



UN Sustainable Development Goals Report

2022-2023

In July 2023 we replaced all soft drinks sold in single-use plastic bottles

with aluminium or glass alternatives across University-operated outlets



Through the Athena Swan Charter, the University as a whole and **21** departments within the University hold accreditations for tackling gender equality

There are over 5000 solar panels on our campus

A total of **41** species



of moth were found on campus through **Emissions** from two light trap surveys 2021/22, reported in in Summer 2023 proportional tonnes CO₂ equivalent

Scope 1

Gas, Petrol, Diesel, LPG

Scope 2

Mains Electricity

Scope 3

- Good and Services
- Water
- Capital Construction
- Fuels and Energy related activities
- Business Travel
- Commuting
- Telecommuting
- Studying Abroad
- Travelling to Study
- Waste







Since 2019, monitoring water usage has shown that behavioural changes have saved **30**

litres of water per bedroom, per day in metered residences



In 2022/23

16,956m³ of water was saved due to leaks being stopped more quickly as a result of improved monitoring and maintenance.

Net Zero 2030

target for Scope

1 & 2 carbon

emissions

The Way to **Sustainable**



Prof. Emma Flynn Provost

contributions to each of them.



SDGs continue to be of crucial importance in a turbulent world, and we remain committed to furthering our

In September 2022 we relaunched our Institute for Global

Sustainable Development (IGSD), to become the gateway

to research on sustainable development at Warwick and to connect with hubs of excellence nationally and globally.

governance, climate change and inter-species resilience -

and recruited IGSD Thematic Fellows and IGSD Honorary

Fellows. In 2023 we launched our Early Career Researcher

(ECR) Sustainability Training School and our Visualisation

Project to facilitate future collaborations, IGSD is now

sustainable development across the globe.

host to 16 projects - all focusing on different aspects of

We have expanded our Energy and Sustainability team and

have major projects underway to decarbonise our energy

supply. We are safeguarding and enhancing habitats on

our campus and beyond, creating spaces for nature and

people to thrive. Our engagement activities are driving

In line with our 'Way to Sustainable' strategy, this report

provides case studies under the headings of Research, Education, Operations and Engagement, however much

of our activity spans these categories. Meeting the SDGs

Whilst we have made significant progress, we know that

there is still much more to do. It is with a sense of pride that we present our journey so far, and with humility that we

acknowledge the distance yet to travel. We hope that you

University community stepping up to play their part.

will join us in tackling the challenges ahead.

is by nature a collaborative effort, and we are proud of our

waste reduction, promoting clean transport solutions and

helping our staff and students to make sustainable choices.

We have developed three thematics - environmental

Prof. Elena Korosteleva Director of the Institute for Global Sustainable Development



Parvez Islam Director of Environmental Sustainability

Since our last SDG report was published, we at Warwick The UN 2015 Sustainable have seen some local changes, with the launch of our **Development Goals** Way to Sustainable strategy and recent arrival of our new Provost as strategic lead for sustainability. Meanwhile, the



























































End poverty in all its forms everywhere

1 NO POVERTY



Research

The Warwick Interdisciplinary Research Centre for International Development (WICID)

WICID focuses on global issues of inequality and social, political and economic change. WICID assists researchers in connecting and obtaining funding for innovative interdisciplinary international development research. Visit WICID's webpages to learn about their research in gender, health, justice, and mobility.

The missing middle in Sierra Leone

Developing skills worldwide is crucial to prevent young people from getting vulnerable jobs. The adage "teaching a man to fish" is well-known, but having technical skills is not always enough to secure a job. Dr. Jamelia Harris says the "missing middle" in Sierra Leone makes it hard for young and skilled workers to find jobs. She describes the missing middle as differences in skills, stakeholder involvement, and limits on starting businesses, amongst other factors.

Project Baala: breaking the cycle of taboo

Project Baala is the brainchild of Soumya Dabriwal (BSc Economics at Warwick, 2016). During Soumya's time with the 'Warwick in India' programme, she personally witnessed the difficulties women face with menstruation. One of Soumya's studies found that around 23 million girls in India leave school after they start menstruating, which affects their long-term well-being.



Project Baala has helped **650,000** people that have started their periods.

Beginning in India, Project Baala highlighted the stigmas and misunderstandings that made it hard for people to use period products. They then made affordable and accessible pads that can be reused for two years.



1,800,000 reusable period pads distributed.

Now operating in Nepal, India, Tanzania, and Ghana, Project Baala champions education as a means to eradicate period poverty, and aims to reach two million people that menstruate.

Empowering under-represented students in research

The Social Mobility Student Research Hub helps students from under-represented groups join research, such as people from low socio-economic backgrounds. To encourage students to participate, they were given a £1,100 stipend, while PGR mentors were paid by the hour. Dr Damien Homer and Dr Tammy Thiele from Widening Participation led a team that organised workshops and events for students. They spent six months working on these activities and presented their final results at a conference in September 2022.

Education

Explore the economic principles of sustainable development with a GSD module

The GSD (Global Sustainable Development) module 'Economic Principles of Sustainable Development' explores the connection between economics and policy. The course examines the causes of poverty for individuals and countries and helps students to understand how economists solve real-world problems by using different frameworks and models.



Extra-curricular learning: Warwick in Africa

Participating in activities outside of university classes can greatly impact a student's future. These experiences build confidence and new skills and encourage networking. The 'Warwick in Africa' programme supports students and teachers in South Africa, Tanzania, Ghana, and Kenya. Education helps people escape poverty, and more than 750,000 learners, teachers, and Warwick students have benefitted.

Operations

Inclusive access to The University of Warwick

Our students at Warwick are from a wide range of socioeconomic backgrounds. The University offers support with funding to ensure that financial issues are not a barrier to entry for undergraduate and postgraduate students.

Warwick's ongoing journey towards social mobility

By 2030, Warwick's impact on social mobility will be stronger. We will recognise, inspire, and support more talented students from disadvantaged backgrounds. Warwick has created a plan to improve equal opportunities for underrepresented groups in higher education. The plan is continually reviewed and updated to align with our evolving commitments to social mobility.

Our Warwick Scholars programme

We believe that everyone should have access to the world's top universities, and we are dedicated to helping students succeed. Warwick Scholars is a programme that helps students get into Warwick by improving their grades, developing their skills, and providing a glimpse of what studying at Warwick is like. The activities happen mainly during school holidays and are totally free, including transportation, food for on-campus events, and accommodation for residential events.



Cost-of-living support for students and staff

Warwick has set aside £3.5 million to help students and staff cover living costs. This brings the total financial support for Warwick students to over £45 million for the 2022/23 academic year. Around 3,200 low-income students got a 10% increase in payments through bursary schemes. In January 2023, more than 3,900 Warwick employees who were struggling received a payment of up to £550 to help with the cost-of-living. Other forms of support are also available to them.



Engagement

Student Action for Refugees (STAR) helps to transform lives

STAR is a group of young people who help refugees and asylum seekers. They raise awareness of refugee and asylum issues, campaign for rights, and volunteer in their community. At Warwick, STAR volunteers run conversation clubs to teach English to local refugees. They also run Youth Clubs to help young people with refugee status with schoolwork. The club understands that education can change lives and create opportunities for a better future.

IntoUniversity and Warwick community outreach

IntoUniversity helps low-income families in the UK by improving school performance, supporting university attendance, and breaking the poverty cycle. Warwick and IntoUniversity work together to offer after-school study sessions in Coventry. These sessions help students improve study skills and promote independent learning. Students can use important resources like books and computers that they may not have at home.

RAWKUS - from campus kitchens to the core of our community

RAWKUS is an annual cross-accommodation charity donation drive on our campus. Kitchenware and food left behind by students are collected and sorted by volunteers. During Welcome Week, a Pay-As-You-Feel sale supports Carriers of Hope and Coventry City Mission by selling donated kitchenware. Food and food surplus is donated to Coventry Food Bank.



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



Research

Transforming the UK food system with local bean varieties

Researchers at Warwick are developing three new types of dry common beans that can be grown in the UK. The team at Warwick Crop Centre has bred three bean varieties - Godiva, Capulet, and Olivia. They used conventional breeding methods and in-field selection to drive commitment to sustainability and food security. Beans that can grow well in the UK's special climate will stop the need for imports. In September, two farmers had a successful harvest. They will showcase the Capulet and Godiva beans at a project called 'BeanMeals' at Warwick Institute of Engagement (WIE) events. The project envisions how common beans can transform the UK food system through innovation.

Greener gardens with fewer pesticides through companion planting

Companion planting is growing plants together that are mutually beneficial. Planting companion plants alongside edible crops is a suggested way to control pests and reduce pesticide use. Warwick researchers are working with the Royal Horticultural Society to test how companion planting affects pest behaviours, and to understand the biological mechanisms at work. The goal is to find effective companion planting options that are based on scientific evidence.

The Vegetable Genetic Improvement Network (VeGIN) bridges research and industry

VeGIN is a group of researchers and industry leaders that promote improved vegetable varieties and sustainable production systems in the market. Warwick are contributing to the network through research. The network is focused on four key crops - onion, carrot, leafy vegetables and salads. Research and industry collaborate together to improve crop varieties and increase food production sustainably. This addresses the challenges of food security and climate change.

The global impact of the UK **Vegetable Genebank at Warwick**

Having a variety of genes in crops is crucial for everyone to have healthy food.



The UK Vegetable Genebank takes care of **14,000** vegetable seed samples.

The <u>UK Vegetable Genebank</u> takes care of 14,000 vegetable seed samples. These seeds are used globally for research and improving crops. This may be to screen for new sources of resistance to diseases such as clubroot, and pests such as carrot root fly. Identifying a trait that resists pests means it can be bred into new varieties. After that, researchers can look for DNA markers linked to the resistance trait. This makes it easier to track them across generations.

Tech for tomorrow's crops with **SmartProtect Integrated Pest** Management (IMP)

Considerable advances in technology have had a positive impact on crop protection. In the last three years, members of the EU SmartProtect IMP Thematic Network have studied tools and technologies for managing pests and diseases in vegetable crops. SmartProtect is a group of is a group of 15 partners from 12 countries, of which Warwick is a part. They have studied crops grown outdoors and in protected areas. This work has identified over 150 tools and technologies available to European growers.



The Elizabeth Creak Horticultural Centre opens to pioneer sustainable crop advancements

Warwick has opened the Elizabeth Creak Horticultural Technology Centre (ECHTC). It is a £1.5 million facility that uses gene-editing technology to improve vegetable crop quality, resilience, and sustainability.

The ECHTC is studying disease resistance, crop yield, climate change adaptability, and nutritional value. In addition, they train scientists and give scholarships to make sustainable changes in agriculture using gene-editing advances.



Education



Interdisciplinary Food Systems Teaching and Learning (IFSTAL) brings together academia and the workplace

IFSTAL is a programme that helps post-graduate students learn more about the food system. Warwick is a key contributor to the programme that brings together top higher education institutes. The aim of **IFSTAL** is to provide students with knowledge and skills they can transfer to the workplace. The program uses different teaching methods, such as an online learning platform. More than 1,000 students studying food issues have participated.

Addressing 21st century food security challenges with Warwick's MSc in Food Security

Ensuring everyone has enough

food worldwide is a big challenge in the 21st century. Every country must find a balance between producing its own food and importing it, while also considering the impact on the environment and the economy. Warwick's School of Life Sciences has a master's course that focuses on global food security. The course examines climate change, biodiversity, water, soil, land use, labour, diet, and urbanisation. The course delivers the knowledge and skills needed to practically tackle this major global challenge.

Operations

Making use of surplus food on campus

Warwick supports the Too Good to Go app as a solution to minimising food waste. Customers can find affordable and sustainable fresh food at five retail outlets on our campus in the form of 'surprise bags'. These surprise bags contain surplus food that would otherwise go to waste.

Engagement

Connecting through food at Warwick Chaplaincy's community lunches

Warwick Chaplaincy wants to help create a community based on respect, openness, and trust. The Chaplaincy team hosts a free Community Lunch every week during term-time. They provide a relaxed environment where people can try foods from different cultures.



Explore the Warwick Crop Centre at an open evening

The Stratford Innovation Campus in Wellesbourne has labs, fields, and glasshouses for sustainable crop projects, where members of the School of Life Sciences' Warwick Crop Centre carry out their research. Warwick Crop Centre is also a member of two local sustainable farming groups, both supported by the Warwickshire Rural Hub. This Summer, the centre hosted open evenings for Hub members, University colleagues and members of the public.





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

3 GOOD HEALTH AND WELL-BEING





A brighter future for construction workers: National Grid and Warwick Medical School

National Grid has partnered with Warwick Medical School (WMS) to study and enhance the wellbeing of construction workers. Construction currently has the highest suicide rate of any sector. National Grid and WMS have set up a pilot 'Health Hub' in Kent. Employees can use it on their long workdays. Facilities enjoyed include a gym, social spaces, and free healthy meals. The findings showed that the hub made people happier, reduced anxiety, and promoted healthier habits. The pilot hub will support future projects in the UK to improve mental health for construction workers everywhere.

Warwick and Tommy's give guidance and reassurance to people that have had a miscarriage

Warwick and Tommy's National Centre for Miscarriage Research have collaborated to create an online tool to help women who have had miscarriages. The tool predicts the chance of a successful next pregnancy by considering age, BMI, previous miscarriages, polycystic ovaries (PCOS) diagnosis, and previous live births. The platform also offers personalised advice on tests, treatment and lifestyle changes. The tool helps pregnant women understand what causes miscarriage and gives them knowledge and reassurance.

Warwick's call for empathy over stigma in obesity narratives and policies

Warwick Obesity Network is an interdisciplinary group of academics and clinicians. Their recent research findings suggest that obesity stigma does not prevent obesity. To change how people think about body weight, decision makers and stakeholders must collaborate to dispel myths and show empathy for larger individuals. This will also help to create better policies and actions that improve people's health by addressing the social and environmental factors that contribute to obesity.

Revolutionising tuberculosis treatment

In October 2022, The Howard Dalton Centre for Translational Mechanistic Enzymology was launched. A group of researchers is studying new drugs that fight resistant microbes, like tuberculosis. Tuberculosis has been treatable since the 1950s, but still causes 1.6 million deaths each year. They are studying the membrane molecules of tuberculosis with the aim of helping to better deliver antibiotics.

Education

A sustainable medical curriculum

WMS is aligning their curriculum with the Education for Sustainable Healthcare curriculum. This curriculum is monitored by the Learning, Teaching & Quality committee. This work will improve education for planetary health at WMS. It will also build on the current teaching about Global Health and Sustainable Healthcare that students receive in Phase III.

What's Up #DocTok

Warwick introduced "#DocTok," with Dr. James Gill sharing health information on TikTok. The #DocTok videos cover health topics that provide young people with trustworthy information and reduce pressure on doctors. The initiative helps young TikTok users to understand health and make informed choices.

WBS Global Online MBA: pioneering specialisations for a changing world

WBS is giving more options to participants of its Global Online MBA program. Participants can choose to combine core modules with new specialised modules in 'Social and Environmental Sustainability' and 'Healthcare'. The Sustainability specialism helps participants lead organisations towards ESG goals. The Healthcare specialism helps clinicians and healthcare managers develop leadership skills and understand digital innovation in healthcare.



Linking local communities through campus cycling

Warwick's campus has over 3,600 cycle parking spaces and works with local authorities to improve cycling links to campus. A new bike path connects Coventry city centre and our campus. This will become part of the National Cycle Network. The route forms the first phase of a network to serve Canley, Cannon Park and the campus via Lynchgate Road.



11% of staff used active travel to commute to campus.

Green spaces for wellbeing.

Green spaces are linked to wellbeing, and much of our on-campus accommodation is surrounded by green space. Katherine Mayfield, the Sustainability Champion for Biodiversity, organised a Green Spaces Walk during Wellbeing Week in July 2023. The walk aimed to show the beauty and benefits of Warwick's green campus to both staff and students. Participants were encouraged to step out of their offices and classrooms and immerse themselves in nature.

The WMS Disability Network fosters inclusivity at Warwick

The WMS Disability Network is made up of students from different MBChB, Health and Medical Sciences courses. Their shared goal is to build a caring community for students and staff who have disabilities or health conditions. The network provides training, education, and support. It also works closely with the University to create policies and guidelines.

Engagement

Nurturing the mind and body at our Health and Wellbeing Day event

In May 2023, a Health and Wellbeing Day event was held at Gibbet Hill, the home of WMS and the School of Life Sciences. The event had activities for everyone, with fun and interactive sessions. Participants could find a new health and fitness routine or learn something new, including about sleep or gut health.

The Sports and Wellness Hub is building a strong and active campus

Warwick Sports and Wellness Hub is open to staff, students and the local community. The facility has a gym, fitness classes, swimming lessons, and a climbing wall. It also hosts various sports societies and teams. The Hub provides information to staff, students, and the community about the benefits of being active. The Sports and Wellness community, also known as #TeamWarwick, want to create the most active campus community in the UK by 2030.

Memory Lane Café serves hope and friendship to older people with memory loss

WMS students started the Memory Lane café to help older people with memory loss. They want to fight loneliness and promote social prescribing. The café at The SYDNI Centre in Leamington Spa is supported by funds from WIE. Its goal is to improve mental health, promote social interaction, and contribute to visitor wellbeing. The welcoming space has many activities, refreshments, and chances to connect with others in the community.



Championing Warwick research on health and climate change

Dr. Ana Raquel Nunes from WMS is gaining attention in climate discussions by appearing in various media outlets such as New Scientist, BBC News, Sky News, Bloomberg, and Euronews. This helps to share important information about health and climate change. Her research on the impacts of extreme temperatures on health is reaching millions, highlighting the role of academics in raising awareness and taking action on global challenges.



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





Research

Warwick's CIDD pursues effective interventions for family carers

The Centre for Research in Intellectual and Developmental Disabilities (CIDD) is an internationally respected centre that researches education and psychology topics from around the world. A recent study called the 'Cerebra Systematic Review' looked at the extra stress that family carers of people with intellectual and learning disabilities go through. These carers have a higher chance of experiencing poorer mental health than other family carers. The research examines how interventions can be effective. It also considers factors that promote successful interventions and identifies barriers to support.

A decade of learning at the Education Studies **Postgraduate Conference**

The Education Studies

Postgraduate Conference is now in its 10th year, and it continues to give researchers in the education studies field the opportunity to connect with education in a wide range of ways. The 2023 conference theme was 'Education: Participation, Learning, and Practice'. The event had speakers from different areas, such as Dr Rebecca Morris, who is interested in social policy and justice, and Dr Julia Badger, who focuses on bullying and victimisation in school.

The conference allowed us to see how being part of or excluded from learning and education affects our world.

Navigating Europe's workforce skills for a brighter future

Skills2Capability is a significant, international study that wants to understand how skill systems in Europe can help people change jobs, employers, or industries. This will reduce skill mismatch. The Warwick Institute of **Employment Research is helping** with the project, which will reduce skill mismatch and help people maintain their abilities.



130 Undergraduate students completed Global Sustainable Development Courses.

Education

Engineers in the making: Warwick's work experience week

Warwick's Widening Participation Team and WMG held a work experience week to inspire 10-year-olds from local schools to consider careers in engineering. Thirty students took part in the project and learned about different engineering paths, research, careers, and the dynamic atmosphere of an engineering job.

The teams particularly wanted to support underrepresented students that might lack confidence or support. The initiative aims to promote inclusivity and equal opportunities in engineering education. It does this through mentoring, laboratory tours, and projects, which also challenge misconceptions about the field.



130 Undergraduate students completed Global Sustainable Development Courses.

Warwick's transport museum takeover inspires young STEM scholars

In July 2023, Warwick hosted a Transport Museum Takeover. The initiative wanted to involve 100 Year 8 students from 10 nearby schools. The students enjoyed a hands-on experience centred on STEM subjects. The event showcased exhibits on robots, battery manufacturing, and solar-powered transport. Its goal was to inspire young minds and encourage children from less advantaged backgrounds to pursue higher education. The **Transport Museum Takeover** supports Warwick's goal of inclusive and creative education.



32% of students in the Centre for Lifelong Learning don't have A-Level qualifications.

Warwick's ESD Network **Promotes Collaboration**

The School for Cross-faculty Studies has created a webpage around Education for Sustainable Development (ESD) to support the Institutional Teaching and Learning Review process. This included an ESD common theme, whilst also providing visibility of the excellent work already taking place at the University around sustainable development. Warwick now has an ESD Network, connecting students and staff across the institution to work together on making sure the pedagogical approach aligns with the ESD framework.



There are **42** nationalities amongst our current Centre for Lifelong Learning students.

Operations

Warwick's 'School Tasking' project inspires young people to reach for higher education

Dr. Ali Struthers from Warwick Law School created the 'School Tasking' project. Its purpose is to encourage less advantaged young people to think about higher education and gain vital workplace skills. Year 5 students from local schools formed teams and competed in tasks to showcase their skills.

The 'School Tasking' project has inspired 26 other universities to adopt it. This means that more young people in the UK will have the chance to develop their skills and think about going to university.

Warwick's Climate Literacy Certificate will fuel personal and professional growth

At Warwick's School for Cross-Faculty Studies, students can develop important workplace skills with Climate Literacy Training. Our graduates' employability is also improved by recording their certificate on their Higher Education Achievement Report. The certificate will soon be available to all Warwick staff and students. Our Climate Literacy Certificate will focus on training students and staff in this important area and helping them to understand how climate literacy relates to their personal and professional growth.

Unitemps supports student employment

Warwick's Unitemps helps students find jobs, tackling challenges that are common to students, such as employability and money problems. <u>Unitemps</u> helps people find temporary and permanent jobs at the University and nearby businesses.

Engagement

The Library is about more than books

The Library is a resource for staff, students, and the public. It holds old (Warwick Digital Collections) and new archives (Modern Records Centre). You can access research publications, e-resources, and the RNIB book share.

The book share has many inclusive options for people with visual impairments and disabilities. The Library is central to campus life, running events throughout the year aimed at connecting staff and students outside of academia.

Coventry schoolchildren visit Parliament with **Warwick and UNESCO**

In March 2023, schoolchildren from Coventry visited Parliament on a school trip. The trip was organised by Warwick and UNESCO. The visit was part of the University's programme to widen access to higher education, aiming to expand opportunities and experiences for schoolchildren from disadvantaged backgrounds in Coventry. The children, from ten schools across the region, were hosted by local MP Taiwo Owatemi. The event built on previous work done by Warwick which aims to empower young voices in the city.

Warwick and UCB's partnership for education and economic growth

Warwick and University College Birmingham are working together to help businesses in the West Midlands by filling skills gaps. The collaboration helps disadvantaged communities by offering education, technical training, apprenticeships, and support for entrepreneurs. Both institutions have a big impact on the region, helping the economy and creating jobs in the West Midlands. The partnership focuses on education and skills development for social mobility and regional growth.

Achieve gender equality and empower all women and girls

Research

Tackling violence against women through data and research

Professor Sonia Bhalotra at Warwick is leading a research project that generates new evidence to address violence against women and realise women's rights. Gender inequality is a cause and result of violence against women. Despite this, economists show less interest in violence against women than other aspects of gender inequality, such as the pay gap. The project wants to gather and study data that is not being used or is not available, and the goal is to create new scientific evidence to help make policies and support more research.

Celebrating Dr. Currie's impact on pregnancy and fertility research

Dr. Cerys Currie, a Warwick researcher, has won an award for her work in reproductive science and research culture. Dr. Currie collaborates with the IVF clinic at University Hospital Coventry and Warwickshire (UHCW) on two projects. The first project examines how maternal age affects fertility and why human eggs develop atypical chromosomal numbers over time. The second project examines early human embryos and how they contribute to pregnancy loss and infertility by studying chromosome segregation.



MEDHERANT

Innovating menopause care with the world's first testosterone patch

Medherant, a company that originated from research at Warwick, has secured nearly £3 million in funding. They aim to create a testosterone patch for individuals experiencing reduced libido and vitality due to low testosterone during menopause. Founded by Professor David Haddleton, the company took their testosterone patch to clinical trials in Autumn 2023. Although there are patches for Oestrogen and progesterone HRT, there are currently no patches for transdermal testosterone delivery. The new patch helps with menopause and is widely available, filling a gap in products.



27% of Warwick Professors are women.

Education

Warwick's dedication to gender equality recognised with Silver **Athena Swan award**



The Athena Swan Charter helps promote gender equality in higher education and research worldwide. Warwick has a Silver Athena Swan award, and 21 academic departments also have individual Athena Swan awards.

GSD module explores inclusive aid, humanitarianism and sustainable development

The GSD module 'Aid, Humanitarianism, Sustainable Development and NGOs', introduces international aid and the challenges to collaboration from changing geo-political alignments and climate change impacts. On the course, students are encouraged to adopt an inclusive understanding of gender, which will help to ensure that everyone can access necessary and useful support after experiencing violence.



Reassessing sustainability discourse with GSD postgraduate module

GSD offers the postgraduate module 'Care-ful Sustainability: Place, Culture and Value'. This module deconstructs sustainability using feminist ethics of care. It provides a critical perspective and prompts students to reassess sustainability discourses. This module helps students discuss ethics of care in relation to food, design, architecture, health, inequality, and justice.

Operations

50 years of empowerment: celebrating Warwick women graduates

The Warwick Women's Professional Network celebrated 50 years of women graduates. Representatives from the last five decades shared their challenges, growth, and changes in the workplace. Events have been held either online or at the WBS campus at The Shard in London. The events have been an opportunity to connect, share and reflect on topics such as wellbeing, assertiveness and resilience.



54% of Professional Services Staff at FA9 are Women.

"AdvanceHE

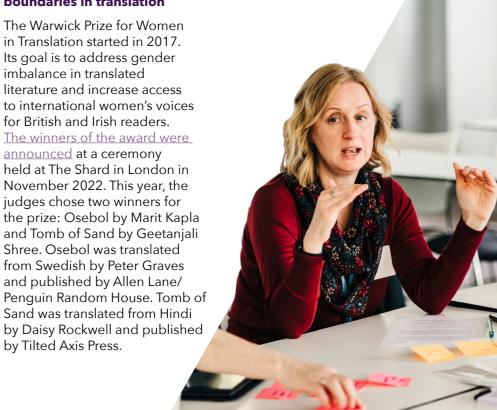
The Aurora programme is cultivating a network of change

Aurora is a program run by Advance HE that helps female staff in academic and professional roles. The program helps women to improve their leadership skills and connect with others across the UK. At Warwick, there are several champions called 'Warwick <u>Aurorans'</u> who coordinate across departments and skill sectors. These champions are alumnae of the Aurora programme, and their network supports and contributes to female development initiatives.

Engagement

A double triumph: Warwick Prize winners break boundaries in translation

in Translation started in 2017. Its goal is to address gender imbalance in translated literature and increase access to international women's voices for British and Irish readers. The winners of the award were announced at a ceremony held at The Shard in London in November 2022. This year, the judges chose two winners for the prize: Osebol by Marit Kapla and Tomb of Sand by Geetanjali Shree. Osebol was translated from Swedish by Peter Graves and published by Allen Lane/ Penguin Random House. Tomb of Sand was translated from Hindi by Daisy Rockwell and published by Tilted Axis Press.



Ensure availability and sustainable management of water and sanitation for all







Warwick works with our communities in river health citizen science project

The 'Know Your River' project wants to involve communities in studying English rivers. They want to learn how people use the rivers for fun and help people feel more involved by doing surveys and testing river water. The research will also discover how healthy the rivers are. <u>Dr. Borsetto from</u> Warwick's School of Life Sciences led a team that studied pollution. They studied pollution caused by antibiotic and antibiotic resistant bacteria. This pollution poses a risk to human health. Over one month, 155 water sample testing kits were delivered to volunteers nationwide, and 100 were returned. The returned kits will be analysed by Dr Borsetto's team to give crucial baseline data.



The IGSD's global efforts in tackling water security challenges

Warwick has worked with researchers from low and middle-income countries to tackle water security challenges made worse by climate change. They were part of the Futures Climate Research Cohort Programme. The Institute for Global Sustainable Development (IGSD) leads an initiative that focuses on understanding inequality in water security, promoting resilience, and empowering vulnerable groups. The programme aims to help 20 new researchers from ten countries through training, projects, and knowledge exchange.

Education

'Thinking water' module unpacks water's impact on our world

A holistic module from the Institute of Advanced Teaching and Learning aims to present the topic of water in its complexity. The module focuses on recent water discoveries and their impact on our planet's history, ecosystems, global goals, gender, and city organisation. Students have the added opportunity to reflect on the ways in which water is managed and utilised on our campus.

A Sustainable Serenissima: Water and the Future of Venice

This undergraduate Liberal Arts module focuses on Venice as a case study in sustainability and unsustainability from a wide variety of perspectives. The course discusses climate change, megaprojects, and the importance of indigenous and local knowledge for sustainability.

Living With Water module prepares students to navigate water's complex realities

Living with Water is a module for first-year undergraduates. It explores contemporary issues about water management. The module goes beyond traditional ideas about sustainability. It covers social, environmental, and economic aspects. This lens allows students to explore history, politics, culture, and governance related to water and sustainability. They can also reflect on, evaluate, and envision strategies for adapting to future climate change and its impact on water.





Operations

Water conservation success on campus

Warwick saved almost 17 million litres of water by better managing our water use and fixing leaks. We used automatic monitoring to constantly check water usage.



16,956,000 litres of water saved.

Warwick's journey to sustainable plumbing

The University standards specify that water efficient appliances are fitted whenever we build new or refurbish taps, showers and dual flush toilets. Shower and tap flow technology have halved shower water usage from 12 litres per minute to six litres per minute, and tap water usage is now down to three litres per minute in areas that currently have low flow taps installed.

Engagement

From dinosaurs to water warriors: Warwick Nursery's sustainability success

Children at Warwick's nursery have been working towards their second Green Flag Award. For the youngest children, water was identified as a vital resource by explaining that: "We drink the same water that the dinosaurs used to drink! Can you roar like a dinosaur?". The older children are becoming 'water warriors'.

They are learning to switch off taps that other children have left on, and to only take the water that they need from the cooler, without tipping excess down the drain. The children use collected rainwater to water plants and are sharing their newfound knowledge with their parents through monthly newsletters.



Each year, on-campus accommodation blocks participate in a competition to reduce their water usage. Due to the accommodation across campus having both ensuite and shared bathroom facilities, block water usage varies widely. Therefore, the competition focuses on individual savings, comparing week by week readings. Student Cut the Flow ambassadors engage with blocks to share ideas and encourage water saving behaviours.

Cut the Flow has been a constant in student life at Warwick since 2014. Since 2018, it has taken place throughout terms one and two, with consumption behaviours being monitored throughout term three. In the UK, average water usage is roughly 140 litres. Across 7,463 beds within Warwick accommodation, there was a reported average of 129 litres per day, a reduction of 162 litres from the 2019/20 average.



Ensure access to affordable, reliable, sustainable, and modern energy





Research

Bolivia's green revolution: Warwick's role in lithium battery innovation

Warwick is set to help Bolivia

become a world leader in renewable energies and electric vehicles, thanks to an historic partnership on lithium battery research with the Bolivian Government. The partnership will help develop the application of lithium as a power source in everything from electric cars to mobile phones.

The project supports Bolivia's ambition to provide 40 per cent of the world's supply of lithium by 2030, which could lead to higher paying employment and industry and a transition away from the exploitation of raw materials. In addition, several master's degree scholarships will be offered to Bolivian students.

Warwick and Manchester discovery could lead to low-cost and green hydrogen

A research discovery by Warwick and The University of Manchester has the potential to accelerate the hydrogen economy. Expensive catalysts and membranes, which sometimes have significant environmental footprints and are currently used to generate and utilise hydrogen, could be replaced with more sustainable 2D graphene crystals. This would reduce carbon emissions and generate green hydrogen. The research is leading the way towards the development of low-cost catalysts for hydrogenrelated technologies.

EV-elocity's award-winning efforts in electric vehicle adoption



EV-elocity, a collaborative project led by WMG, received a Collaborate to Innovate Award in the Energy and Environment category. Focused on increasing electric vehicle (EV) adoption through vehicle-to-grid innovation, researchers developed a model to optimise EV battery usage, promoting renewable energy utilisation, lowering carbon footprint and providing financial savings.



Research collaborations reveal how nanowires hold the key to solar power innovation

Researchers from Warwick,
Oxford Materials and SuperSTEM
have revealed that tiny materials
100,000 times smaller than the
width of a strand of hair could
be used to improve solar cell
technology, through harvesting
energy from the sun. The
discovery of such small nanowires
could potentially lead to new
properties and applications of
this type of sustainable energy.

Warwick's quest to cut carbon emissions in energy networks

The Sustainable Thermal Energy Technologies group is researching ways to reduce carbon emissions in energy networks. They are developing low carbon heating and cooling technologies. Current research projects are centred around electric, low-cost heat pumps and waste heat recovery. The research facilities have a lab for thermal technologies, chambers for new heating and cooling tech, and a solar lab.



Education

Azerbaijan's renewable energy journey: WMG's partnership with new MSc

In March 2023, the Dean of WMG Robin Clark visited the Azerbaijan State Oil and Industry University as part of plans to launch an MSc Dual Degree Programme in Renewable Energy. The world-class faculties within the programme will empower candidates with the knowledge and skills to excel in this rapidly evolving sector.

Warwick's MSc in Humanitarian Engineering can empower sustainable solutions

The Department of Engineering at Warwick offers an MSc in Humanitarian Engineering with a focus on sustainability. The curriculum teaches about modern renewable energy technologies like biofuels, wind power, and solar energy. It also includes ethical and practical considerations, with a focus on limitations in developing countries.

Operations

Warwick's on a mission to triple solar energy capacity with campus photovoltaic installations

The Energy Action Group (EAG) is installing more photovoltaic installations on campus rooftops. To date, the University's photovoltaic installations have a one mega-watt of generating capacity, and there are now plans to triple this capacity.

Heating the future: Warwick explores new low-carbon heat sources for campus

Investigations into alternative low carbon heat sources on-campus are underway. The Energy Team have identified low carbon technology that will be part of new buildings on-campus, replacing existing heat sources in buildings.

New energy policy switches on across campus buildings

Building temperature set points and time schedules have been modified across more than 100 buildings across campus, in line with Warwick's new energy policy published in 2023.

A data-driven approach to energy management

Energy consumption is monitored in almost all buildings across campus using a network of more than 5,000 connected meters. Through continuous monitoring of data, energy wastage can be quickly identified and measures put in place to rectify.

Engagement

Energy Action Group (EAG) brings colleagues together to decarbonise our campus

Representatives from EAG provide regular updates about the Net Zero Carbon Plan and the types of projects that are underway and planned. Decarbonising energy sources is a central part of the Way to Sustainable Operations Pathway, and plans are in development both within the University and with the wider community through Master planning, Regional and Strategic Engagement workstreams.

The Energy team provide guided tours of campus energy infrastructure, supporting academic research and teaching programmes through data and knowledge sharing. The use of the campus as a "Living Laboratory" has been long promoted by all involved in the delivery of energy infrastructure projects.



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

DECENT WORK AND ECONOMIC GROWTH



Research

Warwick's green paper shows **UK farming could sow the** seeds of economic prosperity

A green paper by Warwick Crop Centre shows how a strong farming sector in the UK could bring economic, environmental, and nutritional benefits. To ensure the growth of the UK fresh produce industry, it needs sustainable strategic support. If British farmers increase their production of fresh fruit and vegetables by 30% by 2032, it would benefit the UK economy by adding £0.5 billion per year and help the industry become carbon neutral.

Strategies for successful AI adoption in the workplace outline our path to progress

Professor James Hayton conducted a study for the Institute for the Future of Work (IFOW). The study found that nearly 80% of UK companies use artificial intelligence (AI), robotics, or automation technology. Despite concerns, research shows that adopting AI can create jobs and improve job quality. The readiness of an area to innovate and the involvement of workers are important factors in the successful adoption of Al. Investing in education, infrastructure, and HR practices is crucial for benefiting from AI and automation.

WBS report makes recommendations to **Government on care home** financial crisis

A report by WBS, University College London and the Centre for Health and Public Interest highlights that financial support for the UK care home sector during the COVID-19 pandemic had postponed rather than prevented a financial crisis. The £2.1 billion provided by the UK government avoided mass closures, but did not always reach frontline care or workers, with sums 'leaking out' in profits and dividends. The sector faced a renewed financial crisis postpandemic, leading to calls for improved contingency planning, transparent use of public funding and enhanced support for care staff.



Education

Earning while learning: the benefits of degree apprenticeships at Warwick

The Degree Apprenticeship Programme offers a range of successful undergraduate (Level 6) and postgraduate (Level 7) apprenticeship courses, as an alternative route to entry.

All have been carefully developed with industry and professional bodies to meet current and future skills needs. Courses are offered across various fields including engineering, digital technology, business and administration, and health and social care, alongside new programmes that are currently in development. The apprenticeships are provided without tuition fees whilst allowing the students to earn a wage.



90% of Degree Apprentices retain employment.

GSD World of Work module explores sustainable livelihoods in a globalised world

The GSD module 'World of Work: Global Perspectives on Labour and Livelihoods' explores various issues regarding work in the global economy and sustainable livelihoods. It considers issues such as full and productive employment, thinking globally about work, ethical work and considering future outlooks.











Warwick Enterprise and the entrepreneurial edge of **Warwick students**

Global labour market challenges mean it is important to leave university ready to contribute positively and responsibly to society. Being 'enterprising' is not just about starting or running a business. Entrepreneurial behaviour and enterprise skills are valuable in university and desired by employers. Warwick Enterprise works with students to explore enterprise and entrepreneurship, helping them develop skills and launch ventures.

Operations

Warwick is an accredited **Living Wage Employer**



Warwick is now a Living Wage Employer. We have chosen to pay everyone a living wage based on the cost-of-living. The University is helping many staff in Coventry and Warwickshire, including contractors and suppliers, with this accreditation. The real Living Wage is higher than the government's minimum, or National Living Wage. It is an hourly rate of pay that is independently calculated. The rate is based on the actual costof-living. It is calculated each year and is announced by the Living Wage Foundation as part of Living Wage Week.

Beyond compliance: Warwick's transparent approach to equal pay and inclusion

Warwick has reported on the gender pay gap, as required by the Equality Act 2010. The University also publishes pay gaps related to ethnicity, disability, and LGBTQUIA+ even though it's not required. The data has been analysed and it will be used to show the University's commitment to improving pay gaps. This commitment will be achieved through current steps and future actions.

Warwick joins sustainable recruitment alliance and launches 'The Workwear Wardrobe'

In April 2023, Warwick joined the Sustainable Recruitment Alliance, alongside four other Russell group universities. The alliance aims to encourage organisations to be more eco-friendly in recruiting early talent. This is done through a review, reduce, report framework. Warwick's Student Opportunity Department has created 'The Workwear Wardrobe' to help students build a professional wardrobe affordably. This will benefit them for interviews, assessments, and work experience.

Engagement

WMG programme injects £220 million into Midlands economy

WMG finished its £10 million DI4M program, adding £220 million to the Midlands economy. The initiative supported 660 jobs and digitalised 370 businesses. The program facilitated the development of innovative products such as an electric charging point for lampposts and a wall-climbing robot for maintenance on tall buildings. WMG's SME group continues to support manufacturing SMEs through initiatives like the Net Zero Innovation Programme and Business Energy Advice Toolkit.



Build resilient infrastructure, promote sustainable industrialisation, and foster innovation



Research

Coventry's Very Light Rail system will be affordable and eco-friendly as demonstrated at WMG

Coventry City Council and Warwick's WMG revealed a practical demo site for the Coventry Very Light Rail (CVLR) track system. Utilising advanced materials, the track is costeffective, easily installable within existing highways and removable, minimising disruptions. Estimated at £10 million per km, it offers a more affordable alternative to traditional tram tracks. The innovation promotes efficient, eco-friendly urban transport. The project, supported by the West Midlands Combined Authority (WMCA), showcases regional collaboration in advancing low-cost, low-impact public transportation, contributing to climate commitments.



Innovate UK and WMG join forces to empower UK manufacturing with SIMPLE data platform

To enhance UK manufacturing with data-driven tools, WMG collaborated with Innovate UK to develop SIMPLE software.

SIMPLE stands for Smart

InforMation PLatform and Ecosystem for manufacturing. The SIMPLE toolbox has modules for connecting hardware and software data sources. These sources include shop floor equipment and organisation databases. Manufacturers can gather important data and provide useful insights quickly using SIMPLE. The goal is to create a data platform that helps manufacturing companies quickly and effectively use digital tools for decision-making.

£7 million Centre gains WBS expertise with Professor **Stephen Roper as Co-Director**

WBS professor Stephen Roper has been appointed Co-Director of the new Innovation and Research Caucus (IRC) to develop it into a world-leading centre of excellence in research and innovation funding. In the future, the IRC will gather more evidence to support UKRI's strategies and investments. This will help UKRI achieve their goals in science and technology. It will also lead to greater societal and economic impacts from research and innovation.

Education

Warwick launches new Design and Global Sustainable **Development degree**

This year, the school for Cross-Faculty studies introduced a new degree in Design and Global Sustainable Development.

The degree makes students think critically about important global issues like the environment and technology. They also come up with practical, design-led solutions.

WMG's Innovation and **Entrepreneurship MSc:** paving the way for innovative digital businesses

WMG's Innovation and Entrepreneurship MSc teaches you how to start and grow innovative digital businesses. The course supports students who want to start their own business or make changes in an established company. It encourages creativity and provides practical support.

Operations

IKON advocates for transparency in carbon emissions reporting and modelling

IKON, part of WBS, studies knowledge and innovation using theory and research. New <u>research</u> from the centre shows that differentiating between data reported by companies and data estimated by providers for carbon emissions can be counterproductive in managing finances related to climate change. In this context, estimates are common from reporting firms or data providers. Instead of preferring one type, we should focus on making Scope 3 modelling more transparent and known.

ISO certifications acknowledge WMG's Energy Innovation Centre is a research leader

Warwick Manufacturing Group's (WMG's) Energy Innovation Centre at the University got international accreditation in January 2023. They achieved this by meeting two important ISO Management Systems Standards. The first standard, ISO 9001, focused on Quality Management Systems. It covered the entire business operation within WMG's battery research facilities. This included manufacturing battery cells and packs, as well as extensive testing processes. ISO 14001 is the second standard. It focuses on Environmental Management Systems and evaluates how the Energy Innovation Centre manages environmental risks. The EIC was successful in achieving full certification of both standards. The centre's certifications make it a research leader, working with industrial partners to maintain quality and environmental standards.

Engagement

Warwick's lab sustainability efforts rewarded: LEAF accreditation for 25 labs (and counting)

Warwick has 25 labs accredited

as LEAF Labs. These labs are

in Chemistry, Life Sciences, Engineering, and Research Technology Platforms. The scheme wants to make the laboratory workplace more sustainable. They focus on things like waste, recycling, equipment management, and procurement. Five University labs received LEAF accreditation this year. The number of labs earning silver awards increased from six to ten, and gold awards increased from two to four. The scheme has the twin benefits of saving carbon and money, whilst also demonstrating best lab practices to staff and student audiences.



Warwick's Innovation District fuels local economy with £35.8 million investments

A report shows that Warwick is boosting innovation in the West Midlands, which helps the local economy grow. The report showed that businesses in the Warwick Innovation District (WID) raised £35.8m in 2021. The District is an innovation ecosystem that connects academics, businesses, founders, investors, and business growth programs. Since it launched in 2020, the District has raised over £100m in equity investment. The WID helps more than 700 businesses, including NanoSyrinx, which received a £6.2m investment. The region stays strong in clean transport, manufacturing, gaming, health, and fintech. This is because of initiatives like accelerators for clean transport and university research commercialisation.

WMG inspires underrepresented students into STEM careers

WMG (WMG) held an Engineering Industry Day, welcoming 200 secondary school pupils identified by their teachers as being from underrepresented groups in STEM careers, with an interest and a potential to do well in those subjects. The event included tours, academic and student interactions, and presentations by local companies such as Jaguar Land Rover and National Grid. Aimed at addressing the engineering skills gap, the initiative encouraged the pupils to consider STEM careers. Students were given advice on engineering careers, apprenticeships, and support programs to encourage diversity and interest in STEM fields.



Reduce inequality within and among countries

Research

Warwick and Coventry City Council collaborate to tackle health inequalities

In 2022, Warwick collaborated with Coventry City Council on the Health Determinants Research Collaboration (HDRC) to address health inequalities and improve outcomes across Coventry through research. The partnership forms part of a wider £50 million investment across the country, aiming to boost local authorities' capacity and capability to conduct high quality research. The HDRC will help to stimulate economic growth, particularly in some of the most deprived areas of the country and contribute to the Government's plans to act for the longer-term resilience of the health and wealth of the country.

Warwick's initiative to boost equality in UK construction

The UK public sector spends £284bn a year on purchasing (or procuring) goods, works and services. With such high amounts of spending, there is growing interest from policymakers in using public spending power to foster social goals, an idea known as 'social procurement'. Professor Tessa Wright and her team at Warwick Institute for Employment Research are leading the research project "Buying Social Justice". The project explores how public bodies can use public procurement to promote employment equality in the UK construction sector. The sector has few women and ethnic minority workers. The project aims to recommend ways to improve employment equality.

Age diverse boards are better at reigning in banking CEOs

This year, researchers from WBS examined how age diversity on company boards, particularly in the banking sector, impacts on risk management. Analysing 232 US banks, the research found that age-diverse boards are more effective in identifying and addressing risky behaviour or less-than-prudent behaviour in banks. The findings emphasise the need for age diversity on company boards to contribute to responsible and effective governance.

Education

Addressing the Black awarding gap: Warwick's progress and commitment

The Black awarding gap is the difference between the proportion of White UKdomiciled students who are awarded a first or upper second degree and the proportion of UK-domiciled Black students who are awarded degrees of the same class. The University is committed to eliminating the Black awarding gap (degree outcomes gap) by 2025. Warwick is performing better than the higher education sector average in this area. In 2020/21, the sector average was 18.5 percentage points. Whereas, that year Warwick's awarding gap was 8.1 percentage points, decreasing most recently to 7.7 percentage points in 2021/22.



Warwick's Student Research Hub drives inclusivity and equity

By providing extra help to students from minority groups, we increase their chances of success and create a stronger sense of community. The Student Research Hub helps underrepresented students access and participate in research. The hub links student researchers with postgraduate mentors and a wider project team. They explore students' relationship with their environment. They also discuss themes of inequality, diversity, and inclusion in an equitable way.

WBS launches Black in **Business scholarship**

In 2022, WBS launched a Black in Business scholarship to encourage and support more Black people to take up study and reach senior leadership positions in business. WBS wants to help more Black people get top business jobs. They offer a discount on MBA fees for Black candidates. The scholarship is one of seven new scholarships launched to champion diversity at WBS in the workplace.

Operations

Warwick's committed to being a representative workforce

The University is committed to reaching 25% Black, Asian, and Minority Ethnic (BAME) Professors and Professional Services staff at FA9, with 5% to be Black, by 2030. In 2022/23, 10.2% of Professors at Warwick and 6.7% of the University's Professional Services staff at FA9 were BAME

The proportion of BAME Professors at Warwick is higher than the sector average.

Warwick's dedication to race equality earns us the REC **Bronze Award**

The Race Equality Charter (REC) wants to make higher education better for minority ethnic staff and students. It focuses on representation, progression, and success. Warwick has earned the Race Equality Charter Bronze Award, showcasing its dedication to addressing race inequality. The institution is still following its Race Equality Action Plan. It is measuring progress for five years and showing achievements, like more diverse staff since 2017. Warwick is one of 22 institutions that have achieved REC Bronze award status.

Accessible parking on campus made easier

Parking on campus is free for all vehicles displaying a valid blue badge. There are accessible parking spaces near all buildings on campus.

Warwick prioritises web accessibility

The webpages of the University website are regularly audited for accessibility and automated accessibility checks are built into the content editor. Training is available to all digital marketing executives and developers on accessibility and a full review of the website started in February 2022 to ensure the content is both relevant and accessible.

Awards and Accreditations

- Silver Athena Swan Award
- Disability Smart Bronze Award (2021)
- Bronze Race Equality Charter Award
- University of Sanctuary (since 2017)
- Trauma Informed Educator Silver Award (2023)
- Signatory to the Social Mobility Pledge
- Warwick is a founder member of the Disability **Employment Charter**
- Stonewall Workplace Equality Index, Ranked 122 out of 403 and awarded Gold (2022)

Engagement

Warwick's Islamic **Education Summer School** enters its fifth year

The Warwick Islamic Education Summer School (WIESS) is a unique learning community. It includes researchers and practitioners from diverse backgrounds. They all share an interest in the intersection of education and Islam. This is within the context of Muslim societies, both minority and majority, in the present day. <u>In September</u> 2022, WIESS held its fifth summer school. The sessions looked at how young learners create their learning identities in different educational cultures and teaching styles that sometimes have different expectations.

Warwick STAR recognised its welcoming community of volunteers on World **Refugee Day**

23

On World Refugee Day, Warwick proudly recognised the impactful efforts of over 300 student volunteers from Warwick Student Action for Refugees (STAR). Through weekly English conversation clubs and a tailored youth club, student volunteers provide support to refugees and asylum seekers in Coventry, promoting language skills, academic assistance, and emotional support. The initiative demonstrates values of solidarity and inclusivity, helping to build a welcoming community.

Warwick Inclusion Conference reflects on collective progress

In June 2023, over 130 staff attended the second Warwick Inclusion Conference. The conference offered an opportunity to share practice, generate ideas, think about what it means to be an inclusive institution and celebrate our collective achievements and progress so far.

Coventry's LGBTQ+ community unites at Warwick's inaugural pride event

In June 2023, Warwick hosted a Pride event for the first time in the institution's history. The campus welcomed students and local communities for the year's biggest celebration of the LGBTQ+ community in Coventry. The free event celebrated and supported everyone in the LGBTQ+ community, promoting inclusivity and unity. As part of the event, Warwick welcomed different community groups. One of these groups was 'Out in the UK,' which supports LGBTQ+ refugees. Some of these refugees had to hide their sexuality in their home countries.



Make cities inclusive, safe, resilient, and sustainable

Research

Pioneering change: proposing legislation for micromobility vehicles in the UK

The UK is the last major Western economy not to legislate 'Powered Micro Vehicles'. Warwick wants to change this. We proposed new rules for

allowing micromobility vehicles, like e-scooters, to be legal in the UK. Researchers from WMG, with support from Cenex, created guidelines for designing and operating eScooters. The report examined ways to make models safer and better. It gave clear instructions for dealing with unsafe behaviour, to help change regulations.

Warwick partners in research initiative that could unlock our hydrogen future

Warwick is one of several partners to contribute to a new hydrogen research hub.

To achieve net zero carbon emissions by 2050, the UK needs hydrogen and low-carbon liquid fuels like ammonia. Hydrogen is a flexible energy source that can be used in sectors where other energy options, such as electricity, are not suitable.

Warwick researchers publish first ever study on aggressive driving

Researchers at Warwick have conducted the first study on aggressive driving behaviours. They measured the changes in driving when someone is aggressive. Aggressive drivers go faster and make more mistakes, which puts others at risk. This also poses a challenge for researchers developing self-driving cars.

Education

Warwick's 'Sustainable Cities' module prepares students for urban challenges

Cities are spaces of social and technological innovation, but also host some of the most pressing human welfare concerns. The 'Sustainable Cities' module from Global Sustainable Development helps students understand urban context. This understanding is important for promoting sustainable human development. Students are asked to think about creating cities that are inclusive, safe, resilient, and sustainable. They also study the roles of buildings and government.

WMG environmental assessment workshop inspires change

SAMS and HVMC sponsored a two-day training workshop to teach participants from diverse backgrounds about environmental sustainability assessment. The workshop, led by experts from WMG and industry specialists, explored environmental impact assessment, life cycle analysis, and material flow analysis.



Venice: Resistance and Representation

The 'Venice: Resistance and Representation' undergraduate module offered for Liberal Arts and Global Sustainable Development students, explores Venice as a hub of cultural, ecological, intellectual, and political resistance. Participants unpack the city's historical defiance as well as its representation. Key questions include how resistance manifests in Venice, the role of its unique geography and the relevance of past resistance to current challenges like depopulation, mass tourism, and climate change. By examining Venice's legacy of resistance, students can consider practical applications for addressing contemporary issues in today's cities and communities.

Operations

Warwick and TfWM's innovative on-campus collaboration

Warwick and Transport for West Midlands (TfWM) worked together for two years to convince drivers to use greener transportation instead of cars. To make the campus more eco-friendly, the Future Transport Showcase introduced e-scooters, on-demand buses, and a shared car scheme. During the trial, people were encouraged to choose greener transportation through incentives in the "Choose Your Way Warwick" campaign.



Campus average of 3,000+ rides per week using the cycle hire scheme.



Smart mobility solution launched on campus has been a hit with customers

In spring 2021, the West Midlands Combined Authority (WMCA) started a pilot project for Demand Responsive Transport (DRT). The project was launched around Warwick campus and in South-West Coventry. Staff and students could book one of the six minibuses using a smartphone app or by calling. Each minibus could hold 13 passengers, including one wheelchair spot. The minibuses would pick users up for any trip within the zone.



70,000+ completed rides on DRT since 2021.



Engagement

Warwick experts bring STEM to life for Coventry students

Professors and experts from different departments at Warwick visited Coventry's famous Transport Museum in July. They were hosting 100 students from ten nearby schools for the day.

Children from disadvantaged backgrounds had the opportunity to learn about STEM through museum exhibits and from our academics' expertise. The takeover aimed to ignite curiosity and inspire young minds by bringing science to life. The children had the chance to delve into intriguing topics including robots, battery manufacturing, and solar-powered transport.

Cycle Assist Day promotes disability awareness

The University held a Cycle Assist Day. Attendees could listen to talks by disability change makers, and campaign for change in focus groups and art workshops. Warwick's Transport team had bike sales at the beginning of terms, and cycle training was provided from November to March. This was done in partnership with a local community engagement program.



WIE improves teaching at Warwick and helps students develop skills for future employment. WIE also gives Warwick a platform to play a stronger role in national and international debate, as well as in social, economic, and policy development.

A 'fresh' approach to participation research

Community organisation Grapevine and Warwick teamed up in a citizen science project working with the local community to enable Ball Hill residents in Coventry to investigate issues around local air pollution. By measuring pollution levels around a local school and high street at different times of day, they gained a better understanding of air quality and to were able to advocate for change through a citizens' jury. This project combined participatory research and citizen science, with nonprofessional scientists in Ball Hill undertaking scientific work with a focus on empowerment, education, and change.



WIE helps the University to play a regional and national leadership role. WIE boosts innovation by sharing knowledge between the University and society, enhancing learning, and fostering partnerships. Through public discussion, knowledge curation and generation, WIE gives Warwick a stronger role in championing inclusion.



Ensure sustainable consumption and production patterns

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Research

How CENTS is pioneering circular economy research

CENTS (Circular Economy **Network in Transportation** Systems) is a research network that brings together researchers, industry experts, and policy stakeholders. The group aims to take on the fundamental challenges of transitioning to a Circular Economy for Sustainable Transport. Together, they work to identify research challenges and develop solutions, and collaborations across sectors such as raw material production, manufacturing, materials use and design, supply chain, human factors, business, and commerce.

HydroPRS recycling process: a breakthrough in reducing the carbon footprint of plastic waste

A recent study led by WMG, in collaboration with Mura Technology, highlights an 80% reduction in global warming potential through an advanced plastic recycling process called HydroPRS when compared to incineration. The peer-reviewed Life Cycle Assessment showcases the potential of advanced recycling technologies in achieving a low-carbon circular plastic economy.

Warwick chemistry joins forces with Biome Bioplastics for sustainable plastics

Lignin is a naturally occurring polymer found in plant cell walls, that is also a by-product of pulp and paper manufacture. Researchers at Warwick's Department of Chemistry are collaborating with Biome Bioplastics to produce a biodegradable plastic from lignin, with a range of opportunities for application in the packaging, catering and cosmetics sectors.

Education



Warwick Volunteers Support 109 Charities in Coventry and Warwickshire

Warwick Volunteers is a group of student volunteers, and they logged over 8,000 hours last year. Their volunteers help many local causes, including 109 charities and community groups in Coventry and Warwickshire. Volunteering in charity shops and food banks helps the local area in a number of ways. It helps to reduce waste, supports sustainable habits, and promotes circularity in the economy.

Preventing contamination enables waste circulatory

Warwick has a lot of labs that do research and teaching. These labs create a lot of waste for the University. Students play a crucial role in waste segregation and sustainable practices in campus laboratories. The LEAF Labs framework helps departments with labs to handle waste responsibly. STEM departments have staff and student groups working on reducing waste and increasing recycling.

GSD's solution-oriented fashion course

The fashion industry is very polluting and affects communities and the environment throughout clothing production and use.

GSD has a course called 'Fashion and Sustainable Development'. It looks at how fashion affects society and the environment, and suggests ways to fix these problems. It also explores the connection between creativity, the economy, and sustainability.

Consumption module tackles the complex web of consumer behaviour

In this course, students study how people buy things and its impact on society. They will look at different theories and frameworks about consumption. This module encourages students to investigate problems in the arts, humanities, and social sciences, using an interdisciplinary problem-based learning approach.

Operations

Warwick Students' Union opened a Zero Waste Store

The Students' Union Zero Waste Store encourages both staff and students to shop more sustainably by reducing single-use plastics from food packaging at source. The store stocks food items such as rice, cereals, pasta, and sweet treats alongside household items such as washing up liquid, hair conditioner and kitchen towels. To make it easier, shoppers can bring a container to fill with goods. If they need more reusable containers, they can buy them at the store for a fee.



Eco-friendly food: Warwick's journey to minimise supply chain emissions

The University continues to recognise the important role it plays in the supply chain by working in collaboration with the community to significantly reduce the direct and indirect emissions of the food it purchases. Efforts include reducing packaging, end of day price reduction strategies, and composting, as well as working with suppliers to reuse packaging where possible and monitor the impacts of systems change.

ReStore repair café breathes new life into old items



ReStore is a recurring repair café event. Staff and students are invited to bring items to be repaired or upcycled by a team of volunteers led by Dean Turner. At an event in June 2023, items revitalised included gaming controllers, worn clothes, fraying cables, a sound system and an electric toothbrush.



81% repair rate at the reStore repair café.

Engagement

New growing space at Gibbet Hill for staff and students

The WMS Sustainability Network is a platform for student collaboration on projects promoting sustainable healthcare, education and living. One such project is the Gibbet Hill allotment, which has been extended with support from WMS staff and the Grounds and Gardens team. The students in the network are passionate about sharing this hobby with others to encourage more local food production.

Warwick's most fashion forward students promote circular economy with Swap Shop

Warwick Students'
Union organises
regular clothes
swapping events
for students
to exchange
clothes they no
longer wear. This
promotes circular economy and
reduces waste. Students can also
buy used clothes by donating a
small amount of money.

Milk bottles into medals

In August 2023, Green
Champions at WMG coordinated staff and students from across the University to collect plastic milk bottle tops to donate to Coventry Trophy Centre. The local business recycled 25,000 bottles into medals for the Oslo Marathon on 16 September. Each four-pint plastic milk bottle was transformed into one medal.

Saying 'no' to disposable cups

Starting in October 2022, the University made changes at its outlets. They stopped using disposable cups at drinking fountains and started using glass drinkware instead. They also made the free drinking water stations more visible. Reusable cups are actively encouraged during event planning and across campus.



Take urgent action to combat climate change and its impacts

Research

Green and hydrogen jobs are the future in the Midlands

A research team at Warwick Institute for Employment Research have been analysing green and hydrogen jobs in the Midlands. The study identified three types of green jobs: pure green jobs, which are new and emerging occupations; enhanced skills and knowledge occupations, which reflect changes in worker requirements for some existing jobs; and increased demand occupations, where green economy activities create more jobs. Using online data, hydrogen jobs were mapped, highlighting roles demanded by the industry. There are more and more green job opportunities available, showing a shift towards a greener economy. The results showed that a more environmentally friendly economy is changing the needs of workers in current jobs. It has also increased the demand for certain jobs.

Advancing battery technology for a sustainable future

WMG secured a share of funding from the Faraday Institution for three battery research projects. The projects, called Extending Battery Life, Battery Modelling, and Battery Safety, support the UK's work in transportation electrification and will have a commercial impact. The projects aim to help society, the environment, and businesses in electrochemical energy storage.

Sustainable development is a key tool in mitigating the impact of heatwaves

Dr. Ana Raquel Nunes shared findings in August 2022 about heatwaves and how sustainable development can reduce their effects. This research is a significant step towards building a more resilient future. New research explores how sustainable development and heatwave resilience are connected, providing important insights for academics.

Education

Challenges of climate change module prepares students for a climate-resilient future

GSD offers a module called 'Challenges of Climate Change' that shows students the current central challenges of climate change. The module is taught by professors from different departments and is open to all students. Climate change is a big challenge for people and will greatly impact students' future work, and understanding it fully requires an interdisciplinary approach.





Financial Times ranks WBS the joint greenest in the UK

WBS has been named the joint greenest business school in the UK after climbing the Financial Times world rankings. The Financial Times Global MBA Ranking 2023 sees WBS move two places up to 55th in the world, 14th in Europe and 6th in the UK, while also being named joint first in the UK and 17th in the world in its Carbon Footprint rankings. In line with the University's wider strategy, the school is committed to achieving net zero scope one and two emissions by 2030 and scope three emissions by 2050. Sustainability is embedded in the full-time MBA curriculum with core modules addressing sustainability issues.

Operations

Progress towards net zero scope one and two emissions by 2030

We reduced 1,000 tonnes of CO2e per year by adjusting heating and cooling settings in 100+ buildings. Solar panels on 42 rooftops across campus produced over 750,000 kilowatt hours of electricity, and we plan to triple our rooftop solar capacity. Warwick has long been a leader in energy efficiency.

We supply 70% of campus heat through a heat network that uses a gas fired combined heat and power plant for efficiency. Our power plant used to be the cleanest way to make energy, but now there are better ways.

Warwick is starting a new phase of using low carbon heating, and we will soon dig trial boreholes to see how well ground source heat pumps can be used on our campus.

Progress towards net zero scope three emissions by 2050

The University has invested in the Energy and Sustainability team staff numbers have grown by 40 per cent this year.

To reduce embodied carbon, recent construction projects have used timber, offsite manufacturing, and material reuse. Future major construction projects on campus also have sector-leading targets for embodied carbon.

We found that most staff and students don't live close enough to walk to campus, and so Warwick remains committed to improving our sustainable travel options. More than 50 per cent of our staff work from home at least one day a week, which means fewer cars on campus and so better air quality.

Engagement

Reducing the footprint of manufacturing chemicals.

A new research program called Sustainable Chemicals Innovations Enabling Net Carbon Emissions (SCIENCE) aims to make specialty chemical manufacturing more ecofriendly. It was made possible by a Prosperity Partnership. The chemical industry is a major contributor to the UK economy and a key facilitator of change through innovation, as over 96% of all manufactured goods have chemical industry content.

WMG's BEAT toolkit is a game-changer for sustainable manufacturing

WMG introduced the Business Energy Aid Toolkit (BEAT) to assist small and medium-sized manufacturers in reducing energy use, cutting costs, and boosting profits. The BEAT program examines energy consumption in manufacturing operations and provides a comprehensive evaluation with energy-saving suggestions. A pilot program achieved energy savings of up to 90% on specific machines and up to 46% in overall production facilities.

Planet Pod

Planet Pod is a podcast where quests from all walks of life share their knowledge and ideas. Dr. Ana Raquel Nunes, an Assistant Professor at WMS, recently talked about how climate change affects public health. She discussed vulnerability, resilience, and the importance of working together to cope with extreme weather.

'Acting on Climate' takes a creative approach to climate education

Acting on Climate uses creative methods to address the climate crisis with young people in the UK. Rachel Turner-King and Bobby Smith involve schools and community groups in their research. Their new project will collaborate with non-academic groups and artists to create participatory artworks that respond to the Sustainable Development Goals. This project aligns with the government's investment in climate change education.





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





Research

How marine organisms adapt to survive in extreme environments

Researchers from the School of Life Sciences are studying the evolution of marine organisms. They want to understand how organisms adapt and respond to different environments. They are currently studying organisms from extreme environments, like the world's warmest coral reefs. They are looking at how these organisms adapt to different stressors and how their genes help them adapt to different environments.



Learning about the 'Biological C pump'

The oceans affect the global climate. Single celled organisms in the water take in CO2 from the air, helping to reduce greenhouse gases. This process, called the biological C pump, is our best natural defense against in the fight against climate change.

Warwick researchers are studying how these organisms use photosynthesis and CO2 fixation to help. The techniques they are using range from the molecular ecological to biochemistry, photophysiology and cell biology.

Education

MSc environmental bioscience in a changing climate calls for balance

The increasing impact of environmental change and climate change makes us reconsider how we manage agriculture and natural habitats. We need to balance the need for food production with environmental stewardship and addressing climate change. This MSc program focuses on environmental bioscience, management, and societal issues related to sustainable food production and ecosystem services.

GSD module Managing Natural Resources explores conservation initiatives

The GSD department has a module called 'Managing Natural Resources' for undergraduates. It helps students understand the challenges of protecting and managing global natural resources. The module uses social, economic, and environmental theories to discuss conservation initiatives.

Operations

Kingfishers spotted at Cryfield pond

The ponds at Cryfield residences on the main campus had become overgrown. In November 2022, the vegetation was cleared and the silt was removed. We also created a natural filter for the water entering the ponds and planted 1,800 marginal plants, which added colour and provided habitat. After the project, Kingfishers, which were hard to spot before, were seen by morning walkers.

Student-led conservation: installing mammal ramps for campus wildlife rescue

As part of the Hedgehog Friendly Campus initiative, Warwick reviewed our on-campus water bodies to see if small mammals can escape if they fall in. A team of students, led by an intern, installed mammal ramps where needed.



Engagement

Warwick joins the Plastic-Free July Initiative

This year, the University participated in Plastic Free July. Across retail and food outlets, Campus and Commercial Services Group (CCSG) actively targeted single-use plastic, replacing all soft drinks sold in single-use plastic bottles with alternatives sold in aluminium cans or glass bottles. The University owned outlets have also removed all single-use plastic bags and cutlery, replacing with wooden cutlery and paper straws.



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



Research

The sound of the underground

Soil scientists, at Warwick Crop Centre are collaborating with experts in eco-acoustics to listen to the activity of earthworms and other invertebrates in the soil. The theory is that noisy soil is healthy soil - and that the sounds generated in soil can be noninvasively recorded, measured, and used to evaluate soil conditions. It is hoped that the study will help develop a system to monitor the activity of earthworms and other soil fauna, to help farmers grow crops more efficiently.

Warwick researcher addresses poverty and deforestation in Madagascar

Following support from Warwick, Dr Herizo Andrianandrasana is researching the social and ecological complexities potentially linking poverty and deforestation in Menabe, Madagascar. Human migration in the area is believed to have been caused by harsh living conditions, with the protected forest land offering shelter. However, the resulting agricultural impacts are affecting the conservation of endemic species. Balancing these priorities requires policy change, education and highlights the dichotomy of balancing the reduction of poverty with the conservation of natural life.

Revolutionising **Environmental Surveys:** Warwick's eDNA Research for Biodiversity Monitoring

Environmental DNA (eDNA) is a faster, cheaper, and more accurate way to survey the environment than traditional environmental surveys. It allows for biodiversity monitoring over large areas. Organisms release DNA into their environment through skin cells, faeces, and plant matter. Metabarcoding eDNA can measure the composition of communities of microbes, plants, and animals living on land and in water. Research conducted by the School of Life Sciences is enabling eDNA observatories for use by local authorities.

Education

Warwick Nursery's ongoing commitment to sustainability

The nursery achieved their <u>second</u> Eco-Schools Green Flag award this year, taking part in litter picks, planting fruits and vegetables, and rewilding their grounds. The nursery also worked with the Estates team to make bug hotels, and hedgehog houses that will be placed around campus.

campus reveals rich biodiversity and conservation insights

Moths are great indicators of habitat health and surveying the moth species we have on campus raises awareness around biodiversity - it's an opportunity for staff and students to get involved and learn more about local wildlife. This summer, Dr Dan Hall, a teaching fellow in German Studies, <u>led a team of volunteers</u> in two species surveys using light traps that found a 41 species of moth. In a single survey, 192 moths were identified in a location set back from human habitat interference and building lights.

Operations

Warwick embraces No Mow May

This year, Warwick participated in Plantlife's No Mow May initiative for the third consecutive year, increasing space for nature across campus as wildflowers were given the opportunity to flourish. Not only were areas left to grow throughout May, but they were left to flourish into Let it Bloom June, further increasing the atmospheric carbon being locked below ground.

Moth survey at Warwick

which reinvigorate the hedge and provide additional habitat for wildlife.

1690 trees have been planted since 2020.

Hedgerows and wildflower

meadows: Warwick's green

Warwick collaborated with Severn

initiatives in full bloom

Trent and the Warwickshire

Wildlife Trust in their Wilder

Communities project. At the

Wellesbourne Campus, the

University has sown an area of

approximately 0.25 hectares

with mixes of wildflower and

from both staff and student

volunteers, planted saplings

as part of The Queen's Green

A double hedge was planted

to provide a valuable wildlife

lay a total of 1,462 meters of

down main campus' Spine Route

corridor. In addition to planting,

the University has continued to

hedges on-campus since 2020,

Canopy initiative.

grass seeds. All the areas have

been sown as strips, parallel to

hedgerows. Equally, the Grounds

and Gardens Team, with support



806m of new hedgerows planted since 2020.



Engagement

Warwick awarded the Silver Hedgehog friendly campus accreditation; sets sights on gold

Hedgehog Friendly Campus is a national initiative aiming to make areas safer and better for hedgehog populations. The University was awarded the Silver accreditation in February 2023 and is now working towards the Gold award. In the past year, the University has:

- Conducted positive species surveys on both Wellesbourne and main campuses.
- Provided information and resources to staff, students and the local community about the risks to hedgehogs.
- Created and installed bug hotels.

Warwick's Wildflower **Roundabout Takes Top Honours**

One of Warwick's picturesque roundabouts has been <u>crowned</u> Roundabout of the Year 2024, recognising its impact on promoting biodiversity and providing habitat for a range of species throughout the seasons. Wildflower planting is a key part of the biodiversity and ecology plan, bringing wildflowers into the urban areas of campus and providing the increase in biodiversity that supports our pollinators.

Warwick Wombles lead the way in campus cleanup and wildlife preservation

Monthly university-wide litter picks were launched in January 2023 after Warwick took part in a successful Big Hog Friendly Litter Pick Challenge. 60 bags of rubbish were collected over a period of six weeks with the help of 63 amazing volunteers - known as the Warwick Wombles.

The monthly sessions engage staff and students from across the University, encouraging them to take care of their environment and keep campus safe for wildlife. They are also a great opportunity to improve our community's wellbeing through connecting with nature.



18 litter picks on campus.



Warwick takes a walk on the wild side: record-breaking biodiversity with City **Nature Challenge**

This April and May, the University took part in the global City Nature Challenge (CNC) initiative, a global mission to record wildlife over four days using citizen science.



335 species recorded on campus.

With support from ecologists at Coventry City Council and the Warwickshire Wildlife Trust, over 250 observations of 146 distinct species were recorded across the campus. Since taking part in CNC, monthly biodiversity recording walks with a range of experts are open to all staff and students using the iNaturalist app.





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

AND STRONG



Research

Addressing barriers to education for local refugees and asylum seekers

For refugees, the journey to higher education is often long and difficult. Tackling those barriers at Warwick is a research project led by Dr Ursula Clayton. The project worked in partnership with charities, such as Refugee Education UK (REUK), to advance English language support and offer peer-to-peer mentoring. Policy changes ensured that refugees were treated as national students for their fees, and recommendations were made around the Sanctuary Scholarship process to further strengthen the model.

Representing future generations in climate planning

The interests of future generations must be central to climate policy. This raises the questions: who should represent future generations and according to which criteria should we judge whether a particular candidate would make a legitimate representative for future generations? Newly published research from the Department of Politics and International Studies <u>arques</u> that future generations should be represented by those who share similar experiences. Based on this, researchers argue that communities already adversely affected by climate change are best placed to represent future generations in decisions about climate policy.

Warwick's prototype for visualising Sustainable **Development Goals** (SDG) research

IGSD is hosting a project to help Warwick visualise its SDG research and collaboration. They will make a dashboard using academic publication data, project data, and staff research profiles. The project will find strengths and opportunities in research collaborations, promote cross-disciplinary collaboration, and improve research reporting and evaluation.

The art of rebuilding trust: **Policing, Culture** and Community

With public trust in policing extremely low, a body of work from Professor Jacqueline Hodgson and Dr Rachel Lewis explores the potential for arts and culture to help build trust and confidence in policing. The initial project led to some positive insights published in a recent report, and a number of newly developed projects including a story-telling initiative and an exciting new collaboration with the Belgrade Theatre.

Al's vital role in prioritising critical injuries

Researchers from WMG and Kharkiv National University of Radio Electronics in Ukraine are working together on an Al project where software analyses CT scan data. They want to help doctors quickly identify and prioritise patients with life-threatening injuries from shrapnel wounds.

This project, part of the 'Twinning initiative', could improve emergency medical response in places like earthquake zones and busy trauma wards. It is an important contribution to humanitarian efforts and addresses urgent healthcare needs.

Education

A new teaching tool on transitional justice

Dr. Briony Jones, Director of WICID, obtained funding from Warwick to create a new teaching tool on transitional justice. The tool, developed with the African Network Against Extra Judicial Killings and Enforced Disappearances (ANEKED) and and the University of Warwick PAIS students, will be launched soon.

GSD module offers global perspectives on good governance for sustainable development

What makes governance 'good'? What institutional changes are required at the local, national, regional, global level to achieve sustainable development? These are some of the big questions addressed by the GSD module 'Good Governance and Sustainable Development' in an interdisciplinary context.

The module delves into why institutions and governance mechanisms differ across countries and on possibilities for institutional change.

Warwick helps Ukraine's education system build a path to recovery

A Ukrainian academic at WBS created a programme to help rebuild Ukraine's education system. The Ukrainian Education Rebuilding Summer School brought 40 Ukrainian education professionals to Warwick. This initiative, in partnership with the Ukrainian Leadership Academy, aims to address post-

war challenges such as school system transformation, student wellbeing, trauma support, and effective leadership.

Operations

The collaborative efforts of Warwick's sustainability action group

The Environmental and Social Sustainability Action Group (ESSAG) helps to coordinate the University's environmental and social sustainability efforts. They work with other committees and groups to improve the University's approach to sustainability. This includes proposals for reaching net zero and promoting a culture of sustainability.

Engagement

Warwick researcher co-writes and presents report for the **UN SDG Summit.**

Dr. Briony Jones, from WICID, co-wrote a report for the United Nations SDG Summit which was presented at the pivotal United Nations SDG Summit in September. The report suggests ways to integrate transitional justice, peace, and development, like strengthening collective action among victim groups, civil society, and political movements.

Our 'University of Sanctuary' is hosting Ukrainian visitors

Warwick is a designated University of Sanctuary, welcoming Ukrainian academics and their families. Our visitors are doing research and building collaborations on campus and beyond. Being a 'University of Sanctuary', means we are committed to providing a welcoming and enabling environment to people fleeing violence, and persecution and seeking sanctuary.



Warwick hosted **10** Ukrainian academics and their families.

Nurturing kindness: Warwick Nursery's acts of giving extend across borders

"There are 7.753 billion people on planet Earth, so it's really important to be kind to one another and work together - can you do a kind act for someone today?"

As the nursery worked towards their second Green Flag Award, they partnered with the Canley Food Hub and now regularly donate supplies for children. This includes baby wipes, selection boxes at Christmas, and Easter eggs. They also donated over 20 bags of children's clothing to Turkey and Syria after the Earthquake Disaster in February 2023. The children are learning about diversity, inclusion, and being kind to both acquaintances and strangers.

Warwick's twinning agreement with Ukraine's NURE signifies hope amidst crisis

In September 2022, Warwick signed a twinning agreement with Kharkiv National University of Radio Electronics (NURE), Ukraine. This collaboration is part of a program that is supporting Ukrainian universities during the war. The #TwinForHope initiative is organised by Cormack Consultancy Group and the President's Fund of Ukraine for Education, Science, and Sports, with support from Universities UK International. As a first step, NURE students have been given the opportunity to participate in Warwick's summer programmes. Twinning with NURE is just one way that Warwick is responding to the conflict.





Strengthen the means of implementation and revitalise the Global Partnership for **Sustainable Development**



Research

Academic Collaboration for Sustainable Healthcare: the **GPNET-0** initiative

The GPNET-0 study wants to reduce carbon emissions in healthcare and make the NHS carbon neutral. Dr. Ana Raquel Nunes is leading this study, which started in September 2023 and will last for 30 months. Researchers from Birmingham, Warwick, and Keele Universities are working together on this project. The study aims to transform healthcare practices and shows how academic knowledge can make a difference in the real world. It highlights the importance of collaboration between different academic fields and the University's commitment to creating a sustainable future for healthcare that aligns with the Sustainable Development Goals.

Warwick Law School students advocate for social housing equality in Coventry

Warwick Law School students

researched social housing inequality. They focused on change of circumstance applications to Coventry City Council. Led by Warwick Law in the Community's Strategic Social Justice Clinic, the students looked into delays faced by tenants in getting new housing. The Central England Law Centre will use a briefing note and pre-action protocol letter to help vulnerable individuals in Coventry. This helps with housing needs and supports social justice and the community.

Professor Jo Angouri's insights on transnational collaboration

Professor Jo Angouri published an insight paper on transnational collaboration, innovation, and policy implications. This paper reflects on the ways of transnational collaboration and aims to create a space for dialogue and sharing good practices. The paper suggests that to expand opportunities, we need to focus on mobility and connecting institutions at regional, national, and international levels.

Education

EUTOPIA universities strategise to lead the way in global problem-solving and innovation

EUTOPIA is an alliance of ten European universities - including Warwick - that work and innovate together to solve global problems. Warwick was part of a meeting in <u>Venice</u> where they talked about different strategies, ambitions and visions for universities in the future. The alliance is changing Europe's approach to global challenges by working together on research, helping students and staff move more easily, and supporting innovation.

From food donations to eco-projects: Warwick **Nursery's lessons in compassion** and sustainability

The on-campus nursery donated food to Coventry Foodbank and clothes to the Syrian-Turkish Earthquake appeal. This taught children about helping others. They also did projects to teach about nature, like reusing leftover drinking water to water plants.

IISMA Scholarship recipients thrive at Warwick

The GSD department welcomed a group of undergraduate students as part of a new collaboration with the Indonesian International Student Mobility Awards (IISMA) scheme. IISMA is a student mobility scholarship scheme involving several top universities across the world. Ten students from eight different universities and ten different majors, spent a term at Warwick studying interdisciplinary modules across different departments.

Climate action and creativity united at the **Youth Climate Assembly**

In February, the Youth Climate Assembly hosted a public sharing event in partnership with the curator of the Mead gallery and the Warwick Arts Centre's Creative Learning team. The event showcased three interrelated creative arts education impact projects and navigated the complex topic of climate change through the arts. Drama, dance, digital arts, creative writing, and performance poetry all featured.

Operations

Walking the path to sustainable development with local and global partnerships

Working with regional, national and international colleagues is key to ensuring Warwick remains a leading institution and has the maximum possible benefit to the communities in which it is based. Working with charities, including the Warwickshire Wildlife Trust, broadens the scope of knowledge available to teams dedicated to biodiversity on campus. Equally, to ensure minimal disruption for local neighbours, Warwick collaborates closely with Coventry City Council on traffic flows. The University became a signatory of the SDG Accord in 2020, committing to incorporating the goals into the curriculum, research, and University operations, through the Way to Sustainable strategy.

Green action at Warwick: empowering change and sustainability

Warwick has different Green Action Groups. Staff in these groups work on making changes to improve biodiversity, energy efficiency, communication, and procurement.

Actions include:

- Adding sustainability to agendas at team meetings.
- Using energy consumption data to identify opportunities for improvement.
- Holding an event as part of Green Week.

Planting Roots programme explores nature, wellbeing, and sustainability

Warwick Arts Centre, Feeding Coventry and WIE teamed up for a special programme of activities called Planting Roots, fostering community engagement and environmental awareness. Through workshops at the gardens at Foleshill Community Centre, the program explored nature, wellbeing and sustainability empowering individuals to make positive changes.

Engagement

Inter-departmental competition yields carbon reductions during green week

During Green Week 2023, Computer Science, Mathematics and Statistics competed in an inter-departmental competition to determine which department could lower their carbon footprint the most. An abundance of ideas were brought to life, addressing transport, food and energy usage.

At the end of the week, all actions were collated, and Mathematics was crowned the winner. Despite the competition only lasting a week, Mathematics saved 25kg CO2e per person through making more sustainable choices.



55 activities across Green Week 2023.

Warwick and Brunswick Hub hold festive feast amid cost-of-living challenges

Warwick hosted a free Festive Feast as part of its Resonate Lates Programme in collaboration with Leamington-based community centre Brunswick Hub. The event, aimed at promoting community connections and providing support amid the cost-of-living crisis, featured international foods, festive crafts, and musical performances. This initiative aligned with the University's commitment to engaging with its neighbours and complemented the ongoing costof-living support package worth £3.5 million for staff and students.

Coventry Culture Works: a new cultural partnership

Warwick has joined forces with Coventry City Council, Coventry University, and leaders from the cultural, creative, and wider sectors in the city as part of a pioneering partnership to deliver Coventry's ten-year Cultural Strategy.

The Coventry Culture Works partnership will attract investment into the cultural and creative economy for the wider benefit of the city. Warwick's new cultural strategy includes commitment to investment, sustainability and developing partnerships and will ensure its campus is a welcome space for residents of the region to enjoy.

WMS praised for **Planetary Health**

The WMS Green Action team were praised in this year's Planetary Health Report Card for their actions in laboratory sustainability, involvement in student-led initiatives and collaboration across departments and communities. As an example, the Green Action team run an onsite garden which grows produce.

WMS Sustainability Network fosters sustainable healthcare and education

The WMS Sustainability Network is a student-led group that started in 2023. They work to promote sustainable healthcare, education, and living at WMS. The group focuses on improving sustainable travel and practices by students. They also support the faculty in prioritising planetary health teaching at WMS.



53% of Medical Students carshare to hospital placements.







For more information about our work on sustainability, go to warwick.ac.uk/waytosustainable