

Anglia Ruskin University and the Sustainable Development Goals



Annual Report, 2023

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Foreword

Sustainability is a core value at Anglia Ruskin University.

We are committed to advancing better ways of doing things across all our operations. Part of our commitment to sustainability is an energetic engagement with the UN Sustainable Development Goals (SDGs). These 17 Goals, adopted by the United Nations in 2015, form an ambitious set of targets to address the most pressing social and environmental challenges of our times – hunger, poverty, disease, discrimination, inequality, the climate emergency and biodiversity loss.

Action for the SDGs is action for people and the planet.

Anglia Ruskin's mission to be a transformative force for our students and communities means that we are required to engage meaningfully with action for the SDGs. We have a suite of actions across our research, teaching and operations to help us advance each of the 17 SDGs.

Our actions make a difference. As the examples in this report show, we are undertaking pioneering research, forging unique new partnerships and delivering innovative education. We are delivering impact within our communities, nationally and globally.

Over the coming two years, we will be building new and even more ambitious strategies to deliver sustainability in everything we do. As we do so, we will seek to set in place strategies that match the urgency of our current political, social and ecological moment. We have a historic challenge to meet. And ARU is ready to help meet it.



Professor Roderick Watkins
Vice Chancellor





Sustainability at ARU

Sustainability is embedded across our research, teaching and operations at ARU.

Our work to advance sustainability is being recognised widely. In 2023, we were shortlisted for the University of the Year at the Times Higher Education awards. We're also shortlisted for awards for *Outstanding Contribution to Equality, Diversity and Inclusion* and *Outstanding Contribution to the Local Community*. Our submission rests, in no small part, on the difference we make in the region and communities where we're based – while also acknowledging the broader impact of our world-leading research, and the contributions of our students.



In October 2023, we were delighted to be awarded University of the Year at the UK Social Mobility Awards, in recognition of the role our new Peterborough campus is playing in the city and wider region.

This year we are also delighted to have been shortlisted as finalists in three categories in the 2023 Green Gown Awards, including: *Next Generation Learning and Skills* for our Ruskin Modules, which are framed by the Sustainable Development Goals (SDGs) and form a part of most undergraduate degrees at ARU; *Sustainability Champion* for work led by the Global Sustainability Institute's Dr Zareen Pervez Bharucha on advancing our reporting under the SDGs; and *Diversity, Equity and Inclusion in Sustainability* for the Global Sustainability Institute's work to foreground female researchers working on energy transitions.

Within the pages of this report, you will find examples of how our research, teaching and operations are contributing to the achievement of the United Nations Sustainable Development Goals (SDGs). These 17 Goals address the world's most pressing challenges, from reducing inequality, eradicating hunger and poverty, tackling the climate crisis and improving health and well-being. Higher Education institutions have a special role to play not only through their work on research, innovation

and education but also directly, through their day-to-day organisational actions.

Our results in the 2021 Research Excellence Framework (REF) show that our research is world-leading, and making a real impact in our communities and globally. Each of our REF impact case studies has been mapped against the SDGs. From protecting the oceans from plastic waste, to shaping energy policy, increasing children's understanding of environmental issues and advancing legal frameworks on genocide, our research community is achieving real positive change. Read more about this inspiring work and contact each of the research teams involved here: aru.ac.uk/research/ref

In 2022, we launched three new research, innovation and impact themes on Sustainable Futures, Safe and Inclusive Communities and Health, Performance and Wellbeing. These will drive forward new collaborations and partnerships with government, the private sector, and civil society in our region and beyond.

Sustainability is also integrated across our entire curriculum. Our innovative Ruskin Modules facilitate independent and interdisciplinary thinking on societal challenges and solutions. These modules are integrated across our Undergraduate teaching and touch on the most

profound challenges facing global society, including the design of Artificial Intelligence (AI), climate justice and inequality, identity, racism and anti-racist practices, social justice and ways of imagining sustainable futures. Our Global Sustainability Institute hosts a pioneering Education for Sustainability team, committed to expanding our provision of sustainability teaching as well as advancing pedagogic research on sustainability education. To learn more about their work, visit: aru.ac.uk/global-sustainability-institute-gsi/education-for-sustainability

Finally, we are committed to showcasing sustainability best-practice across our estates and all operations. In 2019, we declared a climate and ecological emergency. Our Sustainability Strategy commits us to transitioning fully to zero carbon sources for our electricity by 2026, and achieving zero carbon emissions by 2045. As signatories to the Fossil Fuel Declaration, we have no investments in extractor fossil fuel companies and pledge to remain fossil free in the future. We have a Biodiversity Net Gain policy, which outlines our commitment to preserving or enhancing net biodiversity value on our land. To learn more about our work to advance sustainability on our estates, visit: aru.ac.uk/about-us/sustainability/sustainable-campus

Tracking our work on the Sustainable Development Goals

Our Sustainable Development Goals Working Group tracks the University's work on the SDGs. We chiefly rely on the framework and methodology set out within the Times Higher Education Impact Rankings. These use a set of indicators to capture how higher education institutions are contributing to the SDGs across four areas: research, teaching, outreach and stewardship. The rankings are published annually, and include over a 1000 universities from 106 countries. .

Our inaugural submission to the Impact Rankings was in 2020. To date, we have submitted data demonstrating our impact on seven of the Goals, each representing strategic priorities for the University:

- Good health and Wellbeing (SDG 3);
- Gender Equality (SDG 5);
- Affordable and Clean Energy (SDG 7);
- Reduced Inequalities (SDG 10);
- Sustainable Cities and Communities (SDG 11);

- Responsible Consumption and Production (SDG 12);
- Climate Action (SDG 13) and
- Partnerships for the Goals (SDG 17).

This report highlights some of the most notable examples of our work in teaching, research and operations across all 17 Goals. We have been selective, capturing only indicative examples that showcase the breadth and variety of our contributions.

We should note that the THE Impact Rankings capture data from the past full academic year, or the past full calendar year, whichever is most suitable. Thus, most of the examples within this report pertain to the year 2022, or the academic year 2022 to 2023.

To get in touch with the SDG Working Group at ARU, please contact the co-chairs, Professor Aled Jones [aled.jones@aru.ac.uk] and Dr Zareen Bharucha [zareen.bharucha@aru.ac.uk].

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Goal 1: No poverty

1 NO
POVERTY



Inclusivity and widening participation is ARU's central mission.

Around 85% of our students share at least one characteristic of disadvantage. 17% come from regions with the lowest rates of participation in higher education. We're unique in this respect. Across higher education institutes in the UK as a whole, an average of 12% of students come from these lowest-participation areas.

A core part of our work is thus providing support to students who would otherwise not be able to participate in higher education. We provide this support through bursaries, scholarships, and an additional learning support fund available for selected groups including care-leavers and mature students. Our support matters: students from lower participation areas have outperformed those from higher participation areas in completing the full duration of their courses. In the 2020-2021 academic year, support provided with the help of donations to our bursaries and scholarships has:

- Supported 696 students
- Provided £93,900 for students from the most vulnerable groups through the Ruskin Support Fund
- Provided £14,500 worth of bursaries for care leavers

In September 2023, ARU will be offering five scholarships to students in China, Mexico, Malaysia, Thailand and Turkey for full-time taught postgraduate courses in all subjects, in partnership with the British Council and UK government's GREAT Britain Campaign.

We also support students to participate fully in campus life by providing support with the cost of living. On-campus support includes free or heavily subsidised food available on our campuses, subsidised membership in sporting facilities, free sanitary products, free health and wellbeing resources and emergency shopping vouchers.

Research highlight

Dr Xin Sheng, Associate Professor in our Faculty of Business and Law led research which showed that poorer households in the UK are more vulnerable to climate change because temperature shocks are associated with deepening wealth inequality. It also found that climate risk shocks harm the poorest the most relative to the richest households, exacerbating long-term wealth inequality.

Goal 2: No hunger

2 ZERO
HUNGER



In 2023, we made a step-change in our research and teaching capacity on sustainable food production. Our campus at Peterborough hosts a new BSc in Agri-Food Technology to provide graduates with the skills they need to contribute to sustainable food production and future proof the production and supply of food in the face of climate change and economic shocks. In July, we announced a proposal to merge with Writtle College, which has a distinguished 130 year history of work on land-based studies, including courses on agriculture and food production.

Our on-campus catering is committed to providing nutritious, affordable and sustainable food. We provide a range of vegetarian and vegan options on our campuses, and we are committed to reducing meat consumption on campus by 50% by 2026 and reducing dairy consumption. Our catering outlets actively promote sustainable choices, including reducing waste from packaging and single-use items. In September 2022, we introduced a daily deal offer of a hot lunch for £1 at our Cambridge, Peterborough and Chelmsford campuses, to help staff and students with the cost of living.

"We donate leftover food to both Sanctus Homeless Shelter in Chelmsford and Jimmys in Cambridge. After having a recent clear out in Chelmsford we also donated a lot of equipment to Sanctus rather than sending it to landfill. In addition as part of our catering refurbishments we used a company called Ramco to take our excess large equipment and they auctioned it, so it all went to new homes instead of landfill."

Susie Cullen, Head of Catering, Hospitality & Events

Research highlight

Professor Aled Jones of our Global Sustainability Institute co-authored a report for the World Food Security Programme examining four scenarios of what our food system might look like in 2050, as the UK adapts to meet its climate change commitments while also experiencing milder, wetter winters and hotter, drier summers. Professor Jones explains: "Without significant change then several countries will collapse, and the implication of those countries collapsing could be very severe for everyone else. You will start to see civil unrest at the very least, if not entire regions collapsing. And then we won't get any imports or exports from those regions. If the Middle East collapses, it's not a pretty outcome."

Goal 3: Health and wellbeing

3 GOOD HEALTH
AND WELL-BEING



ARU is a leader in research, innovation and impact in our region and beyond. Our School of Medicine is working to address the urgent need to train more healthcare professionals for our region. Our students benefit from collaborations with five NHS hospitals, a large mental health trust and over 60 GP surgeries.

Our Clinical Entrepreneur Programme, founded in 2016, is a free entrepreneurial work force development programme aimed at NHS staff and healthcare professionals. It is now the world's largest workforce development programme for healthcare professionals.

Our healthcare research makes a difference to our local communities. Our Global Vision Database has been established by an international consortium of ophthalmologists and optometrists with an interest in the epidemiology of eye disease. Anglia Ruskin Clinical Trials Unit (ARCTU) is a research partnership between Anglia Ruskin University, NHS Trusts from Cambridgeshire, Essex and Hertfordshire, and industry partners and international partners. Together, our NHS Trusts cover a local patient population of over

3 million. Two additional tertiary centres take this population to over 10 million. We are one of the few UK Universities to have our own eye clinic, giving our optometry and ophthalmic dispensing students essential clinical experience and providing care to the community.

Our globally-renowned Cambridge Institute for Music Therapy collaborates internationally in areas such as dementia and autism. It also runs the Music Therapy Clinic to support the local community. In 2022, we entered into a new partnership with Samaritans, the leading suicide prevent charity, to develop more online and digital support services in the wake of the global pandemic. We will be the first UK University to host a Samaritans hub. We will also pilot placements at the Samaritans for students from relevant courses,

such as Mental Health Nursing and Social Work, which will provide a unique experience for students undertaking professionally regulated programmes.

We proactively support the health and wellbeing of our staff and students through access to counselling, signposting students to locally available (free) sexual health services, and providing students with access to a Sexual Violence Liaison Service and a Harassment Support Service as part of our 'Unsilenced' initiative. Our Six Ways to Wellbeing online hub provides students with information and support to facilitate physical and mental health whilst studying, and signposts wellbeing workshops, self-help resources and free and confidential counseling services.

Goal 4: Quality education

4 QUALITY
EDUCATION



In 2023, we were awarded a Gold – the highest possible ranking – in the UK Teaching Excellence Framework. Our ranking recognises ARU's Employability Strategy and alumni careers centre, and our Career Pulse online tool, which has supported over 9,000 students through a two-minute interactive online assessment of their employability skills.

Between 2018 and 2022, we have invested £40 million in developing our estate to enhance learning and teaching and we continue to invest in our facilities to provide a transformative education for our students. We are also innovating to provide students with an interdisciplinary of key societal challenges. Our Ruskin Modules are part of most undergraduate degrees at ARU. They are framed around the UN Sustainable Development Goals and each presents a challenging question on our changing world.

We continue to host a rich programme of events for the general public, designed to support lifelong learning. Recurring programmes have been designed to support Black

History Month, Interfaith Week, International Women's Day, Mental Health Awareness Week and Refugee Week each year. We participated in the inaugural Cambridge Festival in 2021, hosted the inaugural Chelmsford Science festival in 2022, and have hosted this again in October 2023.

We run several programmes focussed on young people in our region. In 2019, the North Cambridge Academy Orchard project was run by the student-led Sustainability Society to work with a local secondary school to turn a bare plot of land into a small onsite orchard. With a focus on community, sustainability and education, the project brought together 15 pupils from North Cambridge

Academy with students from the Sustainability Society over a three-month period. We employ a team of Higher Education Champions (HEC) to deliver the project 'Take Your Place'. Targeted outreach involves our HEC delivering activities in specific schools including offering help with personal statement writing, mentoring, and workshops. Strategic outreach involves working with BAME students, children of military families, carers & care leavers. We have collaborated with the Cambridge & Peterborough Combined Authority, Festival Bridge, East Cambs and Fenland Opportunity Area & NCS to achieve these aims.

Goal 5: Gender equality

5 GENDER
EQUALITY



ARU is a member of Athena SWAN, a framework used globally to support gender equality in higher education and covering both staff and students. We were first awarded our Institutional Athena SWAN Bronze award in 2015, and this was re-conferred in November 2018. We are working towards achieving Faculty Bronze awards across all our faculties and are actively exploring ways to enhance our culture and practice of gender equality. Following a review of maternity pay, ARU offers a sector-leading 26 weeks full pay for maternity and adoption leave and also, paternity and shared parental leave.

We are committed to breaking down barriers to access experienced by women in higher education. Our female Engineering students are all invited to join our Women in Engineering programme, which provides regular networking events, workshops, mentoring and exposure to industry. In 2021, we were awarded a grant of £175,000 from the British Council to support five women from Brazil and Mexico to study Engineering, as part of our efforts to encourage women in STEM. This builds on work with Brazil's Science Without Borders programme and work with universities in Latin America, including Brazil's Federal University of Minas Gerais.

Our Valuing Diversity and Promoting Equality Statement sets out our commitment to equality (including gender

"People at ARU are extremely supportive. I was allowed to bring [my son] Hector with me to lectures. I thought I would be the only one. But the very first day, in the very first class, I listened to a baby babbling in the classroom. It made me feel happy. I appreciate the culture of supporting women that is lived here."

Marilu Cruz-Bravo,
BSc Engineering Management
student

equality) and protecting staff from discrimination. Our staff are encouraged to consider a wide range of factors relevant to diversity, including biases such as accent, social class, and appearance. Our Trans Equality Policy Statement sets out our

commitment to ensuring that equality, access and protection from discrimination includes those members of the community whose gender identity is not expressed in ways that are typically associated with their assigned sex at birth. This includes those who have non-binary, non-gender or genderfluid identities.

In 2022, following a students union campaign, ARU committed to providing access to sanitary products in all bathrooms free of charge across our campuses. ARU students are actively collaborating with law enforcement, fire services, and councils in Essex to shape policy and address the root causes of violence against women through the Students at the Heart of Knowledge Exchange.

Goal 6: Clean water and sanitation

6 CLEAN WATER
AND SANITATION



Cambridgeshire and Essex, where our two largest campuses are based, are two of the driest counties in the UK.

We closely monitor our water consumption, and promote water-conscious behaviours across our campuses through stickers at all sinks on campus and posters in all kitchens and toilets. We require BREEAM Very Good standard which includes standards for water consumption above regulatory standards, as detailed in our Design Principles. We have installed automatic meter readers on our main water

supplies enabling us to closely monitor our consumption and identify any potential leaks or changes in performance.

Our landscaping is designed to consider numerous factors including site, biodiversity, ground conditions, and maintenance. We have created a Mediterranean garden on our Chelmsford campus specifically to minimise water use and tolerate drought.

Research highlight

Dr. Maryam Imani, a Chartered Civil Engineer and Associate Professor, is making waves in the field of water and waste-water projects. Her research, focused on infrastructure, sustainable urban drainage systems (SuDS), and water quality, is reshaping the way we address climate change risks. Her research has increased awareness among stakeholders in the UK, Brazil, and India and enhanced our understanding of how climate change impacts water systems and critical infrastructures.

Collaborating with ARU's Brazilian partners, including UFSCar and São Paulo University, Dr. Imani's research has become a cornerstone of education for the next generation of Brazilian architects, engineers, and urban planners. Their postgraduate course, Águas Urbanas: Interdisciplinary Studies for Resilience and Sustainability, now incorporates Dr. Imani's insights. She played a pivotal role in supporting the course's delivery and was honored with an invitation from the environmental sanitation agency CETESB to present her findings to their 3,000 employees at their São Paulo headquarters.

Goal 7: Affordable and clean energy

7 AFFORDABLE AND
CLEAN ENERGY



Our electricity has been zero-carbon since 2019. In the same year, we participated in the first aggregated Power Purchase Agreement (PPA) in the UK involving 20 universities, committing to buy 20% of our baseload electricity for 10 years from windfarms in Scotland and Wales. This arrangement reduces our direct carbon footprint by ~10%.

We are committed to transforming our estate to improve efficiency and reduce energy consumption. In 2021 we commenced phase 1 of our RE:FIT Energy Performance Contract, a multi-phase programme to identify and implement carbon saving measures in our existing buildings. All our new buildings must achieve BREEAM Very Good standard which includes standards for energy efficiency

above regulatory standards, as detailed in our Design Principles. We have a dedicated energy manager to identify wastage and manage improvement projects.

Finally, we are a signatory to the Fossil Fuel Declaration with the NUS and People and Planet, committing us to no investments in extractor fossil fuel companies and to remain fossil free in the future.

Research highlight

ARU has a significant and growing portfolio of research on sustainable energy. At our Global Sustainability Institute, Professors Chris Foulds and Rosie Robison have led 2 major EU Horizon 2020 programmes - SHAPE-Energy and Energy-SHIFTS - aimed at bringing insights from the social sciences and humanities to European energy policy. ARU is an academic partner for Eastern New Energy (ENE), a three-year programme focusing on low/zero carbon actions and local economic development across the East of England. We are also a strategic partner for the South East New Energy Project (SENE) which aims to accelerate the transition to a low carbon economy in the South East of England.

Goal 8: Decent work and economic growth

8 DECENT WORK AND
ECONOMIC GROWTH



Chelmsford has the largest business base in Essex - with around 12,000 businesses in the area. Our Chelmsford campus hosts the Chelmsford Arise Innovation Hub, a new £6 million building providing office space, research and development facilities, meeting rooms and easy access to services on the innovation park. The Hub runs community events throughout the year, encompassing social coffee mornings and lunches and a growing programme of industry-specific events and special interest groups.

Our researchers have made significant impact in the UK and internationally through projects which address minority experiences and discrimination at work. Pioneering research by Professor Nick Drydakis, who leads our Centre for Pluralist Economics, has addressed the experiences of sexual-orientation and gender-identity minorities in the workplace, and highlighted the significant barriers faced by sexual-orientation minorities to employment, wage discrimination and low job satisfaction. This

research has informed new policy recommendations for the European Commission, OECD, World Bank, and Canada's Public Service Alliance.

Research from the Centre has been used in policy making by international organisations and institutions including the Council of Europe, the European Foundation for the Improvement of Living and Working Conditions, the European Union Agency for Fundamental Rights, the Government Equalities Office, the

Department for Business, Energy and Industrial Strategy, the Competition and Market Authority, the European Commission, the International Labor Office, the International Telecommunications Union, the Organization for Economic Co-Operation and Development, the United Nations Educational Scientific and Cultural Organization, the United Nations Agenda for the Sustainable Development and the World Bank.

Goal 9: Industry, innovation and infrastructure

9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE



Our Anglia Ruskin Innovation Centre (ARIC) is a strategic partnership between ARU and TWI Limited. It aims to develop a comprehensive research capacity focussed on digital transformation of management, people, skills and organisational innovation within an Industry 4.0 context. ARU brings organisational, behavioural economic, logistics and workplace research expertise to ARIC, which will be the first social science Innovation Centre based at TWI.

Research highlight

ARU researchers at our Faculty of Business and Law were a delivery partner for the Blueprint to a Circular Economy project, which concluded in March 2023. The project supported Local Authorities to transition to a sustainable Circular Economy. Our researchers led a work package on mobilising social enterprises to provide training on the circular economy.

Our research and teaching at ARU are highly impact focussed, and are well-placed to make a strong contribution to industry and innovation in our region and globally. In 2022, we formally launched three new Research, Innovation and Impact themes in the areas of *Sustainable Futures*, *Safe and Inclusive Communities*, and *Health, Performance and Wellbeing*. These themes form a major strategic push to consolidate our research in these fields, and develop a strong impact agenda.

Our #ThinkBigARU pitching competitions is run by our Anglia Ruskin Enterprise Academy allows students and recent graduates to pitch business ideas

to win funding – up to £10,000 – and other prizes.

Our Arise Innovation Hubs were established in collaboration with Essex County Council, Chelmsford City Council and Harlow Council in Chelmsford and Harlow support local companies and boost entrepreneurship in the region. Our Hubs benefit our staff and students as well as our external stakeholders. The Hubs offer students the chance to apply for internships, post-doctoral work placements and full-time job opportunities and provide staff with the opportunity to commercialise research in collaboration with business partners.

Goal 10: Reduced inequalities

10 REDUCED
INEQUALITIES



We pride ourselves on being an inclusive organisation committed to widening participation and having a transformative impact in our communities.

We have a number of formal networks for inclusivity, including a Race and Ethnic Equality Network, Women's Network, LGBTQ+ Network, Disability Staff Network, Part Time and Family Network, Men's Network and a Wellbeing Network.

Addressing marginalisation and inclusivity within our own community, our Equality, Diversity, and Inclusion Steering Group (EDIG), Student Success Steering Group (SSSG), and Access and Participation Steering Group (APSG) promote inclusion and respect for diversity among Anglia Ruskin staff and students.

We are currently undertaking an end-to-end review of our recruitment procedures to tackle an imbalance in numbers between BAME (16% of staff) and non-BAME staff (80% of our staff). We are also committed to a sector-leading reporting of our ethnicity pay gap.

Our Race Equality Strategy was launched in 2021. This sets out our explicitly anti-racist approach to advancing race equality in our organisation. As part of this work, we have a Race Equality Action Plan, and a programme for Race Equality Student Advocates. In 2023, we were one of only 38 UK Universities to be recognised for our work on race equality with a Bronze Race Equality Charter award.

We are a Disability Positive employer. Our Campus provides facilities for people with disabilities. Our allocations policy allows all full-time students with a disability or medical condition to apply for University accommodation. These accommodations provide features that facilitate day-to-day living.

In October 2023, ARU will host an improved Muslim prayer space with the support of ARU's chaplaincy and student services, the ARU Estates department and the senior management team. The new prayer space includes separate ablution and prayer spaces for men and women, bathrooms with bidets, a sound system for congregational prayers and premium carpeting.

In October 2023, ARU will host our first ARU Shine Conference, an employability event for BAME students to provide opportunities for networking, raise awareness of extra-curricular opportunities, and provide skills workshops.

Goal 11: Sustainable cities and communities

11 SUSTAINABLE CITIES
AND COMMUNITIES



ARU makes a significant contribution to the social, economic and cultural life of our communities. This includes public access to our campuses generally, and to events at our Mumford Theatre, Ruskin Gallery, recording studios, the Recital Hall and the Jerome Booth Building. Our libraries are open to the general public through a reference membership. Our local communities also benefit from free face-to-face lactation information, support and education to families through our Breastfeeding Support Hub at our Cambridge campus and free face-to-face legal advice from our law clinics at Cambridge, Chelmsford and Peterborough. Through 2023, we will be working to set up a new Creative Quarter on our Cambridge campus, including a new media building. Construction is expected to begin in 2024 subject to planning permission, and the project is expected to be completed in 2026.

We have a number of measures in place to build a sustainable community for our staff and students. Our Sustainability Policy commits us to widening the use of zero and low carbon transport, and to reducing the impact of our commuting and business travel. We provide ongoing input into planning and development matters in our local region, working with the local authorities where we operate on a very broad range of issues including planning, economic development, public health, and transport. Our campuses in Chelmsford and Cambridge are located in two of the driest counties in the UK, receiving less than 450 mm of rainfall in some years. We thus have

a responsibility to save water where we can, to reduce pressure on our waterways, and also to reduce emissions required to treat and transport water and sewage. Our community is encouraged to save water, report leaks, and we actively incorporate water efficiency in all our grounds maintenance activities.

Our public engagement staff coordinate new projects and community events both inside and outside our University, so that they are accessible and beneficial to our communities. In 2023, we will host the second Chelmsford Science Festival, with 27 public events including a very popular Family Science Day and public talks by keynote speakers

including science author Adam Rutherford, space scientist Maggie Aderine-Pocock, and art activist Katherine Hasegawa. Over the whole of October 2023, we will host a series of events to mark Black History Month, including an exhibition to celebrate the achievements of ARU's Black alumni and honorary degree holders.

One of our innovative Ruskin Modules, *"Who, me? Make a difference in my community?"* guides students through an exploration of issues that affect the community, develop an understanding of community organising, and change for sustainability.

Goal 12: Responsible production and consumption

12 RESPONSIBLE
CONSUMPTION
AND PRODUCTION



We have a range of measures in place to support more responsible production and consumption in all our campus operations. Our procurement processes integrate economic, environmental and social elements of sustainability. We expect the same standards from our contractors, suppliers and other business partners. Our Responsible Procurement Policy aims to improve our key suppliers' environmental and social performance. All staff have access to our Social Responsibility Impact Tools prepared by our Procurement Team, to help guide decisions when purchasing goods and services for ARU.

Our Sustainability Strategy included a commitment to remove all single use plastics from sale by 2022. While we are still working towards this goal; 84% of single use plastics have been replaced. Within our catering outlets, all consumables (plates, cutlery etc) are now plant based.

We do not send any waste to landfill. All waste is either reused, recycled or used to create 'refuse derived fuel'. Our Sustainability Strategy commits us to increasing our recycling rate to 60% by 2026. Our community is supported to recycle by clear marking of recycling facilities on our campus maps on the ARU app. Finally, in a collaboration with the British Heart Foundation, students are provided with a Big Green Move Out guide, to facilitate

donation and reuse of unwanted items when students leave our accommodation.

Our catering outlets are committed to reducing food waste, building on the lasting effects of a food waste campaign carried out in collaboration with Cambridge Sustainable Food in February 2018. This campaign led to the proper separation of waste, which ultimately pointed to food preparation as the most wasteful area. Small changes like using offcuts for stews and soups, choosing pre-prepared vegetables, and minimising waste from food preparation allowed the team to reduce food preparation waste by 66%. ARU adopts the Better Chicken Commitment and will meet all the standards in it by 2026.

Research highlight

Research led by Professor Dannielle Green from our Faculty of Science and Engineering has had a major impact on national and international policy on the reduction of single-use plastics, microplastics, and other little-studied, litter-based sources of environmental pollution such as glitter and cigarette butts. Professor Green's team was the first to evaluate how plastic pollution can affect entire communities of organisms and ecosystem functioning, rather than individual species in isolation. The team also discovered that microplastics made from polymers that are marketed as biodegradable or compostable, can have similar effects on marine and terrestrial ecosystems to commonly-used non-biodegradable materials, requiring their promotion to be halted before their impacts on ecosystems are better understood. The evidence provided by this research has led to strengthened restrictions on microplastics by the European Chemicals Agency, new business commitments on the use of single-use plastics and raised awareness of plastics pollution amongst governments and citizens.

Goal 13: Climate action

13 CLIMATE
ACTION



ARU declared a Climate and Ecological Emergency in 2019, and is committed to becoming a zero-carbon university by 2045.

We have reduced direct emissions by 43% since 2006, and have ambitious measures to help us cut emissions further, without the use of offsetting. Our Climate Positive Plan includes policies on agile working, education provision, estates management, our investment strategy, procurement and purchasing decisions, water and waste management, and business travel.

We are a signatory to the Fossil Fuel Declaration with the NUS and People and Planet, committing us to no investments in extractor fossil fuel companies and we pledge to remain fossil free in the future.

Our researchers carry out agenda-setting work on climate risks, impacts, mitigation, adaptation, impact reduction and early warning systems both within the UK and globally. At the Global Sustainability Institute, our Global

Chaos Map project records past events of unrest or deaths related to access to natural resources, such as food, water and fuel. Outputs include an interactive map and a freely available database. Project lead, Dr Davide Natalini explains the impact of the project: "Our mapping provides invaluable insights into patterns of unrest and global trends – and the factors that contribute to regions being vulnerable, which can be used to support early intervention design by Governments' ministries of defence, NGOs and researchers working to stop resource-related conflict." Indeed, on the basis of this work, researchers at the Global Sustainability Institute are part of FOREWARN, and review anticipation alerts for food insecurity and conflict to help inform decisions on the release of funding to assist communities impacted by climatic and other shocks.

Research highlight

Dr Zareen Bharucha, Senior Research Fellow at our Global Sustainability Institute, led a project which ran through 2023, placing women early-career research into consultancy placements at organisations. Energy-SHINES (Energy Social sciences and Humanities Insights for Non-Energy Sectors) provided short placements for five women social scientists in the NHS, Yorkshire Water, Cambridgeshire County Council, the Royal Institute of British Architects and the office for Product Safety and Standards. Each researcher helped to provide a social sciences and humanities perspective on a key challenge faced by these organisations in their transition to net-zero. Energy-SHINES has been shortlisted as a finalist in the Diversity, Equity and Inclusion in Sustainability' category, one of only two finalists in this category.

Goal 14: Life below water

14 LIFE
BELOW WATER



Our Sustainability Strategy includes a commitment to remove all single use plastics from sale by 2022, a commitment we have made in recognition of the overwhelming threat these pose to marine and aquatic ecosystems.

Our MSc in Animal Behaviour provides a cutting-edge degree in animal behaviour and conservation. In 2023, one of our students on the course joined ORCA's marine mammal surveyor network, collecting data to help protect cetaceans from anthropogenic threats. One of our recent alumni, Natalie Fox, was runner up in the 2023 Vice Chancellor Outstanding Alumni awards in the Sustainability

Champion category. Natalie is an ocean activist who co-founded Women for Whales in 2011 to highlight the plight of whales and dolphins. She is now an Ocean Plastics Ambassador for Whale and Dolphin Conservation's campaign.

Professor Dannielle Green, of our Faculty of Science and Engineering, has done pioneering work on providing

the evidence base for stringent regulation to reduce water pollution from single-use plastics and microplastics. Since 2018, Professor Green has been Advising Environmental Scientist on the Oceans Together business forum, and as a result of her advocacy, the businesses involved have used 12,800 kg less single-use plastic after switching to reusable alternatives.

Goal 15: Life on land

15 LIFE
ON LAND



ARU has a net-gain biodiversity policy on our campuses, to ensure that the net value of biodiversity on our land is protected or enhanced. We have a number of green pockets on our campuses, each marked with a numbered sign. These include green roofs, a green wall, wildlife and pollinator gardens, boxes for owls, bats and birds, bug hotels and habitat piles, a bog garden, and a mediterranean garden to showcase plantings of drought-adapted plants, replacing a water-hungry lawn.

Our Cambridge and Chelmsford campuses have biodiversity trails allowing students and staff to explore wildlife habitats. We encourage staff and students to spend time in the green spaces on our campuses and to note the wildlife found there. Our ARUgreen scheme invites staff and students to report wildlife sightings on campus, and our 'green pockets' of wildlife habitat are signposted. Our ARU Biodiversity Photography competition runs annually in April, on the theme of what biodiversity means to our community.

Researchers at our Global Sustainability Institute and School of Life Sciences conduct research on changing habitats, sustainable land-use and protecting biodiversity. Dr Wheeler has also been involved in research on the importance of traditional ecological knowledge, and its role in restoring ecosystems. ARU has also been apart of an ongoing study led by Dr. Peter Brown and Dr. Helen Roy, calculating long-term trends for Britain's 47 Ladybird species. In addition to the research, their Ladybird workshops held in 2020 attracted

595 attendees and have close to 5000 views on YouTube.

Our Wildlife Society works closely with local conservation groups to protect biodiversity in our wider community. We received a Living Landscapes Award from the Essex Wildlife Trust for our restoration of the River Chelmer Millpond, which now forms part of the Chelmer Valley Heritage and Nature Trail.

Goal 16: Peace, justice and strong institutions

16 PEACE, JUSTICE
AND STRONG
INSTITUTIONS



Our policies and procedures aim to strengthen transparent and ethical functioning. We have an anti-bribery policy, which was last reviewed by the Board of Governors in July 2022. The University has a number of measures in place for seeking to prevent fraud and to respond where incidences do occur.

Our law clinics provide free, face-to-face legal advice on our Cambridge, Peterborough and Chelmsford campuses. We collaborate with local legal professionals, advice agencies and student advisors to meet some of the unmet need for initial legal advice in our communities. Our Support@Court project provides information, guidance and moral support through the court process at our Cambridge campus. Our law clinics take referrals from community organisations such as Citizens Advice, as well as self-referrals from members of the

community. In both 2019 and 2021, we won the Excellence in Pro Bono award at the Cambridge and District Law Society's annual awards and in May 2019 we were highly commended runners up in the Best New Pro Bono Activity in the LawWorks National Student Pro Bono awards.

Our International Integration, Migration and Local Communities Network was established in 2020 to bring together national and international partners who work in migration, integration and local communities.

Research highlight

ARU researchers Dr Aldo Zammit Borda and Dr Alexander Murray have conducted pioneering research to establish an evidentiary framework for genocidal intent and identified avenues for prosecuting genocide perpetrators, to help institutions recognise when genocide has been committed, and to help states to prevent or punish genocide. The researchers have applied their framework to the case of atrocities committed by ISIL against the Yazidis, developing an extensive evidentiary framework to justify classifying ISIL's actions against the Yazidis as genocide. In May 2021, Karim Asad Ahmad Khan, Special Adviser and Head of UNITAD, informed the UN Security Council that the Team had 'established clear and convincing evidence that genocide was committed by ISIL against the Yazidi'. In November 2021, a German court sentenced an Iraqi ISIL fighter to life in prison for the crime of genocide – the first verdict worldwide to use the label.

Goal 17: Partnerships for the goals

17 PARTNERSHIPS
FOR THE GOALS



Our partnerships enable impact, and are therefore fundamental to everything we do for sustainability.

Our partnership approach is exemplified by examples such as ARU's position as mentor to other UK Universities through the National Union of Students' Responsible Futures accreditation and our innovative SHoKE (Students at the Heart of Knowledge Exchange) platform. This allows students to make a personal social impact by collaborating with our partner organisations. Approximately 150 students from diverse backgrounds have participated, creating a significant social impact by changing attitudes and behaviours. Contributions by SHoKE students have already been incorporated into the outreach work of Essex County Fire and Rescue Service, particularly the Firebreak program, which includes a

lesson plan called "In Her Shoes" developed by SHoKE students that aims to promote positive attitudes and empathy towards women and girls. This program is being adopted by schools and fire services across the UK and has garnered attention from the Met Police and the Home Office.

ARU researchers lead or participate in a number of highly collaborative research consortia on sustainability. At the Global Sustainability Institute, researchers have partnered with academic colleagues, policy workers and civil society leaders on a number of EU Horizon 2020 projects, including on Responsible Research and Innovation (RRI), transitions to sustainable energy and the implementation of a European

Green Deal. Professor Aled Jones, Director of the Global Sustainability Institute, chairs the Biodiversity Working Party for the Institute & Faculty of Actuaries who are developing educational and research policies for the Institute (which represents 30,000 actuaries worldwide) as well as advising on their policy and government engagement around financial implications of biodiversity loss. ARU supports the NGO 'Accounting for Sustainability' which works with Chief Financial Officers and finance teams around the world by developing best practice examples and toolkits to embed sustainability into financial reporting including through the GSI's Professor Aled Jones sitting on their Expert Panel.

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