

2023/2024
Sustainable
Development Goals
Report



## The Sustainable Development Goals (SDGs)

The United Nations Sustainable Development Goals (SDGs) are a set of 17 goals which provide a shared blueprint for peace and prosperity for people and the planet, now and into the future. They are at the heart of 'the 2030 Agenda for Sustainable Development', which was adopted by all United Nations Member States in 2015.

#### **Our Commitment to the SDGs**

We understand the vital need to address our own environmental impact, and have <u>set a target to</u> <u>achieve carbon net zero</u> (including indirect "scope 3" emissions) by 2030. We have pledged to become a <u>nature positive university</u>, to halt and restore any harm to ecosystems and species. We have also published our <u>nature positive strategy</u>, outlining how we will examine our estate, our supply chain, our teaching and research to make them all nature positive. As a University we are committed to embedding the SDGs across all courses and the experience of our staff and students.

The University of Exeter signed the <u>Sustainable</u> <u>Development Goals Accord</u> in 2019, committing to report on the SDGs on an annual basis and beginning the process of embedding the SDGs in the curriculum, research and wider activities at the University. In addition, we also participate in the annual <u>SDG Teach In</u>.

The <u>University of Exeter joined the prestigious</u>
<u>Worldwide Universities Network</u> (WUN). Through its Research Development Fund, WUN supports collaborative research that echoes the main pillars of the University of Exeter's Strategy 2030 — working towards a greener, fairer and healthier future for all. Its research addresses the overarching themes of sustainable development, including: social justice, human rights, inequality, sustainable world cities and urbanisation, energy transitions, water and food security, mental health, child and maternal health, ageing, and responsible and ethical use of computing, artificial intelligence, information security and privacy.

This year we have been focused on embedding sustainable education into our curriculum, with our Curriculum For Change programme working to develop a distinctive and sustainable model for education by 2030. Alongside Exeter Students' Guild and Falmouth and Exeter Students' Union, we have been awarded joint SOS Responsible Futures accreditation, reflecting a shared commitment to embed sustainability across the curriculum and campuses.

Our world-class research makes a powerful contribution to the sustainability landscape, across a multitude of fields. According to the Reuters Hotlist, five of the world's 21 most influential climate scientists work at Exeter (the only five in the UK), and in total we have more than 1,500 research and education specialists working on forging a greener future.

This includes our <u>Parliamentarians' Guide to</u> <u>Climate Change</u>, launched in October 2024 alongside Peers for the Planet. This guide contains contributions from experts at the University and Met Office, and aims to provide global leaders with an overview of climate science, so that they can make informed, science-based decisions that will bring us closer to our net zero goals whilst stimulating clean economic growth. This crucial guide has now been sent to every British diplomatic mission around the world, and we are currently working on translations into multiple languages.

In addition, we have introduced several key strategies, including our Nature Positive Strategy, Sustainable Transport Strategy, and Circular Economy & Sustainable Resource Management

Strategy. These set out our plans for the next five years, and we will be working hard to engage all areas of our organisation in their delivery. Data has been both a challenge and a catalyst to our progress

this year, as we have strengthened our reporting infrastructure for greater efficiency and clarity. This work is fundamental in helping us achieve our net zero targets.

### **Our Impact**

At the University of Exeter, we seek to use the power of our education and research to create a sustainable, healthy and socially just future. These results show our progress towards the SDGs and our Strategy 2030 goals which are to:

- Lead meaningful action against the climate emergency and ecological crisis.
- Make key breakthroughs to transform human health and wellbeing.
- Lead progress towards creating a fair, socially just and inclusive society.



## End poverty in all its forms everywhere

The Exeter Innovation Accelerator boosts opportunities for innovative STEMM start-ups and SMEs by providing enrolment on to our word-leading accelerator programme, enabling strategic empowerment through the delivery of workshops, seminars, and drop-in surgeries.

The programme covers all aspects of organisational growth, including business fundamentals, sustainable and scalable product development, and finding and managing investment.

<u>SETsquared</u> is a unique enterprise partnership and a dynamic collaboration between six leading research-led UK universities. As a world-leading business incubator, we provide a wide range of highly acclaimed support programmes to help turn ideas into thriving businesses.

Our Institute of Cornish Studies, Social and Economic Research Unit brings together the latest research into the social and economic issues affecting Cornwall today. We know that beyond Cornwall's scenery and visitor attractions, we have considerable poverty and inequality.

The <u>Centre for Social Mobility</u> is the UK's only university centre dedicated to improving social mobility through evidence-informed practice and policy. The centre's goal is to help disadvantaged young people so they do better at school, access higher education and succeed at university.

#### **Local Start-Up Assistance**

The University of Exeter provides financial assistance to the local community to support the start-up of financially and socially sustainable businesses.

Our <u>Green Futures programme</u>, which ran from July 2023-March 2025 in partnership with SetSquared, supported the sustainable tech sector in the South West. In addition to business support, training and upskilling, we awarded funding to start-ups in the community to help them develop further bids for funding.

In addition, we award philanthropic funding to student and recent graduate start-ups through our **Student Startups Incubation programmes**. The Student Startup team focus on identifying and fostering the startup ambitions of University of Exeter Students across all campuses, colleges and disciplines. Our programme helps students to develop a more entrepreneurial mindset and equips them with the practical toolkit necessary to inspire innovative ideas and create entrepreneurial solutions. Students learn how to undertake rigorous market validation and develop and launch viable and sustainable new enterprises, with the aim of having positive social, environmental and economic impact. This is done through a combination of interactive workshops and events, 1-2-1 advising and by facilitating opportunities for networking and collaboration. Our goal is to provide

inspiration, training, guidance, support and funding opportunities to promote, nurture and enable entrepreneurship during university and post-graduation.

#### **Funding and Scholarships**

Because we're determined not to let financial worries put anyone off studying, University of Exeter offer bursaries to complement government loans for low household income families, scholarships for exceptional students, sportspeople and those meeting other criteria as well as expert funding advice and guidance.

University bursaries and scholarships, include:

<u>The Sanctuary Scholarship scheme</u> enables individuals seeking asylum and refugees who are not able to access student finance to study at the University of Exeter.

<u>Green Futures Scholarships</u> - These awards are available to support exceptional candidates from Low and Lower Middle Income Countries to pursue their academic and career goals - combining education for sustainable development with global citizenship to deliver equitable and sustainable Green Futures around the world.

**Care Leavers & Estranged Students Bursary** 

**Access to Exeter Bursaries** 

**Exeter Excellence Scholarships** 

The University, in partnership with its alumni community, has also created a <u>fund</u> to offer additional financial support if you are experiencing unexpected financial hardship which is affecting your ability to study within your current academic year.

<u>OPALS</u> is a six-year programme of foundational and applied research, launched in October 2021, which aims to support sustainable human-landscape interactions across Africa.

Led by the University of Exeter's Global Systems Institute working in close collaboration with our partners across the continent, the £2.3 M programme is jointly funded by the University of Exeter, Sarah Turvill and Oppenheimer Generations Research and Conservation.

**Exeter Research Centres** are interdisciplinary groupings of our researchers who are working with private or public sector organisations to solve global issues.

Wellcome Centre for Cultures and Environments of Health are committed to engaged research that enables health and well-being. Flagship projects include the <u>DeStress Project</u> an interdisciplinary research programme exploring the links between poverty and mental health. We work with patients and healthcare providers to understand how patients can be better supported within primary healthcare and have developed resources which enable this.



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

Through networks, events and projects, we work directly with the community, local farmers and food producers to connect and transfer knowledge.

<u>Exeter Food Network</u>- connecting researchers from across the University with third sector organisations, policymakers, interested members of the public and other stakeholders. Hosting <u>events</u> across the year, such as:

<u>The Farm Carbon Toolkit seminar</u> (May 2024) exploring the work of the Farm Carbon Toolkit and work with farmers over the last 12 years helping to reduce greenhouse gas emissions and improve soil health. The soil carbon project, Farm net zero and other participatory work which aims to showcase farmers' ability to be part of the climate solution.

<u>Exeter Food Network Penryn Food</u> research showcase (June 2024) featuring projects focusing on food systems, community growing and presenting work that engages with food in and beyond Cornwall.

Balancing Food Security and Self-Sufficiency for a better Environment (Feb 2024) a talk by Jake Fiennes, Director of Conservation at the Holkham Estate, Norfolk and author of Land Healer: How Farming Can Save Britain's Countryside.

We work in places around the world, conducting research all along the food chain, examining the dynamics of contemporary food systems, the legacy of historical foodways, and the possibilities for healthier, greener, and more equitable food futures.

The <u>UK Farmer Discussion Network</u> includes over 170 independent farming groups across England, Wales and N.Ireland - a unique **community of practice** homed in the University Land, Environment, Economics and Policy Institute (LEEP). Launched in 2018 to promote open discussion, **to enable farmers** to debate and consider the current issues facing the sector in a neutral non-political space.

<u>Upstream Thinking</u> – South West Water, assisted by University of Exeter researchers, work with **wildlife organisations and landowners** to promote better water quality. Funding organisations like the Devon

Wildlife Trust to employ farm advisors to support farmers/landowners to farm in a way that's good for water quality, wildlife, and their bottom line – using less fertilizer, nutrients, and pesticides. It's a program that benefits water quality, wildlife, and the farmer financially.

The <u>UK Sustainable King Prawn Project</u> is led by experts from the University of Exeter in partnership with the University of Reading and Rothamsted Research. Exploring the potential to create a new, sustainable and more environmentally-friendly king prawn farming sector using renewable energy technology.

It aims to help position the UK as a global frontrunner in this field and provide innovative diversification opportunities for UK aquaculture and agriculture.

**Community events** included a 3D model of a farm featuring Anaerobic Digestion and a king prawn Recirculating Aquaculture System, which was displayed, to illustrate the project's objectives at the May 2024 – University of Reading's Community Festival. You can take a VIRTUAL tour of our commercial scale demonstrator via the project website. **In person** tours will be introduced in Spring 2025.

We provide a free **MOOC** *Future Food: Sustainable Food Systems for the 21*<sup>st</sup> *Century*, available to staff, students and the wider community through our platform <u>Learn Exeter</u>.

Academics from the Centre for Rural Policy Research Centre for Rural Policy Research took part in Rootstock — a one-day annual conference bringing together expert scientists and practical farmers to discuss forward-looking, profitable, sustainable farming in tune with natural processes.

In addition to the above projects and networks we provide access on food security knowledge and sustainable aquaculture/agriculture to farmers, food producers and other communities.

Research carried out by Exeter Food members on food insecurity and hunger engages with communities around the world as well as those in the immediate environs of the University's campuses, and includes historical, as well as contemporary, work on famine and food poverty. Work in this area includes research on how food systems and food access are not only shaped by structural inequities, but also affected by dynamic processes such as shifting political landscapes (e.g., Brexit), national and global economic events (e.g., the financial crisis of 2007-2008 and subsequent austerity policies), environmental forces (e.g., the climate crisis) and public health events (e.g., the Covid-19 pandemic).

The <u>Collaborative Centre for Sustainable Aquaculture Futures</u> (SAF) is a joint initiative between the Centre for Environment, Aquaculture and Fisheries Science (Cefas) and the University of Exeter.

SAF seeks to develop further **collaborative partnerships** with academia, governments and industry, both nationally and internationally, to establish a network of world leaders in the fields of **aquatic animal health, food safety,** and **protection of the aquatic environment**.

WorldFish is partnering with <u>Cefas and the University of Exeter</u> to carry out research on aquatic animal health to help harnesses the potential of fisheries and aquaculture to reduce hunger and poverty. <u>WorldFish</u> is an international, non-profit research organisation that harnesses the potential of fisheries and aquaculture to reduce hunger and poverty. To address the global challenges faced in aquatic food security and safety, sustainable intensification of aquaculture production will require innovative research, and the translation of this research into practical solutions.

<u>BEE-STEWARD</u> a free to download computer software tool **designed to help farmers and land managers** see how pollinator-friendly management on their farm could affect bee survival and pollination rates.

By forecasting and comparing the effects of different land management such as growing different crops, or pollinator-friendly options such as wildflower margins on bee conservation and food production, BEE-STEWARD can help farmers to make the most of their land for bees and for business.

Researchers at the <u>University of Exeter's Business School</u> conduct place-based research which prioritises collaboration with local communities. By directly working with farmers, businesses, and policymakers, they are fostering a shift towards sustainable and socially responsible food systems, from the ground up. You can read more about their work <u>here</u>

#### **Our Retail and Catering service**

The <u>Sustainable Restaurant Association</u> help organisations to move towards a better food system in many areas of their business helping to tackle sustainability issues, including the climate crisis, world hunger, food waste and drought. The University is proud to have achieved the highest rating, scoring highly in celebrating local and seasonal food; supporting global farmers, particularly though

our work with the Fairtrade Foundation; treating staff fairly and through efforts to reduce, reuse and recycle.

The University is committed to supporting, using and promoting Fairtrade within the retail and catering outlets and services on campus and works towards a number of goals set by the <a href="#Fairtrade Foundation">Fairtrade Foundation</a>

#### In addition:

- Our Market Place Forum shop is listed on the <u>Too Good to Go</u> app, reducing food waste
- In March 2024, a <u>community fridge</u> opened at the Forum Library. This is a collaboration between the
  University and <u>Foodsave</u> CIC. The fridge is restocked daily with surplus food from local businesses, provided
  for free to help reduce food waste. Between March and August 2024, the fridge <u>redistributed over 1 tonne</u>
  of food, equating to 477 and saving 3,635kg CO2 e.
- In collaboration with the Grounds team our in-house <u>kitchen garden</u> has been expanded, now using both traditional planting and hydroponics to provide fresh, sustainable produce year-round, promoting local, campus-grown food.
- Track Food Waste across the University

<u>Grand Challenges</u> is a project week, in which University of Exeter students work in interdisciplinary groups with other like-minded students to design innovative solutions to real world challenges linked to the UN's 17 Sustainable Development Goal. Top academics and invited speakers will share their views and help students apply their skills and knowledge to a real-life problem.



# Ensure healthy lives and promote well-being for all at all ages

The <u>Children and Young People's Wellbeing@Exeter</u> Research Network aims to advance research and understanding into the physical and mental wellbeing of Children and Young People (from prenatal to 25 years of age). The network is committed to promoting impactful, interdisciplinary research and engagement with key stakeholders in CYP research and policy. Our <u>Engagement & Impact Awards</u> help the co-development of interdisciplinary grant applications and Patient and Public Involvement and Engagement activities. Awards in 2023/2024 include pilot studies around:

Sustainable school food practices that are nutritional, environmentally friendly, and financially viable

The impact of transitioning to plant-based diets on the physical and mental health of children and young people

Increasing incidental physical activity in primary school children

A new Centre focused on delivering research on climate change and its impacts on health that will address climate-environment-health inequalities across each life stage is being created by the University of Exeter. Together with the UK Health Security Agency (UKHSA), the National Trust, Forest Research, the Met Office and other partner organisations, the £10m Centre for Net Positive Health and Climate Solutions is funded by UK Research and Innovation (UKRI). The centre will focus on finding net positive solutions to the well-established negative impacts of the climate crisis and associated environmental changes in human health

**Exeter Research Centres** are interdisciplinary groupings of our researchers who are working with private or public sector organisations to solve global issues.

Wellcome Centre for Cultures and Environments of Health are committed to engaged research that enables health and well-being, our projects have brought researchers, public partners, and health organisations together to address key health challenges, including: the health impacts of loneliness and social isolation; the value of different forms of evidence in health policy; the impact of relationships on children's health; and community access to – and involvement in – research and data governance. Flagship projects include Connecting3Worlds (C3W) a Wellcome Trust Collaborative Award led by Prof. Dora Vargha (University of Exeter, PI) Dr. Sarah Marks (Birkbeck, Co-I), and Prof. Edna Suarez-Diaz (UNAM, Mexico, Co-I). Connecting3Worlds pioneers a new history of global health that, for the first time, incorporates the socialist

world during the Cold War and after. It identifies the particular health cultures produced by socialism across Africa, the Americas, Asia, and Europe; and explores the impact and legacies of socialist internationalism.

The <u>NIHR Exeter Biomedical Research Centre</u> carries out high-quality scientific research into the health areas that are most important to our communities, putting people at the centre of our work. Helping academics and patient-facing experts like doctors and other health professionals bring their research to labs, ensuring that scientific discoveries find their way, or translate, to the bedside or clinic.

<u>LearnExeter</u> hosts MOOCs (massive open online course) with a number of courses free and available to staff, students, the public and health professionals.

Our <u>Wellbeing Services</u> are here to help students with their wellbeing and mental health whilst studying with us. Our supportive team is available to students whether based on our St Luke's or Streatham campus (if you're based in Cornwall, please go to our <u>Cornwall wellbeing services pages</u> to find out more). We offer a range of psychological therapies, workshops, self-help services, support with mental health issues and wide-ranging support on wellbeing.

We are a <u>Mindful Employer</u> and we are working towards achieving the <u>University Mental Health Charter</u>, which demonstrates our commitment to better mental health at work.



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

Our Education and student experience is a theme of **Strategy 2030**.

#### **Future 17: Powered by Exeter and QS**

The University of Exeter and QS are partners in delivering a transformative educational partnership between the world's leading universities and global organisations, to empower and enable the next generation of students to answer the questions that will shape today, tomorrow and the future for us all.

In an era of global challenges, the 17 UN Sustainable Development Goals have become a key framework to articulate the issues that face humanity and encourage mobilisation of concerted efforts to end poverty, fight inequalities and tackle climate change. While many organisations have taken steps to embed these goals into their

strategies, at the University of Exeter we are committed to going further. We believe in the power of our brightest young minds coming together to tackle these global challenges whilst developing 21st century skills to enhance their education.

Our vision, in partnership with QS, is to build a global ecosystem that connects students from multiple universities with international organisations to generate insights and develop solutions that help address SDGs. To connect the next generation to the most complex challenges of our time and generate actionable solutions.

#### Free access to up-to-date environmental information and resources

The <u>Green Futures Network</u> is a free way for any organisation – businesses, community groups, local government, charities – to access up-to-date environmental information, from cutting edge research to brand new resources, and contribute to collective approaches to the emerging climate and ecological emergencies and the changes they are bringing.

Chaired by our Sustainability Education Advocates, leading projects and initiatives to embed sustainability education across our formal and informal curriculum. The University's <u>Sustainable Education Action Plan</u> includes:

Responsible Futures a change-making programme and accreditation framework, co-led by students, staff, academics, and the students' unions to embed sustainability across all aspects of education. The University of Exeter, Exeter Students' Guild and Falmouth and Exeter Students' Union have been awarded joint SOS Responsible Futures accreditation. Exeter is the only Russell Group university to currently have full accreditation.

The <u>Sustainability Curriculum Mapping Project</u> aims to map the <u>UN Sustainable Development Goals</u> (<u>SDGs</u>) and the three pillars of <u>Transformative Education</u> across the formal curriculum.

Climate Literacy – piloting the use of Sulitest to assess student knowledge, skills and mindset on sustainability.

The **Curriculum for Change** programme is working to realise our strategic commitment to develop a distinctive and sustainable model for education by 2030. It will be exploring different initiatives further in 2024/25, such as reviewing all undergraduate programmes.

Introduced in 2021, the <u>Transformative Education Framework</u> (TEF) supports educational initiatives relating to its three pillars: Inclusive Education, Racial and Social Justice and Sustainability.

Under the Sustainability pillar, the TEF is working to embed the UN SDGs, promote social and ecological change and address climate change throughout the curriculum.

Through the Transformative Education Framework we will enable our student and staff community to work on embedding the SDGs in all our taught programmes.

During 2023/24, a wide range of resources have been created, such as:

- New SharePoint resources on Education for Sustainable Development and a new version of Decolonising Sustainability
- New SharePoint resource on COP outlining information on the various projects led by the University of Exeter
- Two Education for Sustainable Development student voice workshops for internal and external staff
- Three Transformative Education Curriculum Enhancement Programme level workshops
- A seminar series, featuring topics such as Addressing the Climate Emergency and Sustainability in Higher Education.

<u>Green Consultants</u> is an award-winning programme, aligned with the UN Sustainable Development Goals, designed to provide students with additional skills and experience required to work in the highly competitive environmental and sustainability sector.

<u>LearnExeter</u> hosts MOOCs (massive open online course) with a number of courses free and available to staff, students and the public.

The <u>SDG Teach In</u> campaign calls upon educators to include the SDGs within teaching, learning and assessment, during the campaign and beyond. In 2024 Exeter ranked fourth (first among universities) for the number of students reached, and sixth (third among universities) for the number of educators pledged.



## Achieve gender equality and empower all women and girls

Our <u>vision</u> is to create a positive and inclusive working environment that is a great place to work. Promoting and embedding gender equality is central to this vision and our progress in this area has been recognised with our institutional <u>Athena Swan</u> Silver Award.

Following on from the University's engagement in these gender equality accreditations, the Gender Equality Group (GEG) meets termly to discuss a range of gender-related issues affecting staff and students at our institution and monitor our <u>Gender Equality Action Plan</u>.

<u>Women on Boards (WOB)</u> aims to provide further support to achieve gender equality at the University, in particular at the Executive level, in addition to supporting our commitment to reducing the gender pay gap. WOB will also support our Athena Swan applications in recognising a solid foundation for eliminating gender bias and developing an inclusive culture that values all staff.

The <u>Women in Climate (WiC) Network</u> is a joint University of Exeter and Met Office initiative to support the retention of women in climate science and promote diversity. Women in Climate is a bottom up initiative to support and encourage the retention of women in climate science.

Shame and Medicine an interdisciplinary research project funded by a Wellcome Trust Collaborative Award. The project is led by Luna Dolezal (University of Exeter) and Matthew Gibson (University of Birmingham). The overall aim of the project is to research the role of shame in various aspects of health and medicine, including clinical practice, patient experience and medical student education. Shame and Medicine is engaging a team of researchers in social sciences, cultural studies, medicine and philosophy to investigate the philosophy and cultural representation of shame in medicine, while also doing empirical studies looking at shame experiences in current healthcare practices and professional culture, particularly exploring how race, ethnicity, class and gender impact on the experience of shame.



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

#### Optimising water consumption across our campuses through:

- Rainwater harvesting
- BREEAM (Building Research Establishment's Environmental Assessment Method) implementation for all developments
- Sustainable lab practices
- Our Water Resilient Policy aims to maximise our influence in reducing our water use, ensuring
  sustainable supply of water and managing wastewater discharge. Surface water runoff contributes to
  negative environmental impacts by carrying pollutants into waterways, causing water quality
  degradation, habitat destruction and increased flooding.
- Biophysics water upgrades. An investment of £28,300 allowed for the purchase of sustainable water equipment, such as a recirculator and glass washer, saving an estimated 23,520 litres of potable drinking water each year.
- Prioritising <u>water conservation</u> in our labs
- Drought tolerant planting

#### Water saving surveys and optimisations

In 2024, South West Water surveyed the domestic water systems in all of our buildings across Streatham and St Luke's campuses to repair water leaks and identify further saving opportunities. They reduced flowrates, replaced inefficient control devices and repaired taps and toilets to reduce consumption to its minimum. In total, they repaired 1,166 leaks and installed 8,185 devices.

Further work is underway to review and optimise the water and energy used in our specialist research and teaching activities. The research undertaken requires various purified and treated water types that are all produced locally on campus. Some systems are outdated and have inefficiencies that need to be addressed. Specialists have been engaged to review the operation of these systems for possible water and energy savings. To minimise potable water usage and waste, future construction projects must adhere to the stringent water use targets outlined in our **Sustainability Design Guide**, ensuring water consumption is kept to an absolute minimum.

We work with our community, involving and providing education in good water management practices, (such as water treatment, flood control, protecting water quality and minimising pollution) and promoting conscious water usage (being mindful of how water is used, reducing waste, and promoting efficient practices) to protect water resources for the present and into the future.

<u>Tidelines CIC</u> brings together the arts, science, climate action, and research by **working with communities and the public**. Through its projects, Tidelines has created ways to celebrate and care for the Exe estuary, by adapting and responding collectively to the impacts of climate change on the local coastline and waterways.

Storying Water is an arts-led research project to explore our water system – what it means to people, how it works, challenges involved in maintaining it, species affected by human uses of it, why its future resilience is threatened, and, in the face of environmental emergency, what is needed to improve and protect it into the future. Collaborating with scientists, and with other experts, to translate their research, experience and ideas into compelling audio storytelling to engage diverse audiences in the water systems and its environmental resilience.

The EU funded <u>Enforce</u> project aims to enhance environmental compliance **by integrating citizen science** with innovative technologies.

The partnership between Westcountry Rivers Trust and the University of Exeter focuses on mitigating agricultural impacts on water quality in the East Devon Catchment.

Leveraging tools such as GIS mapping from satellite land cover data and Serious Gaming projects to enhance regulatory targeting and compliance guidance.

Additionally, a Citizen Science Investigation scheme engages volunteers in monitoring water quality.

<u>Citizen Phage Library</u> Ben Temperton's team worked with Exeter Science Centre to run a **citizen science project** on phage therapy. The citizen 'phage hunters' collected water samples which have been screened in the lab for phages - viruses that kill bacteria. These phages are stored in the <u>Citizen Phage Library</u> and will be used to tackle antibiotic resistant bacteria.

The <u>LCAT</u> brings together climate models, adaptation options, and health impact **evidence to help local communities** build resilience to climate change. Codeveloped with, and for, local authorities and local service providers.

Users are guided through how changes, such as stronger storms, more high impact flooding, an increase in heatwaves and severe droughts will impact at a local level and what those hazards could mean for public health, infrastructure, or communities.

<u>Blue Heart</u> is a 6-year project, funded by **Defra's** Flood and Coastal Resilience Innovation Programme (FCRIP), which aims to champion innovative approaches to flood resilience and climate adaptation in Eastbourne and southern Wealden.

The project will adopt smart technology and the Internet of Things to establish an integrated water management system for these **communities**, which will monitor water levels in real-time and incorporate forecasted rainfall to issue flood warnings and alerts, and calculate the optimum response - to either store or release water.

These solutions will utilise existing infrastructure more effectively and provide economic, environmental, and social opportunities for local people whilst achieving lower whole life carbon than a traditional capital flood risk management scheme.

The <u>Sideshore Sea Safety project</u> was developed as a community interest project to deliver safer sea swimming and water safety to primary schools within the Exmouth Learning Community and has grown and evolved rapidly

due to popularity and demand and is now delivered to **over 1200** children a year, from 26 Schools (both Primary and Secondary) from across Devon.

The project takes 3 strands of education and pulls them into an unforgettable day-long experience.

- Sea Safety Learn how to swim safely in the sea understanding tides, currents, weather, self-rescue and risks.
- Environmental Education Learn how to respect the ocean environment and understand the threats from sewage, pollution, plastics and other human activity and become the change makers of tomorrow (co-developed and delivered by Exeter University).
- Art Workshop In this workshop we help children to reflect and build deeper understanding of the ocean through the use of creative art.

<u>900 children</u> were taught about the Exmouth marine environment, by Exeter University, as part of the inspiring (which will be back bigger and even better in 2025).

<u>Upstream Thinking</u> Our work on the award-winning 'Upstream Thinking' project-has restored and protected over 100,000 hectares of land across the South West, enabling substantial cost savings and improving water quality and biodiversity. The long-term ongoing programme has been running for over a decade, established through close collaboration with expert delivery partners, including Westcountry Rivers Trust, Devon and Cornwall Wildlife Trusts, South West Peatland Partnership, and the University of Exeter.

Upstream Thinking approach to keeping our drinking and bathing water clean and affordable by stopping pollutants entering our rivers and streams. Ensuring that our waterways are clean and reducing pollution for shared local wildlife and for people. By **working with landowners** it means that we all benefit from cleaner water, better water flows throughout the year, and we can create more space for nature on farmland.

Community and landowner engagement is a constant theme. Farm Advisors have developed long-term relationships with farmers, supporting them with tailored advice and access to funding. Broader public engagement through walks, workshops and events has built shared ownership of water and biodiversity challenges across the South West. Wider community engagement is achieved through free public events, educational outreach and communication campaigns that raise awareness of the programme's benefits and encourage local action and advocacy.

A project working to improve resilience to flooding in 26 communities across Devon has received a prestigious award. The <u>Devon Resilience Innovation Project</u> (DRIP), which includes experts from the University of Exeter and which helps neighbourhoods to be better prepared for flooding and to recover more quickly from flood events, was among the winners at the Environment Agency's Flood & Coast Excellence Awards.

It was presented with an award in the 'Surface Water Management' category, recognising DRIP's work to increase flood resilience in Stokeinteignhead, including natural flood management, property flood resilience, **community engagement** and a surface water flood forecasting pilot project.

This work has been led by Devon County Council, with support from a number of partners including Exeter University, Westcountry Rivers Trust, JBA Consulting, Kisters and the University of Plymouth.

<u>ULTIMATE</u> - a 4-year Horizon2020 Project (2022-2024) under the EU Water in the Context of the Circular Economy programme. Creating economic value and increase sustainability through good water management and conscious water usage via utilising resources within the water cycle. ULTIMATE brings evidence-based impacts and benefits of WSIS to life for decision makers and influencers.

The ULTIMATE project brought together diverse groups, including industrial partners, water utilities, policymakers and the general public. A unique tool that ULTIMATE used was the "immersive narrative experience," designed to engage local people in the project's case study locations. This method of communication helped to "stimulate the needs and interest of citizens," demonstrating the project's relevance to local communities as well as industry experts.

Exeter's research and partnerships also supports off campus water conservation.

Using water wisely and efficiently to protect this vital resource for current and future needs. It involves projects such as; ULTIMATE - reducing water waste through understanding of reusable resources in industrial wastewater; The Sideshore Safety Project, CREWW and AMR projects around understanding and preventing pollution ensuring sustainable management of water supplies off campus.

A new study <u>undertaken by scientists from the University of Exeter</u> has looked into the effects of beavers, and of other nature-focussed methods employed up stream on flooding risks.

They have discovered that during peak flows, the result of the creatures' effective damming, coupled with manmade leaky dams built by staff and volunteers, has **reduced the flow of water in the Bircham Valley by 23 per cent.** It is thought that the research is the first of its kind to study the effects of the animals in an urban environment.

<u>CREWW research</u> focuses on pressing issues facing the water and waste sectors to ensure we conserve water, including:

- How to protect drinking water supplies from pollution
- The safe treatment and disposal of wastewater (including issues such as micro-plastics and antimicrobial resistance)
- Ensuring we have enough water to cope with a growing population and climate change
- Protecting the water supply network
- Predicting and preventing pollution from the wastewater network
- Understanding how catchments respond to flooding and drought, to improve future resilience.

#### Projects include:

The <u>Understanding combined sewer overflow (CSO) discharge impacts</u> –CSO spills (chemical and microbial) pilot studies to understand scale and nature of the problem of CSO followed by an in-depth study in collaboration with SWW working towards recommendations and establishing a modelling technique for future use.

<u>Nature for Climate Change, Peatland Grant Scheme</u>. Building on a decade of research case studies at the University of Exeter (Upstream Thinking 1, Mire-on-the-Moors) this project continues to support and evaluate peatland restoration in collaboration with the South West Peatland Partnership. Peatlands are globally important ecosystems that offer us a wide array of valuable services, such as **providing clean water, flood alleviation** and supporting biodiversity.

The <u>Centre for Water Systems</u> (CWS) is internationally renowned for its research into water systems engineering. Supporting, developing and operationalising sustainable water management is a key challenge for

the future that is strongly addressed by the Centre's activities. This includes research into water supply and distribution systems, waste water and urban drainage systems, flood risk management, and smart water systems, to name a few.

Cooperation around water security is vital, our work informs local, regional, national and global governments.

The <u>Collaborative Centre for Sustainable Aquaculture Futures (SAF)</u> is a joint initiative between the **Centre for Environment, Aquaculture and Fisheries Science (Cefas)** and the University of Exeter.

With the world's population set to increase to almost 10 billion by 2050, providing future generations with safe and sustainable farmed seafood is one of the critical challenges researchers working with the centre will

address. Cefas is an executive agency, sponsored by DEFRA.

The <u>Centre for Resilience in Environment</u>, <u>Water and Waste</u> (CREWW) is the first purpose built transdisciplinary centre, containing specialist laboratory facilities for water, waste, soil and vegetation analysis and space to facilitate collaboration between industry, **policy makers** and our academics. CREWW also accommodates new, state of the art field monitoring equipment which we will use to improve our understanding of the interactions between the water sector and the natural environment. This is vital if we are to make informed, sustainable choices about **how we manage water supplies in the future**.

CREWW supports existing research excellence by providing facilities which will:

- Contribute to research that is part of delivering the Industrial Strategy and Defra's 25 year
   Environmental Plan
- · Strengthen transdisciplinary research by bringing researchers from across academic disciplines
- Enhance strategic research partnerships by providing collaboration and training facilities where industry staff can work with our own researchers

Exeter expert, Professor David Butler, co-authored the <u>NEPC public health report</u>, called Testing the waters: Priorities for mitigating health risks from wastewater pollution, which was published recently. The report, the first of its kind to assess how potential health risks from polluted open waters can be mitigated, calls for the national wastewater infrastructure to be upgraded to protect public health.

The recommendations include engineering interventions to prioritise wastewater asset management, enhanced public health monitoring and updated bathing water regulations.

The report outlines **15** recommendations for government, regulators and industry to reduce these risks and highlights solutions to achieve this.

By bringing together engineers from industry and academia, NEPC provide valuable depth of expertise. This helps **government** navigate increasingly complex challenges.

The <u>ULTIMATE</u> project brings together diverse groups, including industrial partners, water utilities, policymakers and the general public.

Key achievements included better understanding of reusable resource in industrial wastewater, development of a methodology to facilitate the industrial symbiosis for recycling and sharing the resources among business

oriented industrial ecosystem. The Centre for Water Systems (CWS) and the Centre for Simulation, Analytics and Modelling (CSAM) at the Faculty of Environment, Science and Economy (ESE) have jointly contributed to the scientific breakthrough in ULTIMATE.

The focus is on European policy and regulation, impacts of national/regional legislation are also considered.

**University of Exeter** <u>antimicrobial resistance research</u> (AMR) has led to new understanding and has informed action. Findings include identifying who is most at risk, and what concentrations of antibiotics are unsafe in our waters and could trigger the evolution of resistance. Exeter's One Health research approach combines a wide range of expertise to address this complex issue from multiple angles.

The group's research has had a number of policy influences in the UK, the EU and internationally. Professor Gaze has worked with the United Nations Environment Programme, co-authoring a report on AMR, coinciding with a commitment to tackle the issue from an environmental and health perspective.

Current project, **Assessing the risk of wild swimming**, works with the campaign charity Surfers Against Sewage, conducting the **Beach Bums** survey. The team found that surfers were more than three times as likely to carry resistant E. coli in their guts than non-swimmers. This high impact work **influenced policy** and was cited by both the **UK Government and World Health Organization** and has led to the **Poo-Sticks project**, which over the summer collected over 300 fecal samples from freshwater wild swimmers to understand more about how AMR bacteria enter our bodies.



# Ensure access to affordable, reliable, sustainable and modern energy for all

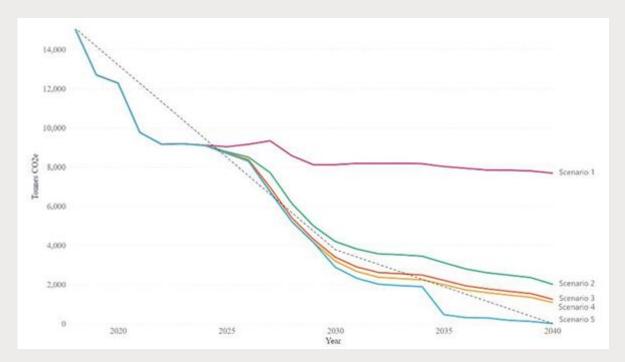
The Energy Policy Group (EPG) is the only academic research group in the UK focusing on enabling government-level policy and regulatory change that is essential to transforming the system by taking a holistic approach to integrating operations. We're an established thought leader in this sector with the evidence and ideas essential to enabling transformation. Our research has already been translated into recommendations adopted by energy policymakers.

We place sustainability and change at the heart of debates about energy policy and governance. We work collaboratively with stakeholders and researchers on the economics and politics of energy to find new and innovative approaches for enabling the transition to a low carbon, sustainable and affordable energy system.

**Exeter Energy** brings together over 140 individuals from across all disciplines at the University of Exeter to collectively make sense of and facilitate transformation to sustainable energy systems. Our approaches range from developing cutting -edge technology and ideas, to understand how economic, social, environmental and political constraints can be overcome.

University Investment Policy excludes investments in entities that are involved in the extraction of fossil fuels.

**Heating decarbonisation** Most of our existing buildings rely on fossil fuel heating that add to our emissions. Our **Infrastructure Decarbonisation Masterplan** is an evolving programme to deliver projects focussed on carbon reduction relating to energy use across our estates and transitioning away from fossil fuel heating and has completed a substantial amount of work to progress the decarbonising of our heat network. It sets out a plan to 2040 to fully decarbonise energy consumption and includes sections on interventions, tested scenarios and their outcomes, and an implementation plan (sections 6 to 9).



This figure illustrates the carbon emissions for each scenario over time compared to the University target line.

Scenario 1 will benefit from the decarbonisation of the grip until about 2025, however, as gas consumption will remain high, so will carbon consumption.

Scenario 2 follows the University's carbon targets until about 2030. As the electric boilers have higher energy usage than ASHP emissions and no fabric improvements are made, emissions remain higher, even as the grid decarbonises.

Scenarios 3 and 4 have similar carbon trajectories and meet the University's targets until 2034.

Scenario 5 meets the University's target by utilising energy produced by a large-scale PV farm. This could also be achieved by purchasing 100% renewable energy. Scenario 5 also has lower carbon emissions from 2029-2035 by maintaining the existing renewables Power Purchasing Agreement (PPA).

The University is also increasing on-campus renewable energy generation through programmes to install additional ground-based and roof-mounted PV and planning permission has been received to install a wind turbine to supply energy for our Penryn campus.

In addition to building decarbonisation, the University is undertaking multiple programmes of work to manage its scope 3 emissions and embed sustainability into University culture:

- Commuting <u>Sustainable Transport Strategy 2024-2030</u>
- <u>Procurement</u> prioritising decarbonisation of our supply chain and embedding 20% weighting for sustainability into tenders
- Investments
- Waste see strategy below <u>Circular Economy and Sustainable Resource Management Strategy 2024-</u>
   2030
- Water Water Resilient Policy in place with Water Management Strategy in development

- <u>Travel Policy</u> ensuring that travel for work and study is undertaken in accordance with our values and to meet wider University targets and objectives relating to sustainability, cost, compliance, equality, diversity, and safety requirements.
- Research Footprinting Tool developed in-house to help identify areas of high GHG impact
- <u>Laboratory Efficiency Assessment Framework (LEAF)</u> reducing environmental impact of laboratories

District Heating Project We are undertaking Royal Institute of British Architects (RIBA) Stage 3-4 design work on two options for decarbonising our heating network. These are focusing on a city-wide heat network and a campus-based heat network, powered by low carbon heat. In 2024, we received a Low Carbon Skills Fund grant of £982,000 to develop the full business case. We are using this to decide on the most effective options for removing fossil fuels from our heating network.

Cornwall House air source heat pumps Following a successful government grant funding bid, the heating source in the Cornwall House building and swimming pool has been switched from gas to electricity. The new air source heat pumps were completed in August 2024 and will save over 160 tonnes of CO2 compared to heating the building and swimming pool with fossil fuels – that's equivalent to heating 60 domestic households

**Biosciences Greenhouses heat pumps** The heating for our Biosciences Research Greenhouses was also converted from fossil fuel heating to heat pumps, funded by a successful grant bid. The new heat pumps were completed in February 2024 and **will save over 20 tonnes of CO2 each year**.

**Duryard PV array** During the summer of 2023/24 we connected over **1,800** new ground-mounted photovoltaics (PV) to our electricity network on university land close to Duryard Halls of Residence. The new solar panels are operational and will generate over **1,000 MWh of renewable energy per year** – equivalent to providing electricity to over 250 domestic households – and **save 225 tonnes of CO2** per year.

**Roof-mounted PV at Streatham** We currently generate **1 MWh** through our installed roof-mounted PV and are developing the next phase to add **an additional 1.2 MWh**. We also **generate 480 MWh** via car park canopy mounted solar PV, with potential to expand by a **further 660 MWh** across other car parks, subject to planning.

**Lab ventilation optimisation** We are undertaking a review of our energy-intensive lab ventilation systems. This project will reduce ventilation rates, replace inefficient equipment and improve controls to save energy and carbon emissions, whilst maintaining a safe environment for teaching and research. The project **could save up to 30%** of the current energy consumption of these systems – equating to **a saving of 400 tCO2e**. This is done by actively monitoring and automatically adjusting the air change rate based on the current air quality, and applying additional heat recovery measures.

**LED lighting programme** The first phase of our project, completed in July 2024, replaced fluorescent lighting with energy-efficient LEDs across eight buildings, resulting in an **annual saving of 289 tCO2e**. The next phase, beginning in August 2025, will extend these upgrades to all remaining buildings, achieving an **additional annual saving of 550 tCO2e**. The project also includes a smart lighting control system that shares valuable data – such as occupancy and room daylight levels – with other control platforms.

**Metering review** We are currently reviewing our existing and future energy and water metering systems to identify enhancements. These improvements will help uncover opportunities for energy, carbon and water savings.

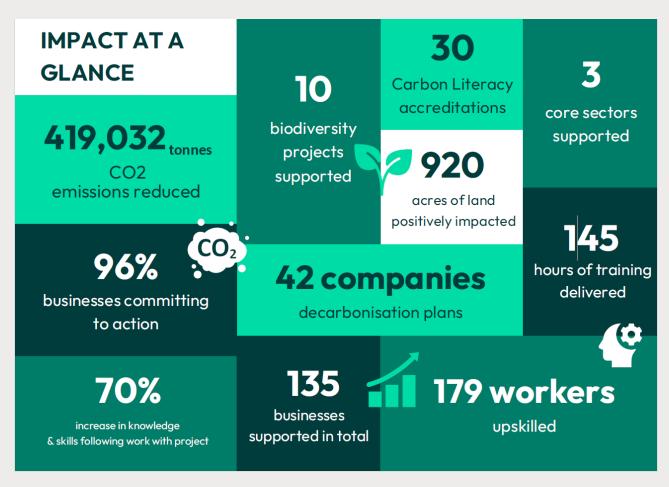
**Penryn wind turbine** We have conducted a feasibility assessment for installing a 1 megawatt (MW) wind turbine on University-owned land to connect with the Penryn Campus. A planning application for the project has been submitted to Cornwall Council. The turbine **would generate up to 2,803 MWh** of renewable electricity each year, enough to power 750 households.

Roof-mounted PV at Penryn In July 2024, we installed a new PV system on the Academy of Music & Theatre Arts (AMATA) roof at our Penryn Campus, boosting our renewable energy capacity by 13% and saving an estimated £30,000 per year. Now fully operational, this addition is expected to cut our annual carbon emissions by 20 tonnes, in line with our ongoing carbon reduction goals. With PV panels now featuring on four buildings, including Daphne Du Maurier, Peter Lanyon and the Sports Centre, our Penryn PV network is helping is saving around 169 tonnes of carbon emissions each year, contributing to a massive 60% decrease in the energy emissions of the Penryn Campus since the 2005/06 baseline.

#### **Energy Efficiency Services for Industry**

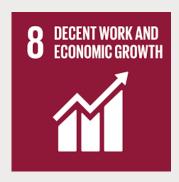
Our <u>Green Futures project</u>, which ran from July 2023-March 2025 provided services to local industry across Cornwall and the Isles of Scilly to understand their environmental impact, improve their energy efficiency and reduce their emissions through use of clean energy. The project provided 524 hours of decarbonisation consultancy to 42 companies. Following energy efficiency assessment, each business received a detailed carbon footprint and bespoke decarbonisation plan, highlighting the areas where they could make the most significant emissions reductions. This work has removed at least 419,032 tonnes of CO<sub>2</sub> emissions – the equivalent of 689,197 return flights between London and New York.

In addition, over 145 of training was delivered across online courses and in-person workshops and events.



The University also provides assistance to start-ups that support low-carbon technology through its <a href="Exeter">Exeter</a> <a href="Innovation Accelerator">Innovation Hub</a>. Sustainable start-up <a href="New Motion Labs">New Motion Labs</a> designs and manufactures efficient and sustainable roller chain technology and thanks to the support, funding advice and connections provided by the University's <a href="Business Acceleration">Business Acceleration</a> team, New Motion Labs has grown its team to 30 members and secured £750k funding.

The Partnership for Research in Marine Renewable Energy (PRIMaRE) is a consortium of marine renewable energy experts across higher education, research and industry which have joined together to establish a 'network of excellence' centred in the south of the UK. The Universities of Plymouth, Exeter, Southampton, Bristol and Bath, along with the Marine Biological Association of the UK and Plymouth Marine Laboratory, have agreed to work together on research projects across the spectrum of marine renewables. Completing the line-up of PRIMaRE is the South West Marine Energy Park (SW MEP) and the Wave Hub facility off the north coast of Cornwall, who will act as conduits between the research community and industry. The consortium regularly hold seminar events and an annual conference to share knowledge about the latest clean energy technologies in the marine sector.



# Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Living Wage employer, since 2014

The <u>Community Partnership Hub</u> connects public, voluntary, community and social enterprise (VCSE) sector organisations with researchers and students at the University of Exeter. Our aim is to help establish long-term, sustainable relationships which support partnering through research projects, student placements and internships, or volunteering.

The University of Exeter has established <u>Civic University Agreements</u> for Exeter, Cornwall and Devon. These Agreements set out how the University will work in partnership with other anchor institutions in the region to help find solutions for society's most pressing problems.

#### **Exeter Mission:**

- Support the sustainable and inclusive growth of the city
- Innovate towards a sustainable low-carbon economy for the City of Exeter
- Build a city of aspiration and opportunity
- Support an ambitious culture and tourism offer
- Enhance the health and wellbeing of our citizens

### **Cornwall priorities:**

- Green Futures
- Health Futures
- Fair Futures
- Creative Futures

#### **Devon Mission:**

- Thriving futures for young people
- Innovation and skills for a sustainable future
- Carbon considered housing for all

University of Exeter is one of 22 international partners of the <u>HABITABLE</u> Project, a research project on climate change and migration funded by the <u>European Commission's Horizon 2020</u> program for research and innovation. The fund tackles climate change, helps to achieve the <u>UN's Sustainable Development</u> Goals and boosts the EU's competitiveness and growth. It creates jobs, fully engages the EU's talent pool, boosts economic growth, promotes industrial competitiveness and optimises investment impact within a strengthened European Research Area.

<u>Green Consultants</u> is an award-winning programme, aligned to the United Nations Sustainable Development Goals, designed to provide students with additional skills and experience required to work in the highly competitive environmental and sustainability sector.



## Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Exeter Innovation works across the research, development, innovation and skills landscape by: driving impact – supporting academics to develop impact; connecting partners - helping build links with potential partners locally, nationally and globally; creating opportunities - helping to structure relationships and create opportunities for collaboration using national and regional funding; and, generating value – supporting income generation; such as IP licensing, spin-outs, consultancy, facilities access, training services and entrepreneurship across the University.

The University of Exeter is part of a pivotal partnership that will help decarbonise the electricity system in Great Britain and accelerate progress towards net zero. Exeter is one of six universities across the UK to sign innovation partnerships with the National Grid Electricity Transmission (NGET). The partnerships, which cover the five-year period of the RIIO-2 price control from 2021 to 2026, will help to enable the transition to a cleaner electricity system through knowledge sharing and creation of a culture of innovation, both between NGET and individual universities and as an entire collective.

The **University of Exeter** Centre for Future Mobility **(CFCM)** partner with businesses to develop low-emissions, high-efficiency integrated power systems for applications in the aerospace, automotive, marine and rail sectors. Driving the next generation towards zero carbon.

As part of the Clean Maritime Demonstration Competition Round 3 (CMDC3), OS Energy is spearheading
a retrofit project in collaboration with CFCM. The <u>project</u> entails equipping the Prince Madog vessel
with a hydrogen propulsion system that will complement the vessel's diesel-fuelled main engine,
enabling zero-emission operation during low-speed or short-distance trips. Under regular operation, the
hybrid system and innovative propulsion design are expected to reduce emissions by up to 60%.

The University of Exeter Centre for Future Clean Mobility (CFCM) are part of a consortium led by South West-based hydrogen developer, Tower Group, will deliver the Exeter H2 Hub, a 10 MW pilot plant with mobile refuelling capability in East Devon, by 2026. This will demonstrate how hydrogen can be used in transport.

Founded in 2013, <u>GW4</u> is an alliance of four of the most research-intensive and innovative universities in the UK: Bath, Bristol, Cardiff and Exeter. Collaboration is at the heart of everything we do. We work with other universities, businesses and civic bodies, acting as the anchor institutions to support a knowledge-intensive economy.

The project 'GW-SHIFT (Great Western Supercluster of Hydrogen Impact for Future Technologies)' led by the University of Bath and University of Exeter has secured £2.5 million from the Engineering and Physical Sciences Research Council (EPSRC) as part of their Place Based Impact Acceleration Account awards (PBIAA).

Researchers from across the GW4 Alliance of Bath, Bristol, Cardiff and Exeter universities alongside Swansea, South Wales, and Plymouth will work with 25 civic and industry partners, contributing over £1.5 million in additional funds and in-kind support, to maximise the enormous potential of the South West of England and South Wales hydrogen ecosystem.

Hydrogen technologies will play an important role in decarbonising transport and energy to meet the UK government's 2050 Net Zero target and large scale aims to drive the growth of low carbon hydrogen. GW-SHIFT will be a key enabler of these priorities, supporting the UK transition to green hydrogen production.

Over the next four years, GW-SHIFT will support innovative research and activities to create a thriving low carbon hydrogen supercluster focusing on key themes such as production, storage and distribution, conversion and transport.

In an industry first, EDF Renewables UK and Nature Positive announced a <u>long-term academic partnership</u> with the University's Environment and Sustainability Institute (ESI) to study the ecological effects of solar farms at Longfield Solar Farm.

This partnership will examine the effects large-scale solar farms can have on soil health, fauna, wildlife habitats and carbon flux under and adjacent to arrays.

The outputs of the research will influence ecological initiatives at Longfield Solar Farm – a new solar farm with battery storage in Essex capable of providing enough clean, secure energy to power up to 96,000 homes every year.



## Reduce inequality within and among countries

<u>Success for All</u> is at the heart of our Education Strategy which aims to widen participation, close gaps in student outcomes and build a diverse and inclusive learning environment. A collaboration between academics, professional services staff and students, it seeks to create an educational culture in which everyone can realise their potential.

The impact of Success for All on the outcomes and experience for underrepresented students contributed positively to our TEF Gold outcome, and our work to build an inclusive university culture, improved student experience and UN sustainability goals.

We have an <u>Access and Participation Plan</u> to improve access and retention of students from under-represented groups, with specific objectives relating to recruiting students from under-represented groups (see <u>objectives 1 and 2</u>). We are committed to supporting staff and students from all walks of life and building an inclusive environment. We have dedicated staff who are on hand to help students who require additional support and provide an enhanced induction programme for eligible students.

#### Supporting underrepresented students

We believe all students should have equal and fair access to Higher Education. We also recognise that studying at university isn't as straightforward for everyone, and depending on financial, personal or ethnic background, students may face additional challenges in both accessing Higher Education and throughout their studies.

Specific support is offered for students meeting the following criteria: free school meals; first generation into HE; Black, Asian and Ethnic minority students; mature students; care leavers and care experienced; student carers; estranged students, asylum seekers and refugees; students from military families; students from low participation neighbourhoods, areas of multiple deprivation and with low incomes.

Find out more about our support for widening participation students.

Our <u>Access and Participation Plan</u> 2020/21-2024/25 includes specific targets to increase recruitment from underrepresented groups.

 $Access \ target\ 1.\ Ratio\ of\ entrants\ who\ are\ from\ POLAR4\ Q1\&2\ v\ entrants\ from\ Q4\&5\ (target\ 1:3\ from\ 1:4.7)$ 

Access target 2. Ratio of entrants from the South West from POLAR4 Q1 v Q5 (target 1:1 from 1:1.5)

Access target 3. Percentage of entrants from IMD 1&2 and state school (target 13% from 11%)

Access target 4. Percentage of BAME entrants (target 15% from 10.1%)

Access target 5. Percentage of mature entrants (target 8% from 5.8%)

Our <u>annual report (pp29-31)</u> outlines the measures we took in 2023-2024 to recruit and support disadvantaged and underrepresented students.

#### Supporting underrepresented staff

The University participates in the 1<u>00BWPN</u> accelerator and change programme which is aiming to promote equity of opportunity in the academia. The programme not only supports Black academic women to navigate and manage their careers, it also challenges assumption and bias, recognising the need to address fundamental societal inequities, and acting to achieve systemic change for a fairer world.

As a <u>Disability Confident</u> employer we aim to recruit and retain disabled people and those with health conditions.

At the University, <u>our values</u> – Community, Inclusion, Discovery, Excellence and Respect – are at the very heart of everything we do. In addition to our <u>Equality</u>, <u>Diversity and Inclusion Policy</u> we have a suite of related policies and procedures.

#### Our <u>Dignity and Respect Policy</u> aims to:

- Promote an environment and culture in which bullying, harassment and victimisation are known to be
  unacceptable, and proactively work towards eliminating them by creating an inclusive culture, raising
  awareness within our community and where reporting routes are transparent.
- Individuals have the confidence to raise genuine concerns of bullying or harassment without fear of ridicule or reprisal and know that appropriate action will be taken.

The University <u>Wellbeing Inclusion and Culture Committee (WICC)</u> aims to support our strategic priorities and commitments by bringing together colleagues to focus on the delivery of strategies for health and wellbeing, equality, diversity and inclusion, and colleague experience and development.

Our <u>vision</u> is to create a positive and inclusive working environment that is a great place to work. Promoting and embedding gender equality is central to this vision and our progress in this area has been recognised with our institutional **Athena Swan** Silver Award.

<u>Race Equality Charter</u> Bronze Award - recognising the University's commitment to and efforts towards advancing race equality in higher education.

The Department of Geography at the University of Exeter has been working to reduce the carbon emissions associated with their international field course travel. More inclusive and accessible experiences are available for students and staff through a range of measures. All Geography field courses are optional, meaning that students positively opt-in to travelling on a field course. The costs of travel, accommodation and two meals a day is included in the tuition fee for all field courses, reducing inequalities based on ability to pay. No-fly travel can also be positive for those who have a fear of flying. Indeed, running such no-fly trips has enabled a full audit of inclusivity and accessibility on field courses and how we can continuously work with students to improve access and participation.



## Make cities and human settlements inclusive, safe, resilient and sustainable

Exeter University is a partner of the <u>Blue Heart</u> 6-year project (2021-2027) to help **predict and reduce the impact of flooding,** we're investigating how rain, river and wastewater move through Eastbourne and South Wealden.

Climate change is challenging the way we live. We're working with local organisations and communities to explore how to be more sustainable using water, smarter about how we manage it, and help everyone to be prepared for flooding and other impacts.

The project will adopt smart technology and the Internet of Things (IoT) to establish an integrated water management system for these communities,

which will monitor water levels in real-time and incorporate forecasted rainfall to issue flood warnings and alerts, and calculate the optimum response - to either store or release water.

These solutions will utilise existing infrastructure more effectively and provide economic, environmental, and social opportunities for local people whilst achieving lower whole life carbon than a traditional capital flood risk management scheme.

#### We have joined forces with the Met Office to create a Joint Centre of Excellence in Environmental Intelligence.

Based in Exeter, and home to world-leading researchers, our partnership is pioneering the development of solutions to some of the world's most complex and pressing environmental challenges, from climate change to global pandemics.

Environmental Intelligence is a fast-developing new field that brings together Environmental data and knowledge with Artificial Intelligence to provide the meaningful insight to inform decision-making, improved risk management, and the technological innovation that will lead us towards a sustainable interaction with the natural environment.

We are using AI to assess the risks of climate change at local levels and how it will affect local infrastructure, modelling the effects of climate change on agriculture and food security and we're applying AI techniques to identify the health impacts of air pollution on individuals.

We aim to make travelling around and between campuses better for everyone and to ease pressure on the environment and reduce carbon emissions.

We have a range of ongoing initiatives to promote sustainable commuting, such as showers, a Cycle to Work scheme, discounted bus travel and interest-free loans for annual rail season tickets.

Our <u>Travel Policy</u> embeds sustainability into decision-making around business travel and applies to all staff and students who are required to travel as part of work or study requirements. Two Task and Finish Groups are working on furthering its aims: the Field Course Task and Finish Group, and the Enabling Rail Travel Task and Finish Group.

Business travel is a key metric within the University's Performance Framework under the net zero KPI. As part of this, targets are being set at Faculty and Professional Service level to reduce emissions associated with business and field trip travel.

The <u>Sustainable Transport Strategy 2024-2030</u> (STS) was approved in July 2024 to promote the adoption of sustainable transport modes. Developed in consultation with various sectors, the STS aims to encourage students, staff and visitors to adopt sustainable transport modes. It includes KPIs and targets for modal splits and emissions, as well as actions on commuting and business travel.

The Field Course Task and Finish Group's work on developing a set of guiding principles to make practices more environmentally sustainable, inclusive and accessible has already supported two low carbon (by rail) final year undergraduate field courses in Geography (GEO3325 and GEO3158).

**The Enabling Rail Travel Task and Finish Group** have been working to identify barriers preventing more staff from traveling by train and have made several recommendations, which are now being implemented.

We are working with local partners on a **District Heating Project.** We are undertaking **Royal Institute of British Architects (RIBA) Stage 3-4 design** work on two options for decarbonising our heating network. These are focusing on a city-wide heat network and a campus-based heat network, powered by low carbon heat. In 2024, we received a Low Carbon Skills Fund grant of £982,000 to develop the full business case. We are using this to decide on the most effective options for removing fossil fuels from our heating network.

The <u>Green Futures Network</u> is a free way for any organisation – businesses, community groups, local government, charities – to access up-to-date environmental information, from cutting edge research to brand new resources, and contribute to collective approaches to the emerging climate and ecological emergencies and the changes they are bringing.

The <u>Community Partnership Hub</u> connects public, voluntary, community and social enterprise (VCSE) sector organisations with researchers and students at the University of Exeter. Our aim is to help establish long-term, sustainable relationships which support partnering through research projects, student placements and internships, or volunteering.

The University of Exeter has established <u>Civic University Agreements</u> for Exeter, Cornwall and Devon. These Agreements set out how the University will work in partnership with other anchor institutions in the region to help find solutions for society's most pressing problems, including

#### **Exeter Mission:**

• Support the sustainable and inclusive growth of the city

### **Cornwall priorities:**

Green Futures

#### **Devon Mission:**

- Innovation and skills for a sustainable future
- Carbon considered housing for all



## Ensure sustainable consumption and production patterns

### University policies supporting responsible consumption and production, include:

The <u>Sustainable Procurement Policy</u> and <u>The Responsible Procurement Checklist</u> enable environmental and sustainable considerations in the purchase of all bought goods and services, including consideration on whether existing assets can be reused or shared.

<u>Sustainable Food Policy</u> reflects the principles of the University's procurement strategy, sustainability goals and climate emergency recommendations, including commitments around responsible sourcing and reducing single use plastic and waste.

Single Use Plastic Strategy to reduce single use plastics across campuses

In July 2024, UEB approved a new <u>Circular Economy and Sustainable Resource Management Strategy</u> embedding circular principles, facilitating the elimination of avoidable waste and minimisation of the rest, the reuse of as much possible, and recycling of the remainder. This strategy includes an action plan to encourage the adoption of circular economy principles across all aspects of our activities.

We launched a flagship initiative – <u>Gift it, Reuse it</u> – enabling outgoing students across our halls of residence to donate home essentials for incoming students the following September, free of charge. An **estimated 8,000** of the items were taken by arriving students during Welcome Week, and the remaining items were offered out in pop-up shops in Clydesdale House later in the term.

As a global University that engages with the world through research, field trips, conferences and collaborations the University recognises that travel may be necessary for learning, teaching, research and developing partnerships. Our <u>Travel Policy</u>, launched in Sept 2023, sets out guidance to enable travel to be undertaken in accordance with our values and to meet wider university targets and objectives, including sustainability, focusing travel on low-carbon options.

<u>Exeter Centre for the Circular Economy</u> established to advance the theory and practice of circular economy we deliver impact nationally and internationally through a diverse portfolio of research, education and collaboration activities. With Student interns a Circular Economy maturity analysis project was completed to

assess circular economy readiness and scaling opportunities. The project mapped circular economy maturity and explored piloting circular economy for Waste Electric and Electronic Equipment (WEEE) and student engagement.

The Exeter Centre for Circular Economy is dedicated to developing, testing and adding to the theory and practice of Circular Economy interventions and real-world implementation. We are home to a £30 million 4-year UKRI funded programme that brings together academics, industry practitioners and policy makers to deliver circular economy research and innovation.

Professor Fiona Charnley – Co-director of the Exeter Centre for Circular Economy (ECCE) and National Interdisciplinary Circular Economy Research Hub (NICER) – has been appointed to lead a team of experts who will advise the Engineering and Physical Sciences Research Council (EPSRC) in the area of manufacturing and circular economy research and innovation.

The Centre is a leading provider of research led Circular Economy (CE) executive and practitioner <u>education</u> <u>programmes and courses</u>. Drawing on the expertise of our research community at the University of Exeter, and our excellent relationships with industrial partners, we have curated and shaped inspiring and high impact education and training that enables leadership and managerial capabilities of organisations to deliver effective Circular Economy solutions.

We are <u>now a partner</u> in the new **UN-backed International Centre of Excellence on Sustainable Resource Management in the Circular Economy (ISC-SRM)**. The new centre, which opened in April 2024, is a collaboration between the University of Exeter and University College London (UCL), Brunel University, Swansea University and the British Geological Survey, who together contributed £1.85 million to fund the centre's technical activities.

It will develop new approaches to the circular economy and resource efficiency to enable carbon reduction and the transition to a greener future as well as ensure the UK can help countries across the world to maximise the environmental and economic opportunities the circular economy offers.

We have signed the <u>Concordat for the Environmental Sustainability of Research and Innovation</u> Practice, which represents a shared ambition for the UK to continue delivering cutting-edge research, but in a more environmentally responsible and sustainable way.

We have developed a **research footprinting tool** to estimate the carbon emissions associated with research projects. By identifying the areas of our research with the highest negative impact, the tool empowers individuals to focus on solutions for reducing these. Our researchers will then collaborate with the University to adopt low-carbon research practices, driving meaningful change. With funding secured from the Wellcome Trust, we are developing and piloting the tool for a national rollout in partnership with the Universities of Bath, Bristol, Cardiff, Edinburgh, LSE and QMUL

CREWW labs were awarded **Sustainable Lab of the Year** at the Lab Innovations Awards. Their exceptional sustainability initiatives and rapid attainment of Laboratory Efficiency Assessment Framework (LEAF) Gold demonstrates industry leadership, setting a benchmark for excellence in sustainable practices.

<u>Academic experts</u> from the University have collaborated with the retailer John Lewis on a new circular collection of products designed to be longer lasting and more durable. The new framework will support the John Lewis Partnership to meet its commitment that 100% of its new own-brand products will be designed with circularity in mind by 2028.



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

The University of Exeter played a significant role at COP29, the UN Climate Change Conference - held in Baku, Azerbaijan from 11-22 November 2024.

With time running out to limit global warming to 1.5°C, COP29 was a vital opportunity to drive global action to reduce greenhouse gas emissions.

Exeter's work at the conference included leading the <u>Global Carbon Budget</u> – a vital annual report on the sources of carbon emissions, and natural "sinks" that absorb about half of the carbon emitted by human activity.

The University is renowned for its environmental research and education, and is home many of the world's leading climate scientists. We now have more than 1,500 people working on the environment and climate emergency.

The University of Exeter's commitment to conducting and communicating world-leading climate research has been recognised with the <u>Outstanding Contribution to Environmental Leadership</u> prize at the <u>Times Higher</u> <u>Education (THE) awards</u>, held on November 28<sup>th</sup> 2024.

As a world-leading university in the field of environmental sustainability and climate change, we provide the ideal learning environment for students who want to play their part in building a green future for all. Our students learn from academics who are at the forefront of discovering solutions to these global challenges — translating their cutting-edge research into innovative teaching at both undergraduate and postgraduate level. We have handpicked a <u>selection of courses</u> you can study with us, whilst being inspired and taught by top climate scientists in their fields

Our <u>Sustainability Annual Reports</u> reflect and showcase our achievements, performance, challenge and commitment to responding to the Environment and Climate Emergency across the University of Exeter.

For our 2023/24 report, we have aligned to the <u>Standardised Carbon Emissions Framework</u> (SCEF). SCEF is a framework launched for higher education institutions by the Environmental Association for Universities and Colleges (EAUC). We are therefore starting to report student out-of-term commuting, although this is not currently included in our net zero target.

The University of Exeter's Strategy 2030 builds on the Environment and Climate Emergency declaration made in 2019 and commits the University to leading meaningful action against the climate emergency and ecological crisis. Reducing our own impact is a large part of this, and we have a target to achieve carbon net zero across all scopes by 2030.

Our Infrastructure Decarbonisation Masterplan is an evolving programme to deliver projects focussed on carbon reduction relating to energy use across our estates and transitioning away from fossil fuel heating. Find out more about this work under SDG 7 in this report.

Our Sustainable Design Guide – helps ensure sustainable energy in all refurbishments and capital works/new build. Our 2021 Sustainability Design Guide informs sustainable design and construction decisions across all projects. The creation of a Sustainable Buildings Manager post in 2023/24 has increased its application in Estates projects. A comprehensive review of the guide began in 2023/24 to ensure the right balance between deliverability and alignment with best practices, with an updated guide set for completion in 2024/25. A key change will be to the embodied carbon targets, which are currently not achievable for many development types.

Multiple programmes of work are focussed on changing our ways of working to be more sustainable, reduce carbon emissions and embed sustainability into University culture.

The University of Exeter has established <u>Civic University Agreements</u> for Exeter, Cornwall and Devon. These Agreements set out how the University will work in partnership with other anchor institutions in the region to help find solutions for society's most pressing problems. Further information on the Civic University Agreements can be found under SDG 8 in this report.

Installed across three campuses (Streatham, St Luke's & Penryn) between 13 November and 1 December 2023, the <u>Climate Wall</u> represented a moment of reflection in the lead up to COP28 in Dubai, United Arab Emirates. Over 1,100 staff, students and visitors interacted with the wall, answering questions or posting reflections to facts relating to the climate and ecological emergencies.

The interactive art installation allowed the local community, students and colleagues at the University to view facts about climate change and action being taken across the world, and post "live" reflections to represent a "moment in time" of how people think and feel about climate change.

In April 2024, the Global Opportunities team became the first Russell Group University to sign the <u>CANIE Accord</u> – an organisation that drives change in the international education sector to foster sustainable practices on a global scale.

Environmental Education Measures – Participating in co-operative planning for climate change disasters, informing and supporting government and collaboration with NGOs

Academics at the University of Exeter have participated in cooperative planning for climate change disasters.

Analysis led by Professor Richard Betts has informed the UK government's third <a href="National Adaptation">National Adaptation</a>

Programme (NAP3), published in July 2023, which sets out future actions that government and others will take to adapt to the challenges of climate change in the UK and plan for climate change disasters.

And in October 2024 <u>The Parliamentarians Guide to Climate Change</u> was launched at the House of Commons. The guide, produced by the University of Exeter, brings together analysis from the world-leading climate experts to provide government and other policy makers – at national and local level – with reliable insights to inform and plan action on climate change.

On a regional level, the University, in collaboration with NGOs including the Westcountry Rivers Trust, and Cornwall County Council, is a member of the Devon, Cornwall and Isles of Scilly Climate Impacts Group which is coordinating regional action on climate adaptation, preparing communities and organisations for a changing climate, and improving resilience across the region. The DCIoS Climate Adaptation Strategy will help communities and organisations across the Southwest better understand the risks their area might face in the future, as climate change increasingly affects the UK. It will also help them monitor early warning signs of climate change and adapt to these changes, thereby improving their resilience and community safety.

Resources have been made available to help individuals, communities, organisations and local policy makers take action for climate adaptation and prepare for climate impacts.

The University has also collaborated with the National Trust and other partners on the Landscape Futures and Challenge of Change project, the outcomes of which were embedded into **guidance** now being used globally to educate heritage organisations on how to become more resilient to climate change and support teams to take decisions on how to adapt in the face of climate hazards. The outcomes from the Landscape Futures project are referenced on page 7 of the introduction.

The <u>Convex Seascape Survey</u> seeks to discover exactly how the ocean performs its vital role as the world's largest carbon sink. Over five years, the project will not only scrutinise the carbon locked in the continental shelf seabeds but will assess the role of ocean life on carbon storage, as well as assessing human influences on seabed carbon. Funded by Convex Group Ltd., the project is facilitated by Blue Marine Foundation, with science led by the University of Exeter in collaboration with partners.

Together with Encounter Edu and Blue Marine Foundation work includes the creation of a legacy of UK curriculum-aligned lesson packages while ensuring a global reach through live lessons, a <u>free-to-access online repository of resources/activities</u>, and an immersive digital experience.

<u>LearnExeter</u> hosts MOOCs (massive open online course) with a number of courses free and available to staff, students, the public including Climate Change courses:

Tipping Points: Climate Change and Society

Climate Change Solutions
Climate Change: The Science

Arctic Ecosystems and Climate Change



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

Exeter University is a partner of the <u>Blue Heart</u> 6-year project to help **predict and reduce the impact of flooding,** we're investigating how rain, river and wastewater move through Eastbourne and south Wealden.

Climate change is challenging the way we live. We're working with local organisations and communities to explore how to be more sustainable using water, smarter about how we manage it, and help everyone to be prepared for flooding and other impacts.

Through a series of ground-breaking innovations, researchers at the University of Exeter are seeking to improve sustainable fishing and aquaculture (fish farming) of Caribbean spiny lobsters. The two-year project will:

- Build a "genetic tool" to enable analysis of lobster population genetics and connectivity
- Work with local fishers and trial the latest aquaculture technology for sustainably farming lobster
- Work with key government stakeholders in the Bahamas to devise a policy for future sustainable exploitation of this critically important organism.

<u>Development of Marine Protected Areas</u> (MPAs) - Our research into marine biodiversity and ocean resource users has successfully helped to create Marine Protected Areas (MPAs) in Ascension Island, Gabon and the Ivory Coast.

The Resilience of Coastal Communities (ROCC) project aims to build the know-how to enhance the resilience of marine resource-users to environmental, regulatory and socio-cultural change, while simultaneously improving their wellbeing and reducing adverse impacts on the marine environment. The team has come together from the University of Exeter, University of Bristol, and European Centre for Environment and Human Health and Plymouth Marine Laboratory, and is being led by Dr Louisa Evans, University of Exeter.

A groundbreaking study has provided pivotal new insights into the extensive impact of metal mining contamination on rivers and floodplains across the world.

Progress happens when we work together. We put progress at the heart of everything we doit's the driving force that connects every relationship we have as a university.

Water conservation means using water wisely and efficiently to protect this vital resource for current and future needs. It involves reducing water waste, preventing pollution, and ensuring sustainable management of water supplies. We offer educational programmes for our community collaborating on fresh water eco-systems and encourage and maintain shared aquatic ecosystems through volunteering projects (Nature-focussed solutions) and involvement in the SW Peatland Project working with businesses and community groups. Our long term Upstream Thinking project, collaborating with partners and local community focusses on water quality and shared aquatic ecosystems, providing education and opportunities and encouraging

local action. Our **Walkie Talkie** events and <u>Sideshore Sea Safety project</u> provide education on how to protect and respect our waters. We used unique tools to engage local people and stimulate needs and interests through <u>ULTIMATE</u> project case studies and citizen science events with the <u>Enforce</u> project. Using the arts to create compelling audio stories with science research through <u>Storying Water</u>.

<u>Upstream Thinking</u> Our work on the award-winning 'Upstream Thinking' project-has restored and protected over 100,000 hectares of land across the South West, enabling substantial cost savings and improving water quality and biodiversity. The long-term ongoing programme has been running for over a decade, established through close collaboration with expert delivery partners, including Westcountry Rivers Trust, Devon and Cornwall Wildlife Trusts, South West Peatland Partnership, and the University of Exeter.

Upstream Thinking approach to keeping our drinking and bathing water clean and affordable by stopping pollutants entering our rivers and streams. Ensuring that our waterways are clean and reducing pollution for shared local wildlife and for people. By **working with landowners** it means that we all benefit from cleaner water, better water flows throughout the year, and we can create more space for nature on farmland.

Community and landowner engagement is a constant theme. Farm Advisors have developed long-term relationships with farmers, supporting them with tailored advice and access to funding. Broader public engagement through walks, workshops and events has built shared ownership of water and biodiversity challenges across the South West. Wider community engagement is achieved through free public events, educational outreach and communication campaigns that raise awareness of the programme's benefits and encourage local action and advocacy.

#### **Nature Focused Solutions**

A new study <u>undertaken by scientists from the University of Exeter</u> has looked into the effects of **beavers, and of other nature-focussed** methods employed up stream on flooding.

They have discovered that during peak flows, the result of the creatures' effective damming, coupled with man-made leaky dams built by **staff and volunteers**, has reduced the flow of water in the Bircham Valley by 23 per cent. It is thought that the research is the first of its kind to study the effects of the animals in an urban environment.

New wildlife has been observed in the area since the arrival of beavers including otters, kingfishers more frogs and a badger filmed crossing one of the beaver dams.

We held Walkie Talkie events, talking about the impact of plastic pollution and medication to our ecosystem and waterways and the efforts that are being made in reducing environmental impacts.

<u>Plastic Oceans</u> - Falmouth 30 September <u>Plastic Pilgrimage</u> - Exeter 9 September <u>Pharmaceutical Side-Effects</u> – Falmouth 1 October

<u>ULTIMATE</u> - a 4-year Horizon2020 Project (2022-2024) under the EU Water in the Context of the Circular Economy programme. Creating economic value and **increase sustainability** by utilising resources within the water cycle.

Key achievements included better understanding of reusable resource in industrial wastewater, development of a methodology to facilitate the industrial symbiosis for recycling and sharing the resources among business oriented industrial ecosystem.

The ULTIMATE project brought together diverse groups, including industrial partners, water utilities, policymakers and the **general public**. A unique tool that ULTIMATE used was the **"immersive narrative experience," designed to engage local people in the project's case study locations**. This method of communication helped to "stimulate the needs and interest of citizens," demonstrating the project's relevance to local communities as well as industry experts.

The <u>Sideshore Sea Safety project</u> was developed as a community interest project to deliver safer sea swimming and water safety to primary schools within the Exmouth Learning Community and has grown and evolved rapidly due to popularity and demand and is now delivered to **over 1200** children a year, from 26 Schools (both Primary and Secondary) from across Devon.

The project takes 3 strands of education and pulls them into an unforgettable day-long experience.

- Sea Safety Learn how to swim safely in the sea understanding tides, currents, weather, self-rescue and risks.
- **Environmental Education** Learn how to respect the ocean environment and understand the threats from sewage, pollution, plastics and other human activity and become the change makers of tomorrow (co-developed and delivered by **Exeter University**).
- Art Workshop In this workshop we help children to reflect and build deeper understanding of the ocean through the use of creative art.

<u>900 children</u> were taught about the Exmouth marine environment, by Exeter University, as part of the inspiring (which will be back bigger and even better in 2025).

We are part of the <u>South West Peatland Partnership</u> working together to restore degraded peatland across West Penwith, Bodmin Moor, Dartmoor and Exmoor by 2025. Restoring this damaged peatland through rewetting will have <u>innumerable benefits</u>.

Peatlands significantly impact aquatic ecosystems, influencing water quality, biodiversity, and hydrological processes. Healthy peatlands act as natural filters, improving water quality by absorbing pollutants and releasing clean water.

Restoring peatlands is a huge task and requires the involvement, determination and drive of a wide range of people, businesses and community groups. It's why SWPP work <u>as a partnership</u>, bringing together knowledge, experience and skills from across the UK's South West, collaborating to find the best ways of tackling this challenge and leaving a lasting positive impact. Working in partnership alongside government agencies, landowners, charities, farmers, commoners and other key stakeholders, we ensure that everything from local land use to the historic environment, cultural elements and ecology are fully considered and incorporated within restoration plans.

The EU funded <u>Enforce</u> project aims to enhance environmental compliance by integrating **citizen science** with innovative technologies.

The partnership between Westcountry Rivers Trust and the University of Exeter focuses on <u>mitigating</u> <u>agricultural impacts on water quality in the East Devon Catchment</u>. Leveraging tools such as GIS mapping from satellite land cover data and Serious Gaming projects to enhance regulatory targeting and compliance guidance. Additionally, a **Citizen Science** Investigation scheme engages volunteers in monitoring water quality.

This project will ensure there is robust evidence base for tackling environmental challenges with direct support for local evidence gathering and community engagement.

<u>Storying Water</u> is an arts-led research project to explore our water system – what it means to people, how it works, challenges involved in maintaining it, species affected by human uses of it, why its future resilience is threatened, and, in the face of environmental emergency, what is needed to improve and protect it into the future. Collaborating with scientists, and with other experts, to translate their research, experience and ideas into compelling audio storytelling, and to explore new possibilities for arts-based engagement with science research.

## Develop and support programmes and incentives that encourage and maintain good aquatic stewardship practices

Aquatic stewardship refers to the responsible and ethical management of water resources and aquatic ecosystems. Our work in this arena includes the <a href="SW Peatland Project">SW Peatland Project</a> and <a href="Nature-focussed solutions">Nature-focussed solutions</a>. Aquatic stewardship also encompasses a commitment to ensuring the health, sustainability, and long-term well-being of water bodies like rivers, lakes, and oceans. This involves understanding the interconnectedness of human activities and water systems, and adopting practices that minimize negative impacts. Our work in this field includes <a href="BlueAdapt">BlueAdapt</a> (understanding how climate change impacts pathogens and AMR in coastal waters), <a href="CREWW">CREWW</a> (CSO spills impact on receiving waters) and co-author of the <a href="NEPC Report">NEPC Report</a>

The <u>BlueAdapt</u> project has been developed by the University of Exeter's European Centre for Environment and Human Health and is led by the <u>Basque Centre for Climate Change (BC3)</u>.

Protecting human health by understanding how climate change can impact pathogens and antimicrobial drug resistant bacteria in coastal waters.

Climate change and environmental pollution could be making waterborne pathogens (such as bacteria, viruses, fungi and parasites) more dangerous in ways that we don't yet fully understand. To prevent illness and disease, we need to know how people could be exposed to different pathogens in coastal environments.

We are investigating how climate change is enabling pathogens to evolve and multiply, and how people are at risk. Our findings will help to inform the most effective ways for Europe to adapt through policy and innovation. BlueAdapt has been funded by the European Union's Horizon Europe research and innovation programme and UK Research and Innovation.

<u>CREWW</u> has been established to undertake research into the challenges facing the water sector in the UK and overseas. The Centre is a joint venture between South West Water and the University of Exeter, based on Exeter's Streatham Campus.

Our aim is to understand how we can manage our precious natural resources in ways which are sustainable and resilient in the face of climate change and population growth.

**Research** focuses on pressing issues facing the water and waste sectors, including:

- How to protect drinking water supplies from pollution
- The safe treatment and disposal of waste water (including issues such as micro-plastics and antimicrobial resistance)
- Predicting and preventing pollution from the waste water network

Microplastics research at University of Exeter is world-leading, to grow this work at pace, we have established a state-of-the-art 'CREWW Microplastics Lab', which will underpin and enable further ground-breaking work on microplastics at a scale to meet the needs of the industry.

The <u>Understanding combined sewer overflow (CSO) discharge impacts</u> –CREWW is working with SWW on CSO spills (chemical and microbial) pilot studies in three major catchments (Exe, Tamar and Torbay) to study CSO spills, frequency and volumes and their potential impact on receiving waters and whether or not they present a significant risk to environmental and/or human health.

Exeter expert, Professor David Butler, <u>co-authored the NEPC public health report</u>, called **Testing the waters**: Priorities for mitigating health risks from wastewater pollution, which was published recently.

<u>The report</u>, the first of its kind to assess how potential health risks from polluted open waters can be mitigated, calls for the national wastewater infrastructure to be upgraded to protect public health.

The recommendations include engineering interventions to prioritise wastewater asset management, enhanced public health monitoring and updated bathing water regulations.

Our <u>Single-Use Plastic Strategy</u> outlines our plans and progress on reducing single-use plastic on our Exeter campuses through a whole institution approach, utilising alternative materials and adopting sustainable disposal solutions wherever possible. We are now developing a revised 2025 Single-use Plastic Strategy with further focus on driving change across the University with enhanced alignment towards the principles of the circular economy. This will capture existing good practice, promote the sharing of information to encourage further engagement, and the identification of the scope for further improvement.

#### Monitoring the health of aquatic ecosystems

Developed by geographers at the University of Exeter the <u>ReefBudget</u> is an online resource and methodology designed to support both research and management applications focused on quantifying and monitoring the

carbonate budgets of tropical coral reefs. The open access tool has been integrated into the monitoring programmes of major reef conservation agencies globally.

The carbonate budget of a coral reef, the difference between calcium carbonate production and erosion, is a critical metric for measuring the physical resilience of reef structures. The application of carbonate budgets to guide management and conservation has been limited by a lack of standardised approaches. The ReefBudget is now being used by regional reef management agencies and NGOs working at sites spanning four of the six global biogeographic realms in which coral reefs grow. Advice has been provided via dedicated in-person training workshops and organisations have modified their field protocols to integrate the methodology.

On 6 September 2024, researchers embarked on <u>a five-week voyage</u> to investigate the vital role of tiny animals called zooplankton in ocean ecosystems and carbon storage. The voyage is part of the <u>BIO-Carbon programme</u>, which aims to improve our understanding of the role of marine life in storing carbon in the ocean and learn more about how these processes work, and how changing conditions on our planet might affect them.



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

The University signed the <u>Nature Positive Universities pledge</u> in 2022 - a commitment to start a nature positive journey and develop a plan for action that will result in a net positive impact on the environment and biodiversity. In undertaking this planning, we have pledged to measure, monitor and report on the environmental impacts of all University activities – teaching, research, operations, partnerships and supply chains resulting in our <u>Nature Positive Strategy</u> published in 2024 outlining our targets and key objectives.

We are developing a biodiversity footprint for the whole University, including our activities at St Luke's and Penryn campuses. A biodiversity footprint is a measure of how much we impact biodiversity via all our activities, not just those on our estates. Exeter academics from the **RENEW** project are working with us to carry out this analysis.

We have worked to engage and connect people with nature on our estates, and more broadly. Over the past year, we have engaged over 600 people at 32 events, such as regular volunteering led by the Grounds team, biodiversity monitoring events, information talks and student-led events.

In January 2024, our FXPlus Grounds and Gardens team at Penryn set a goal to plant 1,200 wildflowers across campus. By 11 June, we exceeded this milestone, This planting effort – featuring species like ox-eye daisies, mallows, self-heals, and yellow rattle – supports biodiversity by creating habitats for goldfinches, meadow brown butterflies and buff-tail bumblebees.

We are designing a Nature Based Solution to deliver carbon storage and enhanced biodiversity and natural capital **at Hoopern Valley** (University owned site).

#### Kenya study highlights complexity of tree-planting schemes

Research with smallholder farmers in Kenya shows that tree-planting schemes must account for complex local issues and preferences.

Tree planting is central to many countries' climate mitigation and biodiversity conservation goals, and Kenya alone plans to plant 15 billion trees by 2032.

Adding trees and shrubs to farmland (called agroforestry) can boost biodiversity, carbon storage, soil health, food production and income. But many tree-planting schemes overlook diversity and promote a narrow range of species.

<u>The new study</u> – led by the University of Exeter – examined the factors that enable or prevent Kenyan smallholders from increasing the diversity of trees and shrubs on their land, interviewing 620 smallholder farmers in the Kakamega forest landscape in Western Kenya.

We provide a free MOOC – Valuing Nature - available to staff, students and the wider community.

#### We support and organise events to promote conservation and sustainable use of land.

In 2023, the University of Exeter hosted the <u>British Science Festival</u>. The event included over 70 talks, workshops and interactive activities making scientific research and innovation relevant and accessible to everyone. It was a chance to shine a spotlight on cutting-edge technologies, new ideas and exciting possibilities. The '<u>This Green and Pleasant Land?</u>' panel discussion in Exeter Cathedral, which was attended by over 100 members of the public, covered thoughts on 'UK 2050', the actions needed to protect land for nature, such as sustainable technology, a new approach to land use, and the future challenges each entails. The event included individuals voting for their preferred sustainable future.

In May 2024, researchers from the University of Exeter and the MET office spoke at venues across the city as part of the Pint of Science festival. Bringing together community members and enthusiastic scientists, the three-day festival continued a tradition of showcasing unique research in a relaxed environment. Events around sustainable use of land and conservation included **Rooted Resolutions**, which covered topics from exploring the vital role of peatlands in climate resilience to uncovering innovative approaches to nature conservation, and **Carbon Chronicles**, which covered the vital role of peatlands in carbon sequestration and climate resilience.

Academics from the <u>Centre for Rural Policy Research</u> took part in <u>Rootstock</u> – a one-day conference bringing together expert scientists and practical farmers to discuss forward-looking, profitable, and sustainable use of land for farming in tune with natural processes.

The University of Exeter is a partner on <u>NetZeroPlus</u> which brings together a number of funded research projects to help build up the knowledge needed in the UK and beyond to deliver net zero emissions by 2050. The

University hosted the <u>Al for Net Zero Conference</u> in December 2024 which covered topics around sustainable use of land, including Sustainable Peatland Management, decision support for tree planting and a session on understanding how much CO2 can be sequestered by planting a given type of trees in a given location and in a given year.

The <u>RENEW Parliament</u> in November 2023 brought together academics, land managers, and other participants to discuss ideas, interventions, and solutions to biodiversity challenges and the sustainable use of land.

#### Collaboration for Shared Land Ecosystems

The <u>Exeter Community Garden</u> on the University's Streatham campus brings together, staff, students and members of the community to share skills and promote mental wellbeing. The garden achieved Outstanding when assessed under the RHS It's Your Neighbourhood assessment of community projects with judges praising the collaborative approach, biodiversity and sustainability.

Following local consultation and improvement works in the Lower Hoopern Valley, including designation of the new Right of Way, Friends of Hoopern Valley (FoHV) was formed in 2024 as an unincorporated charity supporting University of Exeter's management of Lower Hoopern Valley as a County Wildlife Site and biodiversity hub. FoHV is made up of student members and local residents and actively collaborates with the University community, hosting events and activities whilst promoting environmental awareness and stewardship of the Valley's ecosystem. We attended their AGM to provide an update on previous and future works – a report is available here: Lower Hoopern Valley AGM 2024

We are working with the National Trust on the <u>RENEW</u> programme to renew biodiversity through a "people-in-nature" approach. Projects include <u>Co-design to improve biodiversity outcomes on common land</u>. Common land, especially upland common land in places like the Lake District, encompasses large tracts of our most well-loved and ecologically rich landscapes. This makes it key to biodiversity conservation in England. Collaboration with partners including commoners, local community organisations and local decision-makers to improve our understanding of the current condition of the common and integrate farmers' knowledge of the land with environmental data.

<u>Environmental benefits at the heart of new solar research partnership.</u> In an industry first, EDF Renewables UK and Nature Positive announced a long-term academic partnership with the University of Exeter's Environment and Sustainability Institute (ESI) to study the ecological effects of solar farms at Longfield Solar Farm.

This partnership – the first in what EDF Renewables UK expects to be long-term research programme – will examine the effects large-scale solar farms can have on soil health, fauna, wildlife habitats and carbon flux under and adjacent to arrays.



#### Educational Outreach: sustainable management of land for agriculture

<u>Exeter Food Network</u>- connecting researchers from across the University with third sector organisations, policymakers, interested members of the public and other stakeholders. Hosting <u>events</u> across the year, such as:

<u>The Farm Carbon Toolkit seminar</u> (May 2024) exploring the work of the Farm Carbon Toolkit and work with farmers over the last 12 years, helping to enable sustainable management of land for agriculture through reducing greenhouse gas emissions and improve soil health. The soil carbon project, Farm net zero and other participatory work which aims to showcase farmers' ability to be part of the climate solution.

<u>Exeter Food Network Penryn Food</u> research showcase (June 2024) featuring projects focusing on food systems, community growing and presenting work that engages with food in and beyond Cornwall.

<u>Balancing Food Security and Self-Sufficiency for a better Environment</u> (Feb 2024) a talk by Jake Fiennes, Director of Conservation at the Holkham Estate, Norfolk and author of Land Healer: How Farming Can Save Britain's Countryside.

We work in places around the world, conducting research all along the food chain, examining the dynamics of contemporary food systems, the legacy of historical foodways, and the possibilities for healthier, greener, and more equitable food futures.

The <u>UK Farmer Discussion Network</u> includes over 170 independent farming groups across England, Wales and N.Ireland - a unique **community of practice** homed in the University Land, Environment, Economics and Policy Institute (LEEP). Launched in 2018 to promote open discussion, **to enable farmers** to debate and consider the current issues facing the sector in a neutral non-political space.

<u>Upstream Thinking</u> – South West Water, assisted by University of Exeter researchers, work with **wildlife** organisations and landowners to promote better water quality. Funding organisations like the Devon Wildlife Trust to employ farm advisors to support farmers/ landowners to farm in a way that's good for water quality, wildlife, and their bottom line – using less fertilizer, nutrients, and pesticides. It's a program that benefits water quality, wildlife, and the farmer financially. Broader public engagement through walks, workshops and events has built shared ownership of water and biodiversity challenges across the South West. Wider community engagement is achieved through free public events, educational outreach and communication campaigns that raise awareness of the programme's benefits and encourage local action and advocacy.

Academics from the <u>Centre for Rural Policy Research</u> took part in <u>Rootstock</u> – a one-day conference bringing together expert scientists and practical farmers to discuss forward-looking, profitable, and sustainable use of land for farming in tune with natural processes.

**Educational Outreach: sustainable management of land for tourism** 

Researchers at the University of Exeter are working alongside the National Trust and Forestry England, two of the UK's largest landholders, as well as a range of project partners including the Association of Local Government Archaeological Officers, Chartered Institute for Archaeologists, Historic England, National Trails UK, The Heritage Alliance, and National Parks to explore the relationship between the natural and historic environments, and find ways to identify the value that the latter brings, allowing us to make better decisions about management and investment in cultural heritage assets in the outdoors. The <u>VOCul</u> project (September 2023 to January 2026) will support the development of a Culture and Heritage framework for decision making by improving the understanding of the value to people provided by culture and heritage, exploring the challenges faced by land managers and contributing to a robust evidence base and best practice guidelines for incorporating culture and heritage into national accounts and tourism management decisions.

A Diploma in Cultural Heritage Management has been co-created by the University of Exeter and Colombian partners from the University of Antioquia, the Secretariat of Culture and Tourism of Guaviare Department, and the Geographical Society of Colombia. In November 2023, indigenous communities in Colombia's world-renowned Amazonia region celebrated the **graduation** of a first cohort of students who will help to establish and nurture the growth of sustainable cultural heritage tourism. As part of the project, three 'fellows' were flown to the UK and taken by Exeter staff to visit Stonehenge, the Ancient Technology Centre in Dorset, and the RAMM in Exeter to learn how cultural artefacts are preserved and showcased to visitors. These fellows will now share what they have learned with other communities in the Guaviare department, and as heritage guardians, have been entrusted to protect the regions internationally-significant rock art.

As part of the University of Exeter's RENEW collaboration, <u>Evaluating access interventions at the coastline</u> (February 2024 to Winter 2024/25) is a project which aims to increase and improve public access to England's coastline. The aim is to enable visitors to access and travel along the coastline, enjoying the environment, scenery and leisure opportunities whilst protecting sensitive areas. The project is evaluating whether land managers are able to successfully safeguard land issues without unduly restricting visitor access and enjoyment.



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

<u>Justice and Violence Studies @Exeter</u> Network brings together researchers, students and experts across all career stages, from different backgrounds, with the aim to change and challenge inequality and injustice. With expertise and interests spanning disciplines, such as geography, history, psychology, political science and forensic science, the Network is perfectly placed to heal create a fair, socially just and inclusive society.

Our network aligns with the United Nation's Sustainable Development Goal 16.

The University of Exeter <u>Community Law Clinic</u> opened its doors in September 2017. We assist individuals who are not eligible for legal aid or are otherwise unable to afford private legal advice.

We recognise and seek to fill the gaps left by legal aid cuts and help individuals access justice in a system which often appears overly complex, confusing and expensive.

Law students, under supervision from qualified legal professionals, provide free legal advice and information to members of the public in a variety of areas of law.

There is also a specialist Immigration Clinic which covers initial leave to remain, entry clearance applications, further leave to remain, settlement applications, refugee family reunion, nationality naturalisation, EU settlement scheme and travel document applications.

Their new partnership with Citizens Advice Teignbridge has elevated their student-led clinical offering in a new area of law to meet increasing demand.

The Exeter Centre for Environmental Law (ExCEL) was established at the end of 2021 to stimulate interdisciplinary internal partnerships with centres within the University. The purpose of ExCEL is to provide an intellectual environment to create a Worldwide Environmental Law and Policy Research Network with international academic partners, such as Duke, QUEX and CUHK. In parallel, it is aimed to engage with international, national and local stakeholders. In addition to being an attraction centre for law researchers willing to conduct their research in Cornwall, it is also one of the goals of ExCEL to support members with achieving impact through policy workshops and training, as well as PR and marketing.

Our research will focus on:

- promoting the study and development of environmental, climate, and marine law and policy;
- stimulate debate, collaboration, and networks in response to the most pressing needs of international, European, and local environmental matters; and
- support teaching and training in the fields of environmental, climate and marine law.

<u>The World Reimagined</u> is a groundbreaking art installation project which aims to redefine how we understand the Transatlantic Trade in Enslaved Africans and its lasting impact.

The university hosted <u>two globes</u> from this initiative, formally launched with events at the Penryn and Streatham campuses.

The Exeter (Streatham Campus) based globe - 'Uncertain Voyage': A complex Triangle created by Nadia Akingbule and Cornwall (Penryn Campus) based globe 'A Dark Cloud' by artist Caroline Daly.



## Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development

Member of the <u>Earth League</u> - a voluntary alliance of leading scientists and institutions working on planetary processes and sustainability issues, established to address current challenges and opportunities related to the future of our planet.

The University of Exeter's research and education makes a difference across the world. In order to deliver our Strategy 2030 we recognise that <u>Global Partnerships</u> are vital. Our mission is to make the world greener, healthier and fairer place by collaborating with partners on priorities which address the UN Sustainable Development Goals (SDGs), including:

- QUEX Institute to deliver impactful research that addresses major global challenges, unified by the central issue of 'Global Sustainability and Wellbeing'
- HABITABLE Bringing together 22 diverse recognised institutions from 18 countries, covering a wide range of expertise necessary for the successful implementation of the project. HABITABLE will run for 4 years (2020-2024)

This international collaboration is the largest research project on climate change and migration to have ever been funded by the European Commission's Horizon 2020 program for research and innovation. The fund tackles climate change, helps to achieve the <a href="UN's Sustainable Development">UN's Sustainable Development</a> Goals and boosts the EU's competitiveness and growth.

HABITABLE seeks to connect **different scales of research** by adopting an interdisciplinary, **mixed-methods** approach. Empirical data collected through a longitudinal survey will be complemented by indepth qualitative methods to provide a more nuanced understanding of how particular tipping points influence migration behaviour and the habitability of Socio-Ecological Systems (SES).

The overall goal of HABITABLE is to investigate how and to what extent climate change affects the habitability of socio-ecological systems and transforms current and future migration and displacement patterns. HABITABLE's systemic approach will contribute to the design of appropriate and sustainable policy responses to the climate-migration nexus.

#### The four objectives:

• Formulate a **predictive understanding** of migration patterns and dynamics under climate change through the identification of social tipping points that lead to migration.

- Propose adaptation options and strategies for populations affected by climate change based on an assessment of how migration redefines the limits to adaptation.
- Identify, analyse and mainstream the gendered and social equity dimensions of the climatemigration nexus throughout the project
- Support the development of effective policy responses by co-producing migration scenarios and policy recommendations with key stakeholders.

As a world-leading university in the field of environmental sustainability and climate change, we provide the ideal learning environment for students who want to play their part in building a green future for all. Our Green Futures website provides information on a selection of <u>sustainability courses</u>.

#### <u>Future 17</u> – the Sustainable Development Goals Challenge Programme.

The University of Exeter and QS are partners in delivering a transformative educational partnership between the world's leading universities and global organisations, to empower and enable the next generation of students to answer the questions that will shape today, tomorrow and the future for us all.

In an era of global challenges, the 17 UN
Sustainable Development Goals (SDGs) have
become a key framework to articulate the issues
that face humanity and encourage mobilisation of
concerted efforts to end poverty, fight inequalities
and tackle climate change. While many
organisations have taken steps to embed these

goals into their strategies, at the University of Exeter we are committed to going further. We believe in the power of our brightest young minds coming together to tackle these global challenges whilst developing 21st century skills to enhance their education.

Our vision, in partnership with QS, is to build a global ecosystem that connects students from multiple universities with international organisations to generate insights and develop solutions that help address SDGs. To connect the next generation to the most complex challenges of our time and generate actionable solutions.

The <u>University of Exeter played an important role</u> at **COP29**, the UN Climate Change Conference - held in Baku, Azerbaijan from 11th to 22nd November. Exeter's work at the conference included leading the Global Carbon Budget — a vital annual report on the sources of carbon emissions, and natural "sinks" that absorb about half of the carbon emitted by human activity.

Our first partnership with the <u>World Economic Forum</u> will help develop a new project in support of the Arctic and Antarctic biospheres. The successful <u>Hoffmann Fellow</u> will help to develop an integrated approach to tackling the common threats these areas face, and the implications for the rest of the world affected by polar tipping points.

The <u>Global Carbon Budget</u> Office is led by Professor Pierre Friedlingstein from the <u>University of Exeter's Global</u>

Systems Institute with the support of more than 100 people from 70 organisations in 18 countries.

Since 2006, as part of the Global Carbon Project, the **Global Carbon Budget** has provided a wealth of information on carbon emissions and the ramifications for reaching the global climate goals.

The University is renowned for its environmental research and education, and is home to many of the world's leading climate scientists. We now have more than 1,500 people working on the environment and climate emergency, and recently launched a new business support initiative called <u>Green Futures Solutions</u>.

The University of Exeter signed the <u>Sustainable</u> <u>Development Goals Accord</u> in 2019. The Accord is a commitment made by learning institutions to one another, to do more to deliver the SDGs, annually report on individual progress as a Signatory, and do so in ways which share the learning with each other both nationally and internationally.

Benefits of SDG Accord reporting allows a more relatable and clear dialogue on sustainability

internally within the organisation and externally, allowing us to build new external partnerships based on the SDGS, such as around research, policy and projects.

EAUC publish the <u>SDG Accord annual progress</u> <u>report</u>, highlighting the collective progress towards the SDGs in the college and university sector.

#### Relationships with regional NGOs and government for SDG policy

We directly inform national government and regional non-government organisations through policy development for SDGs. Our work identifies challenges of climate change and cooperative actions to take to adapt (NAP3) together with modelling likely futures and providing reliable insights to local and regional government, through our Parliamentarians Guide to Climate Change. We work in collaboration with NGOs to coordinate regional action on climate adaptation, the DCloS Climate Adaptation Strategy helps communities monitor early warning signs of climate change together with resources to take action for climate adaptation and prepare for climate impacts.

UK government report on climate adaption. Academics at the University of Exeter have participated in cooperative planning for climate change disasters. Professor Richard Betts MBE, led the detailed 1500-page CCRA3 Technical Report, providing the evidence at the core of the Independent Assessment, which has informed the UK government's third National Adaptation Programme (NAP3), published in July 2023. NAP3 sets out the actions that government and others will take to adapt to the challenges of climate change in the UK and plan for climate change disasters. The University of Exeter is taking a leading role by providing the scientific basis for reports such as the National Adaptation Programme, and the work of our researchers is enabling policymakers to make evidence-based decisions in our quest for a greener future.

And in October 2024 <u>The Parliamentarians Guide to Climate Change</u> was launched at the House of Commons. The guide, produced by the University of Exeter in partnership with NGO Peers for the Planet, brings together analysis from the world-leading climate experts to provide government and other policy makers – at national and local level – with reliable

insights to inform and plan action on climate change.

On a regional level, the University, in collaboration with NGOs including the Westcountry Rivers Trust, is a member of the Devon, Cornwall and Isles of Scilly Climate Impacts Group which is coordinating regional action on climate adaptation, preparing communities and organisations for a changing climate, and improving resilience across the region. The DCIoS Climate Adaptation Strategy will help communities and organisations across the Southwest better understand the risks their area might face in the future, as climate change increasingly affects the UK. It will also help them monitor early warning signs of climate change and adapt to these changes, thereby improving their resilience and community safety. Resources have been made available to help individuals, communities, organisations and local policy makers take action for climate adaptation and prepare for climate impacts.

#### **Collaboration with NGOs for SDGs**

The University of Exeter and the National Trust <u>national partnership</u> focusses on protecting the natural world. The joint research initiative explores how both organisations can best respond and adapt to environmental and cultural change, support wildlife renewal and improve wellbeing through nature.

This is only the second university collaboration of its kind from the National Trust. It builds on more than 20 joint research projects and four student placements run collaboratively by the University of Exeter and the National Trust over the last 5 years.

There will be new collaborations on projects involving landscapes and communities, and new opportunities for cross-disciplinary research, knowledge exchange and engagement at an international level. The collaboration will focus on three main themes: **rethinking**: how to reverse declines in nature and adapt to climate change; **regeneration**: managing changing multifunctional landscapes and exploring novel approaches and management techniques; and **reconnection**: engaging people in conservation.

Experts will develop science-based, action-orientated research to inform land use decision making and better understand ways to care for our natural and cultural landscapes. The focus will be to plan and manage the inevitable transformation of landscapes so they work best for people, place, nature and future generations.

The University, in collaboration with NGOs provides a number of educational resources including:

Devon, Cornwall and Isles of Scilly Climate Impacts (DCIoS) Group <u>Resources</u> to help individuals, communities, organisations and local policy makers take action for climate adaptation and prepare for climate impacts.

The Convex Seascape Survey facilitated by Blue Marine Foundation, with science led by the University of Exeter in collaboration with partners. Together with Encounter Edu and Blue Marine Foundation work includes the creation of a legacy of UK curriculum-aligned lesson packages while ensuring a global reach through live lessons, a <a href="free-to-access online repository">free-to-access online repository</a> of resources/activities, and an immersive digital experience.