journey. Search online or in your network for a local green skills or net zero hub. Or try careers hub leaders and DWP partnership managers. Ask relevant people in FE colleagues or local authorities like employment and skills officers. Once connected you will be able to better navigate local training provision and employment support services focused on green jobs.

3 Innovative approach

Can you take an innovative approach to building your own green skills system? What can you capture from the work you perform to improve your own training resources and practices? Can you work with training providers to adapt their programmes to better match how you work and support customers? Are you taking advantage of resources like the Supply Chain Sustainability School to achieve a baseline competency across the business?

4 Digital delivery

Can digital play a role in helping deliver skills and build competencies. Can digital delivery make it more engaging or adaptable to your typical working patterns? Can it help to train workers who struggle with traditional learning methods? Are you incorporating training in digital and AI tools to help workers deliver low carbon work e.g. digital twins, BIM and work simulators?

5 Personal benefits

This report has shown that young people need help to become aware of green jobs and the personal benefits they can offer in terms of conditions, pay, early progression and interesting work. They will value the positive green impact of the job even if it's not the primary reason to join. It could also increase job satisfaction, engagement and retention.

Think through how to reach these people and how best to communicate these benefits. Look for people from beyond your usual sources. It does not matter so much what they have studied, what is their capacity and motivation to learn and practise new skills? Where in the skills and careers ecosystem can you get early access to motivated young people as they start to explore what their personal pathway to a good job could be and how can you help them?

Useful Resources

The following is a list of resources to help you get started or make progress on building green skills in your business.

<u>IEMA Green Career Hub</u>	Broad ranging set of resources on green careers with useful sections on sectors, regions and job profiles
<u>Electric Revolution Skills Hub</u>	Hub focused on careers in electrification by facilitating training, skill development pathways, and jobs
<u>The Green Edge</u>	An expert source on developments in green skills. Their regular round up on relevant reports is recommended
<u>Green Careers Week</u>	Separate programme run by National Careers Week held in November each year
<u>UK Green Building Council</u>	Membership network for building sustainability with a range of events, training and learning resources
<u>National Retrofit Hub</u>	Workforce Growth & Skills Development WG has produced a very comprehensive qualifications and training map available here
<u>Zero Construct</u>	A dynamic collective of professionals who have already produced an online academy and playbook for decarbonising the built environment
<u>Connected Places Catapult</u>	UK innovation hub focused on an integrated approach to the built environment, transport and infrastructure
<u>The Careers and Enterprise Company</u>	National body for careers education in England. Follow this link to find your local careers hub. These are increasingly gearing up for green skills.
<u>IfATE Green Theme Occupational Maps</u>	The Occupational Maps from IfATE are well designed and 'green themes' allow you to explore current green pathways using mid and dark green definitions
<u>Deloitte Toolkit for A Green Workforce Transformation</u>	Provides a framework to help organisations map transition their entire workforce to meet green outcomes

Local Resources

The following list are examples of local hubs, skills academies and other resources. Similar resources can be found in many other parts of the UK. A search for your region or area plus “green skills” will often find relevant resources.

[Local London Green Skills Partnership](#)

Group of Employers, Educators and the 9 North East & South East London Boroughs.

[South London Partnership Green Skills Academy](#)

A range of green skills resources and courses for the South London group of boroughs

[West London Green Skills Hub](#)

Green Skills resources and training for the West London group of boroughs

[Manchester Green Skills Academy](#)

New green skills academy for Manchester

[West of England Green Skills](#)

Hub including training, funding and careers advice

[Skills for a Sustainable Skyline](#)

Initiative of the City of London to boost the supply of skilled workers for sustainable commercial buildings. To launch a live Playbook on best practice for green skills

[Built Environment – Smarter Transition](#)

Formally the Construction Scotland Innovation Centre, this hub supports innovation, collaboration, training and careers in the Net Zero Transition

[Zero Carbon Hwb](#)

Focused on zero carbon new and existing homes, this hub has an extensive Knowledge Hwb and case studies, with resources from Wales and across the UK

[Mayor of London Green Skills Academy](#)

A range of green skills courses for the Central London group of boroughs



Credits

This document is a collaboration between The 5% Club and GetZero.

GetZero

GetZero is a free digital platform to develop green skills and explore green job opportunities. GetZero's educational app and micro-courses use game-based learning to engage learners and teach foundational green skills, as well as providing personalised and AI-powered support to help them design their own journey into employment and training opportunities.

We work across the later stages of secondary education and post 16 routes in FE such as apprenticeships. Our programmes help engage more young people in priority green sectors such as building retrofit, EV charging networks and renewable energy

For more information about GetZero or this report, please contact matt@getzero.earth

The 5% Club

The 5% Club works with UK employers and key influencers to inspire positive action for increased and accessible workplace learning, focused primarily on the number of apprentices, sponsored students and graduates employed. The goal of The 5% Club is to increase the employment and career prospects of today's youth and equip the UK with the skilled workforce it needs to safeguard Britain's economy. The 5% Club was launched in 2013.

Members sign The 5% Club charter. As a member of The 5% Club, employers state they are:

- Committed to helping the UK's growth agenda and acknowledge the importance of developing people as both a business and social imperative;
- Playing their part in addressing youth unemployment and skills shortage;
- Pledging to work towards having a minimum 5% of their UK workforce enrolled on formalised apprentice, sponsored student and/or graduate development schemes within five years;
- Measuring and reporting on their progress annually against the above metric in their Corporate Social Responsibility section of the Annual Report and Accounts or equivalent document;
- Committed to encouraging other employers to participate in the campaign.

Membership of The 5% Club numbers more than 1,000 organisations from across a broad range of sectors as well as size of company, including large corporations as well as SMEs. The total number of employees represented is now more than 1.9m, with circa 108,000 in "earn & learn" schemes.

For further information please visit or www.5percentclub.org.uk or contact: Gill Cronin, Director of Operations, gillcronin@5percentclub.org.uk

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Thank you for reading

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