

Carbon Management Plan

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University of East Anglia

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Carbon Management Plan – University of East Anglia

Revision

Revision No.	Date	Prepared by	Approved by	Description
2026-1	05/08/26	C. Mills	M. Bray	Annual revision
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Executive Summary

This document sets out how the University of East Anglia will achieve the energy and carbon emissions objectives and actions from its Environmental Sustainability Strategy 2030. The Carbon Management Plan succeeds the previous ‘2015-2020 Energy and Carbon Reduction Plan’ and the ‘2020 Net-zero UEA’ plan and is focused on actions between 2025 and 2030.

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About the Carbon Management Plan

The intention of this plan is to set out the actions required to close the gap between UEA's current level of greenhouse gas emissions and its net-zero targets.

This requires a good understanding of all sources of emissions from the university's operations and the level of savings that can be associated with individual interventions. UEA can comprehensively calculate its scope 1 & 2 emissions, and has been making progress towards filling the gaps in our scope 3 data

UEA's net-zero plans are continually evolving and the level of detail contained within this document will be iteratively improved as the university confirms the specifics of its decarbonisation actions. Therefore, this should be considered a 'working' document, which will be continually updated as further information becomes available and uncertainties are eliminated.

The carbon reduction plan is compiled by the Energy Manager, chair of the Energy Implementation Team. Progress against the plan is reported through the Sustainability Committee.

Key Targets

The university has committed to the following emission reduction targets, which were calculated by the Tyndall Centre for Climate Research to be consistent with global efforts to limit planetary heating to 2°C.

- A reduction in campus emissions (Scopes 1 & 2) of at least 80% by 2030 against the 2015 baseline of 25,360 tCO₂e.
- Net zero emissions (Scopes 1, 2 & 3) by 2045 or earlier
- Not relying on offsetting for Scope 1 & 2 carbon emission targets

Governance

Sustainability at UEA is overseen by the Sustainability Committee, who act as a steering committee on behalf of the Executive Team, for Sustainability, Biodiversity and Net-Zero Carbon strategies across departments.

Responsibility for delivering the sustainability objectives set out in the 2030 strategy sits under various Implementation Teams, each covering a distinct aspect of sustainability, accountable to the committee.



Figure 1 – Sustainability Implementation Team structure

Scope 1 Emissions

Implementation team responsible: Energy and Water

Baseline: 12,140 tCO₂e (2015)

Target: 5,072 tCO₂e (2030); 0 tCO₂e (2045)

Emissions originating from combustion of fuel on site and in university-owned vehicles were as follows:

tCO ₂ e	2014/15	2023/24	2024/25
Natural Gas	12,047	12,858	16,256
Gas Oil	34.6	26.6	1.4
Vehicle Diesel	55.4	16.2	37.5
Vehicle Petrol	4.8	10.0	11.1
Total	12,140	12,880	16,306

UEA’s district heating system, which supplies the majority of buildings on campus, is currently fuelled using natural gas-powered boilers and two CHP engines. The CHP engines also generate electricity at a cheaper rate than it can be purchased from the national grid, resulting in a significant financial saving for the university.

The increase in scope 1 emissions in 2024/25 was primarily due to improved reliability of the CHP engines, with the increased running time resulting in higher gas consumption.

It is still intended to decommission the CHP engines in 2028, which will reduce our onsite gas consumption by an estimated 50% - even if the heat generation is replaced with gas boilers. When combined with a renewable electricity supply, this action could deliver approximately 70% reduction in scope 1 & 2 emissions against the 2015 baseline.

As decommissioning the CHP will result in increased purchasing of grid electricity, a solar PV project is currently being appraised, which will partly mitigate the increased energy cost.

The remaining 10% emissions reduction to achieve the 80% by 2030 target will be achieved through reducing campus heat demand. The university is currently developing its energy management system according to the ISO50001 standard, which will provide a framework to identify and implement energy saving measures.

Scope 2 Emissions

Implementation team responsible: Energy and Water

Baseline: 13,220 tCO₂e (2015)

Target: 0 tCO₂e (2030)

tCO ₂ e	2014/15	2023/24 (location-based)	2024/25 (location-based)	2024/25 (market-based)
Electricity Imports	13,220	2,011	1,550	0

UEA imported approximately 10% less electricity from the grid in 2024/25 compared to the previous year. This was due to improved reliability of the CHP engines resulting in more power being generated on site. In conjunction with the falling emissions factor of the UK electricity grid this resulted in a 23% reduction of scope 2 emissions. UEA currently purchases Renewable Energy Guarantee of Origin (REGO) certificates for all imported power, making the university’s electricity supply zero-carbon when reported using a market-based methodology.

A business case for a 5MW solar PV project will be evaluated by university council in September 2026. Options to purchase power from off-site renewables are also being investigated.

Scope 3 Emissions

The UEA is continuously assessing and aiming to improve the reporting of its Scope 3 emissions. Responsibility for calculating a baseline and setting reduction targets against each scope 3 category falls under the relevant implementation team.

We currently have data on scope 3 emissions from:

- Supply chain (purchased goods and services, including capital goods and transportation of goods)
- Staff commuting
- Business travel
- Waste
- Water supply and wastewater treatment
- Externally managed student accommodation

Supply Chain (purchased goods and services, including capital goods and transportation of goods)

Implementation team responsible: Procurement

Supply chain emissions have been compiled using the HESCET tool, which estimates emissions based on procurement spend. The values given include the estimated emissions from transport. Capital goods are reported under ‘Construction’.

tCO2e	2024/25
Business services	9,826
Paper products	484
Other manufactured products	5,522
Manufactured fuels, chemicals and gases	1,194
Food and catering	5,235
Construction	3,242
Information and communication	14,962
Waste and water	120
Medical and precision instruments	4,796
Other procurement	1,241
Unclassified	1,129

Staff Commuting

Implementation team responsible: Procurement

Staff commuting travel data was collated through a survey conducted by Mobilityways. Results are published in our annual HESA EMR return.

tCO2e	2024/25
Staff commuting	1,737

Business Travel

Implementation team responsible: Procurement

As of 2024/25, business travel data is collected through a nominated travel management company and reported in our annual HESA EMR report.

tCO2e	2024/25
Business travel	3,680

UK and International Student Travel

Implementation team responsible: Procurement

Emissions from student commuting were calculated based on responses to our 2023/24 travel survey.

Response to the most recent survey (2024/25) was too low to establish a statistically significant value.

tCO2e	2023/24
Student commuting	2.0

We currently have no data on student travel at term start/end.

Waste

Implementation team responsible: Waste

Emissions from waste disposal and recycling are calculated annually for our HESA EMR return.

tCO2e	2023/24	2024/25
Waste	18.6	8.8

Externally managed student accommodation

Implementation team responsible: Procurement

All university-owned accommodation is located on campus and in the student village opposite the Earlham Road entrance. The university has referral agreements in place with third-party accommodation providers to house students, should campus accommodation be oversubscribed. However, no students were referred under these agreements in 2024/25.

tCO2e	2023/24	2024/25
Externally managed student accommodation	0	0

Key Actions and Recommendations

No.	Action	Responsible Team
1	Continue to develop decommissioning strategy for the CHP engines	Energy & Water
2	Set 2030 targets for all remaining scope 3 categories	Procurement
3	Further develop energy management system to identify and implement energy saving opportunities	Energy & Water