SUSTAINABILITY & ENVIRONMENT FRAMEWORK AND ACTION PLAN

2025 - 2030

ABSTRACT

City College Norwich's plan to reduce carbon emissions and act responsibly in addressing the factors accelerating climate change globally whilst equipping our students to do likewise throughout their lifetimes.

EASTON COLLEGE

PASTON COLLEGE

CITY COLLEGE NORWICH

City College Climate Action Plan 2024-2030

Contents

EASTON COLLEGE PASTON COLLEGE CITY COLLEGE NORWICH

Context

The impact of climate change is already dramatically affecting the Sub-Saharan African region with rising temperatures leading to a 30% drop in agricultural output, loss of lives and animal species. Whilst less likely to cause significant loss of lives it is already affecting low lying Norfolk considerably with rising sea levels and extreme weather events already causing erosion on the northeast coastline and flooding in the Broads and other areas.

Credit: © Mike Page www.mike-page.co.uk

However, there are opportunities to inform, educate and act to mitigate the continued impact of mankind on the environment. The college is in a position to equip our young people with the green skills to work in industries striving to reduce their impact on the environment and driving innovation in that sector. The college also is committed to reducing the impact of its own operational activities on carbon emissions and the environment. This plan outlines the actions required to do so and the timeframe for implementing those actions.

The UK government has legislated to achieve net zero emissions on all Green House Gas emissions by 2050 under the 2008 Climate Change Act - the education sector needs to meet this target.

A key initiative of DfE's sustainability and climate change strategy for education is 'sustainability leadership and climate action plans'.

The strategy states: "By 2025, all education settings will have nominated a sustainability lead and put in place a climate action plan". This includes early years settings, schools, multi-academy trusts, colleges, and universities. The action plan needs to be approved by Governors and submitted to the DfE.

Sustainability leadership could be a group of people or an individual responsible for the development and implementation of a climate action plan.

A climate action plan is a detailed plan to enable your education setting, or trust, to progress or commence sustainability initiatives.

City College Norwich's plan includes a commitment to working towards being a Net Zero Emissions producing organisation by 2030, significantly ahead of this target. This is a considerable and ambitious undertaking which will require significant investment and drive.

The Association of Colleges, EAUC, GuildHE and Universities UK have partnered to establish a Climate Commission for UK Higher and Further Education Students and Leaders.

The Climate Commission urge every university and college to sign up to the Race to Zero for universities and colleges https://www.sdgaccord.org/race-to-zero-for-universities-and-colleges to date 130 UK institutions have signed up including ours.

EAUC – (Environmental Association for Universities and Colleges) the alliance for sustainability leadership in education is a not-for-profit charity with a membership of over 220 universities and colleges, supporting sustainability within the UK tertiary education sector.

The EAUC are leading the sector in developing a response to the Climate Crisis and have developed a Climate Emergency Framework (CEF). The college has adopted this framework under which to produce and implement our Climate Action Plan.

Climate Emergency Framework | Sustainability Exchange

Aligned to this framework is The Climate Action Roadmap for FE Colleges (Produced by the Climate Commission for UK Higher and Further Education with Nous Group) which is an example roadmap showing the type of activities a college can undertake to move from an Emerging College to an Established College and finally a Leading College (See Appendix 5).

Climate Commission and Nous Group Climate Action Roadmap for UK FE Colleges | EAUC

https://www.eauc.org.uk/file_uploads/final_roadmap_25june2020.pptx

Our sustainability aspirations

Working towards the climate plan, a key element is about integrating actions across the college in daily business and having conversations with staff and students about how to be a sustainable citizen. It is also about ensuring that the transformation of college buildings, energy and land are seen as a learning opportunity.

OUR COMMITMENT - To protect and enhance campuses by **minimising the environmental impact from buildings, land, and infrastructure.**

What this means;

- Developing decarbonisation initiatives
- Adopting sustainable approaches to transport, energy, water and waste management
- Managing land sustainably and developing and implementing a biodiversity plan

OUR COMMUNITY - To foster a **culture where staff, governors and students care about sustainability**, are trained, and have the skills and knowledge to continuously improve practices and ensure environment and sustainability are embedded through all our areas of work.

What this means;

- Working across teams to reduce, recycle and reuse
- Working with suppliers and contractors to reduce emissions

- Training and awareness raising

OUR ROLE - To **embed climate and sustainability education into the curriculum** and wider enhancement activities to enable learners to develop the knowledge, skills, values, and attitudes to equip them with the changing skillsets for their chosen careers and lives.

What this means;

- Teaching sustainable business practices across the curriculum
- Encouraging a green mindset through enrichment programmes
- Developing and delivering green skills and supporting green jobs

WORKING TOGETHER - To **demonstrate clear leadership and governance** in tackling climate change working with learners, communities, businesses, the voluntary sector and key partners to foster a culture where staff and students care about sustainability and continuously improve their own and collective practices.

What this means;

- Supporting partnerships across Norfolk
- Embedding sustainability into all governance and decision-making forums and across all we do in our teams

Scope

The four core areas for delivery of the framework are outlined below and are aligned to a Sustainability Leadership Scorecard which is a tracking tool and is accessible for a small annual cost enabling sector wide comparisons to take place also.

Climate Action requires considerable investment and returns are usually longer term or simply do not exist. It should be noted that the benefits are much wider, and consideration needs to be given to how to fund the reduction of carbon emissions.

Additionally, there is a requirement for data to measure both baseline information and to track and report on performance against the plan. Rather than define that under a separate heading that requirement is embedded within the other sections.

This plan is designed to deliver on a range of targets and initiatives. It will require commitment and resources to succeed.

Leadership and Governance

This includes Staff Engagement and Human Resources, Leadership, Health and Wellbeing and Risk.

General Principles

Set Ambitious Goals

Define clear and ambitious targets for the college to achieve net-zero emissions. The most common goal is to achieve carbon neutrality by reducing emissions and offsetting the remaining emissions, although the latter is considered a last resort.

Measure, Track and Publish

Progress should be routinely tracked and published on the college's website. Climate anxiety is experienced by current and prospective learners who expect the college to be taking action.

Develop the Culture

Inform and educate staff, students and stakeholders in carbon literacy and collective responsibility to enact initiatives.

Manage the Risks

Develop a risk management approach to the impact of climate change and the costs and implications of mitigating actions for the college.

Task	Purpose	Timeframe
Select Governors to lead on Climate Action.	The plan should be agreed, and performance monitored by governors.	2024
Engage Governors through EAUC resources and a training session.	To make governors aware of the benefits and impact of a sustainable organisational approach. A Guide for Members of Governing Bodies | Sustainability Exchange The Education Training Foundation (ETF) have an excellent Climate Action Governance Development Programme designed for colleges. Governance Development Programme | ETF Booking (etfoundation.co.uk)	2024
Appoint Climate Action Manager	A dedicated role should be recruited with the remit of developing and delivering the Climate Action plan objectives through collaboration with other parties. This was recommended by the College Collective sustainability workstream and the ESOS HDP report.	2024
Set net zero targets. (Appendix 4)	Using the carbon baseline reports, agree net zero targets with Governors and the Leadership	2025
Publish commitment and carbon reduction targets on website.	This is part of the commitment to Race to Zero which the college has signed. It is also a statement to learners, parents and stakeholders as to the college's intent. The website should also show progress to date and recognise the Climate Emergency explicitly.	2025
Agree a Budget	Establish a ring-fenced annual budget to meet the objectives identified within the Climate Action Plan.	Connected to the financial strategy

Utilise the Sustainability Leadership Scorecard to measure, report and improve progress on a whole institution approach.	This will track progress of the initiatives set out within the Climate Action Plan and how that produces a progress score compared with sector organisations. https://www.eauc.org.uk/sustainability_leadership_scorecard (There may be a small cost involved)	2026 / 2027
Carbon Literacy Project training for staff and key student reps.	Consider a strategy for the adoption of CLP across the college. This could involve governors, staff governors, student governors, SLT, staff who wish to become advocates and ambassadors, interested students and various members of the SU. EAUC are partnering with Carbon Literacy Project on developing this for the sector. Information available on the Training Days is available here.	2025/2026
Create a cross departmental Climate Action Steering Group within the organisation.	Approximately 10 people. 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.	2025
Commitment to net zero target/sustainability is reflected in strategic plan.	Requires a meaningful ring-fenced budget to deliver on it (which includes funds students/staff can bid for to deliver sustainability projects).	2024
Report annually on progress on meeting net zero targets and interim targets, to the college community and the public	This should be tracked by governors through the selected committee and published internally and on the college's website and the Race to Zero website. Other stakeholder engagement such as newsletters or employer engagement should be considered. The One-College App can be utilised to engage the student community.	2025
Undertake a climate change risk analysis for your institution and work out your action plan	Utilise EAUC resources to assess the risks to infrastructure, business continuity, health and wellbeing that climate change bring. https://www.sustainabilityexchange.ac.uk/adaptation adapting_universities_and_colleges_to_a_changing_climate_-_eauc__hebcon_-_june_2019.pdf (sustainabilityexchange.ac.uk)	2026/2027
Use EAUC measuring and reporting tools to track carbon reduction	Use the tools to develop reporting and dashboards for governors and leadership to track progress against targets.	2026/2027

Credit: © Sheringham Shoal

Estates and Operations

This includes Resource Efficiency and Waste, Biodiversity, Construction and Renovation, Water, Travel and Transport, Climate Change Adaptation and Energy.

Whilst the race to net zero is a college wide undertaking and cannot be achieved without a collective responsibility, the majority of emissions are in the area and influence of Estates and Facilities Management.

General Principles

Baseline Assessment

Start by conducting a thorough assessment of the college's current carbon footprint. Identify the main sources of emissions, such as energy consumption, transportation, waste management, and other relevant activities.

Energy Efficiency Measures

Implement energy-saving measures throughout the college campus, including upgrading lighting systems, optimizing heating, ventilation, and air conditioning (HVAC) systems, and installing energy-efficient appliances and equipment.

Renewable Energy

Transition to renewable energy sources to power the campus. Install solar panels, wind turbines, or consider purchasing renewable energy from local providers.

Sustainable Transportation

Promote sustainable transportation options for staff and students. Encourage cycling, walking, and carpooling, and provide incentives for using public transportation.

Waste Management

Develop a waste management plan to reduce, recycle, and properly dispose of waste. Implement recycling programs and promote waste reduction strategies across the college.

Green Building Standards

Incorporate sustainable design principles into new construction and renovation projects. Use eco-friendly materials, design energy-efficient buildings, and aim for green building certifications like BREEAM.

Task	Purpose	Timeframe
Produce baseline assessment of carbon emissions for all sites and activities.	To build on the HDP received and produce the baseline measure against which reductions can be applied by works within this plan.	2025
Measure separately the baseline carbon footprint of the farm operation at Easton.	Use a specialist contractor to measure the farm baseline and consider options for decarbonisation.	2025
Incorporate Climate Action targets into 10-year estates strategy, differentiated by site.	To reflect a commitment to net zero targets, including an ambition to optimise the use of the estate (rather than build new buildings), refurbish buildings to improve their efficiency, and applying BREEAM standards to new buildings.	2025/26

Prepare for and consider bids into the Public Sector Decarbonisation Scheme (PSDS)	Prepare the additional works itemised in the HDP that will be required in order to bid for boiler replacements and insulation schemes identified within the HDP. Phase 5 Public Sector Low Carbon Skills Fund | Salix Finance	On-going
Investigate private sector funding initiatives.	Government funding may not be available. This could realise benefits earlier.	On-going
Commission a condition survey report for plant at all sites.	To form a basis for planned divestment from fossil fuel-based plant based on age and condition.	2026/2027
Implement strategies to reduce energy use. Energy walkaround, campaigning to switch-off, close windows etc.	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.	2025
Ensure recycling, food waste, and signage is available in every college building	Rationalise operations across all sites with additional signage to inform site users as to what happens to waste.	2026
Negotiate with campus food suppliers to supply sustainable food options	Reduce scope 3 emissions including indirect emissions caused by food miles and greenhouse gas emitters such as cows and sheep. Include carbon labelling for food items.	At next catering tender (2025)
Produce feasibility study for installation of an anaerobic digestion plant at Easton.	To develop a carbon neutral (or better) farming operation with multiple benefits including marketing and power generation. **See Appendix 3**	2025/26
Analyse Scope 3 emissions and produce plan for mitigation.	To begin to address less direct or substantial sources of carbon such as staff commuting, waste disposal, driving for work etc. **See Appendix 1**	2026
Apply for a Sustainable Farming Incentive (SFI) payment	Sustainable Farming Incentive guidance - GOV.UK (www.gov.uk) To increase sustainability through more sympathetic management of nutrients, hedgerows, flora strips, buffer strips and wildlife amongst other things.	On-going

Green Travel Plan	Update the Green Travel Plan to incorporate options to reduce scope 3 emissions and provide sustainable options for all types of business travel and commuting.	2026
Electric Vehicle Chargers	Provide charging at each site for the fleet vehicles, visitors, staff and students. To reduce scope 1 and 3 emissions.	2026/2027
Analyse fleet vehicle requirements with the aim of replacing with electric leased vehicles.	Reduce scope 1 emissions from what is primarily an aging and inefficient diesel fleet with a predictable operating expenditure cost.	On-going

Credit: © Lanpro -Trowse solar farm, Norwich.

Partnerships and Engagement

This includes Community and Public Engagement, Business and Industry Interface, Procurement and Supplier Engagement and Food and Drink.

General Principles

Engage with local communities, businesses, and government organizations to collaborate on sustainable initiatives. Form partnerships with relevant stakeholders to achieve shared sustainability goals.

Task	Purpose	Timeframe
Procurement and supply chain	To ensure suppliers and contractors are procured without conflicting with our climate action plan and reducing scope 3 emissions.	2025
Incorporate sustainability as a key pillar of the marketing strategy. Becoming a leading local organisation in Climate Action.	Students and parents expect it of a community college, and this is a significant growth sector for employment in line with Skills and Post-16 Education Act 2022 91% of 6000 surveyed students say they agree their place of study should actively incorporate and promote sustainable development (Manchester Metropolitan)	2025
Develop a communication matrix for green skills and sustainability.	To inform internal and external stakeholders of the initiatives taking place both small and large.	2025/2026
Establish community and council links with a shared aim to combat climate change locally.	To align our plan with the Norfolk County Council Climate Strategy aims and objectives for adaptation and response. NCC has yet to declare a climate emergency but has a very comprehensive response document.	2025
Produce fossil fuel divestment plan.	Working with partners and Estates to enable a move away from non-sustainable, carbon producing fossil fuels in scopes 1-3.	2026/2027

Credit: © Beryl

Student Outcomes: Teaching, Learning and Research

This includes Research, Learning and Teaching and Student Engagement

General Principles

Education and Awareness

Raise awareness and promote sustainability throughout the college community. Conduct workshops, seminars, and campaigns to educate staff and students about the importance of carbon reduction.

Task	Purpose	Timeframe
Implement a Carbon Literacy Training plan for all students.	To enable them to work with leaders to develop co-constructed curriculum, catering and travel plans.	2026/2027
Establish a network for Green Skills leads to joint locally or nationally.	To share good practice and develop initiatives and rationales for use within the college.	2025
Ensure climate change mitigation is on all curricula.	Building student awareness of the issues and what we are doing. Engage with Responsible Futures	2025/2026
Integrate Green Skills into curriculum as appropriate to local and national needs.	To develop students to work in the green skills sector or improve sustainability in other sectors.	2025/2026
Develop a Renewables centre at Easton campus.	Provide green skills through an apprenticeships renewables pathway and low carbon heating pathway.	2024
Involve student in biodiversity projects on all sites.	Through the Climate Action Steering Group identify initiatives that will improve biodiversity to preserve species at risk from climate change and increase wellbeing of students who may be affected by eco anxiety.	2025/2026
Hydrogen Cell – for race car	Develop in partnership hydrogen battery cell technology to support a carbon neutral racing series for teaching engineering/motorsport students	2024/2025

Credit: © CCN Marketing Electric Vehicle (EV) maintenance curriculum at Norwich

References and Resources

This plan has been developed using a wide range of resources produced to support FEIs in the implementation of measures to achieve Net Zero by 2050 at the latest.

- Climate Action Roadmap for FE Colleges (https://www.eauc.org.uk/fe_roadmap)
- Climate Commission for UK Higher and Further Education (Climate Commission for UK Higher and Further Education | EAUC)
- EAUC – (Environmental Association for Universities and Colleges)
    - https://www.eauc.org.uk/sustainability_leadership_scorecard
    - https://www.eauc.org.uk/sustainability_commitments
- Sustainability and climate change: a strategy for the education and children's services systems - GOV.UK (www.gov.uk) (updated December 2023)
- The Department for Education's (DfE) sustainability leadership and climate action plans initiative. Sustainability leadership and climate action plans in education - GOV.UK (www.gov.uk)
- Climate Emergency Framework (CEF) https://www.sustainabilityexchange.ac.uk/cef
- Powered by the UN Environment Programme, EAUC and Second Nature - Race to Zero is a global campaign to rally leadership and action in the education sector Race to Zero for Universities and Colleges (educationracetozero.org)
- Norfolk County Council Climate Strategy – May 2023
- Carbon Literacy Training developed by Manchester Metropolitan and delivered by EAUC
- Green Skills Report July 2023 commissioned by the 5 East Anglian Colleges and produced by Steve Frampton.

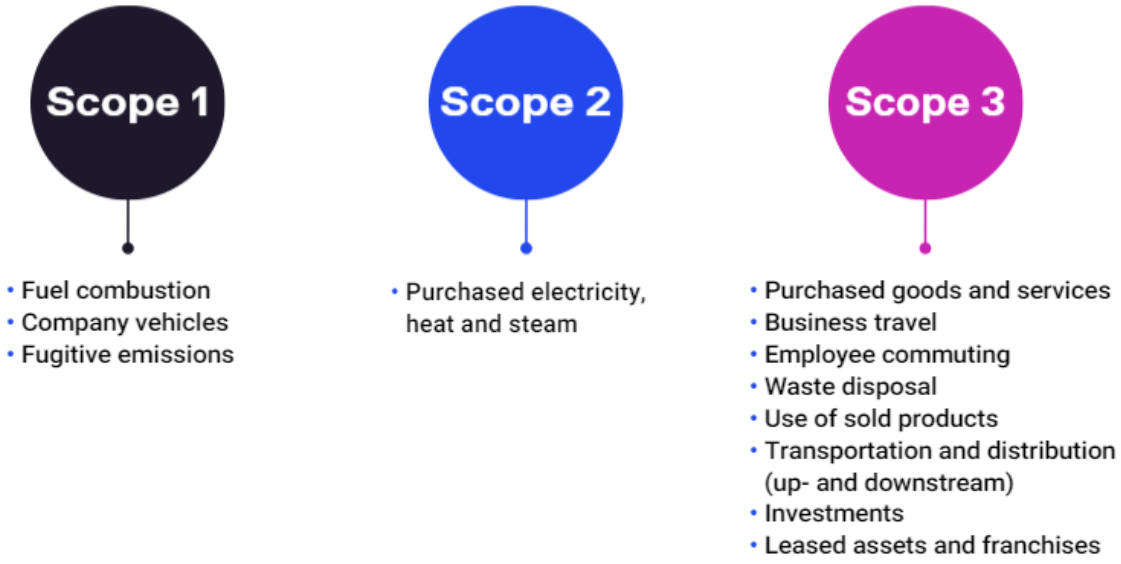
Legislation

- Climate Change Act 2008
- Environment Act 2021
- Skills and Post-16 Education Act 2022

Appendix 1 – Emissions Scopes 1 – 3 explained

The Greenhouse Gas Protocol – which provides the most widely recognised accounting standards for greenhouse gas emissions – categorises GHG emissions into three 'scopes'.

Scope 1 covers direct emissions from owned or controlled sources. Scope 2 covers indirect emissions from the purchase and use of electricity, steam, heating and cooling. By using the energy, an organisation is indirectly responsible for the release of these GHG emissions. Scope 3 includes all other indirect emissions that occur in the upstream and downstream activities of an organisation.



Credit: © Carbon Trust

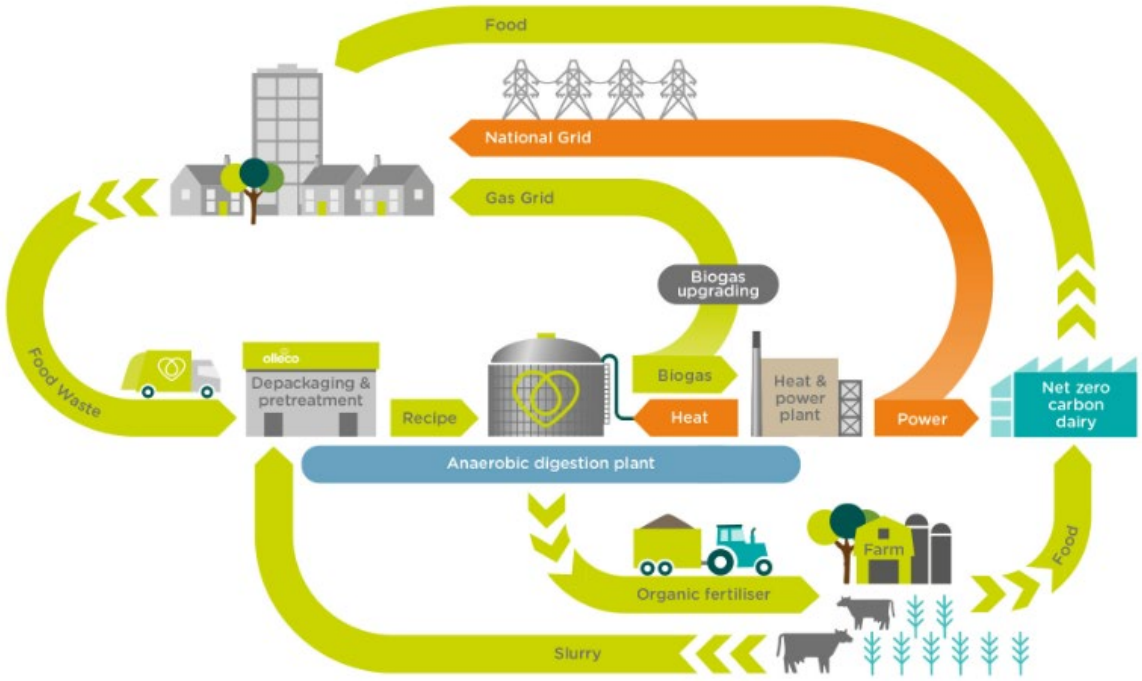
Appendix 2 – Actions to date (April 2024)

Task	How	When
Implemented a limited Carbon Literacy Training plan for key staff.	LSIF funded CLP training for FE staff online x2 half days. Numbers?	Feb – March 2024
Heat Decarbonisation Plan (HDP) compiled.	Funded by Salix for all buildings on all sites and undertaken by ESOS (cost £38,000)	March 2022
LED replacement programme at Ipswich Road.	Lighting replacement programme funded by DFE through energy consumption reduction grant.	2023 – 2024
Re-roofing and insulation installation Ipswich Road.	DFE Building Condition Capital Funding.	2023-24
BMS systems scoping and design report commissioned with some capital allocated for targeted partial upgrades.	300K capital project, partially complete first phase with replacements to be prioritised then commissioned	2024-
Staff Development Day Sustainability Pledges.	Departments made pledges and implemented smaller scale sustainability initiatives.	2022-23
Beryl Bikes electric bikes/scooter installation at Ipswich Road.	Working with the Beryl Bike Scheme Norwich to install a sustainable travel option for Ipswich Road staff and students outside the Debut.	March 2024
Green energy procurement	Supplied electricity comes from organisations generating through renewable energy sources only.	2020
Soil management programme at Easton Farm	Devise and implement a management scheme designed to retain nitrogen and carbon within the soil and minimise the use of fertiliser and pesticides through intelligent monitor systems.	Commenced 2022 TBC WH
Hedgehog friendly campus	Introduce measures to protect endangered hedgehogs using resources from About us | Hedgehog Friendly Campus	3 Campuses completed 2024
Waste recycling	Whites 80% recycled waste through separation at Norwich.	2014
Electric vehicle curriculum	Opened the ACE centre focusing on maintenance of hybrid and fully electric vehicles.	2022- 2023
Heat pump curriculum	Air and ground source heat pump curriculum introduced including installation and maintenance.	2022-2023

Solar and PV	Installation of PVs on Creative Arts, DigiTech and planned Construction building.	Ongoing initiative
Heat Pump Jubilee Easton	One of three boilers for Jubilee was replaced by a heat pump.	2020
Tree Nursery at Easton	Foundation learning students growing trees to saplings	2024
Electric van at Norwich	Early technology electric van purchased for transport locally between sites.	2013

Credit: © CCN Marketing - Hedgehog friendly campus at Paston

Appendix 3 - Anaerobic Digestion



92%

That's the greenhouse gas saving biogas from waste gives compared to natural fossil gas

55%

Processing all UK food waste in AD plants would generate the same environmental benefit as over half of the UK's wind turbines

96%

Power generated from AD generates 96% less CO_2 than the average UK source of electricity

To consider - Send food waste for processing into Biogas or our own plant medium term.

Sending waste cooking oil for processing to make Biodiesel. Consider modifying fleet and farm vehicles to run in biodiesel which can be supplied by the converting company.

Sustainability | Find Out About What We Do and Why | Olleco

Compact Onsite Models now make both economic and ecological sense and avoid the environmental impact of moving waste offsite:

What is the Future of Small-Scale Anaerobic Digestion Plants? :BiogasWorld

Compact Biogas Plant for Anaerobic Digestion (Dry Matter 20-55%) (renergon-biogas.com)

bioQUBE | QUBE Renewables Ltd

Appendix 4 – Net Zero Targets

The college needs to set challenging but achievable targets for carbon reduction down to the legislated Net Zero target requirement for 2050.

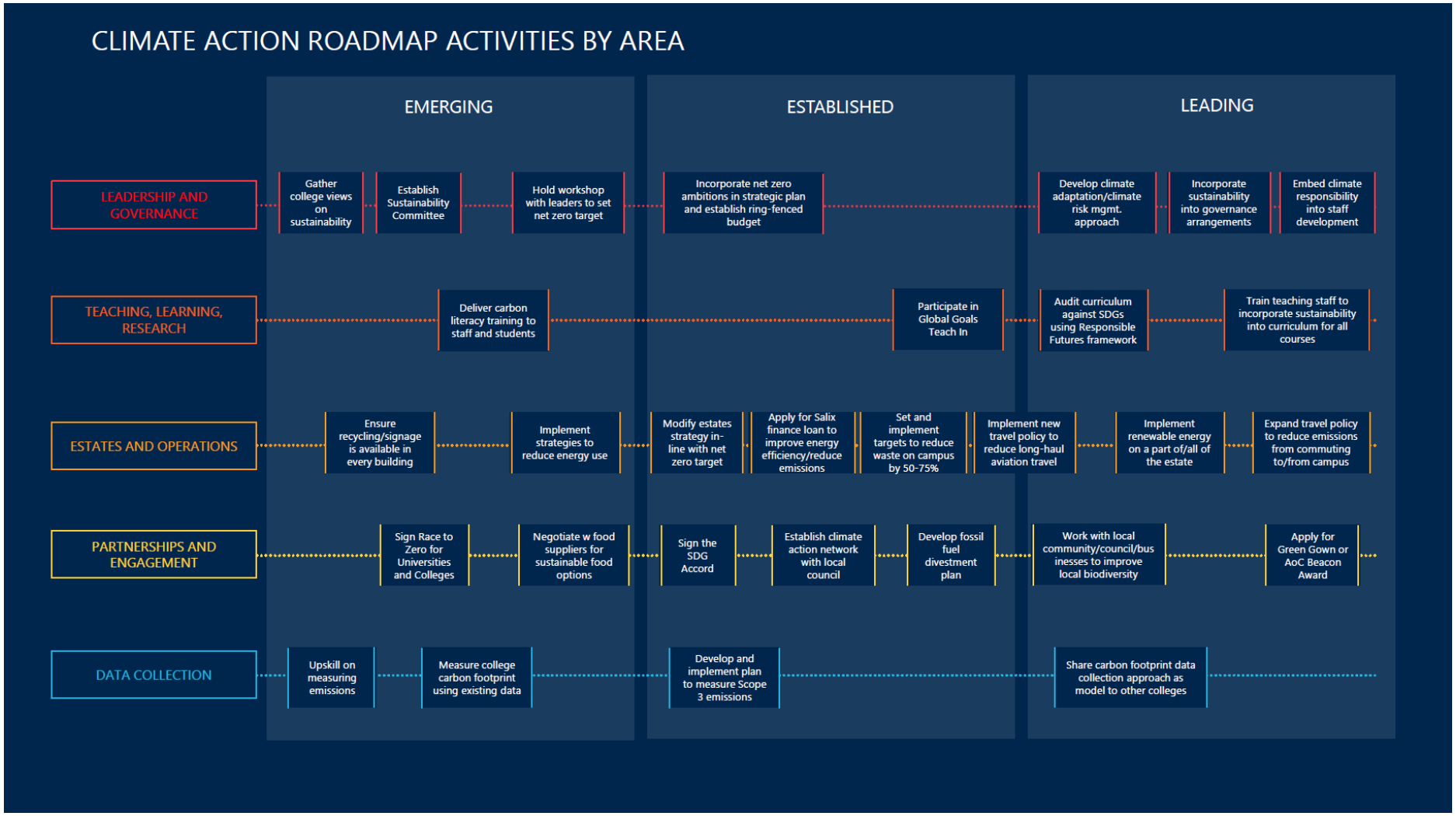
These targets should be published on the college and the Race to Zero websites and progress reported publicly on those two sites as part of our commitment.

2024 marks a formalisation of City College Norwich's journey to develop a 'road map' to reach net zero emissions by 2050.

Interim Targets

1. **Agree the Climate Action Plan Q1 2024 for publication to DFE 2025.**
2. **Agree a methodology for measuring carbon emissions scopes 1 -3**
3. **Leader to FE industry on sustainability by 2028**
4. **50% net-zero reduction by 2030**
5. **75% net-zero reduction by 2040**

Appendix 5 – Climate Action Roadmap sample



EASTON COLLEGE PASTON COLLEGE CITY COLLEGE NORWICH