

Sustainability Strategy



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Version: 7 Review Date: November 2022

Executive summary of commitments

We aim to become one of the most sustainable Further Education Colleges in the country and will align our teaching and campus to ensure sustainable practice across everything we do.

Our commitments acknowledge the balance that to be truly sustainable we must be environmentally, economically and socially sustainable. This strategy will seek to engage staff and students from across the College as well as other key stakeholders through the programme of strategic planning.

Our aim is to be a leading light in the Further Education sector for its commitment to, and achievement of, sustainability targets (https://www.eauc.org.uk/7033).

Carbon neutrality

- Develop a meaningful and achievable roadmap to progress towards our aim of being a net-zero carbon College by 2050, and net-zero for Scope 1 and 2 emissions by 2040.
- Make significant cuts to absolute carbon emissions: reduce Scope 1 and 2 emissions by 25% by 2025 and Scope 3 emissions by 30% by 2025 and 50% by 2030 (based on a 2018/19 baseline).
- Investigate and implement effective and scientifically robust carbon offsetting schemes that balance environmental, economic and social factors.

Education

- Embed Education for Sustainable Development (ESD)¹ into our courses wherever [possible or ensure there is a significant theme for sustainability within them (The Green College Commitment)
- Give students a voice in sustainability improvements
- Teach in ways that are consistent with our sustainability commitments
- Provide our staff with the skills and knowledge² to make decisions to help them promote sustainability and to contribute to the Colleges goals (The Green College Commitment)
- Invest in the innovative technology required to enable the College to train for green iobs

Campus

Biodiversity

- Replace any trees removed on a two-to-one basis and increase canopy cover by at least 2 percent across our estate
- Ensure a net biodiversity gain³ across our capital projects

¹ https://en.unesco.org/themes/education-sustainable-development

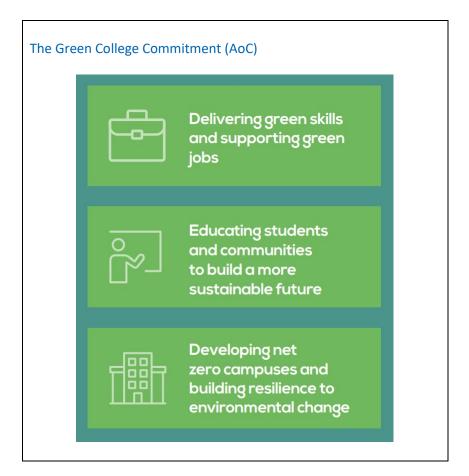
² https://carbonliteracy.com/

³ Biodiversity net gain is an approach which aims to leave the natural environment in a measurably better state than beforehand.

Support wellbeing through our green spaces.

Greening factor

- The Urban Greening Factor (UGF) is a tool to evaluate how "green" a building, or its location of development, is
- The benefits of a greening strategy include:
 - improved biodiversity.
 - reduced rainwater run-off.
 - improved carbon sequestration.
 - reduced air and noise pollution.
- The College will determine its UGF and ensure that site developments are undertaken with the aim of improving it



Buildings

- Embed sustainability in all decision-making related to campus developments
- Retrofit inefficient buildings through progressive, sustainable, capital investments
- Ensure buildings are used efficiently, taking account of sufficiency
- Ensure effective monitoring and reporting of energy use in buildings

Energy

- Contract a 100% renewable purchased electricity supply
- Build on our 23% percent carbon reduction (2010-2020)
- Consider on-site renewable electricity generation wherever possible
- Explore low-carbon heating and lighting options as technology and funds allow

Food

- Reduce sale of high impact foods⁴
- Use suppliers who can contribute to our sustainability goals and encourage our suppliers to do the same
- Reduce single-use packaging and waste

Procurement

- Improve understanding of Scope 3 emissions relating to our supply chain
- Introduce staff training to eliminate unsustainable purchasing practices
- Drive social value through our supply chain

Travel

- Invest in infrastructure to support active travel to campus
- Electrify our fleet
- Discourage flying and encourage remote working and surface travel (seeking alternatives to high emission air travel) where possible
- If not alternative to flying, offset carbon emissions through on-site activities

Waste

- Commitment to the waste hierarchy: avoid, reduce, reuse, recycle.
- Improve upon our overall recycling rate of 20%.
- Help students to reuse and recycle unwanted items, particularly at the end of day
- Engage with local organisations to reduce food waste.

Hedgehogs

- To secure "hedgehog Friendly campus" status for the College site
- https://www.britishhedgehogs.org.uk/hedgehog-friendly-campus/
- https://bighedgehogmap.org/

⁴ Lamb, beef, cheese almonds

College vision

The world is facing a climate emergency and public sector education providers are uniquely placed to respond to the challenges that we face.

The education we provide ensures that the next generation, those who will be most affected by the climate crisis, have the skills needed to find solutions. It is essential that our staff and our wider student body understands how to apply their subject knowledge to make society more sustainable.

As the country recovers from COVID-19, we have the chance to reshape our activities and press forward with innovative solutions to long-term sustainability challenges. We must grasp the opportunity for a green recovery and take full advantage of the changes to behaviours and practices that have become embedded in these unprecedented times. We recognise the urgency to do more than we have done before, and faster.

The College has made good progress in reducing its emissions over many years. This sustainability strategy is the next step on our journey to reduce emissions with the ultimate aim of becoming net carbon neutral. We want to do this by 2040 for Scope 1 and 2 emissions and 2050 for Scope 3.

We don't take this commitment on lightly and we don't currently have all the answers. The challenges we face are multifaceted and any action we take to overcome them requires a careful balance between environmental, economic and social factors to understand their full impact.

But we will never lose sight of the urgent need to cut emissions, restore habitats and secure our planet for the future.

Dr. N EnglandChair of Governors

Debbie LavinPrincipal

Our approach

We believe that sustainability must be something that runs through all of our operations and plays a role in all business, planning and teaching decisions. It unites our staff and students in a one-college approach to implementing solutions to the challenges we face.

Sustainability is a central pillar of our overarching College vision and values, underpinning everything we do. This embedded model helps us to convey to staff and students that sustainability is something that we must all consider; it is not anadd-on that can be addressed in isolation.

A Sustainability Steering Group at the College will oversee the strategic direction of sustainability at the College. It will monitor our sustainability performance and policies. It will be chaired by a senior member of the Colleges management team and membership of the Steering Group will made up of the both teaching and support staff, students and representatives of the Colleges governing body.

Carbon neutrality

Carbon neutrality means achieving a state in which our activities result in no net greenhouse gas emissions.

To tackle the climate emergency, we must work to reduce absolute carbon emissions as much as possible, with the ultimate goal of carbon neutrality. The UK Government has a legally-binding target of net-zero by 2050.

Mainstream scientific opinion is clear that the next 10 years are crucial for any efforts to slow the trend of global heating. As such, we believe we have a responsibility to aim to be net carbon neutral in our Scope 1 and 2 emissions by 2040.

Scope 1 emissions are direct emissions: those that can be directly attributed to the College's activities, such as the fuel used in its fleet and any gas used on site.

Scope 2 emissions are indirect emissions: those produced by our procured energy supply. Scope 1 and 2 emissions are often grouped together.

Scope 3 emissions are all other indirect emissions arising from the College's activity. Examples include staff and student commuting, business flights and emissions embedded in supply chains

The College has large associated Scope 1 and 2 emissions due to the energy we consume, with many buildings and some very old buildings which are heating and lighting inefficient. Despite growing our estate in recent years, our absolute and relative emissions have continued to fall. Between 2010 and 2020, the College cut its Scope 1 and 2 carbon

emissions by 23%, even while our estate grew by 24%. While this has been partly due to wider grid decarbonisation, improvements have also been achieved by investing in energy saving technologies including LED lighting, new boilers, heating and cooling controls and energy efficient equipment.

	Baseline	Outcome	Outcome	Outcome	Outcome	Outcome	Outcome
	2010	14/15	15/16	16/17	17/18	18/19	19/20
Carbon Tonnage produced by the college	1,595	1,504	1,400	1,353	1,513 ¹	1,397	1,226
	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes

Further reductions will become increasingly difficult to achieve as many of the relatively low-cost, high-yield initiatives and investments have already been completed. However, a green recovery from COVID-19 may present opportunities to accelerate our transition to greener infrastructure and practices.

Scope 3 emissions add a further level of complexity; they are very difficult for the College to control and yet are much larger than the Scope 1 and 2 emissions. The College has much less ability to directly influence its Scope 3 emissions which are embedded in complex global supply chains, often many times removed from the College itself. This makes them difficult to track and reduce. Despite the difficulty, it is vitally important that we begin to understand and reduce our Scope 3 emissions. We aim to be net zero for Scope 3 emissions by 2050.

Carbon offsetting

The College will inevitably produce some emissions; this is unavoidable due to the nature of our operations and technological limitations, particularly around energy for heat and the energy embedded in the construction and operation of electricity generation infrastructure.

When we judge we have done all we reasonably can to reduce our absolute emissions, we will need to offset the remaining carbon to achieve net-zero.

In the short-term our priority is to reduce our absolute emissions as much as possible and this is where our energy should focus. Additionally, before committing resources to any offsetting scheme, we must establish what the most effective way of offsetting is.

Education

Our commitment to Education for Sustainable Development (ESD) aims to help our students to learn more about how they can have a positive impact in the world. As a College, our greatest contribution to promoting sustainability comes from the students we nurture to become the change makers of the future.

Learning

ESD⁵ takes a holistic definition of sustainability, as set out by the UN's Sustainable

⁵ https://en.unesco.org/themes/education-sustainable-development

Development Goals (SDGs). It aims to make sustainability relevant to all students, no matter what subject they study.

While it can include measures to directly combat the climate emergency, depending on their vocational specialism it might also include climate justice, disaster risk reduction, biodiversity, poverty reduction, sustainable consumption, human rights, social equality and responsible citizenship. ESD connects and expands skills and content from each course to key sustainability challenges.

We have pledged that every 16-18-year-old College student will receive Education for Sustainable Development as part of their study programme and in the wider student experience. ESD will be embedded over a period of five years.

https://en.unesco.org/themes/education-sustainable-development/what-is-esd

We will work with all teaching departments on embedding ESD in a way which will equip students with the knowledge, skills, values and attributes needed to work and live in a way that will bring about solutions to the environmental, economic and social challenges that we face.

ESD can be a challenge for subjects that are not traditionally seen as sustainability related. We will not force all students to become climate scientists. Sustainability, as set out by the United Nations Sustainability Development Goals (SDG)⁶, is defined broadly. There are skills and approaches that all subjects can link to sustainability challenges. ESD must, therefore, find those skills and attributes already present in these programmes, investigate where further connections can be made, and support departments to develop learning opportunities for students.

Teaching practices

It is important that our own teaching practices are consistent with the sustainability principles we teach.

COVID-19 presents us with an opportunity to reassess how we use our spaces and incentivise a greater degree of sharing and flexibility between different departments and uses. This will ensure that we are getting maximum use out of our spaces and that the associated carbon costs of heating and lighting are as low as possible.

A number of our courses currently entail international travel. These trips are a vital part of many courses and provide students with exciting and enriching opportunities to further their studies and personal development. But these opportunities must be balanced with their carbon cost. We will ensure that emissions are considered as part of the decision-making process when trips are planned and lower-carbon alternatives are considered, while ensuring that learning outcomes and our student experience are not compromised. Where high emissions trips are justified and continue, they can be used as an opportunity for reflection, discussion and undertaking positive climate action projects.

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⁶ https://sdgs.un.org/goals

Staff training

We are committed to providing our business support and academic staff with the information and knowledge to be more sustainable in their work and personal lives.

We will develop a staff training programme to help guide staff to make evidence-based choices as part of their roles, in order to balance environmental, social and economic factors.

This will include aspects such as departmental procurement decisions, office energy use and recycling. We will align this to our Green Impact programme to ensure an approach which engages staff at their appropriate knowledge level. This will be rolled out to existing staff and embedded into our induction process for new-starters. In addition, we will ensure that senior leaders are trained to understand the sustainability impacts of their departments' operations and how these can be improved.

The College aims to achieve Carbon Literate certification through the Carbon Literacy scheme whereby all staff undertake training in better understanding their carbon footprint

https://carbonliteracy.com/

College site

We are committed to maximising the ecological value of our green space for the benefit of a wide range of plants and animals and for the mental wellbeing of staff, students and local communities.

Biodiversity

The UK is facing a crisis of biodiversity loss. Some of the key drivers include climate change, urbanisation and pollution. These pressures on wildlife can be mitigated by strong sustainability action and the creation and protection of greenspace. Our long-term vision is to increase the amount of green space the College has and improve the biodiversity value of the existing estate.

Trees play a vital role in the environmental, social and economic sustainability of our Island. They improve our air, soil and water quality, aid mental health and well-being and provide a sense of place. They are also a cost-effective means of controlling stormwater runoff, reducing building energy costs and increasing pavement longevity.

We will continue with our two-to-one replacement policy for all trees on campus to achieve our objective of increasing canopy cover by at least 2 percent by 2030 (from a 2020 baseline). We will increase the genetic diversity of our tree stock to promote resilience to climate change and ensure that our most valuable trees are identified and protected for future generations.

Urban Greening Factor (UGF)

The Urban Greening Factor (UGF) is a planning tool designed to evaluate how green a building is. The UK Government has announced that Biodiversity Net Gain (BNG) will become mandatory in England for new developments. UGF will be delivered onsite and must still be met; even if, for BNG, a developer is looking to offsite solutions.

Urban greening will become an integral consideration of new developments and the successful execution of these projects will require the involvement of landscape design early on in the process.

https://www.london.gov.uk/sites/default/files/urban greening factor lpg pre-consultation draft.pdf

The most common forms of urban greening are installing trees, parks, and landscaped green areas in newly-built urban projects. Urban greening helps combat air and noise pollution, soaks up rainwater that may otherwise create flooding, creates a habitat for local wildlife, and has shown to lift morale in the people who see it, calming traffic and lessening urban crime.

Buildings

The way in which we use our buildings, how efficiently they are designed, the activities that occur within them and the layout of campus have a significant impact on our Scope 1 and 2 emissions. Many College spaces are energy-intensive, but there is a lot of progress that can be made in reducing emissions by improving our current building stock and ensuring new buildings are designed to the most rigorous environmental standards.

While COVID-19 has made the immediate future uncertain, it is likely the College will need to construct new buildings in the coming years as the staff and student bodies grow and to ensure start- of-the-art teaching facilities.

In addition, there will always be a need for ongoing maintenance and retrofitting activities in an estate that has developed over 60+ years. It is essential that any new developments and major refurbishment projects reflect our ambition to achieve net carbon neutrality by 2050. Given the overwhelming impact of our existing building stock on operational carbon emissions, there will be a presumption of prioritising refurbishment and retrofitting over new build, unless an exceptional case is made.

While some high yield results will be possible by improving the efficiency of our buildings, how we use our buildings can also affect energy consumption. Part of our retrofitting efforts will be directed at putting in place strategies and associated infrastructure, such as diagnostic metering to provide feedback enabling users to reduce energy usage.

We will also continuously review how our spaces operate to ensure they are providing carbon efficiency and that we are not using more space than necessary and sufficient for our needs. Building materials and construction activities have a major impact on our scope 3 emissions.

COVID-19 and the resulting lockdown has provided further possibilities for changing our practices. College staff have generally adapted well to home working and we recognise that flexible working practices can be beneficial to both staff and the students. There might also be significant environmental benefits, including a reduction in Scope 3 emissions and air pollution associated with commuting. In addition, more flexible working may make it possible to reduce emissions relating to office space and, in the long term, allow for a reduction in overall office space.

However, at colder times of the year this might result in more carbon emissions, as staff individually heat their homes. There is also a social impact, as the College would be outsourcing its

energy bills to individuals, and different personal circumstances will mean not all staff want to work from home. We will carefully consider any move to flexible working to ensure it provides mutual benefit for individuals, the College and the environment.

Heating and Lighting

Providing low-carbon heating to the College is a particular challenge. Many options for decarbonising heating are dependent on infrastructure changes as well as being financially challenging. Making full and every use possible of "SALIX type" funding through schemes like Public Sector Decarbonisation (PSDS) will be critical to making in roads to this area.

In any room or building refurbishment provision will be made to replace lighting with more energy efficient alternatives

	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Total Energy	4,120,917	3,726,900	3,680,371	3,669,388	3,499,588	4,062,468	3,693,962	3,638,692k
Consumptio	kWh	Wh						
Electricity	1,724,555	1,657,874	1,829,580	1,810,766	1,771,716	1,924,928	1,791,735	1,516,029k
	kWh	Wh						
Fossil Fuels	2,396,362	2,069,026	1,851,228	1,858,622	1,727,872	2,137,540	1,902,227	2,122,663k
	kWh	Wh						
Natural Gas	1,247,698	1,157,734	1,320,534	1,858,622	1,727,872	2,137,540	1,902,227	2,122,663k
rtatarar Gas	kWh	Wh						
Oil	1,148,664	911,292	530,256	0	0	0	0	0
	kWh							
Total Energy	£300,156	£285,929	£291,143	£296,509	£258,710	£292,524	£315,606	£293,364
Costs	,	,	,		,	,		
Total Water/	£45,912	£43,285	£52,486	£48,554	£38,146	£50,941	£40,000	£27,263
Waste Costs	,		,	,	,			

Food

The problem of feeding a growing population is both a technical and social challenge. To ensure that enough food is produced, and that it is distributed equitably, governments and industry must draw on contributions from individuals, institutions and researchers from many academic disciplines.

Our current global food system will have to adapt to ensure that everyone has access to adequate nutrition in decades to come. The biggest challenges include more inhospitable climates for growing food, soil degradation, the food sector's greenhouse gas emissions and inequitable distribution resulting in malnutrition. There is an urgent need to implement social and technical solutions to these global problems.

Working closely with the supplier, we will remove carbon-intensive foodstuffs, such as most beef and lamb, from our food outlets and develop an understanding of the consumer choices in our food outlets allowing us to actively promote sales of sustainable foods, including vegan, vegetarian and healthy food options.

Our plan is to drastically reduce single-use packaging on campus, particularly food packaging such as coffee cups and water bottles, will need to be reassessed in light of the COVID-19 pandemic. It is likely that in the short term we will be unable to use reusable containers at our outlets, which will lead to an increase in waste. However, we will continue to plan in the long term for the elimination

of single-use items, including by introducing a levy on single-use cups across campus and the installation of more water fountains to further reduce the consumption of bottled water. Where single use packaging would be difficult to eliminate, we will seek out and use the "least worst" option available from an environmental perspective.

Travel

Sustainable travel is not just about reducing carbon emissions. It is about ensuring that everyone can access environmentally friendly and economically viable means of transportation that meets each person's needs.

There is no single travel solution that will work in every circumstance and trade-offs between different aims are necessary in many cases. However, by approaching the problem holistically, we are committed to enacting a travel policy that mitigates environmental impacts in a way that ensures necessary travel is available to everyone.

Transport is the UK's biggest emitting sector. Even excluding international aviation and shipping, transport accounts for a third of the UK's carbon emissions. At a College level, we estimate that in 2018/19 over 500 tonnes of CO² equivalent came from associated travel including business travel, staff and student commuting and our fleet of vehicles. Of these emissions, approximately 25% are associated with business travel. Moving away from carbon intensive, individual travel patterns is a challenge that requires people to understand the impacts of their travel and to be empowered to reduce travel and to use low- carbon active or public transport options where possible. Individuals and institutions must work in partnership if we are to make transport more sustainable.

Less than 5% of our staff and students either walk or cycle to the College – well below the national average for commuting to work of under 15 percent.

We remain committed to ensuring that access to the College for public transport remains safe and readily available and to ensuring that public transport is a practical and affordable option for our staff and students. We will continue to work with local operators to improve the Colleges public transport provision and we will be exploring ways to secure better bus links. Regular revision and consideration of the College's Green Travel Plan will help ensure its continued prioritisation

It is likely that the COVID-19 pandemic will have an impact on the long-term commuting habits of our staff. More flexible working is likely to reduce Scope 3 emissions relating to staff commuting to campus, although this may result in increases to emissions from heating homes. With reduced capacity on public transport, more staff may walk or cycle to work. For those who do need to drive, we will encourage and support a move to less polluting vehicles. We will ensure that any policy in this area considers the differing needs of staff, for example caring commitments or mobility issues and we will continue to promote options identified in our Green Travel plan to encourage staff to transfer from single driven cars to more environmentally beneficial travel.

Waste

We produce a varied and substantial amount of waste every year. Waste can have significant environmental impacts including releasing greenhouse gases and polluting local environments during processing. It can also pollute natural environments further afield if it is not properly dealt

with. We take the commitment to avoid, reduce, reuse and recycle materials very seriously and are committed to applying the principles of the circular economy wherever possible.

This means that we seek to reuse and upcycle products and resources as much as possible before disposal, so that waste from one process becomes materials for another. We will also procure reused and upcycled products where possible.

As indicated by the waste hierarchy, upcycling, recycling and disposal should be secondary to avoiding and reducing the total amount of resources used. For example, coffee cups equate to around 2.5 percent of our waste stream – equivalent to 29 tonnes of waste per year. Disposable cups are an example of where we know that we can make an impact by safely promoting reusable alternatives in order to reduce the production of unnecessary single-use materials.

Finding alternative uses for products will be an important part of our circular economy commitment. It is also possible to design out waste altogether if waste implications are considered from the outset in any activity, or to repurpose or redirect them as resource inputs in the next supply chain.

Appendix 1 - Streamlined Energy and Carbon Report 2019/20 (from Website and Accounts)

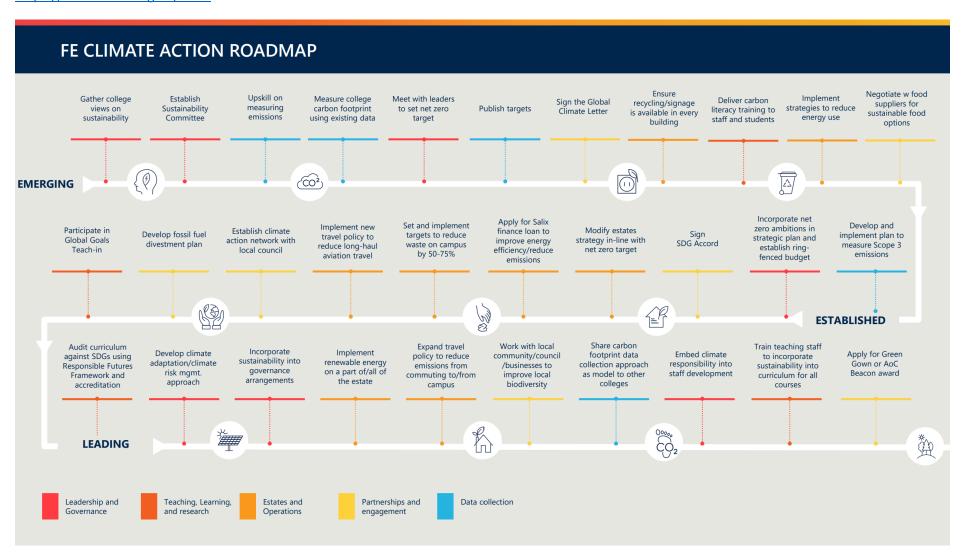
Greenhouse gas emissions and energy use data for the period 1 August to 31 July

	2019/20	2020/21	2021/22	2022/23	2023/24				
Energy consumption used to calculate emissions (kWh)	3,680,902	3,505,281							
Energy consumption breakdown									
Gas	2,122,663	1,947,122							
Electricity	1,516,029	1,535,878							
Transport fuel	42,210	22,281							
Scope 1 emissions (metric tonnes)									
Gas consumption	390.29	356,63							
Owned transport	1.68	1.58							
Total scope 1	391.97	358,21							
Scope 2 emissions									
Purchased electricity	353.45	326,11							
Scope 3 emissions									
Business travel	8.59	2,89							
TOTAL GROSS EMISSIONS	754.01	678,22							
Intensity ratio									
Tonnes CO2e per member of staff	2.83	2.76							

https://www.gov.uk/government/publications/college-corporation-financial-management-good-practice-guides/streamlined-energy-and-carbon-reporting-for-college-corporations

Appendix 2 – FE Climate Action Roadmap

https://www.eauc.org.uk/7033



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
- 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.