

GREEN SKILLS PROVISION

OXFORDSHIRE COUNTY

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Introduction

The project examines green-skills provision across Oxfordshire in the context of the county's net-zero ambitions and the role green employment can play in supporting inclusive pathways into work, especially for young people. The brief sets out a clear concern that provision is currently fragmented across further education, adult education, Skills Bootcamps and employer-led initiatives, and that this lack of coordination may be limiting the development of a coherent countywide pipeline linking education, retraining and employer demand. It also frames the work around practical questions on where provision matches ambition, where gaps or duplication exist, and what factors hinder delivery, with a particular focus on accessibility for young people, career-changers and residents outside Oxford city. The report is therefore intended to map current provision against projected demand, identify priority shortages and produce recommendations that can better align the skills system with climate and nature policy, employer needs and pathways into employment.

Definitions range from narrow to broad. At the narrow end, a green skill is a specific low-carbon task; installing a heat pump or assessing a home for insulation. At the broad end, it is any general ability a worker will eventually need, such as thinking about whole systems or redesigning a process to waste less. Some bodies go very wide: the International Labour Organization counts any job that benefits the environment (ILO, 2016). Others argue that climate change is slowly making every job partly green (Cook and Elliott, 2025).

The trap is that the broader the definition, the harder it becomes to count anything. If everything is green, the map shows nothing useful. The common solution is to keep a broad definition for fairness and inclusion, but do the actual counting with a narrower, tiered system.

Literature Review: Green Skills Taxonomy for Oxfordshire

The choice of taxonomy matters because definitions of green skills vary considerably, from the very narrow to the very broad. At one end, green skills refer to specific low-carbon tasks such as installing a heat pump or assessing a home for insulation. At the other, they include wider capabilities that workers across the economy may need over time, such as systems thinking or redesigning processes to reduce waste. Some

definitions are even broader still: the International Labour Organization treats any job that benefits the environment as green (ILO, 2016), while other accounts suggest that climate change will gradually make almost every job partly green (Cook and Elliott, 2025).

For this project, the central issue is not simply how to define green skills, but how to choose a framework that can be used consistently across the county. A definition that is too broad risks losing analytical value: if everything is green, then the map shows very little. The most workable approach is therefore to keep a broad definition in principle, while using a narrower, tiered system for classification and counting.

A useful starting point is the UK's three-part "shades of green" model (Green Jobs Taskforce, 2021): dark green jobs, where sustainability is the main purpose of the role; mid green jobs, where existing roles are being reshaped through low-carbon methods; and light green jobs, where sustainability is a smaller but growing part of a more ordinary role. Skills England uses a similar approach, although it often excludes the light-green category (Skills England, 2025). For a project concerned with inclusion, that exclusion would be a weakness. Light-green roles, such as the small-business accountant beginning to report emissions, the project manager on a home-retrofit scheme, or the planning officer working with new nature rules, are often the point at which most workers first encounter the green economy. Leaving them out would make the county's green economy appear smaller, more specialist and less accessible than it is.

The same issue arises in the data. There are two official ways of counting green jobs, and they are not designed to produce the same result. Industry-based measures are stable and comparable, but they are slow to capture emerging sectors and miss greening within ordinary jobs (ONS, 2024a). Task- and skill-based measures are better at tracking change across the economy, but they are less consistent (ONS, 2024b). Neither is available reliably at the local level required for Oxfordshire. The most honest approach is therefore to build the demand picture from several imperfect sources and to be explicit about their limitations.

That also points to the most practical way of structuring the analysis: as a map of where employer demand is high, where relevant training is scarce, and where the two do not meet. Government heatmaps use a similar logic, plotting jobs by how much they are needed and how difficult they are to fill (DESNZ, 2025a, 2025b). National estimates suggest that low-carbon jobs could grow substantially by 2030 (CCC, 2023). For this project, the value of that approach lies less in the national figures themselves than in the method: a county-level map of priority roles against thin or missing provision speaks directly to the project's core question.

The most important decision, however, is how far the taxonomy should extend beyond clean energy and buildings. National policy has increasingly narrowed its focus to those areas and explicitly excludes nature-based work such as tree planting, peatland and river restoration, farming and biodiversity (DESNZ, 2025a). That may be appropriate for a national energy department, but it does not fit Oxfordshire. More than 74% of the county is farmland shifting towards nature-friendly schemes, and local evidence identifies shortages in biodiversity professions alongside retrofit shortages (SQW/Oxford Brookes for OxLEP, 2023). For Oxfordshire, nature and land are not an optional extra; they are a major part of the local green economy. Any county taxonomy should therefore include them.

Because the project treats green skills as a route into good work and wellbeing, accessibility also needs to be built into the framework. It is not enough to ask whether courses exist; the more relevant question is whether the people who need them can reach them. Useful ways of testing that include a job-quality lens covering pay, security, safety and wellbeing (DESNZ, 2025a), and a five-barrier approach that considers awareness, capability, support, access and finance (IFOW, 2026). New maps of environmental disadvantage can also help identify the parts of the county where need is greatest (EA and Natural England, 2026).

On that basis, Oxfordshire should adopt a broad definition of green skills: any ability that helps cut emissions, adapt to climate change, or restore nature. But it should classify and count using the three shades of green, retaining the light-green tier so that entry-level roles remain visible. The framework should give equal weight to clean energy and buildings on the one hand, and nature, land and food on the other. It should build the demand picture from several local sources rather than relying on a single dataset, present gaps as a demand-versus-provision map and interpret the results through the question of whether people can actually reach these opportunities.

That approach leaves the framework open about the tensions it has to manage: breadth and countability, climate and nature, jobs and access. Those tensions are not a weakness to be smoothed away, but the basis of a taxonomy that can be used meaningfully across the county.

Oxfordshire Green-Skills Inventory: Main Findings

The inventory built a single picture of two things side by side: the green training on offer across Oxfordshire, the courses residents can enrol on, and the signs that local employers need green skills: from job adverts, employer feedback and county strategy. Every course and every sign of demand was sorted into one of two halves of the green economy: clean energy and buildings (retrofit, heat pumps, solar, electric-vehicle

charging) and nature, land and food (ecology, nature recovery, land management, sustainable farming), plus a cross-cutting group for roles that serve both, such as sustainability managers and carbon-literacy training. We also noted the qualification level of each course, so we could see whether entry points exist for people without prior qualifications.

The full method and the course-by-course coding sit in the annexes. What follows is what the finished map reveals around supply.

Supply Findings

The inventory records 54 distinct green-skills offers across Oxfordshire; 49 courses and programmes plus 5 access-and-funding mechanisms that are not courses in themselves. Each was sorted into one of the two halves of the green economy (clean energy and buildings; nature, land and food), plus a cross-cutting group; tagged for how central sustainability is to the role (dark, mid or light green); and given a qualification level where one is stated. The counts below are counts of offers, not of learner places: capacity is examined separately, and is the inventory's main blind spot.

Oxfordshire's green training is real and, in clean energy, genuinely strong, but it is skewed away from nature, built almost entirely on reshaping existing trades rather than dedicated roles, hollow at the technical middle, and dependent on two anchor institutions.

Provision leans heavily toward clean energy, and thinly toward nature

Of the 54 records, 30 (56%) sit in clean energy and buildings, 14 (26%) are cross-cutting, and just 10 (19%) cover nature, land and food (Figure A). Given that farmland covers most of the county and the local evidence names a real shortage of nature and biodiversity professionals, a nature pillar holding under a fifth of all provision is the clearest quantitative signal of under-supply in the whole dataset.

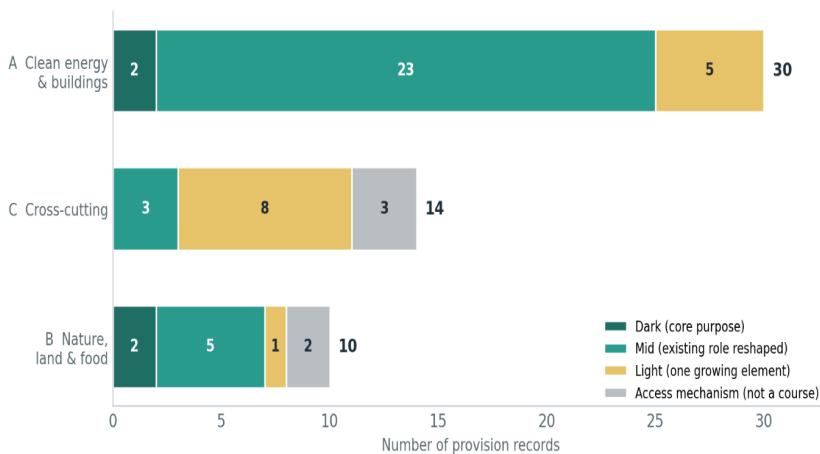


Figure 1: Green-skills provision by pillar and tier

The model is conversion, not new specialists

Sorted by shade of green, provision is overwhelmingly mid-green: 31 of 54 records, against 14 light-green, and only 4 dark-green records in the entire county. In clean energy and buildings, 23 of the 30 records are mid-green - existing trades (electricians, plumbers) being reshaped to add heat pumps, solar or EV work (Figure A). This is consistent with Oxfordshire's own stated strategy that its fastest source of green workers is converting existing tradespeople rather than training specialists from scratch. The data supports that model, but it also shows how few dedicated green roles are being trained for directly.

The professional middle layer barely exists

Grouping provision by qualification level exposes the sharpest gap in the supply picture. There are 17 records at entry to Level 3 (trade and entry) and 14 at Level 6 and above (degrees and professional qualifications), but only 2 records at the technical Level 4–5 middle, and one of those is unconfirmed (Figure B). A further 15 records are short courses, bootcamps or CPD, and 6 are access mechanisms.

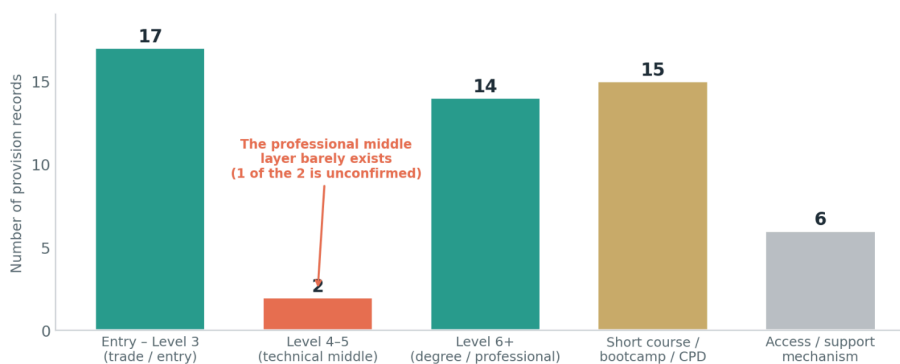


Figure 2: Green-skills provision by skill level.

In plain terms: the county can train someone into a trade, and can train a graduate professional, but offers almost nothing at the technical supervisory level in between; exactly the retrofit-coordinator, assessor and adviser roles that local evidence names as the bottleneck. The "hollow middle" is not an impression; it is a count of two.

The nature pillar is top-heavy and has no vocational ladder

The 10 nature records repeat the same shape in miniature (Figure A). At the top sits a world-class but selective, degree-only professional route through the University of Oxford. At the bottom sit short, Continuing Professional Development (CPD) and volunteer routes through local trusts and land-based organisations. Nothing sits in between: there is no accessible, in-county route for someone without a degree to progress from an entry-level interest into a professional ecology or nature-recovery career, and the formal land-based qualifications that would provide it sit outside the county altogether. For a pillar the project treats as equal in weight, this is the least complete ladder in the inventory.

Half of all provision comes from just two institutions

Provision is concentrated - Abingdon & Witney College accounts for 16 records and Oxford Brookes for 11, together half of everything on the map. Add the University of Oxford and the Activate Learning colleges and roughly 69% of provision comes from four organisations (Figure C). The remaining records are single, standalone offers spread across seventeen different providers. This concentration is efficient, but it is also a resilience risk: a change at either anchor institution would move the county's supply picture significantly, and much of the rest of the system is thin enough that individual offers could disappear without an obvious replacement.

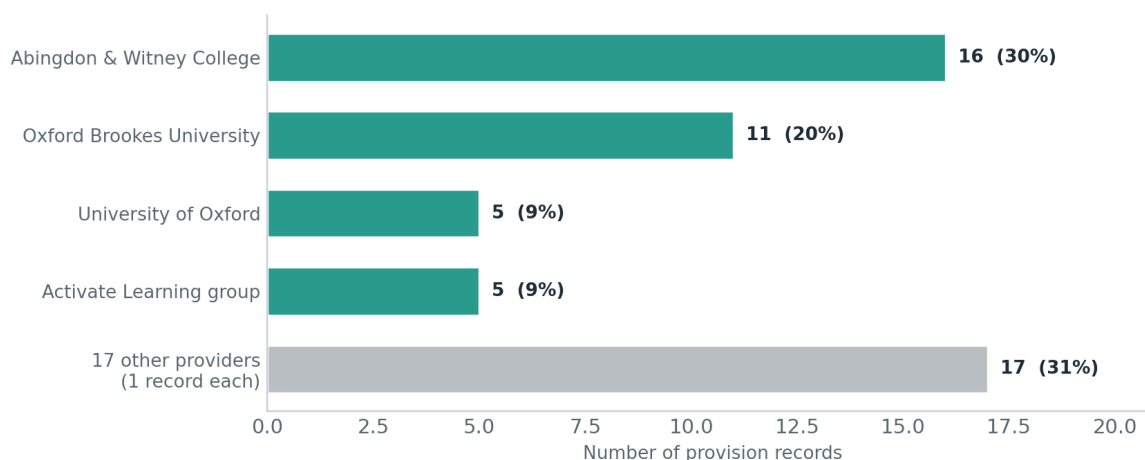


Figure 3: Provision is concentrated in a few anchor institutions.

Stakeholder Insights: Main Findings

As part of the primary data collection, 12 stakeholder interviews were conducted with key representatives across local government, employers, training and education providers, sustainability organisations, and the voluntary/community sector. These interviews aimed to validate the green-skills inventory, identify barriers and gaps within the current green skills-ecosystem, and understand opportunities for strengthening pathways into green employment.

While stakeholders highlighted the strength and diversity of existing green-skills provision across Oxfordshire, the interviews consistently identified a shared challenge: there are real strengths and capabilities on a county-level, but the green-skills ecosystem requires stronger coordination, clearer progression pathways, and greater accessibility to translate local market provision into more equitable and inclusive outcomes in education, employment, health and well-being.

Findings

I. Strongest provision in clean energy, buildings, and construction sectors. More local investment is needed in enhancing local quality expertise, advancing nature-based provisions and sustainability solutions beyond siloed technical roles and climate net-zero framework.

II. Accessibility and inclusion: Barriers extend beyond the availability of provisions

III. System coordination: Gaps and market mismatch

I. Strongest Provision in Clean Energy, Buildings and Construction, with Further Investment Needed in Nature-Based and Wider Sustainability Skills

Defining green skills provision

Launched in October 2023, Abingdon & Witney College's Net Zero Skills Hub is one of Oxfordshire's most developed vocational offers, providing practical training and courses in areas such as heat pumps, solar energy, EV charging, retrofit, ventilation and energy storage. The Hub was developed with employers and local partners in response to priorities identified through the LSIP. Nearly 50 employers and more than 200 learners had engaged with the Hub during its initial phase. For 2025/26, [the annual report](#) recorded 362 enrolments across its Net Zero courses, including programmes supported through district-level funding. This confirms the relative strength of Oxfordshire's clean-energy and green construction provision, while also reinforcing the inventory findings that much of the offer is concentrated at Levels 2-3 and focused on upskilling existing technical workers rather than creating broader nature-based or intermediate professional pathways.

Beyond large providers such as Abingdon & Witney College and Activate Learning, which concentrate primarily on construction, energy and the greening of established trades, there are a range of smaller pilot and community programmes that provide specialist nature-based learning. Organisations such as *Where the Fruit Is* provide specialized Level 1 Forestry training to a handful of students at the Oxford Academy. Much of the nature-based skills acquisition happens often informally via the VCSE sector (eg. community growing, hedging, creating wildlife spaces). However, they are considered unsustainable as many of these organisations are operating on shoestring budgets and limited resources.

Stakeholders clearly emphasised the need for a broader understanding of green skills that extends beyond technical low-carbon roles:



"It's the knowledge, the expertise, the technical skills, the core skills or what some people would call kind of soft skills, that enable us as a society to maintain a sustainable way of life...We can't separate out climate and other aspects of environmental sustainability from nature." - Lizzie Moore (Oxfordshire Local Nature Partnership)

"We deliver a program called the Young Leaders, which you could argue absolutely equips young people with the soft skills that would be relevant to the green skills economy, creativity,

flexibility of thinking, critical thinking, team building, leadership, public speaking, collaboration.” - Emmy O’Shaughnessy (Oxfordshire Youth)



This signals the need for an Oxfordshire-specific green-skills framework that recognises the green economy in more integrated and cross-sectoral competencies from education to employment. More importantly, there is a need to actively include the voices and lived experiences of young people in shaping green-skills provision and future employment pathways, ensuring that programmes reflect their aspirations, motivations, and tackle perceived barriers. This will be explored further in a later section on accessibility and barriers.

In addition, stakeholder perspectives also reinforced the inventory findings: while clean energy and buildings have clearer industry transformation, policy drivers, funding streams, and training routes, nature-based skills remain less developed despite growing demand. Zero Carbon Oxfordshire Partnership (ZCOP), an organisation that focuses on decarbonization efforts across the county, reports that for primary trades, fundamental provision such as accredited courses, qualifications, and college frameworks via institutions like Abingdon & Witney College or Activate Learning, are already “reasonably well covered” and structurally “set up to grow”. However, existing provisions reveal the lack of other skillsets covered in technical courses or traditional classroom settings.



“There’s a bigger need in the areas of leadership and coordination or communication; those might be skills that are actually more impactful and necessary at this point in a transition.” - Bart Ashton (Zero Carbon Oxfordshire Partnership)



Another key point relates to the quality of place-based expertise required in nature-based sectors. For example, the core tasks of nature recovery in Oxfordshire do not take place on dedicated nature reserves, but on working landscapes where biodiversity must coexist with other land uses.



“We don’t work on nature reserves. We’re usually working with people on their land, where

*the primary purpose of that land is to grow food, or for people to play on... we're there to help them increase biodiversity.”- **Camilla Burrow (Wild Oxfordshire)***



Rather than relying solely on specialist ecological expertise, this requires practitioners to understand landscapes holistically - from geology, soils and habitats to farming systems and community priorities. Importantly, technical ecology represents only around half of the role, with the remaining half consisting of relationship-building, collaborative communication and project management.



*“That's all only 50% of the job, because the other 50% is being able to talk to people collaboratively, understand their point of view, explain technical ecological concepts in a way that they understand... and, of course, you need really good project management skills as well.” - **Camilla Burrow (Wild Oxfordshire)***



Several other stakeholders similarly challenged the assumption that green skills are synonymous with highly specialised technical occupations. Instead, they argued that achieving nature recovery requires generalist ecological knowledge combined with transferable competencies, including stakeholder engagement, systems thinking, communication, project management and the ability to translate complex scientific evidence into practical actions for diverse audiences such as farmers, schools, local authorities and businesses.

This perspective also challenges conventional pathways into environmental and green careers. While formal education and university degrees provide valuable theoretical foundations, many of the most important skills - including project management, partnership working and practical ecological surveying - are learned through mentoring and workplace experience rather than formal education. At the same time, traditional expectations for unpaid volunteering remain exclusionary for many aspiring professionals, limiting who is able to enter the sector.

Local expertise in key sectors

Oxfordshire's provision challenges concern not only the number of qualified workers, but the quality of local expertise. Although there is growing demand for commercial

energy assessments, renewable technologies and building-cooling solutions, the shortage of quality installers able to assess and deliver more complex non-domestic projects reliably remain a challenge. This is particularly visible in the solar market, where overstretched companies may prepare quotations through desktop modelling without visiting the site. Low Carbon Hub reported one such case: a proposed commercial installation, in which the model failed to account for one building shading another, had applied assumptions designed for a domestic property.

“There aren’t enough quality solar installers out there” - **Alison Grunewald (Low Carbon Hub)**

Furthermore, general builders are aging out or operating as sole traders, meaning they do not train successors and simply fold their businesses when they retire. The deficit therefore lies not simply in the number of trained workers, but in the place-based knowledge, commercial-scale assessment and project-management capabilities required to deliver longer-term solutions. Adding to this is the difficulty of finding green suppliers for low-carbon technologies in Oxfordshire, as local SMEs struggle to get a single quote for an air source heat pump.

Similar constraints are visible in Oxfordshire’s transport sector, where electrification is reshaping both technical and operational roles. The transition from diesel to electric buses has required the Oxford Bus Company to retrain existing mechanics and recruit “mechelec” apprentices who combine mechanical and electrical expertise. A major training gap concerns EV infrastructure specialists. These roles combine competencies that currently sit across separate occupational pathways, including property and facilities management, civil works, electrical engineering and health and safety. Yet no established qualification or course currently integrates these capabilities despite rising demand.

“You’ve got a career pathway for health and safety... for property management and facilities... and you can be an electrician, but you’ve got to bring all that together in these roles to be an EV infrastructure person.” - **Luke Marion (Oxford Bus Company)**



Implications

Consequently, Oxfordshire's green-skills strategy should move beyond a narrow Net Zero framing and recognise nature recovery, sustainable land management and cross-cutting sustainability competencies as integral components of the county's future workforce and economy. Given Oxfordshire's [significant agricultural landscapes](#), biodiversity priorities and ambitions for nature recovery outlined in local development strategies, strengthening these capabilities represents not simply an environmental objective, but an economic and social investment in a more resilient green economy.

II. Accessibility and inclusion: Barriers extend beyond the availability of provisions

Improving access to green skills and employment requires much more than increasing the number of courses available. Echoing the literature review, which identifies awareness, capability, support, access and finance as the principal barriers to participation, stakeholders described how these barriers often interact and reinforce one another, particularly for young people, career changers and those furthest from employment.

Awareness

The first barrier identified was awareness and visibility of what green skills or careers look like. While many young people are motivated by matters of climate change and sustainability, there is a lack of awareness when it comes to the diversity of occupations in the green economy or ways to access them. Careers advice for students often remains focused on broad occupational categories and overlooks many emerging or specialist green roles. Careers services rarely understand the breadth of “niche” green occupations required to support local infrastructure and economy, making it difficult for young people to recognise these careers as realistic employment opportunities. This suggests that awareness, rather than lack of motivation, may be a significant constraint on entry.

Young people may be motivated by environmental issues or meaningful careers but often struggle to understand how these aspirations translate into realistic employment opportunities. A lack of visibility around more diverse green occupations limits awareness of careers that are critical to Oxfordshire's green transition.

*“When you go to university, your careers advisors don't necessarily know all these niche roles... We struggle to sell how important this stuff is and what difference it makes to society because people just don't know.” - **Luke Marion (Oxford Bus Company)***

Exposing young people to sustainability-related work through practical experience rather than relying solely on classroom-based learning becomes ever more important. Short courses may raise initial interest, but uncertainty about what follows - including whether a qualification leads to a placement, apprenticeship or paid role - can discourage participation and weaken progression. Employers need to provide clearer signals about future workforce demand.

*“They need to make it really obvious what the need is and what their anticipated need is, and that needs to be pushed down into education.” - **Kim Polgreen (Oxford Earth Academy)***

The issue is therefore not simply a lack of information or interest, but a lack of visible and viable pathways linking education, training and employment. But as a start, careers guidance services in schools should make the breadth of green work more legible while showing the concrete steps required to enter and progress within different sectors.

Practical Barriers

Beyond limited awareness of green careers, stakeholders identified several practical constraints that determine whether young people and disadvantaged groups can access and remain in training or employment. These findings demonstrate that the formal existence of a course or vacancy does not necessarily make it accessible. Transport,

digital exclusion, living costs, unpaid entry routes and the availability of workplace support all shape who can realistically participate.

Transport emerged as a particularly significant barrier for young people living outside Oxford city. In particular, Oxfordshire's rural geography makes access to employment and training highly dependent on an individual's ability to travel:



“Oxfordshire is the most rural county in the South East of England, which means that access to opportunities when you're 16 to 25 [is] highly dependent on whether or not you have the funds to travel to those opportunities, whether they're work-experience placements, site visits or job interviews. The transport connectivity from rural to urban parts of Oxfordshire is really problematic.” - Emmy O'Shaughnessy (Oxfordshire Youth)



Furthermore, public transport services operate on limited timetables which restrict mobility especially for residents outside Oxford city and in more rural areas. Transportation and geographical barriers are thus significant constraints on access to green-skills opportunities.

Digital exclusion is an emerging issue for young people particularly within deprived wards and rural communities as it can compound rural and socioeconomic disadvantages. Young people increasingly require digital access and literacy to search for work, complete applications, participate in training and undertake roles involving data, energy systems or other emerging technologies. Oxfordshire Youth's Digital Natives programme is one of the few programmes tackling this head-on.

Oxfordshire's high cost of living also affects the ability of employers to recruit and retain workers. For instance, according to Luke Marion (Oxford Bus Company), some specialist transport roles cannot be performed remotely because employees need to be physically present at bus depots and engage directly with operational staff. Employers in Oxfordshire may therefore struggle to compete with organisations in lower-cost regions that can offer greater flexibility or cheaper living conditions. This demonstrates how housing and living costs can constrain green workforce development even where roles and employer demand exist.

Financial barriers are also embedded within some conventional routes into environmental work. There are longstanding expectations in many professions, from ecologists to conservationists, that new entrants should undertake substantial unpaid

volunteering before gaining secure, paid employment: Entry pathways that rely on unpaid or volunteering experience risk excluding poorer, more disadvantaged groups. This is particularly relevant to the inventory finding that many entry routes into nature recovery and conservation are short-term, voluntary or informal rather than part of a clearly funded vocational pathway.

Confidence and capability support

Technical qualifications alone do not guarantee successful progression into secure employment. Young people and those furthest from the labour market may require mentoring, pre-employment support, workplace experience and opportunities to develop confidence alongside technical skills. Young people without strong professional and personal support networks may find it significantly more difficult to navigate fragmented training and employment systems.

Work placements and supervised learning can help close this gap, but employers and VCSE organisations lack the resources to provide them. For example, Wild Oxfordshire frequently receives requests for work placements and would offer more opportunities in principle. But the lack of resources hinders the progression of such opportunities.

*“We’d like to do more, but... we just don’t have any staff available who can properly supervise volunteers and work-placement people... When you’re putting out fires all the time, it’s quite hard to find the time to teach someone else how to put out a fire.” - **Camilla Burrow (Wild Oxfordshire)***

The deeper tensions across the nature sector reveal that experienced practitioners do want to transfer their knowledge and help make the sector more inclusive but are already overstretched and working within severe funding constraints. This illustrates that mentoring and training capacity is not simply a matter of organisational interest or goodwill. Supervision, coaching and knowledge exchange require dedicated staff time, resources and funding. Without support for these arrangements, increasing the number of placements could either overburden smaller organisations or result in experiences that do not provide participants with meaningful learning and progression.

Another crucial component concerns mental health and wellbeing of NEET groups, young people and those further from employment. For some groups, moving directly into technical training may not be realistic without earlier support related to confidence, workplace readiness and trusted relationships. However, because this study gathered

organisational perspectives rather than engaging with young people directly, the relationship between mental wellbeing and green-employment pathways requires further research and active youth-led engagement.

Implications

Without intentional inclusion measures, Oxfordshire's emerging green sectors risk reproducing existing inequalities by benefiting those who already possess financial resources, professional networks, digital access and the ability to travel or undertake unpaid experience. Green skills provision should therefore integrate employability support, outreach, and accessible entry points alongside technical training. Funding should also support the organisational capacity of employers and VCSEs to properly supervise learners and provide sustained workplace development. The challenge is not simply adding on provisions, but implementing pathways to facilitate inclusive and equitable outcomes for all.

III. System coordination: Gaps and market mismatch

A recurring theme across stakeholder discussions is not simply a shortage of green skills, but a more fundamental market misalignment between training provision, employer demand, business readiness, and labour market signals. While a growing number of green-related local training programmes and qualifications are available, many stakeholders are concerned about whether current provision is well-aligned with broader structural needs and conditions required for employers and organisations to absorb, utilise and sustain green skills and workforce capabilities.

Fragmented provision, unclear signals and regulatory gaps

Skills shortages cannot be addressed independently of regulation and a stable pipeline of work. To illustrate, Oxford Direct Services (ODS) has provided air-source heat-pump training for existing gas engineers, however:



“It’s one thing... putting someone on the course, and it’s quite another thing having day-to-day experience in that.” - Emma Hope (Oxford Direct Services)

Without regular opportunities to apply new competencies, formal training may not translate into employment, and competencies can quickly be lost. Regulatory standards also influence employer demand for specialist skills. ODS identified limited availability of builders, materials and expertise in high-performance retrofit and airtight construction in southern England. For instance, as Emma Hope (ODS) described, stronger building standards, like those adopted elsewhere in Scotland and Ireland, would “force us to start building to a higher spec” and help create a more sustained market demand for green construction skills. Current development practices may minimise upfront costs while creating higher lifetime energy expenditure. However, the actual lifetime cost of buildings becomes much higher when homes are constructed to poor thermal standards. Stronger regulation could therefore support both workforce development and longer-term affordability, while improving resilience to climate change impacts.

Provision is also fragmented by the structures governing qualifications and funding. Colleges and training providers may wish to adapt their curricula in response to emerging employer needs but remain constrained by institutional awarding and sector bodies that prescribe course content and assessment requirements. Funding arrangements can further weaken collaboration by encouraging providers to compete for short-term contracts rather than jointly design provision around local needs.

“The funding should react to the demand; the demand should not react to the funding.”
- Steven Kiakowski (The Verdancy Group)

Under current competitive tendering models, colleges, private providers and community organisations may bid separately for portions of the same funding, even where an integrated programme would be more effective. Organisations should instead be able to examine and address market trends, local demographics and needs in more transparent and collaborative ways.

Operational mismatch between local employers, schools and government

Improving awareness alone would not resolve the underlying challenge. Current debates around green skills often assume that increasing the supply of trained workers will

automatically generate employment outcomes. However, the current system suffers from a market mismatch, where training provision and employer demand are misaligned.

The core structural failure is not a lack of green skills courses or candidates. A significant but often overlooked challenge is dealing with an unviable throughput volume: existing pipeline models are too narrow to produce trained workforce, labour and resources required to deliver programmes at scale.

*“The biggest issue we have is throughput versus availability. The industry says, ‘We have a course available, why aren't people coming?’ But the model of throughput is fundamentally broken. The current channels are simply too narrow to produce the volume of workers needed to scale up and meet regional retrofitting and clean energy targets.” - **Steven Kiakowski (The Verdancy Group)***

There is caution needed against treating projected skills demand as equivalent to an established labour market. Referring to local heat-pump provision, Tom Storey (Storey Consulting and OIEP) shared that although policymakers and industry frequently report an urgent need for installers, colleges and training providers may still struggle to attract learners because “there isn’t the market demand for the training”.

This apparent contradiction reflects market uncertainty and an unstable pipeline of commercial demand rather than the simple absence of provision. Rather than representing this issue as a simple imbalance between supply and demand, this reflects a wider systems problem. Although retrofit assessors, heat pump installers and other clean energy occupations are frequently identified as priority growth sectors, employers and particularly SMEs may lack the financial capacity, regulatory certainty, commercial incentives, or business readiness to adopt new technologies or invest in greener workforce development at the pace anticipated by market trends and policy.

Consequently, training providers may successfully produce qualified workers, while businesses remain unable or unwilling to absorb them or create sufficient demand for those skills. Equally, employers may report specific skills shortages while funded training places remain under-subscribed because learners do not perceive stable employment opportunities or clear career progression. One local district council member shared that even though their team previously rolled out funding for carbon

literacy workshops, they could not fill the available spaces because there was insufficient business demand.

Therefore, it is important to challenge the assumption that expanding short-term training programmes alone will resolve market misalignment. Instead, we propose a focus on expanding “green absorptive capacity” - defined as the ability of employers, industries and local institutions to effectively integrate newly trained workers into green employment (Dinibutun, 2024). This requires coordinated investment not only in education and skills, but also in business support, stronger regulatory frameworks, funding infrastructure, mentoring and demand-side incentives that enable organisations to adopt greener ways of working.

From this perspective, addressing the issue of market mismatch is more complicated than adjusting supply-side and demand-side interventions. A more coordinated and integrated system is needed in which education providers, employers, local authorities and intermediary organisations can work together.

Stakeholders also noted that effective employer-school partnerships require stronger alignment between institutional timetables and operational capacity. This is because school calendars, teaching timetables and staff commitments are typically planned far in advance, with the annual calendar often fixed a year ahead. Employer-led initiatives proposed at short notice may therefore be difficult to accommodate, even where schools are supportive. Work experience and careers activities also require considerable coordination, time and resources from both schools and employers.

Green-skills initiatives must also fit within an already crowded school curriculum shaped by national programmes of study, examinations and accountability requirements. Rather than simply adding further content, policymakers and partner organisations must consider how green skills can be integrated into existing school programmes while recognising competing curriculum demands and the trade-offs involved. What is therefore needed is early planning and sustained local partnerships that provide schools with consistent support and clear information about employer needs, relevant qualifications and progression routes.

Implications

Green skills provision should therefore move beyond expanding the number of training courses or qualifications delivered. Instead, policies and strategies should focus on strengthening the mechanisms that link education, business and market signals, creating sustained institutional pathways from schooling and training to mentoring, work experience and longer-term career progression. Enhancing green absorptive

capacity across Oxfordshire will be essential to translate ambitious climate and nature goals into a more inclusive, equitable and sustainable pathways for green employment.

Synthesis of main findings

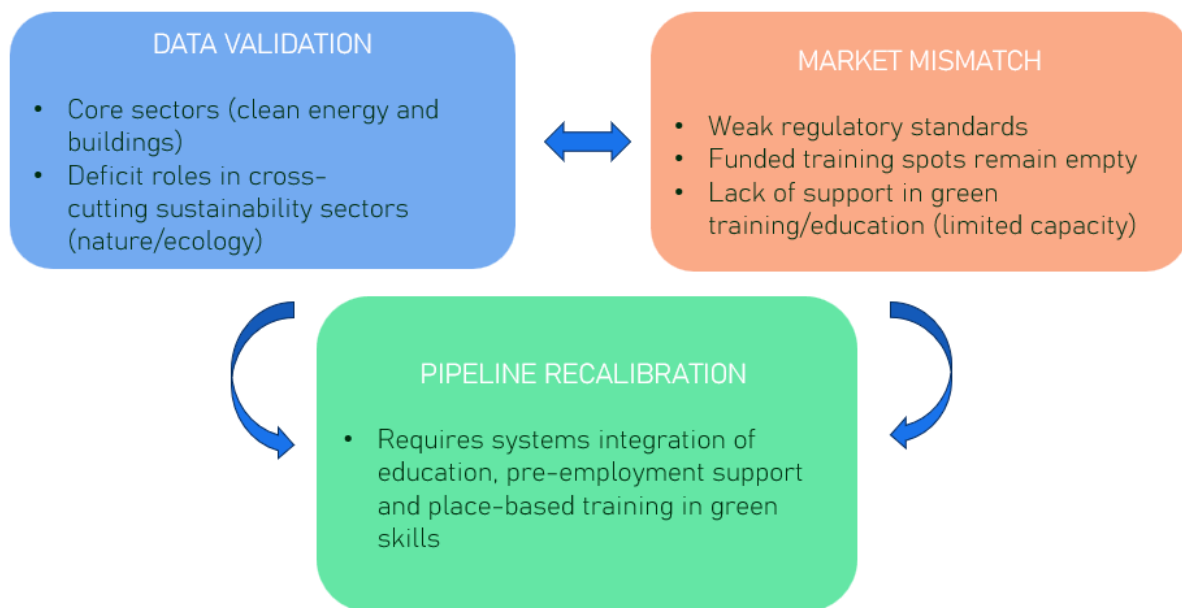


Figure 4: Visual synthesis of overall findings

Oxfordshire has real strengths and capabilities in green-skills provision, but the existence of provision does not automatically translate into workforce capacity or long-term employment. The data shows where provision is concentrated and where deficits are in key sectors with significant gaps at the technical, middle-level supervisory roles.

Beyond data validation, this report shows a profound market mismatch in green skills provision. The issue is more complicated than simply adjusting market supply or demand. As described, funded training places offered by providers like Abingdon & Witney college remain empty, while employers report skills shortages in these exact same sectors. Weak regulatory standards also contribute to employer uncertainty and limited organisational capacity, which can further impede employers' willingness or ability to invest in greener business models and recruit or train workers.

Therefore, the priority is to recalibrate the pipeline by developing stronger linkages across education, pre-employment support, workplace mentoring and organisational capacity. We set out several key recommendations in the next section.

Takeaway: System Coordination Challenges in Green Employment

There are system coordination challenges beyond simply a lack of courses or skills. Both the inventory and stakeholder insights highlighted a highly fragmented provision due to unclear progression pathways and weak cross-sectoral coordination. Instead of simply filling in skills-gaps, we need to address the larger issue of market mismatch and unclear pathways into green employment.



Recommendations and next steps

Based on both the inventory and stakeholder findings, we propose key recommendations that can be broadly grouped in three categories:

Enhance coordination

Create a countywide green skills coordination function to align partners and provide clear leadership across the system. This can be executed through anchor bodies such as the Oxfordshire Leaders' Joint Committee and LSIP Employer Representative Body driving strategic local collaboration. It is essential to promote place-based leadership, strengthen coordination and integrated skills training that meet local economic and business needs.

Increase demand and capacity for green skills

Focus on strengthening green absorptive capacity by supporting businesses and employers alongside workers to improve market alignment. So that employers have more confidence, capacity and incentives to adopt greener business models, offer work placements and create sustained demand for green skills. This should include stronger public-private partnership models, such as apprenticeship levy-sharing, supported work placements, targeted SME assistance and clearer long-term signals driving future market demand.

Build a stronger talent pipeline

Enhance support for local schools and education providers in mainstreaming green skills and hands-on training/experiential learning for young people, and upgrading careers guidance for a wider range of green occupations. Clearer progression routes – from schooling and pre-employment support through to training, apprenticeships and paid work – will be essential to creating a more inclusive and sustainable local talent pipeline.

Conclusion

In sum, this report maps existing green skills provision and identifies key gaps, barriers and opportunities for Oxfordshire's green economy to thrive. Young people, NEETs and other disadvantaged groups need to be able to access opportunities in fairer and healthier ways; employers need more capacity to absorb green skills, and organisations across the ecosystem need to be better coordinated to create more viable and sustained pathways. Future research should engage directly with young people and other groups struggling to enter or remain in the workforce, so that their experiences and needs can directly inform the design of local programmes and policy for a fairer, greener and healthier economy.

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Annexes

Inventory: operating definition and coding scheme

The adopted definition

A green skill, for this project, is any capability that helps Oxfordshire cut greenhouse gas emissions, adapt to climate change, or protect and restore nature. The definition is held deliberately broad so that the analysis captures not only the obvious technical roles but the management, advisory, data and administrative roles that the green transition reshapes. Breadth is the conceptual frame; the counting is done through the tiers and pillars below, which keep a broad definition tractable.

Two rules sit above everything that follows. First, the light tier is retained: it is not optional, and records are not dropped because their green content is partial. Second, nature, land and food sit inside scope as a full pillar of equal standing with clean energy and buildings; the national exclusion of nature-based work does not apply to this project.

How each record is coded

Every course (supply side) and every demand signal (demand side) gets three tags: pillar, tier, level, plus the descriptive and accessibility fields. Apply them in that order.

Tag 1 — Pillar

Pillar	Covers
A. Clean energy & buildings	Retrofit, insulation, airtightness; heat pumps and low-carbon heating; solar PV, solar thermal, electrical storage; EV charging; electrical and building-services work; grid and networks; energy efficiency and advice
B. Nature, land & food	Ecology and biodiversity; biodiversity net gain and nature-recovery practice; environmental land management and agri-environment; woodland, river and habitat work; sustainable food and farming
C. Cross-cutting	Roles that serve both pillars or neither specifically: sustainability-literate management, project management, sustainability data and analysis, carbon literacy, SME sustainability advice

Decision rule

Assign the pillar by the **primary purpose of the role or course**, not by the sector it nominally sits in. A retrofit project manager is Pillar A even though "project manager" is generic, because the purpose is building decarbonisation. Where a record genuinely serves both pillars equally (a generic sustainability-management course, carbon literacy), code it **C** rather than forcing a choice. Resist the urge to default borderline records to A; the nature pillar is under-represented in the public record precisely because coders reach for the energy frame first, and that bias is the one this scheme exists to correct.

Tag 2 — Tier (shade of green)

Tier	Test	Examples
Dark	Sustainability is the core purpose of the role	Heat-pump installer; retrofit coordinator; ecologist; nature-recovery practitioner
Mid	An existing occupation reshaped by low-carbon or nature methods	Electrician adding solar PV; plumber moving to low-carbon heating; farmer entering environmental land management
Light	Sustainability is one growing element of an otherwise conventional role	Quantity surveyor; SME accountant handling emissions reporting; planning officer handling biodiversity net gain

Decision rule

Tier on **what the work becomes, not what the person was**. The same individual can hold a mid-green role today and a dark-green one after retraining; code the role as it is described in the course outcome or the vacancy, not the person's history. If a record could be read as two tiers, take the **lower** (lighter) tier and note the ambiguity, so the map does not overstate how specialised the green economy is.

Tag 3 — Level

Use the standard qualification levels (Entry/Level 1 through Level 8). For demand signals where a level is not stated, record the typical level for that occupation and flag it as inferred. Level is what lets the accessibility analysis see whether entry points exist for people without prior qualifications.

Descriptive and accessibility fields (inventory only)

For each **provision** record also capture: provider; campus or location (district); mode (classroom / practical / online / blended); cohort size and annual throughput (mark *unknown* — *interview* where not public); funding route and cost to the learner; entry requirements; transport and additional-needs notes; and known progression into work. These are the fields the five-barrier access analysis runs on, and the ones the interviews exist to complete.

For each **demand** record capture: source; pillar/tier/level; whether the signal is local (LSIP, employer, strategy) or national-localised (DESNZ priority occupation applied to Oxfordshire); and gap severity once supply is overlaid.

Edge cases, decided in advance, so the same call is made every time:

- **EV roles** — in scope, Pillar A, because they sit within the buildings-and-energy decarbonisation system locally (charging installation, electrical work), even though the national Clean Energy Jobs Plan parks EVs in "wider green jobs." Note the divergence from national scope in the methods note.
- **Retrofit / construction project managers and coordinators** — Pillar A, dark or mid by role, never demoted to light because the title is generic. This professional layer is a named local gap and must stay visible.
- **A course spanning both pillars** (e.g. a broad "green skills" introduction) — Pillar C, light tier, so it is counted once and not double-counted across A and B.
- **Generic construction or engineering trades with no explicit green content** — out of scope as green, but record separately as the *transferable base*, since Oxfordshire's own evidence says much of the green workforce comes from converting existing trades rather than training from scratch.
- **Nature / land roles funded through agri-environment or BNG** — in scope, Pillar B, even where the employer is a farm or estate rather than an obviously "green" organisation.
- **Higher-education sustainability provision** — in scope, tag by level (usually 6+), but flag accessibility, since degree-level routes answer a different gap from the trade and entry-level ones.

Why these rules, in one line each

Broad definition, so inclusion is not designed out. Light tier kept, because that is where most career-changers enter. Two equal pillars, because Oxfordshire's nature gap is real and national framing hides it. Tier on the role not the person, so the map reflects the work. Lower tier when in doubt, so the green economy is not made to look more

specialised than it is. Transferable base recorded separately, because conversion of existing trades is the county's fastest supply.

Oxfordshire green-skills inventory

Coding key. Pillar: **A** clean energy & buildings · **B** nature, land & food · **C** cross-cutting. Tier: **D** dark · **M** mid · **L** light. Level = RQF where known. Lower tier taken where ambiguous.

Colour Key:

PILLAR (which half of the green economy)

A	Clean energy & buildings — retrofit, heat pumps, solar/EV/storage, electrical, energy efficiency
B	Nature, land & food — biodiversity, BNG, nature recovery, land management, forestry, sustainable farming
C	Cross-cutting — sustainability-literate management, project/data, advisory, carbon literacy, access & engagement

TIER (shade of green — how central sustainability is to the role)

D	Dark — sustainability is the core purpose (heat-pump installer, retrofit coordinator, ecologist)
M	Mid — an existing role reshaped by low-carbon/nature methods (electrician adding solar; farmer into ELMS)
L	Light — sustainability is one growing element (SME accountant, planning officer); blank = access/engagement mechanism, not a course

STATUS (evidence confidence)

Confirmed	Existence and nature stated in a public source
Verify	Green-specific content implied but not itemised — fieldwork to-do

TRANSFERABLE BASE

(grey row)	<i>Not counted as green — generic trades/quals that convert fastest into green roles</i>
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Note:

Capacity and throughput are non-public for ALL records and are the work the interviews close. 'Lower tier' taken where ambiguous. BBOWT and other multi-area figures are not Oxfordshire-specific volume without local confirmation. Source links are in the Source column of each sheet.

Provision

ID	Provider — course / programme	Pillar	Tier	Level	Notes (access · geography · capacity)	Status
Po1	Abingdon & Witney College (A&WC) — L3 Air Source Heat Pump (City & Guilds, MCS-aligned)	A	M	3	Abingdon; upskill for heating/plumbing engineers; part-funded	Confirmed
Po2	A&WC — Heat pump systems installation (MCS, for plumbers)	A	M	3	Upskill route	Confirmed
Po3	A&WC — Domestic Solar PV	A	M	3	For electricians; ~£700 → ~£350 after 50% Midlands NZ Hub funding	Confirmed
Po4	A&WC — Solar Thermal	A	M	3	Part-funded	Confirmed
Po5	A&WC — EV charging equipment installation	A	M	3	Domestic / commercial / industrial; for electricians	Confirmed
Po6	A&WC — Electrical Energy Storage Systems	A	M	3	For electricians	Confirmed
Po7	A&WC — Domestic ventilation systems	A	M	3		Confirmed
Po8	A&WC — Certificate in Retrofit	A	M	3	Trade-level; coordinator/assessor (dark) layer not covered here	Confirmed

Po 9	A&WC — Airtightness & weather-sealing workshop	A	M	short		Confirmed
P10	A&WC — Intro to ASHP / Solar PV / Solar Thermal	A	L	short	Taster / foundation	Confirmed
P11	A&WC — Renewable technology within plumbing apprenticeships	A	M	2-3	Renewable Technology Suite	Confirmed
P12	A&WC — OxLEP Skills Bootcamp: Green Construction	A	M	bootcamp	Funded, employer-linked	Confirmed
P13	Activate Learning (City of Oxford College) — green suite: domestic retrofit, heat-pump installation, EV maintenance, EV charging installation, e-bike maintenance (Cytech)	A	M	2-3	Oxford + Activate campuses	Confirmed
P14	Activate Learning — T Levels (Construction, Engineering), Sept 2026	A	L	3	Sustainability embedded; extent to verify	Confirmed
P15	Banbury & Bicester College (Activate) — construction & electrical trades; 'Get that Job' route	A	M	1-3	North Oxfordshire; green-specific content embedded — verify	Verify
P16	Oxford Energy Academy — Skills Bootcamp in Heat Pumps (funded)	A	M	bootcamp	Oxford; install / service / maintain + qualification	Confirmed

P17	South Oxon & Vale of White Horse — SPF green building/construction places (82): heat-pump install & maintenance, understanding domestic retrofit, awareness	A	M	various	OxLEP + A&W + SOFEA; South Oxon + Vale; fully funded	Confirmed
P18	Cosy Homes Oxfordshire / RetrofitWorks — retrofit coordination & competence	A	D	5	One-stop-shop; whether it trains openly — verify	Verify
P19	Oxford Direct Services (ODS) — social-housing retrofit skills (SHDF)	A	M	2-3	In-house; openness beyond ODS — verify	Verify
P20	Low Carbon Hub — community energy (solar etc.)	A	M	-	Formal training / volunteer-to-work routes — verify	Verify
P21	Dual-fuel smart meter installer apprenticeship (national standard)	A	M	2-3	Reduced duration; local uptake — verify	Verify
P22	BBOWT — Wildlife Traineeships: Conservation & Biodiversity	B	D	entry-3	~20/yr across 3 counties; 3 days/wk, 12 months; certified, some expenses; largely unpaid; land-mgmt strand paused	Confirmed
P23	Sylva Foundation — Wood School (Long Wittenham): short courses, Summer School, Professional Course; Forestry for Woodworkers CPD; myForest	B	M	short-CPD	South Oxfordshire; woodland / home-grown timber / woodworking — forestry-adjacent, not ecology-professional	Confirmed

P24	FarmED (Shipton-under-Wychwood) — regenerative farming, food & biodiversity courses (intro → deep-dive)	B	M	short-CPD	West Oxfordshire / Cotswolds; sustainable-food and agroecology	Confirmed
P25	Earth Trust — regenerative agriculture training (FiPL); meadow/grassland management; equipment demo & loan	B	M	short	South Oxfordshire	Confirmed
P26	Wychwood Forest Trust — rural skills & crafts courses; conservation volunteering	B	M	volunteer-short	West Oxfordshire; entry / volunteer route into practical conservation	Confirmed
P27	A&WC — Common Leys Farm (land-based campus)	B		various	Land-based estate; green/ELMS content not itemised — verify	Verify
P28	Trust for Oxfordshire's Environment (TOE) — BNG delivery method/advice	B		-	Advisory, not open training	Confirmed
P29	A&WC — Carbon Literacy training	C	L	short	Awareness; serves both pillars	Confirmed
P30	A&WC — Environmental awareness	C	L	short	Awareness	Confirmed
P31	A&WC — OxLEP Skills Bootcamp: Sustainability	C	L	bootcamp	Scope to verify	Verify

P32	Activate Learning — HTQ Sustainable Business Management (new)	C	M	4-5	Leadership + sustainability; nearest local higher-level green offer	Confirmed
P33	Activate Learning — Skills Bootcamp in Sustainability (10-week blended)	C	L	bootcamp	With Oxfordshire Greentech, Blenheim Palace, Siemens Healthineers	Confirmed
P34	OxLEP Skills Bootcamps (programme) — free, ≤16 weeks, guaranteed interview	C	M	bootcamp	Countywide; green construction + e-bikes among ~10 courses; DfE Skills for Life (to Mar 2025, re-procured 2025/26)	Confirmed
P35	Oxford City Green Skills Fund (UK SPF)	C		-	Access / finance mechanism; free/subsidised; Oxford-city-bounded	Confirmed
P36	No Limits programme (OxLEP + SOFEA)	C		-	Into-training/employment support; free laptops/phones, travel; South Oxon + Vale	Confirmed
P37	SOFEA — education charity + food larders across Oxfordshire	C		-	Community engagement / access route to disengaged residents; countywide	Confirmed
P38	Oxfordshire Adult Learning — free funded adult courses (incl. provision for adults with mild–moderate mental-health needs)	C	L	Entry-2	Countywide community venues; wellbeing / access route relevant to the NEET aim	Confirmed

P39	Oxford Brookes — Small Business Sustainability Basics (with Small Business Britain)	C	L	-	SME-facing short upskilling; access for non-graduates	Confirmed
P40	Oxford Brookes — BSc Construction Project Management (accredited; placement year)	A	M	6	Sustainable-construction content; feeds the construction/retrofit PM demand (Do8)	Confirmed
P41	Oxford Brookes — BSc Building Surveying (accredited; placement year)	A	M	6	Retrofit-relevant professional route	Confirmed
P42	Oxford Brookes — BSc Quantity Surveying & Commercial Management (accredited)	A	L	6	Cost / commercial professional route	Confirmed
P43	Oxford Brookes — Planning, Real Estate & Urban Design suite (incl. BA Sustainable Urban Design and Planning)	A	L	6	Biodiversity, green space and energy efficiency within urban design/planning	Confirmed
P44	Oxford Brookes — BA Architecture / MArchD Applied Design in Architecture (ARB/RIBA Parts 1–3)	A	M	6-7	Sustainable & modular buildings; design for wellbeing	Confirmed
P45	Oxford Brookes — MSc Sustainable Architecture: Evaluation and Design	A	D	7	Sustainable-design specialism	Confirmed

P4 6	Oxford Brookes — MA Urban Design	A	M	7	Biodiversity, green space, flooding, energy efficiency	Confirmed
P47	Oxford Brookes — MSc Infrastructure and Sustainable Development (RTPI/RICS accredited)	C	M	7	Global-South focus — sustainability planning, less locally targeted	Confirmed
P4 8	Oxford Brookes — Built Environment Foundation year	A	L	3-4	ACCESS / widening-participation route into built-environment degrees	Confirmed
P4 9	Oxford Brookes — Architect Degree Apprenticeship (MArchD, work-based, 48 months; ARB Parts 2&3)	A	M	7	Work-based route; private-funded only from Jan 2026 (funding caveat)	Confirmed
P5 0	University of Oxford — MSc Biodiversity, Conservation and Nature Recovery (SoGE / Leverhulme Centre for Nature Recovery)	B	D	7	Directly addresses the biodiversity-professional shortage (DO9) — but SELECTIVE, full-time, residence-required; not a widening-participation route	Confirmed
P51	University of Oxford — MSc Sustainability, Enterprise and the Environment (Smith School)	C	L	7	Zero-carbon transition, finance/economics; designed for a range incl. early–mid-career professionals; selective	Confirmed
P52	University of Oxford — MSc Environmental Change and Policy (Environmental Change Institute)	C	L	7	Environmental-policy leadership; selective	Confirmed

P53	University of Oxford — MSc Nature, Society and Environmental Governance (SoGE)	B	L	7	Conservation governance; selective	Confirmed
P54	University of Oxford — MSc Water Science, Policy & Management; DPhil Geography and the Environment	B	M	7-8	Water professionals; doctoral research (FT 3-4 yr / PT 6-8 yr); selective	Confirmed

Demand

ID	Demand signal / role	Pillar	Tier	Level	Local / National
Do1	Retrofit installers (insulation, airtightness, fabric) — capacity gap	A	D	2-3	Local + National
Do2	Retrofit coordinators / assessors — professional-layer bottleneck	A	D	5	National
Do3	Commercial-retrofit business advisers — explicit local gap	A	M	4+	Local
Do4	Heat-pump installers	A	D	3	Local + National
Do5	Electricians upskilling to solar PV / EV / storage (solar = Oxon's strongest renewable)	A	M	3	Local
Do6	Building-services / electrical / civil engineers	A	M	6	National
Do7	Construction trades for green construction (plumbers, carpenters, bricklayers...)	A	M	2-3	National
Do8	Construction / retrofit project managers	A	M	4-6	Local + National
Do9	Biodiversity / ecology professionals — explicit local shortage	B	D	4-6	Local
D10	BNG & nature-recovery practitioners	B	D	3-5	Local
D11	Environmental land management / agri-environment advisers (CAP→ELMS)	B	M	3-4	Local

D12	Sustainable food & farming roles	B	M	various	Local
D13	Sustainability-literate managers / project / data roles (L4+ gap)	C	L	4+	Local
D14	SME / foundational-economy sustainability capability	C	L	-	Local
D15	L4+ sustainability-literate graduates / professionals	C	L	6+	Local

Transferable base- recorded separately (not counted as green)

Not counted as green — generic trades/qualifications that convert fastest into green roles (Oxfordshire's stated fastest supply).

ID	Record	Why it matters
<i>To1</i>	WRAS water regs; unvented hot water; low-temp heating (A&WC)	Base for heat-pump / low-carbon-heating conversion
<i>To2</i>	18th Edition wiring; inspection & testing; electrotechnical route (A&WC)	Base for solar PV / EV / storage conversion
<i>To3</i>	Activate Learning generic construction & electrical trades (incl. Banbury & Bicester)	Convertible into green-construction / retrofit
<i>To4</i>	Engineering / project-management qualifications (county-wide)	OxLEP: existing eng/PM skills need transferring onto green projects; fusion needs transferable engineers

What the coding shows

Coding the provision against demand exposes a county that is well-equipped at the two ends of the ladder and hollow in the middle. Clean-energy-and-buildings provision (Pillar A) is genuinely strong and well-evidenced: a dense installer-level offer anchored on Abingdon & Witney's Net Zero Skills Hub, free employer-linked bootcamps, and an accredited degree-and-apprenticeship layer through Oxford Brookes spanning construction project management, surveying, planning and architecture.

The trade bottom and the professional-degree top both exist. What sits between them is thin - the retrofit coordinator and assessor roles, and the commercial-retrofit advisers, that Oxfordshire's own LSIP evidence names as the bottleneck have almost no dedicated provision. The nature pillar (Pillar B) shows the same shape in sharper relief: Oxford runs a world-class route into professional conservation through its MSc in Biodiversity, Conservation and Nature Recovery, while Sylva, FarmED, Earth Trust, Wychwood and

BBOWT supply entry, CPD and volunteer routes at the bottom, but nothing connects them. There is no accessible in-county vocational pathway from an entry-level interest into a professional ecology or nature-recovery career for someone without a degree, and the formal land-based qualifications that would provide it sit out of county at Merrist Wood in Surrey.

Two cross-cutting findings qualify that picture. First, geography is a patchwork rather than a pipeline: provision now appears in every district, but it is stitched together from separate, time-limited funding pots: Oxford city has its own bounded Green Skills Fund, South Oxon and the Vale have separate SPF places and the No Limits wraparound, with no single countywide entitlement, and the thinnest coverage above trade level falling in Cherwell and the rural west.

The access infrastructure that does exist (No Limits' laptops and travel support, SOFEA's community hubs, adult learning's mental-health-aware provision) maps well onto the project's inclusion aims but runs on short-cycle funding, making it a durability gap as much as a coverage one. Second, and most important for what the inventory can and cannot claim, capacity and throughput are public for almost no record. The coding establishes what exists, where, across both pillars and all districts, and where the structural gaps lie; but not whether any of it runs at the volume demand requires. That single number, particularly the unquantified retrofit capacity gap Oxford City itself flags, is the thing only the stakeholder interviews can supply.