College Collaboration Fund: Net Zero and Sustainability Strategy 2022-50

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APPROACH

This report sets out the first template of ideas on the vision, policies and proposals for managing our carbon budgets and achieving ambitious sustainability targets for EKC Group, Mid Kent College and Morley College to be Net Zero by 20??(TBC). This is being led out initially under the Collaborative College Fund (CCF) Project.

The report starts by describing the key elements that must underpin the approach. It then sets the scene by assessing the current context of Government policies and the state of play with the HE/FE education sector regarding the adoption and implantation of Net Zero and Sustainability Strategies. It concludes with a template for the Strategy itself to be carried forward and developed by the Kent-based FE colleges. Finally, an initial assessment of the First Year Action Plan is provided in the **Annex D**.

This strategy must be alive, agile and interactive. Through the participation of its stakeholders and feedback from its early implementation it will be constantly updated, refined and redirected to stay abreast of times and changing conditions and moving targets in this rapidly evolving agenda. This document only has meaning once the consensus and approval of staff and students has been achieved. As with any strategy, the implementation plans arising need consolidating into a coherent business plan that appraises and programmes costs and benefits, carbon reduction and assesses the risks, opportunities and impacts involved.

There will always be a **range of pathways to achieve Net Zero**. There is no singular route or approach as the opportunities and challenges are changing constantly. The strategy will maintain a holistic agile system view of where action can be most effective and when to change direction. Adaptability and innovation will increase understanding, advance new approaches and reduce the costs of existing ones.

Each College does not have to reinvent the wheel. This document draws on those HE/FE colleges that are already leaders in the sector and draws on established best practice. Recognising the work and leadership of others, this first version of the Net Zero and Sustainability Strategy draw on two primary sources: the work at UCL, Kings College and the EAUC Climate Action for UK FE Colleges Roadmap¹ is designed to be practical, easy to follow, affordable and outcome driven. The roadmap recognises different levels of maturity. EKC Group, Mid Kent College and Morley College are all "emerging" in this space and do not yet have an "established" approach to sustainability. Structures need to be put in place to support this process for the colleges to become "leading in this spare" and are not yet models for others on sustainability.

Underpinning the implementation of the Strategy will be an action plan of key initiatives. These are aligned to the same categories as the EAUC's 'Sustainability Leadership Scorecard' and that would allow easy integration into the AOC carbontargets.uk evaluation system.

They include:

- Leadership and Governance
- Learning, Teaching, and Research
- Estates and Operations
- Partnerships and Engagement
- Date Collection

Adopt a systems approach. The Net Zero challenge requires action by multiple parties (on, off and across campuses and departments) able to deliver at pace and manage large number of uncertainties. This needs strong coordination in policy development and managing expectations.

A whole systems approach helps to navigate complex policy and implementation challenges where the environment, social, educational and

economic parts as viewed as an interconnected system. This can help identify interdependencies, as changes in one area can directly or indirectly impact others. This approach will help the design of policy and programmes to maximise benefits, account for dependencies, mitigate conflicting interests and, with the right feedback mechanisms, take account of learning along the way. It reduces the risk of unintended consequences, ensuring individual decisions designed to achieve Net Zero avoid hindering it or other important objectives.

To aid this there is a need for the right forums to be created so that they can:

- Deliver shared Net Zero goals and identify key issues through crosssystem governance and participation structures
- Work towards a shared understanding of interdependencies and risks across different parts of the Net Zero challenge
- Test and determine feasible Net Zero scenarios within a whole system modelling, monitoring and evaluation approach to identify best high leverage, systemic actions that will be necessary in a range of scenarios

CONTEXT

Developing and managing the Net Zero and Sustainability Strategy will only have full meaning when set in context that recognises a journey that has historical depth and future foresight. It is now 30 years since the first Earth Summit in Rio that set the scene for the international adoption of Sustainable Development to be at the core of government and community policies and actions, both locally and internationally. The current era of the Climate, Biodiversity and Soil Health Emergencies declared since 2019 foreshadow possible futures should societies worldwide not act swiftly enough to avert catastrophic change at the local and global levels.

Government Policies

The Department for Business, Energy & Industrial Strategy published its Net Zero Strategy in October 2021² detailing how ministers plan to reduce greenhouse gas emissions to reach an aim of Net Zero by 2050. The government has said colleges will be "key" to hitting their target of supporting 440,000 Net Zero jobs by 2030 and contributing towards a broader pivot to a greener economy which could support two million jobs in green sectors or by greening existing sectors". As such, reforming the skills system is a critical part of this plan and the new measures outlined in the 'Skills for Jobs' white paper will be central to this.

Colleges' place at the "centre of their local communities and economies means they are key to unlocking opportunities across the country". Government is committed to reforming the adult skills funding and accountability system for colleges and other training providers to ensure they are "better supported to focus on helping their students into good jobs; reduce the complexity of funding so that colleges can focus on their core role of education and training; and define clearer roles and responsibilities for the key players in the system. No mention is made of extra investment in FE providers to achieve the Net Zero goal.

The government's pledges in the Net Zero strategy are:

- 1. Deliver the lifetime skills guarantee and grow key post-16 training programmes (such as apprenticeships, skills bootcamps and T levels) in line with the needs of employers in the green economy.
- 2. Reform the skills system so that training providers, employers and learners are incentivised and equipped to play their part in delivering the transition to Net Zero - including by legislating for skills required for jobs that support action on climate change and other environmental goals to be considered in the development of new local skills improvement plans.
- 3. As part of the pathway towards the lifelong entitlement, trial short courses provision at levels 4-6 enabling learners to flexibly build towards a full qualification in subjects crucial for Net Zero.
- 4. The majority of strategic development fund pilots, announced in July 2021, include a project focused on green skills, covering areas including decarbonisation, renewable energy and electric vehicles.
- 5. Reform the adult funding and accountability system so that provider funding reflects value of courses to the taxpayer and introduce accountability agreements to encourage delivery towards national priorities, such as the green economy.

2 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1026655/net-zero-strategy.pdf

- 6. A refreshed FE teacher training curriculum and apprenticeship standard to embed and promote sustainability.
- 7. Introduce a sustainability and climate change strategy for education and children's services which will include a focus on equipping children and young people with the knowledge and skills they need to contribute to the green economy.
- 8. While skills policy is devolved, the government welcomes close engagement with the devolved administrations, mayoral combined authorities and the Greater London Authority on this important agenda to ensure everyone in the UK has access to green skills and jobs.

The various scenarios and optional pathways embedded in the strategy include:

- High electrification: explores the impact of using widespread electrification to support transport, heating, and industry decarbonisation coupled with deep decarbonisation of electricity supply.
- High resource: explores the impact of using low-carbon hydrogen more extensively, particularly for decarbonising buildings and heavy vehicles. It assumes higher levels of tree-planting are achievable, increasing the 'negative emissions' available from land-use sinks.
- High innovation: explores a world in which successful innovations, such as synthetic fuels and zero emission aircraft, enable lower residual emissions to be reached sooner in aviation. Higher capture rates increase the impact of carbon capture technologies, particularly higher deployment of carbon direct air capture and utilization.

Delivering carbon reductions can reduce demand for gas, coal, oil and transport fuels. This can improve security of supply by diversifying away from primarily imported fossil fuels. Increases in electrification and the simultaneous deep decarbonisation of electricity supply carries security of supply risks.



Reviews of the Strategy³ show there are strategic gaps and uncertainties over how the ambitions will be delivered. This includes inadequate fiscal support for the education sector transition, unclear plans for tackling emissions from agriculture and promoting diet change, uncertain support to scale up heat pump solutions and removing price distortions favouring gas over electricity, insufficient action for public engagement, amongst others. The risk is that policy or planning decisions remain incompatible with a Net Zero UK, particularly as it is unclear how the Treasury will use the tax system to adequately support the transition to Net Zero.

Current State of Play

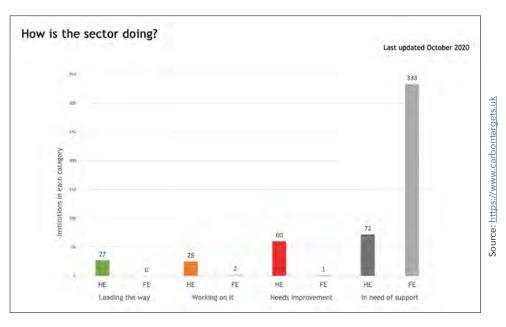
One recent influential assessment (amongst others) identified widespread societal failures to make the changes needed to cut carbon emissions to zero by 2050⁴. It noted, "None of the indicators are on track to meet our 2030 targets" (also needed to meet the 2050 target). Three indicators were actually going in the wrong direction.

30 years bear witness to unresponsive and ineffectual action to avoid disastrous climate consequences. This demands system-level intervention and sector-wide activity that hardly exists. There is widespread frustration after the Earth Summit in 1992, the Climate Change Act in 2008 and the Paris Agreement made in 2015 ha's resulted in only a "Ten-point plan for a green industrial revolution"⁵ in 2020 and its Net Zero strategy in 2021 is its first ever.

There is sentiment that "it's profoundly shocking that education isn't yet giving the leadership on this that society needs." It is noteworthy that official reports still talk of it being 'still early days'⁶ 30 years on from the Rio Earth Summit.

As the following figure illustrates, there is strong evidence showing the sector remains in catch-up mode. Many organisations are only just starting out to gather information or trial solutions to the climate crisis, focused on skills. Some point out that the sector is an "employer-led system, where employers and learners just aren't knocking down the door asking for

green apprenticeships ... I think something really needs to be done by the government to stimulate that interest." As most initiatives are voluntary, colleges struggle to allocate time or resources.



Meanwhile, positive signs show concrete results with carbon emissions in the UK already down 40 per cent in 2019 compared with 1990. In 2019, the UK became the first major economy to legislate to reach Net Zero emissions by 2050. Within the HE and FE sectors there are also many grassroots initiatives evident and growing.

The UK government promises to "forward a strategy which will set out how our children's services, education and skills systems" will help meet the target of Net Zero emissions by 2050, recognising some other targets loom imminently as, by 2035, the government wants the energy system to be "powered entirely by clean electricity".

- 4 https://www.wri.org/research/state-climate-action-2021
- 5 <u>https://www.gov.uk/government/publications/the-ten-point-plan-for-a-green-industrial-revolution</u>
- 6 https://feweek.co.uk/net-zero-in-fe-why-arent-we-doing-this-yet/

^{3 &}lt;u>https://www.theccc.org.uk/publication/independent-assessment-the-uks-net-zero-strategy/</u>

The Department for Education has published its draft strategy⁷ with the final strategy expected in April 2022. This sets out four aims: Preparing all young people for a world impacted by climate change; reaching Net Zero: ensuring resilience to climate change (through buildings and infrastructure) and a' better environment for future generations' (through biodiversity and increasing access to nature).

Some examples of notable activity include:

- Association of Employment and Learning Providers plan a "green skills summit" in February 2022 to put Net Zero and commission research on sustainability.
- Institute for Apprenticeships and Technical Education green apprenticeships advisory panel in Spring 2021, following the government's Green Jobs Taskforce set up in 2020; developing new standard, e.g., retrofitting high-efficiency energy systems into existing buildings; review of 600 existing standards; and developed a sustainability framework for employers.⁸
- Learning and Work Institute sustainability skills gap (five pilots 2021-23 for people's jobs affected by the pandemic identifying new growth sectors, including the green economy and FE colleges providing retraining.
- The Education and Training Foundation focused on FE staff development and standards to ensure sustainability is in teacher's roles and the college curriculum with guided learning hours and 20 case studies. Supports government's Net Zero strategy and DfE's new FE teacher apprenticeship required to integrate sustainability into their teaching; a standard soon to be incorporated into all future further education teaching qualifications.

- Environmental Association for Universities and Colleges initiatives to cut FE estates emissions include: in 2019 convening Students Organising for Sustainability (SOS), the Association of Colleges (AOC), GuildHE and Universities UK to set up the climate commission for UK higher and further education⁹ and, notably, their climate action roadmap for FE colleges.¹⁰ This document presents a range of scored initiatives for colleges to reach Net Zero emissions; a climate action guide for FE governors¹¹; the "green gown awards"¹² to recognise the most sustainable colleges and universities, and the SDG Accord, ¹³ a group for embedding sustainability development goals in post-16 education.
- SOS UK developed carbontargets.uk.¹⁴ league table for how ambitious HE/FE college carbon targets are.
- AoC established a special interest group for developing Net Zero and climate-change resilient campuses, and published The Green College Commitment.¹⁵
- UK Gov £1.5B upgrade fund for college estates FE Capital Transformation Programme.¹⁶
- Education and Skills Funding Agency non-statutory guidance from August 2021 to streamlined energy and carbon reporting for college corporations,¹⁷ encouraging colleges to publish consecutive years of energy-use data on their websites. However, the experts are clear that mandatory targets on carbon emissions and environmental protection, linked to government accountability measures, are needed. This would be a fast-track to upskill staff and students in sustainability solutions and stimulate the green jobs market.

7 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1031454/SCC_DRAFT_Strategy.pdf

- 8 https://www.instituteforapprenticeships.org/developing-new-apprenticeships/resources/sustainability-framework/
- 9 <u>https://www.eauc.org.uk/climate_commission</u>
- 10 https://users/jessicastaufenberg/Downloads/final_roadmap_25june2020_pptx.pdf
- 11 https://www.eauc.org.uk/the_climate_action_for_university_chairs_guide_
- 12 <u>https://www.greengownawards.org/eauc1</u>
- 13 https://www.eauc.org.uk/the_sdg_accord
- 14 <u>https://www.carbontargets.uk/</u>
- 15 https://www.aoc.co.uk/the-green-college-commitment
- 16 https://feweek.co.uk/next-phase-of-1-5bn-college-capital-funding-programme-launched/
- 17 https://www.gov.uk/government/publications/college-corporation-financial-management-good-practice-guides/streamlined-energy-and-carbon-reporting-for-college-corporations

THE STRATEGY

The Collaborative College Fund (CCF Sustainability Strand) Net Zero Strategy is for everyone at EKC Group, Mid Kent College and Morley College. Everyone has a role to play. We will encourage our community to be sustainability leaders in ways that align with their knowledge, skills and interests. Its success needs widespread engagement and action at an institutional and individual level, and how we undertake research, develop curriculum and act as a community.

Delivering on our ambition will be challenging and will need governance processes to keep us relevant, rigorous, and ultimately accountable. The forums we develop will give opportunity for the diverse voices from across the colleges to challenge progress and suggest new initiatives. Each college will be represented on the CCF Sustainability Steering Group to develop their sustainability plans, to regularly monitor progress against the strategy commitments and publish publicly available annual reports.

THE VISION

Three principles underpin the vision for the FE staff and students:

- To empower every student to adapt to and adopt a sustainability-based culture during their time here at college, and beyond.
- To seek to lead by example, making sustainable and socially responsible lifestyles the preferred culture by fully integrating sustainability into our planning, processes and activities.
- To have the colleges, particularly the students, help mould the transition and co-create solutions with local communities and the wider world.

AIMS

The Net Zero and Sustainability Strategy is intended to be developed, adapted and adopted by each college's own staff and students. This first iteration is a starting point for discussion and review of how to celebrate and integrate the full gamut of activity around economic, environmental and social responsibility issues. We will use our student participation and research capability to inform the operation of the strategy and our estate to test solutions for research and teaching. The aim is to inspire our staff and students to be responsible citizens through their teaching, learning and impact of what they engage with on and off-campus.

The United Nations 17 Sustainable Development Goals (SDGs)¹⁸ provide a framework to guide our sustainability actions ensuring we are taking a holistic view of what it means to be sustainable. The realisation of the SDGs is driven throughout the activities and operations of the colleges. This strategy is an umbrella through which to integrate these other strategies and to recognise their contribution to meeting the SDGs. There are both positive and negative economic, social and natural capital impacts associated with emissions reduction policies and programmes. The overall contribution to sustainable development is generally likely to be positive, particularly when they are planned and implemented together as an integrated whole system. We will become a signatory of the SDG Accord Climate Emergency Letter.¹⁹

IMPLEMENTATION

Good planning and management. To achieve these ambitious targets, we will develop our Action Strategy and Business Plan to be outlined in March 2022 and then developed through a Sustainability Action Network, involving students, staff and alumni. We will develop a Business Management and

¹⁸ https://sdgs.un.org/goals

¹⁹ https://www.sdgaccord.org/climateletter

Programme Plan detailing the additional investment requirements for Net Zero and Sustainability Strategy pathway.

Focus on measures with impact. There will be a range of implementation measures to achieve our carbon and sustainability targets. They will cover, for example, improved energy efficiency in facilities, through more efficient equipment and encouraging behavioural change, e.g., through a Sustainability Champions programme. The energy targets, performance and saving opportunities will be regularly reviewed by the Energy team and through the Environmental Management System. Additionally, lower carbon energy generation options will be explored. This can come in the form of both on- and off-site generation.

The transition to Net Zero will require significant capital investment requirements that are to be determined and sourced and patterns of investment also will have to change. New jobs will be created requiring different skills and education. Consumption and production behaviours in the supply chain and on campus will shift towards greener choices, while each college could face different economic opportunities and challenges.

Cost-benefit analysis will likely show significant co-benefits to the transition to Net Zero including reduced operational, power and heating costs, reductions in greenhouse gas emissions, improvements to air quality, fuel savings, benefits to natural capital, reduced noise pollution from cars, improved health from walking and cycling, warmer buildings from energy efficiency measures and various indirect multiplier impacts in the supply chain and local economy. For example, one estimate suggested up to 20% of the workforce could see demand for their skills affected, either positively or negatively.²⁰

CORE ELEMENTS

There are various foundation building elements to ensure success in deploying meaningful programmes to address the need for a drastic societal shift to combat the growing challenges of inequality, climate change, loss of biodiversity and threats to soil health.

The following provides a first outline of what we intend to commit to. The next stage for all these is the participation of the staff and students to prioritise and

amend these to suit and to set realistic targets that the administrations can then translate into well-resourced Action Plans. The first template for the First Year Action Plan is provided in **Annex D**.

INSPIRE ACTION

Our diverse community creates opportunity to inspire sustainability action locally and internationally. Our staff and students are already engaged with sustainability subjects in various but, as yet, uncoordinated ways, whether through research, taught courses and voluntary initiatives. There is a clear unmet demand and need to adapt and adopt much better teaching and learning about sustainability in and outside of the curriculum. Leadership can create coherence and build space for champions, so the dedicated individuals already engaged can grow a network across the campuses to create new projects and drive change in their colleges.

Be inspired and informed about sustainability. Everyone needs to understand how sustainability and climate change will affect their lives and what it means through introductory training, courses, and events to contribute to departmental sustainability goals.

Everyone has the opportunity to study and be involved in sustainability.

Staff and students are the leaders in the making and through their college experiences can be inspired to be sustainability leaders. The cross-cutting nature of sustainability means that it can be incorporated into all aspects of academic study. This makes it an ideal focus for the connected curriculum bringing together students from across courses to develop solutions to address real-world problems. We will provide opportunities for all staff and students to explore sustainability within their disciplines and through extracurricular activities. We will encourage this interest to continue when our students leave college by engagement with the alumni community.

Be a positive partner and neighbour in our community. We want our local communities around each college to feel welcome on our campuses and to increase the opportunities for them to visit and take an active role in college life.

20 https://www.lse.ac.uk/granthaminstitute/news/green-economy-how- the-transition-to-net-zero-could-affect-uk-jobs-across-the-country/

Our staff and students feel supported to be sustainability leaders whatever their role on campus and beyond. Everyone can show leadership

and contribute sustainable actions to achieve the vision. To be change makers we need to equip our community with the sustainability skills and knowledge to know what choices and actions they can take, whether that is through the induction process for new members, by providing tailored sustainability training for staff or through facilitating peer-to-peer engagement activities. We will create an environment to inspire and challenge each other to consider more sustainable ways of researching, teaching, learning, and operating. We will encourage Champions to be drawn from every level to help initiate sustainability activities and opportunities with impact on and off campus.

Be innovative to find solutions to the challenges and create recognition

and reward for sustainability contributions. No change will happen without people feeling confident to do things differently. Collective thought and action are needed to tackle the challenges, whether through societies, collaborative platforms, research or operating differently. Sustainability managers, leaders and teams will provide advice to build capability and capacity and support staff and students on this journey to include: understanding sustainability risks and opportunities; forming and implementing departmental sustainability plans; ensuring staff and students have completed sustainability training; leading on sustainability and making decisions with a sustainability lens; and inspiring, empowering and enabling staff and students to act on key issues.

Priority Actions

- Setting institutional ambitions to reach Net-Zero that are visible and backed publicly by the executive(s)
- Establish Student Sustainability Council and Staff Sustainability Forum to increase accountability
- Commissioning extensive stakeholder engagement
- Create opportunities for staff and students to study and be involved in learning about and deploying sustainability solutions with improvements to knowledge across the colleges
- Commission mapping of teaching content and graduate skills development
- Recognise and celebrate contributions and building this year on year through a sustainability award programme.

- Disseminate our research to inspire and advocate for action
- Increasing inspiring research and focus to contribute to the Sustainable Development Goals
- Allocate reasonable financial and time resources to the project with short, medium and long-term commitments

RUN COLLEGES SUSTAINABLY

To thrive through the 21st Century, we must deploy economically, environmentally, and socially responsible ways to operate with a new normal. This must be a key consideration in our planning, processes, and culture.

Sustainability is fully integrated into planning, processes, and delivery.

Sustainability is not something that someone else takes responsibility for - it is we, as individuals, do. We will provide the framework for sustainability by embedding it in wider strategies, policies and plans to develop the culture. Each college has a unique contribution to make to the sustainability mission, whether through research, providing careers advice or reducing energy and water use.

We will deploy support measures to identify these opportunities and develop bespoke sustainability plans, including, for example, looking towards achieving external sustainability certification standards, such as ISO 14001, GRI, GRESBE, CDP, SBTi Net Zero and BCorp standards to demonstrate our commitments and ongoing performance.

Research and innovation to deliver positive impact. Much of our work and research is already relevant to the Sustainable Development Goals but is not seen as such in ways that can make a difference. We will seek to increase the impact that these findings deliver by sharing best practice and connecting researchers with industry and community partners to translate these discoveries into enterprise opportunities and real-world impact.

Our estate and operations are a Living Laboratory for sustainability

research. Taken together, the Kent-based FE college campuses are significant urban conurbations in their own right as suitable places to demonstrate innovative sustainability solutions with commercial and industry partners locally and further afield. The estates assets represent a range of challenges for retrofit and new build solutions and or new ways to consider the energy networks and cost avoidance through efficiency improvements and new income streams of the future.

Spark debate to co-create sustainability solutions with the wider world. $\ensuremath{\mathsf{We}}$

will open a dialogue with the wider community to create, test and disseminate sustainability solutions; working with communities locally and globally to co-create solutions and providing informed and digestible science to the students and the general public and that through public engagement we learn from other communities to create effective sustainability solutions.

Priority Actions

- Adopt the UN Sustainable Development Goals as a framework for action
- All college sustainability action plans completed
- Launch live reporting of colleges' sustainability impacts and detailing progress on reducing carbon emissions regularly and publishing in our annual Environmental Sustainability Reports
- Establish local community sustainability forums to share work and increase linkages Increasing opportunities for local people to work and engage with the colleges
- Identify and create testbeds for innovative sustainability solutions
- Explore new sustainability initiatives through Public Policy
- Establish a sustainable procurement strategy that includes sustainability targets for college supply chain
- Establishment of a Net Zero retrofitting strategy for existing buildings and new buildings by 2040 and our institutions by 2040.
- Commission estates energy systems audit
- The strategy and action plans address Scope 1, 2 and broad Scope 3 emissions to reduce impact
- Achieve Living Wage accreditation and pay the Real Living Wage to all directly employed staff and work to ensure the same for all contracted staff
- Roll out first phase sustainable infrastructure (e.g. water fountains, bike parking and sustainable catering)
- Being single-use-plastic free campuses by 2040
- Converting operations to fully circular economies by 2040
- Roll-out of additional sustainable infrastructure (e.g. videoconferencing)

- Being single-use-plastic free campuses by 2040
- Converting operations to fully circular economies by 2040
- Developing an offsetting strategy
- Divesting from fossil fuels and publish records of investment
- Alignment of pension contributions with these goals



GOALS

GOAL 1 Institution by 2040

Reduce energy consumption by 40% by 2040. We will reduce energy consumption both by investing in insulation and energy efficient equipment on campus and by encouraging energy efficient behaviours from the UCL community, whether that's switching off the lights or developing more efficient research computing methods.

Our energy supply is from renewable sources by 2040 (gas and electricity), and we will seek to generate a college-specifc signifcant percentage of our own renewable energy by 2040. We will seek to source all electricity directly purchased to come from 100% UK wind energy backed by Renewable Energy Guarantees of Origin (REGO) certificates. We will review signing a Power Purchase Agreement (PPA) with onshore and/

or offshore wind farms. The future of more sustainable and efficient energy sources will not lie in the traditional combined heat and power plant (CHP) to supply buildings with heat and electricity. PV, energy storage, biogas production and EV systems are some of the technologies that will be assessed to save money and reduce impact.

Deliver global impact while reducing the climate impact of staff and

student travel. We will support our researchers to progress their careers and work with global partners without leaving the UK. We will explore ways to help our staff and students reduce the climate impact of their travel.

Become a climate positive investor. We will review our portfolio of investments and prioritise impact investments in funds which have a positive climatic impact and divest from fossil fuels.

Prepare our colleges to be resilient to the effects of climate change. Our campus and operations will be a living laboratory, testing ways to reduce energy and water use, while adapting to increasing temperatures, flooding, and resource shortages.

Priority Actions

- Source renewable energy provider for electricity to have zero carbon electricity supply
- Perform a climate review of college Investments
- Programme energy efficiency improvements to reduce energy use
- Review buildings for climate change resilience and implement adaptation measures
- Make enhanced video conferencing facilities available as a substitute for travel to meetings
- Upgrade energy network to zero carbon source and extend to provide cooling
- Source renewable energy provider for gas to enable a zero-carbon heating supply

GOAL 2 Inspire and Enable Climate Action and Research

Apply a climate lens to our decision making. If we are to have a positive impact on climate change, we will need to consider the potential climatic effects and risks from all of our decisions by integrating climate considerations into our existing decision-making frameworks.

Develop novel approaches to climate change. We help the FE academic community develop solutions to with minimal climate impact, whether that is for academic travel or laboratory energy use. We will help create a climate innovation hub linking students and researchers from different colleges and subject areas to develop responses to climate change.

Provide the tools for staff and students to mitigate and adapt to climate

change. Every college member can contribute to tackling climate change based on what we provide them with - the knowledge, skills and support to act in a way that resonates with them. We will facilitate induction programmes,

a cross-disciplinary climate change module and give everyone the opportunity to develop a personal climate action plan.

Provide the infrastructure to enable small climate footprints. We will make it easy for our staff and students to reduce their climate footprint, from climate positive meal choices to intelligent heating controls.

Priority Actions

- Launch Climate Accountability Scheme (combining a carbon price with behavioural nudges) to incentivise climate action by departments
- Climate change integrated into institutional decision frameworks
- Introduce 100% vegetarian catering for events and hospitality
- Launch Climate Change Innovation Hub
- Launch personal climate action scheme
- Launch interdisciplinary climate change module

GOAL 3 Enable Supply Chain Improvements and Choice through Responsible Sustainable Procurement

Working with responsible suppliers. Modern supply chains often involve numerous companies in creating one product. This presents a challenge around issues, such as modern slavery and human rights. We are committed to better understanding our supply chains and working towards greater transparency and responsibility towards people working in them.

Through the contract management process, we will develop and implement a robust sustainable procurement strategy that will require all our suppliers to evidence how they are implementing and enforcing effective systems and controls to tackle the important SDG issues, such as slavery and human trafficking. We will monitor supply chains that have been identified as a potential risk and take appropriate action as necessary.

Support our local economy. We will make it easier for SMEs and local businesses to supply the colleges through our procurement processes. We will continue to pay the Real Living Wage to all directly employed and contracted staff.

Priority Actions

- Achieve certification in the Responsible Procurement Code
- Engage top 500 suppliers to ensure all are within high-risk categories are signed up
- Modern Slavery audits in high-risk categories, e.g., food, electronics and construction
- Work with our suppliers with the aim of introducing sustainability ratings for products on the e-market place and canteens
- Partnership with others to increase the plant content of all our meals reducing the climate impacts of meat



Reduce Our Waste Per Person By 50% By 2040

Consume less by reducing, reusing, repairing, and sharing. We will procure items through a life cycle assessment of cost so that durable items and standardise specifications across the colleges become standard. Our priority will be to repair, not to buy new. We will provide platforms to share and swap items from clothes to scientific equipment. Through a track and trace system in a logistics hub we can have an inventory of all goods delivered to the colleges – enabling consolidation and innovations like packaging take-back schemes to be instigated.

Single use items become a thing of the past. We will enable this with better systems and infrastructure, for example hand-dryers instead of paper towels and electronic records management instead of paper. Building on, for example, the Ditch the Disposable Initiative at UCL, we can reduce the number of disposables and single-use plastic used and work with our suppliers, researchers, and community to introduce and develop alternatives.

Maximise the value from our waste products. We will commit the colleges being Zero Waste to Landfill Institutions and to get better value out of our waste products by adopting a Circular Economy approach that recognises the value in waste streams. Alongside existing schemes, we will increase the facilities for new recycling streams, such as 3D printing polymer and biodegradable/recycled coffee cups. We will work towards an 65% recycling rate while reducing the proportion of our waste sent to energy

recovery. To inspire our community to reduce waste and recycle more we will provide better recycling facilities and improve the transparency about what happens to our waste.

Priority Actions

- Train purchasing staff in sustainable and ethical procurement best practice
- Review event catering to reduce food waste and expand existing waste food redistribution schemes
- Establish logistics hub and start track and trace for deliveries
- Launch high profile recycling communications campaign
- Roll-out key single-use plastic alternatives in catering and laboratories
- Put Electronic Records Management System in place

GOAL 5 Create Biodiversity Net Gain Advantages by Planning for Nature

Introduce nature-based solutions to college campuses. Working with Councils and other local partners, we will identify and make natural interventions, such as green walls, living/green roofs, and pocket gardens to increase resilience to flooding and overheating, increase biodiversity, reduce pollution and provide valuable amenity space. These projects provide the perfect place to partner with researchers to test novel solutions. We will establish Networks with local community groups and NGOs to strengthen relationships and provide opportunities for individuals to engage in a wilder, happier public realm.

Priority Actions

- We will consider opportunities for amenity and biodiversity enhancements at all campuses
- Baseline environmental and social challenges and opportunities assessments at all campuses
- Design a Living Landscape plan for all colleges with the community

- Establish Biodiversity Net Gain Networks to co-create nature-based frameworks
- Implement a series of nature-based green infrastructure projects to achieve extra biodiverse space.

GOAL 6 Increase Health and Wellbeing for our Communities

Reduce congestion and pollution locally. We will seek measures to consolidate deliveries and reduce the number of vehicles movements to make the public realm safer and less polluted. We will monitor air pollution and introduce appropriate greening to reduce pollution locally.

Provide the infrastructure to enable healthy and active travel choices.

Active travel, such as walking, cycling, and scooting is a key means of reducing air pollution and increasing wellbeing. Working with local Councils and other stakeholders, we will make it easier, safer, and more enjoyable to get to and around the colleges by improving active travel routes and providing the infrastructure from showers to cycle confidence training.

Partner with our local community to solve social challenges. Nature-based engagement programmes will connect our staff and students with our local environment and community, such as growing and conservation initiatives partnered with existing student societies.

Create healthier internal environments. We will integrate measures to improve the wellbeing of our internal environments, such as biophilic design, improved daylighting, and air quality measures to improve wellbeing and productivity, e.g. the WELL standard.

Priority Actions

- Develop an active travel strategy in partnership with Councils and other local stakeholders
- Develop a series of nature-based wellbeing initiatives
- Launch live air pollution monitoring for the college campuses
- Implement active travel infrastructure programmes

ANNEX A. USEFUL RESOURCE LINKS

(source: https://www.aoc.co.uk/useful-resources-and-links)

This resource support tool can be expanded under the next review.

ESFA guidance on energy and carbon reporting for colleges²¹

Aimed at finance directors, principals, and governors of sixth form and further education corporations.

SORTED Guide to Sustainability in Further Education²²

Specific guidance on embedding sustainability into every aspect of your organisation.

Making the case for business sustainability²³

A guide for sustainability leaders

Climate Emergency Framework²⁴

Areas that institutions need to develop their own response to, along with resources to help and guide.

Engaging professional departments with sustainability²⁵

Guides aiming to foster further collaboration and embed sustainability at a departmental and institutional level.

Climate change adaptation²⁶

Why, and how, to effectively embed considerations of climate change risk within your existing risk and business continuity procedures.

Guide for members of governing bodies ²⁷

A guide to highlight the institutional benefits available through making sustainability a 'top team, top table issue', and one that complements and enriches current agendas.

- 21 https://www.gov.uk/government/publications/college-corporation-financial-management-good-practice-guides/streamlined-energy-and-carbon-reporting-for-college-corporations
- 22 https://www.sustainabilityexchange.ac.uk/sorted_guide_to_sustainability_in_further_educa
- 23 <u>https://www.sustainabilityexchange.ac.uk/making_the_business_case_for_sustainability</u>

24 https://www.sustainabilityexchange.ac.uk/cef

- 25 https://www.sustainabilityexchange.ac.uk/epd
- 26 https://www.sustainabilityexchange.ac.uk/adaptation
- 27 https://www.sustainabilityexchange.ac.uk/a_guide_for_governors

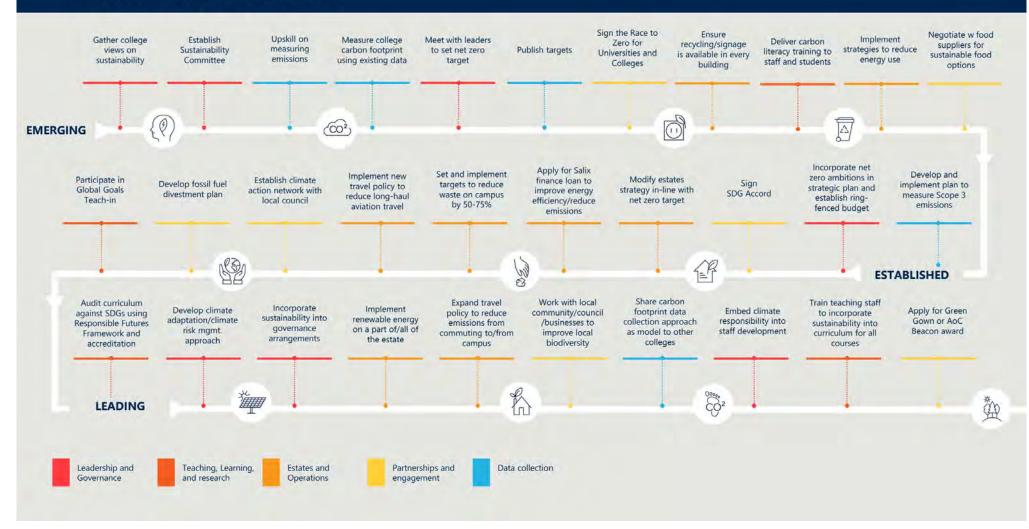
ANNEX B. KEY WORDS AND DEFINITIONS

The following table contains definitions for some of the key words used in this document and can be further developed in the next review.

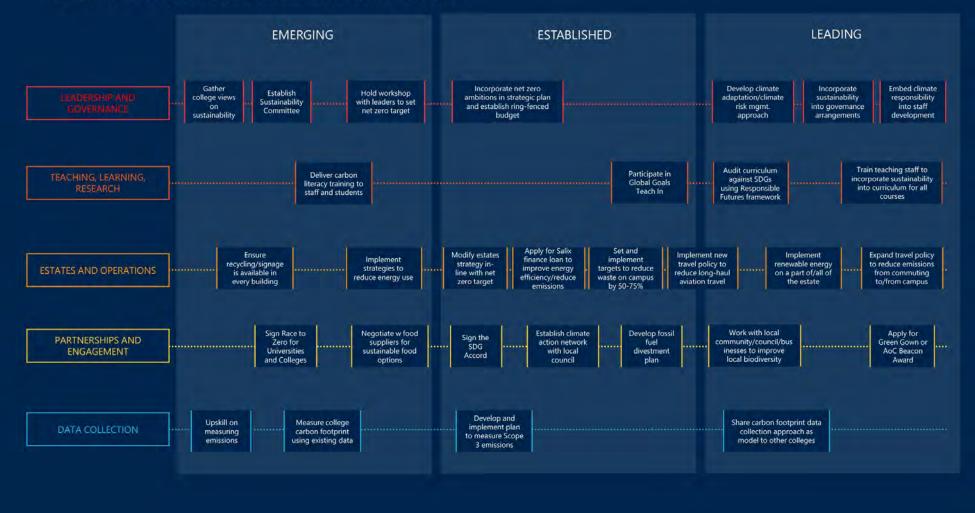
KEY WORD	DEFINITION
Climate change	Changes in the large-scale, long-term shift in the planet's weather patterns and average temperatures. For more information on climate change and what causes it, visit the Met Office web page.
Climate emergency	The situation in which urgent action is needed to reduce or halt climate change to avoid catastrophic environmental damage, and its effects on people and communities.
Carbon footprint	The amount of carbon dioxide released into the atmosphere as a result of the activities of an individual, organisation, or community. 'Carbon' is used as a shorthand to also include other greenhouse gases (e.g. methane and nitrous oxide) which cause climate change.
Net Zero	Achieving an overall balance between emissions produced and taken out of the atmosphere.
Biodiversity	The variety of life on Earth in all its forms and interactions. Biodiversity on earth is being lost at an alarming rate. This loss of species and natural systems threatens the food we eat, the water we drink, and the air we breathe.
Environmental sustainability	Maintaining or 'sustaining' the environment by protecting natural capital and resources and preventing damage through climate change.
Scope 1, 2, and 3	Scope 1, 2, and 3 are different categories of emissions. Scope 1 emissions are those directly under a college's control (e.g. from cars owned by the college). Scope 2 are indirect emissions (meaning the college does not directly control them) from electricity purchased by the college. Scope 3 emissions are all other indirect emissions from activities of the college, including travel to and from college, emissions from waste and water, and emissions from investments. Scope 3 is usually the largest category of emissions.

ANNEX C. THE EAUC FE CLIMATE ACTION ROADMAP

FE CLIMATE ACTION ROADMAP



CLIMATE ACTION ROADMAP ACTIVITIES BY AREA



EMERGING COLLEGES INITIATIVES (1)

Leadership and Governance.					
INITIATIVE	WHY DO IT?	HOW MUCH WILL IT COST?	HOW LONG WILL IT TAKE?		
 Gather college's views on climate change and sustainability. Develop and distribute a short online survey to students and staff to gather their views on sustainability and assess their ambition for action in the college. Include questions like 'how important is sustainability for you?', and 'in what ways would you like to see the college respond to climate change?' 	Understanding the appetite for action to combat climate change among the college community will help to build the case for change	Staff time is involved in designing, distributing, and analysing the survey	~2 months		
 Establish a Sustainability Committee/Group: Establish a group of roughly 10 people who meet regularly, with responsibility for delivering sustainability initiatives. The group should include students and staff, including a member of the college's leadership team 	This group will give a face to, and help to drive forward the sustainability agenda in the college. Including a member of the leadership team will ensure the group has clout. Including students will make sure it is representative of the whole community.	Only cost is staff time involved in the committee	~1 month		
 Meet with college leaders to set net-zero targets and sustainability ambitions Hold meeting/workshop with Sustainability Committee, senior leadership team, and governors to discuss level of ambition for net zero and sustainability targets Set net zero target (e.g. 2050, or more ambitious and earlier?) Set interim targets (e.g. 50% reduction by 2030) 	College leaders will ultimately be responsible for delivering on these targets, so it is important they are involved in setting them. Having an explicit discussion about the level of ambition, and how quickly the college can achieve net zero, will help to ensure initiatives are practical and appropriate to the college's context.	Staff time being involved in the workshop	 1 month (including preparation and holding the meeting) 		
 Publish targets Based on the results of the workshop, share the college's net zero target and interim targets (e.g. net zero by 2040, 50% reduction in greenhouse gas emissions by 2025) with the wider college community Publish targets on college website 	Publishing targets signals the college's sustainability ambitions to the whole community, including partners and external stakeholders. It should also help to hold the college to account.	Staff time (e.g. marketing/communications team/individual)	~1 week (working between sustainability committee and communications person/team)		

EMERGING COLLEGES INITIATIVES (2)

Data collection			
INITIATIVE	WHY DO IT?	HOW MUCH WILL IT COST?	HOW LONG WILL IT TAKE?
 Upskill on measuring emissions/carbon footprint Sustainability team and others learn about how to measure carbon footprint, including Scope 1, 2, and 3 emissions. Use resources like <u>Greenhouse Gas Protocol</u> guidance, and <u>guidance from EAUC on measuring Scope 3 emissions in HEI context.</u> Connect with other colleges (e.g. leading colleges) to learn from others in the sector Sustainability committee share their knowledge with others 	Measuring an institution's carbon footprint can be tricky. Take the time to first learn how to do this, drawing on external resources. Educating others will help reporting to be more effective	Staff time to upskill and share resources	~1 month
 Measure college carbon footprint using existing data Sustainability team collect available data to measure College's carbon footprint. Aim to measure Scope 1 and Scope 2. Try to estimate Scope 3, if possible Use freely available existing tool to measure and project emissions, such as <u>Carbon Footprint and Project Register Tool.</u> 	Even if the college has patchy data, it is important to measure it current carbon footprint as accurately as possible, to establish a baseline and inform your net zero targets. This should also reveal gaps in the college's current data collection.	Staff time involved in collecting data/measuring	-2-3 months
Teaching, learning, and research			
INITIATIVE	WHY DO IT?	HOW MUCH WILL IT COST?	HOW LONG WILL IT TAKE?
 Deliver carbon literacy training to all staff and students Design and deliver 1-day carbon literacy training to all staff and students with support from the <u>Carbon Literacy Project</u> (which offers a day's worth of training on climate change, carbon footprints, and other environmental issues) 	The college community must have a good understanding of climate change, what causes it, and how it is likely to affect them if they are to take action in response. The Carbon Literacy project delivers this foundational understanding and shows individuals actions they can take to reduce their individual environmental impact.	There is a cost involved in the Carbon Literacy Project certifying/delivering training for the college. For more information contact info@carbonliteracy.com	~2 months to arrange and then deliver training

EMERGING COLLEGES INITIATIVES (3)

INITIATIVE	WHY DO IT?	HOW MUCH WILL IT COST?	HOW LONG SHOULD IT TAKE?
 Implement strategies to reduce energy use Identify opportunities to reduce energy use (e.g. by doing an energy walk-around, different heating and cooling timers, campaigning to switch-off lights). Draw on free and publicly available resources/guidance, such as the <u>Carbon Trust's guide to energy saving</u> Report to the college community how much energy has been saved and the impact on the college's carbon footprint 	There are likely to be several, low or no-cost initiatives the college can implement to reduce its energy use before it begins to explore higher cost options to increase energy efficiency and eventually explore renewable energy. Focusing on these 'quick wins' first will reduce the college's carbon footprint straight away and build momentum for future initiatives.	Staff time involved in designing and implementing initiatives	It may take longer than 6 months to design and implement these initiatives and report on their results
 Ensure recycling, food waste, and signage is available in every college building Check recycling bins and food waste bins (where possible) are available in every college building with signs showing people how to recycle/dispose of food waste 	Having the right bins available and guidance for what to put in them will help to divert more of the college's waste away from landfill, reducing emissions from landfill and the pollution the college creates. It will also educate students about recycling and encourage positive behaviour towards waste.	Cost of additional bins, collection points (if needed) and signs	~2 months
Partnerships and Engagement			
	WHY DO IT?	HOW MUCH WILL IT COST?	HOW LONG SHOULD IT TAKE?
 Negotiate with campus food suppliers to supply sustainable food options Understand how sustainable are the food options on your campus (consider number of vegetarian/vegan options available, food miles, and seasonality) Develop a set of criteria for more sustainable food. Check for resources and information on <u>Sustain</u>. Procurement team and sustainability committee negotiate with food suppliers to ensure more sustainable options are available, based on criteria 	A significant proportion of carbon emissions come from food we produce, eat, and waste; and some foods – like beef, lamb, cheese, and chocolate ¹ – have higher carbon footprints than others. Other factors, like how far away food comes from and whether it is in season, also affect its environmental impact. Offering sustainable food options allows students and staff the choice to reduce their personal environmental impact and contributes to positive behaviour change across the college.	Cost should be borne by the supplier and consumers	3-6 months to negotiate change and implement
Partnerships and Engagement			
	WHY DO IT?	HOW MUCH WILL IT COST?	HOW LONG SHOULD IT TAKE?
 Sign the Race to Zero for Universities and Colleges College Principal sign the <u>Race to Zero for Universities and Colleges</u> on behalf of the college – a global commitment for institutions to commit to becoming net-zero. 	Demonstrate the college's commitment to climate action and increase the growing pressure on governments to act in response to climate change. It recognises the important role of education in responding to climate change at a global level and is an initiative by <u>UNFCCC</u> and is championed at COP events.	No cost	

(1) Poore, J., & Nemecek, T. (2018). Reducing food's environmental impacts through producers and consumers. Science, 360(6392), 987-992

ANNEX D. THE FIRST YEAR ACTION PLAN

This template has been drawn from the Strategy template as it stands and prior to any direct participation, consensus, priority setting and resource planning from within the Kent-based FE college's staff and students. As such, this needs to be developed and upgraded accordingly. The Plan can be a calendar year setting or adjusted to a financial year to fit with accounting budgeting and management practices, as required. The setting is the current CCF financed project which culminates at the end of March 2022, after which the whole process needs to be fully internalised and managed under its own new setting. This needs to be incorporated into a wider integrated approach between the colleges under one umbrella to ensure coherence and convergence.

ACTIVITY	BUDGET HOLDER	WHO RESPONSIBLE	START DATE	END DATE
Relevant CCF meetings timetabled	CCF	CCF	1 Jan 2022	30 Mar 2022 Then ongoing
Advisors for best practice engaged	CCF	CCF	1 Jan 2022	30 Mar 2022 Then ongoing
Carbon footprint analysis completed	CCF	CFG/Carbon Trust/Hillside Environmental/CCF	Dec 2021	14 Jan 2022
Net Zero and Sustainability Strategy drafted	CFF	CFG/CCF	13 Jan 2022	21 Jan 2022
Individuals college Net Zero and Sustainability Strategy priorities identified	CCF	CFG/CCF	24 Jan 2022	30 Mar 2022 Then ongoing
Systems and SDG approach to monitor and analyse progress designed and in place	CCF	CFG/CCF	24 Jan 2022	30 Mar 2022 Then ongoing
First strategy review and target setting	CCF	CCF	1 Feb 2022	29 Feb 2022
Second strategy review and target setting	CCF	CFG/CCF	1 Mar 2022	30 Mar 2022
Publish Strategy and targets	CCF	CCF	24 Jan 2002	ongoing
First Project Management evaluation	CCF	CCF	15 Mar 2022	30 Mar 2022 Then ongoing
Data collection skills, systems and needs identified	CCF	CFG/CCF	15 Jan 2022	30 Mar 2022 and ongoing

ACTIVITY	BUDGET HOLDER	WHO RESPONSIBLE	START DATE	END DATE
FE Sector Guide drafted	CCF	CFG/CCF	24 Jan 2022	4 Feb 2022
Design and identify piloting new approaches to deliver carbon reduction and integration into research, skills and curriculum development	CCF	CFG/CCF	24 Jan 2022	4 Feb 2022 and ongoing
Sustainability Forums, Governance and feedback systems in place	Various	Various - to be detailed	1 Feb 2022	30 Mar 2023
Gather college views on sustainability	CCF	CFG/CCF	15 Jan 2022	30 Mar 2022 and ongoing
Staff/student engagement and education and curriculum, reset reviewed, designed and in place	Various	CCF	24 Jan 2022	30 Mar 2022 and ongoing
Sign Race to Zero for HE/FE	CCF	CCF	1 Feb 2022	30 Mar 2023
Sign the SDG Accord	CCF	CCF	1 Feb 2022	30 Mar 2022
Establish Sustainability Rewards and Awards Scheme	CCF	CFG/CCF	1 Feb 2022	30 Mar 2022
Budget management and new activity lines identified	CCF	CFG/CCF	1 Feb 2022	30 Mar 2023
Interim Business Plan developed	CCF	CFG/CCF	1 Feb 2022	30 Mar 2022
First Business Plan developed	CCF	ТВС	1 Apr 2022	30 Mar 2023
Financial strategy and funding arrangements in place	Various	CCF	1 Feb 2022	30 Mar 2022 and ongoing
Audit and design strategies for energy/building management	CCF	CFG/CCF	1 Feb 2022	30 Mar 2022
Implement strategies to rationalise energy and building use and management	CCF	CFG	1 Apr 2022	30 Mar 2023
Develop plan to manage Scope 3 emissions	CCF	CFG	1 Feb 2022	30 Mar 2023
Review of retrofit and new build sustainability management plans and approaches	Various	CFG/CCF	1 Feb 2022	30 Mar 2023
Deliver carbon literacy training to staff and students	CCF	ТВС	1 Apr 2022	30 Mar 2023
Review, design and deploy a circular economy approaches across all campuses	CCF	CFG/TBC	1 Apr 2022	30 Mar 2023
Ensure recycling/signage available in every building	CCF	TBC	1 Apr 2022	30 Mar 2023

ACTIVITY	BUDGET HOLDER	WHO RESPONSIBLE	START DATE	END DATE
Negotiate with food and other suppliers for sustainable options and Scope 3 reporting	CCF	ТВС	1 Apr 2022	30 Mar 2023
Audit/design new approaches to promote Biodiversity Net Gain, Well Being improvements across campuses	CCF	CFG/TBC	1 Apr 2022	30 Mar 2023
Apply for Green Gown or AOC Beacon Award	CCF	CCF	1 Apr 2022	30 Mar 2023
Align with EAUC's 'Sustainability Leadership Scorecard'/ AOC carbontargets.uk evaluations	CCF	Various	1 Feb 2022	30 Mar 2023
Plan entry into relevant certification processes	CCF	Various	1 Feb 2022	30 Mar 2023
Plan adoption of the WELL standard into college affairs	CCF	CFG/CCF	1 Apr 2022	30 Mar 2023

Signed for and on behalf of the Carbon Free Group

B. Spooner

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21st January 2022