# University of East Anglia







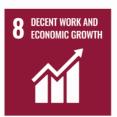
































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#### Introduction

The 2030 Agenda for Sustainable Development is an urgent call of action for the world to address the most pressing challenges facing humanity. The seventeen United Nations' Sustainable Development Goals (SDGs) are central to this; outlining a blueprint for achieving a fairer and more sustainable future for all.

As an educational provider, UEA recognises our responsibility to play a direct and central role in addressing these challenges. We are passionate about embedding sustainability at the very heart of our university, becoming an integral part of our teaching, research, innovation, and operational activities. This is further demonstrated by our ambition to be 100% carbon net zero by 2045 or earlier. This commitment was evidenced by UEA becoming a signatory to the SDG Accord report in 2019, committing us to annual reporting on our goals and progress to meeting the SDGs.

This report showcases a small selection of the work we do towards advancing the SDGs; through our research, public engagement, learning and teaching, and operational activities. We continue to strive to ensure all our students and staff understand the principles of sustainability, and that we make a real and positive change for the future.

Professor David Maguire, Vice-Chancellor and President

#### **SDG 1 No Poverty**

#### End poverty in all its forms everywhere

#### Research - 152 publications in SciVal 2018 - 2023

#### Impact of poverty on children's brain activity

Researchers in UEA's School of Psychology have been studying the effect of poverty on childhood brain function. The research examined brain activity of children aged between four months and four years in both rural India and Midwest America; taking factors such as parental education, income, caste, religion, the number children in the family, and economic status into account. They found that children from lower-income backgrounds had weaker brain activity and were more likely to be distracted. Each year, 250 million children in low and middle income countries fail to reach their developmental potential. This work increasing understanding of the global impact of poverty on early brain and behavioural development, is the first step in designing intervention efforts to boost early brain health before adversity can take hold.

#### **School of International Development**

Our School of International Development has a global reputation as a centre of research excellence, and our researchers are committed to resolving major global challenges such as poverty reduction and environmental sustainability. Their research on 'Social pensions' provided evidence of the benefits of existing social pension programmes, raising their awareness amongst NGOs, UN agencies and key policy makers, and identifying limitations for future improvements. Social pensions have emerged as a major anti-poverty policy for developing countries over the past decade – providing regular cash payments to millions of households who are not covered by formal social protection schemes.

#### **Public Engagement**

#### Aid recipients call for more dignity and diversity in charity campaigns

As part of the Radi-Aid study, researchers in UEA's School of International Development investigate how aid communication is perceived in Sub-Saharan African countries. The study spoke to aid-receiving communities in six countries about their perceptions of aid campaigns. Participants highlighted the need for respect and dignity to be preserved in the portrayal of their communities – believing that campaigns typically show a demeaning and dehumanising image of Africa. A demonstration of the accomplishments of local communities in addition to more diversity in campaigns were also common requests. These findings give vital insight into the design of future aid campaigns.

#### Let's talk about...homelessness

Part of UEA's Students for Global Health "Let's Talk About..." short course series, 'Let's talk about homelessness' highlighted the increasing and needless homelessness crisis in the UK. The event, which was open to members of the public in addition to UEA students and staff, featured speakers from several local charities and focused on increasing understanding of homelessness and what we can do to help.

#### **Student Activity and Learning**

#### Teaching

UEA's School of International Development is committed to tackling global issues of poverty and inequality through our research, teaching and engagement. We're home to more than 50 staff and 600 students who are driven to make a difference in the world. Our graduates have gone on to a diverse range of careers working to alleviate poverty; from charities and NGOs, to government agencies and the United Nations, private sector companies, consultancy firms, and further study.

#### Homelessness campaign with Norfolk charity

Working with students from Norwich University of the Arts, UEA students helped develop a winter campaign for Norfolk homelessness charity St Martins Housing Trust. The trust works across the county to maximise

independent living and prevent homelessness by offering support to the most vulnerable, as well as promoting understanding and compassion towards homeless people through education and advocacy. The campaign, which has been shown on buses, billboards and social media, highlights the voices and feelings of a person experiencing homelessness alongside some of the misconceptions commonly held.

#### **Raising and Giving Society**

Student-run Raising and Giving has a clear mission – to raise as much money as possible for their chosen charities to support their vital work. This year they have three main charity partners - New Routes (a local integration charity for refugees, asylum seekers and migrants), Stop Hate UK (a national charity aiming to raise awareness and understanding of discrimination and Hate Crimes) and CAMFED (an international charity who aim to end poverty in Africa through the education of girls and the empowerment of young women).

#### **Bloody Good Period**

Bloody Good Period is a nationwide charity that tackles period poverty by providing menstrual products to society's poorest - focusing on asylum seekers and refugees. UEA is proud to have the charity's first university society, which runs a series of fundraising events throughout the year to raise money for this fantastic charity.

#### **Operations**

#### Student financial support

We are passionate about supporting our students and ensuring that, wherever possible, financial worries do not impact upon their studies. We offer a UEA Hardship Fund to support students in times of difficulty. In addition, the Vice-Chancellor's Hardship Fund Loan provides a short-term loan facility to help students with cash flow emergencies. Both the SU and Student Support Service provide a confidential service giving students the opportunity to discuss financial issues causing them stress, and can offer help with budgeting advice and debt issues.

#### Food bank on campus

UEA has teamed up with The Trussell Trust, a national food bank charity, to help students struggling to afford food amongst the cost-of-living crisis. The on-campus bank is easily accessible and offers support as well as food parcels to help support students in need.

#### Living wage employer

UEA is an accredited Living Wage Employer meaning all of our staff are paid at least the voluntary living wage. We are also a member of the Worker Rights Consortium which is committed to ensuring the factories from which we procure, are compliant with the Worker Rights code of conduct.

#### **SDG 2 Zero Hunger**

## End hunger, achieve food security and improved nutrition and promote sustainable agriculture

#### Research - 350 publications in SciVal 2018 - 2023

#### A new UK centre of excellence for food security

The yields of major staple foods such as grains, fruits and vegetables are expected to decrease by 3 - 10 % with every degree of global warming. In collaboration with our partners on the Norwich Research Park, the Norwich Institute for Sustainable Development works to mitigate these stark predictions and improve global food security. Their work focuses on combating the threats from ever more extreme and unpredictable weather events, working with farmers all over the world to develop solutions to make agriculture more resilient.

#### Addressing food insecurity in India

Part of our Global Research Translation Award, the Sustainable Food Systems project is working to address food and nutrition insecurity in India. Despite economic growth, India has some of the highest levels of food and nutrition insecurity in the world - with close to 40 % of children under 5 stunted, and over 50 % of women anaemic. This problem is especially apparent in rural, indigenous populations. UEA researchers are working with local partners and communities to share knowledge on sustainable food systems, in particular production choices and diets practices, and how these relate to health and nutrition outcomes. Using a range of tools and strategies, the project is generating digital content – that can be shared at scale to provide 24-hour real-time response to community needs.

#### Optimising nutrition and hydration in care homes

Preventing malnutrition and dehydration in care homes is a complex task and both conditions remain prevalent. Researchers in The UEA Hydrate Group are working with health care staff and national and local organisations, to optimise care home nutrition and hydration practice. Completing a comprehensive review of existing guidelines, they have a developed a series of recommendations for improving practice including developing age and population-specific nutrient and fluid intake standards, appropriate menu-planning, staff training, and more effective screening and monitoring procedures. They continue to work collaboratively with care providers to improve the implementation of these guidelines.

#### **Public Engagement**

#### Promoting balanced nutrition in children

The World Health Organisation estimates that malnutrition directly contributes to more than one third of all child deaths globally. Despite this, there is currently a lack of supplement dosages specifically tailored for children. UEA researchers in the Child Malnutrition project are working with regional manufacturing partners in Brazil, Jordan, Malaysia and Thailand to develop low-cost, child-friendly micronutrient supplements. The project is also working with users of the supplements; using creative writing and film-making to communicate and educate people on the importance of a balanced nutritional diet for child growth and development.

#### Supporting the wider local community

We are proud supporters of Norwich Foodbank which provides emergency food for local people in crisis. We collect unwanted, in-date and sealed foodstuffs at the end of each academic year to support this charity.

#### **Student Activity and Learning**

#### **Teaching**

Our students learn about the challenges of food security and how to develop solutions to end hunger. Our MA in Agriculture and Rural Development explores how agriculture can contribute to hunger and poverty alleviation in low-income countries, and the policy and politics concerned with rural development. Our MA in Globalisation, Business and Sustainable Development explores globalisation and if it is contributing to inequality and poverty. Students on our BSc in Biological Sciences can learn about sustainable crop production, and the role of plant

biotechnology in achieving this. Our MSc in Plant Genetics and Crop Improvement gives students the knowledge and practical skills to use plant molecular genetics and biotechnology to target traits for crop improvement.

#### Textbooks or Food? FoodbankSU

In an attempt to tackle student poverty, UEA SU began the FoodbankSU project. The initiative, which is open to all students, operates using food and money donations collected from the campus shop, which are then split between the student food bank and the wider Norwich and Norfolk community. Students accessing the scheme receive a token which can be exchanged for a food parcel in addition to support from a welfare advisor. The service is a vital source of support to students; working to eliminate any students having to choose between buying textbooks and food if they cannot afford both.

#### VegBox

VegBox is a student run scheme that delivers fresh, organic produce to UEA students and staff each week. The society is passionate about using seasonal produce and supporting local farmers wherever possible, sourcing Norfolk growers and visiting farm shops to reduce food-miles. They are also dedicated to reducing the use of unnecessary plastic packaging and encourage consumers to re-use any packaging wherever they can.

#### Sustainable students!

UEA Sustainability Society is run by a group of students with a passion for making our planet a better, greener place for all. Amongst other projects, they have a plant swapping group which acts as a hub for free sharing of plants and houseplants for UEA students. PhDiggers is a gardening group for postgraduates. The group have access to five UEA allotments so that students can grow a variety of seasonal vegetables, fruits, and other plants. UEA Plant Enthusiasts gives students an opportunity to come together and share their passion for plants and gardening – no matter their experience level.

#### **Operations**

#### **Sustainable Food Policy**

We are committed to ensuring our food production and retail is done in an environmentally and socially responsible manner. All our livestock produce (meat, dairy, eggs) is, as a minimum, Red Tractor farm assured, or equivalent. We also ensure all eggs (and egg products) are free-range, and maximise use of fish on the Marine Conservation Society's 'fish to eat' list.

Wherever possible, we champion the use of local suppliers to reduce food miles, support the local economy and provide a point of difference on campus. All of our milk has been from East Anglian dairies since 2016. Our Procurement team are pro-active in the areas that they assess. They recently contacted some of our farmers to ask about the use of antibiotics in their supply chain.

We aim to identify products and practices that can be changed to improve the nutritional value of our food such as using healthier cooking oils and cooking methods. All in-house produced products do not feature hydrogenated fat and/or unnecessary additives in line with Food Standards Agency guidance. We reduce the frequency and portion size of red and processed meats we serve by always offering a red meat alternative.

All food waste is sent for composing.

#### SDG 3 Good Health and Well-Being Ensure healthy lives and promote well-being for all at all ages

#### Research - 1883 publications in SciVal 2018 - 2023

#### Understanding head injury in professional footballers - Scores project

Research has shown that former professional footballers are far more likely to suffer from serious neurological diseases, including Alzheimer's, than the rest of the population. UEA researcher Dr Michael Grey has launched a trail blazing research project to better understand the cognitive health of former professional football players, and whether there is a connection between heading footballs and dementia later in life. The project screens former players for early indicators of the disease that can appear long before more recognisable symptoms such as memory loss. The project has already drawn extensive support from several high profile football players, featured in two documentaries and over 500 news articles, and holds the potential to significantly contribute to national sports policy.

#### Improving the nutrition of the local community

Malnutrition is a common problem that affects millions of people, particularly those over the age of 65 or those living with long-term conditions. Low income, social isolation and limited mobility can also increase the risk of becoming malnourished. Research in UEA's Nutrition Group focuses on screening projects to improve the identification, treatment, and prevention of vitamin D deficiency related risks in the elderly population, and reducing the prevalence of malnutrition in the wider community. The group's long-term goal is to change practice at a national level by making it easier to identify vitamin D deficiency and to prevent avoidable complications through timely treatment.

#### **Public Engagement**

#### A unique toolkit to reduce opioid use

According to NHS England, there is little evidence that opioids are helpful in the treatment of long-term pain. Despite this they are regularly prescribed. Higher rates of prescribing are often associated with smoking, obesity and mental health conditions, and in severe cases can lead to addiction and death. The UEA led Medicines Optimisation Group East Anglia (MOG\_EA), launched an innovative Toolkit for Tackling Chronic Opioid Use in Non-Cancer Pain, helping GPs to reduce the amount of opioids they prescribe. The toolkit outlines seven best practice areas to help GPs and other health practitioners tackle chronic patient opioid use, including guidance on interventions for gradual drug tapering and better training to provide effective psychological support. Since its launch, the free toolkit has already had over 1,400 downloads.

#### **Helping Young People with Anxiety**

UEA Health and Social Care Partnership launched a free online course aimed at those caring for or working with young people, helping them support youth mental health during the pandemic. 'Anxiety in Children and Young People during COVID-19' helps parents, carers and teachers to understand and identify common anxiety factors, stressors and symptoms and provides advice on how to assist a young person experiencing anxiety. Since starting the course has already been accessed by 12,500 learners from 136 countries.

#### **Medical aspirations**

Applying to study medicine can be a daunting experience. The Medical Aspirations programme supports Year 12 students across the local region on their path to study medicine, and was proud to receive a commendation at the 2019 Neon Awards recognising key achievements in widening university access. In addition to tips on writing their personal statement and opportunity to talk to current UEA medical students, participants receive ongoing support throughout their application and a guaranteed interview if they attend the entire programme. There is also the opportunity to receive a scholarship to study medicine if their application is successful.

#### **Student Activity and Learning**

#### **Teaching**

Over 1800 students are registered within our Faculty of Medicine and Health Sciences which offers a range of health-related courses including Medicine, Nursing, Midwifery, Pharmacy, Paramedic Science, Occupational Therapy and Social Work. We offer a range of opportunities for our students to further understand and support the challenges of global health including the chance of a four-week elective placement in another country in the fourth year of our medicine programme.

#### **Hitchhiking for Charity**

UEA MedSoc is the largest student-led UEA society, comprising over 600 members of Norwich Medical School. The society is passionate about charity work, and is one of the biggest and most well-known fundraisers in Norfolk. Previously they raised just under £3500 for the Cystic Fibrosis Trust through raffles, marathons and their largest event – Jailbreak where students had 24 hours to hitchhike as far away from campus as possible. This year they are supporting the mental health charity MIND, through a series of online events including a bake off, pumpkin carving, running challenges and a Christmas donation-drive special "Mince Pie your Profs".

#### **Students for Global Health**

Students for Global Health is a student network and registered charity, which tackles global and local health inequalities through education, advocacy and community action. The society comprises of students from across the UEA, and runs various events and short courses throughout the year addressing important topics such as racism in healthcare, climate change and health, homelessness, and refugee health. Their recent Suicide Prevention and Awareness event was attended by over 100 people from as far afield as Australia, and their Lost Hours Walk to remember those who have lost their lives to suicide, raised over £1500 for The Calm Zone, a leading suicide prevention charity.

#### **Operations**

#### **Time to Change**

UEA was proud to sign the Time to Change pledge in 2014 and holds annual events to promote mental health awareness, and to change the way people think, and act, about mental health. Our activities in Mental Health Awareness Week 2020 promoted the incredible acts of kindness of our students, staff, alumni and local community during the pandemic.

#### Student support

The Student Services Wellbeing Team offers a wide range of support and advice, and all students have access to the student-designed OpenUp UEA support app. Norwich Nightline offers students with a confidential listening service.

#### Staff support

Our Health Assured Employee Assistance Programme provides staff and students with free, 24 hour support to help deal with personal and professional issues that can impact on, health, wellbeing and home or work life. Our recently launched Mental Health First Aiders scheme has been joined by more than 60 members who are supporting the wellbeing of staff across the UEA community. This is already been expanded with the introduction of Staff Wellbeing Champions, who will act as the first point of contact for employees experiencing a mental health issue or emotional distress.

#### **SDG 4 Quality Education**

# Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

#### Research - 201 publications in SciVal 2018 - 2023

#### Improving maths education

MathTASK is a collaborative research project of the UEA Research in Mathematics Education Group. The multistranded programme explores various aspects associated with better understanding and teaching of mathematics. Their CAPTeaM (Challenging Ableist Perspectives on the Teaching of Mathematics) strand explores inclusive education and how students with disabilities engage with mathematics. Working with researchers in Brazil, the study looks to explore and challenge the assumptions about the mathematical abilities of disabled learners that often shape mathematics teaching and learning. Other research strands explore the how mathematics teaching interacts with the learning atmosphere in the classroom, and the role, and affordances, of digital technology in the learning of mathematics.

#### **Exploring language and culture**

Work in the Language in Education research group explores the use of language in different educational contexts and countries, and the link between language and culture. Examining regional identities, race/ethnic matters, intercultural communication, and professional, classroom and disciplinary discourses, the group has strong partnerships with local authorities in the UK, Asia and South America, and works to improve teachers' racial literacy, use cross-cultural perspectives to enhance the teaching of international students, and improve school effectiveness in developing countries.

#### Promoting trainee teacher mental health

Current mental health resources in teacher training programmes are focused on the role of educators in supporting their pupils. The Mental Health and Wellbeing Trainee Teachers Project, is a new initiative looking into the support trainee teachers themselves may need. The study explores the extent of the current provision of mental health and wellbeing support provided to trainee teachers, and the type of provision that would be needed and suitable in the future. Data collection and initial analysis has begun, with the group planning to inform teacher training providers of the support required to positively influence trainee teacher mental health and wellbeing.

#### **Public Engagement**

#### A celebration of all things science - Norwich Science Festival

UEA is proud to be a partner of the Norwich Science Festival - a celebration of the ground-breaking scientific research associated with the city. Every year the festival offers a week of free exhibitions, shows and hands-on science activities for all ages and levels of knowledge. The festival also offers a dedicated learning programme for schools, youth groups and home educators giving students from reception class to sixth formers the chance to get inspired by science.

#### **Public lecture series**

UEA host a series of free public lectures throughout the year with talks from both university experts and external speakers. Lectures planned for 2023 include 'Using Behaviour Science Insights to Improve Population Health and Wellbeing', 'How Stories and Sagas Create Agency for the Climate Crisis', 'Sustainable Food' and 'Rethinking Education from the Ground Up'.

#### **Grow Your Business**

Our Grow Your Business initiative provides a range of bespoke training and short courses to companies and individuals looking to become more productive, more creative, learn leadership skills or embrace new practices. With our MBA programmes, staff can fine- tune their leadership skills, and become managers with a strategic mind and a global perspective. We also hold a range of business events throughout the year, helping people to develop their expertise, discover new approaches and meet new people.

#### **Student Activity and Learning**

#### Teachers of the future

Our Education department is dedicated to training teachers of the future. Our PCGE courses are highly-rated by Ofsted and train both primary and secondary teachers through either university-led or School Direct routes. We are committed to supporting students beyond their training year and work closely with schools, academies and Newly Qualified Teacher (NQT) induction bodies to provide continuing guidance and training opportunities. Students can continue to develop their careers through our Master's and Continuing Professional Development (CPD) programmes, and our popular Professional Development for Early Career Teachers online course is designed to help newly-qualified teachers improve their teaching skills and manage their workload.

#### **Learning across boundaries**

Our Interdisciplinary Institute for the Humanities encourages students to study across disciplinary lines, with areas of study ranging from the Centre for Japanese Studies, to the Publishing Project, the Media Suite, Digital Humanities and the East Anglian Film Archive. We also offer interdisciplinary postgraduate courses such as Gender Studies and Interdisciplinary Japanese Studies.

#### **Teaching**

The Norwich Business School is a signatory to the Principles for Responsible Management Education (PRME). The academic curriculum ensures all NBS students become literate in ethics and social responsibility, and that sustainability issues are delivered in the content of modules. To date, 71% of all modules have elements of sustainability built into their content and 12 modules are specifically constructed around sustainability or at least one of the Sustainable Development Goals.

#### **Operations**

#### **University library**

Our grade II listed library houses over 800,000 books, 550,000 e-books, and 97,500 online and print journals, and offers access to students, staff, alumni and members of the local community. In addition the library is proud to house a wide range of collections of museum artefacts, art works, rare books and manuscripts, and archive collections, including the British Archive for Contemporary Writing.

#### School governor network

We are keen to support the development of our local schools by encouraging our staff to become school governors. Our outreach team advertise vacancies to UEA staff, and to support those that choose to become governors, we set up the Governors Network – where there are regular meet ups to share best practice, ideas and undertake relevant training.

#### Widening participation

The UEA has an unwavering commitment to widening participation; passionately believing in championing young people from all backgrounds to succeed in whatever way is best for them. Our dedicated Outreach Team offers a host of opportunities for young people, staff, parents and carers and the wider school community, all designed to raise aspirations and help young people recognise university as an option for them - we work with more than 150 schools across the local region each year. Activities are run both on-campus and in-school with all resources provided free of charge. We offer financial support for individual and group travel costs, teacher cover fees and any resources required to deliver our in-school initiatives.

We consistently recruit the expected numbers of students from low participation schools and lower socio-economic households. 14.0 % of undergraduate students come from areas of lowest levels of higher education participation and 10 % are from neighbourhoods of multiple derivation.

#### **SDG 5 Gender Equality**

#### Achieve gender equality and empower all women and girls

#### Research - 151 publications in SciVal 2018 - 2023

#### Improving women's vulnerability to climate risks

Our Gender and Development research group focuses on the social and gender factors influencing poverty reduction, inequality and social justice. Researcher Nitya Rao undertook gender research for ASSAR, Adaptation at Scale in Semi-Arid Regions, a CARIAA (Collaborative Adaptation Research Initiative in Africa and Asia) consortia, which aims to understand how people's gender affect their vulnerability and responses to climatic risks. The work highlighted the constraints that depress women's agency in these regions, particularly unequal education and employment opportunities, and the lack of available child-care, and led to policy and practice recommendations to support local communities to address these barriers.

#### Understanding the uptake of family planning services in Tanzania

Understanding household decision-making is crucial in ensuring effective implementation of anti-poverty programmes. One important area of decision-making is in the use of family planning service; the uptake of which in many low-income countries, particularly in sub-Saharan Africa, remains low - especially in rural areas. Research in our Behavioural Economics Centre explored the use of family planning services in Tanzania and found that uptake was significantly influenced by the perceived need of women to gain their husband's permission or approval to access contraceptives. The study provided new insights into why the use of contraceptives is low, and highlighted policy and implementation implications for future family planning campaigns.

#### **Public Engagement**

#### International's Women's Day

Women from across UEA came together to celebrate International Women's Day. The theme for this year was #BreakTheBias; envisioning a world free of bias, stereotypes, and discrimination, where difference is valued and celebrated. People from across the UEA community came together in a collective group photo and sharing how they #BreakTheBias in their professional work, university studies, or simply in everyday activities.

#### Domestic abuse documentary recognised by international women's film festival

UEA academic Professor Eylem Atakav co-created the short film 'Lifeline', which focuses on survivors of domestic abuse and the people who support them. The documentary follows several female social workers as they provide support for victims of domestic abuse, whilst finding it increasingly difficult to separate their own work and home lives. The film will be featured in the International Section of the International Women Filmmakers Festival (IWFF) which aims to unite female filmmakers and highlight their ever increasing international visibility.

#### Safer Taxi scheme

UEA works closely with partners across Norwich, including the police and Norwich City Council, to ensure safety for the community and students. Our SU has worked with City Council and Student Services on the Safer Taxi scheme – which allows students who are feeling vulnerable to pay for their taxi home at a later date if they are unable to do so at the time.

#### **Student Activity and Learning**

#### **Teaching**

Gender equality is embedded within our teaching and a number of our degrees feature modules on gender issues. International Development students can take modules on Gender Development and Law students can study modules focusing on Language and Gender, and Gender and the Media. Our MA in Gender Studies explores the fundamental debates of gender studies, including social change, feminism, gender history and gendered aspects of society. Our online teaching platform provides a course on Consent Matters which is available to all.

#### Walking against gender-based violence

Students in our UN Women UK Society took part in the UN Women's 16 Days of Activism campaign against gender-based violence. Walking as many miles as they could over the 16 days, the society covered over 80 miles and raised over £100 for UN Women and their Draw a Line campaign whilst raising awareness of this important subject.

#### **WISE - Women in Science and Engineering Society**

Our student run Women in Science and Engineering Society runs a range of lectures, screenings, debates, and networking and development opportunities aiming to support, celebrate and promote women in science and engineering. Their annual conference to celebrate International Women's Day gives an opportunity for female UEA students to share their research and knowledge with their peers.

#### **Operations**

#### **Athena SWAN**

The university subscribes to the Athena SWAN Charter, a framework which is used to support and transform gender equality within Higher Education and Research. UEA holds a Silver University Award and our schools hold a total of fourteen awards; four at Silver and ten at Bronze levels.

#### Equal pay and career progression

The university adheres to the Equality Act 2010 (Gender Pay Gap Information) Regulations 2017, and our Equal Pay and Gender Pay Gap Code of Practice outlines our commitment to identifying issues of gender pay difference and taking action to reduce them. Our annual equal pay review is presented directly to our dedicated Equality and Diversity Committee who are committed to working towards equal pay for all. The university has a dedicated Aurora champion and women in professional and academic roles are invited to join the women's only Aurora network – a unique partnership supporting women and their institutions to fulfil their leadership potential. We have seen an increase of women in senior positions from 27 % in 2009 to 38 % in 2018.

#### **Parental leave**

As well as having a family friendly culture, we recognise the importance of supporting staff during periods of maternity, paternity and adoption leave. Female staff who are pregnant or adopting can take up to a year's maternity leave – 6 months on full pay, and our shared parental leave enables fathers or both parents, to take additional leave.

#### **Nursery Salary Sacrifice Scheme**

Our campus nursery offers childcare facilities for staff and students, and staff can benefit by paying for the nursery through our Salary Sacrifice Scheme. An additional nursery is available the adjoining hospital site. We have a family friendly campus with dedicated space for baby changing and feeding, and highchairs and hot water for heating food provided in our catering outlets.

#### **Stonewall Workplace Equality Index**

UEA is pleased to be part of the Stonewall Diversity Champions Programme; an employers' programme which works to ensure that all LGBT+ staff are accepted without exception in the workplace. We make an annual submission to the Stonewall Workplace Equality Index, to assess our work on LGBT+ equality against others in the Sector. The University has a strong network of LGBT+ members who attend Norwich Pride and wear a rainbow lanyard or pinto show support to the LGBT+ members of the UEA community.

#### **SDG 6 Clean Water and Sanitation**

### Ensure availability and sustainable management of water and sanitation for all

#### Research - 206 publications in SciVal 2018 - 2023

#### **Water Security Research Centre**

UEA's Water Security Research Centre works to address the challenges of governing and managing water for different human, economic and environmental needs. Their research focuses on understanding the social, political and physical drivers of global water challenges, and the affect these have on all aspects of our life including our health and wellbeing, food production, economics and the integrity of our natural environment. They also work to emphasise the existing inequalities surrounding safe and reliable access to water, and how these must be addressed to improve water security for all. Current research themes include water resources management and the challenges of hydroelectric dams, access to water, sanitation and hygiene facilities (WaSH), water politics and transboundary water diplomacy, and adapting to climate change and water related hazards or risks.

#### **Crippling burdens**

Women and girls in developing countries spend 40 billion hours every year collecting water. For many, the burden of collecting water means they simply don't have the time to go to school or work, which leads to social exclusion and gender inequality. Carrying water is also thought to have various health impacts, however little is known about this. Researchers in UEA School of Health Sciences were proud to be part of the first major study into the physical impact carrying water has on the health of millions of girls and women. Working with researchers from Northwestern University, the University of Miami and the Household Water Insecurity Experiences Research Coordination Network (HWISE RCN), the team analysed survey results from households across 21 low- and middle-income countries in Asia, Africa, Latin America, and the Caribbean. The study revealed the dangers associated with collecting water, including falls, traffic accidents, animal attacks, and fights, which can result in broken bones, spinal injuries, lacerations, and other physical injuries.

#### **Public Engagement**

#### Promoting sustainable society

Working in partnership with Anglia Water, The Anglian Centre for Water Studies delivers a range of public engagement events focusing on how society uses and values water, and the need to use water sustainably. A central theme of the collaboration is engaging society – working with local communities to drive changes in the behaviour towards water use and wastage, and offering practical steps to promote water conservation.

#### Water Security professional training

The Water Security Research Centre offers a short course for policy makers and practitioners focusing on the global challenges of water security for human populations and how this is intrinsically related to social and political factors. The course explores how to co-create water secure futures for those with responsibility or interest in the integration of water security into development planning, projects and policy.

#### **Student Activity and Learning**

#### **Teaching**

The challenges and need for sustainable water management and its role in society is explored in a wide variety of our degrees. Students on our Geography and Environmental Sciences undergraduate programmes can study a modules on Land and Water Processes and Management, and Natural Resources and Environmental Economics. Our School of International Development offers teaching on Natural Resources and Development – focusing on the global challenges of effective resource management. At a masters' level, our Water Security research group offers an MSc in Water Security and International Development.

#### **Promoting preservation of the Broads**

The Broads National Park is Britain's largest protected wetland and is home to a quarter of the UK's rarest species. Students from UEA have been working with the Water, Mills and Marshes partnership – a group of 55 public and private partner organisations dedicated to the preservation and promotion of the Broads. Students from UEA's Heritage iTeams programme, which was designed to give students industrial and commercial experience, have been working with the partnership on their Digital Ted project - producing creative designs to bring the life and legacy of famed Norfolk Naturalist, Ted Ellis' to a new generation through digitisation of his personal journals.

#### Reducing single use plastic on campus

A priority campaign of the SU is to reduce single use plastics on campus. The student run initiative focuses on raising awareness around the use of reusable bottles and coffee cups, providing these alternatives to students, and offering incentives for their use - such as partial refunds in campus food outlets.

#### **Bloody Good Period**

Bloody Good Period is a nationwide charity that tackles period poverty by providing sanitary products to society's poorest - focusing on asylum seekers and refugees. UEA is proud to have the charity's first university society, which runs a series of fundraising events throughout the year to raise money in support of this charity. UEA SU also believe sanitary items should be free of charge and available to all. Free tampons and sanitary pads are available in the gender-neutral hive toilets.

#### **Operations**

#### SmartCondensing – saving water in science laboratories

Condensing processes in scientific laboratories typically use large amounts of water. As part of Green Impact, and in collaboration with equipment suppliers Radley's, the Schools of Chemistry and Pharmacy have developed an innovative condensing process with the potential to save 264,780 litres of water per year. The SmartCondensing initiative consists of three pieces of equipment - the award winning StarFin eliminates the use of water for cooling, and on its own can save 10 litres of water in 5 minutes; around 30,000 litres of water each year.

#### Accessible drinking water

Tap water and water machines are available in all catering outlets and across campus to provide free drinking water to students, staff and visitors and to encourage bottle refills. We encourage people to use reusable bottles which can be purchased in our campus outlets. For hot drinks, Keep Cups and the use of customers' own mugs are subsidised and actively promoted.

# SDG 7 Affordable and Clean Energy Ensure access to affordable, reliable, sustainable and modern energy

#### Research - 328 publications in SciVal 2018 - 2023

#### **UK Energy Research Centre**

UEA's Science, Society and Sustainability (3S) Group is set to become a core part of the new UK Energy Research Centre (UKERC). UKERC's research programme will focus on building evidence to inform the decisions that shape the UK's transition towards a net zero energy system and economy. It will explore the potential economic, political, social and environmental costs and benefits of energy system change, and consider how these impacts can be distributed equitably. As part of the initiative, 3S will establish the first ever national observatory for societal engagement with energy. The observatory will map and monitor the different ways in which the public engages with low energy transitions, from their everyday consumption, to citizens' assemblies, social media, protests and community action.

#### Developing sustainable technologies for electric vehicles

The transport sector is the fastest growing contributor to climate emissions, and decarbonising transport is one of the largest challenges in the global response to climate change. Researchers in our Emerging Technologies for Electric Vehicles (EV) research group are working to develop promising new sustainable technologies to accelerate mass-market adoption of electric vehicles. This research directly aligns with UK ambitions to end the sale of petrol and diesel cars by 2030, and the building a Britain fit for the future and Road to zero industrial strategies.

#### **Public Engagement**

#### Understanding the emotions of fuel vulnerability

Current policies concerning fuel poverty tend to overlook its lived experience, and neglect the everyday experiences and emotions it presents. Researchers within our Science, Society and Sustainability Group alongside UEA's Centre for Competition Policy explored the emotional engagements of energy vulnerability among social housing tenants. Conducting interviews with both tenants and housing association employees, the study highlighted how fear and worry can shape patterns of energy use and payment, and how care, embarrassment, stigma and trust can facilitate, or prevent, the receipt of support for energy vulnerable households. Crucially, and for the first time, the research showed how emotions are not merely a consequence of energy vulnerability but can also contribute and shape it.

#### **Visible Energy Trial**

To increase energy efficiency, smart meters and in-home displays (IHDs) have been rolled out across the UK – enabling householders to track their energy use. Exploring how people interact with IHDs however, is key to increasing their impact. Our Visible Energy Trial engaged with 75 households, learning about their views and experiences of IHDs. We found that while IHDs do enable people to learn about their energy use, the effect is often only short-term, and decisions surrounding energy use are far more complex than first assumed. They can involve many aesthetic, emotional and pragmatic considerations, and must be negotiated with others in a wider social context. This research challenges the previous assumptions around household behaviour and highlights the need for additional, and alternative, energy saving approaches.

#### **Student Activity and Learning**

#### Teaching

Using innovative engineering to meet global challenges is at the heart of our engineering teaching, with students covering modules such as Renewable Energy, Nuclear and Solar Energy, Fluids Engineering for Renewable Energy and Environment Assessment Theory and Effectiveness. Our specialised BEng Energy Engineering with Environmental Management course is backed by the East of England Energy Group (EEEGr) and accredited by the Energy Institute, and prepares students for the demands of industry and the need for alternative technologies.

#### **Green Impact**

We are one of over 60 universities taking part in the Green Impact programme with support from the National Union of Students (NUS). Green Impact is an award-winning United Nations programme designed to support environmentally and socially sustainable practice within organisations. Teams from across the UEA complete challenges to improve sustainability in their school or department, and to win awards at the end of the year. Students can become members of their school team, or can be trained to support other teams. 36 students were trained during UEA Green Impact 2018-19, receiving official NUS and IEMA-accredited training.

#### **Engineers Without Borders**

Engineering Without Borders is a worldwide movement which puts global responsibility at the heart of engineering. They work to inspire practising engineers, and engineers of the future, to apply their skills to make positive contributions to the world – making it a fairer, greener and safer place for all. Our student-run UEA Engineering Without Borders Chapter hosts a range of events throughout the year - from talks with academics and industry members, to site visits and outreach activities with local schools; promoting engineering and its role in sustainable development.

#### **Operations**

#### **Energy and Carbon Reduction Programme**

The University's Energy and Carbon Reduction Programme outlines our continuing commitment to reducing carbon emissions and energy use on campus. We have set ourselves ambitious targets to be over 80 % net zero by 2030 and to be 100 % net zero by 2045 or earlier. Our Environmental Management System (EMS) is audited to ISO 14001 international standard, and it has been awarded the top level Platinum Award for the EcoCampus programme for EMS development within the higher education sector.

#### Saving energy on campus

We are committed to saving energy on our campus even as the university grows. We have invested £6.5 million to reduce our carbon footprint – which has included investing in our combined heat and power (CHP) engines. These save the equivalent of around 5,000 tonnes of carbon per year and the electricity produced is 17 % cleaner than that imported from the National Grid. The engines also have the ability to recycle the waste heat energy they generate, which we use to heat the majority of our buildings. We continue to install new, more energy efficient equipment around campus. We install LED lights which have a lifespan of up to 20 years compared to fluorescent tubes. As part of our Sustainable Ways Vision we installed a new 'Solar Bench' on campus – which features 4 USB power ports, WiFi and LED illumination. The main university campus has three electric vehicle charging spaces and the UEA Enterprise Centre has an additional two rapid charge points.

#### Low energy buildings

Our campus was an early adopter of the low energy agenda. Our Enterprise Centre it is one of the UK's most sustainable buildings, with only 446kg of CO<sub>2</sub> per square meter of embedded carbon in the fabric of the building. It has won an incredible 25 awards including The Guardian Sustainable Business Award, and is the first large-scale building to achieve both Passivhaus Certification and BREEAM Outstanding; two of the highest eco standards a building can meet. The building was designed with a 100-year lifespan and recycled and upcycled materials were used extensively. The exterior wooden panels were made from our Chemistry and Pharmacy lab benches. The next major component of our Energy and Carbon Reduction Programme is the refurbishment of the 1960s campus buildings, with energy reduction in mind.

#### Sustainable labs

Our School of Biology alongside UEA Sustainable Ways has been pioneering improving energy efficiency in laboratories – particularly in the use of ultra-low temperature freezers (ULTs). ULTs typically account for 66 % of the energy used by all lab appliances, and even the most efficient ULT consumes similar amounts of energy to a whole house. In an attempt to reduce this, an energy audit of our ULTs was completed and personalised audit certificates produced. Our new ULT Freezer Management Guide also gives advice on how to ensure that freezers are operated as efficiently as possible.

# SDG 8 Decent Work and Economic Growth Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

#### Research - 378 publications in SciVal 2018 - 2023

#### **Ensuring fair competition**

The UEA's Centre for Competition Policy is the UK's leading inter-disciplinary centre for independent competition, regulation and consumer policy research, and has advised on a wide range of national and international policy decisions. As part of one project, the centre worked with the Philippines Competition Commission and APEC (Asia-Pacific Economic Cooperation) to produce a Manual for Competition Assessment of Regulations in the Philippines. The report helped government officials to review their current regulations, identify those that potentially restrict competition and develop alternative regulations that have less or no harm. Other research interests include anti-competitive agreements, vulnerable consumers and a detailed exploration of fairness in the retail energy market.

#### **Building an inclusive economy**

UEA are working with Norwich City Council and a range of partners to set up a Norwich Inclusive Economy 2040 Commission - part of the Norwich 2040 City Vision initiative. UEA researchers have carried out an initial review of the local economy, which will be used alongside stakeholder and public views, to explore the key issues and opportunities Norwich faces, as well as identifying ways in which these issues could be addressed and the economy made more inclusive. Further research will then be used to make recommendations on longer-term actions to ensure that the benefits of Norwich's economy are shared by all.

#### **Public Engagement**

#### **Civil University**

We are proud to be a member of The Civic University Network - a national network which aims to challenge and support universities to embed civic aspirations at an institutional level, and to work with local communities to build mutually beneficial relationships and drive positive societal change. As a member of the Network, we are committed to maximising our economic and social impact for the benefit of those around us. We are already involved in projects promoting an inclusive and sustainable economy, drive clean growth and support our renewable energy coastline.

#### **Gateway to Growth**

Gateway to Growth is an innovative programme designed to support the growth of Norfolk's Small and Medium Enterprises (SMEs) by boosting their engagement with local graduates through internships and skills training. The tailor-made project, which won Ofs Challenge Competition funding, aims to address some of the problems faced by UEA's graduates and Norfolk's economy, many of whom want to remain in Norfolk after completing their studies but struggle to secure graduate level employment. UEA offers a range of services to both local businesses and graduates including dedicated employee and intern recruitment support, networking opportunities, graduate skill sessions and a graduate assistance fund of up to £500 to help with employment expenses such as interview and travel costs.

#### A home for your business - The Enterprise Centre

Our Enterprise Centre helps local businesses thrive by offering them a home whilst they grow. Established in 2015, the hub is home to over 100 diverse companies and offers a range of office spaces and co-working areas to suit all needs. The hub actively encourages networking and knowledge sharing – hosting a range of events and offering meeting rooms, a 300-seater lecture theatre, boardrooms and collaborative working spaces.

#### **Productivity East**

Our state-of-the-art, £7.4 million Productivity East development, is a new regional hub for engineering, technology and management. Working in partnership with our world-class researchers and students, we enable businesses to create innovative practical solutions to current and future real-world challenges. Projects currently

include creating ways of accurately converting data sets into 3D printed physical models for use in applications such as surgical planning, and in replica construction of delicate cultural heritage artefacts.

#### **Student Activity and Learning**

#### Teaching

The Norwich Business School is a signatory to the Principles for Responsible Management Education (PRME). The academic curriculum ensures all NBS students become literate ethics, social responsibility, and sustainability issues delivered in the content of modules. To date, 71% of all modules have elements of sustainability built into their content and 12 modules are specifically constructed around sustainability or at least one of the Sustainable Development Goals.

#### Internships and work experience

UEA offers a wide range of work placements and internships for those students keen to get professional experience. There is a wide range of local, national and international opportunities available, each carefully chosen to ensure students leave with transferable and professional skills that help them to stand out in the crowded graduate job market and prepare them for graduate life and beyond. Students in the School of International Development have the opportunity to undertake a Development Work Placement. Designed to supplement the knowledge and skills learnt in other modules, students have over 200 placements from over 196 countries to choose from, and to ensure placements are an option for all, we offer a £750 bursary towards any associated costs.

#### **Norfolk Network Generation Three**

UEA student volunteers help run the Norfolk Network, a community of over 100 local business owners, directors, entrepreneurs and academics. The network focuses on collaboration, peer support, knowledge and learning in an aim to create a fertile environment for local businesses to thrive. UEA is the platinum sponsor of the organisation, the partnership focusing on developing student employability, entrepreneurship and enterprise.

#### **Operations**

#### Living wage and worker rights

UEA is an accredited Living Wage Employer meaning all of our staff are paid at least the voluntary living wage. We are also a member of the Worker Rights Consortium which is committed to ensuring the factories we procure from are compliant with the Worker Rights code of conduct. Joining the consortium also commits us to conducting business in a socially responsible and ethical manner, and to protect and preserve the global environment.

#### Dignity and respect in the workplace

Our Dignity and Respect in the Workplace code of practice details our commitment to creating a working environment and culture where all staff and students are treated with dignity and respect, valued in their diversity and encouraged to reach their full potential. We have a zero tolerance of unlawful discrimination, harassment or bullying and we are committed to investigating reports of inappropriate behaviour and taking appropriate action proportionate to each case. All staff are required to complete mandatory Diversity in the Workplace training upon their appointment in addition to two-yearly refresher modules. This training includes bullying and harassment content. Staff are asked to familiarise themselves with the University's range of equality, diversity, dignity and respect policies and procedures.

#### **Fairtrade**

Our SU campus shop stocks a range of Fairtrade goods and has lobbied the wider UEA community to do the same in all of their outlets.

# SDG 9 Industry, Innovation & Infrastructure Build resilient infrastructure, promote sustainable industrialisation and foster innovation

#### Research - 326 publications in SciVal 2018 - 2023

#### East of England Smart Emerging Technologies Institute (SETI)

Led by UEA, SETI is a planned research and innovation initiative aiming to create the fastest collaborative research testbed in Europe. Bringing together cutting edge science, technology and business, SETI will nurture a unique ecosystem – supporting the research, innovation, benchmarking and validation of new applications and services by using the latest machine learning, AI and digital communications technologies.

#### **Productivity East**

Our state-of-the-art, £7.4 million Productivity East development, is a new regional hub for engineering, technology and management. Working in partnership with our world-class researchers and students, we enable businesses to create innovative practical solutions to current and future real-world challenges. Projects currently include creating ways of accurately converting data sets into 3D printed physical models for use in applications such as surgical planning, and in replica construction of delicate cultural heritage artefacts.

#### Society and innovation

The Society and Sustainability (3S) Group focuses on understanding the ways in which society interacts with innovation. Viewing innovation as a socially embedded process, they are at the forefront of developing new approaches to study contemporary innovation in the context of societal challenges. Recent research projects have explored how attempts to build low-energy housing consistently fail to account for policy-making, building design and construction, and domestic life, and how innovations such as community currencies and community energy initiatives, provide unexploited solutions for sustainability and local economic resilience.

#### **Public Engagement**

#### **Tech East**

UEA is proud to support Tech East - a rapidly growing network of ambitious East of England technology businesses. The organisation is rated as one of the top 5 tech clusters in the UK, and works to build a world-class technology ecosystem in the East by showcasing local business, providing networking and collaboration opportunities, and partnering businesses with regional workspace, support and expertise. Our Pro-Vice-Chancellor of Research & Innovation is a member of the Tech East Board, ensuring that UEA's cutting-edge research is at the centre of the organisations' strategy, programmes and plans.

#### A hub for innovation – The Enterprise Centre

The Enterprise Centre is our hub for innovative businesses - offering them a home whilst they grow. Established in 2015, the hub is now home to over 100 diverse companies and offers a range of office spaces and co-working areas to suit all needs. The hub actively encourages networking and knowledge sharing – hosting a range of events and offering meeting rooms, a 300-seater lecture theatre, boardrooms and collaborative working spaces.

#### **Innovation and Practice short course**

Our Health and Social Care Innovation and Practice short course gives participates the chance to learn new skills in the development and implementation of service improvement and practice innovation. At the end of the course, students will be able to critically examine published service improvement concepts and methodologies, and will gain experience of developing presentations to disseminate service innovation.

#### **Student Activity and Learning**

#### Teaching

We foster student innovation through our teaching. Our MSc in Management offers a module in Innovation and Technology Management which explores the advantages and management of innovation in sustainable

business. Our MBA programme has optional modules in Sustainable Management and Entrepreneurship, and our Norwich Business School is launching a new undergraduate module in Entrepreneurship and Enterprise Creation.

#### **Engineering industrial partners**

Our School of Engineering is passionate about providing our graduates with the skills to meet the engineering challenges of the future. We have a strong track record of collaborating with a wide variety of industrial partners, all of whom put innovation at the forefront of their work. These include off-shore engineering specialists Aquaterra Energy, who work with the gas and oil industry to provide innovative industry solutions, Shell UK; who are using innovation to accelerate the transition of businesses to net-zero emissions, and Hethel Innovation - who provide bespoke advisory and innovation support to business throughout the East of England.

#### **Enactus UEA**

Enactus is the world's largest experiential learning platform dedicated to engaging the next generation of entrepreneurial leaders to use innovation to improve the world. With the support and encouragement of the global Enactus network, Enactus students deploy entrepreneurial action to improve the human condition and enable sustainable human progress. Enactus UEA runs a series of events throughout the year, and brings together like-minded UEA entrepreneurs to discuss fresh ideas.

#### Innovating with industry – i-Teams

Our i-Teams programme is a fantastic opportunity for early-stage researchers to work with industry experts to acquire new skills and increase their commercial awareness. The programme is open to postgraduate and masters' students in addition to postdoctoral researchers, with participants working in small teams with industry mentors, to develop creative business plans for locally developed innovations. The programme runs for 12 weeks and includes workshops and presentations by entrepreneurs and industry experts, culminating in a final presentation to colleagues, business leaders and employers. In previous years, participants have with organisations including Adnams, the Broads Authority, Gressenhall Farm and Workhouse, and The History of Advertising Trust.

#### **Operations**

#### **Spin-out companies**

We are committed to helping members of our UEA community turn transformative research into thriving spinouts, and we have filed more than 100 patents for inventions developed from their ground-breaking work. We have celebrated the creation of companies that are tackling some of world's biggest challenges and providing innovative services in areas such nanotechnology, weather analysis and the treatment of infectious diseases.

#### **Supporting business innovation**

We are committed to supporting innovation for the benefit of our communities. We have helped companies including Adnams, Anglia AI, Barclays, Curveball Media, and FXHome boost their knowledge, make new discoveries, and hire and inspire their workforce. Our Access Entrepreneurship and Innovation programme works with organisations to transform work-class research into innovative products and services. We have helped businesses of all sizes secure funding, and our consultancy service enables businesses to access our technical expertise and tailored training programmes. Through our licensing scheme, businesses turn UEA research into cutting-edge innovations.

#### **Innovation and Impact Awards**

The annual UEA Innovation and Impact Awards celebrate the remarkable research and entrepreneurial spirit of the University; recognising projects which are changing lives, shaping our understanding of the world, and addressing local and global challenges. Our Innovation Fellowships recognise those who have an outstanding history of achievement and entrepreneurship. They work to provide inspiration and guidance to those at different stages of their own entrepreneurial journey, exemplifying our commitment to continued innovation.

# SDG 10 Reduced Inequalities Reduce inequality within and among countries

#### Research - 313 publications in SciVal 2018 - 2023

#### Understanding the emotions of fuel vulnerability

Current policies concerning fuel poverty tend to overlook the emotional and lived experiences. Researchers within our Science, Society and Sustainability Group explored the emotional engagements of energy vulnerability among social housing tenants. The findings revealed how fear and worry can shape patterns of energy use and payment, and how embarrassment and stigma can prevent people seeking support. The research was the first to show that emotions are not merely a consequence of energy vulnerability but can also contribute and shape it. Findings from the research raise fundamental issues for the future governance of the market – highlighting that analysis of fuel poverty would benefit from focusing more on the real-world phenomena which underpin this complex problem.

#### Supporting vulnerable people into work

The Increase Valorisation Sociale (VS) Project is a partnership between training providers and housing associations in England and France, and aims to economically assist vulnerable people to get into work or business. In addition to offering specialised training and ongoing personalised support, the service also trains some participants to become ambassadors, so that they can continue to embed entrepreneurship and employability learning in their neighbourhoods beyond the life of the project. The impact evaluation of the service is led by a researcher within UEA's Norwich Business School, and has highlighted the key knowledge gained from the programme that will be vital in shaping best practices on tackling employment problems in rural, peripheral and disadvantaged places in the future.

#### **Public Engagement**

#### **UEA law clinic and The Justice Project**

The UEA law clinic is a joint venture between UEA students and staff, members of the local legal profession, and external charities and organisations including Norfolk Community Law Service and Citizens Advice. The team provides free legal advice and representation to the Norwich community – meeting a significant local need for those that could not otherwise access legal support. The Justice Project runs in association with the charity Inside Justice which conducts pro bono casework investigations on behalf of people who claim they've been victims of miscarriages of justice. UEA's Justice Project provides support reassessing the evidence of those who claim they've been wrongly convicted and working to see if there are grounds to overturn their convictions.

#### **True Stories Live**

True Stories Live is a community storytelling project co-directed by UEA creative writing lecturer Molly Naylor. The project works with members of the public to support them in sharing a true, autobiographical story. As an organisation, True Stories Live works with a range of different community groups, including New Routes Integration (a Norwich charity supporting refugees and asylum seekers) and Women of the World Festival. They are passionate about championing the voice of those often overlooked, and collaborated with Norwich Pride to put on a special event focussing on the stories of LGBTQIA+ speakers, and worked in partnership with members of the deaf community to make public events more accessible.

#### **Student Activity and Learning**

#### **Teaching**

Our students learn about inequality in a wide variety of our courses and modules. On our Sociology programme, students study inequality, social justice and social change; focusing on contemporary social issues which connect to employment opportunities. In our School of Politics, students uncover the negotiation and bargaining processes of politics, who is involved in political discussions, who wins and loses, what constraints different people face, and whether certain organisations have privileged access to power. Students on our BA in Economics can take a module on Government, Welfare and Policy in which they explore the economics of social

policy across the globe, and our BA in International Development gives students the chance to explore the geographies of poverty and inequality, and the dynamics of social, economic and political change.

#### **Bloody Good Period**

Bloody Good Period is a nationwide charity that tackles period poverty by providing sanitary products to society's poorest - focusing on asylum seekers and refugees. UEA is proud to have the charity's first university society, which runs a series of fundraising events throughout the year to raise money in support of the cause. UEA SU also believe sanitary items should be free of charge and available to all. Free tampons and sanitary pads are available in the SU Union House on campus.

#### **Disability Visibility**

UEA SU run an annual campaign raising awareness of student with disabilities and how this can affect the student experience. The campaign, run in cooperation with the UEA Students with Disabilities Forum, promotes equality across the institution and aims to dispel some of the common misconceptions of disability. The Forum believes that every student should have equal standards of education and the opportunity to actively engage with other students, clubs and societies to give them achieving the most fulfilling university experience possible. It provides an informal platform to support students with disabilities, raising issues that affect their studies and time at the UEA, and giving a network for students to socialise.

#### **BAME Ambassadors**

The UEA SU is passionate about working with the university to tackle the degree awarding gap that continues to affect students from Black, Asian and minority ethnic (BAME) backgrounds. As an approach, they are recruiting eight paid BAME Ambassadors, who, following training, will work with staff and students; undertaking research, organising events, and creating publicity to ensure the lived experience of BAME students is at the centre of efforts to close the degree awarding gap.

#### **Operations**

#### **Stonewall Workplace Equality Index**

UEA is pleased to be part of the Stonewall Diversity Champions Programme; an employers' programme which works to ensure that all LGBT+ staff are accepted without exception in the workplace. We make an annual submission to the Stonewall Workplace Equality Index, to assess our work on LGBT+ equality against others in the Sector. The University has a strong network of LGBT+ members who attend Norwich Pride and wear a rainbow lanyard or pin to show support to the LGBT+ members of the UEA community. We are constantly in the progress of making improvements; recently producing transitioning guides (including practical guides for managers) and a student name change policy, and are actively working to promote greater understanding and inclusion of trans+ and non-binary identities. Staff can now change their gender identity on our staff system and titles have been removed from our virtual learning environment.

#### **Race Equality Charter**

UEA is a signatory of the Race Equality Charter (REC) outlining our commitment to improving the representation, progression and success of racially minoritised staff and students. Our REC Working Group ensures we reflect on internal practices in a systematic manner and develop an ongoing action plan to bring about long-term, sustainable change.

#### **BAME** staff network

The UEA BAME Staff Network is a friendly, professional support network for colleagues across campus who identify as part of the BAME community. The network plays an important role in raising the profile and understanding of the issues affecting the UEA BAME community, in addition to feeding into university policy and procedure.

# SDG 11 Sustainable Cities and Communities Make cities and human settlements inclusive, safe, resilient and sustainable

#### Research - 284 publications in SciVal 2018 - 2023

#### Dementia-friendly urban design

People with dementia often struggle with navigation and around 40,000 people go missing in the UK every year. Research led by the UEA in collaboration with University College London, the University of Leeds, the Norfolk and Norwich University Hospital, and Norfolk Constabulary explored whether there was a correlation between people going missing and the outdoor environment they went missing from. Researchers studied 210 'missing person' reports for people with dementia to see whether the design of road networks could play a part. They found that people are more likely to be reported missing in areas where the road structures are complicated and disordered. The findings can help identify areas where people may be at a higher risk of going missing in addition to informing future recommendations for dementia-friendly urban design.

#### Sustainable watershed management in Mexico's megalopolis

There are over 30 million people in Mexico's megalopolis who depend on the surrounding watershed for their water security. Part of a GCRF grant, UEA researchers from the Centre for Ecology, Evolution and Conservation and the Water Security Research Centre, worked with Mexican universities, NGOs and local stakeholders to explore how endemic grassland and forest can be sustainably managed for watershed provision. Key to the project was engaging with the indigenous communities who own the water catchment areas, and who often feel overlooked in consultations and planning. The findings have important implications for several other watershed-dependent cities in the global South including Lima, Jakarta, Manila and Cape Town, and have formed a best practice model for the key role of watershed protection in sustainable cities for the future.

#### **Public Engagement**

#### **Civic University**

We are proud to be a member of the national Civic University Network — reflecting our long history of civic engagement across East Anglia. Our civic role encompasses a wide range of work in collaboration with private, public and voluntary sectors. We are working with Norwich City Council, on the Norwich Inclusive Economy Commission project, exploring the economic issues the city is facing and how we might help overcome these in the future. We work to raise the aspirations of school children in the most deprived parts of Norfolk and Suffolk, to enrich the cultural and sporting life of our communities, and to support a range of new businesses through our Enterprise Fund and Gateway to Growth — Unlocking Talent in Norfolk initiative.

#### Improving intercultural understanding and communication in the local community

Work from our School of Language and Communication Studies has highlighted the importance of intercultural understanding in key local organisations and the wider community. It has supported Norfolk Constabulary to change their translation policy and practice in interpreting services within law enforcement and police interviewing, and has worked with Norwich City Football Club to build an increased understanding of the linguistic and cultural assimilation issues faced by migrant players and staff — promoting the additional translation of social media output and inter lingual media work.

#### **Student Activity and Learning**

#### **Teaching**

The Norwich Business School is a signatory to the Principles for Responsible Management Education (PRME). The academic curriculum ensures all NBS students become literate in ethics and social responsibility, and that sustainability issues are delivered in the content of our modules. To date, 71% of all modules have elements of sustainability built into their content and 12 modules are specifically constructed around sustainability or at least one of the Sustainable Development Goals. Sustainability is also embedded in the teaching of many other schools, our School of International Development offers a MA in Globalisation, Business and Sustainable Development.

#### Sustainable societies

We are home to many student societies that have sustainability at their core. Sustainability Soc is the society dedicated to developing a low carbon campus and reducing UEA's carbon emissions. Students work closely with the Estates team to run projects that make a real difference to our green aspirations. With the support and encouragement of the global Enactus network, Enactus students deploy entrepreneurial action to improve the human condition and enable sustainable human progress. Enactus UEA runs a series of events throughout the year, striving to improve the livelihood of the underprivileged people in the community through sustainable social enterprises.

#### **Never OK**

UEA SU is committed to providing a safe, inclusive and welcoming culture, and ensuring that everybody is free from abuse, harassment or hate crime. Their Never OK campaign fosters a culture of zero tolerance, in addition to promoting frank, open and honest discussions about issues of abuse, and supporting the local community to negative behaviour and promote a safe culture for all.

#### **Meat Free Mondays**

Part of the SU's commitment to sustainability, Meat Free Mondays promote the environmental benefits of a plant-based or meat-free diet. In addition to providing only meat-free options in SU food outlets, the SU also support societies to participate in the event by offering funding and kitchen facilities for them to create and sell their own plant-based food.

#### **Operations**

#### **University travel**

We offer our staff and students many incentives to promote sustainable travel options. We have invested over £1million on cycle infrastructure over the last 10 years to provide over 3,600 cycle parking spaces, campus-wide shower facilities, and improved lighting and CCTV. There is a campus-wide Bicycle User Group (BUG) which acts as a focus group and ideas forum for the cycling community.

We collaborate with travel companies to provide Park and Ride services to UEA from the local area. There is also a 'Park and Stride' option for staff which is approximately a 15 minute walk from the centre of the main campus. We offer a SmartShare car share scheme enabling staff to save money and help the environment. The University works in partnership with Abellio Greater Anglia to provide discounts for staff and students who regularly travel by train whether to commute or to explore the area.

#### Sustainability board

UEA operates a Sustainability Board, the aim of which is to create a consultative forum to build a sustainable future. The Board has representation from the Executive Team, staff, estates and the SU, and meets quarterly to review our performance towards achieving the sustainability targets of the university. Future plans for the Board include enhancing its visibility within the university, ensuring it is informed by the depth of research at the Tyndall Centre for Climate Change Research, and building better engagement with its work to make a sustainable campus.

#### SDG 12 Responsible Consumption and Production Ensure sustainable consumption and production patterns

#### Research – 257 publications in SciVal 2018 - 2023

#### Effective green advertising

Despite frequent reports that people favour products with environmental benefits, consumers often purchase conventional alternatives. One reason for this is that they perceive green products to be less effective. Research from UEA's Norwich Business School Centre for Behavioural and Experimental Social Science, suggests that companies looking to promote environmentally friendly products should downplay their green credentials if they want consumers to buy them. The research found that using subtle, implicit communication about greenness – the so called "green understatement", is more effective when consumers have concerns about the product's performance. The findings have important implications in green product advertising strategies and in future public policy.

#### Understanding the uptake of disruptive innovations

Low carbon innovations are integral to addressing climate change. Disruptive innovations offer something new to consumers, however their uptake is strongly impacted by social influence. Research from UEA's School of Environmental Science and Tyndall Centre forms part of the Social Influence and disruptive Low Carbon Innovations project (SILCI) - a four year initiative exploring disruptive low carbon innovations and how and why they are adopted. The project examines the role social influence plays in the diffusion of disruptive low carbon innovations, and how diffusion processes can be accelerated to increase uptake. Innovations explored included new energy conversion infrastructure, alternatives to private car ownership and use, smart home technologies to manage energy demand from heating, hot water, lighting, and appliances, and apps to reduce food waste.

#### **Public Engagement**

#### Improving energy sustainability in isolated communities

Islands and isolated communities face specific energy issues in terms of efficiency, reliability and sustainability, commonly due to their dependency on external energy supplies with limited or no connection to wider grids. This often leads to above average carbon emissions, vulnerability to fluctuating fuel prices and supply disruption. The Intelligent Community Energy (ICE) project is a partnership between UEA and eight research and business organisations in France and the UK. The project aims to meet the needs of these territories, by designing and producing an innovative low-carbon energy system able to significantly reduce greenhouse gas emissions. In addition the project will focus on understanding consumer engagement and the journey of isolated communities in adopting sustainable technologies.

#### **Understanding Grassroots innovations**

Grassroots innovations are community-led solutions for sustainability. They can offer promising new ideas and practices, but often struggle to scale up and spread beyond small niches. Research projects based at the UEA and University of Sussex, aim to better understand how these innovations develop and grow, their potential relevance as a source of mainstream innovation for sustainable development, and how they can be harnessed to meet sustainability policy objectives.

#### **Student Activity and Learning**

#### **Teaching**

Students can learn about sustainable consumption and production in a wide variety of our courses and modules. On our engineering programme, students can take modules in Renewable Energy, Electrical Power Engineering, Nuclear and Solar Energy and Modelling Environmental Processes. Whilst students of International Development can study about Natural Resources and Development and Energy and People.

#### **Green Impact**

We are one of over 60 universities taking part in the Green Impact programme with support from the National Union of Students. Green Impact is an award-winning United Nations programme designed to support

environmentally and socially sustainable practice within organisations. Teams from across the UEA complete challenges to improve sustainability in their school or department, and to win awards at the end of the year. Students can become members of their school team, or be trained to support other teams.

#### **Engineers Without Borders**

Engineering Without Borders is a worldwide movement which puts global responsibility at the heart of engineering. They work to inspire practising engineers, and engineers of the future, to apply their skills to make positive contributions to the world – making it a fairer, greener and safer place for all. Our student-run UEA Engineering Without Borders Chapter hosts a range of events throughout the year - from talks with academics and industry members, to site visits and outreach activities with local schools; promoting engineering and its role in sustainable development.

#### **Meat Free Mondays**

Part of the SU's commitment to sustainability, Meat Free Mondays promote the environmental benefits of a plant-based or meat-free diet. In addition to providing only meat-free options in SU food outlets, the SU also support societies to participate in the event by offering funding and kitchen facilities for them to create and sell their own plant-based food.

#### **Operations**

#### **Sustainable Food**

We are committed to ensuring our production and retail of food is done in an environmentally and socially responsible manner. All our livestock produce (meat, dairy, eggs) is, as a minimum, Red Tractor farm assured, or equivalent. We also ensure all eggs (and egg products) are free-range, and maximise use of fish on the Marine Conservation Society's 'fish to eat' list. Vegetarian and vegan options are available in all our catering outlets and we are constantly working to increase the provision and range of these options. Wherever possible, we champion the use of local suppliers to reduce food miles and support the local economy - all of our milk has been from East Anglian dairies since 2016. The catering teams are focusing on waste reduction and on reducing water and energy use, including through the purchase of new, efficient dishwashers. All food waste is sent for composing.

#### Low energy buildings

Our Enterprise Centre it is one of the UK's most sustainable buildings, with only 446kg of CO<sub>2</sub> per square meter of embedded carbon. It has won an incredible 25 awards including The Guardian Sustainable Business Award, and is the first large-scale building to achieve both Passivhaus Certification and BREEAM Outstanding; two of the highest eco standards a building can meet. The building was designed with a 100-year lifespan and was constructed from local materials throughout. Recycled and upcycled materials were used extensively; the exterior wooden panels were upcycled from our Chemistry and Pharmacy lab benches.

#### SustainableUEA Awards

The SustainableUEA Awards recognise the achievements of staff and students across the university who have made contributions to UEA's sustainability agenda. The awards celebrate their work in making the University and local, regional, and international communities more sustainable for current and future generations. Awards include 'Sustainability Champion', 'Student Leadership', 'Education for Sustainable Development', 'Green Campus', 'Creativity' and the 'SustainableUEA Special Recognition'.

#### **SDG 13 Climate Action**

#### Take urgent action to combat climate change and its impacts

#### Research - 772 publications in SciVal 2018 - 2023

UEA is a world leading climate change research institution and has made the most substantive and sustained contribution to the UN's Intergovernmental Panel on Climate Change (IPCC) of any University in the world.

#### The Tyndall Centre for Climate Change Research

UEA is proud to be home to the headquarters of The Tyndall Centre for Climate Change Research. The Tyndall Centre is a partnership of universities which brings together researchers from across the scientific, engineering, social science and economic communities to develop sustainable responses to climate change. They work with leaders from the public and private sectors to promote informed decisions on mitigating and adapting to climate change. Since it was founded in 2000, the centre has significantly advanced the analysis of emission reduction from all major energy sectors, the understanding of climate impacts, risks, and adaptation options, the public perceptions of climate change, and the governance of climate negotiations and policymaking. A recent example of UEA's impact has been in the development of ScienceBrief; a new online tool which collates and reviews knowledge from peer-reviewed publications to show the current strength of scientific consensus in critical areas.

#### **Climatic Research Unit**

The Climatic Research Unit (CRU) is widely recognised as one of the world's leading institutions in the study of natural and anthropogenic climate change. It aims to improve scientific understanding of the climate system, in addition to studying its interaction with society and to how we can develop the public communication of climate information. The unit has developed a number of the data sets widely used in climate research, including the global temperature record which first brought global warming to the world's attention.

#### **Public Engagement**

#### Helping vulnerable communities adapt to climate change

Some communities are more susceptible than others to the impact of climate change. The DOWN2EARTH project aims to help vulnerable East African communities to adapt to climate change and protect themselves against food and water insecurity. In addition to improving the accuracy of climate forecasting to help communities make more informed decisions, the project seeks to understand gendered decision-making for climate adaptation. UEA researchers from the School of International Development and Tyndall Centre for Climate Research are leading age, gender and ethnicity differentiated consultation in rural communities to ensure that everyone has a voice and the different needs of the communities are heard.

#### **Environmental justice for rural areas**

Climate change policies are often seen as having a disproportionally unfair effect on low-income and rural households. The EU funded Just-Scapes project is a three-year initiative exploring the meaning of "just transformations" in the face of climate change. Research from UEA's Global Environmental Justice group in collaboration with partners across Scotland, France and the Czech Republic, will examine how to address these justice barriers in three different European contexts: the deer-dominated Scottish Highlands; rolling agricultural landscapes in the Czech Republic; and an area of the French Pyrénées dominated by small cattle farmers. Just-Scapes will conduct local interviews, surveys and run transdisciplinary, multi-stakeholder workshops — the results of which will inform ongoing policy consultations in each of the three areas.

#### ClimateUEA public lectures

Part of the ClimateUEA initiative, we are hosting a series of free public climate seminars. Each of the events is hosted by a prominent UEA climate expert and cover a wide range of multidisciplinary climate issues including inequality, health and energy.

#### **Student Activity and Learning**

#### **Teaching**

We are training the next generation of climate change thought leaders. The Critical Decade for Climate Change Leverhulme Doctoral Scholars programme will train researchers to look at real-world data to generate unique insights into why societies succeed or fail to respond to the threat of climate change. Each doctoral project will be invited to contribute a chapter to a book on tackling climate change in the real world. This new generation of scholars will help build the foundations for a healthy planet and a fair society for the future. We also offer a Master's programme in Climate Change, and Climate Change and International Development.

#### SU sustainability review

UEA SU is passionate about incorporating sustainability into all aspects of the student and staff experience. The findings of the annual sustainability review help develop a sustainability action plan; providing a framework for all SU teams to reduce their environmental impacts. Actions include reducing food waste in our catering outlets, introducing paperless tickets in our event venues, and enhancing recycling facilities across campus.

#### **NUS Green Impact accreditation**

UEA SU achieved a 'Good' NUS Green Impact accreditation and a striving for a future 'Excellent' accreditation.

#### **Operations**

#### **Energy and Carbon Reduction Programme**

The University's Energy and Carbon Reduction Programme outlines our continuing commitment to reducing carbon emissions and energy use on campus. We have set ourselves ambitious targets towards a net zero UEA, including over 80 % net zero campus emissions by 2030 and to be 100 % net zero by 2045 or earlier. We have committed to monitoring progress towards targets regularly and to report publicly on progress each year.

#### Saving energy on campus

We are committed to saving energy on campus. We have invested £6.5 million to reduce our carbon footprint — which has included investing in energy saving initiatives such as our combined heat and power (CHP) engines. These save the equivalent of around 5,000 tonnes of carbon per year and the electricity produced is 17 % cleaner than electricity imported from the National Grid. We continue to install new, more energy efficient equipment. We install LED lights which have a lifespan of up to 20 years compared to fluorescent tubes. We recently installed a new 'Solar Bench' on campus. The main university campus has three electric vehicle charging spaces and the UEA Enterprise Centre has an additional two rapid charge points.

#### **Earthshot Prize**

UEA is proud to be one of a handful of UK universities who are an official nominator of the Earthshot Prize; the most prestigious environmental award in history. Nominating institutions are selected for their ability to identify the most impactful solutions to the Prize's five Earthshot categories; five simple but ambitious environmental goals that will benefit the planet and improve the lives of generations to come.

#### **UEA's Climate Stars**

UEA's Climate Stars are a collection of staff, students and alumni who have been recognised for their contribution to tackling climate change and halting environmental damage. The achievements of current Stars include co-founding Youth Engaged in Wetlands; a youth-led volunteer network dedicated to the conservation and sustainable use of wetlands around the world, and a finalist in the Student Political Speech Competition for her speech on the climate crisis.

#### **SDG 14 Life Below Water**

# Conserve and sustainably use the oceans, seas and marine resources for sustainable development

#### Research - 351 publications in SciVal 2018 - 2023

#### Reducing agricultural water pollution

The Wensum Alliance demonstration test catchment project was a programme of research testing the hypothesis that it is possible to reduce agricultural water pollution whilst maintaining output. The application of fertiliser, herbicides and pesticides can be washed through or over farmland, ending up in watercourses. The project demonstrated that it was possible to cost effectively reduce the impact of agricultural water pollution while maintaining food security - using improved farm management and the implementation of on-farm measures across whole river catchments.

#### Working towards water security

Researchers at UEA's Water Security Research Centre work to address the challenges of managing water resources to meet changing human, economic and environmental needs. Their approach to water security focuses on the need to understand the physical and social drivers of global water challenges. Research projects include examining the resilience of fruit production to water and drought risks; facilitating law-based, sustainable water arrangements in the Yarmouk tributary of the Jordan River; and understanding issues of water stress in the semi-arid regions of Africa and Asia – exploring the causes of people's vulnerability to risk and ways to promote resilient, sustainable use.

#### Mapping microplastics in Malaysia

Each year around 10 - 14 million tonnes of single-use packaging ends up in the worlds' oceans. Over time, these plastics are broken to ever-smaller microplastics - which are eaten by, and cause stress to, a wide variety of organisms. Understanding the scale and distribution of microplastic accumulation is vital, however counting microplastics is challenging. UEA researchers are working with partners in Malaysia to develop a cheap and quick method to map microplastic levels and distribution across a range of habitats. Alongside supplying simple equipment, the network is creating a multilingual video manual to aid its use and ensure consistency of practice. Research will be disseminated to policy makers and the general public to highlight the potential environmental risks of microplastics.

#### **Public Engagement**

#### **Promoting sustainable society**

Working in partnership with Anglia Water, The Anglian Centre for Water Studies delivers a range of public engagement events focusing on how society uses and values water, and the need to use water sustainably. A central theme of the collaboration is engaging society — working with local communities to drive changes in the behaviour towards water use and wastage, and offering practical steps to promote water conservation.

#### Water Security professional training

The Water Security Research Centre offers a short course for policy makers and practitioners focusing on the global challenges of water security and how this is intrinsically related to social and political factors. The course explores how to co-create water secure futures and to integrate water security into development planning, projects and policy.

#### **Student Activity and Learning**

#### **Teaching**

Our courses offer a wide variety of teaching on water biodiversity and conservation - developing students' knowledge on how we can sustainably manage this resource for the benefit of all. Students on our Marine Sciences, Geography and other Environment Sciences courses can study modules on Global Environmental

Challenges, Catchment Water Resources, Aquatic Ecology, Environmental Politics and Policy Making, Natural Resources and Environmental Economics, and Biodiversity Conservation and Human Society. Our Ecology and Conservation course explores Sustainability, Society and Biodiversity, and students of Biological Sciences can study Population Ecology and Management. In the School of International Development students can learn about Natural Resources and the Environment and the need for sustainable management.

At a master's level, our Environmental Sciences and Management programmes allow students to focus on Sustainable Consumption, whilst our Applied Ecology and Conservation MSc gives students the chance to benefit from links to major conservation organisations such as the RSPB, CEFAS and the Cambridge Conservation Initiative (CCI).

#### Reducing single use plastic on campus

A priority campaign of the SU is to reduce single use plastics on campus. The student run initiative focuses on raising awareness around the use of reusable bottles and coffee cups, providing these alternatives to students, and offering incentives for their use - such as partial refunds in campus food outlets.

#### **Operations**

#### Reusable cups

We are committed to reducing the use of disposable cups on campus. China cups are offered in most food outlets and recyclable takeaway paper cups are provided for those without their own portable cup. Reusable cups are sold in all outlets, and we offer discounts for staff and students who use their own reusable cup to encourage more people to make the switch. In 2020, 70 % of the number of students, staff and visitors used reusable cups.

#### **SmartCondensing – saving water in science laboratories**

Condensing processes in scientific laboratories typically use large amounts of water. In collaboration with equipment suppliers Radley's, the Schools of Chemistry and Pharmacy have developed an innovative condensing process with the potential to save 264,780 litres of water per year. The SmartCondensing initiative consists of three pieces of equipment - the award winning StarFin eliminates the use of water for cooling, and on its own can save 10 litres of water in 5 minutes; around 30,000 litres of water each year. Furthermore the SmartCondensing process is incredibly energy efficient – the baseplate component reducing the energy required for heating by 40 %.

We are dedicated to supporting sustainable fishing and maximise the use of fish on the Marine Conservation Society's 'fish to eat' list – meaning that fish at most risk of extinction are not caught to prevent overfishing.

#### SDG 15 Life on Land

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

#### Research - 487 publications in SciVal 2018 - 2023

#### **Reducing soil contamination in China**

Soil contamination is a major environmental challenge, and is worsening with the growth of industrial activities and the increased use of pesticides, antibiotics and fertilisers. It also poses potentially severe health risks to the human population – something that is a major problem in China's so called 'Cancer Villages', where rice fields are contaminated with potentially toxic elements. Researchers in our Centre for Ecology, Evolution and Conservation have been researching ways to minimise the risk of chemicals in the soil - exploring the use of biochars for the remediation of pollutants. Their research has demonstrated the use of biochar to mitigate pollutant exposure to "at risk" populations and provided a foundation for the development of national and international guidance on the safe application of biochars.

#### **Protecting Our Pollinators**

Pollinators are vital for plant reproductive success, and influence our food, drink and medicine production. They also make a major economic contribution — estimated at £600-700 million a year in the UK. However despite this, the large scale loss of habitats, along with insecticides, diseases and climate change, mean that Europe's bee population is in serious decline and many species are threatened with extinction. Researchers in UEA's School of Biological Sciences have been researching new ways to gather essential genetic and ecological information on bees, and how farmers, policymakers and businesses can respond to pollinator threat. Their research has contributed to the design of the Wild Pollinator and Farm Wildlife Package in the UK Government's Countryside Stewardship programme. This is an initiative which gives farmers and land managers incentives to manage the farmed landscape sustainably - including measures to aid the survival of pollinators.

#### **Public Engagement**

#### **UEA Wildlife Trail**

The UEA Wildlife Trail was opened in 2012 with funding from the Big Lottery Fund's Community Wildlife programme. There are four sections to the trail covering different habitats and highlighting the biodiversity of the area. Maintained in partnership with local community groups including Friends of Eaton Park and the Yare Valley Society, the trail gives all local residents the chance to experience the natural environment on their doorstep.

#### **Norfolk Festival of Nature**

UEA is proud to be a partner of The Norfolk Festival of Nature — an annual event celebrating the relationship between people and the natural world. The festival brings together many top wildlife organisations including the Norfolk Wildlife Trust, Royal Society for the Protection of Birds, British Trust for Ornithology and Wild Days Conservation, to run events encouraging people to enjoy nature and learn about the need for conservation. Past events have included a Tree Trail of UEA's campus grounds, a festival debate and a nature writing workshop.

#### **Environmental Justice short course**

Our free 5 week online course provided by UEA's Environmental Justice Group covers several issues surrounding environmental injustice, including deforestation, biodiversity loss and climate change.

#### **Student Activity and Learning**

#### **Teaching**

A wide variety of our courses feature content on biodiversity loss and the need for sustainable environmental use and management. Undergraduates on our Ecology and Conservation programme develop skills to complete

ecological surveys, and gain knowledge of conservation management and its interplay with environmental issues. They can complete modules such as Population Ecology and Management, Environmental Politics and Policy Making, and Biodiversity, Conservation and Human Society. Our BSc in Environmental Sciences enables students to explore how the components of the natural environment function and their interaction with society, politics and culture. The course is accredited by the Institution of Environmental Sciences (IES), and offers opportunities for field study in locations such as Greece, Spain, Ireland and Africa. At a masters' level, our MSc in Environmental and International Development studies the interaction between the environment and development policy processes at local, national and international levels. Our MSc in Applied Ecology and Conservation gives detailed learning into ecological survey methods, evidence-based global conservation and statistics.

#### **UEA Sustainability**

UEA Sustainability Society is a student run community passionate about making UEA, and the world, a greener place. The group aims to make sustainable living accessible for all – offering tips and ideas, zero waste workshops, beach cleans, documentary nights, discussion panels and much more.

#### **UEA CAWS**

UEA Conservation and Wildlife (CAWS) Society is a group of nature enthusiasts championing students to explore the plants and wildlife around UEA and Norfolk. The group runs events throughout the year including seal watching trips to Norfolk's Horsey beach, bat walks, bug hotel workshops, nature photography competitions, documentary showings and quizzes to name but a few.

#### **Operations**

#### Planting trees with every internet search

In response to a student-led campaign, UEA has changed the default search engine across computers on campus to Ecosia. Ecosia is the world's largest non-profit internet search engine. It uses ad-revenue generated from searches to plant trees; planting more than 110 million trees in 31 biodiversity hotspots around the globe since it was founded. Making the switch will further enhance the sustainability of our campus – in line with our ongoing commitment to tackling the current climate and biodiversity emergency.

#### The Sustainability Network and Champions

The Sustainability Network consists of staff and student Sustainability Champions that are ambassadors of environmental issues at UEA. They work to encourage friends and colleagues to make small changes to everyday work and lifestyle practices that collectively make a big difference across our campus.

#### Going the whole hog - Silver 'Hedgehog Friendly Campus' award

Building on the success of a previous Bronze award, UEA recently achieved a Silver 'Hedgehog Friendly Campus' award. The Hedgehog Friendly Campus initiative is a nation-wide biodiversity programme celebrating those universities that make positive changes to support hedgehogs in and around campus. The Silver Hedgehog Friendly award involves universities taking measures such as installing 'hedgehog highway' on campus, having a notable local figure as a patron, and engaging with the local community to encourage and support them in making hedgehog friendly garden improvements.

#### **Green campus**

UEA's 360 acres of campus has many varied habitats including five County Wildlife Sites. It is home to over 5,700 different species of plant and animal, including 108 of which are rare or endangered. The campus has won a Green Flag Award for four years in a row. The international award is a sign to the public that the space boasts the highest possible environmental standards, is beautifully maintained and has excellent visitor facilities.

#### **SDG 16 Peace, Justice and Strong Institutions**

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

#### Research - 392 publications in SciVal 2018 - 2023

#### **Global Environmental Justice Research Group**

Our Global Environmental Justice Research Group is an interdisciplinary team focused on the links between social justice and environmental change – in particular promoting environmental justice for those suffering from poverty and disempowerment. Research includes the Indigenous-International Interactions for Sustainable Development (INDIS) project, which works with indigenous communities in Bolivia, Uganda and Papua New Guinea to promote sustainable and equitable development and resource extraction. The Recovery with Dignity project uses historical experiences of recovery in post-disaster India, to explore whether recovery processes that recognise and respect the dignity of socially-differentiated populations are more sustainable. The School, Territory and Post-Conflict: Grounding a Local Peace Culture in Tolima, Colombia is a project working with local school, teachers and community leaders to design a strategy promoting a local culture of peace.

#### Clean Sweep – improving landmine detection

Landmines can lie dormant for decades. Hidden in the ground, they are triggered by pressure and kill peacekeepers, aid workers and children. For recovering countries, their safe detection and removal is just one of the complex issues they face. However their detection is not easy. Typically the process uses ground-penetrating radar to detect reflected signals, but changes in soil density in addition to submerged items such as plant roots or rocks can also cause false alarms. This makes detection a time-consuming, costly and dangerous process. Mathematicians in UEA's Clean Sweep project have been developing algorithms to make clearing minefields safer. Their new image 'stacking' method reduces the effect of ground conditions, minimising the uncertainly in landmine localisation. This work is vital in the development of new mine detection technologies and contributing to global recovery from conflict.

#### **Public Engagement**

#### The Butterfly Project – UEA STAR Society

The UEA Student Action for Refugees (STAR) Society works to support refugees and asylum seekers both locally and nationally. The society recently worked with local arts organisation - The Friend Ship, by taking part in the Butterfly Project. The project aims to raise awareness of the Detention Forum's campaign to end indefinite detention in UK Detention Centres. STAR students ran a craft workshop, encouraging students to create a fabric butterfly with messages of hope and solidarity, whilst discussing the campaign to limit immigration detention to 28 days.

#### Silence is not an option

In a free event, UEA hosted Stuart Lawrence, motivational speaker and the younger brother of Stephen Lawrence who was murdered in a racially motivated attack. In the talk entitled 'Silence is not an option', Stuart, who has over 20 years' experience encouraging diversity and inclusion, spoke about his experiences and about how everyone can contribute to creating a more positive society.

#### **Preserving local heritage**

The UEA East Anglian Film Archive (EAFA) collects, preserves and protects the rich regional audio-visual heritage of the East of England. To mark the 75<sup>th</sup> anniversary of VE Day, the EAFA team created a short compilation film with footage captured by regional filmmakers of life on the home front.

#### **Student Activity and Learning**

#### **Teaching**

A range of our courses and modules promote peaceful and inclusive societies. Our law course offers modules on Human Rights and Policing, International Security, Wars and Humanitarian Crisis and Criminology.

#### **UEA law clinic**

The UEA law clinic is a joint venture between UEA students and staff, members of the local legal profession, and external charities and organisations including Norfolk Community Law Service and Citizens Advice. The team, which comprises of 50 student volunteers, provides free legal advice and representation to the Norwich community – meeting a significant local need as well as boosting the employability of our students.

#### **Eradicate Hate and Report and Support**

Eradicate Hate is a student-run anti-racism campaign designed to educate the community of UEA on what constitutes racist behaviour, to create an anti-racism culture on campus, and to inform students on how to report racist incidents. Recently a drive to promote awareness of the new Report and Support portal was launched – Report and Support is a place for students and staff to report incidents of harassment, assault, abuse or bullying of any kind, and to seek support if this has happened to them. Eradiate Hate continue to lobby the university to ensure those who report racism are kept informed of how the issue is being dealt with, and for the UEA to publish its figures on the number of cases reported, responded to and response times.

#### **Operations**

#### **University of Sanctuary**

UEA is proud to have University of Sanctuary status in recognition of their ongoing commitment to welcoming sanctuary seekers into the university community, and increasing understanding of asylum and refugee concerns. The University of Sanctuary initiative is run by a university-wide steering group, made up of over 30 staff and student members. Their work focuses on promoting a culture of inclusivity and respect through a broad range of activities, including scholarship programmes, education events, and collaborations with local organisations.

#### **Sanctuary Scholarships**

UEA is committed to reducing the barriers that those seeking asylum face assessing Higher Education. Our Sanctuary Scholarships enable those unable to apply for student loans to study. Successful applicants receive a full tuition fee scholarship and a bursary of £3,000 per year to help towards living costs and course related expenses. To date, there have been 6 sanctuary scholarships awarded, with a further two awarded for this coming academic year.

#### **Council for At Risk Academics - CARA**

UEA is a member of CARA, which helps academics at risk of violence to find temporary refuge in universities and research institutions until they return home. UEA has supported two visiting researchers in the School of Mathematics and the School of Education.

Our **Anti-Bribery** and **Anti-Fraud and Corruption Policy** outlines the UEA's zero-tolerance approach to bribery and corruption in all University operations and relationships.

#### **Higher Education and Research Act 2017**

The university adheres to the **Higher Education and Research Act 2017** which has a statutory obligation to maintain freedom of speech. Our **Code of Practice on Freedom of Speech** commits the university to promoting and encouraging free debate and inquiry. It ensures an individual can express their views, even when they are unpopular, controversial or provocative, without risk of discrimination.

#### **SDG 17 Partnerships for the Goals**

# Strengthen the means of implementation and revitalize the global partnership for sustainable development

#### Research

#### Surface ocean observations by the global scientific community

A UEA researcher is Chair of the global group of the Surface Ocean  $CO_2$  Atlas (SOCAT). SOCAT is a community project with more than 100 scientific contributors from around the world. It documents vital information on ocean  $CO_2$  uptake and its variation - a critical measure with oceans taking up one quarter of the global  $CO_2$  emissions from human activity. SOCAT's work provides essential information to international policy makers, in addition to providing research to other scientists and the general public.

#### **Global Challenges Research Fund**

UEA researchers are working with global governments, NGOs, local communities, companies and policy makers worldwide in the Global Challenges Research Fund (GCRF). GCRF is a £1.5 billion fund supporting cutting-edge research that addresses the global challenges faced by low- and middle-income countries around the world. Research programmes have included interventions for older people in Sub-Saharan Africa, indigenous international interactions for sustainable development, Mexico's megalopolis as a model for the key role of watershed protection in sustainable cities, and evaluating iron and zinc bioavailability from biofortified potatoes to reduce malnutrition in the Andean highlands. UEA also has a GCFR funded Global Research Translation Award. The project, called 'Meeting the Sustainable Development Goals: creating innovative infrastructures and policy solutions to support sustainable development in Global South communities', comprises four interconnected subprojects addressing child malnutrition, sustainable food systems, family literacy and micro-plastic pollution.

#### **Public Engagement**

#### **Civic University**

We are proud to be a member of The Civic University Network - a national network which aims to challenge universities to embed civic aspirations at an institutional level, and to work with local communities to build mutually beneficial relationships and drive positive societal change. As a member of the Network, we are committed to maximising our economic and social impact for the benefit of those around us. We are already involved in projects that will ensure we have an inclusive and sustainable economy, drive clean growth and support our renewable energy coastline.

#### International collaborations

Our researchers work in partnership with a wide range of international organisations in support of meeting the SDGs. These include NGOs, charities, governments and civil society organisations. Example are DFID, the UN, World Bank, World Health Organisation, World Trade Organisation, the WWF, British Red Cross and WaterAid to name but a few.

#### Local collaboration

We support and work with large number of local organisations. These include East Anglian Film Archive (EAFA) – working to preserve local film heritage, members of the local legal profession, Norfolk Community Law Service and Citizens Advice in our UEA Law Clinic programme, working with Anglia Water to promote the sustainable use of water, the Wensum Alliance demonstration test catchment project to reduce agricultural water pollution, The Norfolk Festival of Nature, and Norwich Science Festival - a celebration of the ground-breaking scientific research associated with the city.

#### **Student Activity and Learning**

#### International education and partnerships

We understand that working with others is the best way to tackle global problems, and we work in partnership with academics and educational providers from around the world to deliver high quality education and research.

Our national partnerships include local South Essex College, West Suffolk College, City College Norwich and Colchester Institute, in addition to Mountview Academy of Theatre Arts, Brooksby Melton College and The Royal Marsden School; a provider of cancer education for health care professionals. Internationally, UEA is a member of INTO University Partnership Limited, which helps thousands of international students from around the world study at UK institutions – including the UEA.

#### **Aurora Students Organisation**

UEA is the current presiding institution of the Aurora Student Council. The group is made up of representatives from across the Aurora Network, who work to support the Aurora universities' senior management in driving forward its collective ambitions — including those relating to the SDGs. In addition, the Student Council also organises two programmes for student involvement; The Aurora Student Champions, and Aurora Ambassadors, both of which work to promote and embed SDGs in their university.

#### SU partnerships

Our SU has partnerships with several NGOs and influential organisations that promote health, inclusivity and prosperity for all – these include Médecins Sans Frontières, Oxfam, and Amnesty International.

#### **Operations**

#### **SDG Accord**

UEA has been a signatory of the SDG Accord since 2019. The Accord Charter is a commitment from institutions to make an increased effort to deliver the SDGs, and to embed the goals in all aspects of their educational, research, leadership, operations, administrative and engagement activities. It also commits institutions to compulsory annual reporting on their progress.

#### **Aurora Sustainability Working Group**

As a member of the Aurora network, UEA is part of the Aurora's Sustainability Working Group. The group brings together the partner universities to discuss all aspects of sustainability, promote good practice, stimulate joint activities, and to develop mechanisms through to benchmark progress, both individually and collectively. As part of the initiative, the group also launched the SDG Lecture Series in 2019. The lectures aim to give academics and senior doctoral students from Aurora's partner universities a platform through which to share their SDG related research.

#### **Partnership**

Partnerships are at the heart of the UEA working towards the SDGs. Examples of our partnerships include working with Norwich City Council on the Norwich 2040 City Vision initiative striving to make the future growth of the city more inclusive and sustainable, working with local enterprise partnerships to promote business growth and prosperity, and with Norwich County Council and the local NHS foundations in research and treatment innovation in the areas of healthy ageing, young people's mental health, and living with long-term conditions.