

# The Sustainable Development Goals Report 2025

11 SUSTAINABLE CITIES  
AND COMMUNITIES



TARGET 11.2

Affordable and  
sustainable  
transport sys



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**COVER:** The UN's Western Europe regional information director Sherri Aldis during a visit to DMU in 2025



**ABOVE:** The winners at the SDG Awards night at De Montfort University in 2025

**LEFT:** The trophies handed out to the winners in seven categories

**RIGHT:** DMU is the global academic hub chair for SDG 11

## **11 SUSTAINABLE CITIES AND COMMUNITIES**



2025: DMU is appointed as the global academic hub chair for SDG 11

# An important and proud year

THIS year has been an important year – and proud one – for De Montfort University and its work with the Sustainable Development Goals and the United Nations.

We were confirmed by the United Nations Academic Impact (UNAI) as the Global Academic Hub chair for SDG 11 Sustainable Cities and Communities to continue a proud achievement.

DMU is the only university in the United Kingdom to hold the position of being a global academic hub and have now done so since 2019. Previously, we were the global academic hub for SDG 16 Peace, Justice and Strong Institutions from 2019 until the close of 2024.

Our track record with SDG 16 saw us appointed to the hub chair post for SDG 11, which we delighted with because of the work the university has been doing with the City of Leicester on sustainability in the community over more than 40 years.

The expanded network announced by the UNAI in January 2025 sees us chairing SDG 11 with the vice-chairs of University of Cologne in Germany (responsible for Teaching and Education); University of Vale do Rio dos Sinos in Brazil (Research); and the University of Economics Ho Chi Minh City in Vietnam



**ANNOUNCEMENT: Dr Mark Charlton was proud to convene the first meeting of the global academic hub for SDG 11 in 2025**

(Outreach and Partnership). One of my proudest moments during the year was convening the first meeting of all the vice-chairs and DMU to officially getting the SDG 11 global academic hub up and run-

ning. It has also been a good year following the launch of the SDG Fellows 12 months ago. The Fellows are academics, researchers and professional services staff at DMU who have pledged to support and promote the SDGs in all aspects of university life.

We have already inducted more than 160 staff into the Fellows and held an awards night at the end of 2025 to reward all the excellent work that went on during the year.

Finally, a few words about this report and how it was compiled. Because of the breadth and depth of the work on the SDGs at DMU it cannot include everything that goes on, but is primarily the highlights. The news category comes from the DMU news feed and the research is taken from DORA (The DMU Open Research Archive) and only includes open access papers published in 2025. The alignment to the correct SDG is done through the European Union's SDG Mapper and to qualify a paper's content must contain at least 25 per cent of a particular goal to be included.

**Dr Mark Charlton,  
Associate Director  
Head of the UNAI SDG Impact Hub**

# Only 18% of SDG targets on course to be achieved – UN

TEN years since world leaders embraced the transformative 2030 Agenda for Sustainable Development, we have not only the opportunity but the obligation to take stock of progress, acknowledge shortfalls and act with urgency and responsibility.

Since 2015, millions have gained access to essential services. More than half the world's population now benefits from some form of social protection, up by 10 percentage points compared to a decade ago.

Child marriage and maternal and child mortality rates have fallen, and more young people, especially girls, complete school.

Women now hold 27 per cent of parliamentary seats worldwide, up from 22 per cent. Access to electricity and clean cooking has expanded. Internet connectivity has increased by 70 per cent, opening new horizons.

Around the world, young people, communities, civil society and local leaders are stepping up their action to deliver on the promise of the SDGs.

Despite these important gains, conflicts, climate chaos, geopolitical tensions and economic shocks continue to obstruct progress at the pace and scale needed to meet the 2030 target.

This year's Sustainable Development Goals Report finds that only 35 per cent of SDG targets are on track or making moderate progress. Nearly half are moving too slowly and, alarmingly, 18 per cent are in reverse.

We face a global development emergency. Over 800 million people are trapped in extreme poverty. Carbon dioxide levels are at the highest in over two million years, and 2024 was the hottest year on record, surpassing the 1.5°C threshold.

Peace and security have worsened, with over 120 million people forced from their homes, more than double the number in 2015.

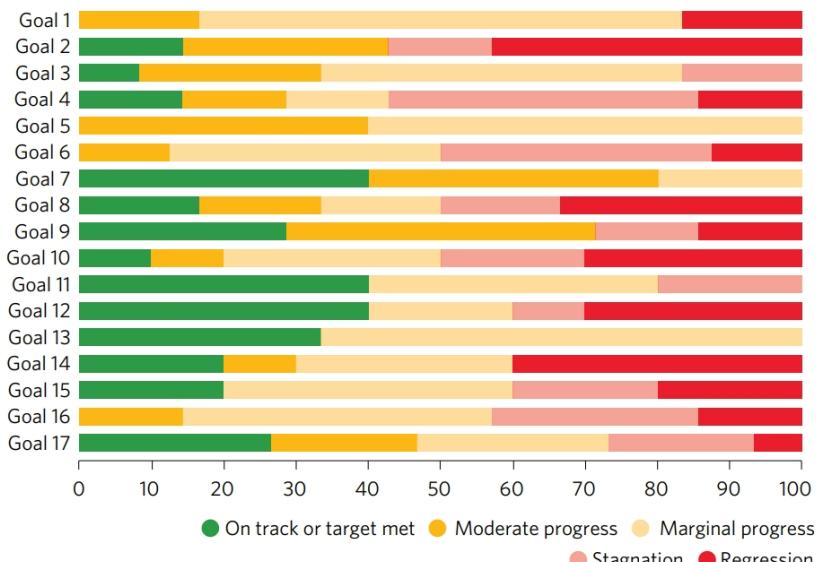
Meanwhile, debt servicing costs in low- and middle-income countries reached a record \$1.4 trillion, squeezing resources needed for sustainable development.

This is a call to action – a call for ambitious action in six critical SDG transitions: food systems, energy, digital connectivity, education, jobs and social protection, and climate and biodiversity.

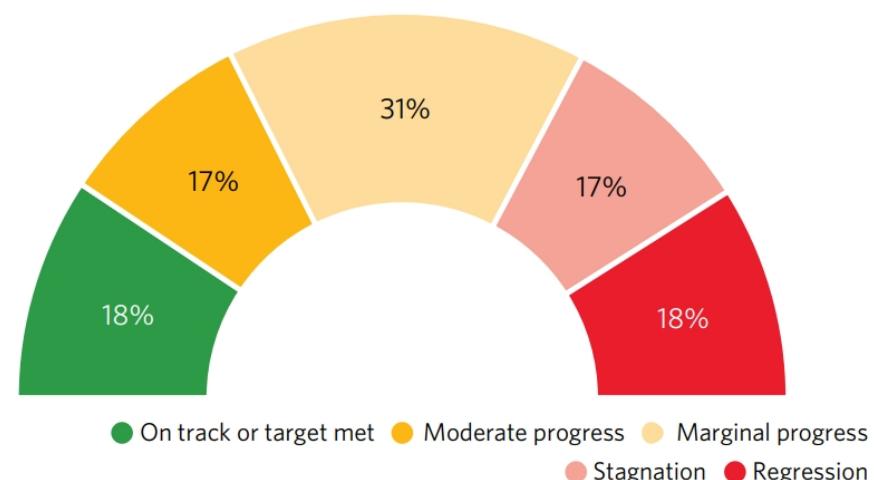
The Sustainable Development Goals remain within reach, but only if we act decisively and act now.

António Guterres,  
Secretary-General of the United Nations

Progress assessment for the 17 goals based on assessed targets, by goal (percentage)



Overall progress across targets based on 2015–2025 global aggregate data



Note: Percentages do not add up to 100 per cent due to rounding up

## UN PROGRESS REPORT ON SDG 1 in 2025

RECENT crises have stalled progress, with the burden falling heavily on sub-Saharan Africa and conflict-affected regions. None of the targets set for the 2030 deadline are on track to be met and this is one of the poorest performing SDGs.

Latest figures estimate that by 2020 moderate progress will be made on 15% of the targets, 70% will show marginal progress but 15% will have actually regressed on the benchmark set in 2015.

The UN 2025 report states: "Without a significant acceleration in efforts, 8.9 per cent of the global population will still be living in extreme poverty by 2030, under the revised international poverty line. Similarly, at the current trajectory, only 1 in 5 countries are projected to have halved its national poverty by 2030.

"For the first time on record, over half of the world's population now receives at least one form of social protection benefit. Despite this milestone, 3.8 billion people remain uncovered."

## MAJOR DMU NEWS ON SDG 1 IN 2025

### [Shocking true picture of child homelessness in Scotland revealed in new research](#)

GROUND-BREAKING research co-led by experts from De Montfort University Leicester (DMU) has exposed the harms caused to children who are forced to live in temporary accommodation in Scotland.

The project, carried out jointly between DMU and University College London (UCL) for housing charity Shelter Scotland, set out to understand childrens' own experiences of living in the temporary accom-

modation system in Scotland, and the impact this has on wellbeing, education, and opportunities late in life.

### [DMU hosts conference showing true picture of poverty in Leicester](#)

THE "devastating" challenge of living in poverty has been highlighted at a conference held by De Montfort University Leicester (DMU).

Experts, charity workers and campaigners gathered on campus for a series of workshops and discussions which laid bare the real and growing financial struggles felt across Leicester.

Ivan Browne, Professor of Public Health and Social Determinants of Health at DMU, said that the issue was most affecting children with more than 50% of Leicester's children are affected by deprivation in Leicester.

### [DMU students breathe new life into old objects in sustainable fashion collaboration](#)

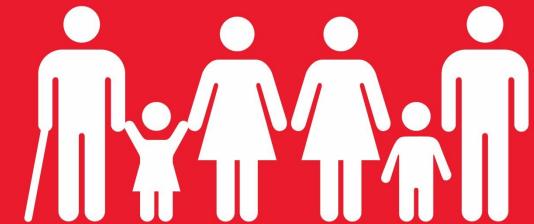
FASHION students from DMU have breathed new life into old objects as part of a sustainable fashion collaboration with Age UK.

The 'Refound' project involved students from DMU's BA in Fashion Communication and Styling imagining and creating new futures for objects they found at the charity's shop on Hotel Street in the city.

## MAJOR DMU RESEARCH ON SDG 1 IN 2025

[Mapping in-work poverty and debt in Leicester: An insight into its scale, antecedents, challenges and solution](#)

# 1 NO POVERTY



Igudia, E., Dalziel, N. and Cartwright, E. (2025) IN-WORK poverty (IWP) is prevalent in East Midlands with consequences for individuals and the regional economy. Accounting for more than half of child poverty, IWP is a critical issue that needs urgent attention. IWP is likely to become more acute during rising cost and economic crisis.

Yet, it's not widely known or measured in the UK. Therefore, in this report, we present a summary of findings from our research, which mapped IWP in Leicester and offer insights into its scope, antecedents, challenges and the ways in which we can support people who are subject to IWP.

[Mapping in-work poverty and debt in Leicester: An insight into its scale, antecedents, challenges and solution](#)

## From food emergency to poverty prevention: The changing function of food banks in Leicester

*Arrieta T and Davies J S (2025)*

WHILE food banks continue to support people with the provision of emergency food parcels, they increasingly support the prevention of poverty in different ways.

Poverty prevention refers to the wide range of functions that food banks are undertaking in relation to social welfare, including employability and financial management support. T

he increased need that the city has experienced recently, in particular after the Covid19 pandemic, led to the development of the Leicester Food Partnership (LFP), an informal arrangement between 22 food banks. This policy brief focuses on the LFP and its poverty prevention work in local communities.

<https://doi.org/10.25392/leicester.data.27304020>

## Foodbanks in Leicester

*Igudia E., Dalziel, N., and Cartwright, E. (2025)*

FOODBANKS play a crucial in our society. For example, during periods of rising cost and economic crisis studies have reported a significant increase in the use of foodbanks.

Not only that, there are suggestions that some foodbanks offer a diverse range of services. However, significant differences exist in both the offerings and quality of services rendered by foodbanks.

This makes it imperative for a deeper study to better understand the level and quality of foodbank offerings in Leicester. In this report, we present a summary of the findings from the interviews and focus

group meetings we undertook across seven food-banks in Leicester.

### [Foodbank Operations in Leicester](#)

## The Limits of the Possible: Third Sector Employability Support for Vulnerable Users and the Challenge of Job Quality

*Payne, J., Rose, J. and Butler, P. (2025)*

MANY third-sector organisations (TSOs) deliver employability support for vulnerable groups, but can they address the quality of jobs their users enter? The question is timely in the UK, given structural constraints presented by its neoliberal labour market and welfare regime, and the new Labour Government's aim of moving job centres towards a supportive approach focused on 'good work'.

An interesting comparison emerges with Scotland, where 'fair work' is more established in policy.

<https://doi.org/10.1111/spol.13162>

## The Impact of Announcing a Payment Assistance Program on UK Household Water Consumption: A Regression Discontinuity Analysis

*Tyllianakis, E., Rigas, N., and Kounetas, K. (2025)*

INFORMATION campaigns aimed at social norms are a mainstay tool for utilities. The announcement effect of such policies is usually ignored in favour of ex-post examinations of campaigns' outcomes.

This paper examines the effects of announcing a 'help-to-pay' program from a United Kingdom (UK) water utility company for households facing a uniform price for water.

This study uses data for around 6000 Yorkshire Wa-

ter households between 2018 and 2020, adopting cross-sectional Regression Discontinuity (RD) and regression approaches.

<https://doi.org/10.1016/j.jup.2025.101981>

## Community resilience to flooding in the UK: A study of Matlock, Derbyshire

*McKie, R.E and Aitken, A (2025)*

THE United Kingdom has faced recurring floods since 2019, with 5.2 million homes at risk.

This has prompted the UK government to prioritise resilience planning in flood prone areas. This study focuses on community resilience in Matlock, Derbyshire, which has experienced intensified flooding since 2018.

Using qualitative interviews and a focus group, the research examines evidence of community resilience and the barriers to its development by focusing on community activities during flooding incidents.

<https://doi.org/10.1016/j.ijidrr.2025.105266>



## UN PROGRESS REPORT ON SDG 2 in 2025

PROGRESS on combatting hunger has been difficult with 45% per cent of the targets likely to have regressed by 2030 on the 2015 figures – and a further 10% of targets show stagnation.

However, around 15% of targets are on track to be met and a further 30 per cent have shown moderate progress.

The UN 2025 report states: “Global hunger and food insecurity have declined in recent years but remain above pre-pandemic levels.

“An estimated 8.2 per cent of the global population still face hunger and about 28 per cent – nearly 2.3 billion people – were moderately or severely food insecure.

“Hundreds of millions of children and women are affected by malnutrition, and dietary diversity remains inadequate for both women and young children.

“Getting Goal 2 on track requires urgent action to strengthen food systems, support small-scale producers, improve services, ensure access to nutritious diets and address structural drivers of food price volatility.”

## MAJOR DMU NEWS ON SDG 2 IN 2025

### [DMU expert to lead efforts to cut food poverty in Leicester](#)

WORK to eliminate food poverty in Leicester is to be led by an expert from De Montfort University.

Professor Jonathan Davies has been appointed as independent chair of Feeding Leicester, a network of organisations working together to ensure access to

food for all. He said: “A big part of our work is to research ways cities can support sustainable development, including the elimination of poverty and inequality and giving voice to marginalised groups. Feeding Leicester is part of the Feeding Britain Network, set up a decade ago.

### [DMU hosts conference showing true picture of poverty in Leicester](#)

THE “devastating” challenge of living in poverty has been highlighted at a conference held by De Montfort University Leicester (DMU).

Experts, charity workers and campaigners gathered on campus for a series of workshops and discussions which laid bare the real and growing financial struggles felt across Leicester.

Ivan Browne, Professor of Public Health and Social Determinants of Health at DMU, said that the issue was most affecting children with more than 50% of Leicester's children are affected by deprivation in Leicester.

### MAJOR DMU RESEARCH ON SDG 2 IN 2025

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WHILE food banks continue to support people with the provision of emergency food parcels, they increasingly support the prevention of poverty in different ways.

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## 2 ZERO HUNGER



management support. The increased need that the city has experienced recently, in particular after the Covid19 pandemic, led to the development of the Leicester Food Partnership (LFP), an informal arrangement between 22 food banks. This policy brief focuses on the LFP and its poverty prevention work in local communities.

<https://doi.org/10.25392/leicester.data.27304020>

### Advancing Agricultural Practices: Analyzing the Role of Robotics in Corn Farming

*Moshayedi, A. J., Khan, A. S., Geng, K., Hu, J., Kolahdooz, A. (2025)*

THE need for robots in corn farming arises from the complexity and labor-intensive nature of tasks such as planting, weeding, harvesting, and monitoring.

Robots offer precision, efficiency, and data-driven decision-making, addressing challenges in resource management, crop health, and productivity to meet the demands of modern agriculture.

In this paper, the current landscape of robotics in corn farming, exploring various robotic systems, their functionalities, and their potential impacts on agricultural practices were studied.

<https://doi.org/10.5829/ije.2025.38.07a.07>

#### Transformative trends: commercial platforms revolutionizing rice farming in Nigeria's agricultural value chain

*Sanusi, M. S., Mayokun, O. M., Sunmonu, M. O., Yerima, S., Mobolaji, D., and Olaoye, J. O. (2025)*

THIS review explores recent advancements in Nigeria's rice farming sector, focusing on the integration of digitalization within the agricultural value chain.

By conducting a systematic analysis of 78 publications from the past 14 years, the study investigates how digital platforms, such as AgricTech apps and e-commerce solutions, are transforming rice farming by connecting farmers, processors, marketers, and fabricators to streamline operations and boost efficiency.

<https://doi.org/10.1080/14735903.2025.2473757>

#### The potential role of Vertical Plant Farms in contributing to the environmental sustainability and security of the global food system

*Turner, David (2025)*

VERTICAL plant farms (VPF), or more colloquially

'vertical farms' or 'plant factories' are innovative indoor crop production structures utilising the vertical dimension of space, usually with the application of artificial lighting and soil-less growing media.

There has been significant interest in the virtues of VPFs in the context of environmental sustainability and resource use efficiency in recent years.

VPFs have been demonstrated to utilise significantly less land, fertiliser, water and pesticides than conventional counterparts.

[The potential role of Vertical Plant Farms in contributing to the environmental sustainability and security of the global food system](#)

#### Smart Farming Solutions: A User-Friendly GUI for Maize Tassel Estimation Using YOLO With Dynamic and Fixed Labelling, Featuring Video Support

*Moshayedi, A.J. et al. (2025)*

THE integration of Autonomous Aerial Vehicles (AAVs) has significantly advanced image processing and remote sensing, particularly in precision agriculture.

These technologies enhance data collection and agricultural yield estimation, benefiting banks, insurance companies, and government agencies in decision-making for budget allocation and quality assessments. This study addresses the challenge of accurately quantifying corn production by developing an enhanced YOLO-v8-based deep learning model, incorporating dynamic and fixed labeling techniques, which was tested on more than 810 images

and video data for real-time detection.

<https://doi.org/10.1109/ACCESS.2025.3554984>

#### A molecular perspective on horticultural trade: lessons from India for international species authentication

*Saxena, A., Nazar, N., Slater, A., Sgamma, T., and Sundaresan, V. (2025)*

THE global horticultural industry faces increasing challenges related to species authentication, regulatory compliance, and trade transparency.

Misidentification of plant species can result in economic losses, compromised consumer safety, and breaches of the regulatory framework.

Traditional authentication methods, including morphological and chemical analyses, often lack the accuracy and reproducibility required for reliable identification.

This review evaluates the potential of DNA barcoding as a robust molecular tool for species authentication in the horticultural trade.

<https://doi.org/10.1080/14620316.2025.2579570>



## UN PROGRESS REPORT ON SDG 3 in 2025

GLOBAL health progress is slowing after decades of gains. Between 2000 and 2019, maternal and child mortality declined significantly; the HIV incidence rate fell; and healthy life expectancy increased by over five years.

However, COVID-19 reversed some of these gains, cutting life expectancy by 1.8 years and slowing progress towards nearly all health-related SDG targets. Consequently, just 5% of the targets set for 2030 are on target to be met, although a further 30% have shown moderate progress. A further 50% of targets have shown just marginal progress and 15% have actually stagnated.

The UN 2025 progress report states: "Infectious and non-communicable diseases remain major threats. AIDS-related deaths have halved since 2010, and 54 countries have eliminated at least one neglected tropical disease.

"Meanwhile, malaria cases are rising; tuberculosis returned to being probably the world's leading cause of death from a single infectious agent in 2023; and non-communicable diseases killed 18 million people under age 70 in 2021.

"Risk factors such as tobacco use, air pollution and poor diet remain insufficiently addressed. Deep inequalities and under-resourced systems persist."

## MAJOR DMU NEWS ON SDG 3 IN 2025

### [Funding boost to tackle county health inequalities](#)

MILLIONS of pounds of government cash to help carry out wide-ranging research to identify the health needs for people in Leicestershire has been con-

firmed. Leicestershire County Council, in partnership with local universities, has secured £5.25m of funding from the National Institute for Health and Care Research (NIHR) for a Health Determinants Research Collaboration (HDRC) project.

De Montfort University Leicester, Loughborough University, The University of Leicester, and University of Nottingham, as well as Leicestershire Academic Health Partners, which includes the NHS and health-focused academic organisations, are key partners for the innovative collaboration.

### [Researchers mark milestone in Kenyan collaboration](#)

RESEARCHERS from Kenya are spending time at DMU, marking a milestone in a collaboration that aims to transform health outcomes for pregnant women in East Africa.

Dr Namuyenga Toko Eunice and Master's student Sharon Kwamutakha, both from Maseno University in Kenya, are working with DMU researchers as part of the first phase of a project designed to improve the early diagnosis and treatment of urinary tract infections (UTIs) during pregnancy.

### [Research shows that breakfast really is the most important meal of the day](#)

RESEARCH from De Montfort University Leicester (DMU) finds that skimping on breakfast is a false economy, and people who do are prone to eating carbohydrate and fat later in the day. The study by nutrition experts at DMU found that a 50% reduction in portion size at breakfast meant that participants on

## 3 GOOD HEALTH AND WELL-BEING



average consumed 286 calories, most often from foods like cake, crisps, biscuits and bread throughout the day.

### [New collaboration to develop greener, more affordable anti-cancer compounds](#)

PATIENTS around the world could have access to more affordable cancer treatments thanks to an innovative new applied research collaboration.

De Montfort University Leicester (DMU) and advanced chemical solutions specialist Fluid Science have won funding from Innovate UK to support the development of a new generation of anti-cancer compounds.

The team will work together on developing and refining active compounds using cutting-edge green

chemistry techniques, using cleaner, sustainable methods which both make the process better for the environment and reduce costs - meaning potential treatments can reach more patients.

### [DMU brain scan study finds evidence that autism is a difference, and not a deficit](#)

GROUND-BREAKING research led by scientists at DMU has found neurobiological evidence that autistic brains work differently, not worse.

The study, led by Dr Moses Sokunbi, Senior Lecturer in Medical Physics at DMU, found new evidence that autistic brains process information in different ways compared with non-autistic, or neurotypical, brains. Dr Sokunbi and his team explored how brain signal complexity - the irregularity of brain activity patterns - relates to problem-solving abilities.

### [Scientists find new way to stop 'silent killer' Chagas Disease](#)

A NEW study could pave the way for novel treatments for Chagas disease, a life-threatening illness that affects millions worldwide.

The disease, caused by the Trypanosoma cruzi parasite, can lie undetected for years before triggering serious complications and even sudden death. With current treatments often ineffective and carrying severe side effects, there's an urgent need for new drug options.

Working in partnership with an international consortium of experts, scientists DMU developed a new class of compounds that have shown real promise in preclinical testing.

### **MAJOR DMU RESEARCH ON SDG 3 IN 2025**

#### **A Novel Fuzzy Logic Framework for Model Reliability Evaluation in Permeability Prediction using GPR**

*Lawal, Ahmad; Yang, Yingjie; Baisa, Nathanael L.; He, Hongmei (2025)*

THIS study proposes a novel approach using fuzzy logic to compute a single, comprehensive metric that accounts for model reliability.

Our method incorporates human input and reasoning into the modelling process, enhancing the model's interpretability and its ability to handle uncertainty. Additionally, we introduce a new visualization technique to simplify the understanding of fuzzy logic outputs for non-technical stakeholders.

<https://doi.org/10.1109/cicn63059.2024.10847526>

#### **How to Improve Uptake and Access to Breast Cancer Screening for Minority Ethnic Women in Leicester**

*Aslam, Haleema (2025)*

THE existing research in the UK indicates minority ethnic women are less likely than their White British counterparts to access the National Health Service Breast Cancer Screening Programme, (NHSBSP), and specific minority ethnic groups are more likely to experience the most aggressive forms of breast cancer with the poorest chances of survival.

Despite, the absence of uptake data by ethnicity, certain factors prevalent in Leicester such as lower general uptake of the NHSBSP than in similar areas, one of the highest minority ethnic populations in the UK, and high levels of deprivation indicate uptake

level of the NHSBSP for minority ethnic women will be low. Therefore, solutions to improving uptake should be developed from the perspectives of minority ethnic women.

#### [How to Improve Uptake and Access to Breast Cancer Screening for Minority Ethnic Women in Leicester](#)

#### **The PMDWell Framework: A Confirmatory Factor Analysis of Video Game Players' Wellbeing**

*Olejarnik, S.Z. and Romano, D.M. (2025)*

DESPITE the video game moral panics that have sprung up since the early 1990s, videogames remain a popular medium, increasing in capacity and market value every year.

With the growth in the number of digital game players came the growth of uncertainty over the impacts of video games on wellbeing.

The new generations are growing up surrounded by ubiquitous, always-available digital technology and increasingly practice digitally mediated socialisation. The cultural shift suggests a change in the conceptualisation of wellbeing that can explain the phenomena of video game playing deaths.

<https://doi.org/10.1016/j.chbr.2025.100806>

#### **Preparing medical and pharmacy students for collaborative working in primary care: the value of interprofessional practice-based course in medicines optimisation**

*Anderson, E. S., Sanders, C., and Lakhani, N. (2025)*

TODAY more older people are living longer with complex health conditions and social care needs.

Multimorbidity is often managed by community practitioners who oversee the use of multiple medications, which can lead to polypharmacy safety concerns.

While clinical pharmacists' roles are established in acute settings, they are in the main new in family practice or primary care.

<https://doi.org/10.1080/13561820.2025.2517216>

**P80 What can we learn from Australian patients' journey to mesothelioma diagnosis? A qualitative study**

*Coleby, D., Oviasu, O., Padley, W., Hinsliff-Smith, K., Logan, P., Coles, J., Oostveen, C., and Linton, A. (2025)*

THE United Kingdom and Australia are amongst the countries with the highest rate of mesothelioma, a rare cancer due to exposure to asbestos.

There is a very low survival rate partly due to delayed diagnosis, and deaths are on the rise. There were 2,446 mesothelioma deaths in Great Britain in 2020, an increase of 6% compared with 2019. While in Australia, there were 701 deaths in 2020, an 3% increase.

The aim of the study is to explore the Australian patients' journey from symptoms to diagnosis.

<https://doi.org/10.1136/jech-2025-SSMabstracts.156>

**Invaders and Containers: Cognitive Representations of Biological and Particular Matter (bioPM )**

*Mitchell, A. S., Lemon, M. and Drew, G. H. (2025)*

AIR quality management concerns the assessment,

analysis and mitigation strategies associated with ensuring that air is breathable and non-toxic.

Successful management is a cognitively intensive task, knowledge-focused and converges multiple sources of information to develop a shared understanding of a problem.

To operate effectively in this space, managers and operational teams share common points of reference in discussing problems and solutions, strategies, tactical briefings, etc., and communication and technical language use are key to the discipline.

<https://doi.org/10.3390/pollutants5030017>

**“It Is Not Possible to Balance It Easily”: A Phenomenological Study Exploring the Experience of Work–Family Conflict in Contemporary Chinese Society**

*Chen, S., Cheng, M.-I., Elqayam, S., and Scase, M. (2025)*

THIS qualitative study aimed to explore the work–family conflict phenomenon in China, to extend our understanding of such a phenomenon experienced under a different cultural background outside of the West, and to help suggest the Chinese culturally specific variables (e.g., filial piety) related to the work–family conflict in China for future research. A purposive sample of 16 Chinese employees was interviewed.

Using Creswell's phenomenological method, six themes and 17 sub-themes emerged through 297 significant statements.

<https://doi.org/10.3390/bs16010063>

**Exploring economic inequality with critical qualitative approaches in psychology**

*Carr, P., Goodman, S., Jowett, A., Abell, J., and Demasi, M. (2025)*

THIS editorial introduces our special issue showcasing how qualitative research methods can be used in psychological research to explore economic inequality. Economic and class-based inequalities are global problems that have a negative impact on people's well-being.

The papers demonstrate how differing methodological approaches such as discursive psychology, thematic analysis, and interpretative phenomenological analysis can be utilised to offer insights into the complexity of economic inequality.

<https://doi.org/10.1080/14780887.2025.2601440>

**Climate anxiety in perspective: a look at dominant stressors in youth mental health and sleep**

*Ogunbode, C.A., Player, L., Lu, S., Park, M.S.A. and Doran, R. (2025)*

THERE is growing evidence that climate anxiety is associated with significant effects on the mental health and wellbeing of young people.

However, the relative importance of climate anxiety for young people's mental health has hitherto been unclear, as climate anxiety has largely been studied in isolation from other common stressors.

This study sought to contextualize the significance of climate anxiety for the mental health of UK young adults relative to other concurrent psychological stressors.

<https://doi.org/10.1111/nyas.70057>

## UN PROGRESS REPORT ON SDG 4 in 2025

EDUCATION is vital for sustainable development, yet progress remains off track with 15% of tracks expected to be met by 2030 and another 12.5% showing only moderate progress.

However, 15% of the targets show regression, a further 40% show stagnation and a further 12.5% just marginal progress.

The UN progress report for 2025 says: "While enrolment and completion rates have improved since 2015, with girls outperforming boys in most regions, progress is slowing."

## MAJOR DMU NEWS ON SDG 4 IN 2025

### [Easy access for local people to university libraries](#)

UNIVERSITIES in Leicester and Leicestershire are opening up their libraries to public users.

A new partnership between De Montfort University, Leicester, (DMU), the University of Leicester (UoL) and Loughborough University (LU), together with local councils, means anyone aged 18+ and living in the city, county or Rutland will easily be able to access university libraries and borrow up to 10 books at a time. Local people will now be able to become members of the university libraries for free.

### [DMU wins seed funding to support transformative teaching](#)

DMU has become one of just four UK universities to be awarded funding by the United Nations' PRME Seed Fund to support transformative teaching. Students will work with researchers to develop new

resources for impacts that align with the Sustainable Development Goals (SDGs), global goals to tackle issues facing the planet. By working alongside university students directly affected by related challenges, this project aims to develop participants' awareness of social policy development and foster values-driven leadership skills.

### [DMU leading the 'Change to Block: Symposium' in front of an international audience](#)

DMU hosted academics and professional support colleagues from universities across the globe for our 'Symposium: Leading the Change to Block.'

DMU's block teaching model allows students to focus on one subject at a time, with assessments at the end of each block instead of traditional examinations.

Throughout the day, we heard from a panel of DMU students, Professors from Southern Cross and Victoria University in Australia and the University of Central Lancashire.

### [OfS Chief hails DMU's Digital Learning Tech Hub](#)

THE Chief Executive of the Office for Students has praised DMU for "creating opportunities for students" following her visit to the university's Digital Learning Tech Hub.

The £6.5m hub was created with funding support from the OfS and was designed to meet the growing demand for advanced digital skills (such as cyber defence, artificial intelligence, data science, virtual production, creative technologies) and prepare students for highly skilled roles.

# 4 QUALITY EDUCATION



## MAJOR DMU RESEARCH ON SDG 4 IN 2025

A Novel Fuzzy Logic Framework for Model Reliability Evaluation in Permeability Prediction using GPR

*Lawal, Ahmad; Yang, Yingjie; Baisa, Nathanael L.; He, Hongmei (2025)*

THIS study proposes a novel approach using fuzzy logic to compute a single, comprehensive metric that accounts for model reliability.

Our method incorporates human input and reasoning into the modelling process, enhancing the model's interpretability and its ability to handle uncertainty. Additionally, we introduce a new visualization technique to simplify the understanding of fuzzy logic outputs for non-technical stakeholders.

The proposed methodology demonstrates that GPR achieves a higher reliability level (0.89) compared to

traditional machine learning counterparts, which are typically neutral to uncertainties.

<https://doi.org/10.1109/cicn63059.2024.10847526>

### Educational Impact and Ethical Considerations in Using Chatbots in Academia

*Ibrahim, Dina M.: Al-Harbi, Njood K.: Al-Shargabi, Amal A. (2025)*

CHATBOTS are getting better every day due to the advancements in their capabilities in today's technological age. This study aims to assess the efficacy of ChatGPT-4 and Gemini in producing scientific articles.

Two types of prompts are given: direct questions and complete scenarios. Subsequently, we evaluate the educational and ethical aspects of the produced material by employing statistical analysis.

We verify the credibility of references, detect any instances of plagiarism, and ensure the precision of the articles generated by the chatbot.

<https://doi.org/10.11591/ijeeecs.v37.i2.pp1150-1167>

### Developing Design Guidelines for Educational Robots: Insights from User Research with Preschool Children

*Zhu, Yuqi (2025)*

CHILDREN aged 4–6 are in a key stage of brain development. During this period, the prefrontal cortex—the part of the brain that controls important skills like paying attention and controlling behaviour—undergoes major changes (Moriguchi & Hiraki, 2020).

In China, parents are increasingly focused on their

children's learning during these years, leading to high demand for educational tools like robots.

[Developing Design Guidelines for Educational Robots: Insights from User Research with Preschool Children](#)

### Enhancing Basic Education as a Foundation for Resilience and Sustainability in Low-Income Mega-Cities: the Case of Lagos, Nigeria

*Okoya, S.A., Reeves, A., Younie, S. and Kolade, S. (2025)*

THE provision of quality basic education is critical for building resilient and prosperous communities. This is particularly needed in low-income settings, where enhancing education can develop human capital and the development of sustainable infrastructures for energy, the built environment, sanitation and more.

Nigeria as home to the world's largest population of out-of-school children can shed light on the challenge of education provision in comparable cities.

[10.5281/zenodo.17041983](https://doi.org/10.5281/zenodo.17041983)

### Enhancing Virtual Reality Experiences in Architectural Visualization of an Academic Environment

*Durojaye, A., Kolahdooz, A. and Hajfathalian, A. (2025)*

VIRTUAL Reality (VR) technology possesses the capability to transport users into immersive, alternative environments, providing them with a convincing sense of presence within a simulated world. This project leverages VR to develop an interactive, educational system centered around the De Mont-

fort University Queens Building, simulating key facilities and infrastructure through the integration of 360-degree imagery and Adobe Captivate software.

<https://doi.org/10.4108/airo.8051>

### A solution space partitioning based multi-population method for dynamic optimization

*Peng, M., Li, C., Wang, J., Cai, X., Zeng, S. and Yang, S. (2025)*

DYNAMIC optimization focuses on solving problems where the search space changes over time. The multi-population method is the most widely used approach for addressing such problems.

Traditional multi-population methods often lack a deep understanding of the problem's structural characteristics, such as the boundaries of basins of attraction.

<https://doi.org/10.1109/TEVC.2025.3597453>

### Transnational education as ecosystem: Rethinking sustainability and equity

*Wang, J. (2025)*

TRANSNATIONAL education (TNE) continues to expand globally, yet many partnerships remain fragile, short-lived or insufficiently connected to local contexts. This study argues that TNE must be reimagined not as a transactional delivery model but as a dynamic ecosystem grounded in equity, sustainability and mutual capacity-building.

The analysis identifies systemic barriers including weak institutional integration, rigid curriculum transfer and fragmented support for students and staff.

<https://doi.org/10.1111/hequ.70099>

## UN PROGRESS REPORT ON SDG 5 in 2025

NONE of the targets for 2030 are expected to be met for SDG 5 with 40 per cent showing only marginal progress and a further 60% showing moderate progress.

The UN progress report for 2025 states: "Gender equality remains elusive. Despite progress, discriminatory laws and gender-based norms continue to hinder gender equality.

"Women remain underrepresented in decision-making and leadership roles and often lack autonomy over sexual and reproductive health, land rights and technology access.

"Women's disproportionate share of unpaid domestic and care work continues to limit their access to education, career opportunities and political engagement, while harmful practices, such as child marriage and female genital mutilation, persist globally," the report adds.

## MAJOR DMU NEWS ON SDG 5 IN 2025

### [DMU to host global summit for International Women's Day 2025](#)

CAMPAIGNERS from across the world will gather to celebrate the role of women in pushing forward global sustainability.

To mark International Women's Day 2025, leaders and experts from De Montfort University Leicester and its global partners around the world, will take part in a summit on Wednesday 5 March.

The debate will focus on the levels of gender equality still prevalent across the world, the role higher education can take in addressing it and the power equal-

ity has in enabling progress towards the 17 Sustainable Development Goals set out by the United Nations.

### ["Quick-release" police hijab goes into production for frontline officers](#)

A GROUND-BREAKING quick-release hijab for female police on the front line has gone into production with orders coming in from around the country.

The innovative design features an innovative magnetic quick-release system that allows the lower section to detach instantly if pulled during a confrontation, preventing the risk of strangulation while maintaining modesty and professional appearance.

The Blue Light Hijab®, created by Leicestershire Police in partnership with designers at De Montfort University Leicester has been getting interest not only from other police forces but emergency services organisations, paramedics, the NHS and private sector for general workwear.

### [DMU academic joins new Government taskforce to break down barriers for women in technology](#)

A DMU academic has been named as one of the founding members of a new Government taskforce set up to get more women into tech.

Dr Ismini Vasileiou, an Associate Professor in Cyber Security at DMU and the Director of the East Midlands Cyber Security Cluster, has been appointed to the Women in Tech Taskforce by Technology Secretary Liz Kendall, who is the MP for Leicester West

# 5 GENDER EQUALITY



### [DMU researcher among most influential women in AI ethics](#)

An ASSOCIATE Professor at DMU has been recognised as one of the most influential women working within Artificial Intelligence (AI) regulations and ethics.

Dr Kutoma Wakunuma, an Associate Professor in the faculty of Computing, Engineering and Media, has been named in the 2025 top [100 Brilliant Women in AI Ethics](#) by Women in AI Ethics, a not-for-profit organisation that champions the representation and empowerment of women in AI.

Having co-authored two books, Dr Wakunuma is helping to shape AI policies in Zambia through a series of workshops with the African country's parliament and policymakers.

## [DMU shortlisted four times in region's Enterprising Women Awards](#)

FOUR women from De Montfort University Leicester (DMU) have been named among the region's most outstanding achievers in the shortlist for the 2025 Enterprising Women Awards.

The awards celebrate exceptional achievement by women across the East Midlands across nine categories ranging from social commitment to innovation.

DMU finalists are:

- Helen Donnellan, director of Research, Business and Innovation – leader of Team of the Year
- Sarah Thomson, Principal Partnership Officer – Social Commitment Award
- Dr Ismini Vasileiou – The Innovation Award
- Dr Dyneshia Johnson – The Innovation Award

## **MAJOR DMU RESEARCH ON SDG 5 IN 2025**

Now you see them, now you don't: Will technological advancement erode the gains made by women entrepreneurship in Sub-Saharan Africa?

*Irene, B., Onoshakpor, C., Lockyer, J. et al. (2025)*

AS GLOBAL economic activity gains momentum post-COVID-19, assessing local economic recovery remains essential for shaping policies that foster inclusive growth.

In countries such as South Africa, which contends with enduring unemployment and significant inequality, cultivating economic resilience—particularly among Previously Disadvantaged Individuals (PDIs) and female entrepreneurs—is essential.

The pandemic highlighted the crucial importance of digital technology in business resilience, as digitally equipped enterprises adapted more efficiently.

<https://doi.org/10.1007/s10843-025-00392-x>

### **Gender and the transition to Net Zero Transport**

*Budd, L. (2025)*

THE United Nations has identified climate change and inequality (including gender inequality) as being two of the biggest challenges of the contemporary global era.

The global transport sector, which currently accounts for around a quarter of all anthropogenic greenhouse gas emissions, remains a long way from reaching its Net Zero target .

The sector also largely fails to deliver gender inclusive services which recognise and meet the different mobility needs, priorities and services both between and within genders.

[Gender and the transition to Net Zero Transport](#)

### **Women's Broadcasting Histories and the Archive: National, Transnational and Transmedial Entanglements**

*Arnold, S., McCabe, J., Andrews, K., Badenoch, A., Baker, J., Ball, V., Hendriks, E., Jackson, V., Murphy, K., Sahu, I., Skoog, K., Terkanian, K and Warner, H. (2025)*

THIS provocation details varied perspectives of the International Women's Broadcasting Histories (IWBH) network on researching the role of women in broadcasting.

The conversational form allows us to roam across

the topic widely, to express a range of discrete positions and distinct arguments, with the desire to bring dilemmas to the surface and explore their implications without reduction.

Responding with a series of interventionist statements around the issues and challenges of doing archival research into women's work, we opt for retaining different viewpoints in a raw state, with the aim of provoking discussion about the methodological opportunities and limitations when working within and outside of archives.

<https://doi.org/10.1177/17496020251330853>

### **"It Is Not Possible to Balance It Easily": A Phenomenological Study Exploring the Experience of Work–Family Conflict in Contemporary Chinese Society**

*Chen, S., Cheng, M.-I., Elqayam, S., and Scase, M. (2025)*

THIS qualitative study aimed to explore the work–family conflict phenomenon in China, to extend our understanding of such a phenomenon experienced under a different cultural background outside of the West, and to help suggest the Chinese culturally specific variables (e.g., filial piety) related to the work–family conflict in China for future research. A purposive sample of 16 Chinese employees was interviewed.

Using Creswell's phenomenological method, six themes and 17 sub-themes emerged through 297 significant statements.

<https://doi.org/10.3390/bs16010063>

## UN PROGRESS REPORT ON SDG 6 in 2025

SDG 6 is one of the poorer performing SDGs with 10% of the 2030 targets actually showing regression in the past 15 years and a further 40% showing stagnation.

No tracks are set to be met and just 10% showing moderate progress and a further 40% of targets just making marginal progress.

The UN progress report for 2025 states: "Billions remain underserved, and more than 2.2 billion people lacked safely managed drinking water, 3.4 billion went without safely managed sanitation and 1.7 billion lacked basic hygiene services at home.

"In schools, 646 million children remain without basic hygiene services, requiring a fourfold increase in progress to meet 2030 targets.

"Water systems are under strain from pollution, water stress and weak governance... achieving Goal 6 requires mobilising comprehensive financing."

## MAJOR DMU NEWS ON SDG 6 IN 2025

### [Flooding in the UK: How better collaboration between communities and authorities can strengthen flood resilience](#)

A LACK of connection between local government and residents is a barrier towards community resilience to flooding, says new research co-authored by a leading climate social-science specialist at De Montfort University (DMU) Leicester.

The UK faces recurring flood events, with 5.2 million homes now at risk from flooding and coastal erosion. This increasing risk highlights the importance of resilience planning, according to the report published

in the International Journal of Disaster Risk Reduction by DMU's Dr Ruth McKie and Dr Adam Aitken from the University of Salford.

## MAJOR DMU RESEARCH ON SDG 6 IN 2025

### **Not a Drop to Drink: Addressing Nigeria's Deepening Freshwater Crisis**

*Irene, J., Irene, B. N., and Daniels, C. (2025)*

NIGERIA is currently grappling with an acute freshwater crisis, characterized by a stark contradiction where abundant water resources coexist with a widespread lack of access to safe and reliable water. This study examines the complex interplay of factors driving this crisis. It highlights how climate change and the degradation of critical infrastructure and water management systems have significantly reduced the resilience of freshwater systems.

This study draws on survey data to assess public perceptions of water scarcity and its causes, revealing a public consensus on the impacts and challenges of freshwater scarcity.

<https://doi.org/10.3390/w17121731>

### **Chitosan-Based Composites for Sustainable Textile Production: Applications Across the Lifecycle**

*Liu, A., Qi, B., and Ku, L. (2025)*

THE fashion and textile industry (FTI) is a significant contributor to greenhouse gas emissions, resource consumption, and waste generation, necessitating sustainable alternatives.

Chitosan, a biodegradable and renewable biopolymer, has shown potential in reducing environmental impact throughout the textile lifecycle. However, ex-

# 6 CLEAN WATER AND SANITATION



isting studies often focus on isolated applications rather than its broader role in industrial sustainability.

This review synthesises findings from 142 academic studies to assess chitosan's applications in textile production, dyeing, finishing, and waste management, emphasising its impact on energy efficiency, carbon reduction, and resource circularity.

<https://doi.org/10.3390/cleantechnol7040095>

### **The Impact of Announcing a Payment Assistance Program on UK Household Water Consumption: A Regression Discontinuity Analysis**

*Tyllianakis, E., Rigas, N., and Kounetas, K. (2025)*

INFORMATION campaigns aimed at social norms are a mainstay tool for utilities. The announcement effect of such policies is usually ignored in favour of ex-post examinations of campaigns' outcomes.

This paper examines the effects of announcing a 'help-to-pay' program from a United Kingdom (UK) water utility company for households facing a uniform price for water.

This study uses data for around 6000 Yorkshire Water households between 2018 and 2020, adopting cross-sectional Regression Discontinuity (RD) and regression approaches.

<https://doi.org/10.1016/j.jup.2025.101981>

#### Cutting-edge innovations in drinking water management

*Diao, K. and Ulanicki, B. (2025)*

EIGHT peer-reviewed papers reflecting the diversity of cutting-edge innovations in drinking water management in water distribution systems (WDSs).

Specifically, the contributions collected are organized into the following two main categories: (1) system status evaluation and (2) operational control and management with novel methods.

Four papers are included in each category.

<https://doi.org/10.2166/aqua.2025.001>

#### Rediscovering cities through strategically decentralised urban green infrastructure: a case study of stormwater resilience

*Tiwary, A., Heidrich, O. (2025)*

THIS paper demonstrates that strategic application of 'decentralised urban green infrastructure' (DUGI) can alleviate flash flooding through adequate surface run off reduction using a combination of linear and dispersed components based

on the perviousness of the sub catchments.

As a first step, an assessment framework comprising of the following three steps is introduced: Site selection; DUGI implementation strategy; Impact analysis (hydrological, socio-economic, etc.).

<https://doi.org/10.1007/s44327-025-00121-y>

#### Context-aware data driven sensor data analysis: With application to H2S concentration prediction in urban drainage networks

*Duque, H. et al. (2025)*

THIS paper presents a context-aware data-driven approach for the analysis of big data from sensors.

Different from conventional methods, this approach incorporates exogenous variables or contextual information that influences the dynamic behaviour of the monitored system. In the context of water distribution systems, for example, key system variables including water demand variations and pressure are significantly affected by factors like time of day, the day of the week, unusual events, seasonal variations and weather conditions.

<https://doi.org/10.1016/j.wroa.2025.100346>



## DMU and United Nations — helping to change the world in 2025

- ⇒ DE MONTFORT University (DMU) is the only UK higher education institution ever to be a global academic hub for the United Nations (UN) Sustainable Development Goals since their introduction in 2019.
- ⇒ DMU was the global academic hub for SDG 16 Peace, Justice and Strong Institutions for two three-year terms from 2019-2024.
- ⇒ In January 2025, DMU became the global academic hub chair for SDG 11 Sustainable Cities and Communities under an expanded UN programme.
- ⇒ DMU leads three other vice-chairs from universities in Brazil, Vietnam, and Germany on SDG 11 across research, teaching and education, partnership and outreach.
- ⇒ In 2025, DMU was in the world top 100 for its work on three SDGs – 11 Sustainable Cities, 12 Responsible Consumption and Production, and 13 Climate Action, according to the Times Higher Education Impact Rankings.
- ⇒ This meant that since 2019 DMU had featured 35 times in the world top 100 across 10 different SDGs in the THE Impact Rankings.
- ⇒ During the COP 30 talks of world leaders in November, more than 500 DMU students and staff took part in events on its Leicester campus aimed at raising awareness and promoting climate action.

## UN PROGRESS REPORT ON SDG 7 in 2025

SDG 7 is the best performing of all the goals with 40% of the targets expected to be met by 2030 and a further 40% showing moderate progress. A further 20% of the targets show marginal progress.

THE UN report for 2025 says: "The world has made considerable progress towards Goal 7.

"Global electricity access reached 92 per cent... up from 84 per cent in 2010. Meanwhile, access to clean cooking fuels and technologies rose from 64 to 74 per cent.

"Renewable energy is the fastest-growing energy source today, and was projected to surpass coal as the primary electricity source in 2025.

"However, achieving Goal 7 targets demands substantially increasing clean-energy investments, particularly in developing economies."

## MAJOR DMU NEWS ON SDG 7 IN 2025

### [DMU leads as experts kick-start clean energy programme for sub-Saharan Africa](#)

DIPLOMATS, academics and industry leaders have met in London to forge ahead with multi-million-pound plans to generate clean energy and tackle e-waste issues in Sub-Saharan Africa.

Led by Professor Muyiwa Oyinlola of De Montfort University, the event at the renowned Chatham House think-tank, was part of a four-day programme designed to kick-start the £3.5 million project by the Circular Economy Powered Renewable Energy Centre (CEPREC).

CEPREC's Director is Muyiwa Oyinlola, Professor of

Innovation for Sustainable Development at DMU, and a chartered engineer who has dedicated his career to engineering sustainable solutions for low-and middle-income countries.

### [Older polluting log burners could be a thing of the past thanks to DMU-led research](#)

A DEVICE that can be retrofitted to older log burners to prevent them from spreading harmful toxins in homes is being developed by a research team at DMU.

The device, known as the Helixtractor, sits in a chamber that is retrofitted to existing devices. It has a heat recovery coil that creates a small whirlpool, which transports the toxins out of the firebox and into the flue chimney, where they get extracted from the plume.

The project has received government funding from the Department for Environment, Food & Rural Affairs (DEFRA) via the Innovate UK Small Business Research Initiative scheme.

## MAJOR DMU RESEARCH ON SDG 7 IN 2025

Analysing the barriers to renewable energy adoption in Ghana using Delphi and fuzzy synthetic approach

*James, G. A., Ahiabor, F. S., and Abalo, E. M. (2025)*  
THIS study investigates the critical barriers to renewable energy adoption in Ghana, where reliable and sustainable energy access remains critical to achieving development goals and addressing climate change.

# 7 AFFORDABLE AND CLEAN ENERGY



Drawing from the existing literature, 44 barriers were identified and grouped into six categories: policy, institutional, economic/financial, structural/technical, political/legal/regulatory, and social.

<https://doi.org/10.1016/j.esd.2025.101667>

Optimizing heat transfer in a solar parabolic trough collector absorber

*Limboonruang, Teerapath (2025)*

THIS research focuses on optimizing the thermal performance of solar parabolic trough collector (SPTC) systems that are specifically tailored to Thailand's unique climatic and economic conditions.

The study combines experimental and numerical methodologies to evaluate innovative designs for solar absorber tubes through Computational Fluid Dynamics (CFD) simulations.

The research focuses on two key optimization approaches to improving the efficiency of solar absorber tubes: external finned solar absorber tubes and looped solar absorber tubes.

[Optimizing heat transfer in a solar parabolic trough collector absorber](https://doi.org/10.3390/su17073002)

**Advancing Sustainable Housing in Latin America: A Critical Review of Energy Efficiency, Indoor Environmental Quality, and Policy.** *Sustainability* Vázquez-Torres, C.E., Ozawa-Meida, L., Bienvenido-Huertas, D., Bassam, A. (2025)

WHILE interest in indoor environmental quality (IEQ) in Latin American housing has been growing over the past decade, the COVID-19 pandemic has further highlighted its critical importance due to increased residential occupancy time, exposure to indoor pollutants, and their implications for health.

Recognising the climatic, cultural, infrastructural, and socio-economic diversity of the region, this study presents a bibliometric review of research and policy advances with the aim of examining progress towards effective pathways for sustainable housing, focusing on the integrated vision of energy efficiency, IEQ, and regulations as the key thematic axes.

<https://doi.org/10.3390/su17136139>

**The potential role of Vertical Plant Farms in contributing to the environmental sustainability and security of the global food system**

*Turner, David (2025)*

VERTICAL plant farms (VPF), or more colloquially 'vertical farms' or 'plant factories' are innovative in-

door crop production structures utilising the vertical dimension of space, usually with the application of artificial lighting and soil-less growing media.

There has been significant interest in the virtues of VPFs in the context of environmental sustainability and resource use efficiency in recent years.

VPFs have been demonstrated to utilise significantly less land, fertiliser, water and pesticides than conventional counterparts.

[The potential role of Vertical Plant Farms in contributing to the environmental sustainability and security of the global food system](https://doi.org/10.3390/su17073002)

**Enhancing Virtual Reality Experiences in Architectural Visualization of an Academic Environment**

*Durojaye, A., Kolahdooz, A. and Hajfathalian, A. (2025)*

VIRTUAL Reality (VR) technology possesses the capability to transport users into immersive, alternative environments, providing them with a convincing sense of presence within a simulated world.

This project leverages VR to develop an interactive, educational system centered around the De Montfort University Queens Building, simulating key facilities and infrastructure through the integration of 360-degree imagery and Adobe Captivate software.

<https://doi.org/10.4108/airo.8051>

**Examining Energy Efficiency and Retrofit in Historic Buildings in the UK**

*Sevim, Y.E.; Taki, A.; Abuzeinab, A. (2025)*

THE energy efficiency potential of a considerable number of Europe's historical buildings is notewor-

thy. However, policymakers often express concerns about energy retrofits that may compromise the integrity of these structures and their surroundings. On the contrary, various strategies exist for enhancing energy efficiency in historic buildings without compromising their architectural constraints.

<https://doi.org/10.3390/su17073002>

**Hybrid deep learning based load forecasting and AI-driven energy management for grid-connected multi-microgrids**

*Zohaib, A. et al. (2025)*

MICROGRIDS offer a promising paradigm for sustainable and decentralized energy management; however, they face operational challenges due to fluctuating load profiles and the intermittency of renewable energy sources. This paper proposes a two-phase framework to address these challenges through accurate short-term load forecasting (STLF) and an advanced energy management system (EMS) for grid-connected multi-microgrids.

<https://doi.org/10.1016/j.compeleceng.2025.110915>

**Rethinking end-of-life renewable energy assets as components of sustainable urban infrastructures**

*Tiwary, A., Olanrewaju, R. and Sung, K. (2025)*

THIS study explores some plausible end-of-life decommissioning options for composite materials in renewable energy assets for developing low-cost public infrastructures.

This has been demonstrated through a case study for wind turbine blades.

The study presents outcomes of a survey that was deployed to understand consumer perception of the proposition to utilise the end-of-life wind turbine components as bus stop shelters.

<https://doi.org/10.5281/zenodo.17020604>

#### Assessing thermal comfort in green and conventional office buildings in hot climates

*Muhammad, A.H.; Taki, A.; Khattak, S. (2025)*

GREEN buildings are recognised for their potential to reduce energy consumption, minimise environmental impact, and improve occupants' well-being, benefits that are especially critical in rapidly urbanising regions.

However, questions remain about whether these buildings fully meet occupant comfort expectations while delivering energy efficiency.

This is particularly relevant in Africa, where climate conditions and energy infrastructure challenges make sustainable building operation essential.

<https://doi.org/10.3390/su17157078>

#### Energy Efficiency and Circular Economy in Glass Wool Fiberizing: Impact of Lightweight Refractory Design

*Afzal, J., Forgerit, B., and Tiwary, A. (2025)*

THIS paper presents an analysis of energy savings and sustainability measures to improve the environmental performance of glass wool fiberizing, the latter being the most energy intensive production step in manufacturing glass wool thermal insulation, involving conversion of hot molten glass into fibers.

The first part evaluates two refractory designs—busi-

ness as usual (BAU) and modified (MOD), over four trials. BAU refractory has higher density whereas MOD is an innovative lightweight design, with lower density and improved thermal conductivity.

<https://doi.org/10.3390/su18010135>

#### Climate obstruction across the Global South

*Faruque, M. O., McKie, R. E., Christel, L. G., Debucquois, C., Edwards, G., Gellert, P. K., Gutierrez, R. A., Hochstetler, K., Li, Y., Milani, C. R. S., Möhle, E., Oguntuse, O. J. and Walz, J. R. (2025)*

THE Global South countries differ in their histories, development trajectories, political structures, and participation in multilateral organizations. They also differ in their vulnerabilities to climate change. This identifies key actors and organizations undertaking climate obstruction activities in various sectors in the Global South. It examines these actors' political aims, their alliances with other actors and organizations, and the strategies, tactics, and narratives they deploy to undermine both legislative and policy actions to address climate change.

<https://doi.org/10.1093oso/9780197787144.003.0008>



#### UN PROGRESS REPORT ON SDG 8 in 2025

GLOBAL economic growth is falling short and half of the targets for 2030 show either regression or stagnation on the 2015 benchmark (30% regression, 20% stagnation).

The UN estimates that 15% of targets will be met in five years' time, while reporting 20% are showing moderate progress and a further 15% only marginal progress,

The 2025 progress report from the UN states: "GDP per capita growth was projected to slow to just 1.5 per cent in 2025 due to heightened trade tensions and policy uncertainty.

"Real GDP growth in LDCs (least developed countries) remains well below the 7% target. Weak productivity growth and declining labour rights compliance further undermine decent-work progress."

#### MAJOR DMU NEWS ON SDG 8 IN 2025

##### [Research shows that work from home revolution is not helping to level-up UK regions](#)

THE post-covid work from home revolution is not helping to level-up struggling regions of the UK, and may even make matters worse.

A ten-month research project involving De Montfort University Leicester (DMU) and others looked into the economic impact of the work from home revolution that was sparked by the Covid pandemic of 2020.

At the time it was widely thought that changes in working practices would redistribute wealth around the regions of the UK as well-paid workers in high-skilled occupations dispersed around the country. High-skilled occupations refers to management & professional occupations.

#### [DMU student takes her shoemaking skills to Africa](#)

A TRIP to Tanzania has kick-started one DMU student's ambition to teach African women how to make shoes.

Damari Kota Diur-Kota, 25, travelled to Arusha, Tanzania's third largest city, for four weeks to teach disadvantaged communities practical business skills as part of a volunteering trip run by DMU Global.

Armed with ten tool kits containing essential shoe-making equipment, Damari arrived in Arusha and worked with Perfect Vision Women Tanzania, a not-for-profit non-government organisation aimed at tackling poverty through education, to set up her shoe-making workshop teaching 15 women.

#### [Professor wins funding to commercialise AI research](#)

A GROUND-BREAKING AI-powered system that could revolutionise the billion-pound banana industry has been given a £100,000 boost.

OPTIcut, created by Professor David Elizondo, aims to reduce waste in the industry by improving cutting methods and helping local growers maximise profits. Responsible AI UK – backed by Innovate UK – announced it had awarded the team funding to refine

and expand its system, which uses AI and 3D image processes to help producers create the best cutting strategies for harvesting.

#### [New report highlights barriers facing Asian business owners in UK](#)

GROUND-BREAKING new research from DMU and Barclays Eagle Labs reveals the vital contribution Asian founders make to the UK economy – and the systemic barriers that continue to hold them back. The study, based on 125 interviews with Asian entrepreneurs, business leaders, and support organisations across England and Wales, shows that Asian-owned businesses contribute an estimated £25 billion to the UK economy and make up over 6% of all SMEs.

However, the research highlights significant barriers to growth, including cultural attitudes to debt and risk, stereotyping in investment and banking, and limited access to elite business networks.

#### [DMU celebrates 50 years of Knowledge Transfer Partnerships](#)

BUSINESSES, graduates and academics from DMU came together to mark the 50th anniversary of the UK's flagship Knowledge Transfer Partnership programme, which helps companies access Government funding to innovate.

And special guest was Richard Lamb, head of KTPs for Innovate UK, who heard about projects past and present at DMU and looked to the future as it aligns with the Government's new Industrial Strategy ambitions.

## **8 DECENT WORK AND ECONOMIC GROWTH**



Since the university's first KTP project back in 1978, DMU has won £11m in funding for 134 projects, which have in turn generated some £60million to the local and national economy.

#### [Universities recognised nationally for pioneering research-to-start up accelerator](#)

A PIONEERING programme to help turn university research into successful ventures has been shortlisted as a finalist for a national Knowledge Exchange Award.

[VentureVersity](#), developed through a collaboration between the University of Leicester, DMU, and Loughborough University in partnership with Leicester Start-Ups, aimed to create new accelerated pathways for university intellectual property and ideas.

## MAJOR DMU RESEARCH ON SDG 8 IN 2025

### Strategic adaptation in a cold funding climate: Third sector experiences of employability funding and commissioning in the UK after 'Brexit'

Rose, J., Payne, J., Butler, P. (2025)

THE ability of third sector organisations (TSOs) to strategically navigate commissioning environments in 'marketized' public services is much debated. This article addresses those delivering employability support outside the UK's marketized public employment system following the end of European funding. Focusing on the UK Shared Prosperity Fund and No One Left Behind in Scotland, it examines TSOs' views on the localisation of employability support under 'austerity localism' in the contrasting governance contexts of England and Scotland.

<https://doi.org/10.1332/20408056y2025d000000036>

### An Ethical Framework for Emerging Technologies: the TEAE<sub>M</sub> Approach

Bhalla, Nitika; Brooks, Laurence; Richardson, Kathleen; Cannizzaro, Sara (2025)

THE inherent nature of uncertainty and the indefinite time horizon of emerging technologies means that their effective ethical governance is not sufficiently addressed by industry and hence society.

This paper explores an approach to enhance existing ethical frameworks that can be useful and relevant to new and emerging technologies.

We begin with the analysis of literature exploring some of the technical features of each framework and its potential applicability to emerging technologies. Following this, a detailed outline of a broad ethi-

cal framework has been proposed using a combination of existing ethical frameworks.

<https://doi.org/10.55613/jeet.v35i1.147>

### A Systematic Literature Review of Passenger Non-Adoption of Airport Self-Service Technologies: Issues and Future Recommendations

Chaiwan, C., Budd, L., and Ison, S. (2025)

TECHNOLOGY has become crucial for businesses to deliver faster and smoother services for growing numbers of customers at lower operating costs, and aviation is no exception. Airports and airlines have made significant investments in a range of back-office and customer-facing technologies including introducing self-service check-in and bag drop in order to enhance the guest experience and reduce processing times.

<https://doi.org/10.1016/j.jatrs.2025.100065>

### Architecture by Algorithm: A Stylistic and Empirical Enquiry into Parametricism

Emeje, Ucheojo (2025)

PARAMETRICISM has emerged as a dominant discourse in contemporary architecture, yet there is a persistent lack of consensus regarding its classification.

While some scholars argue that Parametricism represents a methodological approach driven by computational design and algorithmic processes, others maintain that it functions as a distinctive architectural style comparable to movements such as Modernism, Postmodernism, and Art Nouveau.

This study aims to critically investigate the defining

components of an architectural style and to construct an empirical framework for classifying architectural movements.

[Architecture by Algorithm: A Stylistic and Empirical Enquiry into Parametricism](#)

### The Limits of the Possible: Third Sector Employability Support for Vulnerable Users and the Challenge of Job Quality

Payne, J., Rose, J. and Butler, P. (2025)

MANY third-sector organisations (TSOs) deliver employability support for vulnerable groups, but can they address the quality of jobs their users enter? The question is timely in the UK, given structural constraints presented by its neoliberal labour market and welfare regime, and the new Labour Government's aim of moving job centres towards a supportive approach focused on 'good work'.

An interesting comparison emerges with Scotland, where 'fair work' is more established in policy.

<https://doi.org/10.1111/spol.13162>

### "The cost of "everything": minoritized social entrepreneurs' response and adaptation during the cost-of-living crisis

Kah, S., Murithi, W., Munawar, M., Ogunmokun, O., Osei-Nimo, S. (2025)

THE cost-of-living crisis negatively impacted many parts of the United Kingdom, exposing the heightened economic failures faced by impoverished people whom social enterprises (SEs) support.

Yet, the resilience of SEs, especially those led by minoritized individuals hardest hit by the crisis, is un-

derexplored. This paper examines the response and adaptation of Black- and Asian-led SEs during the cost-of-living crisis. It draws from Duchek's (2020) organizational resilience conceptualization to offer valuable insights into crisis response strategies and their implications.

<https://doi.org/10.1108/IJEBR-01-2024-0061>

### **The Role of Financial Institutions in Bridging the Financing Gap for Women Entrepreneurs in Sub-Saharan Africa**

*Irene, B., Ndlovu, E., Felix-Faure, P.C., Dlabatshana, Z., Ogunmokun, O. (2025)*

SMALL and Medium Enterprises (SMEs) are vital to economic growth, innovation, and job creation across Sub-Saharan Africa (SSA).

Women entrepreneurs are key contributors to this sector, yet they face persistent barriers to accessing finance, which constrain their business growth and broader economic participation.

This study investigates the role of financial institutions in closing the financing gap for women-owned SMEs and assesses the effectiveness of various financing mechanisms, including traditional banking, micro-finance, fintech innovations, and government-backed credit schemes.

<https://doi.org/10.3390/admsci15080323>

**Now you see them, now you don't: Will technological advancement erode the gains made by women entrepreneurship in Sub-Saharan Africa?**

*Irene, B., Onoshakpor, C., Lockyer, J. et al. (2025)*

AS GLOBAL economic activity gains momentum post -COVID-19, assessing local economic recovery remains essential for shaping policies that foster inclusive growth.

In countries such as South Africa, which contends with enduring unemployment and significant inequality, cultivating economic resilience—particularly among Previously Disadvantaged Individuals (PDIs) and female entrepreneurs—is essential.

The pandemic highlighted the crucial importance of digital technology in business resilience, as digitally equipped enterprises adapted more efficiently.

<https://doi.org/10.1007/s10843-025-00392-x>

### **Formalization as a strategy of ASM “sanitization”: So far, how far?**

*Ofosu, G., Siaw, D., Asante, S. and Adusei Peasah, K. (2025)*

FOR decades, a significant number of studies have examined the agenda of the formalization of artisanal and small-scale mining (ASM) operations. There is now enough anecdotal evidence that formalization of ASM operations can help promote safe working conditions.

However, very few studies have examined the internal dynamics and outcomes once ASM operations become formalized.

<https://doi.org/10.1108/SL-12-2024-0133>

### **A Review on Achieving Sustainability in the Petroleum Industry Through the Integration of Lean and Green**

*Dibia, F., Dibia, C., Dhakal, H.N., Okpako, O., Radulovic, J. and Isike, A. (2025)*

*J. and Isike, A. (2025)*

THE petroleum industry has been a key driver in the development of the world economy yet continues to attract increasing criticism due to its negative environmental impact via greenhouse gas emissions, resource inefficiency, and waste.

Integrating lean and green practices is fast becoming a transformative approach to tackling these issues as it integrates process optimization with sustainability principles.

This review paper examined the existing literature on lean and green integration, highlighting its benefits, models, critical success factors, and a roadmap for its implementation.

<https://doi.org/10.3390/app15052333>

### **A behavioural risk perspective to plastic waste management: insights from Nigerian SMEs**

*Tyllianakis, E., Kolade, O., Ambituuni, A., Ogunde, O., Oyinlola, M. and Abolfathi, S. (2025)*

A TRANSITION to a Circular Economy is intrinsically connected to the perceived risk of moving away from the status quo of the extract-use-discard model.

This study examines how small and medium enterprises perceive and respond the risk from plastic waste mismanagement .

Such risk is approximated and analysed using two different behaviour theories in a survey amongst 242 managers in Nigerian SMEs examining the endogenous relationship between perceived impact of PWM and perceived effectiveness in addressing it.

<https://doi.org/10.1016/j.jclepro.2025.147086>

## UN PROGRESS REPORT ON SDG 9 in 2025

SDG 9 is one of the best performing goals and around 30% of the targets for 2030 are expected to be met and a further 45% are showing moderate progress. However, 12.5% of the targets show stagnation and a further 12.5% have actually regressed in the past 10 years.

The UN progress report for 2025 says: "Since 2015, notable progress has been made in expanding infrastructure, fostering industrial growth and boosting innovation.

"Global manufacturing value added per capita grew 17.3 % from 2015 to 2024. Maritime freight reached 11.6 billion metric tons, driven by the growing participation of developing countries.

"Meanwhile, 5G mobile broadband now covers 51% of the global population.

"However, stark regional disparities persist, and many developing countries continue to face systemic barriers to inclusive and sustainable industrialisation."

## MAJOR DMU NEWS ON SDG 9 IN 2025

### [New centre of excellence to drive digital innovation in medicines regulation](#)

A NEW £1m research project to realise the transformative potential of digital technologies like artificial intelligence (AI) in medicines development and manufacturing has been announced.

Funded by Innovate UK, the UK's innovation agency, the 12-month Centre of Excellence in Regulatory Science and Innovation project has ambitions to advance regulatory processes by integrating cutting-

edge digital technologies. The project is led by CMAC (a medicines manufacturing research centre at the University of Strathclyde) and delivered in collaboration with a consortium of partners including an academic institution (De Montfort University (DMU) Leicester),

### [DMU Nano silicon breakthrough paves way for increase in Lithium-ion battery power](#)

A RESEARCH scientist at DMU Leicester has invented a novel manufacturing method that could revolutionise the world of rechargeable batteries.

Professor Shashi Paul has recently patented a process for making silicon nanowire, which could be the key to making huge improvements in the performance and efficiency of the rechargeable lithium-ion batteries used in everything from mobile phones and laptops to drones and also electric vehicles.

### [£150,000 new cyber programme to protect East Mids businesses](#)

A £150,000 support programme is launching to help East Midlands businesses - particularly those in manufacturing, logistics, and professional services - strengthen their defences against the growing threat of cybercrime.

Led by Dr Ismini Vasileiou, Associate Professor at De Montfort University and founder and director of the East Midlands Cyber Security Cluster it offers practical, hands-on support to businesses that want to improve how they manage cyber risk, train staff, and future-proof their operations.

# 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



### [DMU humanitarian mine research recognised by UK Science Minister](#)

RESEARCH from De Montfort University demonstrating how artificial intelligence can be used to detect improvised underground explosives has been commended by the Minister for Science, Research and Innovation.

Speaking at the launch of the Science, Technology and Innovation pillar of the UK-Ukraine 100-year Partnership, Lord Patrick Vallance praised the university's contribution to safer demining operations in post-conflict zones.

Professor of Applied Intelligent Systems at DMU, Mario Gongora is co-leading research into an AI-powered, multi-sensor tool that combines ground-penetrating radar, cameras and thermal sensors to

help in the detection of unexploded devices.

### [Harry's lifesaving device wins national competition](#)

A PRODUCT Design student from De Montfort University is celebrating after his simple, yet potentially life-saving, device won the top prize at this year's Design Innovation in Plastics Awards.

Harry Wragg, originally from Portsmouth, has created a small, dome-shaped prototype that helps people use the correct amount of force when administering CPR by audibly clicking. If the device does not click during the compression, then the user needs to apply more force.

Known as CPR+Aid, the design is made from three pieces of plastic and no electronics, so it can be cheaply mass-produced and form part of a first-aid box.

### [New collaboration to develop greener, more affordable anti-cancer compounds](#)

PATIENTS around the world could have access to more affordable cancer treatments thanks to an innovative new applied research collaboration. De Montfort University Leicester (DMU) and advanced chemical solutions specialist Fluid Science have won funding from Innovate UK to support the development of a new generation of anti-cancer compounds.

The team will work together on developing and refining active compounds using cutting-edge green chemistry techniques, using cleaner, sustainable methods which both make the process better for the

environment and reduce costs - meaning potential treatments can reach more patients.

### [Older polluting log burners could be a thing of the past thanks to DMU-led research](#)

A DEVICE that can be retrofitted to older log burners to prevent them from spreading harmful toxins in homes is being developed by a research team at DMU.

The device, known as the Helixtractor, sits in a chamber that is retrofitted to existing devices. It has a heat recovery coil that creates a small whirlpool, which transports the toxins out of the firebox and into the flue chimney, where they get extracted from the plume.

The project has received government funding from the Department for Environment, Food & Rural Affairs (DEFRA) via the Innovate UK Small Business Research Initiative scheme.

### [New policy unit aims to link DMU research to social impact](#)

A DEDICATED unit aiming to use research carried out to effect social change has officially opened. The DMU Policy Unit acts as a key link between DMU's research community and the international policy arena, helping academics connect with lawmakers and meet urgent social challenges as they arise.

### **MAJOR DMU RESEARCH ON SDG 9 IN 2025**

#### **Educational Impact and Ethical Considerations in Using Chatbots in Academia**

*Ibrahim, Dina M.: Al-Harbi, Njood K.: Al-Shargabi, Amal A. (2025)*

CHATBOTS are getting better every day due to the advancements in their capabilities in today's technological age. This study aims to assess the efficacy of ChatGPT-4 and Gemini in producing scientific articles.

Two types of prompts are given: direct questions and complete scenarios. Subsequently, we evaluate the educational and ethical aspects of the produced material by employing statistical analysis.

We verify the credibility of references, detect any instances of plagiarism, and ensure the precision of the articles generated by the chatbot.

<https://doi.org/10.11591/ijeecs.v37.i2.pp1150-1167>

**An Ethical Framework for Emerging Technologies: the TEAeM Approach**

*Bhalla, Nitika; Brooks, Laurence; Richardson, Kathleen; Cannizzaro, Sara (2025)*

THE inherent nature of uncertainty and the indefinite time horizon of emerging technologies means that their effective ethical governance is not sufficiently addressed by industry and hence society.

This paper explores an approach to enhance existing ethical frameworks that can be useful and relevant to new and emerging technologies.

We begin with the analysis of literature exploring some of the technical features of each framework and its potential applicability to emerging technologies. Following this, a detailed outline of a broad ethical framework has been proposed using a combination of existing ethical frameworks.

<https://doi.org/10.55613/jeet.v35i1.147>

## Digitalisation, unions and 'country-effect': does union strength at the workplace matter?

*Lloyd, C. and Payne, J. (2025)*

TRADE unions are potentially important actors in shaping digitalisation to benefit workers.

Research suggests supportive national labour market institutions can help unions to influence digital change in the workplace.

This article considers the reach of national institutions, or 'country effect', and its relationship with union strength at the workplace.

It applies a multi-level analysis to explore union influence over digital technology in the food and drink processing sector in Norway and the UK, two countries with starkly contrasting institutions.

<https://doi.org/10.1177/00221856251326682>

## Women's Broadcasting Histories and the Archive: National, Transnational and Transmedial Entanglements

*Arnold, S., McCabe, J., Andrews, K., Badenoch, A., Baker, J., Ball, V., Hendriks, E., Jackson, V., Murphy, K., Sahu, I., Skoog, K., Terkanian, K and Warner, H. (2025)*

THIS provocation details varied perspectives of the International Women's Broadcasting Histories (IWBH) network on researching the role of women in broadcasting.

The conversational form allows us to roam across the topic widely, to express a range of discrete positions and distinct arguments, with the desire to bring dilemmas to the surface and explore their implications without reduction.

Responding with a series of interventionist statements around the issues and challenges of doing ar-

chival research into women's work, we opt for retaining different viewpoints in a raw state, with the aim of provoking discussion about the methodological opportunities and limitations when working within and outside of archives.

<https://doi.org/10.1177/17496020251330853>

## Rediscovering cities through strategically decentralised urban green infrastructure: a case study of stormwater resilience

*Tiwary, A., Heidrich, O. (2025)*

THIS paper demonstrates that strategic application of 'decentralised urban green infrastructure' (DUGI) can alleviate flash flooding through adequate surface run off reduction using a combination of linear and dispersed components based on the perviousness of the sub catchments.

As a first step, an assessment framework comprising of the following three steps is introduced: Site selection; DUGI implementation strategy; Impact analysis (hydrological, socio-economic, etc.).

<https://doi.org/10.1007/s44327-025-00121-y>

## Examining Energy Efficiency and Retrofit in Historic Buildings in the UK

*Sevim, Y.E.; Taki, A.; Abuzeinab, A. (2025)*

THE energy efficiency potential of a considerable number of Europe's historical buildings is most noteworthy.

However, policymakers often express concerns about energy retrofits that may compromise the integrity of these structures and their surroundings.

On the contrary, various strategies exist for enhancing energy efficiency in historic buildings without

compromising their architectural constraints.

<https://doi.org/10.3390/su17073002>

## A solution space partitioning based multi-population method for dynamic optimization

*Peng, M., Li, C., Wang, J., Cai, X., Zeng, S. and Yang, S. (2025)*

DYNAMIC optimization focuses on solving problems where the search space changes over time. The multi-population method is the most widely used approach for addressing such problems.

Traditional multi-population methods often lack a deep understanding of the problem's structural characteristics, such as the boundaries of basins of attraction (BoAs), which leads to redundant searches in less promising regions.

Without guidance from these structural features, most populations are regenerated randomly, resulting in inefficient exploration.

<https://doi.org/10.1109/TEVC.2025.3597453>



## UN PROGRESS REPORT ON SDG 10 in 2025

THERE has been no progress on more than 50% of the targets set for 2030 back in 2015. A total of 30% of the target set have shown regression and a further 20% stagnation.

Only 10% of targets are set to be met, 10% have shown moderate progress but a further 30% only marginal progress.

The UN's progress report for 2025 states: "Since 2015, most countries have seen income and consumption growth for the bottom 40% of their population outpace the national average, though disparities persist among regions and countries at different income levels.

"The labour income share of GDP fails to show progress, contributing to rising inequality. Reports of discrimination are rising globally, with higher prevalence among urban residents, women, persons with disabilities, the poorest and those with lower education levels," the UN report adds.

## MAJOR DMU NEWS ON SDG 10 IN 2025

### [Helping people make sense of the digital present](#)

A DE MONTFORT University researcher is turning to the past to help older people make sense of the digital present.

Dr Josie Barnard has been leading creative workshops that use historical medical objects to help older adults feel more confident using digital health tools such as the NHS app. By placing familiar items from decades past next to today's technology, Josie is helping people make connections — and build digital confidence in the process.

### [DMU's business school nominated as country's best](#)

INNOVATIVE efforts to make studying as inclusive as possible for students all over the world have helped Leicester Castle Business School to a national award nomination.

The business school, based at DMU, has been recognised for its work with a nod in the Business School of the Year category at the PIEoneer Awards, run by international education network PIE.

In its entry, the LCBS team highlighted the introduction of new ideas making the studying experience more welcoming and inclusive for international students.

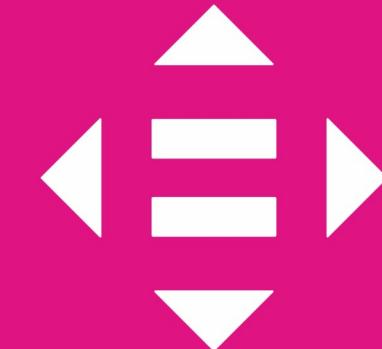
### [3D Printing medical dressings could help isolated communities](#)

SCIENTISTS are combining nanotechnology and 3D printing with natural plant compounds to create better bandages that will treat burns and wounds more effectively.

Dr Sara Cordeiro, senior lecturer in Pharmaceutical Sciences at De Montfort University Leicester (DMU), will work alongside Dr Henrique Rodrigues Marcelino at the Universidade Federal da Bahia, Brazil, on the project which has secured funding from the prestigious Royal Society fund.

Over the next three years they will collaborate on creating a dressing made using a special molecule, C-phyocyanin, extracted from Amazonian algae which has anti-inflammatory, analgesic and wound healing properties.

# 10 REDUCED INEQUALITIES



### [New Companion of DMU Gus John calls on graduates to face up to social injustice](#)

A LIFELONG social justice campaigner who has received the highest academic accolade available at DMU is calling on its graduates to help break down barriers that divide us as humans.

Professor Gus John, who has championed racial equality, particularly in education, was speaking after being named a Companion of DMU at a graduation ceremony. His lengthy fight against systemic racism, which spans more than 60 years, has seen Professor John consult on policies and work on influential academic reports and literature.

### [New report highlights barriers facing Asian business owners in UK](#)

GROUND-BREAKING new research from DMU and

Barclays Eagle Labs reveals the vital contribution Asian founders make to the UK economy - and the systemic barriers that continue to hold them back. The study, based on 125 interviews with Asian entrepreneurs, business leaders, and support organisations across England and Wales, shows that Asian-owned businesses contribute an estimated £25 billion to the UK economy and make up over 6% of all SMEs.

However, the research highlights significant barriers to growth, including cultural attitudes to debt and risk, stereotyping in investment and banking, and limited access to elite business networks.

#### [DMU academic bridging the research gap between the Global North and South](#)

DMU's Internationally renowned cultural policy academic Dr Steven Hadley, Policy Lead for the Institute of Global Challenges and Cultures, has co-programmed a global summit of academics to explore how to address the inequalities in research between the Global North and the Global South.

The Cultural Trends Global Dialogue conference in Peru, aims to foster the development of research networks and academic cooperation between the Global South and the Global North.

#### [DMU embraces Leicester's diverse culture as part of Being Human festival programme](#)

DMU will be celebrating the city's rich cultural heritage through the power of creative writing, comic book art and the feeling of belonging as part of this year's Being Human Festival.

The Being Human Festival supports researchers

within the Humanities to produce events for public audiences that emphasise working with local communities to share ideas for mutual benefit. DMU is one of five universities across the UK to be chosen as a Festival Hub for 2025. Each hub curates its own series of events centred around a specific societal theme, to which DMU has chosen Leicester: Community, Culture and Super-Diversity.

#### [DMU teams with Digital Poverty Alliance to launch free laptop initiative](#)

DMU has partnered with the Digital Poverty Alliance (DPA) to ensure its students have the technology to get online and flourish during their studies.

One in seven adults in the UK, and one in five children, are in digital poverty and don't have access to a laptop, computer or smartphone, or have little to no reliable access to an internet connection.

To help combat this, DMU has joined the DPA's national Tech4Youth programme and will provide up to 50 students who have little to no access to digital tools with a free refurbished laptop to help them complete their studies.

#### **MAJOR DMU RESEARCH ON SDG 10 IN 2025**

##### [Recognizing Geographical Locations using a GAN-Based Text-To-Image Approach](#)

*Ibrahim, Dina M.: Al-Shargabi, Amal A. (2025)*  
GENERATING photo-realistic images that align with the text descriptions is the goal of the text-to-image generation (T2I) model. They can assist in visualizing the descriptions thanks to advancements in Machine Learning Algorithms.

Using text as a source, Generative Adversarial Net-

works (GANs) can generate a series of pictures that serve as descriptions. Recent GANs have allowed oldest T2I models to achieve remarkable gains. However, they have some limitations.

The main target of this study is to address these limitations to enhance the text-to-image generation models to enhance location services.

<https://doi.org/10.11591/ijeecs.v37.i2.pp1168-1182>

#### [How to Improve Uptake and Access to Breast Cancer Screening for Minority Ethnic Women in Leicester](#)

*Aslam, Haleema (2025)*

THE existing research in the UK indicates minority ethnic women are less likely than their White British counterparts to access the National Health Service Breast Cancer Screening Programme, (NHSBSP), and specific minority ethnic groups are more likely to experience the most aggressive forms of breast cancer with the poorest chances of survival.

Despite, the absence of uptake data by ethnicity, certain factors prevalent in Leicester such as lower general uptake of the NHSBSP than in similar areas, one of the highest minority ethnic populations in the UK, and high levels of deprivation indicate uptake level of the NHSBSP for minority ethnic women will be low.

Therefore, solutions to improving uptake should be developed from the perspectives of minority ethnic women.

#### [How to Improve Uptake and Access to Breast Cancer Screening for Minority Ethnic Women in Leicester.](#)

**Current Issues: Is the workplace about to get better or worse for disabled people in the United Kingdom?**

*Berghs, M. and Wilkinson, M. (2025)*

IN THE United Kingdom, the new labour government has recently unveiled two new bills, the Employment Rights Bill and Equality Race and Disability Bill, that seem to strengthen the 2010 Equality Act.

However, it is not clear how these bills will address the disability employment gap.

The government's policy to Make Work Pay has many good points like more transparency in terms of race, gender and disability pay gaps but it also raises questions about what devolution to local authorities to get more disabled and chronically ill people into work will look like?

<https://doi.org/10.1080/09687599.2025.2479094>

**Women's Broadcasting Histories and the Archive: National, Transnational and Transmedial Entanglements**

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<https://doi.org/10.1177/17496020251330853>

**Exploring economic inequality with critical qualitative approaches in psychology**

*Carr, P., Goodman, S., Jowett, A., Abell, J., and Demasi, M. (2025)*

THIS editorial introduces our special issue showcasing how qualitative research methods can be used in psychological research to explore economic inequality.

Economic and class-based inequalities are global problems that have a negative impact on people's well-being.

The papers within the special issue demonstrate how differing methodological approaches such as discursive psychology, thematic analysis, and interpretative phenomenological analysis can be utilised to offer insights into the complexity of economic inequality as a social justice issue.

<https://doi.org/10.1080/14780887.2025.2601440>

**Exploring how entertainment documentaries construct London to account for the residence of the international super-rich in the "hostile environment" for migrants**

*Carr, P., Goodman, S., Jowett, A., and Abell, J. (2025)*

UNLIKE poorer migrant groups, governments offer visa inducements to attract wealthy individuals into a country.

However, super-rich migrants' impact on the UK has been shown to be negative. This research explored how entertainment documentaries account for super-rich individuals residing in London.

Discursive Social Psychology was used to analyse 2490 min of programmes from non-subscription UK terrestrial channels broadcast throughout 2016 in the UK using the term 'super-rich'.

<https://doi.org/10.1080/14780887.2025.2525856>

**A molecular perspective on horticultural trade: lessons from India for international species authentication**

*Saxena, A., Nazar, N., Slater, A., Sgamma, T., and Sundaresan, V. (2025)*

THE global horticultural industry faces increasing challenges related to species authentication, regulatory compliance, and trade transparency.

Misidentification of plant species can result in economic losses, compromised consumer safety, and breaches of the regulatory framework.

Traditional authentication methods, including morphological and chemical analyses, often lack the accuracy and reproducibility required for reliable identification.

<https://doi.org/10.1080/14620316.2025.2579570>

## UN PROGRESS REPORT ON SDG 11 in 2025

AROUND 40% of the targets set for SDG 11 look set to be met by 2030, which is one of the highest across all the goals. However, a further 40% show only marginal progress and a further 20% have actually stagnated at their 2015 levels.

The UN warns in its 2025 progress report: "With rapid urbanisation and now over half the world's population living in cities, housing affordability has reached crisis levels.

"Up to 3 billion people worldwide struggle to afford a place to live, and 1.12 billion live in slums or informal settlements without basic services.

"Climate threats intensify urban vulnerabilities. Cities are central to climate change efforts as urban populations grow, with rising temperatures and flood risks threatening billions. Open green spaces are disappearing, undermining climate resilience."

## MAJOR DMU NEWS ON SDG 11 IN 2025

### [DMU to lead United Nations Hub to help build better cities and communities](#)

THE United Nations has chosen De Montfort University Leicester to lead a network aiming to build better cities and communities across the world.

The university has been made chair of the global Academic Impact hub for Sustainable Development Goal (SDG) 11 – sustainable cities and communities. This means it will lead a team of other co-chair universities across the globe in helping to address issues, such as affordable housing, transport, and disaster resilience.

The university is the only one in the UK to be asked to

become a Hub Chair by the United Nations Academic Impact initiative.

### [DMU launches £1.3m grassroots climate action project](#)

DE MONTFORT University Leicester (DMU) has secured more than £1.3m in National Lottery funding to lead a major new community-driven climate initiative aimed at embedding sustainability in some of the city's most deprived neighbourhoods.

The three-year scheme will bring together five grassroots organisations working with diverse communities across the city. Backed by the National Lottery Community Fund, the programme will establish a climate action hub at DMU, designed to support local people in cutting emissions, improving wellbeing and influencing climate policy.

Partner groups – Leicester Nirvana Football Club, Somali Development Services CIC, ZamZam Unlimited Possibilities CIC, Saffron Acres and One Roof Leicester – will receive funding to deliver their own climate-related projects, from community gardening and recycling drives to arts-based workshops and youth training.

### [Flooding in the UK: How better collaboration between communities and authorities can strengthen flood resilience](#)

A LACK of connection between local government and residents is a barrier towards community resilience to flooding, says new research co-authored by a leading climate social-science specialist at DMU.

The UK faces recurring flood events, with 5.2 million

# 11 SUSTAINABLE CITIES AND COMMUNITIES



homes now at risk from flooding and coastal erosion. This increasing risk highlights the importance of resilience planning, according to the report published in the International Journal of Disaster Risk Reduction by DMU's Dr Ruth McKie and Dr Adam Aitken from the University of Salford.

### [DMU named among world's top universities for sustainable work](#)

DMU is among the world's best performing universities in helping to promote three of the United Nations' Sustainable Development Goals (SDGs).

DMU was listed as =57<sup>th</sup> for SDG 12, Responsible Consumption and Production, and =61<sup>st</sup> for both SDG 11 Sustainable Cities and Communities and SDG 13 Climate Action.

The ratings come from the Times Higher Education's Impact Rankings, which is the only measure of a university's performance in the SDGs.

### [Cultural eXchanges returns as part of Riverside Festival](#)

IT'S ONE of the highlights of the DMU calendar and this year Cultural eXchanges will have a new home at the Riverside Festival, as part of a new partnership with Leicester City Council.

Organised by the university's Arts and Festivals Management students, Cultural eXchanges is a free festival that showcases the culture and achievements of both DMU's and Leicester's diverse community through a programme of live performances and activities.

For the first time in the event's 24-year history that it will take place alongside the Riverside Festival, which last year attracted more than 75,000 people to the banks of the River Soar.

### [DMU embraces Leicester's diverse culture as part of Being Human festival programme](#)

DMU will be celebrating the city's rich cultural heritage through the power of creative writing, comic book art and the feeling of belonging as part of this year's Being Human Festival.

The Being Human Festival supports researchers within the Humanities to produce events for public audiences that emphasise working with local communities to share ideas for mutual benefit.

DMU is one of five universities across the UK to be chosen as a Festival Hub for 2025. Each hub curates

its own series of events centred around a specific societal theme, to which DMU has chosen Leicester: Community, Culture and Super-Diversity.

### [Easy access for local people to university libraries](#)

UNIVERSITIES in Leicester and Leicestershire are opening up their libraries to public users.

A new partnership between De Montfort University, Leicester, (DMU), the University of Leicester (UoL) and Loughborough University (LU), together with local councils, means anyone aged 18+ and living in the city, county or Rutland will easily be able to access university libraries and borrow up to 10 books at a time.

Local people will now be able to become members of the university libraries for free, benefitting from access to new resources, study spaces, longer opening hours and increased availability of library services.

### [Early access to arts benefits parents as well as children, research shows](#)

A PIONEERING research project led by DMU has shown that early access to arts improves not only children's wellbeing, but that of their parents.

Talent 25 is a 25-year long study which charts the effect early access to arts and culture has on babies as they grow into children, adolescents and adults.

Run in Leicester, the project, funded by Arts Council England, started in 2019, working with arts practitioners to put on classes across the city, offering families with babies the chance to learn dance, music, arts and crafts.

### [Student's Japanese research trip will strengthen Leicestershire UNESCO bid](#)

TWO students from De Montfort University have travelled to Japan as part of a fact-finding mission to bolster Charnwood Forest's application to become a UNESCO Global Geopark.

Becky Wilson and Natalia Stachowiak set off on 5,000-mile journey to the city of Nagaoka to learn about Japan's cultural attitude towards sustainability, and explore the nearby Itoigawa UNESCO Global Geopark.

The pair were investigating how the country protects its geological heritage, animals and educates visitors about the region's importance.

Their findings will now be fed into the National Forest's application for Leicestershire's Charnwood Forest to receive UNESCO Global Geopark status, which will be submitted later this year.

### **MAJOR DMU RESEARCH ON SDG 11 IN 2025**

Architecture by Algorithm: A Stylistic and Empirical Enquiry into Parametricism

*Emeje, Ucheojo (2025)*

PARAMETRICISM has emerged as a dominant discourse in contemporary architecture, yet there is a persistent lack of consensus regarding its classification.

While some scholars argue that Parametricism represents a methodological approach driven by computational design and algorithmic processes, others maintain that it functions as a distinctive architectural style comparable to movements such as Modernism, Postmodernism, and Art Nouveau.

This study aims to critically investigate the defining components of an architectural style and to construct an empirical framework for classifying architectural movements.

#### [Architecture by Algorithm: A Stylistic and Empirical Enquiry into Parametricism](#)

#### **An Expansion Too Far? The Contested Space of Environmental Policy Discourses**

*Mitchell, A. (2025)*

EVIDENCE linking urban traffic emissions to human illness and death and as a source of climate change is incontrovertible.

In August 2023, the London ultra-low emissions zone (ULEZ) was expanded to include all 32 boroughs, a move that sparked a strong reaction especially from the right-wing media in the UK.

The policy rapidly became politicised and cleaved along ideological lines. This paper uses sampled articles from two politically opposing news media to examine the processes by which policy can become politicised. Using semantic tagging, four themes are analysed to highlight the dynamics by which politicisation is accomplished in the media.

<https://doi.org/10.5281/zenodo.17041955>

#### **Design Solutions for Cultural Sustainability: A Case Study of Vernacular Residential Interiors from Northern and Central Jordan**

*Al-Sheikh Salem, Aya Mutaz-Bellah A (2025)*

THIS thesis applies a design ethnography approach to investigate how vernacular residential interiors in Northern and Central Jordan can contribute to the development of culturally sustainable interior design

practices. This study integrates fieldwork, visual documentation, and qualitative interviews to explore the lived experiences and material cultures associated with Jordanian homes constructed between the 1880s and 1940s.

It explores how traditional techniques, materials, and spatial configurations might influence modern interior design while maintaining cultural identity. The study employs a mixed-methods approach, incorporating fieldwork, site visits, interviews, focus groups, and analysis of literature and archival materials.

#### [Design Solutions for Cultural Sustainability: A Case Study of Vernacular Residential Interiors from Northern and Central Jordan](#)

#### **Prediction of Urban Growth and Sustainability Challenges Based on LULC Change: Case Study of Two Himalayan Metropolitan Cities**

*Rimal, B., Rijal, S. and Tiwary, A. (2025)*

URBANIZATION, characterized by population growth and socioeconomic development, is a major driving factor of land use land cover (LULC) change. A spatio-temporal understanding of land cover change is crucial, as it provides essential insights into the pattern of urban development.

This study conducted a longitudinal analysis of LULC change in order to evaluate the tradeoffs of urban growth and sustainability challenges in the Himalayan region.

<https://doi.org/10.3390/land14081675>

#### **Enhancing Basic Education as a Foundation for Resilience and Sustainability in Low-Income Mega-Cities: the Case of Lagos, Nigeria**

*Okoya, S.A., Reeves, A., Younie, S. and Kolade, S. (2025)*

THE provision of quality basic education is critical for building resilient and prosperous communities. This is particularly needed in low-income settings, where enhancing education can develop human capital and the development of sustainable infrastructures for energy, the built environment, sanitation and more.

Nigeria as home to the world's largest population of out-of-school children and the mega-city of Lagos State can shed light on the challenge of education provision in comparable cities across the globe.

[10.5281/zenodo.17041983](https://doi.org/10.5281/zenodo.17041983)

#### **Gender and the transition to Net Zero Transport**

*Budd, L. (2025)*

THE United Nations has identified climate change and inequality (including gender inequality) as being two of the biggest challenges of the contemporary global era.

The global transport sector, which currently accounts for around a quarter of all anthropogenic greenhouse gas emissions, remains a long way from reaching its Net Zero target and largely fails to deliver gender inclusive services which recognise and meet the different mobility needs, priorities and services both between and within genders.

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#### **A study of the temporal and spatial evolution trends of urban flood resilience in the Pearl River Delta, China**

*Xu, W., Han, P., Proverbs, D.G. and Guo, X. (2025)*

IN VIEW of the increasing threat of flooding across the world and specifically the vulnerability of the Pearl River Delta region to these risks, this study undertakes a spatial and temporal evolution of flood risk in the region, including an assessment of urban flood resilience.

By combining the pressure-state-response model and the nature-economy-society-infrastructure framework, an urban flood resilience index system is constructed. The order relation analysis method, Criteria Importance Through Intercriteria Correlation method and the VlseKriterijumska Optimizacija Kompromisno Resenje evaluation method, they were then combined to quantify urban flood resilience and reveal the hierarchical relationships that exist between key factors.

<https://doi.org/10.1108/IJBPA-11-2024-0228>

#### Rediscovering cities through strategically decentralised urban green infrastructure: a case study of stormwater resilience

*Tiwary, A., Heidrich, O. (2025)*

THIS paper demonstrates that strategic application of 'decentralised urban green infrastructure' (DUGI) can alleviate flash flooding through adequate surface run off reduction using a combination of linear and dispersed components based on the perviousness of the sub catchments.

As a first step, an assessment framework comprising of the following three steps is introduced: Site selection; DUGI implementation strategy; Impact analysis (hydrological, socio-economic, etc.).

<https://doi.org/10.1007/s44327-025-00121-y>



#### Rethinking end-of-life renewable energy assets as components of sustainable urban infrastructures

*Tiwary, A., Olanrewaju, R. and Sung, K. (2025)*

THIS study explores some plausible end-of-life decommissioning options for composite materials in renewable energy assets for developing low-cost public infrastructures.

This has been demonstrated through a case study for wind turbine blades.

The study presents outcomes of a survey that was deployed to understand consumer perception of the proposition to utilise the end-of-life wind turbine components as bus stop shelters.

<https://doi.org/10.5281/zenodo.17020604>

#### Ecologies beyond the Human – Reimagining Nature-based Solutions through Relational and Multi-species Perspectives

*Salvi, S., Reeves, A., Kerr, D. and Abuzeinab, A. (2025)*

DESPITE growing interest in Nature-based Solutions (NbS) and their promise to deliver social, economic, and environmental benefits for society, their human-centred utilitarian functionality raises questions about the adequacy and effectiveness of NbS. Now, with two-thirds of the world's population projected to live in cities by 2050, this trend could potentially accelerate biodiversity loss and wildlife habitat destruction, ultimately weakening our resilience against the looming and feared planetary ecocide.

[10.5281/zenodo.17023592](https://doi.org/10.5281/zenodo.17023592)

#### Community resilience to flooding in the UK: A study of Matlock, Derbyshire

*McKie, R.E and Aitken, A (2025)*

THE United Kingdom has faced recurring floods since 2019, with 5.2 million homes at risk.

This has prompted the UK government to prioritise resilience planning in flood prone areas. This study focuses on community resilience in Matlock, Derbyshire, which has experienced intensified flooding since 2018.

Using qualitative interviews and a focus group, the research examines evidence of community resilience and the barriers to its development by focusing on community activities during flooding incidents in the town.

<https://doi.org/10.1016/j.ijdrr.2025.105266>

## UN PROGRESS REPORT ON SDG 12 in 2025

THE picture is mixed on SDG 12 while although 40% of targets are set to be met by 2030, a further 20% show marginal progress, 10% have stagnated at the 2015 levels and a further 30% are showing a regression on 10 years ago.

This picture is reflected in the UN progress report for 2025, which states: "Food waste, food loss and electronic waste are reaching unprecedented levels, while rising consumption continues to drive increases in domestic material consumption and material footprint.

"These trends are placing growing pressure on the environment, accelerating climate change and exacerbating global resource inequalities.

"However, momentum towards sustainable consumption and production is building at the institutional level. Governments are adopting supportive policies; companies are expanding sustainability reporting, and participation in multilateral environmental agreements is increasing, reflecting strong institutional commitment."

## MAJOR DMU NEWS ON SDG 12 IN 2025

### [DMU scoops coveted Sustainability Institution of the Year 2025 award](#)

DE MONTFORT University has scooped the coveted Sustainability Institution of the Year award at the Green Gown Awards 2025.

The highly competitive awards, now in their 21st year, are run by the Environmental Association for Universities and Colleges to recognise and reward exceptional sustainable initiatives within higher education.

### [DMU named one of the UK's top 10 sustainable universities.](#)

DMU is celebrating after being ranked one of the UK's top ten eco leading universities for the third year running.

Published today in The Guardian, DMU has been awarded a first-class degree for the 12th time in the annual People and Planet University League, in recognition of its environmental and ethical performance.

The university has been repeatedly awarded the first-class status since 2011 and this year the university was ranked eighth overall out of the 147 institutions rated.

### [Gloves Off for a Good Cause at DMU's Leicester Nursing School](#)

NURSING students training at DMU are helping raise cash for brain tumour research by donating their special medical gloves.

Those gloves are being collected and recycled into rubber pellets which are then turned into benches, children's playground equipment and other goods.

Profits from sales are then given to Yorkshire-based Brain Tumour Charity.

### [DMU Nano silicon breakthrough paves way for increase in Lithium-ion battery power](#)

A RESEARCH scientist at DMU has invented a novel manufacturing method that could revolutionise the world of rechargeable batteries.

Professor Shashi Paul has recently patented a process for making silicon nanowire, which could be the key to making huge improvements in the perfor-



mance and efficiency of the rechargeable lithium-ion batteries used in everything from mobile phones and laptops to drones and electric vehicles.

### [Sustainable DMU fashion research to be shown at huge global festival](#)

EXPERTS from De Montfort University will show their pioneering research into sustainable fashion at one of the biggest festivals in the world.

Professor Katie Normington, DMU's Vice-Chancellor, will lead a series of events at South by Southwest (SXSW) in Texas next week.

As part of this, DMU is leading two events on Monday 10 March, one on sustainable fashion and another on immersive technology experiences.

## [DMU students breathe new life into old objects in sustainable fashion collaboration](#)

FASHION students from DMU have breathed new life into old objects as part of a sustainable fashion collaboration with Age UK.

The 'Refound' project involved students imagining and creating new futures for objects they found at the charity's shop on Hotel Street in the city. The 11 students dressed the windows with the works they created.

## [It's in their jeans - industry links help DMU Fashion students go to work on sustainable denim](#)

FASHION students at DMU have used lasers, dyes and screen-printing to create an innovative collection with denim donated by a cutting-edge sustainable fabric company.

The second-year students spent six weeks working with deadstock denim specially donated to the project by the US Group, a Lahore based company, which supplies a range of famous names including Levi's, Ralph Lauren, Mango and Next.

The US Group gives surplus material, known as deadstock, to select fashion design courses as part of its commitment to sustainability and corporate social responsibility.

## [DMU named among world's top universities for sustainable work](#)

DMU is among the world's best performing universities in helping to promote three of the United Nations' Sustainable Development Goals (SDGs). DMU was listed as =57<sup>th</sup> for SDG 12, Responsible Consumption and Production, and =61<sup>st</sup> for both SDG 11 Sustainable

Cities and Communities and SDG 13 Climate Action. The ratings come from the Times Higher Education's (THE) Impact Rankings, which is the only measure of a university's performance in the SDGs.

## [DMU wins Fairtrade University status](#)

DE MONTFORT University has won a coveted Fairtrade University Award for its commitment to ethical consumption.

Given jointly by the Fairtrade Foundation and Students Organising for Sustainability UK, the award recognises sustained commitment over two academic years to increasing awareness and action on trade justice and globalisation.

## [Professor wins funding to commercialise AI research](#)

A GROUND-BREAKING AI-powered system that could revolutionise the billion-pound banana industry has been given a £100,000 boost.

OPTicut, created by Professor David Elizondo, aims to reduce waste in the industry by improving cutting methods and helping local growers to maximise profits.

Responsible AI UK – backed by Innovate UK – announced it had awarded the team funding to refine and expand its system, which uses AI and 3D image processes to help producers create the best cutting strategies for harvesting.

## **MAJOR DMU RESEARCH ON SDG 12 IN 2025**

Machine Learning and Response Surface Methodology for Optimizing Olive Waste Compost in Sustainable Chickpea Production

*Mehdaoui, I. et al. (2025)*

THIS study combines machine learning (ML) and response surface methodology (RSM) to optimize and predict the effects of compost made from olive mill waste cake residues (OMWC) on chickpea yield. Compost was applied to chickpeas irrigated with rainwater, and plant growth, phenology, and yield were monitored. Four modeling techniques RSM with Box-Behnken Design (RSM-BBD), artificial neural networks (ANN), support vector machines (SVM), and XGBoost, were employed to identify optimal compost application conditions.

<https://doi.org/10.1108/TECHS-05-2025-0106>

Chitosan-Based Composites for Sustainable Textile Production: Applications Across the Lifecycle  
*Liu, A., Qi, B., and Ku, L. (2025)*

THE fashion and textile industry (FTI) is a significant contributor to greenhouse gas emissions, resource consumption, and waste generation, necessitating sustainable alternatives.

Chitosan, a biodegradable and renewable biopolymer, has shown potential in reducing environmental impact throughout the textile lifecycle. However, existing studies often focus on isolated applications rather than its broader role in industrial sustainability. This review synthesises findings from 142 academic studies to assess chitosan's applications in textile production, dyeing, finishing, and waste management, emphasising its impact on energy efficiency, carbon reduction, and resource circularity.

<https://doi.org/10.3390/cleantechnol7040095>

**Buying for a better world: The power of marketing to encourage millennials to choose second-hand luxury clothing**

*Jin, H., Quoquab, F., Mohammad, J., and Ku, L. (2025)*  
THIS study investigates factors that may drive Chinese millennials' intentions to purchase second-hand luxury clothing (SHLC).

Grounded in the Stimulus-Organism-Response (S-O-R) theory, it investigates how electronic word-of-mouth (eWOM), publicity and environmental advertisements relate to moral obligation, which subsequently predicts SHLC purchase intention.

Additionally, it explores the moderating effect of consumers' perception of SHLC.

<https://doi.org/10.1002/casp.70131>

**A Review on Achieving Sustainability in the Petroleum Industry Through the Integration of Lean and Green**

*Dibia, F., Dibia, C., Dhakal, H.N., Okpako, O., Radulovic, J. and Isike, A. (2025)*

THE petroleum industry has been a key driver in the development of the world economy yet continues to attract increasing criticism due to its negative environmental impact via greenhouse gas emissions, resource inefficiency, and waste.

Integrating lean and green practices is fast becoming a transformative approach to tackling these issues as it integrates process optimization with sustainability principles.

This review paper examined the existing literature on lean and green integration, highlighting its benefits, models, critical success factors, and a roadmap for

its implementation. <https://doi.org/10.3390/app15052333>

**Energy Efficiency and Circular Economy in Glass Wool Fiberizing: Impact of Lightweight Refractory Design**

*Afzal, J., Forgerit, B., and Tiwary, A. (2025)*

THIS paper presents an analysis of energy savings and sustainability measures to improve the environmental performance of glass wool fiberizing, the latter being the most energy intensive production step in manufacturing glass wool thermal insulation, involving conversion of hot molten glass into fibers. The first part evaluates two refractory designs—business as usual (BAU) and modified (MOD), over four trials. BAU refractory has higher density whereas MOD is an innovative lightweight design, with lower density and improved thermal conductivity.

<https://doi.org/10.3390/su18010135>

**A behavioural risk perspective to plastic waste management: insights from Nigerian SMEs**

*Tyllianakis, E., Kolade, O., Ambituuni, A., Ogunde, O., Oyinlola, M. and Abolfathi, S. (2025)*

A TRANSITION to a Circular Economy is intrinsically connected to the perceived risk of moving away from the status quo of the extract-use-discard model. This study examines how small and medium enterprises (SMEs) perceive and respond the multi-dimensional risk from plastic waste mismanagement (PWM). Such risk is approximated and analysed using two different behaviour theories, the Expected Utility Theory and Protection Motivation Theory in a survey

amongst 242 managers in Nigerian SMEs examining the endogenous relationship between perceived impact of PWM and perceived effectiveness in addressing it.

<https://doi.org/10.1016/j.jclepro.2025.147086>

**Rhetorical Strategies Employed by Big Oil in the Context of IPCC Reports of Climate Change**

*Mitchell, A. S., and Bhattacharyya, S. C. (2025)*

DESPITE long-standing evidence linking fossil fuel combustion to greenhouse gas and climate change effects, and the growing advocacy for reductions and regulatory limits on their use, fossil fuel corporations remain hugely profitable and influential.

In response to scientific evidence linking Big Oil's corporate activities directly to climate change impacts, tactics favoured by Big Tobacco to medical evidence linking smoking to cancer appear to have also been adopted by Big Oil in responding to the Intergovernmental Panel on Climate Change (IPCC) findings.

<https://doi.org/10.3390/world6030128>



## UN PROGRESS REPORT ON SDG 13 in 2025

A TOTAL of 35% of the targets set for SDG 13 look set to be met by 2030, but a further 65 are showing only marginal progress.

The UN warns in its 2025 progress report: "Climate change is accelerating. Extreme weather is intensifying, driving the highest climate-related displacement in 16 years and worsening food insecurity, economic losses and instability.

"The world cannot and must not let up on climate action. To keep the 1.5°C warming limit within reach, urgent investment in adaptation, resilience and emission cuts must accelerate, especially in vulnerable regions."

## MAJOR DMU NEWS ON SDG 13 IN 2025

### [DMU launches £1.3m grassroots climate action project](#)

DE MONTFORT University has secured £1.3m in National Lottery funding to lead a new community-driven climate initiative aimed at embedding sustainability in the city's most deprived neighbourhoods. The three-year scheme will bring together five grassroots organisations working with diverse communities across the city. Backed by the National Lottery Community Fund, the programme will establish a climate action hub at DMU, designed to support local people in cutting emissions, improving wellbeing and influencing climate policy.

Partner groups – Leicester Nirvana Football Club, Somali Development Services, ZamZam Unlimited, Saffron Acres and One Roof Leicester – will receive funding to deliver their own climate-related projects

### [Flooding in the UK: How better collaboration between communities and authorities can strengthen flood resilience](#)

A LACK of connection between local government and residents is a barrier towards community resilience to flooding, says new research co-authored by a leading climate social-science specialist at De Montfort University (DMU) Leicester.

The UK faces recurring flood events, with 5.2 million homes now at risk from flooding and coastal erosion. This increasing risk highlights the importance of resilience planning, according to the report published in the International Journal of Disaster Risk Reduction by DMU's Dr Ruth McKie and Dr Adam Aitken from the University of Salford.

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The ratings come from the Times Higher Education's Impact Rankings, which is the only measure of a university's performance in the SDGs.

### [Leicestershire's universities are working together for a greener future](#)

LEICESTERSHIRE'S universities – University of Leicester, De Montfort University (DMU), and Lough-



borough University – are proving that collaboration is key in tackling climate change.

A cornerstone of their efforts is the Leicestershire Climate and Nature Pact, an ambitious commitment that unites universities, businesses, and local councils in a shared mission to achieve net zero by 2045.

## MAJOR DMU RESEARCH ON SDG 13 IN 2025

Climate obstruction across the Global South  
Faruque, M. O., McKie, R. E., Christel, L. G., Debucquois, C., Edwards, G., Gellert, P. K., Gutierrez, R. A., Hochstetler, K., Li, Y., Milani, C. R. S., Möhle, E., Oguntuase, O. J. and Walz, J. R. (2025)

THE Global South countries differ in their histories, development trajectories, political structures, and participation in multilateral organizations. They also

differ in their vulnerabilities to climate change. This identifies key actors and organizations undertaking climate obstruction activities in various sectors in the Global South. It examines these actors' political aims, their alliances with other actors and organizations, and the strategies, tactics, and narratives they deploy to undermine both legislative and policy actions to address climate change.

<https://doi.org/10.1093/oso/9780197787144.003.0008>

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EVIDENCE linking urban traffic emissions to human illness and death and as a source of climate change is incontrovertible.

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<https://doi.org/10.5281/zenodo.17041955>

### Invaders and Containers: Cognitive Representations of Biological and Particular Matter (bioPM )

*Mitchell, A. S., Lemon, M. and Drew, G. H. (2025)*

AIR quality management concerns the assessment, analysis and mitigation strategies associated with

ensuring that air is breathable and non-toxic.

Successful management is a cognitively intensive task, knowledge-focused and converges multiple sources of information to develop a shared understanding of a problem. To operate effectively in this space, managers and operational teams share common points of reference in discussing problems and solutions, strategies, tactical briefings, etc., and communication and technical language use are key to the discipline.

<https://doi.org/10.3390/pollutants5030017>

### Gender and the transition to Net Zero Transport

*Budd, L. (2025)*

THE United Nations has identified climate change and inequality (including gender inequality) as being two of the biggest challenges of the contemporary global era.

The global transport sector, which currently accounts for around a quarter of all anthropogenic greenhouse gas emissions, remains a long way from reaching its Net Zero target and largely fails to deliver gender inclusive services which recognise and meet the different mobility needs, priorities and services both between and within genders.

[Gender and the transition to Net Zero Transport](#)

### Property flood resilience (PFR): exploring the experiences of commercial property owners

*Xiao, H., Proverbs, D., Joseph, R. and Adedeji, T. (2025)*

THIS research explored the current views and experiences of commercial property owners and users towards the practice of property flood resilience (PFR) to identify the barriers and develop improved imple-

mentation strategies. The research adopted an exploratory approach using six recently flooded commercial properties as case studies and examined them through site visits, interviews and documentary evidence to achieve triangulation of the enquiry.

<https://doi.org/10.1108/IJBPA-08-2023-0122>

### A study of the temporal and spatial evolution trends of urban flood resilience in the Pearl River Delta, China

*Xu, W., Han, P., Proverbs, D.G. and Guo, X. (2025)*

IN VIEW of the increasing threat of flooding across the world and specifically the vulnerability of the Pearl River Delta region to these risks, this study undertakes a spatial and temporal evolution of flood risk in the region, including an assessment of urban flood resilience.

By combining the pressure-state-response model and the nature-economy-society-infrastructure framework, an urban flood resilience index system is constructed. The order relation analysis method, Criteria Importance Through Intercriteria Correlation method and the VlseKriterijumska Optimizacija Kompromisno Resenje evaluation method, they were then combined to quantify urban flood resilience and reveal the hierarchical relationships that exist between key factors.

<https://doi.org/10.1108/IJBPA-11-2024-0228>

### Flying towards Net Zero: Decarbonising aviation amid a climate crisis

*Pantaleki, E. and Budd, L. (2025)*

IN 2021 the international air transport industry committed itself to achieving net zero carbon emissions by 2050 in line with the Paris Agreement to keep

global temperature rises below 1.5°C above pre-industrial levels.

Yet, in 2022, as demand for air travel rebounded following the COVID-19 pandemic, air transport's CO2 emissions reached almost 800 million tonnes, approximately 80% of the pre-pandemic level.

This aims to review the key technological propositions (including sustainable aviation fuels, hydrogen and electric/hybrid aircraft), and international regulatory interventions which aim to facilitate commercial aviation's transition towards net zero.

#### [Flying towards Net Zero: Decarbonising aviation amid a climate crisis](#)

**Evidence for motivated control? Climate change related distress is positively associated with domain-specific efficacy beliefs and climate action**

*Ogunbode, C.A., Player, L., Lu, S., Park, M.S.A., Doran, R. et al (2025)*

RECENT cross-sectional and experimental research has found measures of climate change related distress to be positively associated with measures of efficacy beliefs.

Authors of some of these studies have interpreted this finding in terms of motivated control, that is, people who experience climate change related distress are motivated to believe that they can help mitigate climate change.

We extend this notion of motivated control by assuming that efficacy beliefs flowing from climate change related distress play a role in encouraging climate action.

<https://doi.org/10.1016/j.jenvp.2025.102695>

**Climate anxiety in perspective: a look at dominant stressors in youth mental health and sleep**  
*Ogunbode, C.A., Player, L., Lu, S., Park, M.S.A. and Doran, R. (2025)*

THERE is growing evidence that climate anxiety is associated with significant effects on the mental health and wellbeing of young people. However, the relative importance of climate anxiety for young people's mental health has hitherto been unclear, as climate anxiety has largely been studied in isolation from other common stressors. This study sought to contextualize the significance of climate anxiety for the mental health of UK young adults relative to other concurrent psychological stressors.

<https://doi.org/10.1111/nyas.70057>

**Rhetorical Strategies Employed by Big Oil in the Context of IPCC Reports of Climate Change**

*Mitchell, A. S., and Bhattacharyya, S. C. (2025)*

DESPITE long-standing evidence linking fossil fuel combustion to greenhouse gas and climate change effects, and the growing advocacy for reductions and regulatory limits on their use, fossil fuel corporations remain hugely profitable and influential. In response to scientific evidence linking Big Oil's corporate activities directly to climate change impacts, tactics favoured by Big Tobacco to medical evidence linking smoking to cancer appear to have been adopted by Big Oil in responding to the Intergovernmental Panel on Climate Change findings.

<https://doi.org/10.3390/world6030128>

**Climate policy obstruction on the right and the far right**

*Plehwe, D., Farrell, J., Araldi, L., Brulle, R. J., Bryant, J. C., Callison, W., Davies, K., McKie, R. E., Mitalexis, S., and Racu, A. (2025)*

THIS chapter considers scholarly research on the constellation of actors and movements situated on the right wing of the political spectrum and the strategies, tactics, and narratives they engage in to obstruct climate action.

It begins by clarifying conceptual and empirical boundaries around the related terms "conservative," "neoliberal," "right-wing," and "far right," and then briefly traces the history of these concepts.

The chapter then analyzes climate obstruction by the neoliberal and conservative right followed by that of the revolutionary and authoritarian far right.

<https://doi.org/10.1093/oso/9780197787144.003.0005>

**Community resilience to flooding in the UK: A study of Matlock, Derbyshire**

*McKie, R.E and Aitken, A (2025)*

THE United Kingdom has faced recurring floods since 2019, with 5.2 million homes at risk. This has prompted the UK government to prioritise resilience planning in flood prone areas. This study focuses on community resilience in Matlock, Derbyshire, which has experienced intensified flooding since 2018. Using qualitative interviews and a focus group, the research examines evidence of community resilience and the barriers to its development by focusing on community activities during flooding incidents.

<https://doi.org/10.1016/j.ijidr.2025.105266>

## UN PROGRESS REPORT ON SDG 14 in 2025

PROGRESS on SDG 14 is one of the poorest with 40% of the targets for 2030 having actually regressed on their 2015 levels and another 30% showing only marginal progress. A further 20% of targets are actually on track to be met and 10% show moderate progress. The UN reports said our seas and oceans "...face mounting threats from overfishing, pollution, biodiversity loss and climate change.

"Despite growing conservation efforts, only 8.4% of the ocean is classified as marine protected areas, far short of the target of 30% by 2030, and just 46% of marine key biodiversity areas are under protection. "Ocean warming and acidification continue, overfishing and illegal practices persist, and support for small-scale fisheries remains insufficient."

## MAJOR DMU NEWS ON SDG 13 IN 2025

### [Million-pound climate project to help Leicester become a climate leader as DMU launches its COP 30 programme](#)

A NEW million-pound initiative that will help grassroots community organisations develop their own sustainability projects has the potential to turn Leicester into a city of climate action, according to DMU.

The project was launched as part of the COP 30 @ DMU programme to coincide with the talks of world leaders on climate action in Brazil.

The focus of DMU's programme of events was not just SDG 13 Climate Action, but also SDG 14 Life Below Water and SDG 15 Life on Land, with a Big River



Clean-up on the city's waterways being announced for next year.

The clean-up aims to remove as much plastic and other rubbish from the River Soar and Grand Union Canal in Leicester city centre to prevent it reaching the world's seas and oceans.



## UN PROGRESS REPORT ON SDG 15 in 2025

THERE has been no progress on more than 40% of the targets for SDG 15 – 20% of the targets have regressed on their 2015 levels and a further 20% show stagnation. A further 40% show marginal progress while 20% of the targets are on course to be met by 2030.

The UN report states; "Persistent challenges continue to hinder progress in protecting life on land, managing natural resources sustainably and combating the biodiversity crisis. Global forest cover is shrinking; protection of key biodiversity areas has stalled recently, and species extinction is accelerating.

"Yet, there are signs of progress: global forest loss is slowing, and regional advances show promise," the UN 2025 Sustainable Development Goals report adds.

## MAJOR DMU NEWS ON SDG 15 IN 2025

### [Student's Japanese research trip will strengthen Leicestershire UNESCO bid](#)

TWO students from De Montfort University have travelled to Japan as part of a fact-finding mission to bolster Charnwood Forest's application to become a UNESCO Global Geopark.

Becky Wilson and Natalia Stachowiak set off on 5,000-mile journey to the city of Nagaoka to learn about Japan's cultural attitude towards sustainability, and explore the nearby Itoigawa UNESCO Global Geopark.

The pair were investigating how the country protects its geological heritage, animals and educates visitors about the region's importance.

Their findings will now be fed into the National Forest's application for Leicestershire's Charnwood Forest to receive UNESCO Global Geopark status, which will be submitted later this year.

### [Million-pound climate project to help Leicester become a climate leader as DMU launches its COP 30 programme](#)

A NEW million-pound initiative that will help grassroots community organisations develop their own sustainability projects has the potential to turn Leicester into a city of climate action, according to DMU.

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### **MAJOR DMU RESEARCH ON SDG 15 IN 2025**

#### **Ecologies beyond the Human – Reimagining Nature-based Solutions through Relational and Multispecies Perspectives**

*Salvi, S., Reeves, A., Kerr, D. and Abuzeinab, A. (2025)*  
DESPITE growing interest in Nature-based Solutions (NbS) and their promise to deliver social, economic, and environmental benefits for society, their human-centred utilitarian functionality raises questions about the adequacy and effectiveness of NbS. Now, with two-thirds of the world's population pro-

jected to live in cities by 2050, this trend could potentially accelerate biodiversity loss and wildlife habitat destruction, ultimately weakening our resilience against the looming planetary ecocide.

[10.5281/zenodo.17023592](https://doi.org/10.5281/zenodo.17023592)

#### **Using Big Data from Internet to Improve Land Use Transition Effects on Eco-Environment**

*Liu, T. et al. (2025)*

THE intricate relationship between land use and ecological changes is a critical area of eco-environmental research.

However, there is a notable lack of quantitative, analytical studies that explore this relationship in depth. This study aims to bridge this gap by applying a contrastive learning approach to a practical land use application, utilizing big data.

<https://doi.org/10.70003/160792642025012601007>

#### **Drivers and Preferences of European Farmers for Agri-Environmental Public Goods Schemes: A Two-Stage Analysis**

*Tyllianakis, E. et al. (2025)*

THE new Common Agriculture Policy intends to give more freedom to countries to manage their budget while increasing funding for income support and provisioning of climate public goods from agriculture and farming.

For the past 20 years this has been operationalised through incentivising farmers' contract participation in agri-environmental schemes.

In this paper we examine through a two-stage approach, farmer preferences for contract characteris-

## **15 LIFE ON LAND**



tics in a multi-European country Discrete Choice Experiment (DCE) and the determinants of land enrolment in contracts.

<https://doi.org/10.1016/j.jnc.2025.126912>



## UN PROGRESS REPORT ON SDG 16 in 2025

NONE of the targets in SDG 16 are expected to be met by 2030 with only 15% showing moderate progress and a further 45% marginal progress. A further 25% of the targets show stagnation and 15% have actually regressed on their 2015 levels.

The UN report states: "Violence and conflict continue to drive human suffering and displacement. In the last year, nearly 50,000 lives were lost to conflict – one every 12 minutes – disproportionately affecting women and children.

"By the end of the year, 123.2 million people were forcibly displaced. While global homicide rates fell by 12 per cent between 2015 and 2023, progress remains far below the 50 per cent reduction target.

"Urgent action is needed to protect lives and restore trust through peacebuilding, justice reform and accountability".

## MAJOR DMU NEWS ON SDG 16 IN 2025

### [DMU conference on the future of policing outlines university's commitment to public sector partnerships](#)

SENIOR police officials, academics and practitioners have come together to explore how collaboration between forces and universities can drive greater innovation and tackle challenges facing modern policing in the UK.

More than 120 delegates from 20 police forces & institutions and 13 universities attended the Society of Evidence-based Policing (SEBP) Midlands Regional Conference, which this year was hosted by De Montfort University (DMU) Leicester's Policy Unit and Busi-

ness and Law (BAL) faculty. The conference outlined how generative AI is becoming more prevalent in fraud and sexual abuse cases, with Superintendent Lewis Lincoln-Gordon explaining the need for academia and public services to combat the threat.

### [DMU expert wins €10.4m grant to lead global effort against coercive interrogation](#)

A DMU law professor is part of an international research team awarded more than €10.4 million to transform how police and investigators around the world conduct interviews.

The six-year project, titled JUSTICE – Joining Unique Strategies Together for Interrogative Coercion Elimination, aims to replace coercive and abusive interrogation methods with those grounded in human rights and evidence.

### [DMU Marks 30th Anniversary of Srebrenica Genocide](#)

IF EVERYBODY believed in each other, this place, this world would be a much, much better place." This was the testimony of Jasmin Dajić, a survivor of the Bosnian War, at a recent event hosted by De Montfort University to mark the 30th anniversary of the Srebrenica Genocide.

The atrocity, which took place in July 1995, saw more than 8,000 Bosnian Muslim men systematically murdered in and around the town of Srebrenica. It was one of many horrific crimes committed during the Bosnian War of 1992-1995.

Held at The Venue, the event was organised by Remembering Srebrenica UK, a charitable initiative dedicated to tackling hatred and intolerance whilst pro-

## 16 PEACE, JUSTICE AND STRONG INSTITUTIONS



moting a more cohesive and compassionate society.

### [DMU researcher invited to UK's leading round-tipped knife manufacturer](#)

ONE of the country's leading knife manufacturers has welcomed a De Montfort University Leicester (DMU) researcher to its headquarters to talk to staff there about her work.

Leisa Nichols-Drew, Associate Professor in Forensic Biology at DMU has carried out some of the most comprehensive research into the safety of round-tipped knives compared to pointed blades, finding them far less likely to penetrate materials.

Her work has been widely cited in the media and she has formed an association with Liverpool-based company, Rayware, a leading housewares supplier of some of the UK's best-known British brands including Viners.

## [Transforming police and academic collaboration through critical dialogue](#)

POLICE professionals and academic researchers came together this week to discuss the challenges facing modern policing and how collaboration is the key to addressing them.

DMU, in partnership with the East Midlands Police-Academic Collaboration, hosted a sandpit session, inviting police professionals and academic researchers to engage in critical, reflective, and open discussions about the challenges facing modern policing and the role of collaboration in addressing them.

## [DMU's business school nominated as country's best](#)

INNOVATIVE efforts to make studying as inclusive as possible for students all over the world have helped Leicester Castle Business School to a national award nomination.

The business school, based at DMU, has been recognised for its work with a nod in the Business School of the Year category at the PIEoneer Awards, run by international education network PIE. In its entry, the LCBS team highlighted the introduction of new ideas making the studying experience more welcoming and inclusive for international students.

## [DMU gears up criminal justice workers to be new era of leaders](#)

PRISON and probation workers studying a pioneering Master's at DMU are set to become the next generation of leaders.

Learners on the first-ever Master's in Community

and Criminal Justice Leadership (MCCJL) course at DMU are studying for advanced qualifications that can help them climb the career ladder within the justice sector.

The two-year programme has been designed to be as immersive as possible, making use of creative learning environments such as a purpose-built crime scene house.

## [New Companion of DMU Gus John calls on graduates to face up to social injustice](#)

A LIFELONG social justice campaigner who has received the highest academic accolade available at DMU is calling on its graduates to help break down barriers that divide us as humans.

Professor Gus John, who has championed racial equality, particularly in education, was speaking after being named a Companion of DMU at a graduation ceremony.

His lengthy fight against systemic racism, which spans more than 60 years, has seen Professor John consult on policies and work on influential academic reports and literature.

## [DMU Balkan expert appointed UK representative for international think tank](#)

A WORLD-REOWNED expert on the Balkans has been appointed as a UK representative on a think tank created to foster stability, democratic process and reconciliation within the Western Balkans.

Professor Kenneth Morrison, Director of the Institute of Global Challenges and Cultures at DMU, will join up with former Prime Ministers, Defence Ministers,

senior politicians, academics and policy advisors from Europe and the US as part of West Balkan Net.

## [DMU makes national pledge to support refugees](#)

DMU has made a national pledge to demonstrate its commitment to helping people fleeing violence and persecution.

The university signed up to a statement prepared by City of Sanctuary, a charity supporting a network of groups across the UK and Ireland working to build a culture of welcome and hospitality within their communities.

## [DMU spreads Christmas cheer to Leicester refugees](#)

STAFF and students at DMU have teamed up with the British Red Cross to host a Christmas party for refugee families living in the city.

Refugees who have settled across Leicester came together at DMU's Campus Centre for an afternoon of Christmas songs, party games, drawing and a festive feast, courtesy of national catering company Chartwells.

## **MAJOR DMU RESEARCH ON SDG 16 IN 2025**

Corruption Quantum Comparison and Suspicion-Based Corruption: New Corruption Neutralization and Justification Techniques?

Amagnya, M. A. (2025)

CORRUPTION in criminal justice systems adversely affects governance, justice delivery, and sociopolitical and economic growth.

Corruption leads to disregard for due process, un-

dermines trust and confidence in institutions, impacts law-abiding behavior, violates citizen's rights and liberties, and aggravates inequalities and suffering of poor and vulnerable people. As a result, people who engage in corruption usually look for conditions to blame for the occurrence of corruption.

<https://doi.org/10.1177/10575677251361870>

### Srebrenica, Never Again to No-one and Nowhere: An Action-Oriented Approach to Genocide Education

*Sadique, K. (2025)*

LEARNING from genocide is intended to be a transformative experience, encouraging learners/visitors to be motivated to prevent its reoccurrence and achieve 'Never Again'.

This paper argues that most examples of genocide education do not focus on how to work towards 'Never Again' but rather emphasise remembrance and memorialisation, or 'Never Forget' as the primary goal. This paper therefore explores the experiences of visitors to, and guide-educators at, memorial museums situated in authentic sites of mass atrocities, namely Auschwitz-Birkenau State Museum and Srebrenica Memorial Centre.

[Srebrenica, Never Again to No-one and Nowhere: An Action-Oriented Approach to Genocide Education](#)

### Exploring Witchcraft, Sorcery and Bewitchment Beliefs, and Social Work Responses Among Street Children in Zimbabwe

*Mhizha, S., Marandure, B.N. (2025)*

STREET children increasingly shaping the urban landscape in many African countries. Their experiences of

street childhood expose street children to many vulnerabilities including children's rights violations, and social exclusion from schooling.

Witchcraft, sorcery, and bewitchment beliefs appear to be both a cause and an outcome of street childhood in Africa.

Despite this, there is a notable lack of research on the development of supernatural reasoning, which is central to the African world view.

<https://doi.org/10.1007/s41134-025-00386-8>

### A Systematic Literature Review of Passenger Non-Adoption of Airport Self-Service Technologies: Issues and Future Recommendations

*Chaiwan, C., Budd, L., and Ison, S. (2025)*

TECHNOLOGY has become crucial for businesses to deliver faster and smoother services for growing numbers of customers at lower operating costs, and aviation is no exception.

Airports and airlines have made significant investments in a range of back-office and customer-facing technologies including introducing self-service check-in and bag drop in order to enhance the guest experience and reduce processing times.

However, while uptake of these technologies among certain customer segments has been strong, other passengers are reluctant to use them.

Instead evidence shows they prefer interacting with human staff members which leads to an inconsistency in the service offer and additional costs for airlines.

The aim of this paper is to identify the issues related to passenger non-adoption of self-service technologies in airports and make recommendations for how

airlines and airports might approach this issue in the future.

<https://doi.org/10.1016/j.iatrs.2025.100065>

### America as a Revisionist Power: Trump, 'America First,' and International Order

*da Vinha, L. and Dutton, A. (2025)*

IN HIS second term, Trump's "America First 2.0" positions the United States as the main revisionist power, seeking to remake the liberal international order (LIO). The paper contends that the administration actively undermines the LIO by challenging its structural foundations – sovereignty, self-determination, and multilateralism – as well as its liberal norms of free trade, democracy, and human rights.

Trump's rejection of multilateralism, skepticism toward alliances, and embrace of protectionism directly erode these principles. While his first term initiated this challenge, a second Trump administration offers an unprecedented opportunity to further weaken or even dismantle the LIO, generating profound uncertainty and instability unless other states step forward to sustain it.

[https://doi.org/10.1007/978-3-031-98627-7\\_18](https://doi.org/10.1007/978-3-031-98627-7_18)

### Retrogressive Adaptation and the Erosion of Protest in Authoritarian Regimes: Lessons from Zimbabwe

*Nyamutata, C. (2025)*

THIS article introduces and develops the concept of 'retrogressive adaption' – a theoretical framework that explains why populations under authoritarian regimes often exhibit political passivity despite severe deprivation and repression. Retrogressive adap-

tation describes the process by which individuals and communities, faced with deteriorating standards of living and systemic oppression, adapt through alternative survival strategies that ultimately reinforce the status quo rather than challenge it.

The theory is applied to the case of Zimbabwe, where economic decline and political repression have led citizens to rely on informal survival mechanisms.

<https://doi.org/10.1163/1821889x-bja10154>

#### Satisfaction with the Police in South Africa: Perspectives of University Students

*Bello, P.O., Akinlabi, O.M. and Amagnya, M.A. (2025)*  
THE present study explores satisfaction with the police among university students and factors that contribute to their perceptions.

Citizens' satisfaction with the police is an important element of public perceptions of the police. Existing scholarly literature has extensively examined this subject, albeit with a predominant emphasis on the broader population.

As a result, there is a dearth of research on the perspectives of specific population segments, such as the youth more generally and university students in particular.

<https://doi.org/10.1007/s43576-025-00184-2>

#### Transnational education as ecosystem: Rethinking sustainability and equity

*Wang, J. (2025)*

TRANSNATIONAL education (TNE) continues to expand globally, yet many partnerships remain fragile,

short-lived or insufficiently connected to local contexts.

This study argues that TNE must be reimagined not as a transactional delivery model but as a dynamic ecosystem grounded in equity, sustainability and mutual capacity-building.

Drawing on 245 survey responses, 20 stakeholder interviews and more than 1000 regulatory audit findings, the analysis identifies systemic barriers including weak institutional integration, rigid curriculum transfer and fragmented support for students and staff.

<https://doi.org/10.1111/hequ.70099>



#### UN PROGRESS REPORT ON SDG 17 in 2025

PROGRESS on 25% of the targets set in 2015 look set to be met by 2030 with a further 20% showing moderate progress. However, 30% of the targets show only marginal progress, 20% have stagnated and a further 5% have actually regressed on their 2015 levels.

The UN report says: "Low and middle-income countries faced record-high \$1.4 trillion debt-servicing costs in 2023, compounded by a \$4 trillion annual investment gap that severely constrained SDG achievement. "Despite increased financial flows from official and private sources, Official Development Assistance declined by 7.1% after five years of growth, with further cuts expected."

#### MAJOR DMU NEWS ON SDG 17 IN 2025

##### [DMU to lead United Nations Hub to help build better cities and communities](#)

THE United Nations has chosen De Montfort University Leicester DMU to lead a network aiming to build better cities and communities across the world.

The university has been made chair of the global Academic Impact hub for Sustainable Development Goal 11 – sustainable cities and communities.

This means it will lead a team of other co-chair universities across the globe in helping to address issues like affordable housing, transport and disaster resilience in cities worldwide.

##### [DMU launches £1.3m grassroots climate action project](#)

DE MONTFORT University has secured more than

£1.3m in National Lottery funding to lead a major new community-driven climate initiative aimed at embedding sustainability in some of the city's most deprived neighbourhoods.

The three-year scheme will bring together five grassroots organisations working with diverse communities across the city. Backed by the National Lottery Community Fund, the programme will establish a climate action hub at DMU, designed to support local people in cutting emissions, improving wellbeing and influencing climate policy.

#### [Leicestershire's universities are working together for a greener future](#)

LEICESTERSHIRE'S universities – University of Leices-  
ter, De Montfort University (DMU), and Loughborough University – are proving that collaboration is key in tackling climate change.

The institutions joined forces in 2022 under the Universities Partnership, in a ground-breaking agreement designed to tackle local challenges, including climate change.

A cornerstone of their efforts is the Leicestershire Climate and Nature Pact, an ambitious commitment that unites universities, businesses, and local councils in a shared mission to achieve net zero by 2045.

#### [DMU among guests as Uzbekistan President officially opens Pharmaceutical Technical University](#)

STAFF from DMU met with the President of Uzbekistan, Shavkat Mirziyoyev, for the official launch of one of its international partners, Pharmaceutical Technical University (PTU).

The pharmaceutical industry in Uzbekistan has been

developing in recent years and the PTU project, initiated by presidential decree in 2019, will help the Central Asian country produce more qualified pharmacists to keep up with local demand.

DMU has been working with PTU since the start of the project six years ago, providing training for the university's future teaching staff and developing the delivery of the first MSci Pharmacy degree programme to be offered in Uzbekistan.

#### [DMU expert to lead efforts to cut food poverty in Leicester](#)

WORK to eliminate food poverty in Leicester is to be led by an expert from DMU.

Professor Jonathan Davies has been appointed as independent chair of Feeding Leicester, a network of organisations working together to ensure access to food for all.

Feeding Leicester is part of the Feeding Britain Network, set up a decade ago by former Labour minister Frank Field in response to the work of the All-Party Parliamentary Group on Hunger and Food Poverty.

#### [DMU conference on the future of policing outlines university's commitment to public sector partnerships](#)

SENIOR police officials, academics and practitioners have come together to explore how collaboration between forces and universities can drive greater innovation and tackle challenges facing modern policing in the UK. More than 120 delegates from 20 police forces & institutions and 13 universities attended the Society of Evidence-based Policing (SEBP) Midlands Regional Conference, which this year was hosted by

## 17 PARTNERSHIPS FOR THE GOALS



De Montfort University (DMU) Leicester's Policy Unit and Business and Law (BAL) faculty.

#### [DMU celebrates three-decade partnership with prestigious Danish business college](#)

A CELEBRATION of the 30-year partnership between De Montfort University and Niels Brock Business College in Copenhagen has taken place this week.

The two institutions have been working together for three decades and now provide students with first class education and qualifications in areas including business, computing, international tourism, and hospitality management.

#### [Multi-million pound research funding boost for DMU and Midlands universities](#)

A COALITION including DMU and 14 Midlands university partners have launched Forging Ahead - a new

initiative set to revolutionise how research and innovation are translated into real-world impact.

Forging Ahead will radically enhance the commercialisation ecosystem, supercharging entrepreneurial activity, scaling innovation, and creating dynamic new pathways for academic ideas to become high-growth ventures.

#### [DMU celebrates its first Kazakhstan graduates](#)

THE first ever students at De Montfort University Kazakhstan have graduated at a ceremony in the country's largest city, Almaty.

DMU opened its Kazakhstan campus in September 2021 to enable more international students to study for a British degree and became the first UK university to open a campus in the Central Asian country.

#### [Ey up me duck! DMU continues its long-running partnership with Leicester Comedy Festival](#)

DMU is thrilled to continue its 32-year partnership with the Leicester Comedy Festival for 2025, set to kick off next month.

Founded by DMU Arts and Festivals Management student Geoff Rowe, Leicester Comedy Festival is now one of the biggest and longest running comedy festivals in the whole of Europe, bringing thousands of people to the city each year.

#### **MAJOR DMU RESEARCH ON SDG 17 IN 2025**

**America as a Revisionist Power: Trump, 'America First,' and International Order**  
*da Vinha, L. and Dutton, A. (2025)*

IN HIS second term, Trump's "America First 2.0" posi-

tions the United States as the main revisionist power, seeking to remake the liberal international order (LIO).

The paper contends that the administration actively undermines the LIO by challenging its structural foundations – sovereignty, self-determination, and multilateralism – as well as its liberal norms of free trade, democracy, and human rights.

[https://doi.org/10.1007/978-3-031-98627-7\\_18](https://doi.org/10.1007/978-3-031-98627-7_18)

**'Facilitation regimes' and maritime trade in Nigeria: A critical appraisal of Nigeria's Implementation of the IMO FAL and the WTO TFA**  
*Dirisu, Abdulkumuni (2025)*

THE interdependency between international trade and maritime transport cannot be overstated.

WITH over 80 per cent of global trade by volume carried out by maritime transport, the procedures and processes in and around the maritime domain can either aid or act as barriers to global trade.

['Facilitation regimes' and maritime trade in Nigeria: A critical appraisal of Nigeria's Implementation of the IMO FAL and the WTO TFA](#)

**Transnational education as ecosystem: Rethinking sustainability and equity**  
*Wang, J. (2025)*

TRANSNATIONAL education (TNE) continues to expand globally, yet many partnerships remain fragile, short-lived or insufficiently connected to local contexts. The intercultural challenges embedded in TNE remain underexplored in both research and policy.

This study introduces the Triple-A TNE Partnership

Framework—agility, adaptability, and alignment—as an empirically grounded conceptual model for navigating these complexities.

<https://doi.org/10.1111/hequ.70099>

**Triple-A transnational education (TNE): Addressing intercultural challenges**  
*Wang, J. (2025)*

TRANSNATIONAL education (TNE) creates a dynamic intercultural space where students, staff, managers, and regulators engage with diverse norms, expectations, and institutional practices across borders. The intercultural challenges embedded in TNE remain underexplored in both research and policy. This study introduces the Triple-A TNE Partnership Framework—agility, adaptability, and alignment—as an empirically grounded conceptual model for navigating these complexities.

<https://doi.org/10.3389/fcomm.2025.1568138>

**Climate obstruction across the Global South**  
*Faruque, M. O., McKie, R. E., Christel, L. G., Debucquois, C., Edwards, G., Gellert, P. K., Gutierrez, R. A., Hochstetler, K., Li, Y., Milani, C. R. S., Möhle, E., Oguntuase, O. J. and Walz, J. R. (2025)*

THE Global South countries differ in their histories, development trajectories, political structures, and participation in multilateral organizations. They also differ in their vulnerabilities to climate change. This identifies key actors and organizations undertaking climate obstruction activities in various sectors in the Global South. <https://doi.org/10.1093/oso/9780197787144.003.0008>



# For more information

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