



# SUSTAINABLE DEVELOPMENT GOALS

ANNUAL REPORT 2019/20

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SUSTAINABLE DEVELOPMENT GOALS



The launch of our first SDG report in September 2020 was an important moment for Warwick, signalling our commitment to environmental, economic, social and cultural sustainability and recognising the complex interactions between each of the seventeen goals.

Since then, we have continued to explore our contribution to the SDGs and to discuss the ways in which we can accelerate our impact without increasing our effect on the environment.

We have established a high level Environmental and Social Sustainability Action Group (ESSAG) to coordinate the University's approach to environmental and social sustainability. ESSAG works with and advises other relevant committees and groups in the context of their remit which impacts Environmental and Social Sustainability. The SDG Advisory Group, which has coordinated this SDG report, feeds directly into ESSAG, ensuring that the focus on the global goals and the broad sustainability challenges that they represent are not overlooked. We uphold our commitment to reporting annually to the SDG Accord, which monitors progress towards the Global Goals in the University and College Sector. It is a credit to our community that three of our case studies were featured in this year's SDG **Accord report**, recognising our progress and support for the SDGs in research, education and estates.

I am delighted to confirm that our new route map for sustainability specifically commits us to progressing our contribution to the SDGs, recognising the value we can add through critical thinking in research and teaching and by pursuing fair and equitable business in all that we do.

Warwick's SDG Annual Report 2019/20 is intended to provide a flavour of the multiple connections and contributions that we make to the SDGs in the areas of research, teaching & learning, and campus & operations. In addition to showcasing and celebrating some of the inspiring work that was delivered in 2019/20, which is wonderful to see given the extreme challenges we all faced at the start of the pandemic, we hope to use this report to stimulate discussion around the next steps and how we can find new ways of knowing and doing with the aim of maximising the contribution that we all make to the Global Goals. To that end, I encourage everyone to consider the questions at the end of this report.

I noted last year that this was a journey, with an invitation to everyone to join us on the path to a better world and a better future for all. That invitation still stands, and I look forward to seeing what we can all achieve in the coming year.



**Christine Ennew**  
Provost,  
University of Warwick



## Christine Ennew

Provost,  
University Executive Office



## SDG Report: An Historical Moment of Academic Reflection

The United Nation's Conference of Parties (COP26) is a unique opportunity for addressing an historically unprecedented and existential challenge to humanity – the Climate Emergency. The summit is hosted by the UK, and as a UK University we are committed to contributing to the goals of the **Paris Agreement (2015)** (keeping a global temperature rise this century well below 2 degrees Celsius) and the **UN Framework Convention on Climate Change**.

As the **IPCC reported**, 'Each of the last four decades has been successively warmer than any decade that preceded it since 1850. Global surface temperature in the first two decades of the 21st century (2001-2020) was 0.99 [0.84- 1.10] °C higher than 1850-1900'. Climate change is rapidly and violently affecting every country and continent through altering weather patterns disrupting economies and adversely affecting lives. As ever, negative impacts are mediated by unequally distributed levels of individual and collective capacity: the poorest, most vulnerable and marginalised are the worst affected. The Climate Emergency therefore radically amplifies the urgency of attending to the United Nations Sustainable Development Goals (SDGs).

As we underlined in our **first report** on Warwick's contributions towards meeting the SDGs (2018-19), we see universities as central to the SDG agenda through research and teaching. Universities can 'trigger discussion, engage different generations in dialogue, and produce critical analysis vital for SDG monitoring, evaluation and impact'. Universities also have a vital role to play in transferring thought leadership into practical action for the SDGs through their own operations across campus and facilities.

In this report we cover a challenging period of history. The continuing global pandemic has resulted in significant human fatalities, including in the UK, and in all the geographical areas from where our communities of students and staff are drawn. There is clear evidence that the pandemic has revealed and exacerbates deep seated historical, social and economic inequalities at a local, national as well as at a global scale. To meet the challenges that these inequalities have thrown up, at Warwick, we prioritise open, critical discussion of the sustainable development discourse and the SDGs framework.

Although the origin of the SDG framework lies in the Brundtland Report - **Report of the World Commission on Environment and Development: Our Common Future** - which tried to bring together economic development and social and environmental responsibilities, current SDGs reflect, we note, a rather siloed approach with unresolved tensions between economic development and concern for biospherical support systems change. Indeed, overall, researchers at Warwick largely interpret sustainable development and SDGs as contested and political<sup>1,2</sup>. Indeed, we believe that the

SDGs are meant to form an integrated and indivisible global agenda for transformation, not for some but the many. To be successful, they cannot be approached as a disparate list of 17 technical goals, as they often manifest complex interconnects and overlaps<sup>3</sup>. Some goals are synergistic and can create co-benefits for others, but in other cases there are tensions and trade-offs that still need to be addressed; some of these negative interactions are more easily reconciled than others<sup>4</sup>.

One way we therefore seek to apply innovative thinking is through reporting engagement with SDGs at Warwick through the lens of "nexus-thinking" – a deliberate attempt to recognise persistent linkages and inter-dependencies between different SDGs across space, time and actors<sup>5</sup>. Nexus-thinking implies that our research, teaching and advice on practical action need

<sup>3</sup> Nilsson, M., Griggs, D. and Visbeck, M., 2016. Policy: map the interactions between Sustainable Development Goals. *Nature News*, 534(7607), p.320.

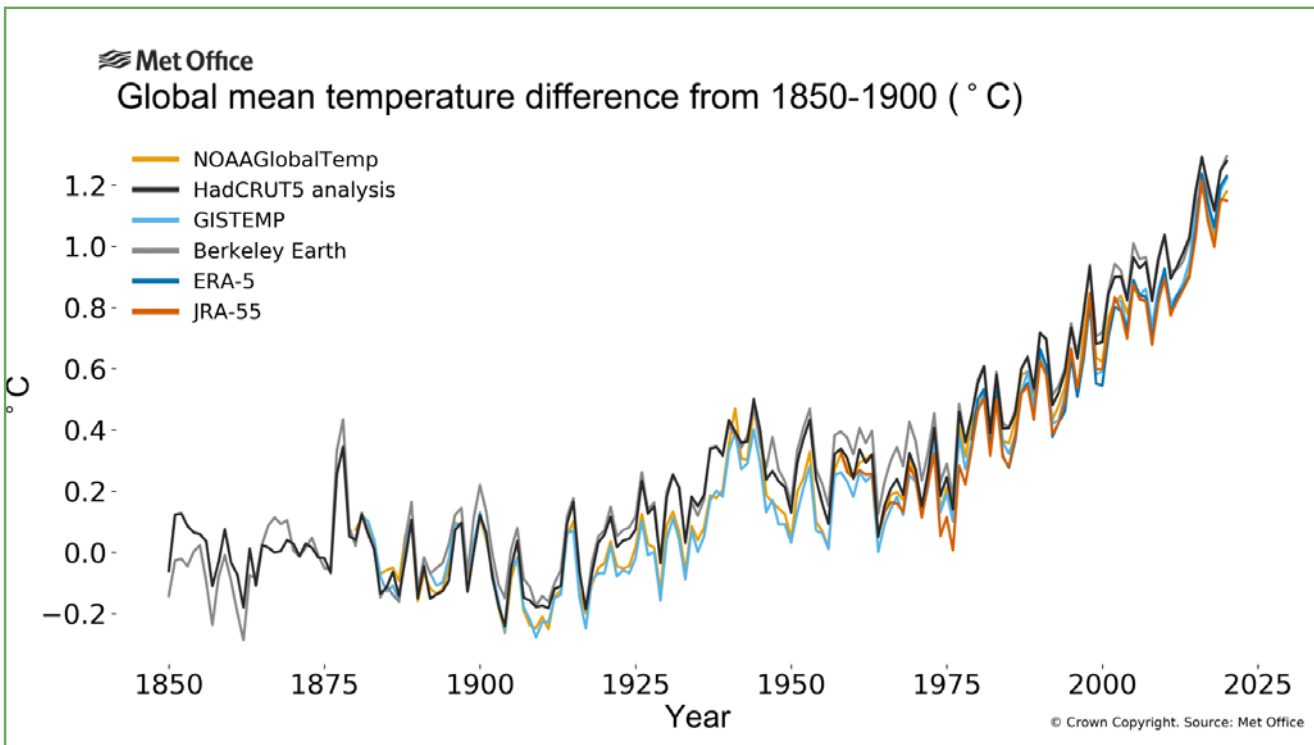
<sup>4</sup> Hickel, J., 2019. The contradiction of the sustainable development goals: Growth versus ecology on a finite planet. *Sustainable Development*, 27(5), pp.873-884.

<sup>5</sup> Leck, H., Conway, D., Bradshaw, M. and Rees, J., 2015. Tracing the water-energy-food nexus: Description, theory and practice. *Geography Compass*, 9(8), pp.445-460.



<sup>1</sup> Rai, S.M., Brown, B.D. and Ruwanpura, K.N., 2019. SDG 8: Decent work and economic growth-A gendered analysis. *World Development*, 113, pp.368-380.

<sup>2</sup> Smith, A.M., 2019. Innovative Approaches to Teaching Sustainable Development. *Encyclopedia of Sustainability in Higher Education*, pp.954-964.



to be explicitly aware of the fact that addressing some goals can have very beneficial spill-over effects for other SDGs. In many other instances, however, challenges arise from spatial and temporal interactions that can affect different types of stakeholders in both positive and negative ways. Nexus thinking compels us to avoid treating each and every SDG as a silo that can be “optimised”, and instead to develop innovative and effective approaches for navigating the SDG landscape.

In this context, our current challenge is to work on both more abstract and concrete issues, through disciplinary excellence, as well as inter- and trans-disciplinary innovations, to contribute creatively towards furtherance of a global good, in both our research and teaching.

In identifying the projects listed in this report, we realised that while some researchers acknowledge these interconnections, in many other cases this is implicit and subject to our interpretation. Our report therefore highlights that there is already a lot of excellent research at Warwick which addresses specific individual SDGs. At the same time, we found it harder to identify research projects that explicitly targeted multiple, interconnected goals. Our report is thus an attempt to provide some inspiring examples of work which we feel broadly adopts a nexus thinking approach. Moreover, we invite the Warwick community to reflect on how best to develop and pursue research, teaching and engagement in a way that contributes to achieving all 17 UN SDGs.

Given our critically reasoned work, we desire to drive intellectual and practical transformation, as opposed to report our progress against established thinking. Therefore, while this report does outline how individual research projects, pedagogical interventions and operational innovations promote clusters of SDGs, we have aspired to a more agenda setting summary of our work.

**We have featured three case studies in each of the following key areas:**

- Teaching and Learning - education, societies and student-led initiatives;
- Research - research on campus and in collaboration with others;
- Operations - good practices and projects.

## University SDG Advisory Group



## Improving Air Quality in Cities

Using data to forecast air pollution across London and inform policy interventions

Modern cities face constant challenges to public health, including air pollution and disease outbreaks such as COVID-19. In London alone, an estimated 9,000+ people die each year due to breathing in pollutants, and there were 700,000+ cases of coronavirus between January 2020 and April 2021. Prof Theo Damoulas's research aims to give the Greater London Authority (GLA) and other local authorities dynamic information on busyness (activity levels) and air quality in the capital's streets, in order to aid public health measures. Through having access to the latest busyness data and patterns, Transport for London (TfL) has been able to widen pavements and close roads to vehicles in order to support social distancing measures. Meanwhile, the availability of air pollution data allows cyclists and people on foot to avoid problem areas, and guides targeted intervention strategies.

### The challenge

The GLA, TfL and public health bodies have access to a wide range of tools and data sources for monitoring mobility, transportation, traffic activity, and air pollution. Networks of ground and mobile sensors, satellites, JamCam cameras and CCTV footage, as well as public transit activity metrics, produce large and diverse data sets with the potential to improve monitoring and understanding. Machine learning algorithms can be used to identify patterns in London's busyness and air pollution. However, these methods perform poorly for complex data, particularly with the strong spatial and temporal (space and time) factors seen in mobility, transportation, traffic activity, and air pollution data. The challenge lies in adapting statistical tools to address large scale complex problems of this nature. Once successfully adapted, such tools can be applied to an extensive variety of data-driven challenges which present themselves in any large metropolitan city.

### Our approach

Two approaches are combined to break down obstacles in the underlying data. The first relies on computer modelling techniques which can adapt both to unexpected data and to initial models that may not have been specified correctly. The second uses statistical sampling methods to break down large problems into those that are smaller and more manageable.

When combined, these approaches address both the unpredictability of the data and its sheer size. Further tailoring is then used to create a data science platform to tackle the real-world scenarios of London's busyness and air pollution. Results can then be widely communicated through an application programming interface which simplifies the development of software and apps. These allow for both live-updates and detailed results to be communicated to citizens, TfL and the GLA.

### Our impact

Prof Damoulas and the team at the Alan Turing Institute have already developed an application programming interface to monitor London's activity using the transport and road



networks, and footfall in London. This interface is used by both TfL and the GLA to closely monitor busyness of the city's streets and enable comparisons to normal levels of activity, supporting recovery from the COVID-19 pandemic. TfL uses the interface directly in their control room dashboard to understand busyness and dynamically manage roads, cycle lanes and pavements, accommodating social distancing measures.

The same statistical approach has also begun to provide a detailed image of London's air quality. An app in development will produce up-to-date and local air pollution forecasts for people walking, running or cycling through London. This will allow them to change their route and avoid the worst polluted areas. Local authorities in London now have accurate means to incorporate new sources of data in their air quality and activity level analyses, to compare different strategies which combat air pollution and COVID-19 transmission. Not only will this enable improved protection of public health, it will give better value for money in public spending and provide a better, safer course of action for the coronavirus pandemic. Warwick researchers are exploring the extension of the data-driven approaches system into further cities, including Newcastle and Sydney.

**“There is a direct connection between this project and SDG target 11.6, which specifically refers to air quality and the environmental impact of cities. By better understanding and monitoring air quality in cities such as London, we are helping policy makers take efficient interventions for improvement and also making a significant contribution to health related goals and targets such as SDG3 Good Health and Wellbeing.”**  
**Professor Theo Damoulas**

# Sustainable Flood Memory

Using media, archives and memory to manage flooding



**Professor Joanne Garde-Hansen and her team have developed and shared archives of digital stories based on flood experiences with flood-risk communities in the UK and Brazil to help at risk communities prepare for future flooding. The ESRC-funded projects combine community-led storytelling and resilience training with digital tools, aiming to preserve and develop knowledge of flooding.**

## The challenge

In the UK, 1.8 million people live with an annual risk of flooding greater than 1 in 75. This figure is expected to rise due to climate change and the pressures of development. The number of homes affected by three consecutive storms in January 2016 topped 16,000, leading to significant financial and emotional suffering and damage of £1.3bn.

The impact of flooding on people's mental health is also significant. Studies have found that 36.2% of flood victims had probable post-traumatic stress disorder, 20.1% depression and 28.3% anxiety. Professor Garde-Hansen and the team have found new, creative ways to help communities build resilience, prepare for future floods, and mitigate the practical and mental effects of flooding.

## Our approach

British stakeholders included the Environment Agency, flood risk groups, National Flood Forum and local archives. The project linked Brazil's Sabesp, Museu da Pessoa and CEMADEN with academics from the UK. These included UWE's Centre for Water, Communities and Resilience as well as Warwick's Department of Computer Science, Warwick Institute for the Science of Cities and the Institute for Global Sustainable Development. Professor Garde-Hansen examined:

- Archive data
- Community memory and storytelling
- Social media networks
- Photographs and video
- Newspaper reports

The researchers then brought this data together to create digital toolkits, curated exhibitions, and story data for the development of two flood memory apps (in the UK and Brazil). Bringing together digital stories and flood memories from communities affected by flooding, these resources allow other communities and key stakeholders to learn from people's experiences. By mapping generations of memory onto at-risk areas, the information could improve preparations for flooding in future.

## Our impact

The Sustainable Flood Memory project has made a significant contribution to how the Environment Agency communicates flood risk. Professor Garde-Hansen's findings have been used to create new ways of informing communities in Gloucestershire and beyond, helping build resilience amongst those most under threat. By combining memories of the kindness of neighbours, the records of journalists and the efforts of the emergency services, future generations can learn the lessons of the past to help prepare for the future. Community flood groups, archive and heritage organisations, rural community councils and the Canals and Rivers Trust have all benefited from the project's research, all of which are stored permanently at the Gloucestershire Heritage Hub.

**“The ‘leave no one behind’ agenda that underpins the UN Global Goals has a strong connection to my research, which has helped to build the resilience of those most under threat of flooding in the UK and Brazil. This increased resilience contributes to SDGs 13 and 11 directly, but it also has broader connections to those goals that are most closely associated with the social, cultural and economic impact that flooding brings.”**  
**Professor Joanne Garde-Hansen**

## Protecting Marine Environments Must Start with the Community



A mangrove resort in Cambodia. Credit: Marco J Haenssger

Public awareness is growing of the damaging effects of overfishing. So what can be done to mitigate the environmental damage being caused?.

One way it is being addressed is through marine protected areas (MPAs). MPAs are protected areas of seas, oceans, estuaries or lakes designed to limit fishing. They are often heralded as a solution to the burgeoning problems of overharvesting and overexploitation of marine resources.

### Community understanding

In developing countries, there is still little understanding of MPAs' impact on local communities. Global targets for MPAs prioritise quantity over quality. They are often established without consultation or consideration of how humans interact with their environment. Community backing and support is vitally important so that MPAs can benefit both the ecosystem and local people. Social, economic and environmental consultations are needed to ensure community buy-in and adherence to rules and regulations. Understanding MPAs in developing countries is crucial for their success. A research project, led by the University of Warwick's Dr Jessica Savage, examined the impact of MPAs in Cambodia, a country still recovering from civil war.

Dr Savage and her team investigated the impact of MPAs and community support in three Cambodian coastal communities. "Without community buy-in, there's a risk that MPAs will fail to meet their objectives and cause community harm. This will negatively impact attitudes towards future conservation projects" explains Dr Savage. "We used interviews and questionnaires with various groups of people and a workshop with communities, NGOs and policy makers."

"We identified key themes and threats at various stages of implementing MPAs in order to help design and create MPAs that support sustainable use of marine resources. Preliminary findings are now being used in plans for community projects, including marine management, waste management and programmes to incorporate women into community development initiatives."

### Involving groups from across the country

A workshop conducted as part of this project was the first

**"Historically, marine conservation approaches have often focussed on ecological and/or economic targets, but without the crucial human component, they are often doomed to fail. If we can identify the barriers to success of Marine Protected Areas and use that information to support the improvement of management and implementation of MPAs, this should have a positive impact on multiple SDGs. In addition to the clear connection with SDG14 Life Below Water, this research also links to SDG15 Life on Land, SDG12 Responsible Consumption and Production, and SDG11 Sustainable Cities and Communities."**

**Dr Jessica Savage**

time that community members, policy makers, and NGOs from across Cambodia had come together to discuss these issues. The workshop's findings showed both similarities and differences in the way that communities use, and perceive, their immediate environment. This suggests a failure of the current 'one-size-fits-all approach' to MPAs.

This project generated a stakeholder-based perceptions map of the Cambodian Coastal Zone. All project partners have expressed interest in using this data to help with the development of future management systems.

### Looking to the future

"Our partners in Cambodia want to use the findings to identify barriers to the success of Cambodian marine management systems. Partners have also requested that we propose improvements to current MPA implementation and management programmes" continues Dr Savage. "Our workshop fostered greater communication between different groups of people. Most people showed interest in similar future events, as well as the development of a communication network for the various groups involved. Areas of interest included creating a 'lessons learned' programme, assistance with patrolling MPAs and conflict resolution strategies."

Through investigating interactions between humans, the environment and conservation, the project supports the United Nations Sustainable Development Goals of Life Below Water, Life on Land, Sustainable Cities and Communities and Responsible Consumption and Production.





## Warwick Cup Launches Reusable Cup Scheme

### Warwick Cup

1. **BORROW**  
a Warwick Cup for free
2. **USE**  
around campus
3. **RETURN**  
to a collection point



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



*Warwick Cup* is a student-led social enterprise which aims to reduce the waste produced by single-use cups through a reusable cup-sharing system on campus. This initiative was founded by Hollie Ryan, Maddie Booth, and Ellie Church, all of whom are studying Global Sustainable Development at Warwick. The project was launched at Curiositea on Monday 24th February 2020.

Throughout the world, single-use cups are a huge sustainability challenge. As reported by the House of Commons' Environmental Audit Committee, '2.5 billion coffee cups are used and thrown away each year in the UK - enough to stretch around the world roughly five and a half times - but less than 1 in 400 - just 0.25% - are recycled.' According to the Warwick Boar, in their incisive interview with the Warwick Cup founders, '750,000 single-use cups are piling up at Warwick each year'.

Warwick Cup believes that this problem cannot be solved by replacing traditional single-use cups with plastic-lined paper and compostable cups since these solutions contaminate the recycling system and emit more methane than a plastic cup once disposed in landfills.

Drawing on its founders' experience working in the highly successful Monash BorrowCup scheme, Warwick Cup has found a way to tackle the single-use waste problem at its root. The Corretto EcoCore Cups used by Warwick Cup (supplied by Bockatech) produce 96% less CO<sub>2</sub> compared to plastic-lined paper and compostable cups in relation to their whole life cycle (bpf.co.uk, 2020).

**Warwick Enterprise congratulates Warwick Cup for its progress and looks forward to supporting this cause, as well as many other student-led sustainability projects. We believe in students as change-makers, and we support them in their journeys!**

The Warwick Cup scheme can easily be summed up by their slogan, 'Borrow. Use. Return.' But in more detail, this is how it works:

**The customer is served a drink in a free Warwick Cup (currently only available at Curiositea, but launching in Library Cafe soon as well).**

**Having finished their drink, the customer returns the cup to one of six collection points located around campus.**

**In the evening, volunteers collect the returned cups and wash them using a rigorous process. Once dry, the cups are returned to the cafés, ready to be re-used the following day.**

The Warwick Cup team have done incredibly well to get so many different stakeholders on board, with support coming from Warwick Retail, Warwick Conferences, Warwick Enterprise, and of course Curiositea. Also present at the launch were Marta Guerriero, Jessica Savage, and Jess Holt (from the Global Sustainable Development department), David Chapman (Warwick Sustainability Champion), Ben Newsham (SU President), and Milly Last (SU Democracy and Development Officer). Alongside the big turnout of team-members and other supportive students, this shows how much buy-in Warwick Cup already has from a wide range of people.



## Equipping Future Leaders to Make Positive Contributions to Sustainable Development Throughout their Careers and Lives.

The Climate Emergency clock is well past midnight; while some social and economic inequalities are reducing, others continue to expand at a faster rate. Perhaps most concerning, many people, from all walks-of-life find it easier to imagine the end of the world, than radical transformation of our socioeconomic structures.

Students are increasingly aware of the need for new thinking and it is essential that academic institutions create a step change, embracing the bold, alternative approaches essential for genuine transformation.

Warwick's School for Cross-faculty Studies has developed a new MA.Sc in Global Sustainable Development. The postgraduate degree supports a new generation of transdisciplinary scholar-practitioners: intellectual thought-leaders for deep transformation around all SDGs, with a uniquely developed capacity for critical analysis, ethical self-reflection, and imaginative, problem-based, response-focused thinking.

Term 1 Core Modules build deep intellectual engagement. Through learning and assessment within "Leading Transformation in the Anthropocene" students reflect on Partnerships for the goals, building personal manifestoes to become a 'work in progress', codified statement of their formal philosophical reflection, critical evaluation of positionality, and evidence-based knowledge of participatory, transformative mechanisms. "Creating Knowledge for Change" pushes students beyond mono- and interdisciplinary experience to become transdisciplinary thinkers: they reconcile ontological and epistemological tensions in moving beyond the silos that limit positive change, and develop Master's level competencies in problem-based, response-focused knowledge creation. "Global Challenges and Transdisciplinary Responses" reaches outside of the standard scope of sustainable development. Students consider, for example, the background role of entropy in relation to numerous goals (1,2,3,6,7,8,9,10,11,12) and management of Reduced inequalities (4), including gender (5), during potential social collapse and biospherical functions (13,14,15).

Through critical sustainable development praxis modules, students learn knowledge around the creation, analysis and implementation of "Sustainable Development Policy", and "Design Thinking for Social Impact" (16). This practically focused grounding is contextualised through further interdisciplinary thematic Optional modules, such as "Socially Engaged Performance: Interventions and Provocations", "Urban Resilience, Disaster and Data" and "Education for Sustainable Development", cover related goals (4,9,10,11).

Finally, learners complete a 3-month capstone experience that maps, critically, to one or more of the SDGs. The Research-based option is realised through either a traditional thesis, journal article or policy briefing document. The Work-based module promotes self-reflective, action-based learning on

**"Whether changes we look to make are small-scale and local, or far reaching global interventions, they must start with rigorous critical enquiries and deep self-reflection."**

**Dr Mandy Sadan**

the role of personal and organisational agency in change and transformation. The Project-based capstone requires a synthesis of learning through a student-defined project, with our default option, an invitation to contribute towards delivery of University's Climate Emergency carbon reduction targets (Image 2).

The new courses enables students to move beyond disciplinary and interdisciplinary approaches towards transdisciplinary, problem-based and response-focused thinking for sustainable transformations. It realises the philosophical heart of Higher Education learning, despite the significance and gravity of practical application.

The aim of the course is to equip future intellectual leaders with the skills to practice deep, personal self-reflection, increasing their ability to make effective, positive contributions to sustainable development throughout their careers and lives and within their fields of expertise.



## Critical Engagement with the SDGs

The Department of Politics and International Studies offers a series of courses at undergraduate and postgraduate level which engage with, and encourage reflection on, the Sustainable Development Goals. These include:

- BA Optional Module (2nd year): Politics of International Development
- BA Optional Module (3rd year): Gender and Development
- BA Optional Module (3rd year): Latin America: Democratisation and Development
- MA Core Module: Theories and Issues in International Development
- MA Optional Module: Transitional Justice and Development
- MA Optional Module: Democratisation and Development
- MA Optional Module: East Asian Development Policies
- MA Optional Module: East Asian Development: National and Regional Perspectives

Teaching and learning activities encourage a critical approach to the SDGs that challenges understanding them as separate goals; rather we treat these as interconnected, overlapping, and sometimes standing in tension with each other. For example, in the MA module Transitional Justice and Development, students learn about the work of the United Nations Working Group on SDG16 and how international policy agendas are shaped and contested. They hear first-hand from a member of the Working Group about how a particular report was written. They are encouraged to reflect on the content and its alignment with the SDG agenda as well as alternative ways of understanding international development.

Similarly, in the MA module Theories and issues in International Development, students are encouraged to critically examine SDG 5 and 8 together to understand how the two may be seen in tension with each other and how this might be resolved. The students write assessed policy papers that focus on different SDGs from standpoints of governments, non-state actors and activists to reflect on the importance of and challenges to SDGs. The undergraduate module on Gender and Development also focuses on these two SDGs. The Warwick Interdisciplinary Research Centre for International Development runs a student blog prize, where the short-listed entries are published as part of the Think Development series.



**“Take the first step towards making progressive change wherever you are through developing your critical and interdisciplinary thinking and research skills through co-production of knowledge and knowledge exchange with students and staff from across the world at the Department of Politics and International Studies Department and Warwick Interdisciplinary Research Centre for International Development.”**

**Professor Shirin Rai**



## Climate Emergency Declaration

The University declared a Climate Emergency in September 2019, which recognised that we have a responsibility as a community and organisation to help combat climate change through our individual actions, our research and teaching, and how we run and develop our University. Alongside our declaration, we also set new carbon reduction targets to:

- Reach net zero carbon from our direct emissions and the energy we buy by 2030 (our scope 1 and 2 emissions); and
- Achieving net zero carbon from our indirect emissions by 2050 (our scope 3 emissions).

In response to the declaration the Climate Emergency Task Force was formed to provide greater coordination of existing sustainability activity and ensure we fully considered and addressed the breadth of activities relevant to environmental sustainability in higher education. The Task Force reported to Chris Ennew, Provost, the executive sponsor for sustainability.

Whilst carbon emissions are key to fighting climate change, the University recognised carbon neutrality in itself could not deliver a sustainable society. The University recognises the importance of the UN-SDG framework and intends to progress its decarbonisation at the same time as progressing its contribution to the UN-SDGs. This may be achieved through organisational changes, education and research critical thinking contributions.



## Waste

The University understands the complexity of society expectation for continuous consumption of goods and the cost impact on the less affluent, as well as the negative impact on the environment from consumption of natural resources.

A number of initiatives took place with the aim of reducing waste production and increasing recycling rates in addition to introducing University communities to the concept of a circular economy.

**RAWKUS** are a group of volunteers who work to tackle waste in accommodation. At the end of each term, they come together to remove the leftover food that is still in date and edible as well as unwanted goods from halls of residence. The food and goods have traditionally been collected and then distributed to local charities in Coventry and Leamington.

During the June and September collections eight tonnes of food surplus and other items were collected. This food was donated to local foodbanks and charities and the other items, such as kitchenware, was stored over the summer. The items were then sold at a 'Pay as you Feel' event during the arrivals weekend which saw huge support from new students, returning students and staff alike. More than £3,500 was raised and donated to Action 21 a local environmental charity.

The first of the University's **reStore** pop-up events took place in July 2019. This is a joint initiative between the Environmental Sustainability team and the School of Engineering Build Space. The events are an informal get together in which people bring along, repair and upcycle everything from electrical and mechanical devices, to computers, bicycles and clothing using the tools and equipment available with the help of some expert repairers and makers.

The University took part in the **NUS RecycleLeague pilot**, which was a national recycling competition in UK universities. The University worked to reduce waste production, increase recycling rates and raise awareness of the importance of resource use.



## Community Involvement

The Building Fabric team from Estates Maintenance undertook a community project at St Peter's Primary School in Leamington Spa during the Covid-19 lockdown when many of the team were on furlough. The team picked spent three days painting classrooms, stairways, cloakrooms, toilets, hallways, railings and playground equipment. They waxed benches and even did a little bit of pointing on the external walls.

The project was generously supported by Dulux, who donated more than £1,000 worth of paint and materials. And thanks to a donation of plants from Morrisons, the team was able to brighten up the playground too. Local business Murphy's delivered breakfast each morning, making sure everyone was fuelled up for the day ahead.



## Sports and Wellness Hub

The University's 40,000m2 Sports and Wellness Hub opened in May 2019 and includes a multi-functional sports hall; the biggest gym in the higher education sector; a 25m-long swimming pool; 17m-high indoor climbing walls; fitness suites; and squash courts. It is designed to be physically accessible to all to encourage participation by all, for example there are Changing Places facilities and a Pool Pod lift.

The Hub was designed and built with sustainability at its core, for example PV panels were installed on the roof. In addition, extensive in-house monitoring took place once the building was opened to identify further energy savings. Within the first year, energy savings of more than £40,000 were being delivered with a carbon saving of approximately 98 tonnes. It has become the most energy efficient leisure centre in the UK, performing 27.5 percent better than CIBSE's Energy Benchmark. Since the building opened it has won the RICS Social Impact 2020 award in the Leisure category and subsequently the West Midlands 'Project of the Year'.

In addition to the energy efficiency features of the building, the Hub has a wildflower area and wetland areas with greatly enhance the biodiversity of the campus and provide valuable habitat corridors to the surrounding area.



**"At times such as this, it is more important than ever for us to work together with our regional neighbours and partners as a single community."**  
**Professor Stuart Croft,**  
**Vice-Chancellor and President**






As indicated in our Introduction, this second report was an attempt to build on our first report from 2018/2019 and to move away from treating the reporting process as a routine “tick-box exercise”. Seeking to develop innovative, interdisciplinary, nexus-thinking, however, raised several new issues and challenges for the university community, which we share here for wider engagement and debate:

1. How can or should the University of Warwick move beyond “business as usual” to develop a genuinely aspirational as well as a pragmatic “vision”, towards a more sustainable world?
2. To what extent should various connections with and through the UN SDGs shape the development of the University’s evolving strategy?
3. How can we increase wider recognition of and critical engagement with SDGs from faculty and students?
4. How do we best consult with and engage faculties and departments to develop strategies in response to issues raised by the SDGs?
5. How do we ensure that we consider accessibility and reducing inequality in all its forms in our offerings across campus and the University?
6. For researchers, how can we encourage greater awareness and working with an interconnected approach to SDGs?
7. What resources in terms of staff and time do we need to improve how and what we do at Warwick regarding the SDGs?
8. And finally, what should be the future of SDG reporting at Warwick?

We strongly welcome any feedback from the University members and the general public reading this report to ensure we continue developing our reporting and practice in line with our ambitions for a sustainable future.

**To find out more:**

-  [warwick.ac.uk/SDG](http://warwick.ac.uk/SDG)
-  [sustainability@warwick.ac.uk](mailto:sustainability@warwick.ac.uk)
-  [@WarwickUniSust](https://twitter.com/WarwickUniSust)

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