



University of Oxford Environmental Sustainability

Annual Report 2023-24







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Introduction

Foreword by Harriet Waters

This has been a fascinating year in our sustainability journey at Oxford University. Our team has grown and the processes we have introduced are now starting to show results.

We are also excited to report on new opportunities for students to study environmental sustainability at the University of Oxford. First announced in the 2023 Oration, the Vice-Chancellor's Colloquium on Climate is an extra-curricular program that brings together students from every undergraduate course and college to explore interdisciplinary perspectives on climate change, develop problem-solving skills, and contribute to climate solutions.

This year we started measuring our research work with reference to the United Nations' Sustainable Development Goals. This will allow us to evaluate our contribution to addressing the environmental challenges through our research.

We continued our decarbonisation work in earnest and delivered energy efficiency and carbon reduction infrastructure projects valued at about £3.4m, generating savings of 1,393 tCO₂e annually. We have also been working to update the Sustainability Design Guide, which guides design teams involved in major projects (both construction and refurbishments) to incorporate best practices for sustainability performance. The University is working with staff and student stakeholders to enhance biodiversity and improve the habitats and species variety on its land. This includes undertaking ecological surveys and delivering projects to enhance on-site biodiversity.



Looking to our sustainable travel efforts, we continued the Vision Zero project which supports the safety of road users, especially the more vulnerable ones – cyclists and pedestrians. This past year, we supported University staff and students with 725 hours of cycle training and provided subsidised safety equipment and free bike servicing on site to nearly 3,000 staff and students. None of our work would be possible without the support and dedication of colleagues, be that in leadership, research, education or operations. In particular, we'd like to thank our grassroots networks for improving sustainability in all corners of the collegiate University.

Thank you all for taking part in this incredible work! We are so proud to be part of this journey.

Harriet Waters
Head of Environmental Sustainability

About this report

This report reviews the environmental sustainability work of the University of Oxford and the colleges between August 2023 and July 2024.

The data in this report focuses on the University's functional estate – the buildings that are used for its day-to-day activities. It includes all the buildings and facilities that either support or directly deliver research or education, such as specialist research buildings, teaching laboratories, lecture halls, sports facilities, libraries, museums, offices and ceremonial buildings. The quantitative data used within the report does not cover the operations or buildings of the colleges or of Oxford University Press.

Carbon emissions estimates for scope 1 and 2 are based on invoiced consumption (for gas and fleet emissions) and meter readings (for electricity). The carbon footprint has been calculated in line with the University of Oxford Emissions Accounting Report. F-gas emissions are excluded.

The biodiversity impact of the University's supply chain is calculated using the methodology detailed in Bull et al., 2022 and relates to the previous financial year (2021–22).

We trust that you will find the information useful. We would welcome feedback from our readers to help us continue to improve the way we communicate our environmental sustainability performance.

For more information, contact the Environmental Sustainability team.

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Natural Harmony, Sustainability
Photographer of the Year
competition, 2004.
Image by Bharat Shivan.



Action and progress against the strategic priorities

The University of Oxford's Environmental Sustainability Strategy sets targets to achieve net zero carbon and net gain in biodiversity by 2035 to address the global challenges of climate change and biodiversity loss in our organisation.

The strategy focuses on the priorities as listed below:

Carbon emissions from University buildings



Strategic commitment: Reduce carbon emissions related to our energy consumption to a minimal level.

Actions

Project roll-out

In the past year, the carbon reduction team delivered projects with a total investment of £3.4m. These are expected to reduce the University's scope 1 and 2 carbon emissions by 1,393 tCO₂e annually.

Energy efficiency through building fabric and services improvements

The team is currently delivering a range of pilot projects to assess the potential of various innovative technologies. These include smart sockets, window coating, solar panel installation on listed buildings and improved window glazing.

Initial findings show that improvements to the fabric of a building are less effective than those made to building services (as measured by tCO₂e reduction per pound spent). Furthermore, they suggest that once an

efficient heat source is present, it is difficult for fabric improvements to reduce carbon emissions enough to justify their cost. These learnings will inform the carbon reduction team in future projects.

Heat decarbonisation strategy

The high-level heat decarbonisation plan has been developed further in collaboration with several of our colleges, as well as external organisations including the City and County Councils, and Oxford Brookes University. Following an analysis of the options, a strategic outline case is now being developed and will be ready in 2024-25.

Photovoltaic technology (PV)

In the past year, our team has assessed University buildings (~220 sites) to identify roofs with potential to expand solar panel coverage. The 5-10 sites with the most potential were identified and plans for these are being developed for implementation over the next 2-3 years.

Design guide

Work is underway to update the 2017 Sustainability Design Guide, aimed at helping design teams involved in major projects (both construction and refurbishments) to make good decisions on sustainability.

The updated guide focuses on ensuring that design performance aligns with actual performance in use, providing comprehensive guidance on sustainability practices. This update will be completed in the next year and will provide designers with more detailed instructions, helping them to navigate the complex challenges associated with creating highly sustainable buildings, which also serve as comfortable working environments.

Be Energy Friendly

For the second year, the University has delivered a holistic campaign aimed at both staff and students, to reduce their energy consumption by changing their behaviour.

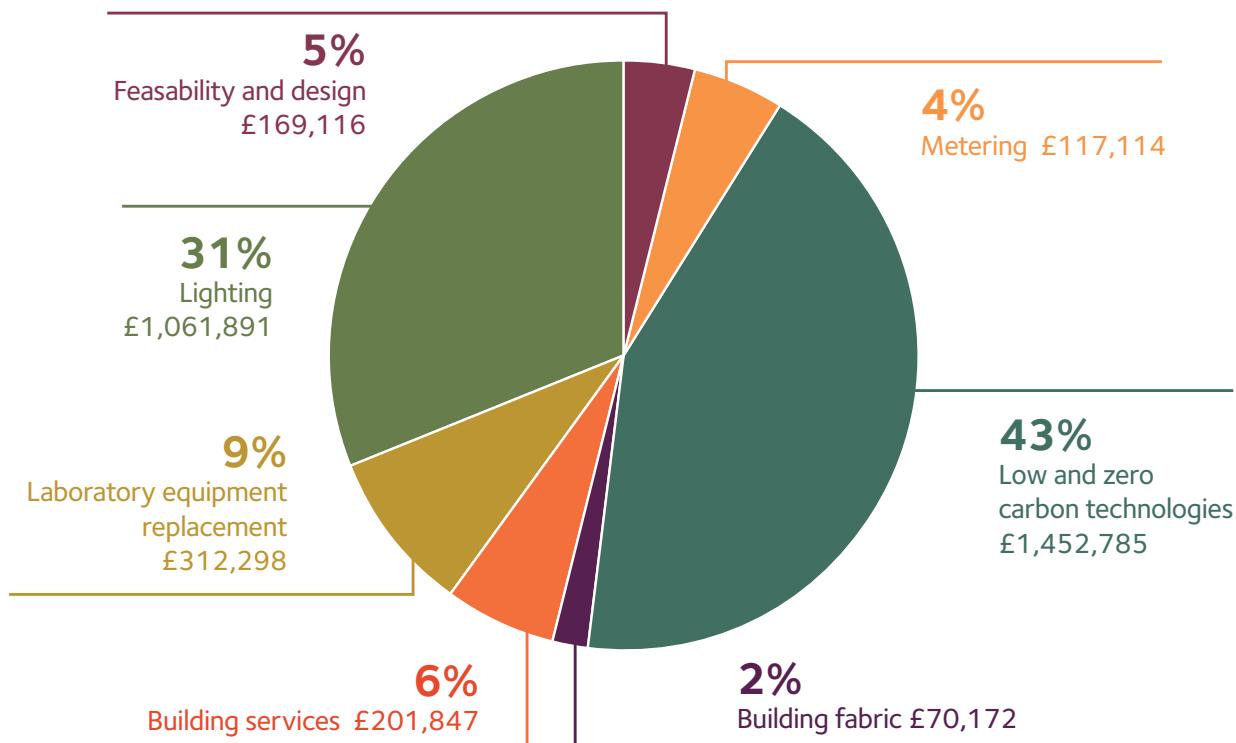
The Be Energy Friendly campaign highlights the daily choices everyone can make to reduce energy use, providing tailored guidance for both winter and summer. It supports the University's policy for the heating and cooling of buildings, which regulates temperature settings and controls the duration of heating and cooling activity.

The University community's collective efforts in 2022-23 led to a 5% reduction in Scope 1 carbon emissions (those directly emitted by the University), equivalent to savings of ~1,260 tCO₂e.

Oxford Sustainability Fund

The Oxford Sustainability Fund supports sustainability projects throughout the University. This year a total of £3.4m has been spent on energy efficiency and carbon reduction projects, with the following breakdown (see figure 1):

Figure 1: Spend on energy efficiency and carbon reduction projects (in £)



Carbon reduction initiatives in the colleges

- Wadham College installed sensors across most of the rooms in the main site. These sensors feed into an energy management system that measures and controls energy usage at sockets and radiators in each room. The data from the system have allowed Wadham College to undertake targeted insulation projects and save energy.
- Lincoln College installed over 80 solar panels on their Museum Road offsite housing facilities.
- St Antony's College decreased its 2023-24 natural gas use by 12% compared to the 2018-19 baseline.
- Reuben College was awarded Low Carbon Building of the Year at the OxPropFest (Oxfordshire Property Festival) Awards 2024.
- Linacre College installed 18 heat pumps and undertook fabric upgrades on three out of four main site buildings. Fabric improvements include internal wall and roof insulation, double glazing and heritage windows draught proofing. These actions are expected to reduce the college's reliance on gas at these large properties.

In numbers

Table 1 presents the total carbon emissions for 2023-24 in comparison to previous years.

Data presented in tCO₂e

	2023-24	2022-23	2021-22
Scope 1	18,218	18,860	19,854
Scope 2	0*	0	0
Scope 3	250,876**	251,574	230,823

The University's carbon estimates, as presented in the table above, exclude F gases, pensions, HMRC costs, and Green House Gas Protocol categories 8-15.

* Electricity usage was 119.3 million kWh and was procured from a zero-carbon tariff from April 2023, before which we purchased REGO-backed electricity thus calculated as zero.

** Scope 3 estimates are lower than in previous academic years due to methodological changes including removing pension contributions and payments to HMRC. The table reflects a recalculation of previous years' data using the new methodology.



Spotlight on -

Saïd Business School heat pumps

The University has now completed the second phase of work to replace gas boilers with heat pumps at the Saïd Business School. This is the first significant heat decarbonisation project at the University. Decarbonisation is achieved by moving from fossil fuel-based heating systems such as gas boilers to lower-carbon electric heat pumps.

Key points of the project:

- **Project cost:** £1.5m, including £0.9m funded through grants.
- **Carbon savings:** The initiative is expected to save over 114 tCO₂e per year over the new plant's planned 15-year life.
- **Air quality:** There has been an improvement in local air quality, contributing positively to the surrounding environment.
- **Scheduling and impact on users:** The work was carefully planned over a nine-month period, to ensure that there was no loss of teaching time.

This project will be a model for future decarbonisation efforts across the University and highlights the institution's commitment to sustainability and environmental responsibility.



Saïd Business School project (images from left) air source heat pump providing hot water to the site, air source heat pumps providing heating, hot water tanks storing heated water from heat pumps (two tanks for hot water, two tanks for heating).

Biodiversity



Strategic commitment: Identify and address the University's principal biodiversity impacts through its operations and supply chain and enhance biodiversity on the University's estate.

Actions

Evaluation of supply chain

The University has been measuring the impacts of its operations and supply chain on nature since 2018, using methods co-designed with its academics. This year it calculated its 2021–22 footprint. The University reports its impact with a delay of one to two years due to the time required to produce the necessary datasets used in the analysis.

Biodiversity loss is driven by multiple environmental pressures including air pollution, greenhouse gas (GHG) emissions, land use change, water use and water pollution. Figure 2 shows how the University's activities affect biodiversity through these environmental pressures.

In the financial year 2021–22 (Figure 2), nearly 70% of the University's estimated impact on biodiversity arises from the supply chain for research and operations. These include purchasing for research such as laboratory

equipment, chemicals, rubber, plastic and glass, and the day-to-day running of the University such as IT, electrical items, furniture and paper.

The activities with the second-highest impact relate to the built environment, primarily energy and water use. The University does not have direct control over its supply chain impacts, but can reduce these by, for example, switching to more sustainable suppliers, or engaging with key suppliers to discuss mitigation options for their upstream impacts.

Monitoring biodiversity on the estate

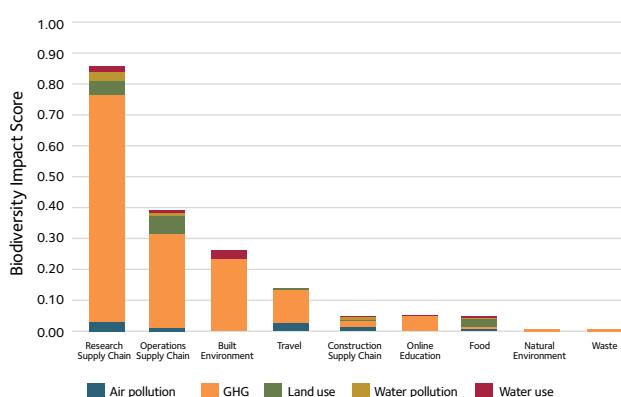
Understanding the habitats and species found on the University estate is important to inform biodiversity creation, and to identify opportunities for enhancement, research, education and engagement. The University measures the habitats, species and ecosystem services of its land using the Statutory Biodiversity Metric and the Environmental Benefits for Nature Tool. To support this, it uses data collected from academic research, ecological surveys and citizen science activities.

In the past academic year, three student interns monitored the health of trees planted in 2021 at Tilbury Farm, as part of activities for the Vice-Chancellor's Colloquium. During this week-long internship, they gained experience in ecological surveying and identifying trees while producing a draft report on the health of the trees and wider ecosystem.

Enhancing biodiversity on the estate

The University works regularly with stakeholders to improve the diversity of habitats and species on its landholdings. Over the course of this year, it has delivered five main projects; the restoration of a pond, undertaking

Figure 2: The biodiversity impact of the University's activities by environmental pressure



ecological surveys, enhancing the ecological condition of the University's Sites of Special Scientific Interest (SSSI), installing informational signage and planting patches of wildflowers across the collegiate University (as part of the Good Gardener campaign).

Biodiversity Subgroup

The Biodiversity Subgroup is a multi-disciplinary team made up of academics and professional staff who support the delivery of the University's biodiversity commitments. It meets termly and reports to the Environmental Sustainability Subcommittee. This year the Subgroup discussed and acted on a number of biodiversity-related topics including biodiversity net gain, measuring the University's biodiversity footprint and ecological

surveying of the estate. The Subgroup had an away day in Michaelmas term, at which they discussed the biodiversity opportunity log and potential ways to reduce the University's indirect biodiversity impact.

Nature Positive Universities

The Nature Positive Universities initiative, which is based in the Department of Biology and works closely with the Environmental Sustainability team, ran a series of six popular webinars in 2024 on different aspects of biodiversity strategies: action plans, monitoring, sustainable food and biodiversity uplift projects. It also ran a Student Ambassador programme, offering green skills workshops, reaching over 500 students from over 40 countries.

Biodiversity impact of departmental work

The Department of Biology carried out a pilot assessment to measure the biodiversity footprint of the department's work, mirroring and updating the methodology used in a university-wide assessment by the same team.

The analysis showed a relatively large biodiversity impact from resource use and waste across all environmental pressures (44% of the total impact), with the supply chain for research and operations playing a substantial role. Travel, including air travel for research activities, accounted for 20% of the total impact. Food consumption accounted for a further 20% of the impact, according to information gathered from surveys of staff and students.

"Going forward the Department of Biology will use this analysis to better target awareness and action to operationalise the mitigation hierarchy. We are also exploring the development of an interactive dashboard, based on the departmental tool, to make it accessible for other departments and colleges across Oxford."

Dr Dawn Burnham, Sustainability Lead, Department of Biology



Good Gardener campaign

The Good Gardener campaign invited teams from the collegiate University to plant wildflower meadows across the estate. Guided by the team and with the support of Facilities Managers and the University Parks, teams planted 32 patches with seed mixes. The project covered a total area of 850 square meters, equivalent to 3.5 tennis courts. A survey of 10 of these patches found 74 plant species, with individual patches containing as many as 28 each.



The Good Gardener Campaign offered staff and students the opportunity to take an active part in enhancing biodiversity on University and college grounds.

Encouraging citizen science through iNaturalist

Using the website/app iNaturalist, over **600 species** have been recorded between Harcourt Arboretum, University Parks, the Botanic Garden and the History faculty grounds. Many popular and charismatic wildlife species are found on the University estate, including plants such as the Pyramidal Orchid (*Anacamptis pyramidalis*) and birds like the Kingfisher (*Alcedo atthis*).

University of Oxford iNaturalist Project



Follow the QR code to enter
University of Oxford
iNaturalist Project

Left: Information sign which was installed in the meadow behind the History Faculty building. The meadow is a result of a rewilding project led by the students' Nature Conservation Society with the support of Faculty staff and the Environmental Sustainability team.

Biodiversity on college grounds

- Worcester College enhanced biodiversity on its grounds by planting diverse species and creating habitats for wildlife, including 60 bird boxes. The college conducted its first biodiversity survey and supported awareness and wellbeing among staff members, students and the public. The survey used iNaturalist to identify and log wildlife encounters as part of the City for Nature Challenge.
- Wadham College, in collaboration with an MBiol student, conducted an analysis of the biodiversity impacts and the carbon costs and benefits associated with the college's net zero strategy.
- Working with the **Thames Valley Wildflower Meadow Restoration Project** since 2020, the gardens team at Merton College embarked on a project to restore two of Merton's Meadows within the city: Great Meadow and Music Meadow. The meadows connect with other wildflower meadows around Oxford, helping to create a network of green spaces that attract a multitude of wildlife and support flora and fauna that struggle to survive in other habitats.
- Conference of the Colleges' first forum meeting in Michaelmas 2023-24 focused on biodiversity. The forum published gardening guidance for colleges about planting, No Mow May and building wildlife ponds.

In numbers



The University has commissioned **4 ecological reports**



The University enhancement work covered **69,750m²**



32 wildflower patches were planted



A survey of just 10 of these wildflower patches found **74 plant species**, with individual patches containing as many as 28



Recorded over **600 species**, using iNaturalist

Spotlight on -

Green Estate

The University estate includes over 3,000 acres of woodland and farmland around Oxford, and these green spaces are managed by Estate Services for use in research, teaching, environmental services and outreach.

Read more: <https://estates.admin.ox.ac.uk/green-estate>



Field work at Wytham Woods (©OU Images / Elizabeth Lettmann)



Blue tit at Park Farm (Park Farm website)

Curriculum



Strategic commitment: Offer all students the opportunity to study environmental sustainability, either within or outside the examined curriculum.

Actions

Establishing a baseline

With support from the Curriculum Subgroup, the team has completed the baseline report on opportunities to study environmental sustainability in undergraduate courses and postgraduate taught degrees. This curriculum mapping exercise involved consultation with University stakeholders across the academic divisions. In June 2024, the Environmental Sustainability Subcommittee (ESSC) approved the draft report, and the Education Committee provided feedback on the report and recommendations.

This report is the first systematic attempt to measure the opportunities to study environmental sustainability in Oxford's examined curriculum. It advances the first commitment under the curriculum priority – ensuring courses with core and optional sustainability content are easily identifiable – while serving as a baseline against which progress on the second and third commitments can be tracked.

Responsible Futures

This year the University joined the SOS-UK (Student Organisation for Sustainability) Responsible Futures programme in partnership with the Oxford Student Union. This programme offers a framework for sustainability education based on 10 years of work in the UK and through emerging international partnerships. SOS-UK staff joined a Curriculum Subgroup meeting in Michaelmas term and are supporting work with the Environmental Humanities Hub to advance sustainability education in the Humanities Division.

VC's Colloquium on Climate Change

The pilot of the Vice-Chancellor's Colloquium on Climate Change was offered to 200 undergraduate students over Hilary Term 2024.

[Read more about the Colloquium in the "Spotlight on" section on page 14.](#)

Across Oxford

Saïd Business School

The Saïd Business School's 2022–23 Annual Sustainability Report emphasised the importance of environmental, social and governance (ESG) content in the MBA programme, appearing in 51% of core teaching hours. In addition, the Global Opportunities Threats Oxford programme helped MBA and Executive MBA students navigate the complexity of real-world challenges related to sustainability and climate change.



Medical Science

The **Planetary Health Report Card** is a student-driven, metric-based initiative to promote planetary health in health professional schools. The latest report card for the Oxford University Medical School rated the curriculum at A, noting:



MEDICAL
SCIENCES
DIVISION



"The curriculum score has notably improved this year, especially through the 'Intro to Final Year' teaching, reflecting the ongoing integration of planetary health across pre-clinical and clinical courses. We would like to thank all students and faculty involved, especially ESH lead Dr SanYuMay, for their work towards this."

Spotlight on -

The Vice-Chancellor's Colloquium on Climate Change

After being announced in the 2023 Oration, the pilot of the Vice-Chancellor's Colloquium on Climate Change was offered to 200 undergraduate students over the eight weeks of Hilary Term 2024. As a new extra-curricular opportunity, the Colloquium supported the development of interdisciplinary skills related to numeracy, critical thinking, communication and problem solving through keynote lectures and college-based tutorials exploring the causes and impacts of, and solutions to, climate change.



"I have been delighted by the level of interest and engagement of students in the inaugural Vice-Chancellor's Colloquium. Over the past eight weeks a fantastic programme of keynote lectures and discussion groups has brought together students and academics from across all academic disciplines to think broadly and creatively about climate change.

By working collaboratively, our students have developed some brilliantly creative and innovative projects that show the value of fostering strong cross-curricular skills to tackle global issues.

I am deeply grateful to the Department for Continuing Education who hosted the program and to all the graduate student facilitators and academic staff members who worked so hard to make this happen. Congratulations to one and all!"

Professor Irene Tracey, Vice-Chancellor of Oxford University, 22 April 2024



In numbers

The Vice-Chancellor's Colloquium:



200
undergraduate students
representing all colleges and
undergraduate courses



480
expressions
of interest



20
postgraduate
facilitators of sessions
hosted by 10 colleges for
skills development and
group projects



8
keynote lecturers
from all four academic
divisions, with cross-
disciplinary pairings in
conversation



15
students participated
in micro-internship group
projects on biodiversity, food
and procurement



144
students received
a certificate of
completion

<https://www.conted.ox.ac.uk/about/the-vice-chancellors-colloquium>



Vice-Chancellor's Colloquium on Climate – 2024, images by John Cairns.

Sustainable resource use



Strategic commitment: Reduce the environmental impacts of our consumption and supply chain.

Actions

Development of new purchasing approach

The Environmental Sustainability team works with University purchasing colleagues to make procurement more sustainable.

In the past year, the Purchasing team implemented initiatives covering the following topics:

Standardising and rationalising purchases and suppliers

One way to support sustainable procurement is by minimising resource use and making it simpler for staff to order sustainable products, or to choose suppliers with a good record on sustainability. A cross-functional team of colleagues formed a working group to develop standardised purchasing initiatives, targeting both cost savings and environmental sustainability benefits. The first initiatives are now being rolled out across University Administration Services and include removing paper towels in washrooms and standardising paper, printers and specifications for IT hardware.

Including sustainability performance in tender processes

As part of the tender for a new stationery supplier, all participants were questioned on their sustainability credentials and initiatives. This included proof of relevant accreditations, compliance with the Oxford Zero Emission Zone (ZEZ), ideas for delivery consolidation, offerings of sustainable product alternatives and plans to reduce non-renewable resource use.

The agreement with the new preferred supplier for consumables includes sustainability requirements. The supplier will be expected to carefully assess the environmental impact of every product it provides.

A similar process formed part of the cleaning services tender, including questions on the use of chemicals, the energy performance of equipment and vehicle fleet.

Measurement and reporting of the sustainability requirements in tenders is on-going.

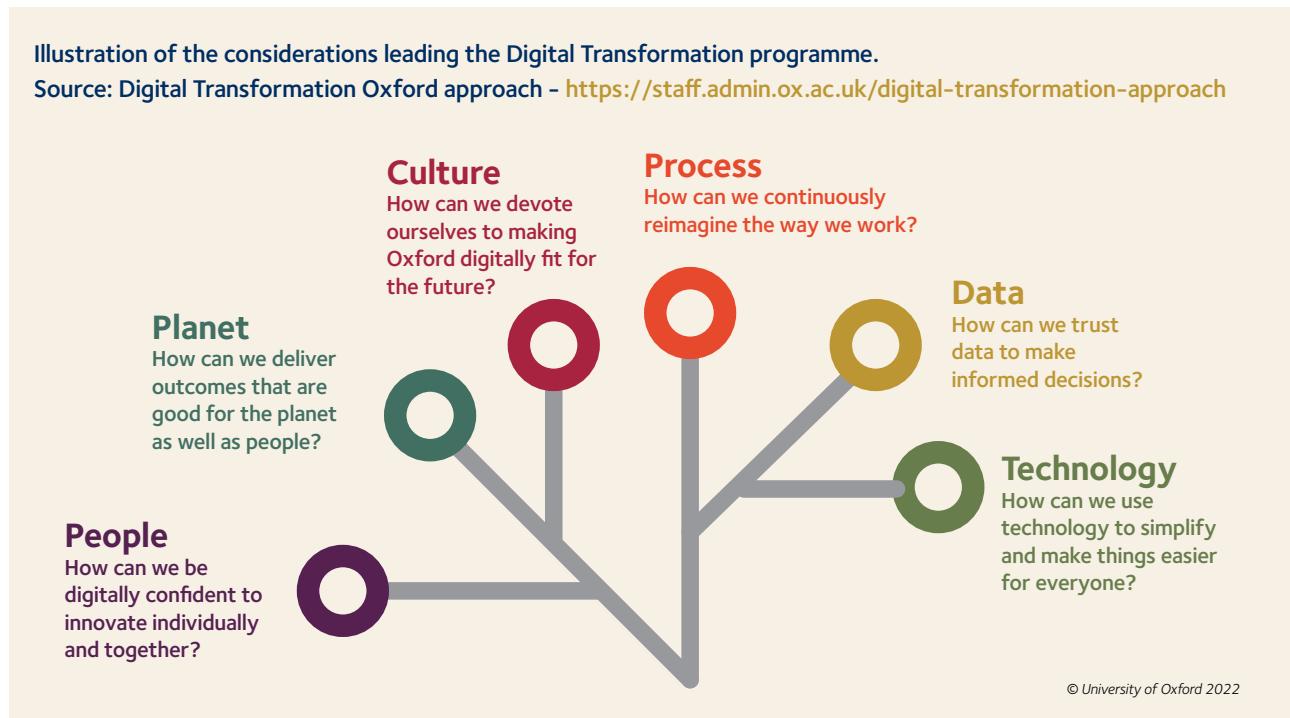
*Picking up insects,
Sustainability
Photographer of the
Year competition
2024. Image by
Martha Glennon*



Digital Transformation initiative

Oxford University is in the midst of the Digital Transformation programme, which will enable the University to be fit for the digital future and making it easier for everyone to study and work.

While still in its initial stages, the programme identifies sustainability as one of its key considerations and aims to embed it in all decision making.



Utilities and waste

In 2023–24, the University (excluding colleges) used a total of 389,695m³ of water. Our electricity was procured from a zero-carbon tariff from April 2023, before which the University purchased REGO-backed electricity (Renewable Energy Guarantees of Origin).

Thanks to a new recycling stream available at two of our major sites, the University collected and diverted 6.28 tonnes of expanded polystyrene in the academic year 2023–24. This would otherwise have gone into the general waste stream.

In numbers

- Scope 3 emissions – 250,876 tCO₂e (indirect emissions including supply chain)
- Nearly 70% of the University's estimated biodiversity impact is attributed to the supply chain for research and operations.
- The top contributors to the University's scope 3 emissions are presented in the following table, along with their respective percentage contributions to the total estimated emissions.

Student inter-term flights	18%
Construction	18%
Business flights	9%
Scientific and medical equipment	9%
IT	7%

Waste and recycling data

- The University disposed of 1,624 tonnes of waste – 47 kg per person (Full time students and staff).
- 1,025 tonnes were used to generate energy, and 600 tonnes were recycled.
- The University reused 7,500 kg of equipment through the Waste Action Reuse Portal (WARPit). This saved the University the equivalent emissions of 20 tCO₂e and £35,000.
- The University used 389,695m³ of water.

Spotlight on -

University Sports' example of circular economy

Many types of sports require specialist equipment, most often plastic-based. The University Sports department pool at Iffley Road Sports Centre generates plastic waste from swimming equipment such as goggles, floats and flip-flops.

"Kids are always going to have a nibble on pool noodles, goggles are always ending up on the lost and found and flip flops just break.



Incidental pool waste goes to general waste and the items in the lost property collection are way beyond what the local charity shops in Oxford could use."

Stuart McCarroll, Finance and Business Development Manager at Iffley Road Sports Centre

Facing this waste of resources, the department decided to look for a circular economy solution. The Iffley Road Sports Centre partnered with Leisure Loop, a company specialising in processing these items – in their words, recycling the unrecyclable.

A collection point was set up at the pool where people can drop their damaged pool waste and the pool team can dispose of lost or unwanted items. The waste is then collected and turned into usable equipment once more, before being sold in the Sports Centre's shop.



Credit: Leisure Loop and Oxford University Sport

The operation is expected to be cost-neutral, and when other pools in the area join the scheme, it will become even more effective in terms of carbon emissions and costs.

Research



Strategic commitment: Increase research and engagement in environmental sustainability.

Actions

Oxford Network for the Environment

The Oxford Networks for the Environment (ONE) continue to play an important role convening dynamic communities of researchers around the themes of biodiversity, climate, energy, food and water.

On 6 March 2024, the ONE annual lecture took place at the Oxford University Museum of Natural History, with Professor John Schellnhuber, Founding Director of the Potsdam Institute for Climate Impact Research, speaking on the theme 'How to survive the Anthropocene: Flat Overshoot, Deep Restoration'.

Across Oxford

Oxford Energy Day

The 11th Oxford Energy Day took place in September 2023, focusing on Energy and Innovation. The day's presentations and collaborations examined diverse aspects of innovation, aimed at delivering the energy transition. Particular emphasis was given to discovering potential

solutions based on research at the University and acquiring the evidence needed to inform policy and action.

The Environmental Humanities Hub

The Environmental Humanities Hub at The Oxford Research Centre in the Humanities is a community of scholars drawn from a wide variety of disciplines, from literary criticism and theology to music and history. The hub generates meaningful interdisciplinary collaborations aimed at answering some of the most pressing questions of our time.

Everything is Connected

'Everything is Connected' was a two-month programme of events from the Cultural Programme in the Humanities Division. It gave the public an opportunity to engage with academic research that focuses on the environment and the challenges facing humanity from cultural and social perspectives. Activities included an installation that translated words into birdsong, to highlight the precariousness of species of birds that are being pushed out of the ecosystems. Another popular exhibit was the 'pollution pods' that allowed people to experience the quality of air in some highly polluted cities. In total, 8,000 people took part in the 38 events offered over the season.



In numbers

Currently in the Oxford University Research Archive Climate Research Collection:



4,653
journal articles



655
theses



Oxford University Innovation's 2023
Impact Report mapped the activities of
58 spinout companies against the SDGs



4 Companies



7 Companies



6 Companies



8 Companies



11 Companies



3 Companies



8 Companies



Spotlight on -

Concordat

The Concordat for the Environmental Sustainability of Research and Innovation Practice was published in April 2024 by Wellcome and Cancer Research UK. Both funders will require grant-holders to comply with the Concordat. The newly formed Concordat Working Group notes that the Concordat broadly aligns with the Environmental Sustainability Strategy. It has made a series of recommendations related to environmental data, reporting and procurement. Increased uptake in the Laboratory Efficiency Assessment Framework (LEAF) accreditation programme is also anticipated, as this is one of the funders' requirements.



"The aim of the concordat is to ensure research and innovation continues to play a critical part in understanding how our planet is changing, while helping the sector to act responsibly to protect and promote our environment

By signing this concordat, signatories:

- recognise the need to change how we conduct research and innovation as well as promote wider solutions
- agree to take shared action now and in the future to reduce and eliminate our own negative environmental impacts and emissions and achieve the transition to sustainable practices."



Reference: Wellcome, Positions and statements on issues of relevance to Wellcome and our role as a global charitable foundation. <https://wellcome.org/who-we-are/positions-and-statements/environmental-sustainability-concordat>

A field covered in buttercups,
Sustainability Photographer of
the Year competition 2024.
Image by Aline Soterroni

International travel



Strategic commitment: Reduce aviation emissions from University staff and student travel and offset the balance of emissions.

The travel policy, including the flight levy, has now been in place for two years, allowing for comparative data for the first time.

In the past year, total flights have increased by 10.9% from 2022-23 which has resulted in an increase in carbon emissions. The level of increase differs across division.

Table 2 presents the comparative flight data over the last two years.

	2022-23	2023-24
Total air travel trips	13,187	14,633
Total distance travelled by air	101 million km	112 million km
Total emissions	18.06 tCO ₂ e	24.9 tCO ₂ e
Total flight levy	£541,700	£749,9000
Average flight levy per trip	£41	£51
Total spend on air travel	£9.11m	£9.94m

The Travel Policy set a flight reduction target of 35% by 2035 against the baseline of 30,000 tCO₂e, with interim reduction targets of 20% by 2024-25, 10% by 2030-31 and 5% by 2034-35.

In numbers

- **14,633 trips were made by 7,285 individuals** (trips refer to flights booked together such as a return flight or multi-leg journey even if it comprises more than one leg)
- Total emission from flights **24,998 tCO₂e**
- **112 million km** travelled by air
- **£749,925** (an average of £51 per trip) flight levy generated
- **11,224 flyers** flew **27,820 flights**, averaging 2.48 flights per person
- Over the past two years, the top 1% of flyers by flight count flew around **9% of total flights** making up over **9% of the emissions**. The top 1% consists of **112 individuals** who together flew **2,428 flights across 15 million km**
- The **top 1% of flyers** by flight count flew **15 flights** or more over the past two years
- The **top 1% of flyers** were more than **3 times** as likely to fly business class
- **53% of flyers** flew only once in two years. This 53% of flyers is made up of **5,976 individuals** making up 24% of emissions
- More than half of all flyers fly **less than 1 flight per year**



Figure 3 below shows that the emissions of 2023-24 exceed the 2024-25 interim target with total emissions increasing from 18,057 tCO₂e in 2022-23 to 24,998 in 2023-24. This requires a reduction of at least 1,000 tCO₂e over the next year to achieve the interim target.

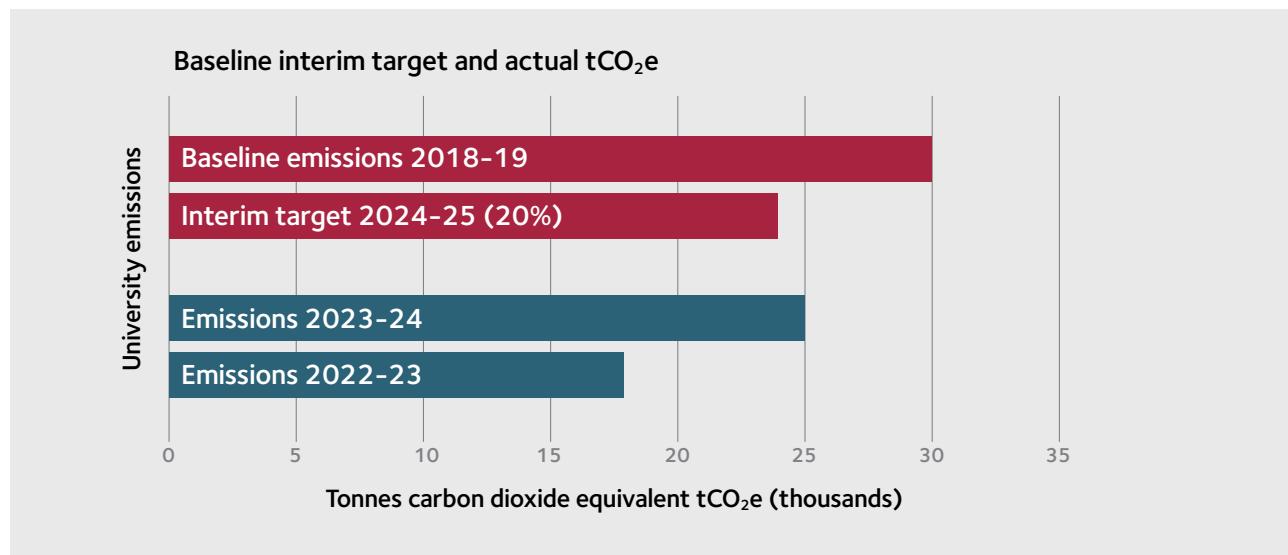


Figure 3: Tonnes of CO₂e emissions from business flights in comparison to baseline and target.

Actions

Capturing data and engaging with stakeholders

Since the Travel Policy came into effect in August 2022, the team has focused primarily on implementing a system of flight levy charges and monitoring, and on compiling data to share with stakeholders to support decision-making. With multiple suppliers and inconsistent booking and payment methods, this task has proved challenging.

The team reports to divisions and departments annually on their emissions.

Expanding the policy

In the past year, Keble College introduced a flight levy which has been implemented on all college and Keble Academic funded flights. This mirrors the University flight levy and aims to reduce the emissions from flights from Keble college funded flights.



Revising the undergraduate international admissions process

The Undergraduate Admissions and Outreach team has made the recruitment process for international undergraduates more sustainable by moving much of it online.

International student recruitment in higher education traditionally involves significant air travel and thereby high associated carbon emissions. The International Student Recruitment team within Undergraduate Admissions and Outreach have grasped the challenge to reduce international flights whilst simultaneously improving the depth, frequency and engagement with prospective students from around the world. Through a varied and robust programme of online events and engagement, prospective students can interact with current international students, admissions specialists, academic tutors and other staff to learn about studying and applying to Oxford. This allows a much greater diversity of international students to engage with the University, while also reducing carbon emissions relative to industry standards, and previous practice at Oxford.

This new approach avoided 552,800km of travel over the year (about 14 times around the world, or to the moon and halfway back) and reduced associated emissions by 108 tCO₂e per annum.

Local travel



Strategic commitment: Limit transport emissions by reducing the need to travel, encouraging walking, cycling and the use of public transport, and managing the demand to travel by car.



Vision Zero events throughout the year.

Actions

Local transportation strategy

The team have developed a draft local transport strategy, which is currently out for consultation around the collegiate University. Its goals include:

- Supporting Oxfordshire County Council in reducing deaths and serious injuries on Oxfordshire's roads to zero by 2050, with targets of a 25% reduction by 2026 and 50% reduction by 2030;
- Electrifying 100% of the University's vehicle fleet, in line with the University's commitment to reach net zero carbon by 2035;
- Reducing traffic to our sites by increasing freight consolidation for deliveries.

The strategy's commitments are being funded and delivered through income from staff parking permit charges, which raise over £400,000 a year. Progress towards achieving these commitments is monitored and reviewed by the Transport Planning Working Group and reported via the Environmental Sustainability Annual Report.

Ultra-low emission vehicle (ULEV) salary sacrifice scheme

The University implemented an ultra-low emission vehicle (ULEV) salary sacrifice scheme enabling employees to purchase a brand new electric or plug-in hybrid car out of their pre-tax income. To date, 41 staff have used the scheme.

Science Transit Shuttle

Use of the Science Transit Shuttle (STS) services has grown by around 20% compared to the previous year. STS services connect the University Science Area with Harwell Campus, Wytham and the Headington hospital sites. A new contract to operate until August 2025 has been secured.

Electric vehicle charge points

The University increased the provision of electric vehicle charge points at the ROQ and Begbroke Science Park.

The Travel team also enabled six departments to provide a total of 45 additional secure cycle parking facilities by providing advice and match funding.

Oxford University Freight Consolidation pilot project

The Oxford University Freight Consolidation pilot aims to reduce freight travel. The project, led by a number of Oxford colleges, partnered with a local cargo bike delivery firm to remove 15–20 van trips a day into Oxford. The pilot delivered 13,200 parcels and saved an estimated 5 tonnes of CO₂e over a 12 month period.

The colleges that take part in the pilot are University College, Wadham College, Corpus Christi College, St Anne's College, Wolfson College and Magdalen College.

This initiative joins the University Mail Service team which is using electric cargo bikes for many of their deliveries around Oxford

In numbers

- **3,000 people participated** in Vision Zero events (including Freshers' Fair)
- **325 staff and students** received free cycle training
- **253 bike doctor sessions** provided servicing to nearly 3,000 staff, student and departmental bikes on site
- **972 staff members** enjoyed the bus and rail ticket discount scheme and season ticket loan service
- **363 staff** participated in the cycle salary sacrifice and bike loan schemes
- **41 staff members took advantage of the EV scheme** to purchase ultra-low or zero emission vehicles



Vision Zero

Vision Zero is based on the principle that no human being should be killed or seriously injured in a road collision, regardless of the mode of transport they are using. It adopts a holistic safe system approach, emphasising that each fatality represents a failure in the system. This approach does not only involve technical solutions; it also fosters a cultural shift towards prioritising human safety in road traffic decisions. Vision Zero principles are integral to all transport-related decision-making processes.



Vision Zero Working Group

The vision zero working group (VZWG), chaired by the Pro-Vice-Chancellor (Planning and Resources), met twice a term from Trinity term 2022 to 2024. It included students and college and University staff. The primary focus was on reducing risks for all road users, with a particular emphasis on active travel modes due to the increased vulnerability of pedestrians, cyclists, and motorcyclists in collisions, and because safety concerns can deter people from adopting these modes of travel.

During its tenure, the Group developed a comprehensive Vision Zero work programme, secured the necessary resources, and facilitated the implementation of various initiatives. Key ongoing commitments include:

- **Provision of safety equipment and services:** Offering safety equipment, mobile bicycle mechanic services, and free cycle training for staff and students.
- **Traffic reduction and freight consolidation:** Including commitments to these practices in the University's transport strategy.
- **Road user hierarchy engagement:** Promoting the hierarchy of road users outlined in the Highway Code among staff and students.
- **Construction vehicle safety standards:** Requiring that main contractors and supply chains for capital projects adhere to CLOCS standards for construction vehicle safety.
- **Prioritisation of vulnerable road users:** Ensuring that the safety of vulnerable road users is a priority in all the University's development projects.

These ongoing efforts, alongside the adoption of a Walking and Cycling Charter (shown in **Figure 5**), reflect the University's commitment to creating a safer environment for all road users and supporting a shift towards sustainable and active transportation modes.

Figure 5:

University of Oxford walking and cycling charter



We believe that:

- Walking and cycling provide our staff and students with a healthy, convenient and cheap way to travel; and
- If more people walk and cycle this will reduce car dependency, reduce carbon emissions and improve air quality in the city.

We want:

- To make travelling on Oxford's roads and streets safe for everyone – especially for pedestrians and cyclists;
- People to be able to travel to work safely, directly and easily using a convenient, connected cycle network; and
- Our roads and public spaces to prioritise people and make walking and cycling the safe, natural choice for most everyday journeys.

We will:

- Provide safety equipment, mobile bicycle mechanic services and free cycle training for our staff and students;
- Include a commitment to traffic reduction and freight consolidation in our University transport strategy;
- Engage with staff and students to promote the hierarchy of road users in the Highway Code;
- Require our capital projects main contractors and supply chains to meet the CLOCS standards for construction vehicle safety <https://www.clocs.org.uk>;
- Specify FORS requirements in non-capital project procurement contracts <https://www.fors-online.org.uk/cms/>; and
- Prioritise the safety of vulnerable road users in all development projects pursued by the University.

We expect:

- Oxfordshire County Council to deliver their Vision Zero commitment to eliminate deaths and serious injuries from road traffic collisions in Oxford, with a 25% cut by 2026, a 50% cut by 2030 and full elimination by 2050; and
- Thames Valley Police to take more action on 'close passes' to cyclists and enforce 20mph speed limits in addition to existing activities such as drink/drug driving, non-wearing of seatbelts and mobile phone and distraction offences.

Sustainable food



Strategic commitment: Reduce the carbon emissions and biodiversity impact of our food.

Actions

In the past year, the University's efforts to promote sustainable food focused on two areas two area, academic and operational. Academic research to understand food systems and behaviours is ongoing, while the Environmental Sustainability team encourages better food choices within the University through engagement work.

Academic work to promote sustainable food

Oxford has conducted long-lasting projects researching food systems in relation to environmental impact, public health and social behaviours. These include:

TABLE

TABLE sets out the evidence, assumptions and values that people bring to debates about sustainable food futures. The project explores data, beliefs and biases to support better dialogue and, eventually, decision-making and action.

In the past year it has hosted events relating to sustainable food issues in Sub-Saharan Africa and Colombia, and reviewed the notion of 'regenerative agriculture.'

A photograph of a path at dusk or night, with streetlights and a cloudy sky. Overlaid on the top half of the image is a large, thin-lined geometric triangle. Inside this triangle, there is a photograph of a street lamp illuminating a path, with a person walking away from the viewer. The overall composition is a composite of two images.

A Path of Many Lights,
Sustainability Photographer of
the Year competition 2024.
Image by Subham Basak

Livestock, Environment and People

The Livestock, Environment and People (LEAP) programme, affiliated with the Future of Food programme at Oxford Martin School, works to understand the health, environmental, social and economic effects of meat and dairy production and consumption. A network of researchers from many disciplines provides evidence and tools for decision-makers to promote healthy, sustainable diets.

They have carried out research across five themes – the impacts of trends and policies; the high-level context for food system decisions; health and behavioural considerations; the environmental impacts of meat and dairy; and informing public attitudes. The programme closed recently after seven years, but the research community it helped create remains robust and engaged, championing efforts for changes in diet and farming.

Promoting sustainable food within the University

The University set up the Event Management professional community in 2023 to address the environmental impact of the events it holds. The community aims to establish an agreed standard for best practice in University events. Topics include reducing transportation need through hybrid events, resource management and use of IT. In its first year of activity sustainable food has been a key topic of discussion.

Fairtrade certification

The University of Oxford has once again received a Fairtrade University Award from the Fairtrade Foundation and SOS-UK. The awards recognise institutions that have embedded ethical and sustainable practices through their procurement and engagement work. Oxford has been a Fairtrade University since 2017.

Promoting sustainable food in the colleges

- Green Templeton College introduced steps to reduce its meat consumption. These include:
 - Increased vegetarian and vegan starters for formal meals.
 - Half of all food options at lunch are vegetarian.
 - Vegetarian options are presented ahead of meat options on weekly menus.
- Merton College's Head Chef Simon Crawshaw and researchers hosted two UNIQ+ interns to explore food waste at Oxford colleges. The interns surveyed food waste across most of the colleges and produced a guidance document to reduce food waste.
- Wadham College have been continuing to donate their leftover food for distribution to people experiencing homelessness in Oxford.
- St John's College achieved Fairtrade and Kale Yeah accreditation (Friends of the Earth scheme to green university meals). The Kendrew Café in the college offers mostly plant-based food and no longer offers red meat.



ESSC away day discussion

ESSC came together to learn about some of the latest research into sustainable diets.

The annual summer away-day is an opportunity to focus on subjects that are thought vital for the upcoming academic year. In 2024, sustainable food was a key theme, alongside heat decarbonisation and biodiversity.

The event was hosted by Pro-Vice-Chancellor David Prout and Head of Environmental Sustainability Harriet Waters, and led with an engaging, interactive presentation on sustainable diets by Peter Scarborough, Professor of Population Health from the Nuffield Department of Primary Care Health Sciences showing that the quickest carbon wins come from persuading meat eaters to transition to eating meat only occasionally.

Following on from this event, the Environmental Sustainability team is convening a VC's roundtable in October 2024, to review University-led research into sustainable food production, diets and health, and to make progress towards a data-driven policy that can meet our environmental targets.

Engagement



The Environmental Sustainability Strategy set a commitment to develop an engagement programme that will build support and involvement with the strategy among staff and students.

Actions

Engagement strategy

In the past year, the team have introduced and begun implementing a new engagement strategy. This focuses on engaging with staff members in positions of decision-making for actions with an environmental impact.

To support this strategy, two new engagement tools have been introduced, alongside continued growth in the existing grassroots network:

Sustainable professional communities

The establishment of professional communities aims to integrate and normalise environmental practices within specific target groups based on their roles within the University. To date the communities are:

- **Sustainable event managers:** Launched in October 2023, this community has been active and successful, focusing on integrating sustainability into event planning and execution. The community is managed in partnership with the Development Office and includes representatives from central University event teams and departments.
- **Facilities and building managers:** In the academic year 2023-24 preparations were made to launch this community, focusing on embedding sustainable practices in the day-to-day management and operation of University facilities.

Initiating pilot projects

Pilot projects provide a framework for demonstrating practical applications of sustainable practices, creating templates that can be scaled up and used elsewhere in the University. So far, the team has delivered one successful project demonstrating best practices for waste management. Concluded in the past year, this increased the overall recycling rate on its site from 23% to 40%.

Discussions continue on future projects, including one focused on building settings for agile working which is expected to launch in spring 2025.

Grassroots engagement-based schemes

The number of teams that are engaged with environmental work in their buildings, departments, colleges and laboratories has grown continuously over the last year.

Over 60 active Green Impact teams contributed, with 34 of them earning Bronze, Silver, Gold or Beyond Gold accreditation. Hundreds of individuals took part in various activities, reaching thousands of people in their departments and colleges and collectively completing 1,360 actions to increase sustainability.

Additionally, a total of 216 lab teams engaged in the LEAF (Laboratory Efficiency Assessment Framework) accreditation, with two departments achieving 100% lab participation in the LEAF scheme.

The yearly cycle of activities was concluded with a showcase and celebration event, where teams shared knowledge, networked and received their certificates.

In numbers



216 labs were LEAF accredited,
with 81 receiving gold awards



2 departments reached 100% cover of LEAF in their labs



26 newsletters were sent to staff members, students and lab professionals, reaching **over 6,000 people**



40 events were offered during Green Action Week, with **over 30 partners**

Green Impact



64 teams registered with **34 teams** submitting and achieving an award this year!



345 people led Green Impact teams – the average **team size is 5**



Provided **38 students** with training and development



Estimated reach of over **9,300 staff and students** through engagement with wider departments, faculties and colleges



Put **1,362 actions** into place through Green Impact



Green Action Week

The University celebrated its second Green Action Week in 2024. The week offered a full and exciting programme of sustainability events, delivered by over 30 partners across the University, from departments and colleges to Oxford SU, student societies, volunteer groups and suppliers.

Participants enjoyed 40 events including discussion panels, academic talks, nature walks and film screenings.



Green Action Week activities created a variety of opportunities including: tour of college gardens, bicycle maintenance workshop, green celebration at Christ Church College, information stalls, sustainable food offering and more.

Investments



Strategic commitment: Ensure that the University, as an investor, is part of the solution to climate change and biodiversity loss.

Actions

Oxford University Investment Committee dedicated sustainability expertise

The Oxford University Investment Committee appointed a member with specific expertise in environmentally sustainable investment.

Focus on ESG investment at OUem

ESG (Environmental, social, and governance) considerations are integrated into the investment process of Oxford University Endowment Management (OUem), the investment manager established by the University. OUem is in regular dialogue with investment groups on ESG matters during due diligence and in ongoing evaluation. As part of this, it asks all investment groups to use the Oxford Martin Principles for Climate-Conscious Investment as a reference for engagement with portfolio companies, to help plan for a net zero world.

OUem has also published its first standalone Taskforce on Climate-Related Financial Disclosures (TCFD) report, which is available on its website. [OUem TCFD Report](#)



Investing in solutions

The University owns units in the Oxford Endowment Fund (OEF), managed by OUem, alongside 45 other investors. Since 2010, OUem has been working to deal with the threats and opportunities arising from the inevitable move away from dependence on fossil fuels due to climate change, through broader themes of resource efficiency and innovation. This has so far led to investments in groups backing companies focused on areas including food and energy waste management, sustainable food chains, renewable energy, carbon offsetting software and technologies, carbon dioxide removal and direct air capture. Within its property portfolio, in 2020, the OEF acquired an upland estate in central Scotland as a natural capital investment.

In numbers

- OUem manages ~**£5bn of assets** for over 40 investors
- **0% direct investments in fossil fuels.** (Estimated indirect exposure of 0.5%)
- **29,000 carbon credits generated** within the OEF following a peat land restoration project in Central Scotland

Progress tracker

Commitment and progress

Carbon emissions from energy consumption on the University estate

- Reduce carbon emissions related to our energy consumption to a minimal level.



- Roll out continues for energy efficiency and carbon reduction projects.
- A high-level heat decarbonisation plan has been further developed with work taking place across organisations including the Oxford City Council and County Council.
- An internal survey was conducted to evaluate additional rooftop PV potential across the University, with five projects in various planning stages.

Biodiversity - Identify and address the University's principal biodiversity impacts from its operations and supply chain and enhance biodiversity on the University's estate.



- The University measures and reports its biodiversity impacts from its operations and supply chain.
- Enhancement projects are ongoing with the development of a mechanism to identify opportunities for future projects.
- Local surveys and engagement opportunities are offered to students, staff and the wider community.

Curriculum - Offer all students the opportunity to study environmental sustainability, either within or outside the examined curriculum.



- A baseline report into opportunities to study environmental sustainability in taught degrees was conducted.
- Responsible Futures to support the development of sustainability-related education. The team has worked to advance sustainability education in the Humanities Division. Additional work was done to enhance ESG topics in the Saïd Business School MBA programme.
- The inaugural VC Colloquium on Climate Change was offered to 200 students.

Sustainable resource use - Reduce the environmental impacts of our consumption and supply chain.



- Waste reduction and recycling targets were set and actions are ongoing to achieve them.
- The Environmental Sustainability and Procurement teams are working together on environmental considerations in purchasing.
- Purchasing guidance for key categories is being reviewed.
- Environmental sustainability is included as a consideration in the Digital Transformation Programme.

Research - Increase research and engagement in environmental sustainability



- The University promotes coordination and collaboration within various disciplines relating to environmental research through the Oxford Network for the Environment (ONE), monitoring sustainability research in line with the UN Sustainable Development Goals.
- Establish multi-discipline research centres.
- Small grants have been provided for research projects investigating negative emissions and building energy performance.
- The University is currently assessing its readiness to sign up to the Concordat for the Environmental Sustainability of Research and Innovation Practice.

Commitment and progress

International travel – Reduce aviation emissions from University business travel and international student travel and offset the balance of emissions.



- A travel policy was introduced with a travel hierarchy, a reduction target and a flight levy scheme.
- Business flights are recorded and reported annually.
- A system has been developed for charging flight levies and has to date raised £1m for the Oxford Sustainability Fund from 27,820 flights.

Local travel – Limit transport emissions by reducing the need to travel, encouraging walking, cycling and the use of public transport, and managing the demand to travel by car.



- The newly formed Transport Planning Working Group has developed a draft University Transport Strategy approved for consultation within the collegiate University.
- Hybrid working was introduced across much of the University, reducing commuting.
- The University of Oxford Walking and Cycling Charter was agreed upon and introduced.
- The University works closely with the county and city councils and other large employers and stakeholders to improve road safety and public transport.

Sustainable food – Reduce the carbon emissions and biodiversity impact of our food.



Investments – Ensure that the University, as an investor, is part of the solution to climate change and biodiversity loss.



- Oxford University Endowment Management publicly reports on its policy in regard to ESGs and climate change.
- The University endowment fund has no direct holdings in fossil fuel investments and estimates its indirect exposure to be 0.5%.

Learning from the pandemic – Build on the experience of the pandemic and the potential shift to more environmentally sustainable working practices.



- The pandemic brought about rapid changes in working practices and was included as a focus area within the strategy to ensure these improvements weren't lost. Improvements include agile and flexible working arrangements, a clearer consideration of the impact of flying, and reduced paper use.
- Now that these improvements are standard business practice this area of focus will be subsumed into sustainable resource use for future reporting rounds.
- For 2025 admissions, the admissions process has been moved online to eliminate travel to interviews.

Looking forward

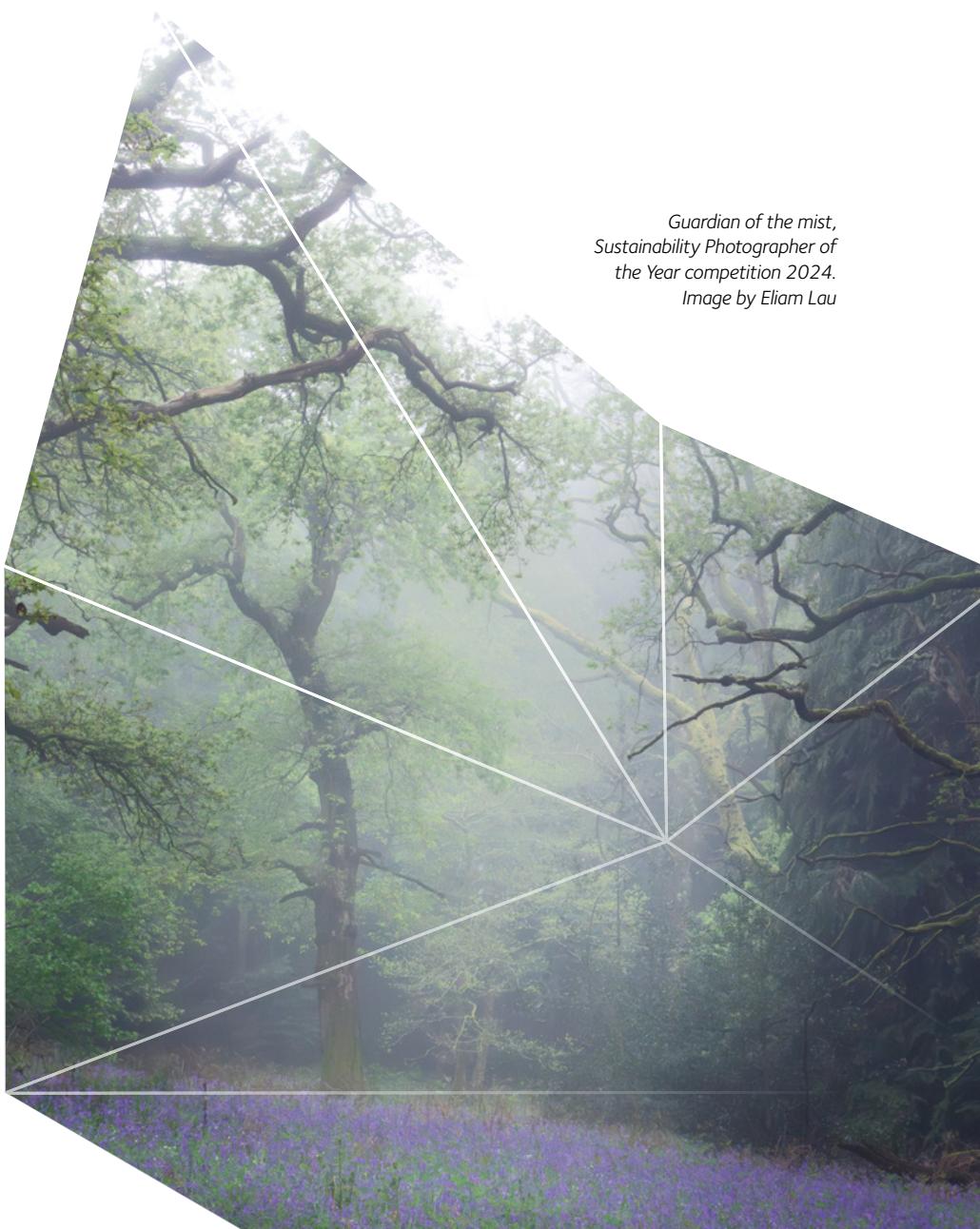
Heat decarbonisation will be a focus of the work of the team in our aim to reach net zero by 2035. This will involve partnership work across the city and provides an opportunity to reduce our reliance on fossil fuels.

Biodiversity work is likely to expand in the future as we not only increase the work we do onsite but also think about the indirect impacts we have. This is not a well established approach and we will work with universities across the Nature Positive Universities network to identify successful frameworks and interventions.

Scope 3 remains difficult but we hope to make progress through working with others in the sector and with more in-depth engagement with key suppliers in our emission hotspot categories.

From a curriculum and research perspective, it is fantastic to be able to highlight some metrics in these areas and look for ways that we can increase the amount of sustainability education made available to our staff and students. Our sustainability research is expanding and plays a crucial role in deepening global knowledge on these issues.

A personal huge thanks to all those who have been involved in this work. We hope there will be more of you next year as we all identify what role we can play in the net zero transition.



*Guardian of the mist,
Sustainability Photographer of
the Year competition 2024.
Image by Eliam Lau*



Above St John's College,
Sustainability Photographer of the
Year competition 2024,
image by Pauline Edwards.

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