

GREATER LONDON AUTHORITY

Workshop 1: Overview of 'Net Zero' and how this project will help your college on its Net Zero journey

The Estimated Cost of Achieving Net Zero Carbon by 2030 in London's Further Education Colleges

17th January 2024

1. Project Overview

Project Overview

- There is a need to support the education sector's future direction and planning for meeting Net Zero carbon goals.
- Urgency of Mayor of London's target goal of Net-Zero by 2030.
- Opportunity to up-skill on and make use of existing net zero plans and best practices to estimate costs.
- There is a particular need to explore the skills and jobs necessary to achieve net zero.
- The final report will identify progress, gaps, and investment needs, and explore synergies among FE colleges.
- This project's focus is to support colleges on cost estimates for emission scopes 1 and 2.

The Carbon Trust and EAUC are working with key stakeholders to analyse and gather information to inform on the ***'Estimated Cost of achieving Net Zero Carbon by 2030 in London's Further Education Colleges'***.

Project Objectives

1. Assess the economic cost of reaching Net Zero carbon by 2030 across London's Further Education Colleges

2. Review current plans to identify gaps in jobs and skills, funding, and explore opportunities for collaboration

Intended outcomes and expected benefits

Outcomes

Understand costs for Net Zero by 2030

Participants in the steering group will gain an understanding of the cost contributors to achieving net zero by 2030.



Understand the baseline

The project will enable participants to better understand existing net-zero plans and best practices to estimate costs, identify progress, gaps, and investment needs, and explore synergies among FE colleges.



Achieve stakeholder engagement

The project will involve getting extensive stakeholder feedback, targeting to reach at least 50 contributors, to assess decarbonisation needs.



Benefits



Cost prioritisation and savings

Gain a clearer understanding of your institution's competing cost priorities in the journey toward decarbonisation. Our research will enable better decision-making to efficiently allocate resources and identify opportunities for cost savings.



Governance and reputational benefits

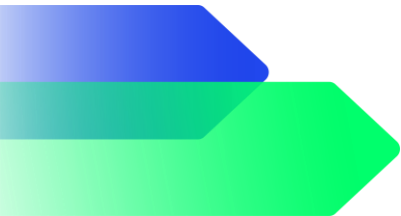
Your participation in this research will demonstrate a strong commitment to sustainability. The insights and data generated through this project will enhance your institution's governance and reputation.



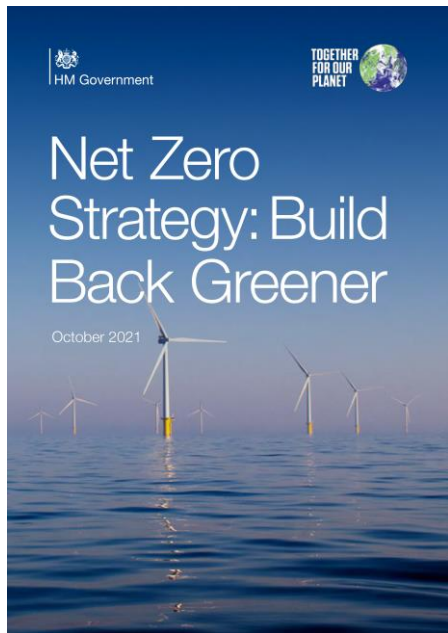
Overcome fragmentation

The lack of a joined-up approach has been identified as a potential barrier to achieving decarbonisation within the FE college sector. Your participation in this project will help address this challenge.

2. Overview of the GLA Net-Zero Strategy



Overview of the GLA Net-Zero Strategy



Net-Zero Strategy: Build Back Greener

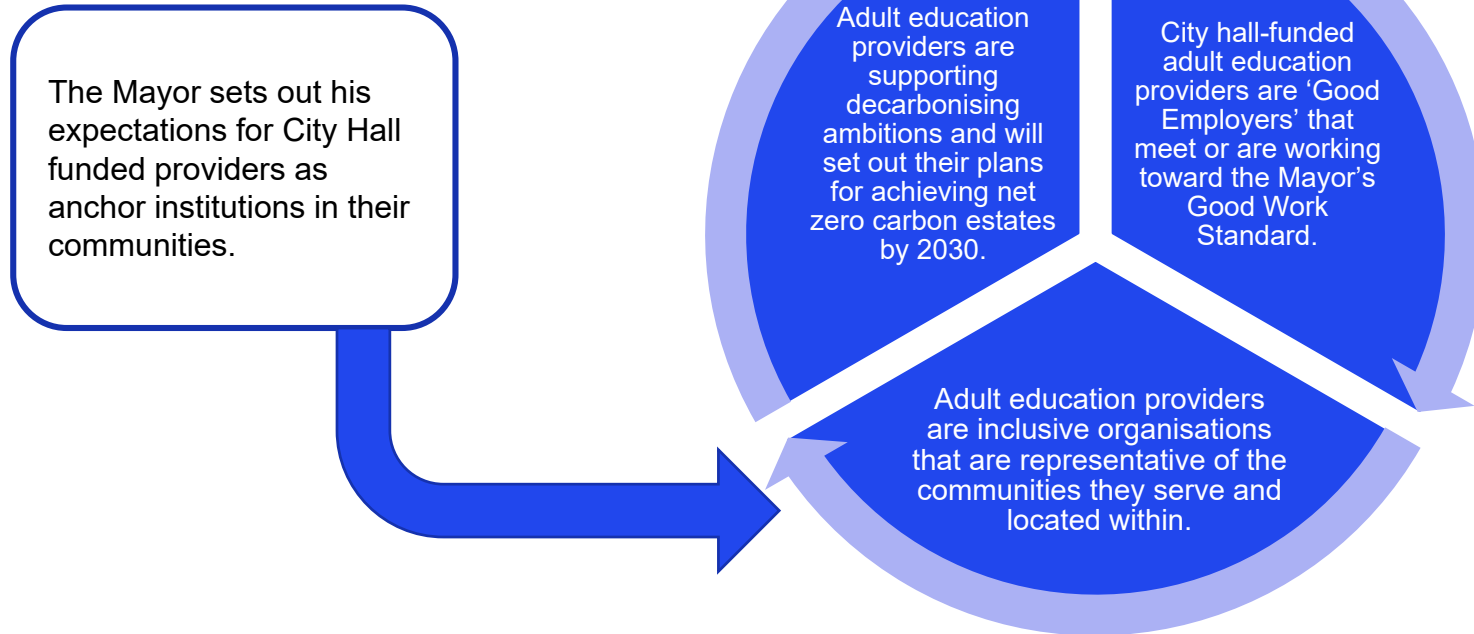
Sets out policies and proposals for decarbonising all sectors of the UK economy to meet the government net-zero target by 2050.

Skills Roadmap for London

Recognises the importance of making skills and training accessible and relevant to local employers to become net-zero carbon city by 2030.



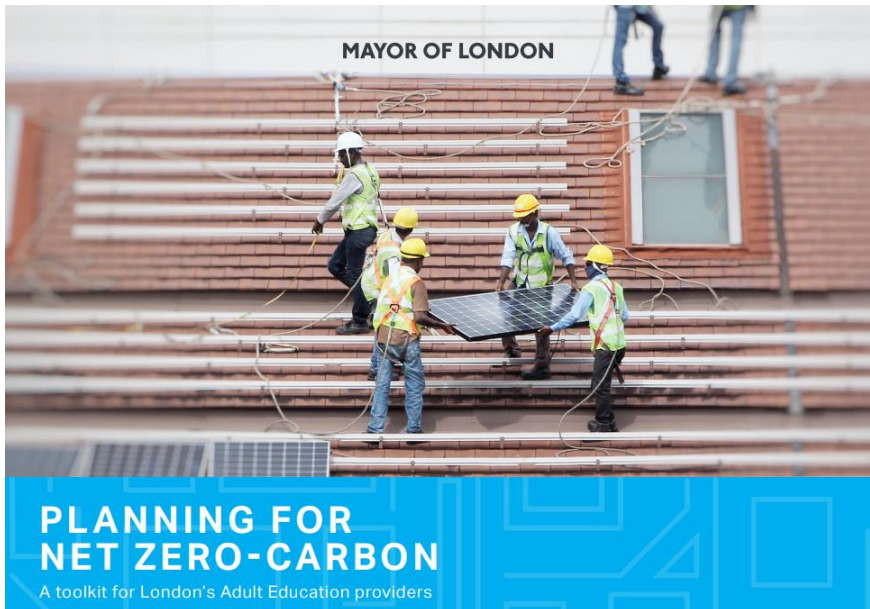
Skills Roadmap for London



Planning for Net-Zero Carbon

A toolkit for London's Adult Education providers

- A toolkit for Adult Education Providers to assist providers in achieving net zero carbon estates by 2030.
- Tailored guidance to City Hall funded adult education providers, to develop their plans for meeting net-zero by their estates by 2030.
- Identifies useful guidance and resource documents.
- Highlight case studies from London based providers.



3. Understanding Net Zero and decarbonisation

Definitions, drivers, and existing tools

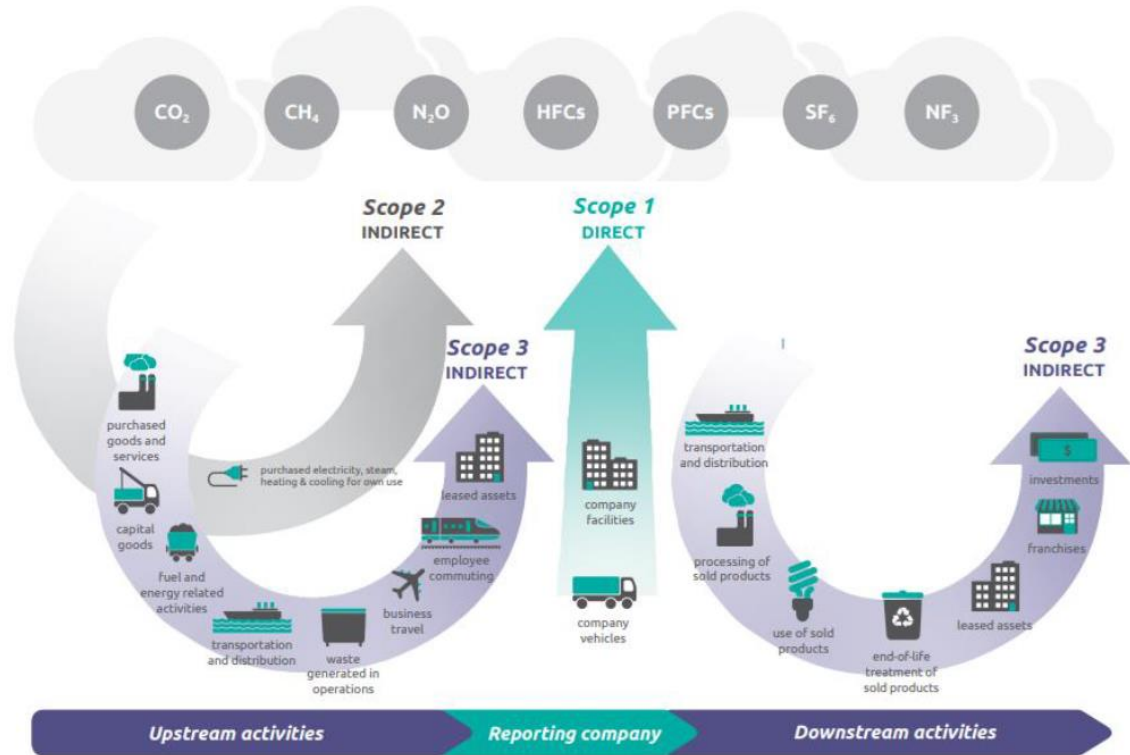
Understanding Net-Zero and Decarbonisation

Net-zero:

Achieve an overall balance between emissions produced and taken out of the atmosphere.

Decarbonisation:

The removal or reduction of carbon dioxide (CO₂) output into the atmosphere.



Policy Drivers and Context

- DfE Sustainability and Climate Change Strategy
- The Green Jobs Taskforce
- Public Sector Decarbonisation
- SECR

National

Skills & Knowledge

- FE Skills Roadmap
- The Green Jobs Taskforce

- UK Government Net-Zero Target 2050
- Mayor of London Net Zero Target 2030

Wider UK Targets

Community

- Staff, Student and Local Community Expectations

Race To Zero

Race 2 Zero is a global campaign to rally leadership and support from businesses, cities, regions, and investors for a healthy, resilient, zero-carbon recovery.

Objective to build momentum around the shift to decarbonised economy.

All members are committed to achieving net-zero emissions as soon as possible

1. Pledge

2. Plan

3. Proceed

4. Published

5. Persuade

RACE TO ZERO

Climate Action Roadmap for FE colleges

36% of responses stated that they do not utilise the roadmap"



Leadership and governance

Teaching, learning, research

Partnerships and engagement

Estates and operations

Data collection

- I. Encourages actions across five areas - 35 in total
- II. Suggests actions at different levels of maturity
- III. Provides indicators of resources (such as the time and money) required for suggested actions

CLIMATE ACTION ROADMAP ACTIVITIES BY AREA

EMERGING

ESTABLISHED

LEADING

LEADERSHIP AND GOVERNANCE

Gather college views on sustainability

Establish Sustainability Committee

Hold workshop with leaders to set net zero target

Incorporate net zero ambitions in strategic plan and establish ring-fenced budget

Develop climate adaptation/climate risk mgmt. approach

Incorporate sustainability into governance arrangements

Embed climate responsibility into staff development

TEACHING, LEARNING, RESEARCH

Deliver carbon literacy training to staff and students

Participate in Global Goals Teach In

Audit curriculum against SDGs using Responsible Futures framework

Train teaching staff to incorporate sustainability into curriculum for all courses

ESTATES AND OPERATIONS

Ensure recycling/signage is available in every building

Implement strategies to reduce energy use

Modify estates strategy in-line with net zero target

Apply for Salix finance loan to improve energy efficiency/reduce emissions

Set and implement targets to reduce waste on campus by 50-75%

Implement new travel policy to reduce long-haul aviation travel

Implement renewable energy on a part of/all of the estate

Expand travel policy to reduce emissions from commuting to/from campus

PARTNERSHIPS AND ENGAGEMENT

Sign Race to Zero for Universities and Colleges

Negotiate w food suppliers for sustainable food options

Sign the SDG Accord

Establish climate action network with local council

Develop fossil fuel divestment plan

Work with local community/council/businesses to improve local biodiversity

Apply for Green Gown or AoC Beacon Award

DATA COLLECTION

Upskill on measuring emissions

Measure college carbon footprint using existing data

Develop and implement plan to measure Scope 3 emissions

Share carbon footprint data collection approach as model to other colleges

"82% of responses state that they have not used the calculator tool"

The cost of Net Zero

Outcomes from a project exploring the costs of Net Zero for Higher and Further Education in the United Kingdom

Version 1 - July 2023

Cost of Net-Zero Calculator Tool

- Aims to have a standard method of calculating the cost to Net Zero.
- Allows institutions to take long-term sustainable action.
- Identifies areas for action and opportunities for financial investment.
- Supports institutions to understand the cost of decarbonisation.
- Supports institutions to develop a strategic-level financial plan.

Prepared by:



Jointly published by:



Funded by:



Standardised Carbon Emissions Framework (SCEF)



Allow further and higher education institutions to measure, report, and manage carbon emissions.



Institutions can compare and share experiences by enabling peer-to-peer review.



Based on the Greenhouse Gas (GHG) Protocol. Interprets Scope 1, 2 and 3 in a university or college setting in plain English.



Three levels of reporting depending on the different stages that institutions are at.



STANDARDISED CARBON EMISSIONS FRAMEWORK

Delivered by



SECR (Streamline Energy and Carbon Reporting) Tool



Streamlined Energy and Carbon Reporting Tool

Designed for colleges to creating their SECR

Compliant with SECR structure and can be used for wider reporting framework

SERC Tool converts data on energy and fuel usage to carbon equivalent figures

Using the government conversion factors for GHG reporting



A decorative graphic on the left side of the slide, consisting of two overlapping curved shapes. The top shape is a bright green arrow pointing right, and the bottom shape is a blue arrow pointing right, partially overlapping the green one.

5. New City College Case Study



New City College

Approach to reducing carbon emissions

EAUC & Carbon Trust workshop for FE colleges
17 January 2024

New City College at a glance



Pre 2016

Tower Hamlets
College

- 4 sites within LBTH
- 1,500 16-18s
2,000+ adults
- 300 staff
- £20m turnover



August 2016

Merger with Hackney
Community College



April 2017

Merger with
Redbridge College



August 2018

Merger with
Epping Forest
College

August 2019
New City College

Mergers with
Havering College of
Further and Higher
Education and
Havering Sixth Form
College

- 10 sites within 5
LAs
- 9,500 16-18s
10,000+ adults
- 1,800 staff
- £110m turnover

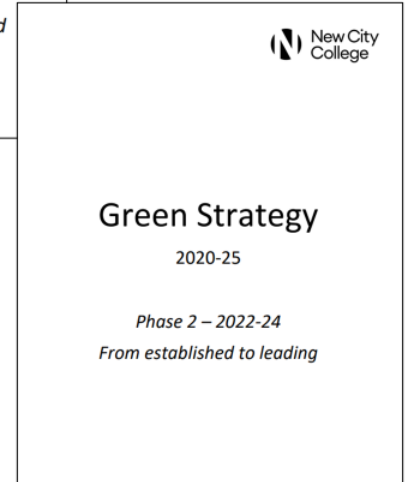
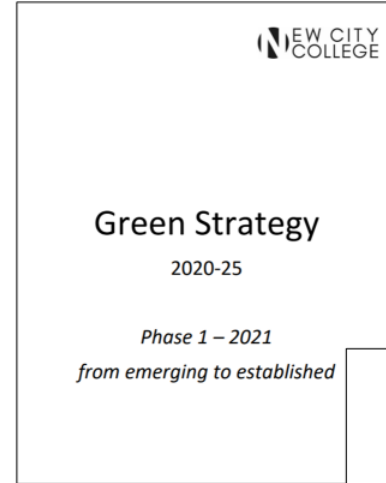


CREATION OF NEW CITY COLLEGE
FEBRUARY 2017



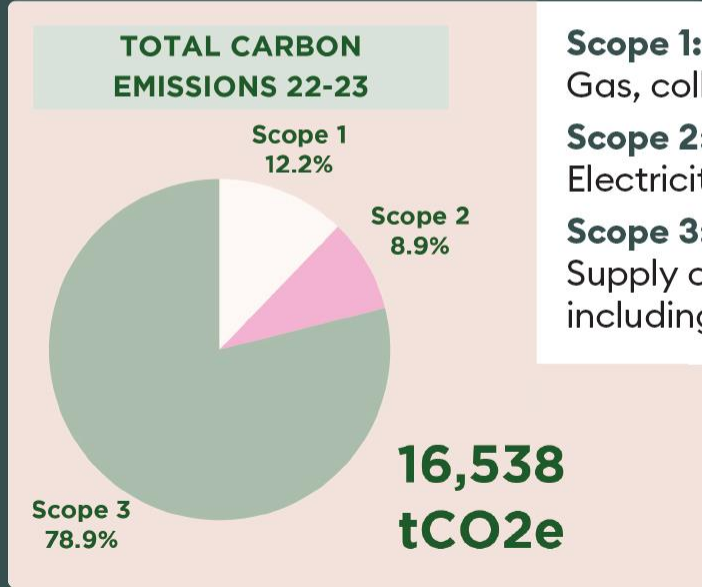
- 9 sites in East London and South Essex + language schools in Bournemouth & Oxford
- Total estate size 110,000+ sqm
- Oldest buildings Grade II listed from late 1800s
- Newest building opened in 2023 and construction starting on another in 2024
- All sites in occupation throughout the academic year

- Whole-college Green Strategy launched in January 2021
- First year focus on baselining & setting up structures
- Focus since 2022 on reducing carbon emissions
 - Target 20% reduction in Scope 1 & 2 emissions compared to 2019/20 baseline by Dec 2024
- No net zero target date



Our Carbon Emissions

Overview of NCC carbon emissions in 2022-23



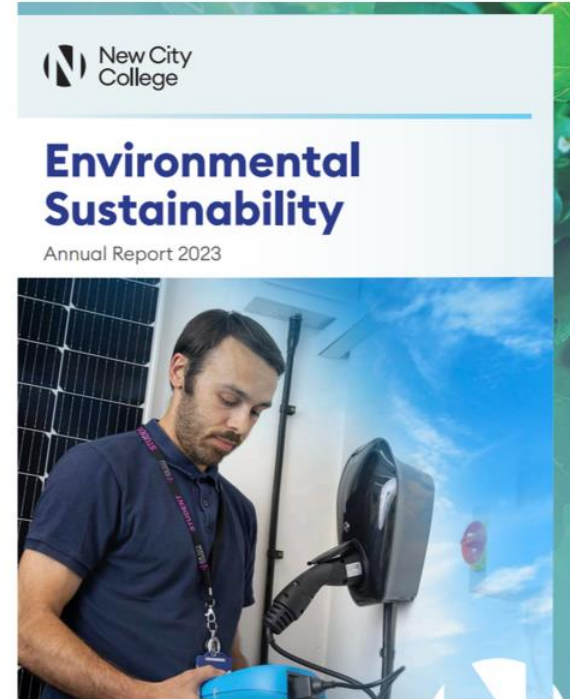
- Scope 1:** Gas, college vehicles, f-gas
- Scope 2:** Electricity
- Scope 3:** Supply chain, including leased buildings



Scope 3 emission savings (2022/23)



- Over 3,000 tCO₂e saved by stopping the sale of beef for the academic year
- 90 tCO₂e saved by using a laminated timber frame instead of a steel frame in the construction of the Epping Wellness Centre
- Nearly 70 tCO₂e saved by using 100% recycled paper in all NCC printers instead of virgin paper
- 693 kgCO₂e saved by partnering with Too Good To Go to minimise food waste



Our approach (part 1): focus on carbon reporting



Year	Scope 1	Scope 2	Scope 3
2019/20 Baseline	Gas consumption based on utility bills	Electricity consumption based on utility bills	Unable to collect
2020/21	Gas as before Fleet vehicle data based on fuel consumption	As above	Business travel by employees based on miles claimed by staff
2021/22	Gas as before Fleet vehicles as before G gas based on register data	As above	Business travel as before Waste data based on tonnage from some campuses Water use from utility bills International flights based on flight information Paper used based on printing records
2022/23	As above	As above	As above where data was available except removing paper All other areas based on non-payroll cost data Only staff and student commute emissions missing

First narrative report



Continuous improvement



- Introduction of temperature protocol, forced PC shutdowns & enforced campus closure periods
- Creation of Green Investment Board to prioritise investment into sustainability
 - £2.25m being invested in 2023/24 – majority grant funded
- Embedding of environmental criteria into internal capital bidding processes incl. decision making on major capital projects

NCC Green Investment Board

Terms of Reference

Overall objectives

- Review and prioritise financial investment (capital and revenue) required to support NCC decarbonisation plans
- Ensure investment in estate decarbonisation is aligned with NCC's Property Strategy and annual budget setting
- Recommend capital spend in line with NCC Financial Regulations with governance oversight from the Property Committee

- Signed up to GLA's Retrofit Accelerator Workplaces programme
 - Initial advice: £23m-£26m cost estimate for Scope 1 & 2 decarbonisation
 - Access to procurement framework for 'decarbonisation partner' and procured a partner
- Used Salix funding
 - Low Carbon Skills Fund used to pay for campus specific decarbonisation plans
 - Secured £1.1m from Public Sector Decarbonisation Scheme for first heat decarbonisation project (ongoing)
- Prioritised Government's energy efficiency grant
 - LED lighting & BMS upgrade



- Deliver two more heat decarbonisation projects by 2026 if Salix grant applications are successful
 - Scope 1 & 2 emissions could go down by up to 38% compared to 2019/20 despite increasing size of estate
- Complete a campus extension project incorporating low carbon heating
- Transition to green electricity tariffs and introduce solar PVs (TBC)
- Roll out sustainable waste management contract to all sites
- Use menu flipping pilot with SOS-UK to identify ways to move towards sustainable catering provision
- Identify target Scope 3 areas to calculate true carbon emissions and impact of moving to sustainable alternatives

Resources



[Public Sector Network | The Carbon Trust](#)

- The Public Sector Network is a sustainability-focused forum to support knowledge sharing, collaboration and decarbonisation within the public sector.

[Skills Roadmap for London](#)

- Helping Londoners to access good jobs and to lead happier, healthier lives.

[Planning for Net Zero-Carbon \(london.gov.uk\)](#)

- A toolkit for London's Adult Education providers.

[The Cost of Net Zero | EAUC](#)

- The Cost of Net Zero Calculator aims to give a standard means of answering this crucial question, and in doing so unlock investment funding for the many actions that are needed.

[Climate Action Roadmap for UK FE Colleges | EAUC](#)

- The Roadmap provides clear actions and guidance on how colleges can respond to the climate emergency and advance sustainability.

[SECR Tool | EAUC](#)

- A tool for colleges to submit a Streamlined Energy and Carbon Reporting which can be used for wider reporting.