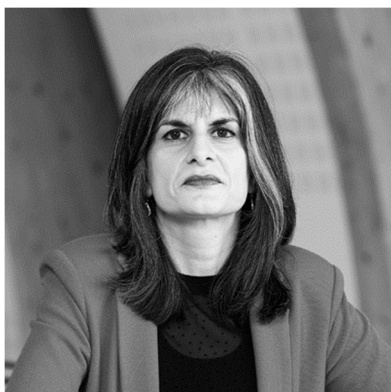


Global Reading, Global Goals

The University of Reading and
the SDGs – Update Report 2024



PREFACE



We continue to support progress towards the 17 United Nations Sustainable Development Goals (SDGs) through world-class research, innovative teaching, sustainable operations, and meaningful engagement with the broader community, fostering positive, lasting change for society and the planet.

Our commitment to being a leader in sustainability was recognised in 2023 when we became the inaugural winners of the Times Higher Education's 'Outstanding Contribution to Environmental Leadership Award'.

We welcome students from more than 140 countries to our campuses in Europe, Africa and Asia, with students studying a wide range of issues and topics relevant to every aspect of humanity and the planet we call home. Our expertise spans critical areas through four research themes that cover the Environment; Agriculture, Food and Health; Heritage and Creativity; and Prosperity and Resilience. Our internationally recognised experts are helping to shape policy around the world.

Our institutional values of community, excellence, sustainability, and engagement, are embedded in everything we do. By collaborating with partners across sectors, we maximise our contribution to the SDGs, and our academic community actively supports urgent global initiatives to combat poverty, inequality, and environmental degradation.

This report highlights work we do to address the climate emergency, with activities that cross disciplines and audiences. Through our research into the science, policy, and people affected by climate change; our engagement at global, national and local levels, from the United Nations to the UK government and local climate action groups; and through our commitment to becoming more sustainable in our own activities, we are demonstrating the huge difference that a university can make. We remain committed to becoming one of the "greenest universities in the world".

Professor Parveen Yaqoob

Deputy Vice-Chancellor, University of Reading
June 2024

CONTENTS

SDG 1: NO POVERTY	4–5
SDG 2: ZERO HUNGER	6–7
SDG 3: GOOD HEALTH AND WELLBEING	8–9
SDG 4: QUALITY EDUCATION	10–11
SDG 5: GENDER EQUALITY	12–13
SDG 6: CLEAN WATER AND SANITATION	14
SDG 7: AFFORDABLE AND CLEAN ENERGY	15
SDG 8: DECENT WORK AND ECONOMIC GROWTH	16
SDG 9: INDUSTRY, INNOVATION AND INFRASTRUCTURE	17
SDG 10: REDUCED INEQUALITIES	18–19
SDG 11: SUSTAINABLE CITIES AND COMMUNITIES	20–21
SDG 12: RESPONSIBLE PRODUCTION AND CONSUMPTION	23–24
SDG 13: CLIMATE ACTION	22–25
SDG 14: LIFE BELOW WATER	26
SDG 15: LIFE ON LAND	27–28
SDG 16: PEACE, JUSTICE AND STRONG INSTITUTIONS	29–30
SDG 17: PARTNERSHIPS FOR THE GOALS	31–32



SDG 1: End Poverty In All Its Forms Everywhere

2508

STUDENTS RECEIVED FINANCIAL SUPPORT FROM THE UNIVERSITY TO ATTEND COURSES IN 2022/23

OUTREACH

Supporting better livelihoods

Through [the Zero-Budget Natural Farming initiative](#), Reading academics are working in partnership through [knowledge exchange activities and community involvement projects](#) with government and local partners in in Andhra Pradesh, India, to enhance livelihood resilience of smallholder farmers to climate and land-use change, while increasing their income and improving food security, and soil fertility.



RESEARCH

Participatory research drives cross-sector action on cost-of-living crisis

[Participatory research methods](#) developed and implemented in collaboration with Reading communities and researchers are investigating the impact of the [cost of living crisis on local people](#) across South East England, that will inform local health and care services.



SHAPE-ing investments

The [Aspect Angels initiative](#) at Henley Business School is supporting more socially responsible innovation by facilitating investment in ventures that are driven by the highest-quality research into human behaviour and our relationship with the environment. It's the UK's first investor network for ventures founded by researchers working in SHAPE – Social sciences, Humanities and the Arts for People and the Economy.

Addressing poverty and ecological destruction

A collaborative project within the GCRF-funded Trade, Development and the Environment Hub at Reading is unpicking the complexities of unsustainable trade practices from different angles that will help find solutions to [enhance trade and alleviate poverty without reducing biodiversity](#).

TEACHING AND LEARNING

Addressing poverty through social policy

Reading's School of Agriculture, Policy and Development offers a module titled [Addressing Poverty and Inequality through Social Policy](#) to students. The module aims to teach students the ways in which social policy is essential to the promotion of poverty reduction, equity, rights and sustainable development, and to the creation of resilient livelihoods.

STEWARDSHIP/OPERATIONS

Access and Participation

Reading aims to tackle educational inequality with targeted strategies addressing economic and ethnic attainment gaps in student outcomes. Our [Student Access and Participation Plans](#) support students from low-income families to attend the University and are helping to address attainment gaps in underrepresented groups.



SDG 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

RESEARCH

Sustainable farming practices

Internationally renowned [agricultural research at the University of Reading](#) is improving crop yields and producing healthier food while reducing environmental impacts. Crop and soil scientists from the University have been working with local partners to make [cocoa farming in Ghana](#) more sustainable. The project identified ways to improve cocoa yields using farm waste compost and has attracted private funding for further trials and outreach.

Raising the pulse in our food

Reading researchers are working to increase the amount of UK-grown pulses consumed, by incorporating faba bean flour into white bread. The [Raising the Pulse project](#) is part of the UKRI's Transforming UK Food Systems initiative. The project is benefiting from genetic information, including the full sequence of the faba bean, generated by a collaborative group including reading scientists. The genetic toolkit will help scientists to breed beans with optimum nutritional content and grow them sustainably.



OUTREACH

Food Systems Equality

Reading is involved in the [Food Systems Equality \(FoodSEqual\) project](#), to empower disadvantaged communities to have choice and agency over the food they consume. Our researchers are working together with food industry representatives, civil organisations and policy makers to co-develop new products, new supply chains and new policy frameworks that deliver an affordable, attractive, healthy and sustainable diet.

Linking environment and farming

Reading's [Centre for Dairy Research](#) (CEDAR) is a LEAF Innovation centre and works with farmers, the food industry, scientists and consumers, to inspire and enable sustainable farming through research, innovation, knowledge exchange and education programmes. CEDAR have hosted numerous visits including farmer groups, research workshops and student groups, including international visitors and groups.



TEACHING AND LEARNING

Access to food security knowledge

Reading academics have developed a toolkit to train farmers in more than 23 countries. The [Participatory Integrated Climate Services for Agriculture \(PICSA\)](#) toolkit helps farmers make informed decisions about their agricultural practices, offering seasonal support and fostering strategic planning and adaptation for improved livelihoods and sustainability. The University also offers [free food and agriculture courses](#), for farmers and people with interest in the food industry, covering a range of topics from food waste to exploring producing sustainable foods.

419

STUDENTS (6%) GRADUATED
WITH AN AGRICULTURE DEGREE,
WHICH HAS A STRONG
SUSTAINABILITY FOCUS

STEWARDSHIP/OPERATIONS

Certified for sustainable food

The University is committed to providing food that is safe, healthy and nutritious, and has implemented a [Sustainable Food Policy and Framework](#). All food and drink outlets on campus have been independently audited and certified through the Sustainable Restaurant Association's Food Made Good scheme, receiving the maximum three stars award.



Menus of Change

Reading has [adopted the 24 key principles for crafting healthy and sustainable menus](#) developed by Menus of Change, an international collaboration between academic and food operator organisations. As a member of the Menus of Change Universities Research Collaborative, Reading carries out operational and academic research to inform and advance these principles, transforming how its food is produced and how its catering services operate.



SDG 3: Ensure healthy lives and promote wellbeing for all at all ages

>1000

STUDENTS GRADUATED
FROM COURSES THAT WILL
TAKE THEM INTO THE
HEALTH PROFESSIONS

RESEARCH

Digital blood tests

The University is part of the [Future Blood Testing Network Plus](#), which aims to develop digital health technologies that support real-time blood monitoring, self-management and timely intervention in community health and care.

Predicting inflammatory arthritis

Reading researchers are exploring how to better [predict the onset of inflammatory arthritis](#) (IA) using artificial intelligence. Funded by UK Research and Innovation (UKRI), the interdisciplinary project involving AI experts, clinicians in primary care and secondary care, data ethicists, AI regulation and other experts, will eventually ease pressure on the NHS by helping doctors to achieve earlier IA diagnoses.

TEACHING AND LEARNING

Training mental health professionals

The award-winning [Charlie Waller Institute](#), a collaboration between the University, Berkshire Healthcare NHS Foundation Trust and the Charlie Waller Trust, is the NHS provider of choice for training for mental health professionals in evidence-based psychological treatments such as cognitive behavioural therapy (CBT).

Wellbeing Hub

The University's Centre for Autism runs a [Wellbeing Hub](#) that aims to create an inclusive community where school-aged autistic children, their families, and supporting professionals can collaborate. As well as supporting research projects, the Hub is also playing a role in the training of future clinicians, educators and researchers – through active participation in Hub activities, placement students receive valuable theoretical and practical experience in neurodiversity-affirming practices.

OUTREACH

Health Innovation Partnership

The University maintains strong links with the Royal Berkshire Hospital NHS Trust through its [Health Innovation Partnership](#). Its [Collaborative Innovation Funding](#) supported over 50 projects in 2023. In addition, [a new Clinical Simulation Training Suite](#) is set to provide unparalleled opportunities for current clinicians to develop their skills and ensure outstanding care for local patients.



AI cuts missed appointments

An [artificial intelligence system](#) developed at Reading is tackling health inequalities by reducing missed hospital appointments in high risk groups by 40%. The tool has now been implemented across all departments at the Royal Berkshire Hospital.

Specialist clinics

The University runs several well-established clinics across [mental health](#), [speech and language therapy](#), [neuroscience](#) and [autism](#). These directly benefit patients and raise the profile of our high-quality health-related research across Berkshire.

Inspiring healthcare careers

[HealthReach](#) is a mobile learning programme which supports access to health and life science careers and courses. Staff and students from the University team run sessions, online, in schools and on campus using interactive and experimental healthcare simulations and education sessions to inspire young people to consider healthcare careers.

STEWARDSHIP/OPERATIONS

Elevating health and wellbeing among staff

The University of Reading is committed to [employee health and wellbeing](#) and aims to provide a workplace that embraces inclusivity and flexibility while providing everyone with the opportunity to manage their time and commitments in the best way that they can. Staff also have access to mental health support and counselling through the free, independent [Employee Assistance Programme \(EAP\)](#).

Keeping locals active

For over-55s in the local community, the University's SportsPark provides [Stay Active](#) classes, including Zumba, badminton and fitness. In addition, the Reading University Students Union works with the local Sports in Mind charity to run [active walking groups on campus](#).



SDG 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

RESEARCH

Equitable and inclusive education

Reading's education specialists are helping to [improve equity and inclusion through education](#) by exploring areas such as education and social mobility, outdoor learning, SEN inclusion and social justice, and ethnicity and gender in educational engagement.

Understanding language learning

A [four-year longitudinal study](#) led by Reading is exploring how young children learn foreign languages in primary school (aged 7-11) and what influences their progress. The data will help set clear goals and standards, based on 2019 recommendations from the Research in Primary Languages Network.

“Through our engagement with teaching practitioners in the UK and beyond, we are filling gaps in education policy and practice that will significantly improve the life-chances of thousands of children”

OUTREACH

Reading initiatives in low-income areas

A [community-based project](#) to foster a love of reading in families in Whitley and Whitley Wood that are among the most disadvantaged areas nationally, has also boosted confidence and mental health among participants. Researchers worked with families, schools, libraries, charities and community centres to co-design activities that would be engaging, self-sustaining and tailored to local needs.



Helping multilingual learners to find their voice

The Talk Rich Teaching project is a [joint project](#) between US and Reading teacher educators that was set up to improve teaching for children whose home languages are not English. Using an innovative approach, the project piloted in four UK primary schools, boosted multilingual children's English speaking, listening and reading skills.

315

STUDENTS GRADUATED WITH A
QUALIFICATION TO TEACH IN
PRIMARY SCHOOLS

TEACHING AND LEARNING

Teaching future educators

The University's Institute of Education provides training for a new generation of teachers, offering [PGCE, QTS and EYTS qualifications](#) in early years, primary and secondary teaching. Each year, over 300 students graduate from teaching courses which partner with schools in Berkshire and surrounding area.



Healthcare Education

The University's teaching specialists have teamed up with the Royal Berkshire Hospital to create a unique [Healthcare Education](#) programme for all staff who teach doctors, nurses, allied health professionals and pharmacists. By strengthening teamwork and mutual understanding as well as improving teaching skills at the hospital, the collaboration is driving improvements in patient care and patient safety.

Life-long learning

In partnership with the FutureLearn platform, Reading supports life-long learning by providing a range of [free online short courses](#), from [exploring the archaeology of early Roman Britain](#) to [understanding depression, microbes](#) or [the weather](#). This enables the University to reach learners from diverse backgrounds and all ages around the world and share the important work it is doing to help tackle some of the major issues the world faces today.

For younger learners, Reading offers a range of [activities for under-16s](#) that support widening participation in higher education. These are delivered through school visits and on campus, including school conferences and assemblies.



SDG 5: Achieve gender equality and empower all women and girls

RESEARCH

Driving equity in computer science

A [study co-led by Reading researchers](#) has highlighted how the English school system fails to engage female students in computer science, creating a gender imbalance that is reflected in the workplace. The study's findings should lead to more evidence-based education policies and practices, which will eventually enable more young people of all genders to set their sights on jobs in computer science.

Supporting women in prison

A Reading research project funded by the Ministry of Justice and Thames Valley Violence Reduction Unit is examining how early intervention and training for criminal justice professionals can help to more effectively [support girls and young women who are in contact with youth and criminal justice system](#).

53.2%

OF ASSOCIATE PROFESSORS AT READING ARE FEMALE

OUTREACH

Maternal wellbeing

A Reading researcher is exploring the [wellbeing, opportunities, and workplace experiences of new mothers in the UK](#) who want to continue to breastfeed on return to paid work. The project aims to develop a toolkit that will help employers to better support working mothers who want to continue to breastfeed while also reducing skill and talent loss and increasing the productivity of working mothers.



Staff networks

The University is committed to gender equality, providing support for all colleagues, such as job share arrangements, mentoring and development schemes for students and staff, and a nursery on campus. It supports several [staff networks](#) including [women@reading](#) and a women's Springboard network to support female colleagues.

TEACHING AND LEARNING

Women in leadership scholarship

To support women in leadership, Henley Business School runs a [scholarship competition](#) each year to offer practical support for the development of strong female talent. The competition is open to people of all genders and the winner receives a fully-funded place on Henley Business School's part-time Executive MBA programme.

STEWARDSHIP/OPERATIONS

Equal opportunities

The University has a dedicated [Diversity & Inclusion team](#) that provides co-ordination and support for the D&I efforts of staff and students across Reading. There is a [Gender Equality plan](#) in place and in 2022, the University succeeded in [reducing its mean and median average gender pay gaps](#). Reading continues to take actions to further close the gender pay gap by increasing its focus on flexible working, improving guidance on starting salaries and equal selection processes, and supporting more women to gain promotions through development programmes.

Athena SWAN

Reading is one of only a small group of universities to hold an [Athena Swan Silver Award](#), which was received in recognition of its work on gender equality. Its Schools of Mathematical, Physical & Computational Sciences; Archaeology, Geography & Environmental Science; Built Environment; Psychology & Clinical Language Sciences; and Chemistry, Food & Pharmacy all hold Silver departmental awards, while the Schools of Agriculture, Policy & Development; Philosophy, Politics & Economics; and Henley Business School hold Bronze departmental awards.



SDG 6: Ensure availability and sustainable management of water and sanitation for all

RESEARCH

Social inequalities and water use

Research by Reading academics found that [social inequalities are driving urban water crises](#) more than environmental factors. The study, published in the journal *Nature Sustainability*, found that urban elites overconsume water for their personal leisure while under-privileged people live without taps or toilets and use their limited water for drinking and hygiene. It is hoped that the research will help to reduce unsustainable water consumption among elites.

TEACHING AND LEARNING

Water Resources module

The University's Department of Geography and Environmental Science offers a module to students titled [Water Resources](#), which focusses on water quality, public health and associated water resource management. The module engages students with past, current and future water quality problems to enable critical examination of their impact, particularly on public health, and the effectiveness of water resource management strategies and legislation.

OUTREACH

Flood risk reduction

Reading scientists codeveloped a [new method that empowers citizens to identify solutions to local flooding threats](#). This citizen-led adaptation planning process will help communities prepare for the significant impacts of climate change. The method was also piloted internationally in Ghana and India.

Saving water on campus

The University encourages staff and students to reduce water usage through its [Doing UoRbit](#) online platform which rewards staff and students with points and prizes for taking steps that boost sustainability and wellbeing. This includes water saving ideas such as limiting showers to 4 minutes, only boiling the kettle for one cup of water when making a single hot drink and reporting water leaks/issues identified around campus.

STEWARDSHIP/OPERATIONS

Climate emergency strategy

The University is a key partner in the [Reading Climate Action Network](#), which oversees the Reading Climate Emergency Strategy. This strategy includes a [Water Theme Action Plan](#) that covers water stress, water supply, water conservation, water efficiency and water education. A project to install more building-level water meters across campus has been commissioned as a part of new targets set in 2022/23.

Water Management Plan

The University has a [water management plan](#) which it updates regularly. It promotes free drinking water for all staff, students and visitors, and has more than [30 water stations](#) across its Whiteknights campus.



SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for all

RESEARCH

Exploiting flexible energy usage

Reading is leading the Flexibility Theme of a new [£15 million Energy Demand Centre](#) that is exploring ways to shift energy consumption at different times of the day or the year to make the most of renewables. The Centre is part of a £53 million investment in six research hubs and centres that will help the UK meet its net zero target by 2050.

OUTREACH

Changing behaviours

To encourage students, staff and the wider public to think about how they might change their behaviour to live more sustainably, the University is running a campaign called [Partnering for the planet](#) that features suggestions from Reading academics on what people might do to reduce their carbon footprint. The University also offers a free [Planet Partners online course](#) to increase awareness around the key issues and impacts of climate change.

395,482

KWH ELECTRICITY GENERATED ON
WHITEKNIGHTS CAMPUS IN 22/23

TEACHING AND LEARNING

Sustainable technologies

The University has a range of undergraduate and postgraduate modules that focus on sustainable environments and energy use. For example its [MSc Renewable Energy: Technology and Sustainability](#) in the School of Construction Management includes a module on sustainable heat and power that gives students the opportunity to learn from academics and industry experts about the challenges of designing sustainable technologies.

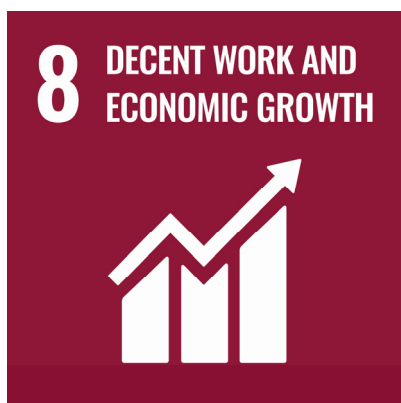
STEWARDSHIP/OPERATIONS

Net Zero by 2030

Reading has committed to becoming Net Zero Carbon by 2030 and has developed an ambitious [Net Zero Carbon Plan](#) to achieve this aim. [100% of the electricity supplied](#) to the University is from renewable sources and we continue to expand our solar PV generation capacity, significantly reducing our reliance on the Grid.

Sustainable investments

The University of Reading has completely [removed fossil fuel shares and bonds](#) from its investment portfolio, diverting its money towards green schemes and sustainable investments.



SDG 8: Full and productive employment and decent work for all

TEACHING AND LEARNING

Campus jobs

[Campus Jobs](#) is the University of Reading's dedicated service that provides part-time work opportunities for students across the Reading campuses, helping hundreds of students to supplement their income and gain skills during their studies.

Apprenticeships

Henley Business School is one of the top UK providers for Senior Leader Apprenticeships and is supporting more than 200 businesses to drive growth and develop future leaders through its [apprenticeship schemes](#).

OUTREACH

Diversity in the workplace

A group of Reading researchers is working on a range of projects focusing on the best ways to [accommodate diversity in the workplace](#). The group aims to create a dialogue between researchers and employers to reach a shared understanding around issues related to diversity and inclusion in the workplace and their implications for good workplace practice and policy. Current projects include studies of [diversity in recruitment](#) and [pay gaps and career progression](#).

STEWARDSHIP/OPERATIONS

Fair work for fair pay

The University sets out clear policies on [diversity and inclusion](#) in the workplace, fair pay and equal rights to ensure all staff have fair and equitable working conditions. The University also reports annually on its [Gender Pay gap](#) to assess progress made and identify areas for further improvement.

RESEARCH

Improving legal frameworks

Academics at [Reading's Centre for Commercial Law and Financial Regulation \(CCLFR\)](#) contribute to policy development and legal reform to help shape fair and resilient labour markets. By participating in public debates and conferences, they are helping commercial law and financial regulation evolve to support decent work, responsible business practices, and equitable growth.

Working smarter

A white paper informed by research at the University's Henley Business School is changing the way organisations and their employees work. The report '[The four-day week: The pandemic and the evolution of flexible working](#)', is based on surveys of 500 businesses and 2000 employees and explores the benefits of working fewer days to both organisations and workers.

Young entrepreneurs

Two teams of researchers and technicians from the University participated in the final of the [Young Entrepreneurs Scheme \(YES\) 2022](#), winning the overall competition, best finance, best intellectual property, and the People's Choice award. YES aims to prepare scientists and engineers for future business endeavours and raise awareness on how research can be commercialised.



SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation

RESEARCH

Decarbonising commercial transport

Decarbonising the transport sector, including road, rail and shipping, has a key role to play in achieving net zero greenhouse gas emissions. Currently there is no single economically viable solution for heavy-duty trucks. Researchers at Reading are modelling [how electrolyser-derived hydrogen, electric charging and localised energy might help tackle the issues](#).

Heating on demand

In the UK, heating and hot water for buildings make up 40% of energy use and 20% of greenhouse gas emissions. In partnership with the University of Nottingham and others, a Reading team is looking at ways to reduce energy consumption [using an innovative phase change material \(PCM\) called the Versatile PCM energy storage system](#).

OUTREACH

Energy-efficient businesses

The University is involved in a government project focused on [bringing down businesses' energy bills](#). The project, which has been awarded over £46,000 through the government's Net Zero Innovation Portfolio, is developing a cutting-edge solution that revolutionises the way energy customers compare tariffs, thus empowering business and organisations to better manage energy consumption and aiding the drive towards sustainable economic growth.

TEACHING AND LEARNING

School of the Built Environment

The University's [School of the Built Environment](#) is internationally renowned for its research and education in the design, construction and operation of buildings and places. Areas of expertise include architecture, construction management, energy systems and environmental engineering.

STEWARDSHIP/OPERATIONS

Greener buildings

Reading has committed to becoming Net Zero Carbon by 2030. Thanks to new and existing initiatives, such as extending our district heating system and expanding use of solar panels, further carbon emissions reductions in 2022/2023 mean that our emissions are now [61.2% below our 2008/09 baseline](#).





SDG 10: Reduce inequality within and among countries

RESEARCH

Tackling health inequalities

[A report co-produced in partnership with local communities](#) has made recommendations for tackling health inequalities in Reading, including improving translation and interpretation services and engaging local community groups as partners in culturally-sensitive service design and delivery.

Action oriented research

The University's [Participation Lab](#) uses action-oriented research approaches and public engagement to enable people's voices to be heard and to achieve change. Its long-standing partnership with the Whitley Community Development Association, is giving disadvantaged people in Reading a voice in devising solutions to local issues. The [Whitley Researchers](#) conduct trusted research and generate knowledge that feeds into council decision-making and policy developments.



Transnational Families

The University is part of the [Transnational Families in Europe](#) research project, which is investigating the relationships between care, inequalities and wellbeing among different generations of transnational families in the UK, Spain, France and Sweden. The project compares migrant carers' and transnational families' experiences within the four partner countries with contrasting welfare models, migration regimes & post-colonial legacies.

OUTREACH

Reading Scholars

To encourage wider participation in higher education, the University's [Reading Scholars programme](#) gives Year 12 students a real taste of life as an undergraduate, and provides practical support as participants begin their higher education application process. The programme is targeted at students who may find it difficult to access higher education (e.g. young people from low-income areas or care-leavers). It is delivered by academics and undergraduate mentors to help students develop study skills, self-confidence and a better understanding of university life and its opportunities.

University of Sanctuary

The University of Reading is a [University of Sanctuary](#) after achieving the award in 2023. We welcome and include sanctuary seekers across our teaching, research and community activities. The University also [offers scholarships](#) to eligible sanctuary seekers (people with refugee, humanitarian protected or asylum seeker status), which recognise the educational disruption that displaced people experience.

Training for local women in Jordan

An archaeologist from Reading worked with partners in Jordan to allow [local Bedouin women to develop a business](#) to generate income for their community. The business in Faynan, southern Jordan, is making and selling handicraft products based on archaeological finds, helping to alleviate poverty, locally.

TEACHING AND LEARNING

Paid work experience supports community initiatives

[Real Jobs](#) is the University Typography department's scheme for bringing together students and clients for personalised work placements, providing valuable work experience and increasing employment prospects for participants post-university. Many of these projects centre around initiatives aimed at reducing inequality – in [one recent project](#), students documented a live theatre performance held at the University by an activist who creates audience-led participatory events that focus on ideas of identity and race.

Undergraduate research opportunities

Students undertaking paid internships through the University's [Undergraduate Research Opportunities Programme](#) (UROP) have been working with local community researchers to support [participatory research projects](#) while developing interpersonal and research skills.

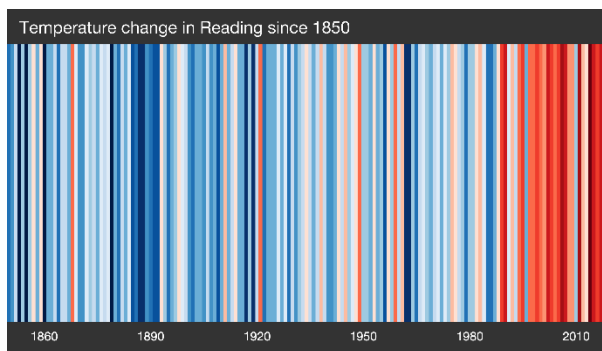
STEWARDSHIP/OPERATIONS

Report and support

The University has [equality, diversity and inclusion](#) and [anti-harassment policies](#) in place to ensure staff and students are treated fairly and without prejudice, at all times. It has developed an online tool – [Report and Support](#) – where staff, students and visitors can report issues and receive timely and effective support when required.



SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable



RESEARCH

Visualising warming cities

[Striking data visualisations](#) created by a Reading professor are showing the impact of climate change on UK cities. Graphics for individual cities were made available for the first time ahead of Earth Day 2023, and the visualisations for 13 cities show they experienced their warmest years on record. The visualisations are inspiring local people to take action and help communities avoid the worst impacts of climate change.

OUTREACH

Cultural heritage at our fingertips

The University's [Museums and Collections website](#) brings together digitised collections from across the University's diverse archives, including objects from the [Ure Museum of Greek Archaeology](#) to the [Cole Museum of Zoology](#), making the collections of fascinating objects and stories of our past available to everyone.

Music at Reading

The University has a vibrant community of staff, students and alumni who come together to share their joy of music and who practise and perform a [range of musical events](#) throughout the academic year.

TEACHING AND LEARNING

Challenging negative perceptions

University researchers and students are collaborating with residents of Reading's [Oxford Road](#) to explore people's stories of local life, amplify local heritage, and highlight the road's rich multicultural history to change perceptions. The project has strengthened Reading's existing community networks, while providing the foundation for further student-community research training and collaboration with local organisations and the arts sector.



STEWARDSHIP/OPERATIONS

Energy efficient construction

The University is committed to making decisions which enhance energy performance and building sustainability in all its [construction and refurbishment projects](#). Reading has set targets for meeting its [Environmental Objectives](#) including achieving at least a 'very good' BREEAM environmental assessment rating across projects relating to its London Road, Whiteknights and Greenlands campuses.

Sustainable Travel

The University [promotes sustainable travel](#) and provides incentives to staff and students to use more sustainable modes of transport, including free cycle maintenance and help to purchase bicycles through a [salary sacrifice scheme](#). There is also a [free Park and Ride bus](#) to Whiteknights campus for staff and students, delivered in partnership with Reading Buses. The University has also approved a sustainable [Business Travel Policy](#) to further reduce carbon emissions.



SDG 12: Ensure sustainable consumption and production patterns

RESEARCH

Lab-grown meat on the menu?

Research from the University has shown that younger age groups are significantly more likely to be open to the idea of [eating lab-grown meat or insects](#) than older people. Insect protein and lab-grown meat are two promising alternatives that avoid many of the environmental and ethical impacts of rearing animals, leading to an increase in sustainable food consumption patterns.

Genetics to inform sustainable apple production

The DNA 'fingerprints' of thousands of apple and pear cultivars are being catalogued by a group of researchers and volunteers, coordinated by the University, to preserve the UK's long heritage in fruit varieties. Information held as part of the [National Fruit Collection](#), curated by University of Reading researchers, could inform which varieties might thrive in a warming climate.



OUTREACH

Workshops inspire waste recycling

Reading researchers held interactive workshops with 200 local primary school children to inspire them [to dispose of food packaging sustainably](#). Activities included fun and interactive methods to promote a shift in everyday behaviour to encourage more waste recycling.

Waste reduction on campus

In 2023, the University recycled or reused 50% of its waste. As part of its commitment to waste reduction and management, it [promotes recycling](#) to all its staff, students and visitors. The University's Campus Commerce also encourages the use of reusable cups by levying a 20p charge on paper cups, and the profits of this tax are ring-fenced for Catering sustainability initiatives.

TEACHING AND LEARNING

Top ranked courses addressing sustainable agriculture and food

The University of Reading is [ranked 16th globally](#) for undergraduate courses in Agriculture & Forestry, and top in the UK in the QS World University Rankings, 2023. The classification includes study across agriculture, food science, ecology, and soil sciences. The University also ranks highly in the UK for Environmental Sciences (joint 10th) and Earth and Marine Sciences (joint 9th).

STEWARDSHIP/OPERATIONS

Waste and Resource Use Strategy

The University maintains and actively progresses a [Waste and Resource Use Strategy](#), including a focus on reducing single-use plastics in line with UK Government Plans. It maintains a waste management strategy which sets out how it will minimise all waste, including plastic. The University also encourages increased re-use of plastic and other materials through the [Warp-It platform](#), where members of staff can claim unwanted items for business use, and the [UniGreenScheme](#), which donates unwanted equipment to third-party organisations.



Giving food more thought

The [University's Catering Team](#) is committed to continually improving its sustainability profile in a financially sustainable way. Regular suppliers are helping Reading to achieve its goals by adopting and embracing the Catering Team's [sustainability framework](#). The University welcomes micro-, small and medium-sized local and regional suppliers to join its supply chain, either directly or via one of its appointed wholesalers.



SDG 13: Take urgent action to tackle climate change and its impacts

RESEARCH

Predicting glacial lake flooding

Reading scientists, led by Professor Shahgedanova, are [transforming glacial lake flood risk management](#) in Central Asia. Their work enabled targeted interventions and expanded in 2022 to predict debris-flow events via a GIS database and app, enhancing early-warning systems for disaster-relief agencies in Kazakhstan, Uzbekistan, Kyrgyzstan, and Tajikistan.



Measuring climate change impacts

The University of Reading is host to world-leading research into climate change and its effects on the planet. Its world-renowned [Department of Meteorology](#) carries out a wide range of studies that are helping understand how wildfires can be better managed and the impacts of sea level rise.

Charging clouds to enhance rainfall

An international collaboration, including Reading researchers, has found that [releasing electric charge into fog](#) alters droplet size and number, potentially enhancing rainfall. Using drones to deliver the charge, the team demonstrated how weather could be modified. This pioneering work, backed by UAE funding, could aid water-scarce regions and reduce reliance on desalination.

Land carbon stores threatened

A landmark study co-authored by a Reading climate scientist has found that [forests are losing their ability to absorb carbon](#) due to increasingly 'unstable' conditions caused by humans. The research shows how the short-term impacts of rising temperatures, deforestation and farming on many vulnerable landscapes are making it less likely for carbon stores on land to recover in the longer term.

Driving conversations about climate

Reading climate scientist Professor Hawkins developed the [Climate Stripes](#) visual to help start conversations about how world temperatures have increased dramatically during the past 50 years. The stripes are now widely recognised around the world, and were included in an [Intergovernmental Panel on Climate Change \(IPCC\) Assessment Report](#) in 2023.

"Our academics and graduates are tackling some of the biggest issues of the 21st century aligned to the 2030 Agenda for Sustainable Development, including sustainable food production, biodiversity conservation, animal welfare, food security, poverty alleviation, international development, climate change adaption and mitigation, ethical food systems, consumer behaviour, diet and health."

OUTREACH

Climate Ambassador programme

The University's pioneering [Climate Ambassadors Scheme](#) is expanding with £2 million funding from the Department of Education. Since summer 2022, 236 Climate ambassadors have reached more than 80,000 learners and teachers in 534 education settings and the programme is now set to reach [every education setting in England](#). The scheme connects volunteer climate and sustainability experts with educators to provide free support and guidance and help them develop and deliver impactful climate action plans. The plans will help to boost climate education, promote green careers, reduce carbon emissions and increase biodiversity, nationally.

Pollinator expertise

Professor Simon Potts's [research at Reading](#) and work with policy makers and NGOs, is highlighting the importance of insects in crop production and the reasons behind their plummeting numbers. His research team also supports [Bees' Needs Week](#), a campaign organised by the UK government's Department for Environment, Food & Rural Affairs to raise awareness about the support that bees need to thrive in the UK.

STEWARDSHIP/OPERATIONS

Sustainability champions

In 2022/2023 the University achieved a [61.2% reduction in carbon emissions](#) against baseline, with a 35% reduction in waste generated per person against baseline. We also launched the [Our Future First](#) sustainable behaviours programme which included establishing a network of sustainability champions across the University's schools and functions.

TEACHING AND LEARNING

MSc climate change and AI launched

A new [MSc in Climate Change and AI](#) at Reading unites expertise from departments across the University and will empower students to explore causal networks and statistical concepts and design networks that will support climate adaptation strategies in real-world projects.

Building capacity in agricultural policy and development

Each year, 800 students from more than 80 countries are taught by world-leading academics on courses at Reading relating to [agriculture, policy and development](#), supporting a new cadre of highly skilled professionals who go on to help address the significant challenges facing the world due to climate change.

Teaching informed by farming practice

The University's [Farm Management Unit](#) develops high-quality farm management teaching in the School of Agricultural, Policy and Development. The curriculum is grounded within the changing needs of employers, and students undertake professional development opportunities during their studies, including work placements. Complemented by excellent research and strong partnerships, its courses produce high quality, policy relevant research and employable graduates.



SDG 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development

RESEARCH

Deep-sea coral evolution

A collaborative study, including a Reading academic, explored the [evolutionary development of stony or hard corals](#) and traced their depth-related colonisation patterns. The findings help explain the origin of existing marine biodiversity and will inform conservation strategies to protect marine biodiversity from human impact.

Sea warming warnings

Scientists, including Professor Chris Merchant at Reading, have developed [remote sensing methods](#) to measure changes in surface sea temperatures around the world. The satellite dataset, built from billions of observations, will help track climate change over time and will support reliable climate research and predictions.



River Thames biodiversity

Reading research is playing a key role in [understanding declining biodiversity](#) in the River Thames. Decades-old research by a Reading zoologist is being used by a PhD student at Cambridge as a comparison for their work on mussel populations in the river. The study found that mussel numbers have declined by almost 95% since the 1960s, with one species – the depressed river mussel – disappearing almost completely.

TEACHING AND LEARNING

Monitoring ground water sources

Undergraduate and graduate students in Reading's [Geography and Environmental Sciences Department](#) have opportunities to carry out research relating to water quality and management of local rivers and catchments, including projects to monitor ground water sources to explore how metal contamination spreads from soil to the environment.

STEWARDSHIP/OPERATIONS

Water quality on campus

To protect local ecosystems, wildlife and human health, the University adheres to local water quality standards and guidelines for water discharges. The [Emissions and Discharge strategy](#) aims to minimise the risk of incidents through monitoring and maintenance of drainage systems and compliance testing of servicing of relevant equipment.



SDG 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

RESEARCH

Sustainable land management

The University hosts a wide range of research that is [helping to protect and restore land ecosystems and prevent biodiversity loss](#). For example, the [Soil and Food Security programme](#) looks closely at what is going on in soil at the root zone of plants, helping our understanding of nutritious food production.

Understanding soil carbon quality

Reading researchers, in collaboration with the Royal Horticultural Society, explored the [relationship between different types of compost and soil carbon quality](#), which is important for improving soil fertility and also for understanding mechanisms of carbon sequestration to mitigate effects of climate change.

National Fruit Collection

The University curates the UK's [National Fruit Collection](#) to protect approximately 3500 varieties of apple, pears, plums, cherries, and bush fruits as part of an international programme to protect diversity in food crops for the future. Reading scientists are also involved in the [FruitWatch project](#), which monitors changes and trends in fruit tree flowering dates.

Reconstructing the Amazon's past

The Amazon faces great threats from climate change and human activity. Professor Frank Mayle [studies deep sediment cores taken from the earth in the Amazon](#). The microscopic analyses are exposing the long-term dynamics of rainforest ecosystems, helping researchers to understand rainforest history and predict future responses to environmental and human pressures.

OUTREACH

Restoring wildflower meadows

Reading owns and manages a community nature reserve at [Langley Mead](#), comprising of 18 hectares of wildflower meadows adjacent to the River Loddon which support a significant number of rare plant species. A number of outdoor learning spaces have been created on the reserve for use by local schools, and arable farmland is being steadily restored into meadow habitats to help sustain local biodiversity.

Nature Park Project

As part of its commitment to promoting better climate education for young people across the UK, the University is developing its own [Nature Park](#) aligned with the National Education Nature Park scheme. The park will offer local schools access to nature-based learning experiences across the University estate and gain a deeper appreciation of our changing climate.

TEACHING AND LEARNING

Sustainable farming

A [free online course](#) developed by academics at Reading in partnership with the FutureLearn platform is allowing learners to explore and learn about the processes that farmers and food producers use to ensure our food is sustainable.

Climate and the past

An undergraduate module – [Tropical Forests, Climate and Lost Civilisations](#) – available to Geography and Environmental Science undergraduates, draws on extensive research and case studies developed from historical research to explore the interrelationships between climate change, human land use and tropical forest ecosystems.

STEWARDSHIP/OPERATIONS

Designated wildlife site

Reading's Whiteknights Campus is designated as a Local Wildlife Site for its mosaic of habitats that support more than [2000 species of plants, insects and mammals](#). These include several protected and notable species, such as the Stag Beetle and Common Toad. Several endangered bird species have also been recorded across the site.



Award-winning biodiverse campus

For over a decade, the University's Whiteknights Campus has been named as one of Britain's top green spaces in the [Green Flag Awards](#), run by environmental charity Keep Britain Tidy. The campus includes 134 hectares of biodiverse land, including a lake, woodlands and the popular Harris Garden, which students, staff and local communities can enjoy. A team of dedicated volunteers help to manage the Harris Gardens, which is open to the public all year round.



SDG 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

RESEARCH

Global Law

The [Global Law at Reading](#) research group has particular strengths on topics relating to international peace and security, such as cyber warfare, the role and responsibilities of the UN, peace operations and human rights.

Diversifying drone stories

A Reading academic led an Economic and Social Research Council-funded [research project](#) that explored the use, perception, and impact of drones in changing UK airspace. The project produced a report aimed at lawyers working on drone cases and drone policy makers that explores the [legal dimensions of drone incidents and misuse](#).

6%

OF STUDENTS GRADUATE FROM LAW AND LAW ENFORCEMENT RELATED COURSES

OUTREACH

Development Studies conference

The University hosted the [2023 Development Studies Association Conference](#) at its Whiteknights campus, which [saw a record number of delegates attend](#). This gathering of global experts, policymakers, researchers, and activists in the field of development studies shed light on the pressing challenges posed by human-induced environmental changes and explored their implications for development interventions and practice.



Supporting climate adaptation in Laos PDR

[The Walker Institute](#) at Reading is supporting development of [climate risk assessments](#) for six focus provinces in Lao PDR, which are informing the country's National Adaptation Plan. This collaborative work is helping to strengthen local and national capacity to take up the latest climate and adaptation science to effectively address climate change and achieve sustainable development.

TEACHING AND LEARNING

Law at Reading

[Master's courses](#) in Law at Reading are taught by leading experts in global governance. Modules cover the contemporary issues that affect the relationship between legal systems and the legal regulation of human rights, armed conflict, refugee movement and the use of force. [Undergraduate courses](#) include a module on Conflict and Global Development.

STEWARDSHIP/OPERATIONS

Freedom of Speech

The University adheres to a [Freedom of Speech Code of Practice](#), developed to ensure freedom of speech is protected, within the law, across all University activities. It is part of a suite of [governance policies and procedures](#) that ensure the University remains accountable.

Inclusive governance

To ensure effective leadership and institutional development at Reading, the University is governed by the University Council, Senate and Executive Board, all of which have wide representation and are [transparent and accountable](#). For example, the University Council that governs strategic direction, estate and finance, includes lay members, and the Senate, which oversees academic matters, receives input from faculty and students.



SDG 17: Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development

RESEARCH

The Walker Institute

[Reading's Walker Institute](#) unites climate experts across the University with policy makers and practitioners around the world to advance understanding of climate change. It is a regional hub of the World Climate Research Programme, focussing on Africa, Asia, and the Americas, aiding farmers, assessing regional climate risks, and enhancing food security through global research and representation.

Trust in food

To understand what drives consumer behaviour when it comes to food, Reading academics in partnership with the EU knowledge innovation community, EIT Food, have developed the [EIT Food TrustTracker](#). This evidenced-based model of what drives consumer trust in the food value chain now forms part of the EIT Food's Consumer Observatory programme, and more than 23,000 consumers from 18 different European countries were surveyed using TrustTracker in 2022.

TEACHING AND LEARNING

Sustainability learning

Sustainability is a cornerstone of the [University strategy](#), and efforts are made to [embed environmental sustainability](#) across both the curriculum and staff training programmes. All students can access modules or extra-curricular activities relating to sustainable development, such as the [Reading Experience and Development \(RED\) Award](#), which provides volunteering opportunities with organisations such as Reading Climate Action Network and conservation group Instant Wild.

PhD students attend COP28

Each year a delegation of doctoral students from Reading compete to attend the UN's Conference of the Parties (COP) on climate change, either in person or remotely. For COP28 hosted in Dubai, [16 Reading PhD students](#) from the SCENARIO and FoodBioSystems Doctoral Training Partnerships attended. They gained valuable insights and took opportunities to interview key stakeholders which are reported in blogs and videos.



OUTREACH

Reading and EIT Food

Academics in the [University's Institute for Food Nutrition and Health](#) are part of [EIT Food](#), a Knowledge and Innovation Community of over 50 leading companies, universities, and scientific partners covering the entire food value chain. It is supported by the European Institute for Innovation and Technology (EIT) to transform the way we produce, distribute and consume food throughout Europe.

STEWARDSHIP/OPERATIONS

An engaged university

The [University strategy](#) is built on four principles – Community, Excellence, Sustainability and Engagement. In every aspect of its work, Reading aims to build thriving partnerships, locally, nationally and internationally to bring about positive societal change.

Community involvement

Reading's university-level decision-making benefits from partnerships with local people through the [University Council](#) and [Community Forum](#), and helps the University to better coordinate its regional engagement. In addition, the University's long-standing collaborations and [participatory research activities](#) with communities across Reading are supporting [local and regional improvements](#).



June 2024

University of Reading, Whiteknights, PO Box 217, Reading, Berkshire, RG6 6AH, United Kingdom