A Green Skills Strategy for a Sustainable Gloucestershire: A Strategic Framework 2026–2030

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1. Executive Summary

1.1. The Strategic Imperative

Gloucestershire stands at a pivotal juncture. The transition to a Net-Zero economy is no longer a distant aspiration; it is an immediate industrial challenge that requires a restructuring of our local labour market. This strategy document, designed to guide the county through to 2030, asserts that the primary bottleneck to achieving our carbon reduction targets is not technology or finance, but without a workforce capable of installing heat pumps, retrofitting our diverse building stock, including heritage and listed properties, managing regenerative farms, and engineering clean energy grids, Gloucestershire's commitment to an 80% reduction in corporate emissions by 2030 and countywide Net Zero by 2045 will remain unmet.[1] Simultaneously, failing to prepare our workforce for the "Green Industrial Revolution" risks economic drag, as traditional high-carbon roles decline and new high-value opportunities migrate to other regions with better-prepared skills pipelines.

In adopting this strategy, we are also improving the outlook for both food and energy resilience providing the means and know-how with which to reduce our dependence on fossil-fuel and fossil-fuel based fertilisers.

1.2 The Vision

Our vision should be for Gloucestershire to become the national benchmark for green workforce development—a region where the transition to Net Zero drives inclusive economic growth. We define "Green Skills" not as specialist, niche roles but broad cross-cutting themes spread across the two strategic pillars of:

1. **Clean Energy Skills:** The technical capabilities required to decarbonise the built environment, transport, and energy generation sectors.
2. **Nature-Based Skills:** The environmental and land management expertise required to sequester carbon, enhance biodiversity, and ensure climate adaptation and nature recovery in a rural county.

1.3 Core Recommendations

This strategy proposes four transformative interventions:

1. **Convene the Gloucestershire Green Skills Faculty:** Moving beyond the fragmented approach of individual institutions, the council will convene a federated Faculty comprising of the universities, colleges and training providers in Gloucestershire delivering courses which contribute to either nature recovery, the production or consumption of clean energy or contribute to the mitigation of climate change. This body will unify the green skills curriculum offer of our Further Education (FE) colleges, universities, and independent training providers, creating a **collaborative ecosystem,** of the type described in Paragraph 7.2 below, that more closely aligns supply with government forecasts and industry demand.[2]

2. **Support the establishment of a Gloucestershire Retrofit Centre of Excellence:** To tackle the county's *most significant emission source*—domestic housing—the council will establish a PAS 2035-compliant training hub (PAS 2035 is a British Standard for whole-house retrofit projects, ensuring energy efficiency, occupant wellbeing, and long-term sustainability) being delivered by a new federated Retrofit Centre of Excellence, initially comprised of SGS, GlosCol and AccXel, in partnership with the Gloucestershire Green Skills Faculty and specialist advisors and mentors, this Centre will deliver a new "whole-house-physics" approach to improve standards and deliver better householder outcomes from the retrofit sector. If the council is successful at promoting and communicating this approach it should, in turn, improve consumer confidence and

deliver high-quality outcomes for householders, residents, businesses, agriculture and the environment.[3]

3. **Deliver the Gloucestershire Green Skills Pledge:** modelled on the successful Essex County Council initiative, this employer-led commitment will stimulate demand by challenging businesses to prioritise green upskilling. The council will provide recognition and support in return for making the pledge.[4]

4. **Develop Green Skills Pathways:** Developing, curating and promoting a consolidated view of all the available green skills courses in the county will make green careers more accessible and desirable to young people, job-seekers and upskillers by providing an accessible resource where they can find information and course details which provide clear guidance on the way to get into, or achieve career progression by developing green skills.

1.4 The economic prize

The data is compelling. Prior work under the Gloucestershire Sustainable Energy Strategy stated that the added value to the local economy if Gloucestershire businesses deliver the work needed to improve the county's energy efficiency would **total £400m.**[1] The Local Government Association (LGA) estimates that Gloucestershire will require as many as **12,500 direct jobs** in the low-carbon and renewable energy economy by 2030, which is predicted to rise to over **20,000 by 2050**.[7] These are not just jobs; they are high-quality, resilient careers that contribute to the social and environmental fabric of the county. This strategy is the blueprint for securing them.

[1] Gloucestershire Energy Strategy

2 Strategic Context and Evidence Base

To create an effective strategy, we must first understand the landscape. This section details the policy environment, the emissions baseline that dictates our priorities, and the economic forecasts that justify our investment in skills.

2.1 The National Policy Landscape

The UK Government's *Net Zero Strategy* and the subsequent *Clean Energy Jobs Plan* have set a clear direction of travel.

In January 2026 the Government also **announced a £15bn investment** in their Warm Homes Plan[2] which will provide grants, low or no interest loans and incentives for householders, housing associations and private landlords to implement energy efficiency measures further stimulating the demand for skilled assessors and installers.

The national ambition is to create 400,000 jobs in clean energy by 2030.[8] This national mandate explicitly devolves responsibility to the local level, recognising that labour markets are inherently regional.

The Climate Change Committee (CCC) has been unequivocal in its advice to the Government: the UK will miss its legally binding carbon budgets without a "skills revolution".[9] The CCC identifies a critical risk: while we have the technology to decarbonise (e.g., heat pumps, EVs, etc), we lack the people to deploy them. **For Gloucestershire, this national risk is *a local reality***.

[2] UK Government Warm Homes Plan Jan 2026

2.2 Gloucestershire's Emissions Baseline: The Driver for Skills

Our skills strategy must align with our carbon strategy. We cannot train people for jobs that do not exist, nor can we ignore the sectors that are emitting the most carbon. The Gloucestershire Climate Change Strategy provides the baseline against which we map our skills needs.[1]

Table 1: Gloucestershire Emissions Baseline & Skills Implications

Sector	Share of Emissions	Strategic Challenge	Roles
Domestic	**25%** (901 ktCO2e)	The highest emitting sector. The county has a high proportion of hard-to-treat, solid-wall heritage properties.	Retrofit Coordinators, Insulation Installers, Heat Pump Engineers, and Glaziers.
Transport	**23%** (approx.)	High reliance on private vehicles in rural districts. Need to transition to EV and active travel.	EV Mechanics, Charging Infrastructure Civil Engineers, Logistics Planners.
Industry	**13%** (478 ktCO2e)	Need for industrial decarbonisation and circular economy processes.	Process Engineers, Sustainability Managers, Carbon Accountants.
Agriculture	**4%** (Direct)	Low direct emissions but high impact on sequestration and land use.	Regenerative Agronomists, Soil Scientists, Ecologists, Foresters.
Commercial	**5%** (171 ktCO2e)	Decarbonising the SME and office estate.	Energy Assessors, Facilities Managers (Green).

Data Source: Gloucestershire County Council Climate Change Strategy Annual Report.[1]

The data explicitly tells us that a strategy focusing solely on "high tech" innovation will fail to address the 25% of emissions coming from our homes. Therefore, **Retrofit** is not just a construction issue; it is our primary climate defence. Similarly, while agriculture is a smaller slice of direct emissions, the land sector is our only means of *removing* carbon (sequestration), making **Nature-Based Skills** equally critical for the "Net" in Net Zero.

2.3 The Economic Opportunity: Quantifying the Demand

The transition is often framed as a cost, but the *Clean Energy Jobs Plan* reveals it as an investment opportunity. The demand for green skills will soon outstrip supply significantly, creating a "seller's market" for skilled labour.

According to LGA analysis specifically for Gloucestershire [7]:

- By 2030, the county will need **1,700 jobs in Energy Efficiency** (Retrofit) alone.
- **2,900 jobs** will be required in Low-Carbon Electricity.
- **1,900 jobs** in Low-Carbon Heat (Heat Pumps).

This creates a total projected demand of over **6,500 technical roles** within the next four years. Furthermore, the UK Clean Energy Jobs Plan highlights that 31 priority occupations—including plumbers and electricians —are already in short supply.[8] If Gloucestershire does not train its own workforce, we will, by default, be forced to import labour at a premium, leaching economic value out of the county and retarding our retrofit programme and, by association, our ability to meet our net-zero commitments.

Conversely, getting this right offers a "levelling up" dividend. Retrofit jobs are distributed everywhere there are houses, meaning this economic activity benefits the Forest of Dean and Gloucester City just as much as the Cotswolds. We have an opportunity to boost an inclusive growth engine.

3 Green Skills – being more specific

Ambiguity is the enemy of a strategic approach. Too often, "Green Skills" is used as a catch-all term that includes everything from recycling to nuclear physics to regenerative farming to corporate ESG reporting. To direct our effort and resources effectively, this strategy adopts a more precise, dual-aspect definition tailored to Gloucestershire's unique profile as a county that is both urban/industrial (Gloucester/Cheltenham/Stroud/Tewkesbury) and deeply rural (Cotswolds/Forest of Dean). To define more clearly the vision around Green Skills we propose adopting a two-pillar approach:

3.1 Pillar 1: Clean Energy Skills

This pillar addresses the technological transition. It is about the "hard" engineering and construction skills required to switch Gloucestershire's energy systems from fossil fuels to renewables.

- **Retrofit and Building Physics skills:** T*his is the most urgent category with the most potential to impact county carbon emissions.* It involves the "whole house-physics approach" to energy efficiency. It is distinct from general construction because it requires an understanding of moisture, ventilation, and thermal bridges, treating the house as a working, holistic system.
    - *Core Roles:* Retrofit Coordinator (PAS 2035), Retrofit Assessor, External Wall Insulation (EWI) Installer, Glazing Technician, mechanical ventilation installer.
- **Low Carbon Heating skills:** The shift from gas and oil boilers to electrified heat.
    - *Core Roles:* Air Source Heat Pump (ASHP) Installer, Ground Source Heat Pump (GSHP) Engineer, Solar Thermal Installer, Biomass Technician.
- **Renewable Power Systems skills:** The generation and storage of clean electricity.
    - *Core Roles:* Solar PV Installer, Battery Storage System Engineer, Smart Meter/Smart Grid Technician, High-Voltage grid infrastructure engineers.
- **Clean Transport skills:** Supporting the EV transition.
    - *Core Roles:* Electric Vehicle Maintenance Technician (Light and Heavy Goods), EV charge-point Installer (Domestic and Commercial).

3.2 Pillar 2: Nature-Based Skills

This pillar addresses the biological transition. It recognises that in a rural county like Gloucestershire, land management is a primary tool for climate action. This definition moves beyond traditional "farming" to encompass ecosystem services.

- **Regenerative Agriculture skills:** A shift from yield-maximisation at all costs to soil-health prioritisation.
    - *Core Roles:* Regenerative Agronomist, Soil Health Advisor.
- **Ecological Engineering & Biodiversity Net Gain (BNG) skills:** Managing land to meet statutory biodiversity targets (Environment Act 2021).
    - *Core Roles:* Ecologist (Phase 1 Habitat Surveying), BNG Assessor, GIS Mapping Specialist, Conservation Land Manager.
- **Forestry and Arboriculture skills:** Increasing canopy cover for carbon capture and cooling.
    - *Core Roles:* Forester (Silviculture), Arborist, Tree Nursery Manager, Woodland Creation Officer.
- **Natural Flood Management (NFM) skills:** Using nature to mitigate climate adaptation risks (flooding).
    - *Core Roles:* Catchment Manager, NFM Project Officer, Hydrologist, Contractor specialising in leaky dams and riparian restoration.[1]

3.3 The "Green Thread": Cross Sector Skills

Connecting these pillars are transversal skills required by all sectors:

- **Carbon Literacy:** Every employee, from the CEO to the apprentice, needs to understand the carbon impact of their decisions.
- **Green Finance:** Skills to broker funding for retrofit or nature recovery (e.g., carbon credits, green mortgages).
- **Supporting Skills:** The green economy is also digital. Precision agriculture, retrofit, modern construction and smart energy grids all rely on **data analytics, cyber-security, artificial intelligence, and marketing**.[5]

4 Supply Side Audit:

Gloucestershire's Clean Energy and Green Skills Assets

Before proposing new structures, the council must audit Gloucestershire's existing capacity in order to have a basline inventory from which to build a skills directory and development programme. Gloucestershire is fortunate to host a diverse range of high-quality education providers. The challenge is not a lack of quality, but a lack of coordination and specific capacity in high-demand green niches.

4.1 Further Education (FE) and Technical Training

Gloucestershire's FE colleges are the engine room for delivering Pillar 1 Clean Energy Skills.

- **Gloucestershire College (GlosCol):**
  - *Strategic Focus:* Construction and Built Environment.
  - *Key Asset:* The **Sustainable Construction Centre** at the Cheltenham Campus. This facility includes 10 plumbing bays, 12 electrical bays, and 20 carpentry bays specifically designed for low-carbon skills.[11]
  - *Offer:* T-Levels in Construction, apprenticeships in electrical installation, and new provisions for EV maintenance in their motor vehicle garages.
  - *Role in Strategy:* The primary hub for "fabric-first" retrofit skills and EV maintenance.
- **South Gloucestershire and Stroud College (SGS):**
  - *Strategic Focus:* Energy Engineering and Renewables.
  - *Key Assets:*

    SGS Green at the Berkeley Campus. Situated at the Gloucestershire Science and Technology Park, this is a dedicated centre for low-carbon energy.[12]

    Offer: Level 3 Awards in Air Source Heat Pumps and Solar PV Installation. It leverages the legacy of the Berkeley nuclear site to focus on high-tech energy engineering.

    SGS Stroud Construction Centre have a strategic objective of integrating green skills into the wider construction curriculum.

    Offer: Level 2 Retrofit and Level 2 Retrofit Advice.
  - *Role in Strategy:* Contextual retrofit across construction and the primary hub for "systems" retrofit (heat pumps, solar) and energy generation skills.

- **Cirencester College:**
  - *Strategic Focus:* T-Levels and Digital Skills.
  - *Role in Strategy:* A key feeder for the digital green economy and administrative support roles in the green sector.
- **AccXel:**
  - *Strategic Focus***:** Specialist Insulation and groundworks
  - *Role in Strategy:* County convener of the Green Skills Advisory Panel - a key interface between employers and green skills training providers

4.2 Higher Education (HE) and Specialist Provision

Gloucestershire's universities provide nationally recognised leadership for delivering skills programmes to support Pillar 2 (Nature-Based Skills).

- **Hartpury University & College:**
  - *Strategic Focus:* Agri-Tech and Animal Science.
  - *Key Asset:* The **Agri-Tech Centre** and **Digital Innovation Farm**. These facilities connect farmers with the latest technology to improve productivity and sustainability.[5]
  - *Offer:* Degrees in Agriculture, short courses in data management for farmers, and research into biosecurity and livestock emissions.
  - *Role in Strategy:* The Global Centre of Excellence for the technological transition in agriculture.
- **Royal Agricultural University (RAU):**
  - *Strategic Focus:* Sustainable Land Management and Rural Entrepreneurship.
  - *Key Asset:* **Farm491**, the UK's leading agri-tech incubator, and the **Alliston Centre**.
  - *Offer:* MSc in Agroecology
  - *Offer:* CPD course - "Old House to Eco-house" retrofitting heritage buildings.[13]
  - *Offer:* Postgraduate Certificate Regenerative Farming
  - *Offer:* MSc in Conservation of Historic Buildings
  - *Role in Strategy:* Leading the business model transition for farmers and the niche skills for heritage retrofit.
- **University of Gloucestershire (UoG):**
  - *Strategic Focus:* Sustainability Leadership and Geography.
  - *Offer:* Courses in Ecology, Geography, and the "Sustainable Leaders Accelerator".[15]

- *Offer:* Countryside Community and Research Institute: Post grad research
- *Offer:* Architecture, Construction and Environment PhD
- *Role in Strategy:* Providing the transversal skills of leadership, carbon accounting, and ecology + Architecture, Rural issues research,

4.3 The Independent Sector

- **Business West:** Have prepared and published the Local Skills Improvement Plan (LSIP) to map green skills needs.[16]
- **The Wildlife Trusts (GWT):** Providing essential volunteer and entry-level training in practical conservation.[17]
- **Bromford Housing**: Creating a Green Skills Academy for employees and residents delivering upskilling opportunities and acting as a catalyst for the wider Gloucestershire Housing and Community Partnership Green Skills initiative.

The Gap: While individual institutions are excellent, from a green skills perspective the system is fragmented and opaque. A business wanting to upskill staff in renewables, solar, heat pump tech or holistic retrofit will find the available course offers difficult to navigate. No one institution currently clearly articulates context and how the green skills training they offer fits within a broader ecosystem of skills pathways. The supply is there, but the *pathways* are obfuscated.

5 Strategic Interventions

#1: The Gloucestershire Green Skills Faculty

To resolve the fragmentation of Green Skills training identified in the audit, GCC will not need to build a new physical college. Instead, we will establish the **Gloucestershire Green Skills Faculty**—a federated, collaborative group of education and training providers that acts as the single directing entity for the provision of green skills training in the county.

5.1 The Model

The Faculty operates on a "Hub and Spoke" model, unifying the existing providers of training and education in green skills to Gloucestershire businesses and residents under a single strategic umbrella for the purpose of Green Skills. It mimics the “Institute of Technology" model, but specifically for the Net Zero agenda.

- **The Brand:** A single, outward-facing identity ("Green Skills Gloucestershire") that employers and learners recognise.
- **The Mechanism:** A shared Memorandum of Understanding (MoU) between GCC, GlosCol, SGS, Hartpury, RAU, and UoG and other Faculty members such as independent training organisations. The MoU will define the operational terms of the collaborative venture – financing, reporting, governance, resource sharing, curriculum development, etc
- **The Function:** To promote a single vision of an accessible ecosystem which delivers high-quality Green Skills training and education for Gloucestershire, to coordinate curriculum, prevent duplication, and enable joint bidding for significant pots of government funding (e.g., Retrofit Skills Bootcamps, etc).

5.2 Key Deliverables

1. **Collaborative Curriculum Mapping:** The Faculty will maintain a live "Green Skills Map" of the county. If a gap is identified—for example, a shortage of commercial energy assessors—the Faculty will commission *one* provider to develop that course, ensuring the most efficient and effective approach
2. **Train-the-Trainer Programme:** One of the biggest bottlenecks is a lack of qualified tutors. The Faculty will run a county-wide staff development programme. For instance, SGS staff with heat pump expertise will train construction tutors from other providers, raising the baseline competence across the region.[18]

3. **Shared Equipment Bank:** Green technology (e.g., thermal imaging cameras, blower door test kits) is expensive. The faculty will manage a shared inventory that can be loaned between colleges for specific training modules.
4. **The Green Skills Pathways Portal:** A centralised web platform where a learner can type "I want to work in renewable energy" and see every relevant course from Level 2 (Entry) to Level 7 (Masters) across all partner institutions.

5.3 Implementation Timeline

6 The high-level activity to implement the strategy has been broken down into short, medium and long term timescales where short = 0-6 months, medium = 6-24 and long is 36 months plus.

SHORT	Launch the Strategy at the Green Skills Summit July 26 GCC Employment and Skills will use the allocated SEDF funding to recruit the Pathways Research Officer. Target Q3 26 Convene the Federated Faculty Steering Group made up of local employers and interested parties and elect the Faculty Board and chairman from the participating members Define the Admin Strategy and requirements for the Faculty Q3 26 Define the Memorandum of Understanding for the Federated Green Skills Faculty in more detail and consult with stakeholders to seek agreement. To include Governance, funding, shared resource and curriculum. Target Q4 26 Define an Mou for the Federated Retrofit Centre of Excellence. Target Q4 26. Define the Infrastructure requirements to support the Faculty. Target Q4 26 Commission baseline WLC study of Retrofit Skills requirements. Target Q1 27 Recruit and convene the advisory panel Q1/2 27
MEDIUM	Define the Faculty Marketing Strategy Review and publish Green Skills Pathways Commission infrastructure to support Faculty, Green Skills Pledge, Pathways, etc (admin systems and web resources) Ensure the Faculty is well positioned for all available funding opportunities Ensure demand for Green Skills are understood and optimised through collaboration with relevant stakeholder organisations Engage with and listen to employers, commissioning bodies, regulators, trade bodies, and the local green skills ecosystem
LONG	Ensure the Faculty remains relevant to both local and national skills demand linked to Net Zero

6.1 Governance arrangements for the Green Skills Faculty and initial Memorandum of Understanding between members of the federated faculty

6.1.1 Governance

The following structure will be established to oversee the delivery of the Strategy and the operation of the Green Skills Faculty (the **Faculty**) and the Retrofit Centre of Excellence, which will function as part of the Faculty.

The Faculty will have a steering group whose role it will be to provide feedback and directional input to skills development and direction from industry, business and farming practitioners. , based on the successful Green Skills Advisory Panel (GSAP), developed by Exeter College and promoted locally by AccXel, that includes representation from industry and the training providers and members of the Faculty identified in paragraph 5.1 above. The GSAP Chair shall be appointed from Industry (e.g. a leader from a major local energy, construction firm or senior retrofit practitioner or academic). The GSAP will, in turn, report into the Green Skills Faculty Board comprised of members of the senior leadership teams of the participating organisations which will report into an appropriate GCC body, the identity of which is yet to be decided.

6.1.2 Memorandum of Understanding

A **Memorandum of Understanding** shall be agreed by all of the organisations identified in paragraph 5.1 above participating in the Green Skills Federated Faculty which will include proposals for:

1. Establishing an Advisory Panel of industry stakeholders chaired by a senior industry figure delivering direction to ensure the curriculum and training options are fit for purpose and aligned with the needs of the target audience.
2. Making appointments to a Faculty Board to oversee the operation, direction and governance of the federated faculty including representation from all member bodies and with an elected Chair
3. Making a commitment to share resources and facilities, where practical, across the organisations participating in the Federated Green Skills Faculty.
4. The definition and promotion of a consolidated curriculum for Green Skills across Gloucestershire under which the Green Skills Faculty members. GCC Green Skills Coordinator and the newly SEDF funded Green Skills Pathways Officer shall manage this process with contributions and source material provided by the participating members of the Faculty
5. Expanding stakeholder engagement by holding an annual "Green Skills Summit" to facilitate

the sharing of new ideas, gathering feedback and promoting understanding and awareness of the Green Skills Faculty

6. Reporting by means of regular progress reports that will be produced by the Green Skills Coordinator. Meaningful KPI's to be agreed with Faculty members.
7. Producing a high-level marketing and communications plan for the Faculty

7 Strategic Intervention #2: The Gloucestershire Retrofit Centre of Excellence

Housing retrofit is the nation's "*wicked problem.*" It requires industrial scale (thousands of homes per year) but artisanal care (every house is different). The history of retrofit is littered with failures (e.g., the Green Homes Grant) caused by poor quality installations. To mitigate this risk and build a trusted supply chain, the council should support the establishment, by SGS, Gloscol and AccXel, of a Gloucestershire **Retrofit Centre of Excellence** to deliver high quality, industry relevant, whole-house skills development for businesses and individuals interested in delivering retrofit advice and services in Gloucestershire.

7.1 The Quality Standard: PAS 2035

The Centre will be founded on adherence to **PAS 2035**, the British Standard for whole house retrofit. These standard mandates specific roles: *Retrofit Advisor*, *Retrofit Assessor*, *Retrofit Coordinator*, *Retrofit Designer*, and *Retrofit Installer*.

Currently, there is a severe shortage of **Retrofit Coordinators**—the project managers who ensure the work is done correctly.[19] Without them, large-scale grant-funded projects (like the Social Housing Decarbonisation Fund (SHDF)) cannot proceed.

7.2 A Collaborative Ecosystem

The Gloucestershire Retrofit Centre of Excellence will form a number of strategic partnerships to ensure the promotion and delivery of best practice. These partnerships between the Retrofit Centre of Excellence could include: industry training bodies, leading innovative practitioners and training organisations recognised and leaders in the field.

7.3 The Retrofit Centre of Excellence Hub Structure

The Retrofit Centre of Excellence will not be a single physical building, but a designated status applied to member's training facilities:

- **The Urban Retrofit Hub (GlosCol – Cheltenham/AccXel - Cinderford):**
  - *Focus:* Fabric measures (Insulation, Windows, Doors).
  - *Target Stock:* Post-war social housing and Victorian terraces in Gloucester/Cheltenham.
  - *Curriculum:* Level 2 Award in Retrofit; Level 3 Insulation Installation.[11]

- **The Clean Energy Systems Hub (SGS - Berkeley):**
  - *Focus:* Decarbonised Heat and Power.
  - *Target Stock:* All housing types transitioning off gas.
  - *Curriculum:* Heat Pump installation (Air and Ground), Solar PV, Battery Storage.[12]
- **The Heritage Retrofit Hub (RAU – Cirencester or UoG Architecture Faculty):**
  - *Focus:* Traditional Buildings and Conservation Areas.
  - *Target Stock:* Cotswold stone properties and listed buildings.
  - *Curriculum:* Level 3 Award in Energy Efficiency for Older and Traditional Buildings.[13] This is a unique selling point for Gloucestershire, leveraging the RAU's expertise to solve the specific problem of "hard-to-treat" rural homes.

7.4 Strategic Goal

The KPI for the Centre of Excellence is to train **200 Retrofit Coordinators** and **500 Installers** by 2029. This will create the capacity required to deliver the county's retrofit targets and unlock government grant funding.

8 Strategic Intervention #3: Nature-Based Skills Pathways

Gloucestershire's rural economy is undergoing its biggest transformation since World War II. The shift to Environmental Land Management Schemes (ELMS) creates a "green skills" demand in the countryside that is almost as acute as in urban areas.

8.1 The Regenerative Agriculture Transition

Farmers are now "Carbon Farmers." They need skills in soil science, carbon auditing, and water management.

- **Hartpury/RAU Alliance:** The Faculty will commission a joint program from Hartpury (Agri-Tech focus) and RAU (Business/Policy focus).
- **The Offer:** A series of short, modular "micro-credentials" for working farmers. Farmers cannot take a year off for a degree; they need 1-2 day intensive courses on specific topics like "interpreting soil data" or "establishing herbal leys".[14]
- **Agri-Tech Adoption:** Leveraging Hartpury's *Digital Innovation Farm* to train farmers in using drones, sensors, and GPS for precision agriculture, reducing chemical use and carbon footprint.[5]

8.2 The Ecology Pipeline

The statutory requirement for 10% Biodiversity Net Gain (BNG) on all developments has created a massive bottleneck.

- **Graduate Pathway:** We will work with the University of Gloucestershire and CIEEM to create a "Local Authority Ecologist" fast-track scheme. This will place graduates into planning departments at the District Councils (Stroud, Cotswold, etc.) while they complete their professional accreditations, solving the public sector recruitment crisis in this field.
- **Conservation Corps:** Expanding the work of the Gloucestershire Wildlife Trust and National Trust to professionalise volunteering. We will use Adult Education Budget (AEB) funding to turn volunteer experience into formal qualifications.

9 Strategic Intervention #4:

The Green Skills Pledge for business

Supply-side interventions (training) must be matched by demand-side commitment (employers). We will launch the **Gloucestershire Green Skills Pledge** to raise awareness of Green Skills and mobilise the private sector.

9.1 The Concept

Modelled on the Essex County Council initiative [4], the Pledge is a voluntary commitment that signals an organisation's intent to prioritise green workforce development. It creates a community of practice and a clear market signal to training providers.

9.2 The Pledge Commitments

Signatories must commit to at least **one** of the following actions:

1. **Workforce Investment:** Dedicate specific training budget to green skills (e.g., PAS 2035 training for builders, Carbon Literacy for office staff).
2. **Future Talent:** Offer a Green Apprenticeship, T-Level placement, or internship.
3. **Expertise Sharing:** Release staff to teach or mentor at the Green Skills Faculty (addressing the tutor shortage).
4. **Supply Chain Pressure:** Require key suppliers to demonstrate green competency credentials.
5. **Ambassadorship:** Actively promote green careers in local schools.
6. **Training to ensure Employee Carbon Literacy:** The Growth Hub to deliver Carbon Literacy training

9.3 Benefits to Business

In return, GCC will offer:

- **Recognition:** "Green Skills Champion" branding and listing on the GCC/Growth Hub website.
- **Procurement Advantage:** We will review our Social Value policy to take into account the commitments of the Pledge signatories in relevant Council procurements.
- **Priority Access:** Early access to subsidised training spots (e.g., Skills Bootcamps) brokered by the faculty.

- **Resources:** A "Green Skills Toolkit" helping navigate the funding landscape.[4]

10 Strategic Intervention #5:

Skills Development Pathways: Opportunities for All

This strategy is designed to be inclusive, offering routes for every demographic in Gloucestershire.

10.1 Pathway A: The Job Seeker (Reskilling)

- *Target:* Unemployed, those in declining industries, and NEETs.
- *Mechanism:* **Green Skills Bootcamps** (Department for Education funded).
- *Content:* Intensive 12–16-week courses provided by the new Retrofit Centre of Excellence (SGS/GlosCol) in Retrofit installation or Electric Vehicle maintenance.
- *Outcome:* Guaranteed job interview with a Pledge signatory.
- *Support:* Wraparound care (travel/childcare) may be funded by the Central Government UK Shared Prosperity Fund (UKSPF)to ensure accessibility.

10.2 Pathway B: The Career Changer (Upskilling)

- *Target:* Existing tradespeople (gas engineers, electricians, builders).
- *Mechanism:* **Modular CPD**.
- *Content:* 3-5 day courses provided by the Retrofit Centre of Excellence (SGS/GlosCol). A gas engineer learns Heat Pump installation; an electrician learns Solar PV and EV charge points with options to extend into mentoring, installer accreditation, network provider liaison, marketing and business development for renewables
- *Delivery:* Online + Evening/Weekend options at the Centre of Excellence to minimise loss of earnings.
- *Incentive:* Subsidised fees for SMEs via the Faculty.

9.3 Pathway C: The Professional (Advanced Skills)

- *Target:* Architects, Surveyors, Farm Managers, Graduates.
- *Mechanism:* **Higher Technical Qualifications (HTQs) and Degrees**.
- *Content:* Retrofit Coordination (Level 5), MSc in Agroecology, Carbon Accounting.
- *Delivery:* Part-time/blended learning at UoG, RAU, or Hartpury.

11 Conclusion

This strategy represents a paradigm shift for Gloucestershire. As a county we need to move from high-level climate ambition to granular, game-changing action. By establishing the **Green Skills Faculty**, we align our world-class educational assets. By building the **Retrofit Centre of Excellence**, we raise the standards and encourage professionalism in the critical task of decarbonising our homes. By launching the **Green Skills Pledge**, we encourage the private sector to participate in the sea-change. And by investing in **Nature-Based Skills**, we ensure Gloucestershire's rural heritage is the foundation of our future resilience.

We are not just training people for jobs; we are building the workforce that will contribute to saving our environment. This is a strategy for a cleaner, greener, and more prosperous Gloucestershire.

Appendix: Evidence Base & Methodology

A. Methodology

This strategy was developed through a comprehensive review of national and local data.

1. **National Context:** Analysis of the *Climate Change Committee (CCC)* recommendations on workforce planning [9] and the *UK Government Clean Energy Jobs Plan* [8], which sets the macro-economic context for 400,000 new jobs.
2. **Local Emissions:** Direct mapping of skills needs to the *Gloucestershire Climate Change Strategy* emissions baseline [1], ensuring a data-led approach.
3. **Local Assets:** A qualitative audit of current provision at GlosCol [11], SGS [12], Hartpury [5], and RAU.[6]

B. Key Data Points

- **Retrofit Demand:** 25% of Gloucestershire emissions are domestic.[1] LGA data predicts a need for over 1,700 energy efficiency roles by 2030.[7]
- **Clean Energy Demand:** The UK target of 50GW offshore wind and 70GW solar requires a doubling of the electrical workforce. Locally, this translates to nearly 7,000 low-carbon electricity jobs by 2030.[7]
- **Nature Skills:** The Environment Act 2021 (BNG) and ELMS create a statutory demand for ecology and regenerative farming skills, currently on the shortage occupation list.

C. Best Practice Models

- **Essex County Council:** The Green Skills Pledge model [4] was selected for its flexibility and success in engaging SMEs.
- **The Retrofit Academy:** Selected as the partner for the Centre of Excellence due to their status as the only provider capable of delivering PAS 2035 accreditation at scale.[3]

D. Abbreviations

- **AEB:** Adult Education Budget
- **BNG:** Biodiversity Net Gain
- **CCC:** Climate Change Committee
- **ELMS:** Environmental Land Management Schemes
- **FE:** Further Education
- **GCC:** Gloucestershire County Council
- **HE:** Higher Education
- **LGA:** Local Government Association
- **UKSPF:** UK Shared Prosperity Fund

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