



University of
Reading

ENVIRONMENTAL SUSTAINABILITY REPORT

2023/24





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1.0 INTRODUCTION

Environmental sustainability is one of the University of Reading's core principles – we remain firmly committed to embedding sustainability across all of our activities. It is of critical importance that we continue to reduce the impact of our operations, ensure that the principles of sustainable development are fully embedded into our teaching, that our research continues to help tackle some of the world's biggest challenges, and that we spread our impact effectively across both our local and global communities.

Climate change remains one of the largest global threats we face and we are proud to be one of the world's leading sustainability institutions. This report summarises the progress we have made from August 2023 to July 2024 across a range of different areas of sustainability, provides a review of the targets we have been working towards over the past 12 months, and highlights how research undertaken at the University aligns to our key sustainability themes. More detailed metrics for energy, carbon, water, waste and travel can be found within the appendices.

“We're really proud of our sustainability achievements over the past year, which demonstrate our ongoing institution-wide commitment and progress in reducing our environmental impacts. We topped the People & Planet University League, achieved our highest ever ranking in the Times Higher Education (THE) Global Impact Rankings, and won the inaugural THE environmental leadership award, showing our leadership in sustainability across all areas of our work.

“There is so much more to come, and to look forward to. Our new Travel Plan is our most ambitious to date, complementing our existing commitment to cut business travel emissions with a range of new staff and student commuter travel initiatives. Our Waste and Resource Use work continues to deliver measurable improvements in our environmental performance, and work is underway on two major heat pump projects, which will significantly accelerate the decarbonisation of our estate in pursuit of our 2030 Net Zero target. Meanwhile, for the first time, Our Future First has embedded sustainability champions throughout every department, making sure we can all play a part in our more sustainable future, and helping deliver over £1m in energy savings this year alone.”

Dan Fernbank, Energy and Sustainability Director

Our sustainability highlights

The University of Reading is a leader in the field of environmental sustainability. Our achievements so far:



1ST IN THE PEOPLE AND PLANET league 2023/24.



TOP 30 IN THE WORLD for our work in five of the United Nations' Sustainable Development Goals (Times Higher Education (THE) Global Impact Rankings 2024).



JOINT 28TH in the THE Global Impact Rankings 2024.



Awarded Fairtrade University **TWO-STAR** status.



WINNER OF 14 consecutive Green Flag awards for Whiteknights campus.



59.7% carbon emissions reduction on 2008/09 baseline.



ZERO direct or indirect investments in fossil fuels.



ISO14001 / ISO50001 integrated and certified Energy and Environmental Management System.



2,217 different species identified living wild on Whiteknights campus.



2.0 UPDATE ON 2023/24 TARGETS

Key

- No progress made towards target
- Progress made towards target
- Target achieved

Section	2023/24 headline targets	2023/24 target status	Details	SDGs supported
3.0 Environmental sustainability strategy	Publish new environmental sustainability strategy in 2023/24.		Significantly behind schedule, will be published in autumn 2024.	
5.0 Compliance and management systems	Continue to maintain the Energy and Environmental Management System (EEMS) to the internationally recognised ISO14001:2015 and ISO50001:2018 standards.		EEMS certification maintained.	
6.0 Energy and carbon	Update our Net Zero Carbon plan in line with the new Standardised Carbon Emissions Framework (SCEF) standard.		Full update of the Net Zero Carbon Plan will be completed in late 2024.	
	Implement the SportsPark air source heat pump retrofit.		Project is underway and will be completed by end of summer 2024.	
	Begin installation of the Whiteknights Energy Centre water source heat pump.		Feasibility study and boreholes work completed.	
	Target £1m of energy saving projects in 2023/24.		Our Future First behaviour change programme helped to deliver these savings.	
7.0 Water	Progress project which has been commissioned to install more building-level water meters across campus, commencing in 2023/24.		We now have 22 AMR (automatic meter readers) installed on our largest supply points, up from 17 in 2022/23.	
8.0 Waste and resource use	Continue to reduce the amount of operational waste produced annually per person (staff and student FTE) and move the University's waste up the Waste Hierarchy.		Waste produced per person is 31% lower than 2015/16 baseline, with only 1% of waste sent to landfill, which shows an improvement compared to last year.	
	Continue to increase annual repair, remanufacture and re-use of items.		30% increase in the weight of items repaired, remanufactured and re-used compared to the previous 2 years, including furniture, IT equipment and pallets.	
	Roll-out a trial for collecting and recycling expanded polystyrene (EPS).		Bulk containers provided by our waste contractor to collect EPS are emptied when full and the material is processed for onward recycling.	
9.0 Sustainable travel	Devise a new 5-year Travel Plan, utilising the results of 2022 and 2024 travel surveys.		5-year Travel Plan published in Summer 2024.	
	Improve secure cycle storage.		Project begun to enlarge and improve Library secure cycle storage, should be completed by the end of summer 2024.	
	Install Electric Vehicle (EV) charging points and new car sharing Co Wheels facility at London Road campus.		This project should be completed by early 2025.	
10.0 Engagement, awareness and behaviour change	Increase sustainability presence during Welcome Week by taking part in additional events this year.		Sustainability present at University Life Fayre, Community and Sustainability Fayre, departmental marketplaces, careers events and delivered a student talk.	
	Increase the scope of student sustainability inductions.		Reviewed and refreshed Essentials (the Student Handbook) and gained a sustainability presence within Welcome booklet.	
	During term time run quarterly in person Sustainability Champion meetings and monthly themed drop-in clinics for Our Future First.		Full programme of events completed for Our Future First.	
11.0 Environmental protection and pollution prevention	Seek to maintain our target of no more than 3 emissions/discharge incidents from University activities on a rolling 3-year average and annually report progress against this.		No more than 3 environmental incidents were reported in 2023/24, incidents were dealt with effectively by staff, with corrective and preventative measures being identified and implemented to prevent recurrence, in line with our EEMS procedures.	
	Continue to increase awareness of air pollution through continuing to be a Clean Air Day Supporter.		Sustainable Travel Day took place in March 2024 and On Your Bike Day in October 2023.	

Section	2023/24 headline targets	2023/24 target status	Details	SDGs supported
12.0 Responsible procurement	Consider how to reduce procurement-related scope 3 emissions, led by our Responsible Procurement Group.		We have been working with stakeholders and suppliers and reduced scope 3 emissions from areas such as stationery deliveries, courier services, catering suppliers and our built environment suppliers.	
	Join celebrations for the Fairtrade Foundation's 30th birthday by aiming to complete 30 tasks to support fairtrade during the 2023/24 academic year.		We have been working towards this goal and delivered a number of tasks, including pancake day with Fairtrade chocolate, Fairtrade themed quiz rounds, working with local Fairtrade partners and working with the RED Sustainability award to get students involved with Fairtrade.	
13.0 Conservation and biodiversity	Publication of new biodiversity action plan in 2023/24.		Publication delayed until 2025.	
14.0 Community and community involvement	Develop a clear community engagement plan relating to climate and environmental sustainability.		Our Future First programme launched to engage internal community. Local community engagement plan developed with Reading Climate Change Partnership. Extensive engagement communications.	
	Establish a Wokingham Strategic Partnership Board with Wokingham Borough Council in 2023/24, with environmental sustainability and climate change as a key workstream.		Strategic Partnership Board established and climate/sustainability workstream defined to shape ongoing collaboration projects.	
	Play a lead role in elevating local and global engagement initiatives such as Reading Climate Festival and Show Your Stripes Day.		Led Reading Climate Festival steering group, shaped programme and delivered many events. Led extensive global activities for Show Your Stripes Day, spreading climate awareness.	
	Work with local voluntary groups to facilitate increased student and community volunteering to support environmental sustainability.		Voluntary groups well represented at Community Forum student fairs etc. University volunteering scheme being scoped.	
15.0 Sustainable food	Develop a plan for reducing carbon emissions from energy used in campus catering facilities, including heating and hot water.		Park Eat is on track to go gas free by the end of the year.	
	Aim for 80% of our van fleet to be electrically powered in the next year.		80% of fleet is now electric, with 4 electric vans and 1 diesel.	
	Implement our Digital Dining platform, which will allow us to label planet friendly options to our consumers (and highlight ones to avoid).		Moving to go live state, will be completed by November 2024.	
16.0 Education for sustainable development (ESD)	Publication of an ESD action plan in 2023/24.		ESD project teams and programmes of work defined for next two years, approved and published internally. Key developments communicated to our community.	
	Review of existing modules to determine how to implement the development of a bespoke University-Wide Module (UWM) which will provide a comprehensive grounding in climate and environmental sustainability for all students.		Review and implementation plan completed, and work to develop new module underway. Project team in place.	
17.0 Ethical investment and banking	Continue to monitor other areas of concern as they develop, such as the border industry, and consider imposing exclusions in these areas.		The University has acted swiftly to amend our Investment Policy to exclude the largest fossil fuel extraction funders.	
18.0 Ethical careers	Develop an ethical careers policy.		The University to announce its position regarding the development of an ethical careers policy in 2024/25.	
19.0 Estates development and maintenance	Commence two major heat de-carbonisation projects in 2023/24.		Two major heat decarbonisation projects began in 2023/24 (Sportspark and Energy Centre heat pump projects).	
	Meet Building Research Establishment Environmental Assessment Method (BREEAM) excellent standards on our next major refurbishment project – the URS building, with completion due in 2026/27.		URS is a very challenging building, so BREEAM excellent standard cannot be achieved, it is now targeting very good status.	

3.0 ENVIRONMENTAL STRATEGIC ACTION PLAN

Our Strategic Plan

The University Strategic Plan sets out our commitment to play our part in tackling climate change and be recognised as a University that leads on global environmental sustainability. Since launching this strategy in 2020, we have progressed ambitious plans across key areas of our teaching, research impact, and operations, working towards being recognised as one of the 'greenest' universities. We have made significant progress thanks to excellent collaboration across our community – and this has been recognised in improved performance in key external sustainability ranking schemes and sector awards.

Our Environmental Sustainability Strategic Action Plan is evolving to define our ambitions for the next three-year period across three themes:



Education and engagement

The University can influence societal changes by engaging, enabling, and equipping all members of its community – staff, students and alumni – as leaders, decision-makers, consumers, parents, and citizens. For the next generations of students, in particular, the impacts of the changing climate and further decline in the natural world will be their lived reality. We must support all of our students to develop both an understanding of the challenges ahead, and the skills and knowledge required to address them in their future careers and day-to-day lives.



Research and influence

The University already makes a hugely significant contribution to our understanding of the climate and environment, expertise through our world-leading climate research, and our strengths in agriculture, food, health, the built environment, and business. We must work to support and increase our impact and ability to create meaningful change. We must also fulfil our duty as a 'University for Reading', working closely with our neighbours and partners, and playing a lead role in supporting Reading and the Thames Valley towards a resilient, sustainable future.



A green University

We have made sector leading progress in reducing our carbon emissions and minimising our waste, and we are increasingly applying our own research expertise to how we manage our operations. How the University manages operations and business activities, conducts teaching and research, and works with partners around the globe, will all help to ensure our community continues working together to deliver a better future.

Reading ranked as greenest university in the UK

People & Planet's University League is an independent league table of UK universities ranked by environmental and ethical performance, compiled annually by the UK's largest student campaigning network, People & Planet.

We are proud to have been ranked 1st out of 151 UK universities in the 2023/24 League¹.

Achieving a top five position by 2026 was a key target identified in the University's Strategic Plan; our drive for environmental sustainability enabled us to reach the top five last year (4th place in 2022/23) and move to 1st place in December 2023.

Supporting the UN Sustainable Development Goals (SDGs)

The SDGs provide a framework for ensuring a more sustainable future for people and planet, spanning society, economy, and the natural world. The Goals set the agenda for sustainable development to 2030.

The University of Reading actively contributes towards all 17 SDGs. We also feature in the Times Higher Education (THE) Global Impact Rankings², which score higher education institutions on their work towards each goal.

In 2024, the University was ranked joint 28th in the world out of 2,031 participating institutions – more than thirty places higher than our position of joint 61st in 2023. We are the 5th highest ranked institution in the UK (of the 68 that submitted themselves for inclusion), up from 15th last year.

Reading was the third-highest performing university in the world for its contribution to supporting SDG12 – Responsible Production and Consumption.

Overall, we achieved top 30 global positions in five of the 17 SDG categories:



- 27th in SDG10 (Reduced inequalities)
- 3rd in SDG12 (Responsible production and consumption)
- 19th in SDG13 (Climate action)
- 16th in SDG15 (Life on land)
- 24th in SDG17 (Partnership for the goals)



Our future commitments

- Publish Environmental Strategic Action Plan in autumn 2024

“Our ambition is to be one of the greenest universities in the world, and this new ranking shows Reading is making strong progress in supporting sustainable development. I am very proud of the work of our students, colleagues and alumni to make our community and the world a better place.

“Climate change and biodiversity loss are key global challenges in which Reading takes a lead in research and study, and the sustainable development goals reflect the fact that everyone must share in the benefits of development. A prosperous, healthy future also requires peace, justice and equality for all.”

Professor Robert Van de Noort
Vice-Chancellor of the University of Reading

¹ University League | People & Planet

² <https://www.timeshighereducation.com/impactrankings>

4.0 OUR SUSTAINABILITY AND CLIMATE SCIENCE RESEARCH

Through world-leading research and innovation, the University is supporting efforts to help people and countries adapt to the impacts of climate change around the world.



Leading the way on climate science

- Professor Ed Hawkins is the Great Britain lead for the new €41.3 million Climate+ Co-Centre, set to be the new home of research, innovation and policy development across the interlinked challenges of climate change, biodiversity loss and water degradation in Ireland and Britain.
- We contribute to the annual Global Carbon Budget by improving and running simulations to understand how changes in land-use and tree and crop harvesting affect carbon emissions.
- We've developed rigorous mathematical tools needed to understand and predict climate change and specifically to detect and avoid climate tipping points, such as the collapse of the Atlantic Meridional Overturning Circulation (AMOC).

Developing sustainable agricultural solutions

- We run the UK's largest ever fruit tree monitoring project, FruitWatch, now in its third year, which records the flowering dates of different fruit trees to help understand the impact that climate change is having on pollination and fruit production.
- Dr Andrew Daymond, who manages the University's International Cocoa Quarantine Centre, is developing a new worldwide network for sustainable cocoa farming, helping cocoa farms become more sustainable and take care of the soil where cocoa grows.
- We've established a three-year partnership with Waitrose to bridge the gap between cutting-edge agricultural research and practical farming applications.
- We've contributed to a first-of-its-kind study on cultured meat and how it might affect UK agriculture, farmers and their livelihoods.

Creating sustainable future foods

- We're using our world-class food facilities to work on the development of novel proteins that are more sustainable but also healthy and tasty as part of a new centre funded by Bezos Earth Fund.
- We're working with European partners to understand consumer attitudes around sustainable food packaging, creating tools and strategies to influence public behaviour and future solutions.

Changing the way we think about energy

- We've identified a new way of harnessing previously untapped sources of waste heat and converting it into electricity in a breakthrough that could improve energy efficiency and make manufacturing greener.
- We've found that simulations that inform energy policy, which shape how we produce and use energy, impacting jobs, costs, climate and security, had unreliable assumptions built into them and that they need more transparency about their limitations to improve modelling and open up decision-making.

Addressing water sustainability

- Our research ranges from identifying that unprecedented ocean heating could become the norm if the world moves into a climate that is 3.0°C warmer than pre-industrial levels, to showing that droughts in Europe could be avoided with rapid emission cuts.
- We've highlighted that the UK's bathing water forecasts are not keeping the public safe and need urgent improvement to prevent bathers from swimming in sewage without warning.

Tackling biodiversity loss

- We've contributed to both a first-of-its-kind analysis that shows the deterioration of the UK's natural environment could lead to an estimated 12% loss to GDP, and the first 'horizon scanning' exercise of UK forests that identifies issues that could lead to forest ecosystems collapse in the next 50 years.
- We've discovered the importance of planting flower margins near fruit trees as a habitat for predatory insects that prey on pests that deform and damage apples, and that planting flowers beside food crops on farms in India attracts bees, boosts pollination and improves crop yield and quality.
- We've shown that air pollution disproportionately harms bees and other beneficial bugs compared to crop-destroying pests and dramatically reduces pollination by degrading the scent of flowers and affecting bees' ability to find them, meaning we need stricter air quality regulations to protect nature's hardest workers.

5.0 COMPLIANCE AND MANAGEMENT SYSTEMS

The Energy and Environmental Management System (EEMS) is a structured framework which drives and supports the University's compliance obligations and ambitions to reduce its environmental impacts. By embedding sustainability into key business processes the system enables the University to demonstrate continual improvement of its environmental performance while managing risks, adapting to changes in our climate and identifying opportunities to progress.

Tracking our progress

- In March 2024, a surveillance audit of the EEMS took place and resulted in the EEMS maintaining its certified status for both ISO14001 and ISO50001. The auditors were extremely impressed with the level of commitment that University staff showed to sustainability and environmental protection.
- There has been progress in expanding the EEMS to other areas of the University estate as well as expanding the context of the system to present a consistent and inclusive system.
- There has been progress in aligning the EEMS with the new high level Strategic Action Plan so that the University has a unified approach to Environmental Sustainability across all activities.

- Our 2023/24 management review concluded that the EEMS continues to help embed sustainability into everyday practices and decision making, and successfully gives a framework to set objectives, identify opportunities and risks, and monitor progress via internal audits and management reviews.



Our future commitments

- Continue to maintain the Energy and Environmental System (EEMS) to the internationally recognised ISO14001:2015 and ISO50001:2018 standards via the ISO certification which will be re-certified in March 2025.
- Continue with the expansion and development of the scope and context of the EEMS.



6.0 ENERGY AND CARBON

We made 59.7% reductions of our in-scope emissions in 2023/24 against our 2008/09 baseline (details provided in Appendix 3). This slight increase is due to an expected increase in the amount of business travel. This means we have exceeded our milestones target for July 2024 of 57.5%, as outlined in our Net Zero Carbon Plan.

The University sector has introduced new Standardised Carbon Emissions Framework (SCEF)³ guidelines for carbon reporting, encouraging organisations to provide more complete emission data. The University is acting to comply with these new guidelines; see Appendix 1 for more details.

Additionally, the University implemented new sustainable travel principles⁴ in Autumn 2022, effective from August 2023, to address business travel emissions.



³ Standardised Carbon Emissions Framework (SCEF) | EAUC

⁴ Sustainable Travel Policy Principles

Tracking our progress

- We adopted an ambitious new Travel Policy in August 2023 which is targeting emissions reductions of 30% and 50% against 2018/19 levels by July 2026 and July 2030 respectively. Although we have met our business travel targets, our business travel emissions have grown significantly year on year, we need to ensure that continued reductions are sustained.
- This is complemented by an bold new University Travel Plan, which sets out further measures to reduce emissions relating to commuter travel.
- We have saved circa £51.4m cumulatively since 2008/09 as a result of our carbon management programme, compared to a business-as-usual scenario.
- Our in-scope carbon emissions are 59.7% below our 2008/09 baseline. These figures are based on geographical carbon accounting.
- A full breakdown of our emissions, with a comparison against baseline and last year, can be found in Appendix 3. Appendix 4 shows our emissions for those areas excluded from the scope of our Net Zero Carbon target.

Energy

- 4.3% of our electricity was self-generated in 2023/24 from onsite solar panels. Appendix 5 shows the emissions we avoided by generating electricity from our own renewable sources.
- We continue to procure 100%-certified renewable electricity for our remaining grid electricity demand. When using market-based carbon accounting, our overall emission reductions stand at 76% below baseline.
- We have signed up to the trial of an innovative 'time of use' renewable energy supply initiative, which matches our electricity consumption to output from renewable generation assets on a half hourly basis. This is a significant difference from the annual matching approach, which is the current industry standard⁵.
- An analysis of our Display Energy Certificates (DECs) shows a slight improvement compared to last year. From an energy performance perspective, 85% of our buildings performed better than the average.

⁵ SmartestEnergy launches market-leading Traceable Renewable Supply to drive greater transparency of renewable energy consumption

Projects

- The 'Major Energy Savings' initiative delivered 3,391,903 kWh savings, equating to 923 tCO₂.
- In 2023 progress was made towards decarbonising our Energy Centre with four boreholes drilled and designs completed in preparation for the Water Source Heat Pump (WSHP) project to decarbonise the Energy Centre.
- We began retrofitting Air Source Heat Pumps at our SportsPark, which will eliminate gas usage and reduce its carbon emissions by an estimated 86 tonnes annually. This project is supported by partial funding from the Public Sector Decarbonisation Scheme, delivered by Salix Finance on behalf of the Department for Energy Security and Net Zero (DESNZ).
- We ran a lighting switch off initiative, which resulted in 26,715 lights being turned off during a 64-day period. This highlighted areas that could benefit from technical change projects and where to target awareness raising.
- Appendix 2 shows the full list of energy projects completed in 2023/24. Appendix 2 also shows the full list of the potential energy projects in 2024/25.



FEATURE: Our Future First delivers significant energy savings

We launched the Our Future First (OFF) sustainability champions programme, aiming to change behaviours relating to energy consumption and operational sustainability. OFF has created a network of 71 sustainability champions across all departments, empowering staff to actively contribute to energy efficiency and sustainability, and supporting the University's sustainability goals.

In response to rising energy costs, OFF introduced the 'Major Energy Savings' initiative, achieving significant in-year energy savings with minimal capital cost. This has saved a massive 923 tCO₂ this year and has enabled us to be the first university to be recognised as an aspiring Energy Conscious Organisation (EnCO).



Our future commitments

- Updating our Net Zero Carbon plan in line with the Standardised Carbon Emissions Framework (SCEF) standard.
- Major roof space insulation upgrades to multiple buildings.
- Energy reduction and space consolidation in the Maths/IT Data Centre.
- LED lighting upgrades in the Carrington building.

7.0 WATER

Monitoring and reducing the University's water consumption has proved more challenging over the years than its energy use.

In part, the very nature of water means that wastage, when it occurs, can be substantial, either because it is gradual but persistent and so not easily detected, or it is substantial when major leaks occur. For this reason, our priority is to improve our water metering to facilitate better monitoring and earlier response to issues.

Tracking our progress

- We used 8.6% less water in 2023/24 than against our 2011/12 baseline.
- We now have 22 AMR (automatic meter readers) installed on our largest supply points, up from 17 in 2022/23. This enables us to have half-hourly data on our water supplies and set up alarms to warn us of spikes in consumption.
- We have also connected a significant number of building-level meters to the University's utilities management database, enabling closer monitoring of consumption at a building level.
- There have been a number of significant leaks during the year, including on the supply to the former TOB1 building, which we had long suspected. The demolition of this building has enabled us to address this issue and consumption is now falling.



Our future commitments

- Completion of the project to connect target building-level water meters to our utilities database, following which, consumption patterns and targets for reduction can be set.



8.0 WASTE AND RESOURCE USE

The University aims to be an efficient user of resources and prevent waste being created in the first place. We are dedicated to embedding the concept of the 'Waste Hierarchy' into our day-to-day operations; to reduce, repair, re-manufacture, re-use, recycle and recover items and materials. Sending materials to landfill is the last resort. We work closely with our main waste management contractor, Select Environmental Services, a local company based in Reading, to roll-out new innovations and undertake new initiatives.

Tracking our progress

- The University's Waste and Resource Use Strategy, covering 2021 to 2030, is focused on responsible resource use and sustainable waste management.
- We have met our 2024 targets set out in the Strategy:
 - To reduce total day-to-day operational waste produced per person (full time equivalent student and staff members) from the 2018/19 level of 50.9kg; with 42.8kg generated per person in 2023/24.
 - To increase the amount of items re-used, re-manufactured and repaired from the 2018/19 level of 11 tonnes; with 28.6 tonnes processed in 2023/24.
 - To increase the University's annual recycling rate for operational waste (by weight, including repair, reuse, anaerobic digestion & composting) above 60%; with the 2023/24 rate being 62%.
 - To reduce the amount of waste sent to landfill to less than 1%; with over 99% of the University's operational waste diverted from landfill in 2023/24.
- 2023/24 is the first year to include waste weight data from the University's farms in the calculation of overall operational waste, adding a total of 26,247kg across the waste hierarchy elements.



The graphic below shows the amount of operational waste generated for each element of the Waste Hierarchy for 2023/24.

Operational Waste Weights 2023/24

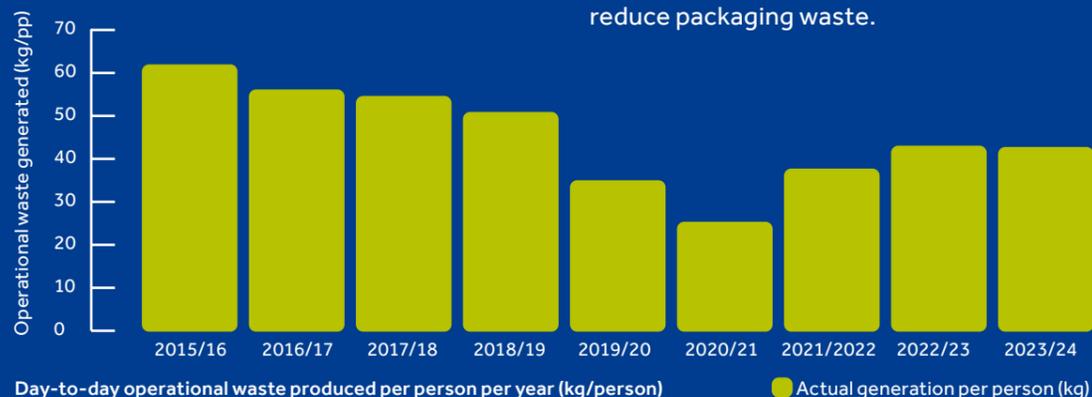
Waste hierarchy element	Overall weight (kg)	Overall percentage
Re-used or repaired	28,599	3.4%
Sent for recycling	371,718	44.2%
Food sent to anaerobic digestion	114,773	13.6%
Sent for composting	5,820	0.7%
Made into biofuel	2,776	0.3%
Energy from waste recovery	300,239	35.7%
Sent for incineration	9,591	1.1%
Sent to landfill	8,393	1.0%
Total waste	841,909	100.0%

Increasing environmental impact →

Reduce

- Total operational waste produced in 2023/24 academic year was 42.8kg per person, compared to our 2015/16 baseline of 61.9kg per person, representing a 31% reduction. This equates to a total generation in 2023/24 of 842 tonnes of waste by around 19,670 students and staff (full-time equivalent).

- The amount of waste generated per person was slightly lower than in the previous year (43.1kg per person in 2022/23), and was more than 8kg per person lower than before the COVID-19 pandemic (50.9kg per person in 2018/19).
- The reduction in waste produced reflects key initiatives undertaken to reduce single-use items, to improve the re-distribution of unwanted furniture and equipment, and to reduce packaging waste.



Reuse and repair

- 7.2 tonnes of furniture and other items were re-used across the year via our online Warp-it reuse platform, with a further 21.4 tonnes of additional items repaired, re-manufactured or re-used via other routes, equating to a total of 28.6 tonnes in 2023/24.
- This shows a substantial increase since 2018/19 when a total of 11 tonnes of items were repaired or re-used.
- As part of this, 9 tonnes of wooden pallets were collected and sent for reuse or re-manufacturing as part of a collection scheme put in place across the University.

Recover

- The vast majority of our waste that cannot be re-used or recycled in some way is sent to an Energy from Waste recovery plant. Here, the waste is burned with the resulting steam powering a turbine which generates electricity.

Landfill

- In 2023/24, 99% of the University's operational waste was diverted from landfill, (up from 98.7% last year), thereby meeting our target to reduce waste sent to landfill to less than 1%.

Construction waste

- Due to the variability in quantities and types of construction waste from year to year in line with major project schedules, information is collated and classified independently from the University's operational waste. In 2023/24, the University's contractors generated 5,905 tonnes of construction waste, of which 92% was sent for reuse, recycling or composting. The majority of this construction waste was generated from the demolition of TOB1 and Marsden Shed.

Recycle

- Our annual recycling rate for operational waste is currently 62% by weight (including repair, reuse, anaerobic digestion and composting).
- A trial collection and recycling scheme for expanded polystyrene (EPS) was implemented in 2024, enabling packaging from IT equipment and laboratories to be sent for recycling.



FEATURE: Re-use of furniture from URS building

The URS building at Whiteknights is currently undergoing a major refurbishment programme. In November 2023, URS was cleared of all internal furniture, and priority was given to the redistribution of non-broken items. For example, 260 classroom chairs were re-used in teaching rooms in other buildings, replacing older or broken chairs, and 28 tables were temporarily stored for future use for Architecture in 2024/25.



FEATURE: Polystyrene recycling scheme trial

Expanded polystyrene (EPS) is used as a lightweight packaging material to help prevent damage to various types of goods delivered to the University. A trial collection scheme was launched in 2024 to enable EPS to be segregated and sent to a special recycling facility. The most economical way to collect and move EPS is in bulk, so a large walk-in container is being used to store blocks of EPS used to package IT equipment, before being taken off-site for processing.



Our future commitments

- Continue to reduce the amount of operational waste produced annually per person (staff and student FTE) and move the University's waste up the Waste Hierarchy.
- Continue to increase annual repair, remanufacture and reuse of items.
- Roll-out a scheme to reuse more of the University's IT equipment as part of the Device Lifecycle programme operated by Digital Technology Services.



9.0 SUSTAINABLE TRAVEL

As an award winning leader in environmental sustainability, the University is dedicated to reducing its carbon footprint and embedding eco-friendly travel behaviours across its community. We encourage alternative, more sustainable forms of travel for commuting, alongside committing to reducing business travel emissions through a reduction in the number of flights taken on behalf of the University.

Tracking our progress

- We published our new ambitious 5 year University Travel Plan, see Feature section for more information.
- We conducted our biennial travel survey in January 2024, which helped us to understand our community's priorities and how we can better support the use of more sustainable modes of transport. See the Feature section for more information.

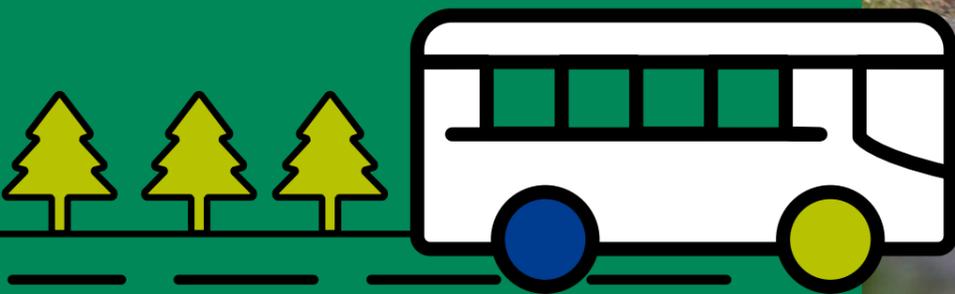
- There was a 20% increase in usage of the 19 a/b/c bus route and 9% increase in the number of people using the Claret 21/21a services.
- The University has worked closely with Reading Buses to launch the new White Knight 20 bus service in September 2024, which provides an express service from Whiteknights campus to Reading Town Centre. This service replaced the 21a and is complimented by the 21 service, which also has received a 33% increase in frequency. These services will increase reliability and hopefully make travelling by bus a more attractive option for students and staff, which was a significant theme raised in the travel survey.
- The University's free Park and Ride for staff and students has grown in popularity. In 2022/23 there was an average of 44 journeys per month, in 2023/24 this has grown to an average of 318 journeys per month.
- The University's electric vehicle (EV) charging points continue to be used extensively, with a 50% increase in usage from 2022/23 to 2023/24.
- Appendix 8 contains further travel usage information.



FEATURE: **University Travel Plan 2024 – 2029**

The Travel Plan (See Appendix 9) is a document that outlines the University’s commitment to changing the travel behaviour of our staff, student and visitor communities. The Travel Plan forms an essential part of the University’s ISO14001-certified Environmental Management System, aligning with the broader goal of integrating sustainability into every aspect of University life, from teaching and research to daily operations. One of its primary goals is to further reduce Single Occupancy Vehicle (SOV) use to 27% for staff and 9.5% for students by 2029.

The Travel Plan is underpinned by a detailed 5 year Action Plan which has been prioritised using the results from the 2024 Travel Survey. The University is committed to continuous community engagement in the Travel Plan. Biennial travel surveys will continue to gather feedback, ensuring the plan remains responsive to the needs of staff and students. The University’s Sustainable Travel Officer will oversee the implementation and monitoring of the Travel Plan, ensuring its success in the years ahead.



FEATURE: **Travel Survey 2024**

We conducted our biennial travel survey in January 2024 (See Appendix 10), which had very positive response rates from both staff and students. A total of 1,215 staff and 503 student responses were seen in 2024; the highest staff response rate since 2016 and the highest student response rate since 2018.

The survey showed that 58% of staff work from home once or more a week, compared to just 11% in the 2020 survey. The survey also showed that 33.5% of staff drive to campus in a typical working week and the remaining 38.4% of staff use sustainable modes to travel to campus in a typical working week. The survey revealed that our student population made an average of 90.5% of journeys to and from campus by sustainable modes.

The key improvements raised included: more undercover secure cycle parking, direct and more frequent buses, safer routes for cycling and walking, better promotion of the free Park and Ride service, increased awareness of our car clubs, and more EV charging points.



Our future commitments

- Increase the number of EV charging points across our campuses.
- Promote our Co Wheels car clubs and introduce new vehicles at key locations, including London Road campus.
- Improve cycle security storage locations.

10.0 ENGAGEMENT, AWARENESS AND BEHAVIOUR CHANGE

Sustainability communication and engagement is a key thread throughout the work that we undertake and the resulting behaviour change is critical to ensuring that we meet our ambitious targets.

Tracking our progress

- Improvements to the scope and depth of sustainability information available to new and current students has been delivered during 2023/24. There is now a sustainability section in every student newsletter, key sustainability messages and sustainable travel information are featured in the Welcome booklet and the range of sustainability information in Essentials (the student handbook) has been greatly increased.
- Green Festival 2023 delivered a range of different events, which engaged hundreds of students and staff. We ran an eco poetry workshop, Hedgehog Society litter pick, lecture about sustainable food systems, a green careers panel and networking event and a meditative nature tour.
- Monthly sustainability sessions were held in the Library foyer which featured a biodiversity quiz to highlight actions to help nature, tips about how to have a more sustainable Christmas and how to save energy, and the chance to win free bus travel with Reading Buses.



FEATURE:

Our Future First

The Our Future First (OFF) programme has created a network of sustainability champions across the University of Reading, embedding and empowering local action to support the delivery of the University's sustainability initiatives.

The longer-term goal of OFF is to effect change in our behavioural patterns, creating a significant positive impact on both the environment and our local community. The programme aims to empower individuals to continually take small actions that collectively make significant sustainability impact. By embedding a sense of responsibility and providing the tools needed for change, OFF will contribute to a healthier planet and a more sustainable community.



Our future commitments

- Improve the range of digital information available for waste and resource use and sustainable travel.
- Deliver renewed mandatory staff training sustainability module and develop other additional optional courses.
- Broaden the different types of monthly sustainability engagement events.

“As part of my role as School Director of Climate and Sustainability Education, and part of the National Climate Education Action Plan (NCEAP) I am responsible for getting colleagues to consider how to embed sustainability into their curriculum. This has required finding ways to empower colleagues and ensuring they have the level of understanding to do this. Training sessions have been held at Reading International Solidarity Centre (RISC) about social justice and Manchester Metropolitan has contributed to the development of training about Climate Literacy.”

“What I enjoy most about this role is working with colleagues, students and other sustainability champions to really think about how we take care of our campus whilst empowering others.”

“The initiatives and actions that I have successfully completed include establishing a small pollinator meadow where we held an event during the Reading Climate Festival to help develop understanding of the importance of pollinators.”

Associate Professor Jo Anna Reed Johnson, Institute of Education, Lead Sustainability Champion



11.0 ENVIRONMENTAL PROTECTION AND POLLUTION PREVENTION

Pollution of the air, land and water can occur through 'emissions and discharges' which refers to liquid effluent, solid waste and airborne matter that is a by-product of an organisation's activities which is often harmful to the environment, wildlife and sometimes human health. It is essential we protect the environment and minimise the risk of pollution from our activities. We do this by controlling emissions, meeting regulatory standards, and implementing emergency response procedures. We prevent risks from occurring by prohibiting certain activities, eliminating hazardous substances in favour of less harmful alternatives, alongside amending processes.

Tracking our progress

- No more than 3 environmental incidents were reported in 2023/24. Incidents were dealt with effectively, with corrective and preventative measures being identified and implemented to prevent recurrence, in line with our EEMS procedures.
- Training has continued for key staff members.
- The programme to inspect and maintain interceptors continues.
- Regular inspections and servicing of oil tanks, boilers and refrigeration units continue to take place in line with best practice and statutory requirements. Internal audits and effective checks are completed via the internal environmental audit programme.



FEATURE: Sustainable Travel Day on 6 March 2024

The Sustainability Team hosted a successful Sustainable Travel Day in Palmer Quad in March 2024. The day raised awareness of the impact of air pollution on our health and environment. Highlights included:

- Meditative spring nature walk.
- Competitions to win free travel with Reading Buses.
- Free bike maintenance from Dr Bike and Reading Bicycle Kitchen.
- Bike security advice from Security and Thames Valley Police.



Our future commitments

- Maintain our target of no more than 3 emissions/ discharges incidents from University activities on a rolling 3-year average and annually report progress.
- Continue to increase awareness of air pollution by promoting more sustainable forms of travel and being a Clean Air Day supporter.

12.0 RESPONSIBLE PROCUREMENT

The University procures a wide range of goods and services – we recognise that the environmental impact of our supply chain contributes to our own environmental impact, and that we have a duty to positively influence this.

Tracking our progress

- The University was awarded Fairtrade University Two Star status in 2023 and we are now working on our evaluation for 2025. This underlines our commitment to support, promote and improve understanding of Fairtrade.
- Our Supplier Code of Conduct sets out the behaviours that we expect of suppliers who are delivering goods and services to the University. This includes that suppliers should adopt and apply fair and ethical practices respecting internationally recognised fundamental human rights standards, and that suppliers and their sub-contractors make all reasonable efforts to minimise their environmental impact.
- In 2023/24, approximately 18% of our total spend was with local suppliers in the RG postcode.
- In 2023/24, the Cleaning Services Team switched to using refill stations for its frequently used products to reduce the amount of single use plastic containers.
- Over the last year, the Sustainability and Procurement Teams have been analysing data from our travel management company (Grey Dawes) to calculate the University's business travel carbon footprint. The carbon budget spend of schools and functions will be reported to them on a quarterly basis.
- The Procurement and Sustainability teams have been working with DTS on elements of the Device Strategy and Lifecycle Project. The new strategy will create a model that reflects the principles of the circular economy, standard issue laptops being smaller and more energy efficient, and a new refurbishment process that aims to keep assets on campus for longer before they are recycled. The University has also engaged an alternative company to dispose of hardware, networking and copper who provide a more comprehensive service which will increase the amount we can recycle.

- The University's Finance Systems team now has an agreement with our financial services suppliers to offset each international student's first flight to the UK when their student fees are paid via the supplier. Over 2023/2024, the contract has offset 3262 tonnes of carbon.
- Through our membership of the Southern Universities Purchasing Consortium (SUPC), we continue to support Electronics Watch to promote safe, equitable, sustainable and ethical workplaces in our supply chain for electronics goods.
- The University has been working with our new stationery supplier to reduce the frequency of deliveries to three times a week, therefore reducing their carbon footprint, alongside reducing traffic and congestion in the local area.



Our future commitments

- The University is supporting the Fairtrade Foundation with their 30th anniversary celebration by attempting to take part in 30 activities during the year 2024/25.
- In the next year, the University plans to sign up to the Net Zero Carbon Supplier Tool run by NetPositive Futures. This tool will help us calculate our proportion of a supplier's carbon footprint and see the supplier's bespoke action plan to help them become a more sustainable supplier. This will lead to more accurate Scope 3 calculations.
- Our Managed Print Service has been working on reducing the amount of printing devices for the upcoming contract period, which will reduce our energy and paper consumption.



13.0 CONSERVATION AND BIODIVERSITY

Our main Whiteknights campus is set in approximately 134 hectares of parkland which has a superb mix of habitats for wildlife. Currently around 40% is managed primarily for biodiversity. We are proud to have won 14 consecutive Green Flag awards and the campus welcomes thousands of visitors each year including schools, community groups and the general public.

Tracking our progress

- A comprehensive baseline ecological assessment of our Whiteknights campus was delivered this year. This is being reviewed and will inform a new Biodiversity Action Plan (BAP) for our main UK campuses.
- A purpose-built herbarium at Thames Valley Science Park will become home to around 8.5 million items owned by Kew Gardens. This site will provide research, education and collaboration facilities which will allow Kew to continue their critical work to address the biodiversity and climate crises.
- Alongside local schools, a number of outdoor learning spaces have been created on the University owned Langley Mead reserve. The site has a wildlife pond, bee mounds and habitat boxes for birds and hedgehogs to promote and enhance local biodiversity.

- In June, staff and students from the University took part in the ICA Biodiversity Challenge. This challenge saw 19 ICA member campuses from across Europe monitor biodiversity with the University of Reading placing 7th in the challenge, recording 935 species in that period.



Our future commitments

- Publication of a new Biodiversity Action Plan in 2025.
- Develop an improved online hub showcasing biodiversity activities at the University of Reading.
- Pilot the University of Reading Nature Park project with a range of local schools, which will offer them increased opportunities to access nature based learning on campus.
- Identify opportunities for improved outdoor learning for our own students and local school pupils.

14.0 COMMUNITY AND COMMUNITY INVOLVEMENT

We are committed to creating a University *for* Reading by working together with local partners to benefit the lives of our local community in Reading, Wokingham and the Thames Valley. The University is working to engage our whole community, locally and globally, to empower and inspire greater commitment and action to address climate change, working towards a more sustainable future for us all.

Tracking our progress

- As a lead partner in the Reading Climate Change Partnership, we committed to support engaging and empowering the Reading community in the forthcoming revision of the Reading Climate Emergency Strategy, which details the actions needed across the borough to enable Reading to become a net zero, climate resilient town by 2030.
- In spring 2024, the partnership launched a 'Year of Climate Engagement' which will feature a range of workshops, facilitated discussions, surveys and activities with stakeholder groups across the local community to gather their insights, opinions, hopes and suggestions that will shape the climate priorities for the new strategy.
- The University also hosted and chaired the Reading Leaders' Climate Summit in March 2024, which brought together over 40 organisational leaders from across the borough to engage and invite their involvement and support with the new Climate Emergency Strategy.
- We ran a Community & Sustainability Fair for students during Welcome Week which enabled them to connect and engage with local organisations that have focus on environmental sustainability.
- The University played a lead role in delivering the 5th Reading Climate Festival, which involved over two weeks of events and activities in June 2024 to engage many thousands of local residents with the challenges of climate change and Reading's climate strategy.





- University students curated a Youth Mobilisation Day during the Reading Climate Festival aimed at mobilising 16 – 25 year olds around climate action. The day-long event included opportunities for attendees to input into the Reading Climate Emergency Strategy, learn new skills in campaigning, film making and politics, and learn about green careers.
- In collaboration with Reading Borough Council, Design Nature and Stantec, the University of Reading ran a Clean Air Schools Workshop, so that local school pupils could explore, map and measure air quality, and understand how they can improve it.
- Show Your Stripes Day on 21st June saw our annual global campaign to raise awareness of the urgency for climate change action, represented by the climate warming stripes developed by Professor Ed Hawkins MBE. A number of iconic landmarks in the UK, US A, Australia and elsewhere displayed the stripes in some form during the day. Numerous broadcast meteorologists included the stripes in their weather presentations throughout the world, and over 65,000 people visited the Show Your Stripes website on the day.

- The climate stripes were featured at CoP28, where the leading formula-e team Envision launched electric racing cars featuring stripes livery, and in a major animated movie, Ozi: Voice of the Forest in summer 2024.
- The University launched a Strategic Partnership Board with Wokingham Borough Council in 2023. The Board identified four priority themes for collaborative activity, which included addressing climate change and environmental sustainability.
- The Berkshire Prosperity Board is a new body bringing together the leaders of the six unitary authorities in Berkshire to work together to drive and deliver economic prosperity across the county. Six priorities have been identified and one of those is collaboration to achieve net zero. This will provide a strong context for joined up working and sharing between the relevant authorities, including how they can be supported by the University.

- The University held an event in December 2023 that brought together representation from all six unitary authorities to explore Unlocking Local Energy Plans. Attendees also included SSE, National Grid and other industry partners.
- Collaboration has been continuing between the School of the Built Environment and the Royal Berkshire Hospital on developing research exploring what net-zero hospitals entail and building business cases in the lead up to the construction of a new hospital for Reading, as well as investigating energy efficiency measures within the current site.
- The University of Reading continues to play a key contributing and delivery role to the ongoing development and implementation of the Department for Education (DfE) 's Sustainability and Climate Change Strategy. Every school, college and university in England will have free access to expert support to become greener and more climate resilient in a national Climate Ambassador scheme now backed by £2m of DfE funding.

- The University is also engaging local schools to participate in improved outdoor learning opportunities on our campuses through our University of Reading Nature Park project, aligned with the DfE's National Education Nature Park, launched in October 2023.



Our future commitments

- Engage people across the University community to empower and inspire understanding and action on climate change and environmental sustainability.
- Work closely with partners to engage residents and the wider community around our campuses in local climate initiatives and individual behaviour change.
- Facilitate opportunities for University expertise and learning to inform and shape local strategies for addressing the climate and nature crises.
- Continue our lead role in supporting schools nationally to improve climate education, climate action planning and enhancing biodiversity.

15.0 SUSTAINABLE FOOD (CAMPUS COMMERCE AND FARMS)

We are committed to sustainability in all areas of our extensive food and drink activity – from our farms, The National Fruit Collection, teaching and research in both agriculture and food sciences as well as our extensive in house catering and external hospitality offerings. We are dedicated to consistent improvement around sustainability – all our suppliers adopt and embrace our Sustainable Food Policy and Framework to drive positive change.

Tracking our progress

- Our Clever Cuisine Meal Plan system is driving positive change for our students, staff and visitors by offering exceptional value for money meals that are environmentally, socially and nutritionally sustainable, from the way they are produced to how the ingredients are sourced. In the last year we have further added to our diverse group of suppliers such as Wild Farmed (regenerative farmed flours), awarded our house beer contract to Siren Craft (a local brewer) and continued to deploy our new digital dining platform, that will help us produce the right food, at the right time and automate complexity within our operations, benefiting both guests and the environment.
- The University remains a pioneering and active member of the Menus of Change Universities Research Collaborative sharing best practice across a group of 70 universities internationally both academically and within the dining room. We took part in research including an in-depth study led by Stanford University looking at the impact of diet on the health of athletes.
- Cooking and producing food remains energy intensive from farm to fork and the University has been working to minimise emissions from using the entire animal when we source meat from our farms, to the phasing out of gas within our catering outlets and looking at where the lowest carbon food is produced.

- Last year we completed the switch from gas to electric for cooking and are working as part of the wider decarbonisation of campus and halls, to go further by moving away from gas for heating and hot water. Park Eat is on track to be our first catering building to have its gas supply disconnected as the gas boilers are decommissioned. Park Eat is also our most extensively monitored building, with energy monitored down to each plug socket allowing us to take an informed approach towards equipment replacement to reduce energy consumption. This work has led us to replace bottle fridges reducing energy use by around 40%.
- We have implemented processes to divert our food waste within our dining outlets across campus, which is used to generate renewable energy through anaerobic digestion.
- By utilising forward-thinking technology to predict service levels, reusing leftover food when safe to do so, cooking in smaller batches, and reducing the size of our counters in quiet service periods we are significantly contributing towards our 50% reduction in the weight of food waste per meal served target by 2030.
- We have also introduced large eye-catching waste units across our outlets to ensure students dispose of their waste correctly. This is done by separating our general waste, dry mixed recyclables, food and glass waste.



Our future commitments

- Reducing kitchen food waste and plate waste.
- Improving seasonality of food on campus.
- Self-generating power for our cooking.

16.0 EDUCATION FOR SUSTAINABLE DEVELOPMENT (ESD)

The University Strategy sets out our ambition to embed environmental sustainability across both our curriculum and staff training programmes. In 2023/24 the next phase of this work was formalised through establishing a number of new working groups, each tasked with delivering key aspects of the programme – building on the progress during the initial phase.

Tracking our progress

- We are working towards ensuring that ESD is the business of all subjects at the University but experienced in a way that is authentic to the discipline. This is underpinned by using the UN Sustainable Development Goals (SDGs) as the overarching framework, though with special recognition of the University's expertise in Climate Action (SDG13) and environmental sustainability (where appropriate).
- The Academic Development and Enhancement Team continued to provide support to Schools as they engaged in ESD in the redesign and refresh of their programmes. This included initiation of a Community of Practice and work to develop comprehensive training videos showcasing best practice across the University.

- Work commenced towards ensuring that a bespoke online course and University-Wide Module (UWM) is developed and made available to provide a comprehensive grounding in climate and environmental sustainability for all students. During academic year 2023/24 a project group was established to develop this new online course and work is well under way.
- The Department of Meteorology already offers an optional module, MT2CCC Climate Change: Causes and Consequences, aimed at all students, not just those studying the sciences. Students can learn directly from our worldwide experts about why the climate is changing, how we can avoid the most devastating consequences, and what we can do to adapt as the planet warms.
- The School of Archaeology, Geography and Environment Sciences provides students both within and outside of their School access to modules on environmental and social issues linked to climate. These include GV1GC Global Challenges: a Planet in Crisis, GV3CCR Climate Change and the Geographies of Responsibility and GV3CPS Consumption, Politics and Space.

- As part of the FutureLearn Campus initiative, students already enjoy free unlimited access to a collection of short online courses developed by experts from the University of Reading and partners from EIT Food and the Royal Meteorological Society. The courses deal with topics as diverse as cutting food waste, teaching climate and sustainability in primary schools and using systems thinking to tackle the climate and biodiversity crisis.
- The University widely promoted the new RED Sustainable Action Award, which is dedicated to encouraging learning, action and advocacy for sustainability, open to all students and with an expanded portfolio of projects in which to participate.
- The University also supported a number of student led societies, including the Reading Environmental Crisis Community (RECC) and Hedgehog Society.



Our future commitments

- Widely champion the ESD programme to staff and students, including highlighting progress across the University and specific opportunities to get involved.
- Develop the new University wide module/online course on climate change and environmental sustainability.
- Embed the Community of Practice and other support mechanisms for teaching staff.
- Continue to promote the RED Sustainable Action Award and seek ways to increase opportunities for students to put their learning into action.

17.0 ETHICAL INVESTMENT AND BANKING

Our University staff, students and extended community all agree that our financial assets should support our values – we seek to avoid certain investments which promote obvious harms and choose investments that will have a positive impact.

Tracking our progress

- We will invest a minimum of 10% of the endowment portfolio assets in impact investments over the next three years. This will generate measurable social and environmental impact, to enable a just transition alongside financial returns.
- We have joined 60+ other UK universities and charities in requesting proposals for the banking sector to create fossil-fuel free treasury funds.
- Following events during 2023/24, our students advocated strongly that there was room to explore extending existing policies and the University has taken decisive action recently to immediately amend our Investment Policy to exclude the largest fossil fuel extraction funders – we have disposed of bond holdings in Bank of America, Barclays and Wells Fargo. This goes beyond our 2020 commitment to divest from companies directly involved with the extraction of fossil fuels.
- Our Investments and Development Committee will undertake a thorough review of our Investment Policy by January 2025 and this process will include student representation.
- We will improve the way we publicly update and communicate with our staff and students to show how and when the University is working as an active investor.



Our future commitments

- Include scopes 1, 2 and 3 carbon emissions from University's investment portfolio within the University current baseline.
- Work to calculate and include the carbon footprint of the University's other treasury activities within the baseline, and reduce it by the use of compliant products as they become more available.
- Add more impact investments which directly reflect the University's net zero carbon journey.

18.0 ETHICAL CAREERS AND RECRUITMENT

We are committed to ensuring that our students and graduates are prepared for their chosen future careers, empowering them to pursue their career paths with freedom of choice. This must be balanced with our ethical and sustainability commitments and this is an ongoing area of work for the University.

Tracking our progress

- We have continued to have detailed discussions in this area so we can announce the next steps along this pathway.



Our future commitments

- The University to announce its current position regarding the development of an ethical careers policy.
- Develop the University's portfolio around future green careers to ensure links between our programmes, awards, work experience and volunteering opportunities.

19.0 ESTATE DEVELOPMENT AND MAINTENANCE

The Sustainability Team form a key part of the Estates directorate, and sustainability is one of the 5 strategic drivers underpinning the University's Estate Strategy. The Estates Strategy sets the requirement to deliver significant infrastructure in order to meet our goal of becoming a net zero university by 2030. In order to achieve this there needs to be an integrated and joined up approach, bringing together low carbon design, energy efficiency, landscape, behaviours and travel.

Tracking our progress

- TOB1 (series of single storey buildings on Earley Gate, north section of Whiteknights campus) has been demolished which will improve the University's carbon footprint as they were inefficient buildings at the end of their useful life.
- The School of Art was moved from TOB1 to a refurbished building off Pepper Lane, which is targeting 'very good' in the BREEAM rating scheme. This building is far more efficient, connected to the district heating system and has solar panels installed – a partnership with Reading Community Energy Society (RCES).

- The site of the former TOB1 building will house a major new tenant in a very efficient green building, the new headquarters of the European Centre for Medium Range Weather Forecasting (ECWMF), which they will own and operate.
- The URS building redevelopment is now targeting 'very good' BREEAM status as it is a very challenging building which renders 'excellent' unachievable. This is expected to be significantly more energy efficient than the current building and we are exploring ways of making it a SMART building.



Our future commitments

- The potential to double glaze Whiteknights House during 2024/25 is being explored to significantly improve the efficiency of the building and comfort levels for those working from this location.
- The gas steam boilers will be removed from the Health and Life Sciences (HLS) building, with localised electric steam generations installed in their place, which will lower the building's carbon footprint.

20.0 2024/25 TARGETS

Section	2024/25 headline targets	SDGs supported
3.0 Environmental Strategic Action Plan	Publish Environmental Strategic Action Plan in autumn 2024	 
5.0 Compliance and management systems	Continue to maintain the Energy and Environmental Management System (EEMS) to the internationally recognised ISO14001:2015 and ISO50001:2018 standards via the ISO certification which will be re-certified in March 2025. Continue with the expansion and development of the scope and context of the EEMS.	   
6.0 Energy and carbon	Updating our Net Zero Carbon plan in line with the Standardised Carbon Emissions Framework (SCEF) standard. Major roof space insulation upgrades to multiple buildings. Energy reduction and space consolidation in the Maths/IT Data Centre. LED lighting upgrades in the Carrington building.	   
7.0 Water	Completion of the project to connect target building-level water meters to our utilities database, following which, consumption patterns and targets for reduction can be set.	 
8.0 Waste and resource use	Continue to reduce the amount of operational waste produced annually per person (staff and student FTE) and move the University's waste up the Waste Hierarchy. Continue to increase annual repair, remanufacture and reuse of items. Roll-out a scheme to reuse more of the University's IT equipment as part of the Device Lifecycle programme operated by Digital Technology Services.	   
9.0 Sustainable travel	Increase the number of Electric Vehicle (EV) charging points across our campuses. Promote our Co Wheels car clubs and introduce new vehicles at key locations, including London Road campus. Improve cycle security storage locations.	   
10.0 Engagement, awareness and behaviour change	Improve the range of digital information available for waste and resource use and sustainable travel. Deliver renewed mandatory staff training sustainability module and develop other additional optional courses. Broaden the different types of monthly sustainability engagement events.	    
11.0 Environmental protection and pollution prevention	Maintain our target of no more than 3 emissions/discharges incidents from University activities on a rolling 3-year average and annually report progress. Continue to increase awareness of air pollution by promoting more sustainable forms of travel and being a Clean Air Day supporter.	   
12.0 Responsible procurement	The University is supporting the Fairtrade Foundation with their 30th anniversary celebration by attempting to take part in 30 activities during the year 2024/25. In the next year, the University plans to sign up to the Net Zero Carbon Supplier Tool run by NetPositive Futures. This tool will help the us to calculate our proportion of a supplier's carbon footprint and see the supplier's bespoke action plan to help them to become a more sustainable supplier. This will lead to more accurate Scope 3 calculations. Our Managed Print Service has been working on reducing the amount of printing devices for the upcoming contract period, which will reduce our energy and paper consumption.	     

Section	2024/25 headline targets	SDGs supported
13.0 Conservation and biodiversity	Publication of a new Biodiversity Action Plan in 2025. Develop an improved online hub showcasing biodiversity activities at the University of Reading. Pilot the University of Reading Nature Park project with a range of local schools, which will offer them increased opportunities to access nature based learning on campus. Identify opportunities for improved outdoor learning for our own students and local school pupils.	  
14.0 Community and community involvement	Engage people across the University community to empower and inspire understanding and action on climate change and environmental sustainability. Work closely with partners to engage residents and the wider community around our campuses in local climate initiatives and individual behaviour change. Facilitate opportunities for University expertise and learning to inform and shape local strategies for addressing the climate and nature crises. Continue our lead role in supporting schools nationally to improve climate education, climate action planning and enhancing biodiversity.	   
15.0 Sustainable food	Reducing kitchen food waste and plate waste. Improving seasonality of food on campus. Self-generating power for our cooking.	     
16.0 Education for sustainable development (ESD)	Widely champion the ESD programme to staff and students, including highlighting progress across the University and specific opportunities to get involved. Develop the new University wide module/online course on climate change and environmental sustainability. Embed the Community of Practice and other support mechanisms for teaching staff. Continue to promote the RED Sustainable Action Award and seek ways to increase opportunities for students to put their learning into action.	  
17.0 Ethical investment and banking	Include scopes 1, 2 and 3 carbon emissions from University's investment portfolio within the University current baseline. Work to calculate and include the carbon footprint of the University's other treasury activities within the baseline, and reduce it by the use of compliant products as they become more available. Add more impact investments which directly reflect the University's net zero carbon journey.	   
18.0 Ethical careers	The University to announce its current position regarding the development of an ethical careers policy. Develop the University's portfolio around future green careers to ensure links between our programmes, awards, work experience and volunteering opportunities.	   
19.0 Estates development and maintenance	The potential to double glaze Whiteknights House during 2024/25 is being explored to significantly improve the efficiency of the building and comfort levels for those working from this location. The gas steam boilers will be removed from the Health and Life Sciences (HLS) building, with localised electric steam generations installed in their place, which will lower the building's carbon footprint.	   

APPENDICES

Appendix 1:
Carbon management scope

Appendix 2:
Completed and planned carbon and water
projects and budget

Appendix 3:
Emissions-energy breakdown versus baseline
and last year

Appendix 4:
Additional out-of-scope emissions

Appendix 5:
Avoided emissions through renewable
generation

Appendix 6:
Waste breakdown and completed projects

Appendix 7:
Food waste

Appendix 8:
Travel Plan annual report

Appendix 9:
University of Reading Travel Plan 2024 – 2029

Appendix 10:
Travel Survey Results Report 2024

Appendix 11:
Supporting the Sustainable Development
Goals (SDGs)





Environmental Sustainability Report 2023/24

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