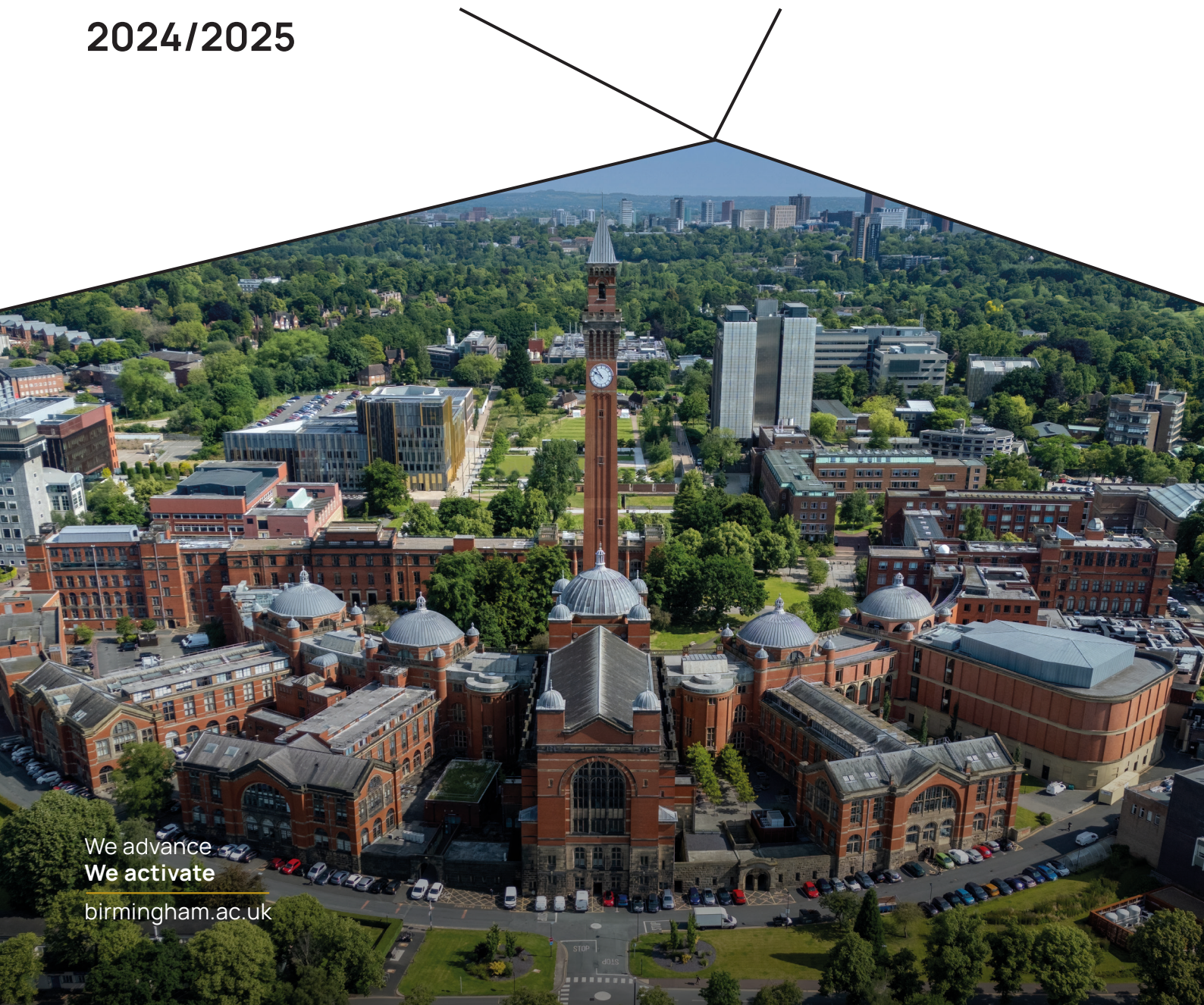




UNIVERSITY OF
BIRMINGHAM

Sustainability in Focus: A Year of Progress

2024/2025



We advance
We activate
birmingham.ac.uk

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Words from our VC

Sustainability is deeply important to me. We at the University of Birmingham are committed to achieving operational net zero carbon; we are seeking to change society and the environment positively and use our research and education to make a major global contribution to the UN Sustainable Development Goals.

In June 2022, our university declared a climate emergency, recognising we need to do more and do it more quickly to help the world reduce the impacts of climate crisis.

As the chair of the University of Birmingham's Sustainability Oversight Board, I have the privilege of hearing about the progress being made across our institution. I wanted to share these exciting developments more widely within our community. I'm delighted, therefore, to launch the first Sustainability in Focus publication, where we highlight our approach to sustainability.

Sustainability is an ethical imperative, and our response is a collective effort. Our academic colleagues are undertaking pioneering research; from enhancing access to clean water and improving air quality, to minimising the environmental impact of surgery, our work will make a difference globally. Through the educational

opportunities we offer to our students, we are equipping the next generation of environmental practitioners and climate-conscious thought leaders with the knowledge and skills to address environmental challenges throughout their careers. Our Professional Services teams are ensuring the University operates in a sustainable way.

Sustainability is a core pillar of our university strategy, reflecting our firm commitment to an institution-wide approach. Whilst we are very much on a journey, we are making progress in ensuring sustainability is at the forefront of everything we do. We have risen 19 places in the People & Planet University League Table 2024/25 since last year, and we are ranked 38th globally and 14th in the UK in the QS World University Rankings for Sustainability; a strong foundation for continual progress.

As we reflect on the last year, I am reminded of the dedication and commitment of our university to tackle hard issues. This year, we have become a signatory to the Concordat for the Environmental Sustainability of Research and Innovation Practice and to the Climate Action Network for International Educators Accord, two key frameworks designed to strengthen and accelerate Higher Education's commitment to climate action. I am very

aware that the research we are leading to understand and find solutions to climate change can contribute to the problem, so it is imperative that we undertake research in a responsible way. As we move forward over the next year, the University is committed to developing more sustainable practices, including our research and innovation practice, to minimise our environmental footprint and conserve resources. I extend my deepest gratitude to our staff, students and partners for their continued commitment to sustainability.

Adam Tickell
Vice-Chancellor of the University of Birmingham



Sustainability highlights

3

prize-winning teams in the Reimagine our Future competition

Ranked 38th
QS World University Rankings: Sustainability 2025

10 'too good to go' sites on campus offering surplus food to students and staff

50%
of all Food Fellows menus are vegetarian or plant based

Over 4,300 hours

of volunteering has been dedicated to BIFoR by staff and students

13 buildings have electric solar panels generating renewable energy

5 new bike shelters installed on campus

Over 25,000 delegates have used our new sustainable conference package

Over 320 sustainability champions across the University

39 electric vehicle charging points on campus

1 inaugural Student Sustainability Day

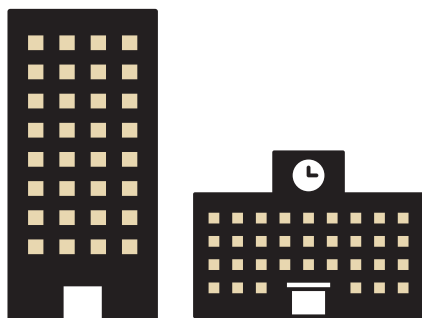
Over 1,000

school students and teachers educated about the impacts of climate change through BIFoR

40
University teams received Green Impact awards

19,000 people walk to campus every day

75%
of our buildings have LED lighting



Ranked 68th
People & Planet League Table 2024/25

Greater Birmingham Chamber of Commerce Excellence in Sustainability Awards 2025 won by the University Edgbaston Park Hotel and Conference Centre

Our University Conference and Events team were awarded a

40
students have completed a sustainability-focused internship to date

2 New Living Pillars™ installed on campus

400 delegates attending the University's Greener Surgery Conference



Green Meetings Gold Award 2024

Our Pathway to Sustainability

Together our pioneering research, transformative education, and sustainable practices are driving global impact.



Introduction from Professor David M. Hannah, Deputy Pro-Vice-Chancellor (Sustainability), Director of Birmingham Institute for Sustainability & Climate Action, Professor of Hydrology and UNESCO Chair in Water Sciences.

The University of Birmingham was England's first civic university; founded on social responsibility, and, as the Deputy Pro-Vice-Chancellor (Sustainability) and Director of the Birmingham Institute for Sustainability & Climate Action (BISCA), I see no greater responsibility than ensuring our planet thrives to support future generations.

Our institution is in a distinctive and privileged position to make a difference. We have got the skills,

expertise and partnerships across a range of disciplines and sectors to play a significant role in tackling some of the biggest climate change and sustainability challenges – along with the purposefulness to make a real difference.

We are seeking to lead – providing important thought leadership and innovation to deliver sustainability through three key areas: pioneering research, transformative education, and through our sustainable practices as an organisation and the behaviours and actions of our university communities.

This Sustainability in Focus report delves deeper into these three themes (research, education and operations), mapping our progress so far against our overarching

goals and priorities that form part of our strategic framework for increasing sustainability locally (on and around campus), within our region, and across the world.

Research is a key area of our activity in which we deliver major global contribution to the UN Sustainability Development Goals. This means not just conducting and supporting world class research but finding innovative ways of joining it together (internally and with external partners) to increase our engagement and impact. The University fosters this by providing a research environment that inspires diversity of thought, encourages collaboration, advances thinking and sparks innovation. This platform is further enhanced by connecting our researchers and students with business, policy makers, decision makers and wider society – leveraging our partnerships in a way that results in real world change.

When it comes to **education**, we are incredibly proud of our role in shaping the next generation of climate-smart global citizens and changemakers. We ensure we integrate sustainability into our academic programmes to equip students to be insightful, responsible leaders and encourage them to think about how they can contribute to a more sustainable future both within their personal lives and their chosen career paths.

Operations are all about adopting environmentally sustainable

behaviours and practices. We are striving to be more responsible as an institution and embedding that intention into our strategies – whether that is in reducing our carbon footprint, working collaboratively with our supply chain to ensure best practice procurement policies, or thinking about how we can best preserve and enhance

the incredible biodiversity we have across our own Edgbaston campus.

Finally, coming full circle to our civic-minded roots, we see it as the University of Birmingham's responsibility to help to develop the culture of sustainability beyond campus and academia. We have a duty to promote good environmental

stewardship and advocacy as well as social responsibility in all the spheres that we touch – by openly sharing our knowledge and resources on sustainability and climate resilience to support others and drive positive change on and far beyond our university.



Research

At the University of Birmingham, our sustainability research is delivering solutions to support a thriving planet. We use our research to make a global contribution to the UN Sustainable Development Goals, from diagnosing the destructive impact of anthropogenic climate change to advancing technologies needed to ensure a sustainable future. We are exploring a diverse range of topics to support our future world.

- Clean air and water
- Biodiversity, conservation
- Clean energy
- Transport
- Climate resilience and infrastructure
- Environmental policy
- Safety and compliance
- Sustainable construction
- Urban planning
- Sustainable agriculture
- Waste and resource efficiency
- Plastics and sustainable materials
- Green finance
- Healthcare and greener surgery and systems
- Behaviour change

Our sustainability research is characterised by its transdisciplinarity and interdisciplinary approaches, bringing together experts from various fields to ask new research questions and develop innovative solutions for change in the real world.

We are actively engaging in research tackling the global challenges of climate change, with a strong emphasis on adaptation and resilience, and ensuring our communities and ecosystems can prepare and thrive despite the complex impacts of climate change. Another critical area being explored is the health implications of climate change and how we can both improve public health in response to pollution and support the transition to net-zero healthcare systems.

In parallel, we are researching sustainable urban development which focuses on enhancing green infrastructure, water quality, waste management, and public transport, ultimately aiming to create more resilient and environmentally friendly cities. Our research also extends into sustainable business models and resilient financial systems, as well as investment into renewable energy.

Creatively, we are exploring the transformative role of artificial intelligence (AI) in tackling

environmental challenges such as climate change, biodiversity loss, and resource management. We are bringing together interdisciplinary expertise to develop AI-driven solutions that are effective, ethical, and aligned with environmental goals.

Through its commitment to the breadth and depth of research and putting knowledge into action – with communities and equity at the heart alongside our planet’s health – the University is making significant contributions to creating a more sustainable and resilient world. One of our key strategic goals is to activate our regional, national and international networks and partnerships to improve our resilience to global change and co-create sustainable solutions. One of the ways we do this is through our Institutes and Centres, which bring together networks of researchers, students, businesses, policy and decision makers, and the wider society to advance our thinking and spark innovation. The University of Birmingham has a number of environmental institutes, such as the Birmingham Institute for Sustainability and Climate Action, the Birmingham Energy Institute, and the Birmingham Institute of Forest Research.



Birmingham Institute for Sustainability and Climate Action (BISCA)

BISCA advances our strategic sustainability objectives by fostering transdisciplinary research and external collaborations. It connects to research groups such as the Birmingham Water Centre, the Plastic Network, Met Office Academic Partnership, and the Birmingham Food Network, and maintains strong ties with the Green Surgery Research Group.

Over the past year, BISCA has identified four core research themes:

- Adaptation & Resilience,
- Sustainable Finance,
- Climate Change & Health
- AI for Sustainability.

Connecting the City of Birmingham to the University of Birmingham’s sustainability research

Exhibitions and events take place at The Exchange, a University of Birmingham building which is based in the heart of Birmingham city centre. It is a focal point to connect our research and our teaching with people, businesses and organisation to help us collectively rethink how our city can be shaped by the people who live and work here. We want to openly share our knowledge and resources to drive positive change and support others on their sustainability journey and we are especially committed to supporting Birmingham and the wider West Midlands to embed solutions to address sustainability, biodiversity and climate-related challenges.

Our public programme this year explores Birmingham's plastic history, the scale of the problem, and how University research is driving sustainable solutions for a greener future. We are sharing our knowledge and research in ways that connect with the public, encouraging interaction with our micro plastics installation, hosting family discovery days supported by our researchers and hosting a comedy performance, commissioned by Birmingham's Plastics Network.

Academic wins £1.75m grant to support Mekong Delta farmers fight climate change through music

Traditional music practices among local farmers in southern Vietnam are being explored to help explore ideas on managing and mitigating the impacts of climate change. Our academics are working with 50 local farmers over five years to build up a picture of their personal histories and assessing how music practice influences their decision-making.

Academics explore green surgery opportunities to reducing global healthcare carbon

Global healthcare is a major contributor to planet-warming carbon dioxide, but green surgery may hold the key to unlocking the conundrum of care versus carbon. Our academics welcomed surgeons and academics from around the world onto its Edgbaston campus to consider research to achieve net zero emissions in operating theatres. We continue to consider how healthcare providers can decarbonise surgery around the world while maintaining the highest standards of patient care.

The Birmingham Plastics Network Policy Commission: A Future for Sustainable Plastics

The Birmingham Plastics Network (BPN) is shaping the fate and sustainable future of plastics. An interdisciplinary team of over 60 researchers and professionals, BPN is engaging with the plastics waste problem through a whole systems approach for widespread impact on economic, environmental, social and ecological systems. In 2023, the Network convened stakeholders from across the plastics landscape to develop a set of well informed, evidence-based, policy recommendations to promote and influence policy for a sustainable future for plastics in the UK culminating a Policy Commission, chaired by Baroness Meacher, Crossbench Peer for the House of Lords and published in March 2024. The report and its recommendations achieved significant coverage in specialist media and was quoted in a Parliamentary Office of Science & Technology (POST) POSTnote and used by Sarah Dyke MP in a House of Commons debate on single-use plastics. While it is challenging to measure policy influence and engagement at an early stage of impact realisation, the tangible outputs of the project are evident through increased engagement among key stakeholders which continues to date.

Research shed lights on longevity of Electric Vehicles now matching that of Petrol Cars

Research from Professor Robert Elliott, along with colleagues at London School of Economics and Political Science (LSE), University of California San Diego, and University of Bern, Switzerland has revealed that battery-powered electric vehicles (BEVs) now match or surpass petrol and diesel vehicles in lifespan and reliability.

Researchers analysed nearly 300 million UK MOT records (2005-2022) to track vehicle longevity.

Publishing their findings in Nature Energy, the research reveals that on average, BEVs now have a lifespan of 18.4 years and can travel up to 124,000 miles, surpassing traditional petrol cars in mileage.

BEVs also offer significant environmental benefits. Though manufacturing emissions are higher, their extended lifespan helps offset carbon footprints, making them a sustainable choice.

Professor Robert Elliott highlights that these findings provide consumers with reliable data and guide policymakers in shaping regulations to support durable, eco-friendly vehicles. This research marks a crucial step towards a net-zero carbon future.

Research discovers air pollution levels may be higher inside your home than outside

Our researchers discovered that people may be exposed to unhealthy levels of airborne pollutants inside their homes, even if the outdoor air quality is good.

Using low-cost sensors and innovative techniques over a two-week period, particulate matter (PM) in three homes was compared. It was found that pollution levels in each house were higher and more variable than outdoor levels.

They found significant differences in PM levels between the three houses, with one home exceeding World Health Organisation (WHO) 24-hour PM2.5 limit on nine days - highlighting the importance of monitoring indoor air quality at a household-specific level.

The approach is easily scaled due to its low cost and would allow

air quality management in homes across Britain and beyond. This could lead to more accurate pollution exposure models and better-informed public health policies.

We are at the forefront of research on the causes and effects of air pollution upon human health across the United Kingdom and globally. Birmingham has over 100 researchers studying clean air from across its five colleges. The campus also operates state-of-the-art pollution research facilities, which have been commissioned for several seminal air pollution studies.

Shaping Climate Policy through Research and Collaboration: Our Road to COP30

We are an active participant within the UN Conference of the Parties (COP) conventions. Working

collaboratively across our Edgbaston and Dubai campuses, we join forces with our global partners to craft policy briefs that tackle pressing challenges such as water and food security, global adaptation, finance, and health and environmental quality at COP28 in Dubai. These briefs, rooted in our sustainability research, aim to drive meaningful change in resilience and climate action. We are preparing now to make our contribution at COP30 in Belém, Brazil. Again, we have created policy briefs, rooted in our sustainability research and for COP30 extending to sustainability education, which, aim to drive meaningful change in resilience and climate action.

International collaborations are essential for to enhance the visibility of our diverse perspectives, and to address global challenges effectively. This year, we have established Engage Amazonia Early Career

Fellowships; funded by the British Council under the International Science Partnership Fund, these fellowships will facilitate ground-breaking research in the fields of Climate Change and Biodiversity, Conservation and Restoration of Natural Capital, and Health Systems in the Amazon. Funded by the British Council, this collaboration with Instituto Tecnológico y de Estudios Superiores de Monterrey will connect UK and Mexican researchers to address women's resilience to climate change, aligning with México's climate action commitments. We are working with our strategic partners at University of Illinois (with on projects with Global South institutions, and Universitas 21 (a global network of research-intensive universities) on signature sustainability initiatives on enhance our global reach and impact in partnership.





Education

We are equipping our students to be knowledgeable practitioners of sustainability and climate conscious citizens.



Introduction from Professor Julia Myatt, Academic Director of Sustainability Education, Professor in Collaborative Education.

At the University of Birmingham, our ambition is to nurture a new generation of climate-conscious citizens. We want to ensure our graduates have the knowledge, skills and tools to lead change, and to bring a breadth of perspective and expertise to a challenging area that crosses social, economic and environmental boundaries. My role as the Academic Director of Sustainability Education is to work with peers, colleagues and students within the University to ensure Education for Sustainability is firmly embedded into our Teaching and Learning Strategy, and supports the activity of our wider sustainability pillar of the University's 2030 strategy.

We are committed to ensuring all our graduates are equipped to be the sustainability leaders of the future. In addition to the provision of specialised sustainability degree programmes and interdisciplinary learning, we are embedding sustainability across all of our degree programmes. Building on our provision of interdisciplinary

degree programmes with a focus on sustainability, this year we welcomed our first cohort on the AI and Sustainable Development MSc. We have partnered with IEMA, the leading body for sustainability professionals, to offer IEMA accreditation, and our first IEMA accredited degree (Climate Change, Adaptation and Policy MSc) is now open to applicants.

In Birmingham, we pride ourselves on offering real-world learning and research opportunities for students while bringing social or environmental benefits to our University. We are working hard to build a programme of opportunities for our students to get involved in practical learning opportunities; you can read about some examples in these pages. Looking ahead to the next year, we are keen to continue to harness the passion and enthusiasm of our staff and students to ensure that everyone can access the opportunities available and develop their skills and knowledge. We aim to train more staff and students, grow new courses, including our intercalated Year in Environmental Sustainability, and support more ways for students to share their thoughts, develop projects and have their voices heard.

Our approach to Sustainability Education at the University of Birmingham

We have developed our own framework to implement sustainable development education standards across the University, aligned to UNESCO's Sustainability competencies.

■ Embed sustainability into our core curriculum and extra-curricular offering

Sustainability education is now embedded into our Quality Assurance processes for education provision, and we are working to ensure that all students can engage with sustainability through their teaching and learning. Sustainability is part of the University Graduate Attributes Framework, where our students self-audit to reflect on their skills and knowledge in this area and are provided with ways to enhance their skills.

Students can take part in sustainability focused training and activities that count towards the Birmingham Award. For example, students can sign up to be Sustainability Champions, take part in biodiversity surveys, as well as attend talks and events such as the Student Sustainability Day, Green Weeks and the UoB Xtra programme.

■ Educate and support our staff to develop and deliver sustainability education

All University academics undertaking their Postgraduate Certificate in Higher Education now receive specific training in sustainability education. A programme of resources and materials have been developed to support all staff to embed sustainability in their teaching. We have hosted cross-disciplinary workshops, supported curriculum reviews and we share best practice across the Colleges.

This year we have welcomed three Educational Enhancement Fund (EEF) educational research projects to enhance our practice in this area.

■ Increase student and staff knowledge about sustainability

'Sustainability in Action' has been launched to all staff and students. This programme introduces key sustainability themes and topics, including practical ways to be more sustainable on campus and at home. In the past year, over 500 students and staff have engaged with this training and nearly 300 have engaged with our more in-depth biodiversity literacy course.

Case Study

Student Sustainability Day

We hosted our inaugural Student Sustainability Day in November 2024. This was an opportunity for students to hear from the Sustainability Leads across the University and share ideas, as well as attend a talk led by the Guild of Students on COP29. Students were able to celebrate their success in the area of sustainability by showcasing their internship and competition projects.

Real-world Learning and Research Opportunities

We want to ensure our students can tackle real sustainability challenges through their learning.

Sustainability Internships

We facilitated 20 paid summer undergraduate internships with the Birmingham Institute of Sustainability and Climate Action (BISCA) this year, and 40 students have now been able to engage with this scheme since it began.

We prioritise recruitment of students who are less likely to have opportunities to experience working in a research environment, such as our Birmingham Scholars students who are from low-participation areas; are young carers; are in the care system; are first in the family to attend university; or are from a low-income household. Many of these Scholars are from minority ethnic backgrounds and are hugely underrepresented in the field of academia - a matter we are keen to address with our internships scheme.

Our internships have enabled students to publish research papers, collect pilot data to support successful grant applications and supported students to secure work after graduation.

Example intern projects

- Green surgery: improving waste management in operating theatres
- Gamifying sustainable development learning
- Electric aircraft-human interface design
- Storytelling in forests: lessons from South East Asia

Reimagine our Future Undergraduate Sustainability Competition

Our students took part in a global competition, in collaboration with the University of Illinois Urbana-Champaign, to develop innovative solutions to sustainability challenges aligned to the UN's Sustainable Development Goals (SDGs). Over 254 students worldwide took part from eleven different institutions around the world, and three of our ten teams successfully made it through to the final and were awarded special prizes for most multi-disciplinary idea and innovation in sustainability education. We have now embedded the competition directly into modules on degree programmes such as the BSc/ MSci Environmental Change and Sustainability to further its reach and impact.

Our University as a living lab

Students undertaking the 'One Planet Thinking and Living' module in their first year of the BSc/ MSci Environmental Change and Sustainability degree use the university as a 'Living Lab'. Students engage with academic and Professional Services staff to review and develop University sustainability policies and practices in areas such as biodiversity, travel and procurement. Masters students on the 'Climate Justice and Social Policy' module in the College of Social Sciences continue to critically engage with debates in this space, and how they impact on the University. Each year, several final year dissertations offered at the university also make use of our own metrics, including energy, Building Management System data, building fabric, and occupancy data.

College Case Studies

The University's five colleges are embedding sustainability in their teaching at undergraduate and postgraduate level. Students across the breadth of our programmes undertake final-year projects, dissertations and placements connected to sustainability, including those that engage with external stakeholders and industry. Below are some examples of new sustainability education delivered in the past year from each of the colleges, all of which provide a flavour of some of the excellent work being done.

College of Arts and Law

This year saw the second cohort of students undertaking the newly developed 'LI/LH Sustainable Development: Climate, Culture, Society and Policy' module. This explores sustainability in an interdisciplinary way across the arts and humanities, and also embeds Carbon Literary Training. This year, the module was opened up to students from other Colleges within the University and from the School of Geography, Earth and Environmental Sciences.

College of Engineering and Physical Sciences

This year, we have launched a new Sustainable Energy Engineering MSc which is designed to develop the knowledge and skills needed to lead the change as we transition to a net-zero future.

The Sustainable Chemistry MSc is now in its second year, following the University signing the Green Chemistry Commitment with Beyond Benign. This initiative supports staff and students to share best practices in green chemistry theory and practice, providing access to collaborative working groups, webinars and additional opportunities. This year, students have been able to present their research projects at the annual Birmingham Mechanochemistry and Sustainability Symposium, win awards and have access to speakers from industry in the UK.

College of Life and Environmental Sciences

In 2025, the recently established BSc Environmental Change and Sustainability and the BSc Human Sciences will see their first graduating cohorts.

These courses provide students with a unique insight into our planet and the people on it, exploring our responsibility to safeguard the future for both, and develop the expertise needed to develop innovative, sustainable solutions. Students are already seeing the impact they can have on our world, and have successfully secured places on graduate sustainability schemes and specialist climate change Masters programmes.



College of Medicine and Health

Academics in the College of Medicine and Health have been working closely with students to create content as part of their Medicine and Surgery MBChB. This has included devising Welcome Week activities and the creation of a sustainability-linked teaching session for the Year Four cohort. The student team also lead on the Planetary Health Report Card that medical students complete for Medical Schools around the country.

College of Social Sciences

As part of our well-established commitment to PRME (Principles for Responsible Management Education), colleagues in the Business School have taken an interdisciplinary approach to embedding sustainable practices in an innovative way. Through PRME seed funding and partnering with the Barber Institute, undergraduate and postgraduate students took part in workshops reflecting on decolonisation and what it means for business studies and practices. Students in the Business School are also encouraged to enter the PRME Responsible Business and Management Student Writing Competition and in 2024 multiple Birmingham students won awards.



Operations

We are becoming a sustainable organisation by adopting environmentally-responsible practices across our University



Introduction from Zoe Hurley, Head of Sustainability

Since joining University of Birmingham in August, I've been incredibly impressed by the commitment and progress our University community is already making to embrace and embed sustainable ways of working. We have over 320 staff and student sustainability champions on campus embedding environmentally-responsible practices in their areas, many of whom participate in our Green Impact programme and we're really encouraged to see participation increased this year. We launched our Biodiversity Plan in December, outlining our goals including enhancing biodiversity on campus. We want to create more opportunities over the coming

years for our staff, students and alumni to support places in our community that are working to monitor, and nurture biodiversity, and encourage connection with nature such as the Birmingham River Champions, the River Cole community commons project, Winterbourne House and Gardens, and our forestry research centre.

Our beautiful campus in Birmingham is comprised of over 200 buildings of different condition, use and age; we have grade I listed properties, new state-of-the-art buildings and everything in between. Many of our buildings were never designed with sustainability in mind; we recognise achieving net zero carbon is a great challenge, but we are committed to making progress where we can.

One of the biggest contributions we can make as a university is nurturing global collaboration to ensure our research in sustainability and climate action is meaningful and impactful, and we can continue to welcome international students to our University to enrich our diversity and impact.

Business travel is essential, but we recognise and acknowledge it comes with an environmental cost. This year, we are starting work to update our university travel guidance to

encourage our community to make more sustainable travel choices; this will continue to be something we work on over the next year. The information on these pages outlines just a flavour of the work we are leading to reduce the impact we have on the environment, engaging our community on our global campuses and beyond to embed environmentally responsible practices. We want to do more over the coming years to enable our students and academics to use our University as a living lab and testbed for sustainable practices. I'm proud to have joined a very enthusiastic committed team of staff here in Birmingham leading change.



align with our environmental goals and will guide our efforts to integrate sustainable practices across all University operations. For example, we have delivered a project this year to establish a Green Laboratory Accreditation standard across our campus and we have established a task and finish group to explore our current alignment to the Concordat for the Environmental Sustainability of Research and Innovation and identify opportunities for improvement.

Reducing the Carbon Footprint of our Estate

We are aiming to achieve operational net zero carbon by 2045. To reduce our energy consumption across our Birmingham campus, we have completed projects to upgrade our lighting systems. 75% of our buildings now have energy-efficient LED lighting systems. To reduce wasted energy consumption, we are currently improving the building controls across our estate and have also installed solar electric panels on 13 of our buildings to generate our own renewable energy and reduce consumption from the National Grid (and associated carbon emissions). We are incorporating sustainability into the design of all major refurbishments or new buildings. This is a commitment we have made in our 2045 Campus Vision and is demonstrated by our new Molecular Science building, which is heated and cooled using the latest electric air source heat pump technology. Later this year, we will be installing an air source heat pump at the Institute for Biomedical Research. This is part of our wider strategy to replace fossil fuel heating and cooling with more sustainable technology on campus. We are leading a revision of our planned investment programme to align our capital investment, maintenance and decarbonisation priorities. This work is being carried out over the next year under the leadership of our new Estates Director.

Engaging our University Community

Over the past year, we have organised various events to engage our University community in sustainability

Delivering Sustainability

Our Head of Sustainability coordinates the delivery of our agreed priorities, reporting progress to a Sustainability Steering Group including representatives from our student body, and College Sustainability Leads Group. All sustainability work is reported to the Sustainability Oversight Board, which is attended by the University's senior leadership and chaired by our Vice Chancellor.

We are working to reduce the environmental impact of our operations and practices, focusing on the following key priorities:

- reducing our carbon footprint including our estates, digital, travel and supply chain carbon impacts
- reducing waste and using resources efficiently

- protecting and enhancing biodiversity
- procuring sustainable food, goods and services
- taking an environmentally-responsible approach to the delivery and dissemination of our research and academic programmes.

We are developing systems to track, measure and report our progress, including establishing our own in-house Carbon Accounting framework and piloting a tool to accurately measure our supply chain carbon emissions. Most importantly, we are engaging our university community in the delivery of objectives as we recognise sustainability is a responsibility of us all, as highlighted in the case studies below.

We are signatories to several leading environmental initiatives, and this year we became signatories to the Climate Action Network for International Educators (CANIE) Accord and the Concordat for the Environmental Sustainability of Research and Innovation Practice. These frameworks

and promote environmentally-responsible practices. We have delivered sustainability learning sessions as part of the Birmingham Professional programme, embedded information in our face-to-face induction for all University new starters, delivered learning session to our Sustainability Champion network based around our priority themes and shared information with students during Welcome Week. Our annual University Green Week was held in November. Staff and students attended talks and workshops hosted by our sustainability leads and academics, visited our BIFoR site, and took part in activities such as spring bulb planting on campus.

Our first 'Shape our Sustainable Future' competition led to the installation of two vertical biodiversity planting structures (LivingPillars®) on our Edgbaston campus in December. We ran our second competition this year and our student and staff community voted to support a 'no single-use plastic on campus' initiative.

Our Campus Services team has created funding to support our Sustainability Champions in the delivery of small-change projects aligned to our sustainability priorities. Previous successful projects include the installation of bug hotels, bird and bat boxes, and pollinator planting.

Reducing the Carbon Impact of our Travel

We are committed to reducing emissions from staff and student commuting by enhancing campus infrastructure and promoting low-carbon transportation options. Our initiatives include installing cycle shelters and electric vehicle charging points, offering financial incentives such as a cycle-to-work scheme, ultra-low emissions vehicle leases via salary sacrifice, offering discounted bus passes to staff and students, and interest-free train ticket loans for staff using our on-campus station. In 2024, we held our bi-annual Travel Survey. This indicated a 2.2% increase in train commuters on campus and a 4.3% increase in bus commuters since 2022.

We are updating our business travel guidance this year to encourage a

university-wide shift from flights to rail where possible, promoting virtual alternatives to travel, and supporting investment in digital technology to help reduce the need for travel. From this autumn onwards, we will be introducing a framework to report and share travel emission data internally. We will also be establishing a sustainable travel opt-in pilot scheme, allowing our central sustainability team to work closely with university staff to help us better understand opportunities to improve the environmental impact of our business travel.

Practical Learning for our Students

We established our inaugural student placement within the central sustainability team in January, offering a student experience in implementing sustainable practices within a large organisation and the chance to influence our University's initiatives. Molly Hobson, a fourth-year Environmental Science student, undertook a part-time placement to support the introduction of the Green Laboratory Accreditation Standard across the University.

Molly shared, "Being involved in this project has connected me with various stakeholders and deepened my understanding of the University's operations. Beyond my project, I've shadowed meetings and participated in webinars and networking events covering topics like business continuity, security, climate risks, and sustainability in campus food and events. This placement has been highly rewarding, allowing me to apply academic knowledge practically, enhance my CV, and develop skills which were invaluable in helping me secure my Graduate Scheme role post-university."

Food and Beverages on Campus

Over the past year, our campus dining services have delivered several initiatives designed to reduce the environmental impact of our food and reduce both food and packaging waste. 60% of all food and drink produced on campus is now meat-free or dairy-free and all coffee cups purchased in university outlets are fully compostable and recyclable. Additional outlets joined the 'Too

Good To Go' scheme this year; we now have nine outlets participating in the scheme offering reduced-price food to campus customers and reducing food waste. A 'Bring Your Own Container' trial commenced in March 2025 at our Med School Café and Campus Infusion restaurant to further reduce packaging waste. Our Food Fellows team ran a 'Love Your Leftovers' campaign in May, engaging 55,000 participants and collecting food waste-reducing tips and recipes from students, staff, academics, and notable figures like Michelin Star chef Luke Tipping and author Tamar Adler. Our biggest restaurant – Vale Infusion – was given bronze Food For Life accreditation from the Soil Association in July 2024.

Sustainable IT

IT services play an important role in helping us reduce the impact we have on the environment across our University, reducing our reliance on paper and printed resources in our teaching and operations, enabling us to connect and collaborate virtually with colleagues and partners all over the world instead of always in person and providing tools to help us operate our buildings efficiently. IT is an important part of sustainable operations, but we are conscious we need to use IT and tools responsibly. We are working in collaboration with our IT service providers, to proactively reduce e-waste generated by the University; between January 2022 to January 2025, we saved 124 metric tonnes of e-waste going to landfill by recycling end of life electric items. Our data centres are energy intensive and with our ambitions to grow the University and continue to use innovative digital tools to support our work, including AI, we aim to grow responsibly. Our Grange Road research data centre, the first in the UK to use a state-of-the-art water-cooling system, cuts cooling energy usage by 83%. Additionally, we've increased the temperature of our on-premise data centres from 19°C to 25°C and reduced relative humidity to 45%, significantly boosting energy efficiency.

Our Dubai Campus

At the University of Birmingham's Dubai campus, we are committed to sustainability through a variety of initiatives and activities. Given Dubai's subtropical desert climate, characterised by extremely hot summers and mild winters, our efforts are particularly crucial.

We have reviewed our use of utilities. Given the high cost of water in Dubai, which involves converting seawater into potable water, we have transitioned to using recycled treated sewage effluent (TSE) water for our campus landscaping. This shift has resulted in a 46% reduction in water costs. We have also successfully reduced our electricity consumption by 25% through the implementation of various energy-saving initiatives. Finally, we are now utilising equipment that is either battery-powered or consumes very little energy. The equipment, which meets green cleaning requirements, features AGM batteries, ergonomic

design, filtration technologies, noise abatement, and chemical savings technologies.

We have fully adopted Dubai Municipality-certified green chemicals for our campus cleaning and maintenance activities. All cleaning chemicals used on campus are now eco-friendly products. These green cleaning products lower our environmental impact, improve indoor air quality, reduce energy usage, and enhance our recycling processes.

We are reviewing our waste and cleaning processes. In collaboration with our service providers, we ensure

that all waste generated on our Dubai campus is sent for recycling. With the help of our F&B - Food & Beverage Service provider ADNH - Abu Dhabi National Hotels, we have also implemented a strict No Food Waste Policy. Any excess food from events is distributed to service staff, ensuring that no food goes to waste.

These initiatives reflect our ongoing commitment to sustainability and our efforts to create a greener, more environmentally friendly campus.



The Guild and sustainability

The Guild is the Students' Union at the University of Birmingham.

At the Guild of Students, sustainability is a central focus, benefiting both students and staff. From our efforts to reduce energy consumption to our work in the local community, sustainability remains at the forefront of what we do. The Guild is committed to upholding and embedding sustainable practices within our everyday operations, which you can learn more about via our Green Impact webpage (see page 23).



Snapshot of progress and activity

- We participate annually in the Green Impact Programme and continually review and improve our organisation's practices
- We have achieved c18% reduction in energy consumption over the past three years by updating our lighting systems, powering our PCs down at the end of the day and providing students and staff with free LED light bulbs and smart plugs
- We have introduced a sustainable menu at Joe's Bar
- We host a series of engagement activities and events for students each year, including an annual Go Green Week
- We manage a community warden scheme, including the JunkBusters Scheme, aiming to reduce waste and reuse and donate unwanted items at the end of term
- We work in partnership with the University to support and lead a student sustainability champion group

Student Societies

The Guild is home to over 350 societies, many of which actively seek more sustainable ways to deliver their activities.

- Vegetarian & Vegan Society host events around plant-based food options and the environment
- Earth Resus focus on the intersection between climate and human health
- Amnesty have run activities such as 'People and Planet Workshop'
- Conservation Volunteers run regular sessions in local parks and maintain a garden on campus called 'Grow with Joe'



Max Williams, Guild Sustainability Officer

'A key part of my role is to work closely with the University and help to make sure the University and the Guild work together to tackle sustainability and climate issues whilst ensuring that the student

voice is heard. Sustainability is a key passion of mine, and I love being able to make positive change to improve the student experience and reduce our environmental impact. Recently I have done this through running new and innovative events that stimulate discussions around sustainability in places you wouldn't normally expect, to encourage a wide demographic of students to engage with sustainability. This has included a better integration of Go Green Week into existing Guild events, promoting collaborations between societies, and supporting resource-sharing schemes. I have worked closely with the Guild and the University to improve our collaborative efforts and support the student voice through schemes like the Sustainability Champions.'

Max Williams, Sustainability Officer, 2024-25

Community Wardens

Sustainability is a key part of the Guild of Students' Community Warden Scheme, which exists to support students living in the local neighbourhood. The Wardens Scheme promotes a safer, cleaner, greener community for all and encourages all residents to get involved in, look after, and feel proud

of their local community. Our aim is for students to make a real difference, create sustainable projects to give back and carve the way for the next cohort of students moving into the local area, wherever possible reducing the level of disruption to the community. Community Wardens have organised litter picks, upcycling

events such as 'T-shirt to Tote Bag' and 'Clothes to Cushions', and they advise students about waste disposal and recycling in the community. A headline Community Warden project is the Junkbusters initiative run in collaboration with the University. This encourages students to donate their unwanted items to local initiatives and supports the clean-up operation in Bournbrook as students move house in July or leave the area. Donations from Junkbusters are made to the British Heart Foundation and they raise thousands of pounds every year.

Last year some of the donations were also donated to a local hospice to re-sell directly back to students living in the area. In previous years, donations of textbooks have been given back to the library at the University. The team are always looking for new ways to recycle items! The Guild is committed to upholding and embedding sustainable practices within our everyday operations, which you can learn more about via our Green Impact page.





Get in touch

If you have any comments or would like to get involved with sustainability at the University of Birmingham, please get in touch with us at:

✉ sustainability@contacts.bham.ac.uk

For further information, please visit:

🌐 birmingham.ac.uk/university/social-responsibility-sustainability

🌐 guildofstudents.com/sustainability/greenimpact/

Environmental Statistics Data:
hesa.ac.uk

@ [in](#) @unibirmingham

University of Birmingham Environmental Alliances and Programmes

- Nature Positive University
- The Climate Action Network for International Educators
- Concordat for the Environmental Sustainability of Research and Innovation
- Fair Trade University
- Green Impact
- IEMA Corporate Partner
- UN Global Compact
- United Nations Principles for Responsible Investment
- UN Race to Zero
- B Corp Certified (Edgbaston Park Hotel)

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