

### OUR COMMITMENT TO THE UNITED NATIONS' SUSTAINABLE DEVELOPMENT GOALS

### WORLD CHANGING GLASGOW

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### INTRODUCTION

#### In a world which is increasingly uncertain and dominated by major shocks, our students, colleagues and other members of our UofG community care about how our University can be a force for good and enact sustainable social impact.

Our landscape is shifting fast as global and societal challenges proliferate and this demands that our sector step up its game and make clear the wider benefits universities can bring. Our funders and, importantly, our students – more attuned than ever before to the socioeconomic and environmental crises facing our nations – expect much more from our institutions.

Our strategy is now being driven by our impact as much as it is by our research. The United Nations' Sustainable Development Goals (SDGs) provide us with a framework through which we can identify ways to contribute to the most pressing global challenges facing humanity and the natural world. This framework supports us to measure outcomes, articulate our impact and develop our strategies.

We collected and submitted evidence to all 17 SDGs in the most recent THE Impact Rankings and were enormously proud to improve our rank to 13th in the world (from 19th in the world last year). We are committed, through the Impact Rankings and the publication of this annual report, to hold ourselves accountable and to give our community the opportunity to celebrate and build upon their contributions.

Increasingly, we do not only want to be recognised as one of the best universities in the world, but we also want to be the best university for the world. I'm grateful to each and every member of our community who has played their part in addressing each of the 17 UN SDGs and supporting our University to make a tangible difference to society.

Professor Sir Anton Muscatelli Principal and Vice-Chancellor

# **SUSTAINABILITY IN A** SNAPSHOT



world Impact Ranking

We planted 300 trees as a legacy of hosting the inaugural Global Sustainable **Development Congress.** 

+10k We employ over 10,000 people.

23,898m<sup>2</sup>

not-for-profit groups.

of space in the new buildings of our

Western campus is available free of

charge for use by third sector and



**Over 200** study abroad destinations



We have been a member of the Athena SWAN Charter since 2011.



We are a Disability **Confident employer** and offer a quaranteed interview for applicants.

We are a proud **Accredited Living** Wage employer.

13th in the

in both THE

Sustainability

and QS

Rankings



£4.4bn Our economic contribution to the UK economy has been valued at around £4.4bn.



We have generated enough **power** from the **photovoltaic** 

panels on the roof of the James McCune

Smith building to

charge **15.000** 

smartphones.

Students from 140 countries



450 windows draughtproofed as part of **University Gardens** conservation



We have harvested enough rainwater on the roof of the **James McCune** Smith building to fill an Olympicsized swimming pool. It has been used to flush the toilets.

### **PURPOSE**

Our 2023 report is our third annual publication, intended to provide an update on some of the work and activity that has been taking place across the University of Glasgow to contribute to the United Nations' Sustainable Development Goals.

We continue to look at four areas of activity:

- Research
- Learning and Teaching
- University OperationsCivic Engagement

We are immensely proud of the commitment, dedication and innovation shown by every part of our community.

This report was produced and steered by Strategy & Planning and External Relations. Special thanks go to Eleanor Miller, Tom Campbell, and colleagues in both directorates for their help and guidance in producing this document, as well as to colleagues across the University for their valuable input.





#### End poverty in all its forms everywhere



## **OUR RESEARCH**

A reforestation project led by the University in collaboration with the National Autonomous University of Mexico Merida is addressing rural poverty and environmental degradation. It was funded by the Global Challenges Research Fund and the Glasgow leaders of the project are also co-directors of the 'Food Sovereignty' Arts Lab theme in our College of Arts.

Sembrando Vida, – 'Sowing Life' – was launched in 2019 by Mexican President Andres Manuel López. The project aims to reach its goal through the planting of a million hectares of fruit and timber trees in agroforestry systems to be supported by trained technicians, statesupervised nurseries and 'peasant learning communities'.

Researchers from the Poverty Research Network and Food Sovereignty Network have partnered with various peasant leaders, defenders of territory, activists and researchers in Mexico in order to examine the impacts of Sembrando Vida on the grounds, as well as the implications of this state-led 'agroecology from above', in a project that is still ongoing today.

A collaborative research study by our MRC/ CSO Social & Public Health Sciences Unit has highlighted the impact of the austerity measures implemented in both Scotland and England. The study reports that an additional 335,000 deaths were observed across Scotland, England and Wales between 2012 and 2019 as a result of the measures which cut billions of pounds from public services and social security systems. The study found that the loss of support caused by these cuts has resulted in people being swept up by a rising tide of poverty and dragged under by decreased income, poor housing, poor nutrition, poor health and social isolation, ultimately leading to premature death.

The authors of the study, led by Dr David Walsh from the Glasgow Centre for Population Health, provided a set of policy recommendations aimed at UK, Scottish and local governments spanning macroeconomic policy, social security, work, taxation, public services, material needs, obesity, and COVID-19 recovery. These would reverse the death rates and reduce the widening inequalities we are seeing. Without urgent action, the tragic figure of 335,000 excess deaths shown in this study will keep growing.

#### LEARNING AND TEACHING

Our School of Humanities has included themes of global poverty, charity, and inequalities in programmes at both undergraduate and postgraduate level. Dr Julia McClure is the founder of the Poverty Network and the Food Sovereignty Network, which works with organisations around the world to deepen understanding and find new solutions to global challenges. It leads several courses on topics including A global history of charity: from begging to basic income; The global history of inequalities; and Poverty and charity in the Spanish Empire.

# UNIVERSITY OPERATIONS

The city of Glasgow has 56 of the most deprived MD areas in Scotland. The University offers a range of anti-poverty support programmes, services and funding to assist students facing financial hardship.

Our Widening Participation (WP) programmes take a targeted approach to considering individual circumstances of pupils within all secondary schools in the West of Scotland, including those from SIMD20 postcodes and pupils with free school meal eligibility.

The WP programmes also extend to asylum seekers, with the University continuing to maintain sanctuary status and offering Sanctuary Scholarships for international students forced to come to the UK for humanitarian reasons.

### 

The Students' Representative Council (SRC) organise a range of volunteering opportunities. Recent examples include training refugees, asylum seekers and other disadvantaged people in technical and web skills to support their searches for employment; and outreach work supporting unemployed women by dressing and coaching them for success at interview.

Colleagues from our School of Education partnered with other universities to explore the rise in child poverty and the impact on educational attainment. The findings call for urgent effective intervention and sustainable solutions and warn of the continued grave consequences of the rise in child poverty in the post-pandemic era. Priority areas for addressing child poverty in Scotland emerged, including the digital divide - the gap that exists between individuals who have access to modern information and communication technology and those who lack access - and the warning is that if this is not adequately addressed in the UK, there will be four million adults by 2024 who will not possess the digital skills for employment in this new age, according to UNICEF. They point out that this will leave adults unable to participate fully in society and that work must be done to ensure all children and young people are digitally empowered for employment in this new age.

The reforestation project Sembrando Vida ('Sowing Life') will address rural poverty and environmental degradation in Mexico through the planting over a million hectares of fruit and timber trees in agroforestry systems.



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



Cochno Farm and research centre has been part of the University since 1954. It offers students the opportunity to gain hands-on experience in the production of milk. beef and lambs

### OUR RESEARCH

The Global Soil Health Programme (GSHP), led by Science Director Professor John Crawford of the Adam Smith Business School, aims to restore and maintain the health and security of 60% of the world's agricultural soils over the next decade. The co-benefits include helping ensure food and water security, alleviating poverty, and mitigating climate change by increasing carbon stocks in soil. GSHP are currently working on projects in the UK, Kenya, Bhutan, Borneo, India and Poland and working together with the World Economic Forum, BIAC and the UN. The overarching approach of these projects is to deliver impact by supporting place-based solutions through the application of science, by accelerating the transformation of food systems.

The University of Glasgow is to host two of three new collaborative research alliances in Scotland, with a focus on two of the biggest challenges currently for world health: nutrition and food security; and lifelong brain health.

The Scottish Funding Council (SFC) have launched the Alliances for Research Challenges (ARCs), marking the beginning of a new approach to collaborative research in Scotland. One of the ARCs hosted at Glasgow is the Scottish Alliance for Food (SCAF), a collaborative initiative bringing together perspectives from social, natural and applied sciences, arts and humanities, to address

critical emerging research questions related to building a better food future for all. Through research, SCAF aims to stimulate collaborations and innovation, develop competencies and foster knowledge exchange to support evidence-based solutions that benefit society and the environment.

Professor Emilie Combet, project lead from the School of Medicine, Dentistry & Nursing said: "Creating a fairer, healthier, more sustainable food future is a key priority to ensure health of people and the planet. We are delighted that, with support from the Scottish Funding Council, we will be able to leverage the passion and commitment from a broad group of professionals across sectors and disciplines to innovate and develop research projects focused on delivering impact".

### LEARNING AND TEACHING

We are fortunate enough to have our own working farm, Cochno Farm, which offers a much sought-after opportunity for our Veterinary Medicine students to work with our milking cows, beef cows and breeding ewes. The Cochno team work with the Royal Highland Education Trust on a programme aimed at getting schoolchildren onto farms to understand where food comes from.

The Veterinary Biosciences programme at Glasgow is run in collaboration with associated research institutes across both Gilmorehill and Garscube campuses. The School of Biodiversity, One Health & Veterinary Medicine has its own working farm, the Scottish Centre for Production Animal Health & Food Safety, a large animal facility, Weipers Centre Equine Hospital and the Small Animal Hospital, all for potential use in teaching and practical sessions.

The University's postgraduate programme in Food Security is accredited by the Royal Society of Biology and is first in the UK for Food Science (Complete University Guide 2023)

This course explores the factors affecting food production from crops and agricultural sources and discusses the demographic, social and economic challenges to achieving food security and development.



Our Commercial Services colleagues continually review the pricing of our catering outlets for affordability in the context of our University community. Options are provided at our Gilmorehill campus below cost price, and our School of Environmental & Social Sustainability is due to launch a free breakfast option on our Dumfries campus during the current academic year.

University colleagues also participate in and lend their expertise to a range of bodies on the topic of food insecurity, hunger and poverty, including our Vice-Principal for Economic Development and Innovation, Uzma Khan, who is part of the board of the Poverty Alliance.



#### CIVIC ENGAGEMENT

For their Spring Fling festival, the team at the Advanced Research Centre - the ARC hosted an array of free, family-friendly events over the Easter holidays, all on the theme of sustainability. One very popular session was an urban foraging event, hosted by The Little Foragers Kitchen's Vicky Manning, which saw participants take a trip around Glasgow's West End to learn about the wild food and medicine that is growing on our doorstep.

The Food: Sustainability, Health, Heritage and Tourism Catalyst project has brought together researchers and Scottish food industry partners to discuss and address the main challenges within the Scottish food industry relating to sustainability, health, locality, and tourism. Catalyst participants used innovation maps to synthesise discussions and create a basis for strategic and action-level plans to meet their chosen objectives.

# TACKLING HEALTH INEQUALITIES

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The recently opened Clarice Pears Building is part of the University's campus redevelopment and home to the School of Health & Wellbeing, a global leader in research into population health and health inequalities.

The work being done within the Clarice Pears Building forms part of the University's wider cross-institutional focus on addressing the health issues facing our communities.

As part of our commitment as a civic university, the Clarice Pears Building is host to the Byres Community Hub. The Hub brings together researchers from six different research groups to foster opportunities for crossdisciplinary work.

The ground floor is open to the public, and holds interactive exhibits, research exhibitions and talks and seminars on health-related themes. It also provides opportunities for patient and public involvement and lived experience panels, networking events with other community organisations and researchers, and meeting space available to local organisations.

The Hub also supports local community organisations undertaking their own research and brings research questions and community perspectives into the University to ensure that the teaching and research is reflective of the issues experienced by people in the communities it serves.



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



We welcomed 'therapets' from Paws Against Stress onto campus – a practical opportunity to put our Wellbeing Strategy into action.

## OUR RESEARCH

Cancer Research UK has awarded funding to a team of researchers in Glasgow and Cambridge to help unlock answers to the questions of what happens in the decades between initial exposure to asbestos and diagnosis of mesothelioma.

Co-led by Professor Daniel Murphy at the University's School of Cancer Sciences and the CRUK Beatson Institute, the team are focused on new molecular features that could make it easier to diagnose and treat mesothelioma earlier than is currently possible. Patients that are at risk of developing mesothelioma typically develop non-specific symptoms that resemble non-cancer-related illness, such as shortness of breath or even fluid on the lungs. Professor Murphy's team are investigating how asbestosdriven inflammation combines with commonly detected mutations to drive cancer development leading to mesothelioma.

### LEARNING AND TEACHING

Our School of Health & Wellbeing has a strong community of world-renowned interdisciplinary scientists, social scientists, economists, statisticians and clinical investigators. With a mission to prevent disease, improve health and wellbeing and reduce inequalities, we are well placed to offer students research which makes the world a better place in which to live and work. The school offers a range of programmes focusing on physical and mental health, including Neuropsychology, Public Health and Global Mental Health.

In May 2023 the University hosted the Deep End student conference, organised by the Glasgow University General Practice Society in partnership with Dr David Blane from our School of Health & Wellbeing. The Scottish Deep End project brings together general practitioners working in 100 general practices serving the most socio-economically deprived populations in Scotland. The conference was a great opportunity to discuss topics including homelessness health, prison health, mental health in the Deep End, social prescribing and multidisciplinary teams in the Deep End.

### UNIVERSITY OPERATIONS

We strive to make the University a place where all colleagues feel balanced, respected, trusted and supported. To this end, we recently launched a Colleague Wellbeing Strategy and an accompanying Health & Wellbeing Hub online. Our strategy recognises the different kinds of wellbeing: social, financial, physical, mental, and spiritual, and the Hub provides practical support, contact information and material in each of these areas.

There is substantial evidence that physical activity can greatly improve our mental health. Our Occupational Health (OH) and UofG Sport

colleagues have collaborated to create a referral pathway whereby colleagues who have been referred to OH in the context of low mood, anxiety or depression can be referred to our UofG Sport team. Sport offer a six-week 'Active Lifestyle Wellbeing' programme specifically designed to improve the activity levels of the University community with the aim of enhancing mental wellbeing.

We were thrilled to welcome some furry friends to our Gilmorehill campus this year for a wellbeing event. Organised by our Health & Wellbeing Advisor Margaret Thomson, 'therapets' from Paws Against Stress spent time on campus meeting colleagues and students. The use of dogs to reduce stress is well-established, and it was a great opportunity to put our Wellbeing Strategy into action while providing the opportunity for colleagues to connect and to get away from their desks.

## CIVIC ENGAGEMENT

The Scottish Ambulance Service and the University of Glasgow have entered into a new strategic partnership that will see the two prominent organisations collaborate in order to address key healthcare challenges. The partnership is focused on working together to improve the health and wellbeing of the population of Glasgow, Scotland and beyond, as well as bringing wider community and economic benefits.

Our academics from MRC/CSO Social & Public Health Sciences Unit have contributed to evaluation studies on the Minimum Unit Pricing (MUP) for alcohol in Scotland, informing Public Health Scotland's final report on the impact of the legislation. MUP was implemented in May 2018 and set the minimum price below which alcohol cannot be sold in licensed premises in Scotland at £0.50 per unit. The study showed that MUP has had a positive impact on health outcomes, including addressing alcohol-related health inequalities. It has reduced deaths directly caused by alcohol consumption by an estimated 13.4% and hospital admissions by 4.1%, with the largest reductions seen in men and those living in the 40% most deprived areas. There was no clear evidence of substantial negative impacts on the alcohol industry or social harms at the population level.

These findings by UofG academics Peter Craig, Alastair Leyland and Vittal Katikireddi will play a critical role in the Scottish Government's decision-making on the future operation of MUP.



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



We're supporting computing science teachers with the Scottish Teachers Advancing Computing Science project, which helps to create highquality, engaging lessons and embed best-practice pedagogy and research.

## **OUR RESEARCH**

Academics from our School of Education are working on a project, supported by Meta, studying the benefits immersive technologies can bring to education. A team led by Dr Neil McDonnell is examining the practical and operational considerations of using immersive technologies like extended reality (XR) in education, including teacher capacity and classroom deployment practicalities. The research is generously supported by a gift from Meta's Immersive Learning Fund, allowing researchers to remain independent whilst working on the project. The announcement follows a recent survey by XR Association (XRA) and the International Society for Technology in Education which found that over two-thirds of educators hope that immersive technologies will be used regularly in schools and 77% believe in the power of extended reality to ignite curiosity and classroom engagement.



Our Adam Smith Business School, who are Advanced Signatories of the Principles for Responsible Management Education (PRME), submitted their first Sharing Information on Progress report in 2022. By joining PRME, the school has made a powerful commitment to advancing values such as sustainability, responsibility and ethics in teaching, research and thought leadership. PRME has resulted in several school-wide initiatives, including the embedment of the UN SDGs in teaching; the creation of a webinar series focusing on the importance of sustainability and responsibility in how businesses responded to COVID-19; and the student-led DigiGallus Connect project, which aims to close the digital divide by connecting people online.

Our Centre for Research & Development in Adult and Lifelong Learning (CR&DALL) demonstrates the contribution research in adult and continuing education can make to promoting socio-economic justice; social inclusion and cohesion; sustainable development; and poverty reduction. It aims to enable capabilities and improve life chances for all, including those most at risk in the global south and north. CR&DALL is recognised as one of the most significant centres in the field by key agencies such as the UNESCO Institute for Lifelong Learning, UNESCO's International Institute for Educational Planning, the Asia-Europe Foundation (ASEF) and the Deutscher Volkshochschul-Verband.

CR&DALL contributed to large-scale projects involving SDG4 and its interface with other SDGs. These include Transforming education for sustainable futures; GALLANT; Gendered journeys of STEM students in India and Rwanda; Social and scientific innovation to achieve the SDGs; Educational peacebuilding in Medellin and Acapulco; and the Centre for Sustainable, Healthy & Learning Cities & Neighbourhoods. CR&DALL hosted the 17th Higher Education Reform conference on the relevance of the SDGs for higher education policy in 2023, supporting ASEF in the delivery of its 23rd Summer University for young adults on 'Liveable cities for a sustainable future'. It provides the Chair for the Asia-Europe Lifelong Learning Network on national policies in lifelong learning and hosts the European centre of the PASCAL Observatory on place, social capital and learning.



The University's Widening Access team has launched a partnership with educational charity IntoUniversity providing educational support to 7- to 18-year-olds from two of the most deprived areas of Glasgow. The programmes running in Govan and Maryhill support young people's progression into higher education. The University works closely with local schools, Glasgow City Council and other agencies to offer a programme of after-school academic support, mentoring with university students and local professionals, in-school workshops and work experience opportunities.



The University of Glasgow's Professor Louise Hayward led a major review of Scottish education. The report sets out the case for significant change across the sector, including the reform of the current senior school phase, the creation of a new Scottish Diploma of Achievement (SDA), and the use of a digital profile for all learners which allows them to record personal achievements, identify and plan future learning. The report offers the potential to provide a more valuable senior phase experience for learners, build teaching resources and improve the quality of information available to employers, universities and colleges about learners' achievements.

The Scottish Teachers Advancing Computing Science project (STACS), based at the University, published its first annual review, highlighting successes in providing support to computing science teachers across Scotland. Over the last 12 months, STACS has developed a central hub website for all things computing science at schools, creating more than 200 hours of high-quality, engaging lessons for the first three years of secondary school, embedding best-practice pedagogy and research around the delivery of computing science. STACS has also launched a national upskilling pilot programme for teachers, helped to connect tech companies with schools and established knowledge-sharing networks celebrating incoming teachers into the profession.

# A GREEN FUTURE FOR DUNIERIES



University of Glasgow

#### **SDGs IN ACTION**





We are delighted to launch the School of Social & Environmental Sustainability, based at our beautiful Dumfries campus and led by world-leading expert in Environmental Risk & Community Resilience Professor Fabrice Renaud.

The development of the school reflects the longstanding pedigree of our Dumfries campus in delivering a portfolio of research and learning and teaching through which the SDGs are woven. The school's curriculum introduces, explores and addresses the SDGs through a range of themes, and provides students in all disciplines with the opportunity to engage with the SDG themes and carry them forward into their chosen professions.

The subject areas covered within the school include education; environmental science & sustainability; tourism and sustainable development. As the school grows and develops its comprehensive portfolio of learning, teaching and research opportunities, sustainability is the firm focus – sustainability of our society and sustainability of our natural and built environments.



# Achieve gender equality and empower all women and girls



UofG's gender pay gap, the percentage difference between the average earnings of male and female employees, is 8.4%. This compares favourably with the median gender pay gap across Russell Group universities of 13.4%.

### **2** OUR RESEARCH

The University's School of Social & Environmental Sustainability celebrated International Women's Day with an afternoon of talks on gender-based research. The event showcased four projects featuring staff from the School of Social & Environmental Sustainability as well as other international institutions, including a Q&A and discussion on promoting gender equalities through research. Topics covered women and witch persecution in Scotland, India and Africa; reducing gender inequalities in Kenya and Tanzania; the gender gap in STEM; and assessing the role of tourism in achieving SDG5.

#### LEARNING AND TEACHING

Aimed at promoting gender equality, our School of Humanities' Good Practice Scheme provides guidance and resources to support colleagues in embedding good practice in the school's learning and teaching activity. The scheme supplies advice and materials on promoting and protecting gender equality in areas including syllabus; supporting staff and student caregivers and parents; pictures and imagery; recruitment and hiring; delivering conferences and seminars; promotions; student recruitment; and assessment and performance. By providing this advice and regular opportunities for colleagues to engage with the scheme, the school are raising ongoing awareness and taking positive steps towards gender equality.

Women in Supramolecular Chemistry (WISC), of which Dr Emily Draper of the School of Chemistry is a founding member, will receive the Hildegard-Hamm-Brücher Prize for Equal Opportunities in Germany from the Germany Chemical Society. WISC aims to create an international community and provide access to resources for all supramolecular chemists. In addition, the project supports the career retention and advancement of women at every stage of their career and seeks to remove potential barriers. Using an online survey, the network identified the needs to the supramolecular community. Based on the results, the network developed numerous supporting initiatives such as a mentoring network, community clusters to build peer communities, and workshops on inclusion and diversity for young scientists.

## 

The University's People & Organisational Development team have been benefiting from the expertise of academics in our Adam Smith Business School to deliver targeted policies to support women approaching or experiencing the menopause. The recently launched Menopause and Hormonal Changes Policy represents one of the University's initial steps in raising awareness of menopause and hormonal changes, reducing the stigma around discussing these experiences, and encouraging colleagues to request adjustments and/or support. The policy includes evidence-based resources created by Menopause Information Pack for Organizations (MIPO), a research-based, free, open access suite of resources to help workplaces support menopausal transition. MIPO's UK-based lead is Professor Kat Riach of the Adam Smith Business School.

It also complements a series of events and online menopause cafes that the University has hosted to support colleagues at all stages of the menopause.

In recent years our Security team have taken targeted action to improve diversity to better reflect the community served by the team. By modernising and broadening recruitment practices alongside offering flexible work patterns, Head of Security Gary Stephen and his team have moved in the space of two years from a service staffed by fewer than 2% female colleagues, to over 12% female today. This is also reflected in Gary's own senior Security team which is now 50% female, and the active leadership by Security colleagues in Women in Security groups with the intention of inspiring other women to pursue a career in Security.

### CIVIC ENGAGEMENT

The University has established a unique law clinic designed to increase access to justice in Scotland for complainers in sexual offences cases, through the provision of independent legal advice and representation by practising Scottish solicitors, without charge.

The first of its kind in the UK, the Emma Ritch Law Clinic honours Emma Ritch, a pioneering campaigner for women's rights and graduate of the University, who sadly passed away in 2021.

As well as offering legal advice through a specially constituted legal practice unit, the Emma Ritch Law Clinic will offer innovative teaching to students, enabling the next generation of Scottish lawyers to gain critical legal and ethical skills. It will also produce valuable research, providing an insight into the difference that specialist legal advice and representation can make to complainers' experiences of prosecution, and gather data to better understand why cases might fail to reach, or progress through the criminal justice system.



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



Sustainable drainage from the 'rain gardens' of our Western campus helps manage rainwater runoff and avoid localised flooding. It also acts as a filter system that allows pollutants and silt to settle.

# OUR RESEARCH

Colleagues from the College of Science & Engineering are contributing to the Decentralised Water Technologies project, which aims to promote a future decentralised model for water infrastructure and wastewater biological treatment systems that operates at the household-community level with the convenience of domestic appliances. The team are focusing on the development of new systems that are easy to use, reliable, safe, affordable and desirable to both end users and legislators. Research is organised into three themes: the delivery of biological treatment technologies and tools; the implementation of viable decentralised water treatment systems in communities; and governance analysis and reform.

The National Centre for Resilience (NCR), based at our Dumfries campus, is a cross-sector partnership spanning Scottish universities, government and practice. In the face of an escalating flood threat to our communities, the RIFFLE project, led by NCR, delved into the long-term hazards posed by floodwaters. The surge of a flooded river can swirl up historic environmental pollutants, some of which have lain dormant for decades or centuries. These hazardous elements can then be deposited within the flooded areas with the potential to cause ecological harm to our waterways and affect crops, livestock, wildlife and human health. The RIFFLE study took a comprehensive approach, drawing upon historic flood records,

data gathered from SEPA and local authorities, as well as soil and sediment analysis. Through these methods, the study was able to look at the potential long-term hazards within the floodwaters. By identifying the contaminants and chemical compositions, the team could assess the risk of these substances to agriculture, wildlife, and human health. The outcomes of this pioneering research extend beyond academia and serve as a tool to guide policy and practice in sustainable water management work. The research offers actionable recommendations for mitigation strategies and the proficient management of contaminated sediments, ultimately enhancing the safety and resilience of our water systems.

### LEARNING AND TEACHING

Environmental Geoscience is the study of the interaction between natural and anthropogenic processes and environments. It focuses on working towards a sustainable future by understanding how humans affect, and are affected by, a range of environmental issues including climate change, water resources, pollution, and landscape change. Our undergraduate programme in Environmental Geoscience offers students extensive fieldwork experience as well as an opportunity to work with world-class samples provided by our Hunterian Museum. Graduates in Environmental Geoscience are equipped with the tools to make an impact across many SDGs and have historically gone on to work in agencies including Scottish Water and the Scottish Environment Protection Agency.

The School of Geographical & Earth Sciences also offers a postgraduate programme in Sustainable Water Environments, which equips students with an interdisciplinary and global perspective on different surface water environments, incorporating issues such as climate and land use change, flood risk, restorations, ecosystem health and associated management perspectives.

# UNIVERSITY OPERATIONS

Our Western Campus development has been designed to provide sustainable drainage through a number of 'rain gardens'. Plants in the rain gardens have been selected to withstand both waterlogging and drier conditions, as well as avoiding those susceptible to diseases which have increased and spread as a result of climate change.

The main rain gardens below St Mungo Square, outside our Mazumdar-Shaw Advanced Research Centre, are designed to catch and attenuate surface water runoff, carrying pollutants such as salt, hydrocarbons from asphalt and any spilt materials. The planting includes species capable of cleaning surface water runoff (eg reeds, rushes and marginals) and the check dams within the rain gardens slow the rate at which surface water passes through the planting, enabling the settlement of pollutants and silt within the beds.

We have also promoted water consciousness through the installation of 50 sustainable water fountains on campus. The fountains are not chilled and are run on the domestic water supply, while de-incentivising the purchase of single-use plastic bottles and cups by providing ample access to water on campus.



Our School of Social & Environmental Sustainability continue to host their popular global webinar series on Water & Sustainable Development. This series provides a platform for discussion on current and future waterrelated problems, and potential solutions from a multidisciplinary, multisectoral and multiissues basis. Leading global academics, senior policymakers from around the world, heads of national and international organisations, and senior officials from important multinational corporations have contributed and provided insight from their expert perspectives. Recent panel members have represented the Scottish Government, Scottish Water and the International Water Management Institute.



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



Our research into air source heat pump technology for heating homes shows that their use in supporting anaerobic digestion could cut the carbon emitted during the production of biogas by more than a third.

### **2** OUR RESEARCH

An alternative source of heat could significantly reduce the carbon footprint of a process which turns food waste into power, new research suggests.

In an effort to help decarbonise the national electricity grids, a leading team of experts from the University have investigated the benefit to using air-source heat pumps to support anaerobic digestion. The investigation found this method could reduce by a third the carbon emissions produced in the use of biogas. Additionally, the findings highlight the potential to help rural communities produce their own carbon-conscious power.

SSE Energy Solutions is to fund the most detailed research ever conducted into the performance of renewable technologies in the business sector. The PhD research, which is being jointly funded by the University of Glasgow and the Energy Technology Partnership, will analyse data from projects ranging from small businesses to large distribution operations.

The government's target of net-zero emissions by 2050 has seen an unprecedented uptake by businesses in behind-the-meter renewable technologies such as solar panels, heat pumps and battery storage with very few demonstrated studies critically analysing the performance of such solutions. Colleagues from across the University continue to investigate carbon capture storage (CCS) in line with partnerships with the UK's largest CCS network, the Scottish Carbon Capture Storage network. Researchers from the School of Geographical & Earth Sciences have explored the benefits and challenges for the utilisation of alkaline wastes in passive carbon capture to influence positive impacts on environmental factors.

### LEARNING AND TEACHING

The Masters in Sustainable Energy from our James Watt School of Engineering is an interdisciplinary programme addressing all the key aspects of sustainable energy, from the most advanced technologies through to ethical and economic considerations. Learning is enhanced through regular industrial lectures and graduates are well-positioned for future careers contributing to the future of sustainable energy.



Our Estates teams continue to improve the energy sustainability of our historic estate, including a recent project which successfully delivered electrified heating from a renewable source. Air source heat pump technology has been installed in one of our oldest buildings – Florentine House was built around 1828 and is home to the College of Social Sciences College Office. The extensive refurbishment of Florentine House, designed to provide modern working space, also included re-insulation and the decommissioning of a gas boiler.

We have also upgraded the lighting in our Molema Building on our Gilmorehill campus. By replacing the originally installed luminaires with LED lighting, we will save an estimated 28 tonnes of CO<sub>2</sub> due to the reduction in the amount of electricity required to power LEDs.



Professor David Flynn, of the University's James Watt School of Engineering, has lent his expertise to a round-table discussion on the hydrogen economy.

Professor Flynn participated in a discussion on how Scotland and Germany could collaborate on a sustainable and scalable hydrogen economy at an event at the Scottish Government.

Attendees at the meeting included ministers and officials from both Scottish and German government.

A Hydrogen Innovation Centre will also be established at the University to accelerate the development of hydrogen technologies. The centre will be jointly funded by a £100K grant each from the Scottish Government and the testing and certification organisation TÜV SÜD and will provide a platform for academic research groups and commercial enterprises from across Scotland to take hydrogen technologies from experimental proof of concept to the small prototype stage. Building the capacity for performance and safety testing with hydrogen in Scotland will be a key enabler of a local hydrogen supply chain, which is essential for capturing economic value as Scotland moves towards its 5-gigawatt target. This not only paves the way for a greener and more sustainable future but also positions Scotland as a key player in the global energy transition.

The University is part of the ENCLUDE network examining effective ways at engaging citizens on sustainability and climate action. The programme works alongside research partnerships across Europe and North America, supported by Glasgow City Council, the United Nations Economic Commission for Europe and Energy Action Scotland. It uses various approaches to encourage individuals to adopt practices for sustainability and decarbonisation.



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



Tourism Studies at our School of Social & Environmental Sustainability aims to address the challenges of global tourism with innovative and sustainable solutions.

# **OUR RESEARCH**

Our world-leading interdisciplinary research at the University's Tourism Studies subject area addresses the complexity of the tourism ecosystem and proposes sustainable, innovative, and impactful solutions to its challenges. Part of our School of Social & Environmental Sustainability, colleagues in the subject area work on indicators and valuation frameworks to assess the contribution of tourism policies and projects to the SDGs. Partnering with IGOs and NGOs including ICCROM, UNESCO and the World Bank, the group also carry out research across the world to explore the impact of cultural tourism policies and projects on local sustainable development and the wellbeing of communities.



The University's Adam Smith Business School (ASBS) holds prestigious triple accreditation for our Glasgow MBA programme from AACSB, AMBA and EQUIS.

ASBS are also an advanced signatory of the United Nations Principles of Responsible Management Information. This underlines the commitment of the school to promoting sustainability and responsible management in learning and teaching. Our first 'Sharing Information on Progress' report was produced in 2022 and highlighted many achievements of the school in embedding the SDGs in learning, teaching and research. The ASBS SDG Challenge was rolled out to provide workshops and support to course teams and coordinators to embed one or more of the SDGs into their courses.

Recently the ASBS celebrated the tercentenary of Adam Smith and continues to honour his legacy by engaging enlightened and enterprising students, recognised on a global level for the positive contribution they make on culture and society as graduates. The school offers a variety of degree programmes across undergraduate and postgraduate level focusing on economics, finance, accountancy, business management and financial technology.

# UNIVERSITY OPERATIONS

The University and the Joint Trade Unions have confirmed our commitment to advancing the Scottish Government's Fair Work First agenda by ensuring fair working practices are in place across the institution.

The University values the culture of working partnerships that have been established with the Joint Trade Unions and, through formal and informal channels, is committed to working positively with the trade unions to promote a culture of open, honest dialogue and joint working which aligns strongly with and goes beyond the Fair Work First principles. As a centre of employment in the local community we are committed to ensuring a positive and respectful environment for all our faculty, staff and students continuing to work in tandem with trade unions and representatives. Our enduring partnerships with trade unions have continued to produce working agreements on multiple employment matters and our spirit of regular engagement and consultation has seen us implement numerous progressive policies that improve terms, conditions and colleague work experience.

The University is one of the biggest employers in the city, with more than 9,000 staff. We recognise the duty we have towards nurturing an inclusive, dignified and respectful working culture in which everyone is valued and recognised. Our values and priorities support the Fair Work First principles through practical interventions including our status as a Living Wage employer; flexible and family-friendly working practices from day one of employment; investment in workforce development; and offering secure and non-exploitative contracts.



The Scottish Government this year announced the Glasgow Riverside Innovation District (GRID), in which the University is a key partner alongside Scottish Enterprise and Glasgow City Council, as Scotland's first whole-system demonstrator. GRID is committed to supporting the establishment of a series of real-world innovation testbeds. This major initiative, known as GRID Discovery, is identifying and launching a number of R&D collaboration projects with industry partners, government bodies, academics and communities. The exciting new programme draws on the University's worldleading research capability and expertise to help drive impactful innovation at pace.

The Discovery programme is aimed at attracting inward investment, creating access to goodquality jobs, and developing a skills pipeline to build on the region's strengths and support productive, thriving places. To this end, the close involvement of communities in the area will be critical success factors.

GRID is already home to the University of Glasgow-led Living Laboratory for Precision Medicine – an internationally leading programme supported by UKRI Strength in Places Funding, focused on translating cuttingedge science and healthcare innovation in a clinical setting and bringing an estimated 450 new jobs to the Govan area.

GRID Discovery will also foster better collaboration between researchers, industry partners and public bodies such as the NHS to enable the rapid translation of research into application and drive improved outcomes for Scotland. It will catalyse a dynamic innovation quarter with local community values at its heart.

# **LEVELLING UP**

CLYDEPORT

#### **SDGs IN ACTION**



#### Six ambitious new projects linked to the University of Glasgow are sharing in a major new investment from the UK Government Department for Science, Innovation & Technology.

A total of 11 projects in and around the city will receive support from the Glasgow City Region's share of £100 million of Levelling Up money, to further accelerate the region's booming innovation economy.

A local partnership of business, public sector and academic institutions led on selecting the project proposals to go forward, working closely with Innovate UK. By working in close partnership, we will ensure that we help create jobs and the support the skills pipeline needed to create productive and thriving places.

These projects, anchored around the Glasgow Riverside Innovation District, will draw on the University's world-leading research, global reach and strong civic mission, and support innovation in our key sectors delivering benefits for Glasgow City Region and our communities.

The six projects linked to the University of Glasgow are:

Next Generation Remote-Sensing Technologies: This project aims to explore the viability of new technologies in uncooled infra-red detectors, novel edge processed highdefinition imagers and the latest laser sensing techniques.

Pilot Accelerator for National Institute for Quantum Integration: Huge growth is predicted for the photonics and quantum markets in coming decades. This project aims to build an engineering capability, led by the University's James Watt Nanofabrication Centre, that will aid the growth of the Scottish photonics and quantum cluster.

Modular Chemical Robot Farms for Chemistry: Chemify spun out from the University in March 2022 and has built a world-class team to commercialise the digitisation of chemistry. The underlying technology was designed and developed by Professor Lee Cronin and his team who are based at the Mazumdar-Shaw Advanced Research Centre.

Risk Stratification Tool for Colorectal Polyp Surveillance: Bowel screening is used to find bowel cancer and pre-cancerous lesions called polyps in patients without symptoms. The aim of screening is both to catch bowel cancers early and to prevent cancers by removing pre-cancerous polyps.

The Centre of Innovation for Financial Regulation: The FinTech Scotland initiative, in partnership with industry partners and the Universities of Strathclyde and Glasgow, includes the creation of a new collaborative centre of excellence, focused on innovation in financial regulation.

Museums in the Metaverse: The Museums in the Metaverse project will create a groundbreaking two-sided Extended Reality (XR) Culture and Heritage platform. It will empower online visitors to explore vast cultural assets in engaging new ways; enable novice and expert curators to create new content; and explore models of use to support sustainable economic and cultural growth.



Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation



UofG spinout company Chemify has raised more than £33 million to digitise chemistry and speed up the development of new materials to advance medicine, farming and green energy by automating the process of designing new molecules.

# **OUR RESEARCH**

A University of Glasgow spin-out company with more than 25 employees, Chemify is developing the automated technology of chemputation: universal chemical synthesis controlled by computers. As part of its £25M series A investment now secured, along with Levelling Up Innovation Accelerator funding of £7.5M, Chemify aim to expand the company to more than 100 people. Chemify will undertake research and development to build a prototype of a scalable pilot plant capable of becoming a chemical 'giga factory' for the manufacture of trillions of chemicals on demand for use in pharmaceuticals, high-value chemical manufacturing, new materials, farming and green energy solutions.

By developing plug-and-play chemical reaction, process and purification units, Chemify will develop a new standardised technology that will set the basis for chemical manufacturing for the next decades. Chemify will disrupt the centuriesold tradition of chemists making molecules in dedicated laboratories with fume hoods.

Chemify will leverage its collaboration with the world-leading Digital Chemistry team at the University and exploit its geographical location with respect to many of the world-leading pharmaceutical manufacturing centres located in the Greater Glasgow area to put Glasgow at the heart of a digital chemistry manufacturing revolution – creating new high-quality jobs and attracting major inward investment to the region for years to come.

The University of Glasgow-led INCISE project is this year's recipient of the Innovative Collaboration Award at the Scotland's Life Sciences Awards 2023. INCISE - or INtegrated TeChnologies for Improved Polyp SurveillancE - is a collaboration with NHS Greater Glasgow & Clyde and industry partners. The project has also received funding through the Levelling Up Innovation Accelerator programme. The INCISE project aims to transform bowel cancer screening in the UK by developing a tool that can predict which patients with pre-cancerous growths in their bowels, called polyps, will develop further polyps. This new tool will reduce the number of people needing repeated colonoscopy, reducing unpleasant experiences and complications, improving access to colonoscopy by reducing surveillance lists, and reducing costs to the NHS, while maintaining a safe follow-up regime for patients.



The International Management & Design Innovation MSc, delivered by our tripleaccredited Adam Smith Business School (ASBS), has been developed to help students understand how design in practice works, and to examine its importance to a modern international company. A powerful partnership between ASBS and The Glasgow School of Art, students are taught how design drives social and economic development and innovation and are encouraged to tackle complex problems and view issues from a variety of socio-cultural and behavioural angles that play into successful innovation.

# UNIVERSITY OPERATIONS

Innovation demands collaboration, a deep understanding of research disciplines, an unconventional way of thinking and diverse skill sets beyond the traditional research track. To support the work of our academics, we are making a significant investment in specialist innovation expertise to strengthen the professional teams within our Innovation Directorate. These roles will help build and manage the University's spin-out and licensing portfolios, foster relationships with industry, public sector bodies, funders, government, charities and other external stakeholders, and will be responsible for growing contract and collaborative research with a view to developing strategic partnerships. This investment will also support the University's participation in strategic programmes such as the Glasgow Riverside Innovation District and ensure that our innovations land where they can have the greatest social and economic impact.

#### **CIVIC ENGAGEMENT**

The Museums in the Metaverse project will create a ground-breaking two-sided Extended Reality (XR) Culture & Heritage platform. It will empower online visitors to explore vast cultural assets in engaging new ways; enable novice and expert curators to create new content; and explore models of use to support sustainable economic and cultural growth. The project will harness the University's global reputation for research in digital cultural heritage and XR to develop an innovative solution to the physical and geographical constraints that can limit concrete exhibitions to less than 10% of the objects held in collections and limit audience reach by cost, distance and accessibility. One side of the proposed platform is for visitors to gain access to a rich array of museums, sites, objects; and novel and dynamic experiences. The other is for virtual curators, where experts and novices alike can build enriching and entertaining narratives using objects and virtual environments that have never before been placed together in the real world. Partners are Edify, Historic Environment Scotland, National Museums Scotland and the University of Glasgow.

10 REDUCED INEQUALITIES

# Reduce inequality within and among countries



Artist Iman Tajik marking Refugee Week 2023 by unravelling his flag. The flag aims to draw attention to the plight of migrants and comments on the borders, both visible and invisible, that we have created throughout history.

# RESEARCH

The University's End of Life Studies Group based at our Dumfries campus work on a range of research around end-of-life issues, collaborating with communities, policy makers, practitioners and academics worldwide. The Dying in the Margins project, funded by the Economic & Social Research Council and with support from Marie Curie, examined experiences of dying at home for people experiencing financial hardship and deprivation in Scotland. This longitudinal study used participatory visual methods to enable participants to tell their own story in their own words and images. In addition, award-winning Scottish documentary photographer Margaret Mitchell was commissioned to create a body of work reflecting on participants' stories and emotions. There are currently no images in Scottish or UK contemporary palliative care policy and literature which speak to the experience of dying in circumstances of socio-economic hardship; these are the first. Findings from the study are informing public and policy conversations around end-of-life care improvements across the nations of the UK, specifically for people experiencing poverty and marginalisation at the end of life.

The Scottish Learning Disabilities Observatory and University Centre for Excellence in Developmental Disabilities have merged, bringing together multidisciplinary researchers to form one of the UK's largest research centres dedicated to improving the health and wellbeing of people with intellectual and developmental disabilities.

Based in the University's School of Health & Wellbeing, the observatory produces scientifically robust evidence that builds understanding of the determinants of health and healthcare inequalities alongside research that is focused on understanding how these inequalities can be addressed. Through this merger, the observatory will also welcome the integration of postgraduate learning and teaching.

ScreenSkills, the only dedicated skills body for the UK's screen industries, has published a Diversity & Inclusion Playbook in association with the University. This brings together current practice in the sector, defines key terms and principles and makes recommendations to help create and support a more inclusive workforce. The playbook has been informed by ScreenSkill's Diversity & Inclusion Target Review, undertaken by researchers from the Universities of Glasgow and Warwick. The playbook provides the screen industries with three key areas of focus: target-setting in the UK screen industries; definitions and a common language for diversity and inclusion targets; and talking points and recommendations for next steps.

### LEARNING AND TEACHING

We recognise that our curriculum and learning community will thrive when it is reflective of global perspectives and when race equality is embedded, and we have been taking measures to support academic colleagues in decolonising their curriculum.

We recently hosted online workshops which brought together academics, researchers, learning and educational developers, and students from a variety of disciplines from across the UK, looking towards decolonisation within their subject area. We have also established a community of practice to look at decolonising the curriculum in partnership with students and colleagues.



displayed artist Iman Tajik's 'Who Is?' flag, currently part of our exhibition Unravelling Times, on the University's north flagpole.

This year marks the 25th anniversary of Refugee Week, held every year to celebrate the contributions, creativity and resilience of refugees and people seeking sanctuary. Tajik's white flag, embellished with the words 'Who are they? Who are we?' aims to draw attention to the plight of migrants and comments on the borders, both visible and invisible, that we have created throughout history.

Tajik's politically engaged work featured in the exhibition Unravelling Times at the Hunterian Art Gallery and conveys his own experience of migration and border-crossing. His featured work includes images from photographic series Calais (2015), created during the artist's visit to the migrant camp infamously dubbed 'The Jungle' and footage from his Bordered Miles project in which he staged a walk to the Dungavel Immigration Removal Centre.



Experts from our MRC/CSO Social & Public Health Sciences Unit were commissioned by the Health Foundation to review the existing evidence on trends in health inequalities in Scotland since devolution. Following the publication of the report in late 2022, the research team were invited to attend a parliamentary event organised by the Health Foundation to promote their independent review of health inequalities in Scotland, 'Leave no one behind'. Furthermore, Labour MSPs Jackie Baillie and Paul Sweeney submitted a motion to the Scottish Parliament that commends the Health Inequalities in Scotland report. The motion received cross-party support from 13 MSPs.



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



A major programme of conservation has restored the beautiful townhouses of University Gardens and increased their long-term energy efficiency.

### **OUR RESEARCH**

The National Centre for Resilience (NCR) is dedicated to enhancing Scottish communities' capacity to withstand and recover from natural hazards. This year the centre's project call is focused on enhancing community resilience to natural hazards across Scotland. Proposed projects will deliver against one of the five themes of: Community preparedness; Risk assessment & early warning systems; Infrastructure & built environment resilience; Social & economic resilience; and Community engagement & education. We believe that building resilient communities is crucial to minimise the impact of natural hazards, protect lives, and promote sustainable development. We aim to support innovative and impactful projects that empower communities. The NCR utilises existing knowledge and commissions new projects to address real-life issues faced by resilience practitioners and communities. Using our networks, we create links for researchers to help them adapt their project outputs into tailored briefings and tools for end users. We help maximise the potential use and impacts of this work by disseminating research outputs beyond the immediate project stakeholder group and into the wider resilience audiences across Scotland.

### LEARNING AND TEACHING

The Earth Futures: Environments, Communities, Relationships MSc is offered by our highly ranked School of Geography & Environmental Science and is an interdisciplinary programme bridging knowledge across the social and physical sciences. The Masters in Earth Futures aims to equip students with the expertise, experience and skills to tackle the environmental and societal challenges of sustainable development in the Anthropocene. Through a compulsory placement module, students develop practical experience of working in social and environmental governance, activist and community sectors. This is supported by research-led teaching covering key global challenges and ethical imperatives in sustainable community and environmental development.

Our Adam Smith Business School offers a postgraduate programme in Environment & Sustainable Development, which focuses on the key issues confronting economics in attempting to reconcile economic growth with environmental and ecological constraints. It also explores the relationship between the role of international environmental agreements and the relationship between the environment and the economic system.

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This year, our Estates team completed an 18-month conservation project to protect and restore the historic terraced houses at University Gardens.

The project enhanced the workspaces for colleagues and students, while improving the buildings' long-term energy efficiency and wind and waterproofing.

The team replaced 100 tonnes of natural stone, 1,000 slates, overhauled and draught-proofed over 450 windows, and repaired and rebuilt numerous chimneys and gutters. The project also uncovered unique features in the stonework and hidden decorative elements.

Originally built between the 1880s and 1900s, these listed buildings, with warm-toned sandstone facades set behind front garden walls, represent a variety of architectural styles ranging from Italian and French renaissance to what is known as the eclectic Glasgow style, as well as influences from the world-renowned architect Charles Rennie Mackintosh. Originally used as private residences, University Gardens housed prominent figures within society including shipowners, engineers, professors, and wealthy whisky merchants. Later these buildings were gifted or purchased by the University. Now it is home to the University's College of Arts & Humanities.

### CIVIC ENGAGEMENT

The Hunterian Art Gallery was proud to work in partnership with The Glasgow School of Art, Dovecot Studios, and Panel – a curatorial arts organisation focused on projects related to particular histories, archives and collections – to develop a solo exhibition by Turner Prize-

winning artist Elizabeth Price. The commission focused on the textile heritage of Glasgow's industrial age and in particular Stoddard and Templeton, world-famous carpet manufacturers based in Glasgow and Renfrewshire, and was open to the public in 2022 and 2023.

Students and academics at the University have helped to recreate the 18th-century Ellisland Farm, home of Scotland's national bard Robert Burns, in Minecraft. The project, led by Dr Timothy Peacock and Dr Matthew Barr, is a partnership between the University's Games & Gaming Lab and Minecraft Society, Robert Burns Ellisland Trust, and South of Scotland Destination Alliance. Minecraft has nearly 140 million monthly active players worldwide. Players now have an opportunity to not only hear Burns' poetry and song in game but also interact in Scots with the poet and his wife Jean Armour. The Minecraft Ellisland project was shortlisted for the Scottish Knowledge Exchange Innovation of the Year Award (2023) as well as the Best Educational Programme at the Scottish Games Awards (2022). The project represents a creative way of using technology to bring Robert Burns to a younger audience, encourage tourism to the Ellisland Museum and Farm, and inspire future cultural projects.

# ART AT OUR HEART

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#### **SDGs IN ACTION**



#### At the heart of the University since 1807, The Hunterian connects people with stories, individuals and ideas found in stunning collections of objects, belongings and artworks.

Today The Hunterian is a space for questioning and experimentation, for enjoyment and enrichment, for connection and collaboration and for reflecting on the role museums and individuals can play in furthering equity, justice and diversity in our society.

The Hunterian Art Gallery includes paintings of international importance, the largest print collection in Scotland, a growing contemporary art collection and an outdoor sculpture courtyard.

To make these amazing collections and wonderful spaces more meaningful to more people, the artworks are now presented under new themes such as 'What Makes a Portrait', 'History and Memory' and 'The World in a Teacup', which will ask questions and invite discussion. Items from The Hunterian's natural history and science collection also feature, giving context to the artworks and highlighting the range and breadth of the collections.

Looking from new perspectives as opposed to a traditional historical narrative, the displays ask questions such as: How do art and history influence each other? What can one picture tell us? What counts as art? How are artworks made?

They include a significant number of works made by women, with 25 female artists represented including Phoebe Traquair, Joan Eardley, Helen Frankenthaler, Marie-Louise von Motesiczky and Christine Borland. 12 RESPONSIBLE CONSUMPTION AND PRODUCTION

# Ensure sustainable consumption and production patterns

### **OUR RESEARCH**

A team from the University has contributed to the first-ever profile of the UK higher and further education sector's carbon footprint.

Professor Jaime Toney, of the Centre for Sustainable Solutions and the School of Geographical & Earth Sciences, and Dr Stewart Miller, the University's sustainability manager, played roles in the preparation of the Royal Anniversary Trust's 'Accelerating towards net zero' report.

The report is an ambitious roadmap for carbon reduction in the tertiary education sector. It proposes a new standardised carbon reporting framework designed exclusively for the sector which will enable all HE and FE institutions to measure, report and manage carbon emissions.

A University-led team of scientists have demonstrated that using air-source heat pumps to support anaerobic digestion could cut the carbon emitted during the production of biogas by more than a third. Their findings could help support ongoing efforts to decarbonise national electricity grids and enable remote communities to produce their own low-carbon power locally. They found that the heat pump system would emit significantly less carbon than the baseline natural gas system when used to process food waste and sewage sludge. Furthermore, a new study by a University-led research centre has found that the UK housing sector is lagging over 30% behind neighbouring countries when it comes to the adoption of heat pumps, despite their enormous potential to reduce greenhouse gas emissions and provide cost savings for households. The study, carried out by the UK Collaborative Centre for Housing Evidence, outlined that the adoption of heat pumps, a key renewable source for space and water heating, is hindered by several barriers in the UK compared to countries such as Denmark and Sweden, including higher capital costs compared to conventional heating systems, mistargeted deployment, and competing economic interests among stakeholders.

Identifying that appropriate knowledge and awareness about heat pumps are crucial for their adoption, the study suggests attracting consumers through financial incentives and reducing the imbalance in levies on electricity and gas bills to drive demand.

The study calls for greater coherence in policies and regulations to incentivise manufacturers and installers, address stakeholders' concerns, and provide end users with a positive experience of heat pumps.

#### LEARNING AND TEACHING

The Masters in Advanced Functional Materials includes the Energy and the Environment course. This course explores the physical mechanisms of various methods of energy production and will equip future physics graduates with a solid foundation in key physical principles and ideas that underpin climate change science and sustainable energy.



Our Estates colleagues are working with University academics to further develop our Digital Twin projects. By creating a digital representation of our buildings and the elements within them, alongside our existing building management system capability, we can generate valuable data to drive our decisionmaking. This technology helps us to understand building usage and optimise the timings for running energy-intensive services for maximum efficiency. Colleagues from the Adam Smith Business School have contributed to a report on the circular fashion ecosystem.

### CIVIC ENGAGEMENT

The fashion and textiles industry currently has a significant adverse environmental and social impact and is cited as the joint thirdhighest emitter of greenhouse gases globally. Colleagues from the University's Adam Smith Business School have contributed to the Institute of Positive Fashion's phase two progress report on the circular fashion ecosystem, as part of a growing recognition of the need for a coordinated transition towards a circular business model. Creating a circular fashion ecosystem requires integrating 'Doughnut Economics' principles and applying circular economy strategies in a scalable approach in cities across the UK. The report presents a blueprint for the future of fashion through ten priority actions and recommendations for members of the industry as well as government, digital innovators, and investors.

Colleagues in our School of Health & Wellbeing and University Estates recently put leftover wood from the construction of their new home, the Clarice Pears Building, to good use. Boomerang Woodworking, one of our social enterprise partners, took the oak panelling used throughout the interior and created a beautiful 'doodle' wall installation for the Byres Community Hub within Clarice Pears. The remainder of the donated wood was used by Boomerang to create other bespoke products and items for sale and the profit will go towards free therapeutic, creative and skills development workshops for the community in Maryhill and surrounding areas.



# Take urgent action to combat climate change and its impacts



The University's Cycle to Work scheme has encouraged hundreds of employees to ditch the car for their commute.

### OUR RESEARCH

The University is proud to be partner in the African Research Universities Alliance – Cluster: Africa-Europe CoRE for Nature-based Solutions for Climate Change Adaptation and Mitigation.

Professor Fabrice Renaud, Head of the School of Social & Environmental Sustainability, is a core partner on this Africa-Europe CoRE. Co-led by the Universities of Cape Town and Stellenbosch in South Africa, and the University of Bologna, Italy, this cluster will build a multidisciplinary research network between European and African institutions, in order to urgently tackle the impact of climate change on both continents.

The cluster will respond to the fact that both Africa and Europe are highly vulnerable to climate variability and change, with human and wildlife consequences ranging from heat-related mortality and biodiversity loss, to reduced food production and water scarcity. To tackle these urgent issues the research team plans to establish a climate service hub for Africa and a nature-based solutions innovation hub, as well as focusing implementing innovative measures to combat climate change. To this end, the cluster aims to open up new dialogues with policymakers and funders in both Europe and Africa, to identify ground-breaking solutions and create opportunities for investment in societal transformation.

#### LEARNING AND TEACHING

The SDGs play a central role in the design of courses on the Environmental Science & Sustainability programme at the University. Three new core courses starting in 2023 introduce, explore and address SDGs through a range of themes.

"The interlinked nature of environmental problems is complex and often difficult to address, but solutions are possible if we have a good understanding of these complexities and make positive changes. Our new courses contribute to a portfolio of SDG-focused courses aiming to expose students to the challenge but also the solutions to a more sustainable pathway" Dr Steven Gillespie, Head of Subject, Environmental Science & Sustainability

The new courses are offered to all students on the Dumfries Campus, therefore students taking non-environmental degree programmes can engage in the key SDG themes and carry this knowledge into their own professions.

Our Centre for Sustainable Solutions has also launched a Sustainability in Learning & Teaching Community of Practice. This community of practice builds on the centre's definition of sustainability, which is fundamentally the safeguarding of the natural environment while progressing towards equitable and just conditions for current and future generations. It aims to be a hub of multidisciplinary connections that lead to learning and teaching collaboration for developing activities and practice that transforms the University from the inside out. The community of practice has held numerous successful events including seminars on climate literacy and climate action, and workshops on students leading staff for sustainability and 'greenifying' your course.



The Glasgow University Environmental Sustainability Team (GUEST) again played a leading role in the Glasgow Goes Green festival, with this year's theme being 'Let Glasgow Flourish'. Events included walking tours, promotion of the University's Cycle to Work scheme, getting active with UofG Sport and other practical events to raise awareness of how to live a less car-dependent life.

GUEST also ran several successful circular economy events, including homeware swaps where items were dropped off by students moving out or decluttering, and swap shops held for other students to come along and collect them. Items were collected from student accommodation and from individual students, and several hundred items were saved from going to landfill. Similar swap shops were also run for clothing and have been a great success.

### CIVIC ENGAGEMENT

An ambitious new project, led jointly by UofG and Heriot-Watt University, is focused on ways in which digital technologies can accelerate the decarbonisation of transport to help the nation achieve its net-zero commitments.

The Twinning for Decarbonising Project, or TransiT, has received the backing of the Engineering & Physical Sciences Research Council to scope the potential of digital capabilities and strategies to manage the reduction of carbon emissions from transport across the country.

Currently, around a third of the UK's total carbon emissions come from transport, making it a key priority for rapid decarbonisation.

The TransiT award highlights how vital digital technology will be to help the UK to reach its decarbonisation targets. The initial funding will support an extensive consultation to explore the potential of digital technology to decarbonise, with the support of industry, policymakers, and other stakeholders. This involves creating a digital twin that encompasses the entirety of the UK transport infrastructure, providing a data-driven foundation for the urgent decarbonisation that the country requires to reach net zero.



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



Students on our Sustainable Water Environments programme gain expertise in river, lake and coastal environments and focus on the contemporary global issues of flood risk and ecosystem health.

## OUR RESEARCH

The Scottish Centre for Ecology & the Natural Environment (SCENE), within the School of Biodiversity, One Health & Veterinary Medicine (BOHVM), is a research and teaching facility located on the banks of Loch Lomond in the Trossachs National Park. Established in 1946, SCENE is committed to understanding the mechanisms that govern the natural world and the impact that humans have on it. SCENE's unique research facilities are used by researchers and students from around the world and the centre offers rare opportunities to study a broad range of species and ecological communities in their natural environment. SCENE also includes live-in accommodation, state-of-the-art laboratory facilities, controlled temperature rooms and cabinets, aquaria, and experimental streams. All these facilities are housed in buildings that were designed with sustainability in mind.

Researchers at SCENE are studying the threats posed by environmental change to one of the rarest UK freshwater fish, the coregonids. They are also investigating the movement ecology of salmonids, which are economically and ecologically important fish species. SCENE researchers have developed expertise in the use of telemetry to track fish migration between freshwater and marine systems. The Marine Alliance in Science & Technology for Scotland network, which the University is a member of, also has access to the facilities. The network brings together experts in the field and actively seeks to encourage productive dialogue and understanding between scientists, other marine experts, and interested parties in all sectors, including those responsible for policy development and regulation.

### LEARNING & TEACHING

Students studying Marine & Freshwater Ecology at the University can learn on the field at SCENE, critically assessing and evaluating the efficacy of ecological methods of managing freshwater ecosystems for conservation, fisheries, and pollution monitoring. Students can visit hatcheries, fish farms and aquaculture projects. In addition, they can complete an additional year of study, gaining an MSc, carrying out research in industry or at a institute in the UK or overseas.

Another programme at the University, Sustainable Water Environments, provides students with multidisciplinary knowledge and expertise in river catchment, lake, and coastal environments. It focuses on the impact of, and adaptation to, changing environments. The programme is designed to help students develop an in-depth and critical understanding of contemporary global issues in surface water environments, including climate and land use change, flood risk, restoration, ecosystem health and associated management perspectives. Finally, the Environmental Science & Sustainability programme also helps students learn about the aquatic environment. This programme offers applied learning at a range of natural resources, including the estuarine and maritime environments located along the Dumfries and Galloway coastline.

# UNIVERSITY OPERATIONS

As committed to in our Glasgow Green Strategy, we have now eradicated single-use plastics from our catering operations, helping to minimise the risk posed to marine species by plastics. Our Waste Management Strategy & Action Plan for non-hazardous waste aims to help us ensure that any waste generated is collected, sorted and recycled. Our Safety & Environmental Protection Service guides the disposal of potentially hazardous biological and chemical waste to ensure that we uphold water quality standards.

### CIVIC ENGAGEMENT

Staff within the BOHVM contribute and play a role in the Scottish Marine Animal Stranding Scheme (SMASS). SMASS provides a systematic and coordinated approach to the surveillance of marine species stranded on the Scottish coastline. Central to this work is the citizen science network of 300 trained volunteers that help with data collection, recovery and transport of stranded marine

animals. During 2022, our staff significantly developed both this volunteer network and supporting events such as the Marine Forum, hosted at the University's Mazumdar-Shaw Advanced Research Centre. This event provided an opportunity for the exchange of ideas between researchers, SMASS volunteers, policymakers and other parties interested in marine science and conservation.

More locally, our Glasgow Science Festival theme of 'Glasgow's Making Waves' brought together 63 events across the city of Glasgow, accessible to the local community and people of all ages, to learn about science. It included the wildlife of the River Kelvin and coral and climate change. As part of the festival, local community groups can apply to create content and deliver events related to the themes. Last year, one of the community groups developed a two-part activity based on the River Clyde, focussing on water bugs and insects that live in aquatic environments, and then using popcorn and sugar to learn about water filtration. This activity was based on themes requested by Fairfield Heritage, Govan.

#### **SDGs IN ACTION**



The University community was thrilled to see the return of the peregrine falcons to its iconic Gilbert Scott Tower last spring. The birds of prey have been nesting in the tower for the past 20 years and have become a cherished part of the local environment.

Peregrine falcons are a highly protected species under the Wildlife & Countryside Act, and across the UK, they are increasingly using historic buildings to raise their young.

This year our Estates directorate have been working closely with the SSPCA, RSPB and The Glasgow Peregrine Project to ensure the peregrine falcons remain safe and undisturbed.

To welcome back the peregrine falcons, our Craftsperson Andrew Crichton from our Estates team constructed and installed a new bird-nesting box on the Gilbert Scott Tower, with a CCTV camera provided by our School of Biodiversity, One Health & Veterinary Medicine. The team hopes that this new feature will help us learn more about peregrines' behaviour if they decide to nest in the tower again.

# PROTECTING OUR PEREGRINES





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



The teaching garden at our Dumfries Campus is a resource for our research on horticulture, botany and ecology.

## OUR RESEARCH

New research from our MRC/CSO Social & Public Health Sciences Unit has highlighted that increasing the amount of natural space and private gardens has the potential to narrow the lifespan gap between those living in the most and least deprived areas. Areas with the highest income deprivation had the lowest average percentage cover of natural space and gardens and people living in these areas had the highest levels of ill health.

The study found that every 10% increase in natural space cover was associated with a 7% fall in the incidence of premature death. Increased availability of natural space within local areas was also associated with a reduction in the disparity in years of life lost between the most and least deprived areas. Even moderate levels of natural space appeared to be able to reduce the inequality in standardised incident rates for both men and women.

### LEARNING AND TEACHING

Our School of Social & Environmental Sustainability, based at our beautiful Dumfries campus, has the perfect environment in which to inspire and educate students. Set in 85 acres of historic parkland, the campus boasts its own teaching garden, intended to produce educational, amenity and aesthetic benefit. The garden is an interactive resource and is incorporated into undergraduate and postgraduate programmes with a focus on phenology, plant and insect identification, plant growth experiments and making space for wildlife. The garden is open to all and is maintained by a dedicated group of staff and students.

The University is also unique in having an Exploration Society, ExSoc, which has been helping teams of undergraduate students explore the world on zoological and geographical expeditions for many years. The earliest record of a student expedition is 1920, and over the past 90 years hundreds of students have had the chance to learn in the field.



The University recently celebrated the planting of a Wee Forest at our Garscube campus, together with Earthwatch, an environmental charity. The planting of the Wee Forest was funded by The Queen's Green Canopy, a UKwide project to plant over one million trees in honour of Her Late Majesty The Queen. The green spaces on the Garscube campus are already popular with walkers and dog owners, and it is hoped that the Wee Forest will increase the popularity of these green spaces by maintaining paths and open spaces for the local community to enjoy. With its prominent position and unrestricted panoramic views, our historic Gilbert Scott Tower has welcomed home our peregrine falcons once again this year. The falcons have been synonymous with the University for over 20 years now. These incredible birds of prey are a growing attraction on campus with some visitors attending specially to see the apex predator that is now thriving in the leafy west end of Glasgow.

We were thrilled that three peregrine fledglings hatched in our tower this year, and recently we have witnessed the parents educating their young in aerobatics. These classes included the characteristic 200mph+ dive amongst highspeed turns and barrel rolls and was an honour to observe.

One eager fledgling fell from the nest in 2022 and another this year; however, our established relationships with the SSPCA and RSPB assisted our experienced Estates team to safely return the fledglings on both occasions.

We are currently considering our options to sympathetically upgrade our existing bird box and CCTV facilities to future-proof the peregrines and monitor their growth.



As part of Art Fund UK's Wild Escape programme, The Hunterian Zoology Museum gave young visitors the chance to cross the worlds of science and art, and to reimagine animals in their more natural habitats. Children also had the opportunity to make artworks based on the animals they saw and upload it to the Wild World web pages to add to artworks submitted by visitors to other Wild Escape museums and collections, creating a huge collective artwork that launched on Earth Day 2023.

The University's Centre for Sustainable Solutions has launched the UrbanByNature Scottish hub in collaboration with Glasgow City Council. UrbanByNature is a facilitated capacity-building programme created by ICLEI Europe, promoting exchange among cities, researchers, SMEs and NGOs to build bridges with the nature-based solutions communities across Europe, Asia, Latin America and other interested regions. Regional hubs are a central tool for networking on nature-based solutions. The UrbanByNature Scottish Hub is based at Growchapel Community Garden in Drumchapel, Glasgow. In 2022 it launched a series of online lunch and learn sessions open to the public.



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



Our work in the area of human rights has informed changes to policy in a number of countries.

## OUR RESEARCH

Ill-treatment of detained persons, whether at time of arrest, during pre-trial detention, or following conviction, is a systemic issue in many Eastern European countries. Through fact-finding research, legislative and policy recommendations and practitioner training, Professor James Murdoch's work has underpinned changes to law, policy and practice to safeguard rights and ensure better standards for detainees in North Macedonia, Bulgaria and Georgia.

Professor Murdoch has worked with the Council of Europe and beneficiary governments to implement the recommendations contained in his research reports on North Macedonia, Bulgaria and Georgia, strengthening the human rights of detainees in these countries.

In North Macedonia, the 'external oversight mechanism', designed to 'police the police' and influence the treatment of detainees by the police in accordance with human rights standards, has contributed to better treatment and complaints processes for approximately 3,000 people.

In Bulgaria, the training programme initially delivered by Professor Murdoch is led by Bulgarian judges and has worked with approximately 2,000 judges.

In Georgia, Professor Murdoch's report led to new human rights-compliant standards being

drawn up by the Georgian Ministry of Internal Affairs. These standards provide various additional protections against ill-treatment for approximately 12,000 detainees annually.

### LEARNING AND TEACHING

Our Criminology programme, delivered by our School of Social & Political Science, provides students with an understanding of the harms and conflicts caused by criminalisation and penalisation, and how we might develop responses which could create fairer and safer societies rather than exacerbating social inequalities. The programme includes teaching by leading scholars from the Scottish Centre for Crime & Justice Research, a centre of excellence in the UK for criminology, and covers topics such as youth violence and gangs; social and legal responses to gender-based violence; sentencing and the penal system; and creative and collaborative approaches to criminological research.



As a leading, global University, we recognise and embrace the importance of holding ourselves accountable and taking decisive action where necessary. In addition to the Understanding Racism, Transforming University Cultures report which has given shape and direction to our anti-racism journey, we asked Morag Ross KC to carry out an independent investigation and review of our approaches to gender-based violence (GBV). GBV remains an ongoing issue in our society and has a devastating effect on individuals. The Ross Report was published in late 2022, and included extensive engagement with colleagues, students, and unions. The University's Senior Management Group have accepted all recommendations in the Ross Report and had committed to implementing them by the start of the 2023–24 academic year.

As seen throughout this report, our expertise is frequently sought by government, and we have a dedicated and specialist Government Relations team who engage and connect the University, academics, practitioners, and policymakers on some of the most urgent issues of our times. The University has led 48 events in the Scottish and UK Parliaments from cross-party groups, briefings and receptions, engaging lawmakers and government on areas across learning and teaching, research and innovation.



There are approximately 30,000 people subject to imprisonment or supervision in Scotland, and over three million in Europe. UofG research led by Fergus McNeill, Professor of Criminology & Social Work, explains how and why people cease and refrain from offending through a process known as 'desistance', and how they sometimes secure reintegration after punishment.

Through sustained dialogue with policymakers, practitioners and activists, the research has directly influenced Parliamentary inquiries and legislative changes in Scotland, including providing evidence to the Justice Committee and the Scottish Parliament's Human Rights Committee. Professor McNeill's research has also led to reframed and reformed justice strategies, services and practices in Scotland, England, Wales, Belgium and the Netherlands; and shaped professional education through initiatives including Scottish Prison Service training and a new assessment tool in Norway. Evidence is now emerging of how these 'desistance-informed' developments are contributing to safer societies through more effective approaches to criminal justice.

Due to Professor McNeill's work, desistance training is now integrated in the Scottish Prison Service Officer Foundation Programme, and over 1,200 staff have already been trained.

#### **SDGs IN ACTION**





The University of Glasgow has been awarded University of Sanctuary status in recognition of its commitment to supporting people who have experienced forced migration.

University of Sanctuary status recognises good practice in organisations that facilitate access to higher education for refugee communities. It is part of the City of Sanctuary UK initiative, which promotes the UK as a welcoming place of safety for all.

The University has a number of initiatives which promote accessibility for displaced people, supporting inclusivity and providing a safe environment for refugees and asylum seekers. We offer a range of assistance, including targeted pastoral, financial and educational support. This includes up to 20 Sanctuary Scholarships to assist applicants to the University who are in the UK on humanitarian grounds.

The University of Sanctuary award recognises our efforts to promote engagement and understanding of the issues around forced migration among colleagues and students, including our work with external networks such as the Council for at Risk Academics (CARA), and within our own community, through Student Action for Refugees (STAR) and our Glasgow Refugee, Asylum and Migration Network (GRAMNet).

"The University of Glasgow is a globally connected institution with a strong set of values, including our commitment to build an inclusive and welcoming community for all. We are delighted to be awarded University of Sanctuary status, which recognises our commitment to promote fairness and equity of opportunity for those who are forcibly displaced from their homes and ensures that every member of our community feels safe, respected and supported to fulfil their potential." Rachel Sandison, Deputy Vice Chancellor, External Engagement, Vice Principal, External Relations and the University's Sanctuary Champion



Strengthen the means of implementation and revitalise the global partnership for sustainable development



#### inaugural Times **Higher Education** Sustainable Development Congress, which delivered a strong message about the vital role played by universities in tackling the global climate crisis. After the congress. 300 trees were planted to represent the delegates.

We hosted the

## **OUR RESEARCH**

The University has joined partners from across Africa and Europe in the formation of vital new Clusters of Research Excellence, established by the African Research Universities Alliance and The Guild of European Research-Intensive Universities.

These sustained partnerships aim to transform the nature of collaborative research and bring about positive, long-lasting change to common societal challenges. The University is pleased to co-lead two Clusters of Research Excellence and be partnered on three more.

The University is a partner in the winning project in a collaboration award at the Scottish Knowledge Exchange Awards, an event that recognises business-academic partnerships. The Multiparty Collaboration award went to the Industrial Centre for Artificial Intelligence Research in Digital Diagnostics, or iCAIRD.

The University is one of more than 40 partners in the project from across industry, the NHS and the Universities of Edinburgh, St Andrews, and Aberdeen. With twin tracks in radiology and pathology, iCAIRD's programme of work is establishing the infrastructure and environment required to support development, validation and deployment of AI technologies for use in healthcare.

#### LEARNING AND TEACHING

The SDGs play a central role in the design of courses on the Environmental Science & Sustainability programme at the University. Three new core courses starting in 2023 introduce, explore and address SDGs through a range of themes: Water, natural hazards & resilience; Energy, waste & pollution: Options for sustainability; and Water resources policy and governance. The new courses are offered to all students on the Dumfries Campus, meaning students taking non-environmental degree programmes can engage in the key SDG themes and carry this knowledge into their own professions.

Colleagues from the National Centre for Resilience, based at our Dumfries Campus, have been lending their expertise to prepare communities for major incidents. Led by BASICS Scotland, this project delivered a bespoke, one-day training course for healthcare professionals to bolster response to major incidents in remote and rural community hospitals. The training was designed to enhance the major incident plans of these hospitals and improve multi-agency responses and collaboration, particularly in challenging weather conditions. The course is tailored to each hospital's specific resources and uses scenarios written by experienced medical professionals with expertise in remote emergency medicine. The project provides an adaptable course with the potential to be used in various remote and rural hospitals across Scotland. By fostering

collaboration between responders, the project aligns with efforts to enhance preparedness across Scotland.

# UNIVERSITY OPERATIONS

Knowledge Transfer Partnerships (KTPs) are collaborative partnerships creating positive impact and driving innovation. Each KTP is a partnership between business and academia. The University takes part in a number of KTP projects, supported by the West of Scotland KTP centre. A recent project saw Professor David Flynn work with The Crichton Trust to provide smart energy solutions. The Crichton Trust is a historic parkland estate, open to the public and hosting a vibrant business and academic community. The goal of the KTP is to determine realistic decarbonisation pathways to net-zero, through exploration of innovative smart local energy systems.

Our role as a member of CIVIS, Europe's Civic University Alliance, has continued to yield exciting opportunities for partnership. CIVIS recently entered into a partnership with six leading African universities, with the aim of enhancing cross-Mediterranean and African collaboration. Rachel Sandison, Deputy Vice Chancellor, External Engagement, attended the signing ceremony for the partnership, which offers valuable opportunities to contribute to the SDGs across the expanded global reach of CIVIS.

#### **CIVIC ENGAGEMENT**

We were proud to host the inaugural Sustainable Development Congress in partnership with Times Higher Education in 2022, uniting higher education, government, industry and civil society to ensure a more sustainable future.

The event delivered an immersive, multi-track agenda tackling the big issues around SDGs, with world leaders and influencers sharing their insights on the challenges faced in converting the goals into action and impact.

The annual congress has been initiated as a new platform of activity that can enable university leaders and their communities to forge stronger partnerships with governments, the private sector and civil society. This report provides practical actions and areas of strategic focus that universities can and must enact in order to catalyse and accelerate progress.

A tree was planted on behalf of everyone who registered for this event. Working with the Woodland Trust, over 300 native Scottish trees were planted in the neighbouring Cochno Farm & Research Centre. Attendance at the congress helped create tomorrow's forests as part of a 15-hectare area of native broadleaf trees.

# LOOKING AHEAD

This report is the third comprehensive annual publication by the University of Glasgow assessing our contribution to the delivery of the UN Sustainable Development Goals.

Since our inaugural report in 2021, the SDGs have become an increasingly important part of how we capture the impact of our activities at a local, regional, national and global level and of how we assess new ways of contribution to the goals. We were delighted to see our institutional commitment to the SDGs reflected in our strong performance in a number of global sustainability rankings, and aim to use this report to highlight the wide-ranging and impactful work of our colleagues. As a University that has been in existence since 1451, we have a long history of world-changing research and innovation, outstanding teaching and partnerships. We want to use this strong platform to increase the scale of our ambition in relation to the SDGs, working with partners across our city and globally, to make a tangible contribution to tackling society's biggest challenges.

#### Uzma Khan

Governance Vice Principal for Economic Development and Innovation and Deputy Chief Operating Officer

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