Sustainability Annual Report 2024 / 25

Executive Summary

The 2024-2025 academic year delivered further progression in our sustainability journey, both in decarbonisation and campus management; marked by the successful attainment of the ECO Campus Silver Award, a significant milestone that reflects not only our operational commitments, but also our strategic commitment to environmental stewardship as a core institutional value. Our strategic roadmap for 2025-26 centres on preparing for the ECO Campus Gold Award, representing the higher standard of sustainability achievement in the higher education sector. Throughout this reporting period, we have systematically strengthened our building control infrastructure through additions to our new BMS and sub metering programme. This significant integrated directorate approach has yielded measurable improvements across all key performance indicators, while simultaneously reducing utility operational costs by 6.32% against last year's data and further reducing carbon emissions.

The 2024–2025 academic year also demonstrates measurable strides in our Transport and Travel Plan. This was achieved through the systematic collection of business travel data, establishing a baseline to guide future performance monitoring and emissions-reduction efforts. As part of our Scope 3 emissions reporting, this initiative provides a foundation to further refine the University's travel policy with a focus on carbon reduction and financial efficiency. In addition to launching the next five-year iteration of our Travel Plan, we have also reissued a new Habitats Plan, both of which guide our work through to 2030.

1. Headline Metrics

Annual expenditure on all utilities excluding tenancies was £952,142 down 6.32% from 23/24, savings which were further supported by a decrease in our electric and gas unit costs from April 2025. A total saving of £139,552. Total carbon emissions from all scopes were 457.984 tCO2e, a breakdown of which can be seen below:

- **Scope 1:** Gas consumption for the year was 1,234,210 kWh a spend of £105,339 a reduction of 26.05% and 35.03% respectively on the previous year.
- **Scope 2**: Electricity consumption for the year was 2,491,083 kWh a spend of £760,750 a reduction of 7.24% and 12.28% respectively on the previous year.
- **Scope 3:**

- **Water**: Water consumption was 41,379 M^3 a spend of £86,053 an increase of 21.58% and 38.19% respectively on the previous year. This increase can be attributed to the large leak that occurred at Brickmakers Wood, a sum of £13,885 was successfully recouped through the Anglian Waters leak allowance claim.
- **Waste**: waste total tonnage = 110.394; waste tco2e = 3.493 waste cost £30,384.76. an 7.82% reduction from 119.76 tonnes in the previous year.
- **Travel**: Business travel generated 176.72 tCO2e miles for business travel = 588,274.47.

2. Emissions Progress and Reporting

Our carbon reduction performance demonstrates steady progress toward net-zero, with results that significantly exceed sector benchmarks and validate our approach to environmental management and capital project master planning. These achievements position the University as a leader in decarbonisation of scope 1 and 2 emissions within the higher education sector. Our total emissions including all scopes was 457.984 tCO2e an increase of 20% on last year which can be attributed to the inclusion of our first full year recording of business travel also providing us with our baseline year for subsequent measurement.

- **Scope 1 emissions**: Gas related emissions were 225.737 tCO2e a reduction of 24.86% on last year, reflecting the effectiveness of our energy efficiency programme and strategic infrastructure investments.

- **Scope 2 emissions:** Remain at zero as our electricity contract continues to be REGO (Renewable Energy Guarantee of Origin) backed. This strategic approach not only eliminates our grid electricity carbon footprint but also supports the renewable energy market.

- **Scope 3 emissions**: This year's Scope 3 emissions have increased compared to last year, primarily due to the inclusion of business travel in our emissions performance data. Our scope 3 categories reflect areas where we are strengthening measurement and management, with transmission and distribution losses associated with electricity use, water consumption impacts showing continued infrastructure improvements, and business travel presenting opportunities to expand virtual collaboration and adopt more sustainable transport options.

Figure 1 below shows the breakdown of our scope 3 emissions.

Emission Type	tCO_2e	% of Total
Transmission and Distribution	45.586	19.63%
Water	6.804	2.93%
Waste	3.137	1.35%
Business Travel	176.720	76.09%
Total Scope 3	**232.247**	**100%**

3. Utilities Costs and Consumption

Our utility management strategy continues to deliver operational and financial benefits, demonstrating that environmental responsibility and fiscal prudence are mutually reinforcing objectives.

- A total of 2,491,083 kWh of electricity was used this academic year in comparison to 2,685,443 in the year 23/24 representing a reduction of 7.24%. This reduction was achieved despite maintaining full operational capacity and reflects the effectiveness of our Building Management System investments.

- 122,894 kWh of electricity was produced by our Solar PV compared to 104,702 kWh in the year 23/24 representing an increase of 14.80% a cost saving of £29,402. The large increase on the previous year can be attributed to several failed panels in 23/24 that were repaired. This performance improvement demonstrates the value of our proactive maintenance approach and validates our investment in renewable energy infrastructure. The increased generation also contributes to our energy security and reduces our exposure to volatile energy markets. This on-site generation has offset the consumption and carbon outputs of Neptune Marina, Athena Hall Gym and 1st floor library combined.

- Annual expenditure on all utilities excluding tenancies was £952,142 down 6.32% from 23/24, savings which were further supported by a decrease in our electric and gas unit costs from April 2025. A total saving of £139,552.

4. Energy Efficiency Initiatives

This academic year, investment in the campus-wide BMS upgrade has significantly enhanced real-time monitoring across most buildings, providing accurate data on energy performance and enabling clear visibility of consumption patterns to support the identification and correction of anomalies. More importantly, this technology allows predictive maintenance, proactive identification of inefficiencies, and data-driven decision-making that were previously not possible.

Figure 2 highlights the energy consumption changes across the estate over the past year, expressed in kWh and associated financial value. Overall, electricity consumption reduced by 217,070 kWh, delivering a financial saving of approximately £52,100. Notable reductions were observed at the Waterfront Building undoubtedly as a result of the chiller being inoperable for most of the year, and the 1st Floor Library, which reflects targeted optimisation measures and operational adjustments. Conversely, increased consumption occurred at Atrium, Athena Hall Gym, and Main Campus North, reflecting increased activity and occupancy in these areas.

These trends provide valuable insights into the impact of operational behaviour and building-specific characteristics on energy use. The reductions demonstrate the effectiveness of BMS-driven optimisation and proactive energy management, while the areas of increased consumption highlight opportunities for further intervention. Through continued monitoring and integration of BMS data, our energy and decarbonisation strategy will target energy efficiency measures more precisely, improve building performance, to realise ongoing reductions in both energy consumption and associated carbon emissions.

Figure 2: *Cost Savings Comparison 2024/2025*

Site	2024 KWh	2025 KWh	Var (KWh)	Value - £
1st Floor Library	46,677	43,515	-3,162	-£758.88
Athena Hall Gym	16,137	17,574	1,437	£344.94
Atrium O Block	235,837	257,416	21,580	£5,179.17
James Hehir Building	0	0	0	£0.00
James Hehir Building 1	616,372	587,850	-28,522	-£6,845.26
Long Street Building	13,877	13,748	-129	-£30.93
Main Campus North	804,204	877,568	73,364	£17,607.31
Neptune Marina	51,578	48,959	-2,619	-£628.58
Waterfront Meter 1	53,910	53,211	-700	-£167.95
Waterfront Building	815,053	536,734	-278,319	-£66,796.58
Total	**2,653,645.62**	**2,436,575.76**	**-217,069.86**	**-£52,096.77**

4.1 LED Lighting

All lighting has now been replaced on the ground floor and floors 3, 4 and 5 of the Waterfront, with remaining areas due to be converted as part of the library build capital works project.

A small number of areas across the University have not yet been converted to LED lighting due to ongoing European supply-chain pressures following the regulatory phase-out of non-LED lamps under EU Ecodesign and environmental legislation. The majority of the remaining identified areas will be addressed through planned capital works, ensuring full transition to energy-efficient LED lighting by 2028. This transition supports reductions in energy consumption and associated carbon emissions, contributing directly to the University's Climate Action Plan. The full conversion to LED lighting forms part of the University's broader decarbonisation commitments and long-term strategy to mitigate climate change.

4.2 Display Energy Certificates

Display Energy Certificate ratings across the campus have remained broadly consistent during the reporting period, with the exception of the Arts building, which recorded a decline in performance. This reduction reflects known deficiencies in the building's fabric and heating systems, as identified in recent building condition surveys, which limit the effectiveness of current energy management measures. The Arts building has therefore been identified as a priority for targeted upgrades, particularly to heating infrastructure.

5. Waste Management

The university continues to achieve its target of 95% waste diverted from landfill by 2030. This target and its performance indicators underpin our approach to circular economy principles and materiality re-use. Changes to waste regulations came into force in April of 2025 with a requirement to further segregate waste. In 2026 we will be retendering the waste contract and will be looking to work closely with a partner who supports our circular economy and reuse values.

5.1 Waste Data

AY 2024 to 2025 saw a total waste production of 110.394 Tons, representing a 7.82% reduction from 119.76 tonnes in the previous year. The breakdown by type can be seen in figure 4 below. Total carbon output for all waste streams 3.493 tCO2e. We successfully diverted 0.18 tons of WEEE waste and 1.895 tons of unused hand sanitizer.

Figure 4: *Breakdown of waste by stream.*

Waste Streams	Tonnes	% of waste
Recycling Rate	32.496	29.44%
Waste to energy	70.407	63.78%
Waste to landfill	5.416	4.91%
Waste Diverted	2.075	1.88%
Total Waste	110.394	100%

5.2 Waste Data

Five waste audits have been carried out this year in the following locations:

- 3D Print Lab
- Arts Dentistry
- Life Sciences
- Digital & IT.
- Sackers waste disposal contractor site visit

These audits provide a detailed insight into waste generation patterns and opportunities for further improvement, informing our continuous improvement approach and supporting targeted intervention strategies. All departments visited had a great level of understanding of the wastes they produce and a good level of understanding of proper disposal.

Management of hazardous waste, however, presents greater complexity. This was highlighted in the 3D Print Lab, where improvements are required to waste liquid labelling to ensure contents are fully and accurately described. Establishing a more formalised and consistent approach to the assessment and sustainable disposal of hazardous waste will therefore be a key focus going forward.

6. Biodiversity and Green Spaces

We continue to develop and enhance our green spaces across the campus encouraging diverse plant rich areas that will naturally contribute to creating species rich areas. This multifaceted approach recognises the interconnected nature of environmental, social, and educational objectives while contributing to our broader sustainability commitments. This is monitored by regular habitat surveys and reporting allowing us to monitor progress as the areas develop. Regular habitat surveys conducted by qualified ecologists monitor ecosystem development and inform adaptive management strategies.

6.1 Habitat Performance

- **Wildflower Meadow**: With the ongoing challenges created by the longer periods of hotter and drier weather we are experiencing challenges sustaining the existing planting. We are reviewing how this space is treated with it potentially becoming more suited to a Heathland environment.

- **Wellbeing Allotment:** The initiative continues to be successful, with the focus now shifting towards improving staff and student engagement in the use and ongoing maintenance of the space. Regular monthly volunteering sessions are being promoted via the Hub and Brightspace. This innovative initiative has demonstrated strong success in engaging both staff and students in practical sustainability activities, while also serving as a living laboratory for sustainable practices and supporting mental health and community cohesion objectives.

- **Habitat Surveys**
  Habitat surveys were carried out during the reporting year in accordance with the UK Habitat Classification Methodology, with support from second-year BSc Wildlife, Ecology and Conservation students, including one micro-placement student. Surveys were undertaken across the wildlife garden, wildflower meadow, physic garden, green bike shed roof and the bumblebee buffet area.

  Key findings:

  - Wildflower Meadow: 22 species recorded, including 13 plant species.
  - Bumblebee Buffet Area: 28 species recorded, representing an increase of 11 species compared to 2024 and a cumulative increase of 17 species since 2023.
  - Wildlife Garden (land area only): 48 species recorded, a decrease of 8 species compared to 2023.
  - Physic Garden: 32 species recorded.
  - Green Bike Shed Roof: 11 species recorded.

7. Travel and Commuting

During the reporting year, the University progressed a range of initiatives to improve travel options and better understand travel-related emissions, supporting its wider sustainable travel and decarbonisation objectives.

The Travel Working Group will be re-established to explore opportunities to enhance travel options to and from the University and to encourage staff and students to adopt more sustainable modes of transport. This work will feed into wider University-led collaboration with Suffolk County Council and Ipswich Borough Council to support increased uptake of sustainable travel across the local area and beyond. These partnerships recognise that achieving sustainable travel outcomes requires coordinated infrastructure improvements that extend beyond the University's own boundaries.

7.1 Bus Travel

During the reporting year, the University has progressed initiatives to improve bus travel options for staff and students across both the main campus and Adastral Park. Engagement with First Bus and internal colleagues resulted in a formal agreement for a new service, which

is scheduled to commence in the 2025/26 academic year. Monitoring of service implementation and uptake will continue to ensure it meets the needs of the University community. Options for incentives and subsidies are being discussed.

7.2 Business Travel Emissions

With a full year of verified business travel activity now available, this section reports on the resulting emissions and incorporates these figures into the University's Scope 3 carbon inventory. See Figure 5 below which will form our baseline for reduction requirements to 2030.

Figure 5: Business Travel Scope 3 Emissions by Mode

Mode	Miles	t CO2e
Car	34,401.19	8.78
Taxi	1,085.41	0.16
Van	580	0.33
Bus	1,030.42	0.06
Rail	103,349.10	6.06
Flight	522,894.80	161.33
Total	**663,340.90**	**176.72**

This analysis reveals that aviation represents over 91% of our business travel emissions despite accounting for a smaller proportion of total travel distance, highlighting the carbon intensity of air travel and the importance of addressing strategic flight reduction initiatives.

7.3 Travel Survey

The University's travel survey was conducted between June and 4 July, receiving a total of 160 responses, compared with 222 responses in the previous year. Of these respondents, 81.25% were staff and 18.75% were students.

Despite the reduction in overall participation, the survey indicates a notable increase in the adoption of more sustainable modes of transport. While multiple factors may contribute to this positive trend, private car use remains the predominant form of travel, as expected. These patterns suggest that University-led engagement and infrastructure initiatives are beginning to influence travel behaviour, supporting broader sustainable transport objectives.

Electric vehicle purchase costs continue to represent a significant barrier to adoption, and the availability of off campus charging infrastructure remains a concern. Nevertheless, an increasing number of respondents report that hybrid vehicles are being considered for their next purchase, providing valuable insight to inform the ongoing development of the University's future infrastructure planning priorities.

8. Responsible Procurement

The University Sustainability Team continues to work with contractors to capture emissions associated with university-related activities through the Net Positive Futures platform. This platform enables contractors to update, track, and report their emissions, which the University can then review. The supplier engagement programme represents leading practice within the higher education sector and supports the University's approach to comprehensive carbon accounting. Use of the platform is embedded within the University's tender process, with ongoing participation monitored to ensure compliance and continuous improvement.

During the reporting year, the University's procurement policy was revised to place greater emphasis on sustainable procurement. The updated policy reinforces the University's commitment to achieving zero emissions in Scope 1 and 2 by 2030 and to reducing Scope 3 emissions once baselines have been established, with a target of net zero by 2050. The policy also incorporates Ethical and Social considerations, ensuring procurement decisions reflect institutional values while delivering environmental benefits.

Work with contractors is being further developed to measure Scope 3 emissions directly associated with university activities. CO_2e per £ of revenue has been identified as the preferred metric for monitoring, providing a clear and measurable approach to supply chain emissions management.

Engagement Training and Community Involvement

This year the sustainability team have been very active in delivering talks on sustainability, working with the wider university and providing practical experience to students, staff and external stakeholder. A summary of the engagement can be found below:

- Four student micro-placements successfully delivered across waste management, travel, and biodiversity sectors.

- Geography and sustainability graduate completed a three-day work shadowing programme to explore career opportunities within the sustainability sector and identify potential specialisation areas.

- 2 radio interviews on Suffolk Sounds and BBC Radio Suffolk promoted the wellbeing allotment opening and broader University sustainability initiatives.

- A podcast with Student Experience Services, discussing sustainability opportunities and institutional benefits for the University.

- Presentation delivered to the School of Social Sciences staff to introduce sustainability principles and encourage sustainable thinking within the department.