

THE GREEN COLLEGE COMMITMENT



FOREWORD



David Hughes Chief Executive, Association of Colleges

The response of colleges to the FE College Climate Action Roadmap published last year has been phenomenal, despite leaders having to face up to all of the challenges that the pandemic has presented.

It has shown us that college leaders, including governing bodies, recognise the vital roles that colleges have in helping the country meet its obligations on net zero. It also reflects the deep concern of students who want to see actions and urgency, rather than just words and vague commitments. Rather than this being an agenda which needs to be pushed, we have found that colleges simply wanted to be supported and have guidance on how to act, not whether to act. We believe that will be true in the wider business community and with people all over the country.

Colleges in England will do everything that they can on their own journey to net zero, but the UK Government does need to support sustainable buildings and infrastructure. Probably even more importantly, though, colleges want to embed sustainability into the curriculum across all subjects and meet the emerging skills needs of a greener economy. Meeting sustainability and biodiversity targets will require every person and business having a better understanding of these challenges, developing new skills and changing behaviours, as well as learning specific new sectoral skills.

The challenge is that colleges can only train and educate people in the new skills needed – air wind, green logistics and so on - if people want to learn them. People will only demand these that when the demand comes from employers, it will take too much time to train the people needed for the jobs. This simple 'catch-22' has to be unlocked by government – nationally and locally – stepping in to bring together employers, investors and educators. The national net zero strategy, has now been published by Government, rightly recognising the important role for colleges in delivering it. Now colleges need to see the investment and local plans to enable them to support people with the skills that will be in demand in the near and planned future.

Colleges are ready to deliver and are building the capacity and capabilities to train and educate, but demand needs to be stimulated and planned for. I am sure that this requirement is understood, I just hope that bold action is taken. Colleges are doing all that they can do, as shown by our Green College Commitment, described in more detail in this report.

We are on the brink of an exciting shift to a more sustainable future and colleges want to be at the heart of that.

EXECUTIVE SUMMARY

Everyone has a role to play in delivering on net zero targets. Colleges are uniquely placed at the heart of communities to support a fair transition to a green economy for people and employers. They must be invested in and empowered to play their role in the journey to net zero and meet the need for green skills and green jobs.

Any failure to enable colleges to deliver on sustainability risks missing the 2050 target for net zero, important biodiversity targets, stark skills shortages in key growth sectors, and widening inequalities.

This report sets out the role of colleges in delivering in three priority areas to meet sustainability targets:



Delivering green skills and supporting green jobs



Educating students and communities to build a more sustainable future



Developing net zero campuses and building resilience to environmental change Colleges across the country are taking action and putting sustainability at the heart of decision-making using the FE College Climate Action Roadmap, in response to the climate emergency and to advance sustainability.¹ **The Green College Commitment**, set out in this report, is an important milestone in the sector setting out its duty and actions.

To unlock the power of English colleges further, investment and policy reform are needed, redressing a decade of under-funding and ensuring that colleges are empowered to deliver on sustainability and biodiversity.

This report sets out 15 recommendations for the UK Government to take bold action to support green colleges, and the priorities are to:

- Make climate and environmental education a compulsory part of all study courses by embedding sustainable development in every subject to support people into green jobs and inspire green behaviour
- Urgently launch the Lifelong Loan
 Entitlement for training in priority green
 sectors, using loans and means-tested grants
 to target support at higher skills levels for adult
 students who could otherwise not afford to
 live while in necessary education and training.
- Provide investment through the National Skills
 Fund to meet demand in growth sectors,
 like offshore wind, electricity networks, electric
 vehicles, low carbon heating and forestry, to
 support people in jobs that are transitioning to
 redeploy their skills.
- Invest in the college workforce to ensure they have the resources and knowledge to train those moving into new developing growth sectors.
- Invest £1.5bn in the next three years in the capital budget to sustainably transform college estates and support colleges to invest in the innovative technology required to train for green jobs.

THE GREEN COLLEGE COMMITMENT

This commitment has drawn inspiration from the FE College Climate Action Roadmap developed by the UK Climate Commission for FE and HE, which provides actions and guidance on how colleges can respond to the climate emergency and advance sustainability. ²

Over 90 colleges are currently on the journey to achieving this.

Putting sustainability at the heart of decision-making by:



Delivering green skills and supporting green jobs

Playing a central role in local skills planning and delivery in partnership with employers and local stakeholders to drive the green economy

Supporting every person who needs it with the training and education they need to get a green job

Supporting people into pathways for green jobs through excellent careers advice

Collaborating with universities and industry to ensure research, facilities and practical support is readily accessible for employers, particularly SMEs.



Educating students and communities to build a more sustainable future

Offering opportunities to learn about sustainability to all students through courses and/or enrichment to understand how their actions and careers can make a difference

Training teaching staff in climate responsibility and sustainability with support for them to incorporate education for sustainable development in the curriculum

Collaborating with community organisations, local authorities and devolved administrations to drive sustainability and biodiversity.



Developing net zero campuses and building resilience to environmental change

Meeting or exceeding ambitious carbon emission reduction targets and publishing data

Improving energy efficiency and modifying estates strategies in line with net zero targets

Implementing renewable energy sources

Meeting or exceeding low-waste targets

biodiverse

Divesting away from fossil fuels

Offering sustainable food on campuses

Developing a climate change adaptation/risk strategy to mitigate climate-related risk

Supporting students and staff to travel to colleges in a low-carbon way

INTRODUCTION

THE ROLE OF COLLEGES IN DELIVERING ON NET ZERO AND BIODIVERSITY

66

The Earth is now about 1.1°C warmer than it was in the 1800s. We are not on track to meet the Paris Agreement target to keep global temperature from exceeding 1.5°C above pre-industrial levels. That is considered the upper limit to avoid the worst fallout from climate change.

THE UNITED NATIONS 3

The urgent global need to reduce carbon emissions and increase biodiversity will be two of the biggest drivers of economic, political and social change for many years to come. The UK Government has set out a *Ten Point Plan for a Green Industrial Revolution*. As the Independent Commission on the College of the Future has set out, colleges are at the heart of policy responses to trends that are transforming the world in the next ten years. As educators, estate holders and community hubs, colleges are responding to the net zero carbon challenge and driving the change that is needed for a sustainable future.

Colleges inspire the next generation and adult students to understand and adapt their environmental behaviour and train and upskill more people for the green jobs of the future. Recent surveys from the National Union of Students (NUS) and the Education and Training Foundation (ETF) show that both students and staff care about sustainability and want their colleges to be leading by example. Local stakeholders and partners also look to their local college to help them futureproof their skills pipeline and deliver sustainable projects. Communities increasingly expect their local college to behave in a socially responsible manner and funders and other stakeholders will require this too.

The recent report from the UN's Intergovernmental Panel on Climate Change (IPCC), has been described as "a code red for humanity" by UN Secretary General António Guterres.⁷ The climate emergency necessitates that the college sector goes further and faster on the path to net zero.

Every member of the college community has a role to play. There are excellent examples of colleges working with local employers on training for green jobs, teaching carbon literacy, and decarbonising and increasing the biodiversity of their estates. To meet the green challenge, colleges are increasingly putting sustainability at the heart of their decision making. Governing bodies, in particular, can play a pivotal role in leading on the green agenda, from curriculum planning, to setting ambitious targets and making green investment decisions.

Greening the college sector must be a collaborative effort. Colleges will need to work together as a sector and with students, schools and universities, employers, communities, and local, regional and national governments. To unlock the power of colleges, investment and policy reform are needed, redressing a decade of under-funding and ensuring that colleges are empowered to deliver on sustainability.

This report sets out what English colleges are doing to drive a sustainable future, looks at what more they can do, and makes recommendations to address existing barriers. It looks at the vital role of colleges from three perspectives:



Delivering green skills and supporting green jobs



Educating students and communities to build a more sustainable future



Developing net zero campuses and building resilience to environmenta change

^{3.} UN. 2021. Climate Action Fast Facts. Available here

UK Government. 2021. The ten point plan for a green industrial revolution. Available here.

^{5.} Independent Commission on the College of the Future. 2020. *The UK-wide final report from the Independent Commission on the College of the Future*. Available <u>here</u>.

^{6.} SOS-UK. 2021. Sustainability Skills Survey. Available <u>here</u>; ETF. 2021.

Experiences of Education for Sustainable Development in the FE and Training
Sector. Available <u>here</u>.

^{7.} UN. 2021. IPCC report: 'Code red' for human driven global heating, warns

1



DELIVERING GREEN SKILLS AND SUPPORTING GREEN JOBS

To deliver on the net zero carbon transformation and biodiversity targets, there is an urgent need for businesses to transition to more sustainable practices and for decarbonisation projects to move at pace. This means a transformation centred around people and their jobs. The UK Government's Ten Point Plan for a Green Industrial Revolution is accompanied by an ambition for two million green jobs in the UK by 2030.8

Modelling from the "Place-based Climate Action Network's Just Transition Jobs Tracker" suggests that one in five jobs in the UK require skills that could experience demand growth (approximately 10% of UK jobs) or reduction (approximately 10%). People whose skills are no longer in demand will need retraining and upskilling, and the right careers advice to recognise and use skills they already have differently. Across the UK there are over 410,000 jobs in low carbon businesses and their supply chains already. This shift comes at a time when due to mega-trends affecting the labour market, 9 in 10 people (over 30 million people) will need to be reskilled by 2030. Colleges play a vital role in key sectors that will be affected.

What are green jobs?

"Green jobs" is a term used often, with no particular agreed meaning, and different definitions to suit different uses, so it is worth briefly unpicking.

Internationally there are two main definitions. Firstly, the United Nations System of Environmental Economic Accounting sets out their definition of green jobs, as jobs in "areas of the economy engaged in producing goods and services for environmental protection purposes, as well as those engaged in conserving and maintaining natural resources." Secondly, the International Labour Organization (ILO) uses a broader definition of what is considered "green", including activities such as community adaptation to climate change and asserts that jobs must be "decent". 13

In the UK, the Office for National Statistics produces estimates of "green jobs" in its annual Low Carbon and Renewable Energy (LCREE) survey. Its definition covers "economic activities that deliver goods and services that are likely to help the UK generate lower emissions of greenhouse gases, predominantly, carbon dioxide.¹⁴

As has been widely asserted, all jobs will be impacted and shaped by the transition to net zero. For the purposes of this report, the wide definition used by the Green Jobs Taskforce will be used: "employment in an activity that directly contributes to - or indirectly supports - the achievement of the UK's net zero emissions target and other environmental goals, such as nature restoration and mitigation against climate risks." 15

The Green Jobs Taskforce breaks down the demand for green skills by the impact on sectors:

- **1.** Well established green sectors will experience significant growth, such as offshore wind, the electricity network, building retrofit, and smart systems technology
- **2.** Green sectors that are predicted to grow ahead of the transition such as hydrogen and carbon capture, utilisation & storage (CCUS) and climate resilience
- **3.** Sectors experiencing significant transformation, such as automotive, oil and gas, heating and cooling, and waste management

^{8.} UK Government. 2021. *The ten point plan for a green industrial revolution.*Available <u>here</u>; UK Government. 2021. *UK government launches taskforce to support drive for 2 million green jobs by 2030.* Available <u>here</u>.

^{9.} LSE Grantham Institute. 2021. *Green economy: how the transition to net zero could affect UK jobs across the country.* Available <u>here</u>.

^{10.} ONS. 2021. Low carbon and renewable energy economy. Available here

CBI. 2020. A radical new strategy for lifetime reskilling must be the bedrock of UK economic recovery. Available <u>here</u>.

^{12.} ONS. 2021. The challenges of defining a "green job". Available here

^{13.} Ibid

^{14.} Ibid

Green Jobs Taskforce. 2021. Report to Government, Industry and the Skills Sector. Available <u>here</u>.

$oldsymbol{1}$ DELIVERING GREEN SKILLS AND SUPPORTING GREEN JOBS



The role of colleges in green jobs

Colleges educate and train people of all ages for key low carbon sectors and those that are on the journey to transforming, from construction and energy to agriculture and transport. They train the workers of tomorrow, upskill and retrain those transitioning into other jobs, and act as a stepping stone to progress into higher education and other training relevant for the green economy.

Colleges also provide careers advice to support every student with the right education and training pathway for them, including working with JobCentre Plus to signpost courses that support the green economy. Whether an employer is in an established green sector that is growing, an emerging green sector that is predicted to grow throughout the transition, or a sector experiencing significant transformation and/or decline, colleges work every day to meet their skills needs.

At the same time, small and medium-sized enterprises are not always sufficiently aware of how to adapt to be more sustainable, what skills are needed, and their investment in green training is often limited. As strategic partners, there is an important role for colleges to support local businesses with these changes, to build partnerships that can share knowledge and work together to support the right skills development and innovation.

College enrolments in key sectors for 2020/21 (all levels and all ages)

Agriculture	9,815
Building & Construction	161,846
Engineering	144,892
Environmental Conservation	2,722
Horticulture & Forestry	12,356
Manufacturing Technologies	14,291
Science	169,389
Transport Operations and Maintenance (including both automotive and aviation)	59,224
Urban, Regional and Rural Planning	1,909
Warehousing & Distribution	14,172

The skills reform agenda

The Skills for Job White Paper reforms and the Skills and Post-16 Education Bill are vital opportunities to deliver on green jobs. 17 Meeting green skills and jobs needs should be seen as a litmus test of its success.

The UK Government's aim is to reform post-16 technical education and training to "support people to develop the skills needed to get good jobs and improve national productivity" by giving employers a greater say in the development of skills through new mechanisms for local skills planning. Additionally, it seeks to ensure people can access training and learning flexibly throughout their lives and are well-informed about what is on offer through careers support. This will be crucial as the labour market changes at pace and the scale of upskilling and retraining increases to drive the green economy.

The reforms build on what colleges already do well. Colleges share the ambition of a skills system that will help people on their journey to good work and support their progression to higher-paid jobs. Achieving this will require stronger collaboration between colleges and strategic partnerships with employers. As the AoC has been calling for, this requires a central role for colleges in developing Local Skills Improvement Plans (LSIPs). The new Strategic Development Fund (SDF) is also a vehicle through which colleges can collaborate together in their engagement with employers, driven by investment. Together LSIPs and SDFs make up Skills Accelerators, and net zero, green technology and decarbonisation are common themes for trailblazers and pilots of these initiatives

There are currently live discussions about how the legislation can deliver on sustainability. It is promising that the Government's own amendment to the bill at report stage in the House of Lords has introduced a specific requirement to consider net zero, adaptation to climate change, and other environmental goals in developing local skills improvement plans on the face of the bill.

Many colleges are already doing a huge amount of important work in this area, working in partnership with employers and other training providers across the country to provide the new and updated skills urgently needed to transition to net zero. With meaningful, long-term investment to deliver on the ambition of the reforms they could be doing much more of this work.

^{16.} OECD. 2021. Greening jobs and skills. Available here

^{17.} UK Government. 2021. Skills for jobs: lifelong learning for opportunity and growth. Available here; UK Parliament. 2021. Skills and Post-16 Education Bill [HL]. Available here.



CASE STUDY

Education providers collaborating to make green skills more responsive to regional employer need



A multi-million-pound government investment has been won by twelve education providers across the Humber region to deliver on green skills. The funding will come from the Skills Accelerator Programme, a pilot initiative from the Skills for Jobs White Paper, which aims to make technical skills training more responsive to regional employer's skills needs. This will include the development new courses to provide the higher-level skills that are needed for future industry growth, which includes new fuel and green technologies, robotics and electric vehicle maintenance.

Bishop Burton College's focus will be on green technology and renewable energy generation within rural farming businesses. The college aims to support farming SMEs within the region to identify and adopt affordable carbon reduction solutions, in order to meet demanding environmental targets.

The twelve education providers who, along with Bishop Burton College, collaborated to become a Strategic Development Fund (SDF) pilot area are: the TEC Partnership (Grimsby Institute, Scarborough TEC, East Riding College and Modal training), University of Hull, North Lindsey College, Selby College, John Leggott College, Franklin College, Wilberforce Sixth Form and Hul College.

"Our focus is to develop higher-level and emerging skills to continue to build the region's economic growth through sustainable, green-energy driven approaches."

Bill Meredith, Principal and CEO at Bishop Burton College

"Bishop Burton College's focus on enabling people to develop new and higher-level skills in green-energy technology and renewable energy generation within rural farming businesses will add strength to the region and will support the transition to a net zero economy."

James Newman, Chair of Hull and East Yorkshire LEP

How colleges will continue to deliver green skills and support green jobs

- Playing a central role in local skills planning and delivery in partnership with employers and loca stakeholders to drive the green economy
- Supporting every person who needs it with the training and education they need to get a green job
- Supporting people into pathways for green jobs through excellent careers advice
- Collaborating with universities and industry to ensure research, facilities and practical support is readily accessible for employers, particularly SMEs



CASE STUDY

Strategic, sustainable partnerships to deliver on clean water



Kingston Maurward College is a land-based college that is working with a range of strategic partners, such as the NFU, within the Poole Harbour Catchment to develop both offsetting and nitrate trading systems. The Poole Harbour Nutrient Reduction Scheme is the first of its kind in the UK. The scheme brings together house builders' and other landowner activity, to ensure the continuation of good water condition in Poole Harbour and reduce eutrophication, alongside support for industries upstream.

Additionally, the college farm works in partnership with Wessex Water and other partners to ensure regenerative and sustainable agriculture across its practice, whilst also demonstrating the range of food production systems available to students and others who use the site. This includes under-sowing maize crops with ongoing post-harvest cover plants, additional planting of green fertilizers and natural nitrate removal plants, such as radish and triticale, and minimal plough activity, alongside circular manure use on the estate from our equine provision. This work reduces nitrogen leaching into the River Frome, and thereafter Poole Harbour, as well as increasing the availability of pollinators' food supply and biodiversity recovery during the year.

The college has set an ambition to be carbon net zero by 2025. The principal is Chair of the Dorset Local Partnership, acting as a key conduit for work in this field across the county of Dorset.

CASE STUDY

The college sector's role in training heat pump installers



The government has confirmed an ambition for all new heating systems installed in UK homes from 2035 to be low carbon and recently set a target to deploy 600,000 heat pumps per year by 2028.¹⁸ Colleges will play an important role in training and upskilling installers.

Decarbonising households and workplaces could support 240,000 jobs across the sector by 2035. To meet net zero targets by 2050, over 44,000 heating installers will be required to meet this ambition by 2035, according to the Heat Pump Association. 19 This will need to include both young people and those within existing workforces. To overcome any future skills shortage, the boiler manufacturing workforce will be critical for both safeguarding jobs and harnessing existing skills. Individuals with the needed skills could also come from air-conditioning manufacturing and the automotive industry. As a recent Friends of the Earth report stated, "whilst the technology is different, many of the engineering and component assembly processes are similar." 20

The recently announced initiatives from the Government to drive down the cost of low carbon heating technologies like heat pumps through government grants mean that it demand is expected. However, a college can only implement training in the new skill set when there are jobs for those who undertake the training to progress in to. That's why AoC has been working with the Department for Business, Energy and Industrial Strategy (BEIS) and heat pump industry representatives to bring colleges and industry closer together in a working partnership. This is with the aim to try and reduce the lag between training delivery and skills demand. The conversations have been considering the upskilling of the existing workforce, the migration of other workers from jobs in lower demand, and the training of young people who would seek to enter the sector.

¹⁹ Hurley, Phil. 2021. How Colleges have a key role to play in upskilling people for the green jobs of the future. Available here.

²⁰ Friends of the Earth, 2021, An emergency plan on green jobs for young people. Available here,



Empowering colleges to deliver more on green skills and green jobs

For colleges to be able to support the scale of training and lifelong learning needed for the transitioning green economy, there are some important areas to consider for policy reform and investment.

Recognising the role of colleges and stimulating the demand needed

The UK Government's *Net Zero Strategy* sets out their plans to achieve net zero emissions and "build back greener".²¹ This direction is needed but there are calls for greater ambition and certainty on timescales and clearer financial plans to increase business confidence. As the CBI have warned previously, "the threat of changing government policy, particularly support schemes such as grants and funding, is a risk to business, which can be offset by long-term policy commitments and goals."²² Additionally, as the CBI have also highlighted, there is a job to do to increase public understanding of the path to net zero to support the growing consumer market and stimulate demand. These factors impact the availability of green jobs and the number of opportunities for people who learn these skills, as well as influencing whether an individual will perceive training and learning in this area to be beneficial.

The vital role of colleges and skills has been recognised in the government strategy: "Colleges' place at the centre of their local communities and economies means that they are key to unlocking opportunities across the country and to building back better." How the unique constituent parts of the education and skills sector will deliver on the strategy together is an area for further work, building on the work of the Augar review and skills reform agenda.

Recommendation 1



Commit to a clearer timescale and investment plan for the net zero strategy to increase employer confidence, demand for skills and national level dialogue on green skills needs.

- A clearer set of timetables, deadlines and long-term financial incentives would provide greater confidence and direction for employers. This would enable them to then better understand, articulate and stimulate greater demand for green skills and subsequently provide a clearer focus for colleges. This would help colleges work in strategic partnerships with employers and respond in adequate time to reduce future skills supply gaps.
- Support in the development of effective dialogue between colleges and employer sector representatives at a national strategic level could also help to identify and meet the needs of each sector in adequate time.

Recommendation 2



Create a joined-up approach to green skills across the whole education and skills sector.

 The forthcoming DfE sustainability and climate change strategy must address ways that schools, colleges and universities can work together in places to align priorities, deliver green career pipelines and make it easier for people and employers to navigate the green skills agenda.

^{21.} UK Government. 2021. Net Zero Strategy: Build Back Greener. Available <u>here</u>;



Investing in low carbon vocational skills

It takes time to develop qualifications and courses. Development of capacity to deliver future green skills needs to come ahead of employer and student demand if we are not to get caught in a catch-22 where students do not seek new skills until employers start demanding them.



Recommendation 3

Provide investment through the National Skills Fund to meet demand in growth sectors, like offshore wind, electricity networks, electric vehicles, low carbon heating and forestry, to support people in jobs that are transitioning to redeploy their skills.

- DfE should use the policy levers available to it, for example accountability agreements, qualification approvals and directions those involved in developing Local Skills Improvement Plans to move the system towards green skills
- These will only work if underlying financial challenges are resolved, so more funding needs to be made available for the increase in activity, which could happen through a growth element in the National Skills Fund.

Recommendation 4



Establish national centres of excellence in low carbon skills.

- Hubs of expertise in colleges could enable collaboration and sharing of best practice across the sector, with an easily accessible and well-known point for employers and people to engage with.
- This could be connected to a national network of Skills Accelerator projects that have a focus on the green economy.

-

Recommendation 5

Invest in the innovative technology required for colleges to train for green jobs.

 Support for providers is needed so they can invest in the technology required for teaching effectively and staying up-to-date with evolving industry practices.



Delivering on lifelong learning that supports a just transition to the green economy

Colleges can only deliver on green jobs if people are given the opportunity to access courses. Everyone must be given the chance to train, upskill and retrain for the green economy. Currently, there are too many barriers for adults to retrain and upskill.

Currently, many adults will be unable to take up the new Lifelong Loan Entitlement (for qualifications at level 4 and above) or the Lifetime Skills Guarantee (a Level 3) because there is no support for living costs and Universal Credit recipients might risk breaching benefit conditions. This restricts opportunities with an unequal burden on those who are already disadvantaged and reducing the number of people able to move to a green job.

Everyone must be given the chance to train, upskill and retrain for the green economy.

Recommendation 6



Ensure everyone can access the learning they need throughout their lives with urgent lifelong learning entitlements and support for living costs.

- Urgently launch the Lifelong Loan Entitlement (currently set for 2025) for training in priority green sectors.
- DfE should develop a system of loans and means-tested grants to target support at adult students who could otherwise not afford to live while in education and training.
- Universal credit conditions should be revised by the Department for Work and Pensions (DWP) to allow claimants to undertake courses for an appropriate amount of time to support priority skills areas
- To unlock opportunities to learn and train at higher technical levels (4-6), people need to have opportunities and support to access education and skills provision at Level 2 and 3. DfE should open up the Lifetime Skills Guarantee for Level 3 education and training to include subsequent Level 3 qualifications so everyone that needs it can develop the skills they need to unlock jobs and further training. Currently only those without a Level 3 qualification are eligible.



Increasing awareness about green jobs

There is seemingly a low level of understanding of what green jobs are and what the jobs of the future might look like. Without a stronger recognition and "brand" for green jobs, people are less likely to consider career opportunities.²³

Recommendation 7



Run a national green careers advice campaign to drive more people towards education and training for green jobs.

- A national government backed campaign to promote 'green' career paths would go some way to stimulating more interest and understanding.
- This must be done by working in collaboration with employers, schools, colleges and universities to offer support and guidance.
- As part of this, employers and industry bodies and unions should review and report on existing routes to retraining and upskilling in their sectors.

Building a green college workforce

Barriers to recruiting professionals to teach sectorspecific green skills must be addressed to meet green jobs targets.

Recommendation 8



Invest in the college workforce to ensure they have the resources and knowledge to train those moving into new developing growth sectors.

- Attracting and retaining the right people from green industries, including those that are currently transitioning, to become dual professionals (specialists in both their field and in teaching/training), is a core need
- Salary differentials can be significant and must be addressed, through increased government investment in the sector
- Exchange initiatives should also be encouraged and funded so employers can proactively share expertise in colleges.

EDUCATING STUDENTS AND COMMUNITIES TO BUILD A MORE SUSTAINABLE FUTURE

The role of colleges

need to thrive and to understand the world in which they live and work. It is transformative and provides confidence, agency and understanding to students of

Whilst there are sector-specific "green skills" and "green the potential to be green.²⁴ This requires a different approach to skills, with a breadth that goes well beyond what many consider to be specific "green skills", both

Students want their voice heard over climate change, should actively incorporate and promote sustainable development, with 84% saying they would like to see

Education for Sustainable **Development**

make informed decisions and take action to change society and care for the planet. Incorporating sustainable development into core curriculums will help students to understand its importance and how sustainability is and beauty, to the source of food used in hospitality and culinary arts, and the representation of nature in



Education for Sustainable Development empowers learners of all ages with the knowledge, skills, values and attitudes to address the interconnected global challenges we are facing, including climate change, environmental degradation, loss of biodiversity, poverty and inequality.

> ...Education for Sustainable Development is recognized as an integral element of Sustainable Development Goal (SDG) 4 on quality education and a key enabler of all other SDGs.

UNESCO 27

24. Green Jobs Taskforce. 2021. *Report to Government, Industry and the Skills Sector.* Available <u>here</u>.

support the college sector's adoption of ESD throughout connection to nature, systems thinking, global citizenship

EDUCATING STUDENTS AND COMMUNITIES TO BUILD A MORE SUSTAINABLE FUTURE



curriculum with broad coverage of ESD. A curriculum audit, carried out by the AoC on behalf of the ETF for a forthcoming

Whilst a wider embedding of ESD is a work in progress, and actions to support change, through specific programmes. to utilise it.



66 Carbon Literacy: "An awareness of the carbon dioxide costs and impacts of everyday activities, and the ability and motivation to reduce emissions, on an individual, community and organisational basis.

Carbon Literacy Project 31

How colleges will continue to educate students and communities to build a more sustainable future

- Offering opportunities to learn about sustainability to all students through courses
- Training teaching staff in climate

CASE STUDY



Using a cross college group to develop environmental awareness

Phil Hastie, Strategic Lead for Environmental Impact, Etc.

[&]quot;As an education heart of our we have a great platform to help people learn and understand the small changes they collectively have a massive impact on our environment."

2. EDUCATING STUDENTS AND COMMUNITIES TO BUILD A MORE SUSTAINABLE FUTURE



CASE STUDY

Delivering carbon literacy in colleges



Sussex colleges, led by BHASVIC, under the banner of FE Sussex are working collaboratively to help raise a generation of carbon literate students who will be able to influence and play a key role in mitigating climate change to reach net zero. The project grew from an initial Brighton based pilot delivering the stand alone level 3 Carbon Literacy qualification, developed by the Carbon Literacy Project. A subsequent Skills Development Fund (SDF) bid to secure £200k to embed carbon literacy in existing courses and deliver the stand alone course to more learners was developed and approved in Autumn 2021.

There is a significant appetite for this stand-alone qualification from students who have provided very positive evaluations of the course. With bespoke training sessions, college staff are now finding creative ways of embedding Carbon Literacy into existing courses within the curriculum as the colleges help students to prepare for new careers and jobs as sectoral shifts in industry and technology gather pace.

CASE STUDY

000

Connecting the college community to nature

The 'Sit and Bee' seat is an initiative from Craven College to develop the college estate whilst demonstrating a positive impact on its environmental sustainability. It enables students and staff to sit outdoors, engage with wildlife and learn about more about environmental issues and the impact they have on wildlife. It helps to provide a pollinator sanctuary for bees to combat and reverse the downward trend in numbers.

This project is the first of many planned by the college that complements and benefits the curriculum offered at the college, such as courses in Conservation, Countryside Management and Environmental Sustainability The seat was constructed using dry stone walling, considerate to the local environment, and utilised the skills and knowledge of Conservation and Countryside Management degree alumni of the college.

The project is supported by Yorkshire Dales Millennium Trust and Heritage Lottery Fund.

"The college has started its journey to reach net zero by 2030. Along with publishing our Streamlined Energy and Carbon Report, and launching our Sustainability Pledge, projects such as the 'Sit and Bee' seat bring our intentions to life, benefiting our students, equipping them with the skills and knowledge for a greener economy and future."

Lindsey Johnson, Principal & CEO, Craven College

CASE STUDY



Building sustainable growth through local partnerships

South Devon College plays a key role as local anchor institution and promoting systems and place leadership. A founding partner of the local Strategic Partnership, Torbay Together, the college are driving inclusive local growth through developing a Community Wealth Building Strategy, along with Torbay & South Devon NHS Trust, Torbay Council, and Torbay Economic Development Company.

Having now agreed a Memorandum of Understanding the four partners will focus on procurement from local supply chains to drive business growth, increase more secure jobs, deliver an increasingly circular local economy and improving long term prosperity for everyone.

This innovative partnership hopes to bring sustainability alive with students and staff and the local community

2. EDUCATING STUDENTS AND COMMUNITIES TO BUILD A MORE SUSTAINABLE FUTURE



Empowering colleges to educate more students and communities to build a sustainable future

Colleges take seriously their responsibility for raising awareness of climate and sustainability issues. To continue to transform what colleges teach and train, there are opportunities to incentivise and resource barriers to overcome.

Investing in colleges as change-makers

The *Skills for Jobs White Paper* sets out a clear ambition for colleges to deliver on lifelong learning.³² Participation in learning will only increase if there is additional funding.

A fundamental way to empower colleges to do more on ESD is to create greater capacity and resources for it by making the core funding system simple, long-term, and crucially with increased investment. Too often colleges deliver this work on a shoestring. At the same time, currently the funding system has many rules and reporting requirements, which are insufficiently focused on priorities and outcomes.³³

Recommendation 1



Return funding to where it would have been if it had kept up with demographic and inflationary pressures 10 years ago and to index link this to inflation as a minimum.

- An increased participation in learning involves additional demands on the budget at a time when the working-age population is growing and when the recovery from the pandemic, new migration rules, developments in technology, and climate reduction all result in new skills needs.
- Colleges have made tough decisions in recent years that were necessary to improve their financial position but the combination of uncompetitive pay, ageing buildings, lack of access to finance, and confusing regulation hold back too many colleges from investing in work in this area.
- Overall spending on skills needs to keep pace with these issues.

Recommendation 2



Simplify funding streams and focus on outcomes like net zero.

- A simpler range of long-term funding streams would reduce the time spent bidding for smal and short-term pots of money and better enable a focus on supporting people, notably with ESD and carbon literacy.
- Ultimately what would enable colleges to deliver on all national priorities, like the net zero transition, is a single Skills Fund that is adjusted in line with inflation, the growth in the working-age population and the need to level up funding in areas with higher unemployment and lower skills levels.

^{32.} UK Government. 2021. *Skills for jobs: lifelong learning for opportunity and growth*. Available <u>here</u>; UK Parliament. 2021. *Skills and Post-16 Education Bill [HL]*. Available <u>here</u>.

Learning and Work Institute. 2021. Focus on results: How a greater focus on outcomes could contribute to England's learning and skills systems. Available here.

2. EDUCATING STUDENTS AND COMMUNITIES TO BUILD A MORE SUSTAINABLE FUTURE



Making education for sustainable development part of everyone's learning

To have the scale and pace of change needed, colleges could use their touch points with people, employers and communities to empower them with the skills and knowledge they need to take sustainable action. With a wide variety of organisations having influence on how and what colleges students learn, collaboration on reform of qualifications and courses is needed. Whilst qualifications are being greened, enrichment programmes can be used to plug the gap.



Recommendation 3

Make climate and environmental education a compulsory part of all study courses by embedding sustainable development in every subject to support people into green jobs and inspire green behaviour.

- The Education and Skills Funding Agency (ESFA) should require all 16-18 study programmes to address ESD
- Building on the work of the Institute for Apprenticeships & Technical Education (IFATE) in developing a sustainability framework for employers in all sectors, DfE and Ofqual should work with stakeholders to review all qualification specifications and ensure that they describe how ESD is addressed.
- Learners and stakeholders, through their representative organisations, should be involved as key partners in shaping and reviewing the post-16 curriculum.

Recommendation 4



Commit to an entitlement to education for sustainable development as part of enrichment

- All post-16 students should be entitled to short ESD awareness courses such as the Carbon Literacy Programme, possibly as part of a taught tutorial programme.
- To achieve this, the ESFA should recognise a range of appropriate qualifications at various levels for funding purposes.
- Ofsted could also inspect ESD curriculum coverage as part of Personal and Social Development.

Building a green college workforce

The college workforce is best placed to deliver the transformation of ESD in all curricula and in enrichment. They need the resources, teaching time and training to make this a reality.

Recommendation 5



Investment in workforce training and resource development for ESD

- Whilst important work is happening already, to reach the scale and pace needed the lack of vital and significant investment needs to be addressed.
- Training and support must be funded so that there can be further innovation in initial teacher training in FE and CPD.

3.



DEVELOPING NET ZERO CAMPUSES AND BUILDING RESILIENCE TO ENVIRONMENTAL CHANGE

Colleges take seriously their role in greening their estates to help the country deliver on net zero targets and many have more ambitious net zero targets than the UK Government. It is estimated that 237 English colleges hold 8.5 million square metres, which presents a significant opportunity for impact.

Many of the priorities of UK Government's plan relate to the developments that colleges can respond to, from low carbon energy sources and greener buildings, to green public transport and protecting the natural environment.³⁴ Colleges play an important role in skills to drive this, and they also play an important role as estates holders and managers of land, and more widely as leaders in communities that can deliver on public health aims.

There are varying levels of action. Leading colleges have clear, comprehensive and ambitious sustainability strategies, whilst others are approaching it at an earlier stage. Every college has an opportunity to reduce their environmental impact in innovative ways, working closely with their students and local communities.

Many colleges are using the Climate Commission for UK Higher and Further Education and Nous Group's Climate Action Roadmap for UK FE Colleges and are sharing best practice and collaborating through events and individual interactions.³⁵ The actions that colleges can take vary in costs and pace of change required. The roadmap is a great resource to turn to for colleges. This report will not unnecessarily replicate this, and instead provide a summary of key areas where colleges are taking action and what can enable them to do more.

It is worth noting that whilst the COVID-19 pandemic continues to create uncertainty, there are questions about how much pre-2020 "normality" returns. Some health and safety requirements may continue that have a significant effect on estates, from ventilation to space for social distancing. There has been a fundamental shift in levels of online learning too, which will continue to play a part in how campuses are used.

Reducing and reporting on carbon emissions

Colleges are complex organisations with many direct and indirect ways of contributions to carbon emissions. As the global effort to reduce carbon emission picks up pace and urgency, colleges know that they need to take this seriously. This is expected by students, staff and communities. It is anticipated that funders, including the Department for Education, may one day require significant reporting on progress on reducing emissions

The Climate Commission for FE and HE recommend the following as targets:

Area	Target	Definition
Scope 1	0% by 2030	Direct greenhouse gas (GHG) emissions from sources owned or controlled by the college, for example gas consumption and owned transport
Scope 2	0% by 2030	Indirect GHG emissions associated with electricity, heat or steam purchased by the college, for example purchased electricity
Scope 3	Down by 2030 0% by 2050	All other indirect GHG emissions associated with extraction and production of purchased materials, fuels and services

Source: EAUC 36

UK Government. 2021. The ten point plan for a green industrial revolution Available <u>here</u>.

EAUC. 2020. Climate Commission and Nous Group Climate Action Roadmap for UK FE Colleges. Available <u>here</u>.

EAUC. 2020. Climate Commission and Nous Group Climate Action Roadmap for LIK FE Colleges. Available here



All large and medium sized companies are required to produce Streamlined Energy and Carbon Reporting (SECR) reports on their websites, which report their scope 1, 2 and 3 emissions each year. Though the regulations were written in a way that left colleges out, ESFA have provided useful guidance on how to produce SECR reports.³⁷ Some colleges are doing this already.

The majority of a college's emissions will be in Scope 3 – emissions controlled by others and produced by things the college does or consumes. This includes goods and services (like food), travel, waste disposal, investments, and staff and student commuting. Measuring Scope 3 emissions and finding opportunities to reduce them will support colleges' ambitions to reach net zero.

Transforming the college estate and preparing for climate change risks

Upgrading college buildings is an area of focus for environmental impact. The need for upgrading is in the context of redressing the decade long neglect of colleges, both for quality of learning environment and levels of sustainability. They need attention, both in retrofitting buildings to improve efficiency and applying BREEAM standards to new builds. At the same time, the effects of climate change, like flooding and heatwaves, pose threats to the buildings and land that are vital for colleges to be able to serve their communities. Many colleges have sustainable estates plans and ring-fenced budgets.

Capital funding exists to improve the condition of college buildings, with aims to support the introduction of T-levels, set up new Institutes of Technology and promote wider regeneration. There has been a profusion of short-term bids in 2021, which is proving to be an inefficient and confusing way to spend funding. The Public Sector Decarbonisation Fund is a £1 billion fund, which in 2020 was over-subscribed by over 2 times.³⁸ The FE Capital Transformation Fund offers £1.5 billion over five years to get buildings to "good", with environmental sustainability one of 5 objectives and "contribution to net zero" tested.³⁹ There is significant appetite for access to these funds and every college deserves to be able to make use of them.

CASE STUDY



Embedding sustainability in property strategies

Wakefield College recognised the need to reduce its impact on the environment when reviewing its Property Strategy in 2010. Students understood the impacts of global warming and questioned what the college was doing to protect their environment for the future. At the same time, the energy market was also significantly volatile, presenting financial risk. The college took seriously its responsibility to procure sustainable solutions, lower consumption and reduce the demand for fossil fuels in the operation of its estate.

The college was successful in joining the FE sector Carbon Reduction Programme sponsored by the Carbon Trust. This led to the development of its first Carbon Management Plan (CMP) between 2010 to 2015. Subsequent plans have covered the period from 2015 to the present day and have set out ambitious targets and influenced the redevelopment of the estate.

The college has reduced its carbon emissions by 65% since 2009/10. The current data considers the usage of gas, electricity, PV generation, business travel, water supply, taxi use and fuel used in fleet vehicles.

"Knowing that you are working to achieve a better world for future generations is the most worthwhile work we can do in this present time and passing these skills to the next generation through education will ensure the future will be a solid one for all."

Julie Thornton, Utilities Officer at Wakefield College

^{37.} UK Government. 2021. Streamlined energy and carbon reporting for college corporations. Available here

^{38.} UK Government. 2021. Public Sector Decarbonisation Scheme. Available here

^{39.} UK Government. 2021. Further Education Capital Transformation Fund. Available here



Greening the powering of colleges

It is estimated that energy for buildings alone account for almost 17.5% of global greenhouse gas emissions. Colleges currently spend £150 million a year on energy and have substantial carbon emissions. Recent price rises should focus everyone's attention on the financial benefits from energy efficiency measures. A few colleges have secured funding from the Public Sector Decarbonisation Fund (see this example) and many more are hoping to use DfE capital grants to support energy saving and carbon reduction but both funds are over-subscribed.

There are several, low or no-cost initiatives colleges are implementing to reduce energy use before exploring more high-cost options to increase energy efficiency and sourcing renewable energy. Strategies to reduce a college's carbon footprint through energy reduction, increasing efficiency and sourcing renewable energy may bring cost savings to the college, but also require an up-front investment.

Training the low-carbon energy sector is an area that colleges will be leading on, so it is only right that they can lead the way on transitioning to it. The installation and maintenance of solutions like heat pumps systems and solar panels could also be a learning opportunity for students, whilst also reduce a colleges' carbon footprint.

Solutions like heat pump systems and solar panels could also be a learning opportunity for students

CASE STUDY



Decarbonising college energy supplies

Gloucestershire College devised and agreed a comprehensive sustainability strategy in 2018 and has challenged itself to reduce its carbon footprint. It has now started a £4.8m project and aims to become carbon neutral by 2030. The college is investing in projects that would in time deliver both carbon zero and financial efficiencies. The college has worked with Hillside Environmental Services to install ground source heat pumps, solar PV, battery storage and artificial intelligence.

The college has engaged students in this project and developed their investment in the delivery of green skills. The project has also further supported the college's social values and profile with key influencers in the local community.

"Becoming carbon-zero is the biggest and most important goal we can have. Within less than 10 years all our campuses will be match fit for carbon zero. In the meantime, we will continue to engage and educate our staff, students and the wider community on the importance of acting now for climate change, and how we can all work together to help save our planet

Matthew Burgess, Principal and CEO, Gloucestershire College



How colleges will continue to hit net zero estates and build resilience to environmental change

- Meeting or exceeding ambitious carbon emission reduction targets and publishing data
- Improving energy efficiency and modifying estates strategies in line with net zero targets
- Implementing renewable energy sources
- Meeting or exceeding low-waste targets

- Fostering campuses that are richly biodiverse
- Divesting away from fossil fuels
- Offering sustainable food on campuses
- Developing a climate change adaptation/risk strategy to mitigate climate-related risk
- Supporting students and staff travel to the college in a low-carbon way

CASE STUDY



Embedding sustainability and green skills in estate strategy

The Board at East Sussex College has endorsed an estate strategy based on the disposal of surplus brownfield land for the creation of community-led facilities as part of an education-health-housing initiative partnering with Eastbourne Borough Council, Lewes District Council, East Sussex Hospitals Trust and the private sector.

The proposals include disposal of surplus brownfield land for the purposes of new social housing, later-life living and improved college facilities as part of an inter-generational living initiative. It involves education, housing and health partners, underpinned with a strong theme of sustainability and biodiversity.

The proposals will include significant green skill apprenticeships during the life of the project and beyond.

Training the low-carbon energy sector is an area that colleges will be leading on, so it is only right that they can lead the way on transitioning to it.



Empowering colleges to hit net zero and build resilience to environmental change

There are many measures that colleges can and do take, to deliver on their estates strategies that have low financial or spending implications, but others have significant costs that colleges cannot bear on their own. Retrofitting existing stock, developing carbon neutral new builds and reviewing the position of colleges in flood risk areas are all priorities that should be supported by government.

There are pots of money available, however colleges have had to submit multiple bids in 2021 with 100 still currently competing at stage 2 for condition funding and a similar number waiting for outcomes of the demographic bids. Meanwhile there are question marks about the ability of colleges to provide match funding to supplement public grants because they have no property left to sell or cannot access loans because of the reluctance of incumbent lenders and the barriers for new entrants.

Recommendation 2



Work with colleges to develop a sectoral green estates plan for colleges

- DfE should develop a green estates plan for colleges to retrofit existing stock, develop carbon neutral new builds and review the position of colleges in flood risk areas could support the reduction the need for constant competitive bids.
- National or local surveys could help in the pursuit of this.

Recommendation 1



- Treasury should add to the £1.5 billion capital budget allocated in 2020 to ensure that all college students get the benefit of upgraded buildings by 2026 and to ensure the sector contributes at an early stage to net zero building targets.
- There should be a shift away from the many bids that currently exist towards the development of government loans as an alternative to a reliance on a vanishing commercial loan market.

There should be a shift away from the many bids that currently exists towards funding the plan and the development of the option of government loans to colleges as an alternative to a reliance on a vanishing commercial loan market.

THE PATH TO NET ZERO

CLIMATE COMMISSION AND NOUS GROUP'S CLIMATE ACTION ROADMAP FOR UK FE COLLEGES

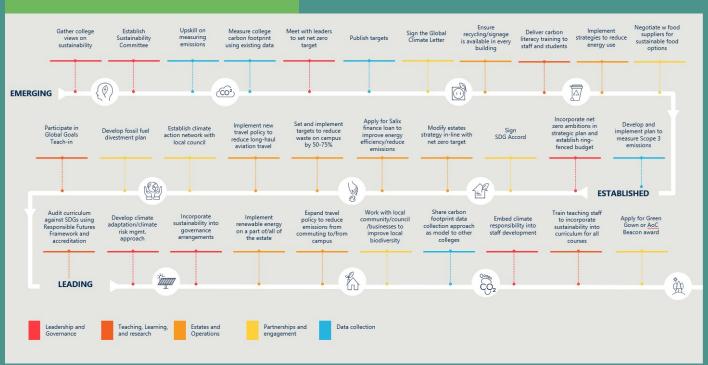
The Climate Action for UK FE Colleges Roadmap has been developed in collaboration between the Climate Commission for UK Higher and Further Education and the Nous Group. The roadmap outlines clear, feasible and cost-effective actions UK colleges can take to advance sustainability across estates, governance, teaching and engagement, and respond impactfully to the climate emergency.

The roadmap was constructed by the sector for the sector, with a group of Principals representing colleges across the UK at different levels of maturity in their approach to sustainability to ensure the work is relevant and beneficial to the sector.

The roadmap is freely available to all colleges to support coordinated and feasible climate action, whether they are further along the road in working towards net zero emissions or just starting out.

So far, over 90 colleges have committed to their journey on the roadmap.

FE CLIMATE ACTION ROADMAP



Source: EAUC 41

^{41.} EAUC. 2020. Climate Commission and Nous Group Climate Action Roadmap for UK FE Colleges. Available <u>here</u>.

SUMMARY OF RECOMMENDATIONS FOR POLICY-MAKERS



DELIVERING GREEN SKILLS AND SUPPORTING GREEN JOBS

- Commit to a **clearer timescale and investment plan for the net zero strategy** to increase
 employer confidence, demand for skills and
 national level dialogue on green skills needs
- Create a joined-up approach to green skills across the whole education and skills sector.
- Provide investment through the National Skills Fund to meet demand in growth sectors, like offshore wind, electricity networks, electric vehicles, low carbon heating and forestry, to support people in jobs that are transitioning to redeploy their skills.
- Establish **national centres of excellence** in low carbon skills.
- Invest in the **innovative technology** required for colleges to train for green jobs.
- need throughout their lives with urgent lifelong learning entitlements and support for living
- Run a **national green careers advice campaign** to drive more people towards education and training for green jobs.
- Invest in the **college workforce** to ensure they have the resources and knowledge to train those moving into new developing growth sectors.



EDUCATING STUDENTS AND COMMUNITIES TO BUILD A MORE SUSTAINABLE FUTURE

- Return **funding** to where it would have been if it had kept up with demographic and inflationary pressures 10 years ago and to index link this to inflation as a minimum.
- Simplify funding streams and focus on outcomes like net zero.
- Make climate and environmental education a compulsory part of all study courses by embedding sustainable development in every subject to support people into green jobs and inspire green behaviour
- Commit to an entitlement to education for sustainable development as part of enrichment
- Invest in workforce training and resource development for ESD.



DEVELOPING NET ZERO CAMPUSES AND BUILDING RESILIENCE TO ENVIRONMENTAL CHANGE

- Invest £1.5bn in the next three years in the capital budget to sustainably transform college estates and support colleges to invest in the innovative technology required to train for green jobs.
- Work with colleges to develop a **sectoral green estates plan** for colleges.



THE GREEN COLLEGE COMMITMENT



To discuss your engagement with this work, please get in touch with <u>lan Munro</u> or <u>Philippa Alway</u>.