UNIVERSITY OF
GLOUCESTERSHIRE

Annual Sustainability Report 2019-2020

Number 1 UK University for Sustainability

University of Gloucestershire
1st place
people & planet
UNIVERSITY LEAGUE 2019

RCE
REGIONAL CENTRE OF EXPERTISE
ON EDUCATION FOR
SUSTAINABLE DEVELOPMENT

ACKNOWLEDGED BY
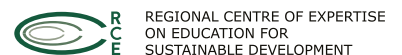
UNITED NATIONS
UNIVERSITY

Stephen Marston
Vice-Chancellor,
University of Gloucestershire

I am delighted to share our Annual Sustainability Report for 2019-2020, a year that brought unexpected changes that affected the lives of our students, colleagues and partners everywhere.

In the report we celebrate as usual our main results and successes for sustainability. We are incredibly proud of our students and colleagues who continue to lead this positive change.

This report highlights the critical issue of climate change and carbon emissions reduction, which is an important concern for many students and staff, as shown in some of the actions they have taken.

We have met all the goals of our 10 year carbon strategy up to 2020 and are now developing a new 'net zero' carbon strategy. Due for release in 2021, its aim will be to cut our emissions further over this decade through to 2030 and play our part in climate change adaptation.

But we also consider the consequences of the Covid-19 pandemic for our efforts to cut emissions, reduce waste and improve biodiversity. We remain committed to these objectives, which will inform our plans for future patterns of work and study as they evolve in this decade.

Dr Alex Ryan
Director of Sustainability,
University of Gloucestershire

I would like to share our sincere thanks to everyone whose talents, solutions and dedication to create change shine out on these pages of our latest Annual Sustainability Report 2019-2020.

This year perhaps more than any other, the report reflects the huge social, economic and environmental changes unsettling our world. Our academic year began with youth climate action across the world and on our doorstep. It closed amidst the Covid-19 pandemic and the upheavals this has caused to all our ways of life, activities and priorities.

Resilience, innovation and collaboration have always been keys to unlock sustainability. As has often been said, one effect of the pandemic is that it showed our capacity to change direction fast when faced with an urgent need to do so.

It has also reminded us clearly about the need to restore and protect nature to support our wellbeing, as the two priorities are so deeply interlinked. It gives us hope and confidence that our university community remains so active in working together for a more equal, healthy and ecologically viable future.

Contents

Introduction

Welcome to our Annual Sustainability Report 2019-2020 - the fourth report on the delivery of our Sustainability Strategy 2017-2022.

It shares our positive sustainability impact through learning, research and partnerships, and our ongoing work to reduce the negative impacts of running our University.

The report covers all 5 goal areas of our Sustainability Strategy:
- **Leadership and governance**
- **Student experience**
- **Academic innovation**
- **Business operations**
- **Engagement and partnerships.**

Sustainability is one of 6 cross-cutting strategic pillars of our University Strategic Plan 2017-2022. This report evidences our oversight of sustainability development and enables public scrutiny of our performance by stakeholders inside and outside the university.

The Annual Sustainability Report is compiled with input from senior managers and academic teams as well as our Students' Union and external partners. It is reviewed and approved by University Executive and University Council. Our Annual Sustainability Report is a tool for sharing our progress as well as guiding our teams in annual planning and priority setting. The images you see in this report are our actual activities and the people who led them.

The report explains our top risks and priority challenges, linked to the performance improvement targets of our externally audited Environmental Management System (EMS), which is accredited to ISO 14001: 2015. Performance against our EMS targets for our main material impacts is shown on page 6. This year we have included an overview of sustainability issues arising in our response to the Covid-19 pandemic on page 25.

It also shows the important material impact of integrating sustainability into student development and academic activities. This creates positive benefits and ongoing legacies as we equip our people to take sustainability forward in all industries and professions.

Regional Centre of Expertise

The University is a designated Regional Centre of Expertise (RCE) in sustainability education, acknowledged by the United Nations University.

The RCE logo shows how we work with our partners on sustainability learning activities for mutual benefit.

REGIONAL CENTRE OF EXPERTISE ON EDUCATION FOR SUSTAINABLE DEVELOPMENT

ACKNOWLEDGED BY

UNITED NATIONS UNIVERSITY

Reporting on the UN Global Goals

This report meets our annual reporting commitments on the SDGs as an institutional signatory to the tertiary sector SDG Accord.

On pages 26-27 we record how the actions and results shown in this report contribute to the delivery of the UN SDGs.

Impact highlights

Our top sustainability stories for 2019-2020 are shown below, with our headline impacts for overall performance, operations, student experiences, academic impact and partnership activities:

Newly released sustainability publications

Green Gown Winner 2020 Research Impact

63% carbon emissions cut since 2005

Oxstalls campus nature solutions award

Community learning projects featured by UN

Who Cares communication campaign

University staff award in sustainability

The following staff were shortlisted as the finalists for our 2020 Sustainability Staff Award:

- **Communications and 'Who Cares' campaign team** - Communications, Marketing and Student Recruitment

- **Professor Adam Hart and Professor Anne Goodenough** - School of Natural and Social Sciences

- **Students' Union Officers team** - Imaani Mitchell, Gemma Mainwaring, Phoebe Crook and George Berry.

Congratulations to our winners - the Students' Union Officers!
The SU team banned plastic bags from Freshers' Fayre, worked with our caterers to reduce single use items and improved SU sustainability practices. They also supported sustainability communications and engaged student societies with the Live Smart challenge.

UK Green Gown Awards 2019

The university was recognised in 3 categories:

Winner - Research with Impact Professor Adam Hart and Professor Anne Goodenough

Finalist – Sustainability Institution of the Year

Finalist – Total Reporting

UN Regional Centres of Expertise Awards 2019

Outstanding Flagship Project - Radical Sustainability partnership with Interface

National Recognition
Miriam Webb

Our Sustainability Engagement Manager Miriam Webb was chosen from hundreds of nominees for the Edie '30 under 30' young sustainability leaders to watch in 2020. Miriam was recognised for connecting living and learning in sustainability through the Live Smart partnership with students, LIFT curriculum change projects and RCE Severn community engagement activities.

Operational performance

This Annual Sustainability Report records our performance against the objectives of our Environmental Management System (EMS) which is accredited to ISO 14001: 2015 and audited by British Standards Institute. The EMS passed its full recertification audit in 2020, with positive auditor report on its performance and maturity.

EMS targets performance

Running an EMS and reporting on progress is key to our sustainability governance and is the system for identifying risks and reducing negative impacts, as well as addressing the concerns of stakeholders. The table below shows performance against high-level operational targets of our EMS (last year's % shown in brackets).

EMS Objective	19-20 Data	18-19 Data	Target	19-20 Result (18/19 %)	Status
Reduce % carbon emissions scope 1 & 2 (against 2005 baseline)	1,955 tonnes	2,119 tonnes	40%	63% (47%)	🟢
Reduce % waste produced (against 2010 baseline)	216 tonnes	323 tonnes	25%	63% (44%)	🟢
Increase % waste diverted from landfill (against 2010 baseline)	ZERO	ZERO	81%	100% (100%)	🟢
Increase % waste recycled (against 2010 baseline)	109 tonnes	176 tonnes	75%	51% (55%)	🔴
Reduce % water consumed (against 2010 baseline)	40,702 m³	68,880 m³	30%	9%*	🔴

🟢 **Target met** - we need to keep it up   🟠 **Target in sight** - we are nearly there   🔴 **Target not met** - we need to do better

* Change of supplier highlighted previous data inaccuracies – baseline reset from 19-20

EMS risks and improvement priorities

Our improvement priorities at the close of 2019-2020 are:

• Development and implementation of our new Carbon Strategy towards net zero carbon emissions, to reduce our reliance on gas heating, tackle staff-student travel emissions, and increase renewable energy generation

• Our recycling rate is not currently on target and the pandemic impact added to this although it did reduce waste arising – improving recycling will be prioritised as the pandemic eases

• Water use is now accurately metered and consumption is back to expected levels but reduction targets will be reviewed in light of the pandemic effect of increased cleaning and hand washing

• Catering services significantly reduced due to the pandemic and a planned review of services to improve on healthy food, plant-based protein and waste/disposables had to be postponed until business returns to normal

• Cross-site biodiversity policy needs development once we are able to resume on-campus surveys – a priority will be to review conservation improvements at Park campus.

Communications and Profile

Who Cares? We Do!

In 2020 the University took the bold step of retiring our printed prospectus and launching a new campaign for our 2021 application cycle.

The Who Cares campaign highlights the issues students care most about, for their university experience, future careers and sustainability of the wider world.

Key features included:

• **student-led content** - accessed via wildflower planting wristbands with QR codes

• **digital prospectus** - with podcasts on the campaign areas and sustainability focus

• **sustainability promotion** – showing how we support our students to live and learn sustainably

• **industry engagement** – to inspire others to follow our move and consider ways to reduce waste.

Taking this stand on the 2.5 million prospectuses UK universities produce each year, we avoided the carbon and waste impact of publishing our previous 45,000 prospectuses annually. Savings on print costs were used to create new digital content which also involved students in the design and creation process.

The bedrock of the campaign is our number 1 status in the UK People & Planet league table which assesses all UK universities on 13 different sustainability impact areas, from operations to curriculum. The response from applicants and parents has been overwhelmingly positive.

Green marketing award winner

Who Cares won the 2020 Northern Marketing Award for 'Best Sustainable/Green Campaign'

The award recognised the impact of the campaign created by the University and Greater Manchester based creative agency, Waterfall.

"We loved this campaign, its principles and attitude. It's great to see something so bold, innovative and brave for this sector".

Award Judges' Feedback

Climate Change

Completion of our Carbon Strategy 2010-2020

All key goals met:

↘

Exceeded our 2020 goal of 40% emissions reduction since 2005 (scopes 1 and 2)

↘

BREEAM Excellent - status achieved for major construction projects

↘

We now emit 2,000+ less tonnes of carbon annually than 10 years ago

↘

We fully divested from fossil fuel in 2018 with immediate effect

In 2019 climate change was highly visible on the public stage. Staff and students pushed for more action to cut the University's carbon footprint and bring this issue to wider audiences.

This year we joined a new £50m energy purchasing consortium with 19 other universities that sources power from a portfolio of UK windfarms to improve our energy profile.

We also reached 63% carbon emissions reduction for scopes 1 and 2 in 2020 although this was an unusual year with lower energy use due to the coronavirus pandemic. Find out more on page 20 about our energy management and carbon reduction work.

We take seriously our duty to educate and engage people on climate change and our work to reduce our footprint. Key activities this year:

- Vice-Chancellor Stephen Marston has been active in the Environmental Association of Universities and Colleges Climate Commission to drive net zero emissions in our sector

- Student's Union Green Team led the 1,000 strong Cheltenham climate strike with local people and school children in September 2019 and took a petition for stronger emissions reduction action to Cheltenham Borough Council

- Invited podcast for Edie's Sustainable Business Covered series, featuring our low carbon Oxstalls development and its links to sustainability strategy and education

- Feature interview given to Times Higher Education and 'Tackling the Climate Emergency' webinar with low carbon leaders Interface

- Climate change focus chosen for Interfaith Week event 2019 with input from student members of Gloucestershire Youth Climate Panel and over 120 local people.

Biodiversity Improvements

In 2019 we completed the rewilding project at our Oxstalls campus.

Part funded by the European Regional Development Fund, it included:

- Re-wilding Wotton Brook to Plock Court Wetland Reserve - natural verges and wildflower meadow with poppies, daisies and marigolds

- Improved biodiversity with replanted hedgerows and wildlife habitat developments, strengthening green infrastructure links across the site

- Reduced flood risk in this area affected by the 2007 floods that damaged over 5,000 homes and businesses in the county

We are working to update our biodiversity policy and exploring new tree planting, wildflower meadows and wildlife habitat opportunities.

Francis Close Hall is Hedgehog Friendly

Staff and students collaborated to gain Bronze Hedgehog Friendly Campus status for Francis Close Hall.

The Hedgehog Preservation Society badge recognised actions to:

- keep the FCH campus litter free
- allow hedgehogs to move freely between campus and local gardens
- reduce risks to hedgehogs from strimming and mowing
- raise awareness via social media.

These actions help tackle the declining UK hedgehog population and support wildlife at FCH - also home to an established colony of swifts.

Nature-based solutions award

The project won an award for 'nature-based solutions by the Countryside Charity Gloucestershire branch of the Campaign to Protect Rural England.

Watch this film to learn about the project and the award.

Live Smart

Live Smart is our student-led engagement programme that delivers transformative experiences and practical opportunities in sustainability that build skills for positive change. Run in partnership with students, it helps students and staff to live in smarter ways that support wellbeing, save money and build community while protecting the planet.

Team

2 students took paid specialist roles to shape and deliver activities on Live Smart's themes in collaboration with other University teams, community partners and students:

Charlotte Homer (Law) - Live Smart Co-ordinator
Nikki Rimmell (Geography) - Communications Officer

"Working in the Sustainability Team as Live Smart Co-ordinator I've learnt so much: how to envision alternative futures and influence not just individuals but whole systems to create change."
Charlotte Homer - Law student and Live Smart Co-ordinator 2019-20

Activities

Communications
Student-led blogs and social media content to help students live smarter. New content created in the pandemic included the 'Live Smart at Home' and 'Short course Saturdays' series.

Events
Bike maintenance on campus to support active travel and a series of online interactive activities adapted during the lockdown.

Challenges
Community collaboration opportunities to develop employability and influence regional sustainability through action and innovation.

5 minutes to change the world

We adapted our planned community festival at Gloucester Cathedral in March and worked with local partners to run interactive 5 minute action-focused short talks with a panel discussion on Facebook Live. Speakers explored regional sustainability themes from a range of perspectives including diversity, business, youth and religion.

Community Challenge

- 19 students and 20+ partners took action in a range of areas including developing climate adaptation plans, designing community green spaces and improving biodiversity

- 10,000 social media impressions generated by videos celebrating challenge projects and results

Individual Winner:
Yolande Booyse – Cheltenham Climate Strike action

Team Winner:
Elijah and Michelle – Green Space action with Gloucestershire Wildlife Trust

Student-led communications

- 27 blog posts with 5 student collaborators

- 5 minutes to change the world reached over 3,000 people on social media

Students Union

Green Team society

Our students' Green Team President led students and local people on the Cheltenham climate action in September 2019 – see the story on page 8.

Following their big climate strike action, students led conversations during the year around climate change and conservation issues through film nights, podcasts and discussion groups.

As follow up the President then met with the Vice Chancellor and other senior leaders to discuss student opinions about the university's next steps on carbon reduction.

Green Team also attended a national education and climate conference and were invited to speak at a number of regional engagements including guest lectures, council meetings and BBC Radio interviews.

National Union of Students - Green Impact

Our SU have maintained 'good' Green Impact status for their own sustainability performance and worked with BAM events agency to improve practices such as the removal of plastic bags at welcome fayre.

Plastic Free Cheltenham Champions

SU officers met with Plastic Free Cheltenham and committed to be plastic free champions by removing single-use plastic from SU bars.

Fairtrade action

In February SU hosted and judged a Fairtrade bake off to raise awareness of Fairtrade ingredients as part of Fairtrade Fortnight.

Glos Goes Green

The Glos Goes Green competition led by the SU saw 18 societies and sports teams logging their positive actions for sustainability through social media to compete for prizes.

Society winner:
Tone Radio

Sports Team winner:
Table Tennis

Learning experiences

Many universities map their course content relevant to sustainability but we aim to go further. We are designing it into whole course experiences including assessments and teaching methods.

This is education for sustainability - not just providing expert knowledge of sustainability, but developing graduate skills to apply it to all professions, with assignments that empower students to drive system change.

Here we share a sample of this year's curriculum stories, including change projects supported by our Learning Innovation for Tomorrow fund.

MBA Seminar with Interface

Industry partners and corporate sustainability leaders Interface treated our MBA programme to a site visit and executive seminar at their new Birmingham HQ in 2019.

Interface senior leaders presented to students on how they connect financial viability with a pioneering sustainability change journey and flooring product innovations that support their zero carbon goals.

Sostenuto – sustainability in the music industry

The Sostenuto project saw the Music Business academics and students collaborating to change the course experience and develop its professional focus on sustainability.

Phase 1 used student and industry viewpoints to create good practice principles, new partnership opportunities and revisions to course design and assessments, to reflect sustainability priorities.

Phase 2 of the project is engaging local creatives and industry partners to develop a professional toolkit, although this element was delayed into 2021 due to the pandemic.

Funded by our LIFT: Learning Innovation for Tomorrow programme

Client brief for Digital Marketing

Our Digital Marketing team invited the Sustainability team to be the live client for their research methods module, exploring how to authentically research, communicate and promote sustainability in course experiences, not just campus practices.

Decolonising Learning

Our Decolonising Learning project aims to uncover and change the hidden biases in university life that are linked to histories of colonisation that can reinforce uneven and unsustainable development.

This university-wide initiative started just before the renewed focus on #BlackLivesMatters in 2020 and is an ongoing commitment for the university in the coming years. The core team includes members of our BAME+ staff/student network, Equality & Diversity Manager and Sustainability Team.

Phase 1 focused on Decolonising the Curriculum with creation of an online teaching resource with tools to support academic teams to redesign course experiences and teaching practices.

Plans to expand culturally diverse messaging in our formal and informal spaces on campus had to be put on hold due to the pandemic but will be taken forward once lockdown restrictions ease.

Funded by our LIFT: Learning Innovation for Tomorrow programme

Brief Cases – Sustainable Futures design challenge

Graphic Design students were assessed against an industry brief as part of the Brief Cases initiative led by sustainability specialists The Heaven Company. Their challenge was to share their designs for sustainability through social and printed media, identifying and supporting one of the UN Sustainable Development Goals (SDGs).

Project outputs included campaigns to encourage children to grow food, apps to reduce food waste, and projects encouraging people to sell their pre-loved wedding apparel.

Student-led performance project on climate change

A part of their collaborative project, Performing Arts students were asked to put on an event or performance working with a group or individual outside of their subject community. Emma Kelly developed an exhibition and performance on climate change with donations supporting Gloucestershire-based sustainability charity, Vision 21.

Student research with young people in Gloucestershire

Sociology students studying research methods surveyed over 500 young people aged 5-25 across Gloucestershire, creating a report using the UNICEF Child Friendly Cities framework and Sustainable Development Goals, tracking youth priorities for sustainability. Their top issues were access to green and unpolluted spaces for wellbeing, plus better waste, recycling and public transport to combat climate change.

Research highlights

Research developments focused on sustainability challenges are developing across our Academic Schools, many of them working with partners focused on the implementation of findings in ways that can drive change and build collaboration with key stakeholders at local and global levels.

Our highest performing research institute, the Countryside and Community Research Institute, secured over £1,151,845 of income for research geared to sustainability in 2019-20.

UK Research Impact award

The University was delighted to celebrate 2 senior academics who won the UK Green Gown Award for Research Impact in 2019.

Professor Adam Hart and Professor Anne Goodenough applied low-cost thermal imaging solutions to reduce rhino poaching, working with experts at Mankwe Wildlife Reserve in South Africa.

From a start point of losing 1/3 of their white rhino population, Mankwe have recorded no further poaching losses since solutions were put in place in 2015 and the rhino population has now grown by 50%.

Adam and Anne's research was praised by judges for its conservation outcomes, financial benefits, partnership working and improving the safety of rangers on the ground. Further solutions are now being developed with partners at reserves in Namibia and Botswana.

Capacity Building for Conservation

Dr Mark O'Connell from our School of Natural and Social Sciences delivered the fourth global Capacity Building for Conservation conference at the Zoological Society of London (ZSL) in 2019.

Supported by partners including Fauna & Flora International (FFI), it gathered researchers addressing severe environmental challenges with the focus on bringing together:

- Emerging issues for building global capacity - planned publications exploring regional, gender and professional perspectives

- UoG research identifying priorities for scaling up capacity building in sub-Saharan Africa, based on expertise from 24 African nations.

SUFISA project completed 2019
Countryside and Community Research Institute

The 4 year SUFISA (Sustainable finance for sustainable agriculture and fisheries) research consortium led by Catholic University Leuven in Belgium focused on identifying practice and policy to support sustainability with primary producers in agriculture, fisheries and food sectors across Europe.

Funded by EU Horizon 2020, it used large scale surveys to assess differences and market conditions across 22 European regions, to guide the development of healthy and resilient food systems.

Our CCRI team led the research on:

- Case studies from 11 countries covering arable, aquaculture, dairy, fisheries, fruit, meat, olives and wine

- UK in depth analysis with over 200 producers to explore the issues for dairy in Somerset and fisheries in Cornwall.

Congratulations to Professor Kenny Lynch

Kenny Lynch was promoted to Professor of Development and Communities, recognising his work with communities in the UK, Sierra Leone and India. His research supports vulnerable groups and focuses on sustainability issues from sanitation to urban cultivators. He has pioneered research-based teaching that places students actively in organisations to develop applied professional skills to drive positive change.

New sustainability book publications

Academic staff released a range of new books showing our diverse research in sustainability.

The Sustainable Development Goals: industry sector approaches
Dr Martin Wynn and Professor Peter Jones' book explores how priorities, reporting and targets are advancing in 8 industry sectors to support the global sustainable development goals.

Ecolinguistics: Language, Ecology and the Stories We Live By
Professor Arran Stibbe released a 2nd edition of his ground-breaking book revealing the stories of an unsustainable world and language for more equal, ecological societies.

Unfit for Purpose: when human evolution collides with the modern world
Professor Adam Hart examines the mismatch between our evolutionary heritage and current ways of life to consider how we can limit damage to our wellbeing and environment.

The World We'll Leave Behind: Grasping the sustainability challenge
Dr Paul Vare with Professor Bill Scott of University of Bath published an overview of challenges in sustainable development, plus ideas for action to drive change.

Partnerships and collaboration

Collaboration is key for our sustainability impact and we work with a wide range of partners, networks and organisations to achieve shared goals.

Some of this work takes shape through RCE Severn, our Regional Centre of Expertise in sustainability education, part of a global network of university-community learning hubs co-ordinated by the United Nations University.

REGIONAL CENTRE OF EXPERTISE ON EDUCATION FOR SUSTAINABLE DEVELOPMENT

ACKNOWLEDGED BY

UNITED NATIONS UNIVERSITY

Hawkwood College - Climate Action Lab

Dr Alex Ryan and Miriam Webb collaborated with Yolande Booyse, President of the students' Green Team, to deliver a workshop on system change for the Climate Action Lab at Hawkwood College in Stroud in March 2020. The event connected sustainability pioneer Mike Berners-Lee with leading organisations such as Triodos Bank and Ecotricity, and campaign groups such as Stop Ecocide and City to Sea, to share practical sustainability actions for our businesses and homes.

Question the Professional online series

Hosted by a current student during the spring lockdown, this short series of Facebook Live interviews featured 3 professionals linked to our Radical Sustainability local business network. The series helped students to see beyond sustainability stereotypes and gain insights into system change for sustainability in different job roles and sectors.

UN 5 year highlights publication

In 2020 the UN Regional Centres of Expertise in sustainability education celebrated their best collaborations with a new publication on RCE projects internationally delivering the UN Sustainable Development Goals.

The University's 'Thread Counts' sustainable fashion initiative was one of 12 projects selected from the award-winners of the past 5 years across the network of 175+ RCEs worldwide. The publication was released as an interactive flipbook and PDF publication.

Thread Counts started in 2017 as a collaboration between the Fashion Design and Product Design course teams working with local partners such as Atelier Stroud and recently extended collaborations with local schools working with Cheltenham Education Partnership.

Sharing educational strategies with UK independent schools

In September 2019 the university joined the annual conference of the network for Heads and Governors of leading UK independent schools. Our Vice Chancellor Stephen Marston and Chancellor Baroness Rennie Fritchie presented the university's strategy and impact in sustainability, to share successful ways of driving sustainability change in education.

UN RCE European network conference

The UN RCEs European network met in Crete in September 2019 with 12 RCEs from 10 countries.

Dr Alex Ryan and Miriam Webb shared 'makerspace' local sustainability learning collaborations led by our academic teams in Product Design, Fashion Design, Music Business and Education:

- Regeneration – local repair café started with Vision 21

- Thread Counts – slow fashion initiatives with local partners

- Soundbites – digital devices and audio created from waste.

The RCE network exchanged recent initiatives on climate change, agriculture, ethical design and food security with an EU project consortium of universities from Crete, Egypt, Lebanon, and Jordan.

Supporting young people locally into sustainability careers

In January 2020 we joined South Gloucestershire and Stroud College at their employability EXPO linking students' professional aspirations to the UN global goals. Examples were shared from the university's professional services teams and the types of sustainability roles and careers that are now common across different industry sectors.

Current student achievements

Current students who have experienced sustainability assignments in their courses have gone on to win a range of awards linked to their industry sectors and the impact they can make as future professionals.

TRADA University Challenge - Winning Team

Kat Cookes – MA Landscape Architecture

Kat was part of the winning team of 6 talented students from various design disciplines and different UK universities, at the TRADA University Challenge held in February 2020.

The competition saw students tasked with designing, costing and engineering the best low carbon energy and water efficient community housing in less than 48 hours. Their designs had to factor in low or zero carbon buildings with a fabric-first approach, sensitive place-making and a community hub.

The team took first prize, beating 9 rival teams and winning a cash reward, for their timber-based housing scheme design in response to the rural site brief set by Wales & West Housing Association.

Earth Island Solutions Awards 2020

Maximising the business potential of sustainability with industry-linked Brief Cases projects focused on the Global Goals.

Daisy Farmer
BA (Hons) Graphic Design
Gold Winner
Project – Visually engaging seed packaging to encourage primary school children to grow their own food and reduce food waste.

2020 RSA Student Design Awards

Showing how design can unravel complex problems, explore possibilities and unlock new ways to meet the needs of people and the planet.

Sylvia Hiam
BA (Hons) Product Design
Finalist
Project – sustainable trainers built with circular economy principles to be repairable and recyclable.

Graduate professional impacts

Assessing biodiversity alongside building performance

Dr Gayathiri Shankar
PhD Landscape Architecture - completed 2020

A career in architecture and specialism in building assessments led Gayathiri to a PhD on sustainability performance standards. Her research explored how these tools can be extended to factor in the whole landscape and biodiversity of surrounding buildings, as well as their design and materials.

Having reviewed existing standards focused on energy and materials, she developed an expanded framework for use by organisations to carry out their sustainability appraisals.

Currently Principal Environmental Specialist at KBR consultancy, she uses her research to advise clients such as the Ministry of Defence on ways to modify tools to take full account of natural capital and to involve designers from the outset in construction that follows circular and lifecycle principles.

Habitat protection at Grass Roots Ecology

Samantha Perks
MSc Applied Ecology – Graduated 2019

Samantha is using insights from her Practical Ecological Methods module to undertake survey work and assessments to deliver net gains for biodiversity and to conserve habitats of protected species in Worcestershire.

Convenor at International Ecolinguistics Association

Jessica Hampton
BA Hons English Language and Linguistics - Graduated 2017

As convener for the International Ecolinguistics Association, Jessica has been investigating sustainability impacts in the Digital Humanities and pushing for a no-fly approach to international conferences.

Sustainability Technology Consultant

Laura Richardson
(BA Events Management – Graduated 2017

Inspired by her entrepreneurship module, Laura joined a sustainable tech startup to combat e-waste. As the sustainability advocate, she has driven the business forward and created partnerships contributing to corporate social responsibility.

Energy and carbon

Energy management and carbon reduction is critical for a cleaner economy and to tackle climate change. Our performance to date has been positive but we need to work harder and faster to move towards zero emissions. We track performance on direct carbon emissions (scope 1 and 2) against a 2005 baseline:
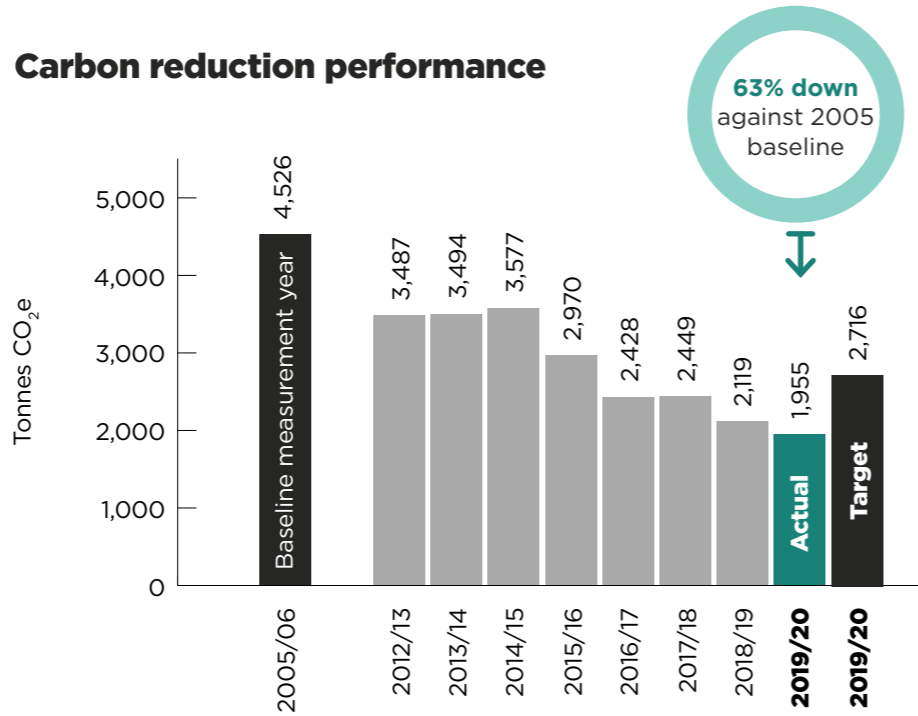
Guide to emissions

Scope 1 emissions – from directly burning fuels and the road fuels for our vehicles

Scope 2 emissions – from energy we buy and off-site generation of electricity we use

Scope 3 emissions – from activities we do not own or control like travel, waste and purchasing good and services.

Carbon reduction performance

63% down against 2005 baseline

Tonnes CO_2e

Year	Value
2005/06 (Baseline measurement year)	4,526
2012/13	3,487
2013/14	3,494
2014/15	3,577
2015/16	2,970
2016/17	2,428
2017/18	2,449
2018/19	2,119
2019/20 (Actual)	1,955
2019/20 (Target)	2,716

As the graph shows, we have now recorded 63% emissions reduction against the 40% target by 2020 in our Carbon Strategy 2010-2020. This takes account of our changing campus footprint and the unusual effects of the pandemic in 2020. Our net zero carbon strategy from 2021 will take the steadier year of 2018-2019 as its baseline year.
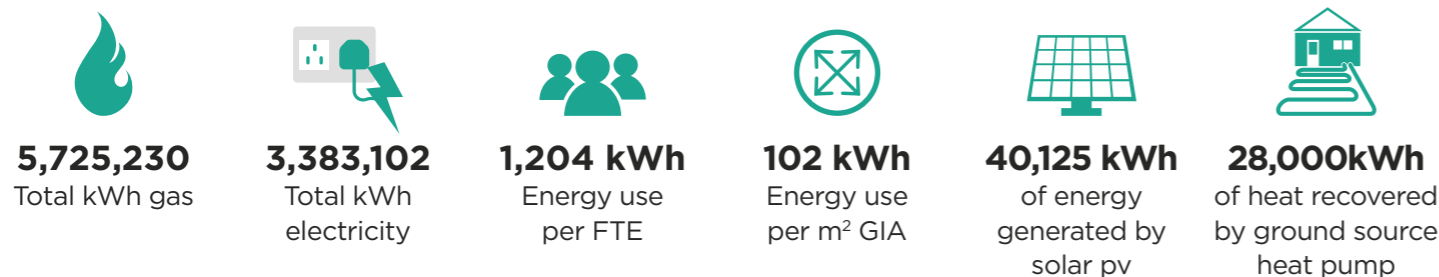
We also track Scope 3 emissions (suppliers and staff/student travel) which are around 80% of our emissions and must be reduced if we want to become a net zero organisation.

As well as recording total emissions, we monitor performance against relative measures. This give us an insight into real progress as we can compare against similar organisations. We use 3 relative measures:

25 tonnes CO_2 emitted per £1m of turnover

22kg CO_2 per m² of gross internal area (GIA)

258kg CO_2 emitted per FTE (students and staff)

Energy use and generation

We have purchased renewable energy since 1993 and we used **9,148,457 kwh** of energy in 2019-2020.
The figures below show how energy was used and generated across our campuses:

5,725,230
Total kWh gas

3,383,102
Total kWh electricity

1,204 kWh
Energy use per FTE

102 kWh
Energy use per m² GIA

40,125 kWh
of energy generated by solar pv

28,000kWh
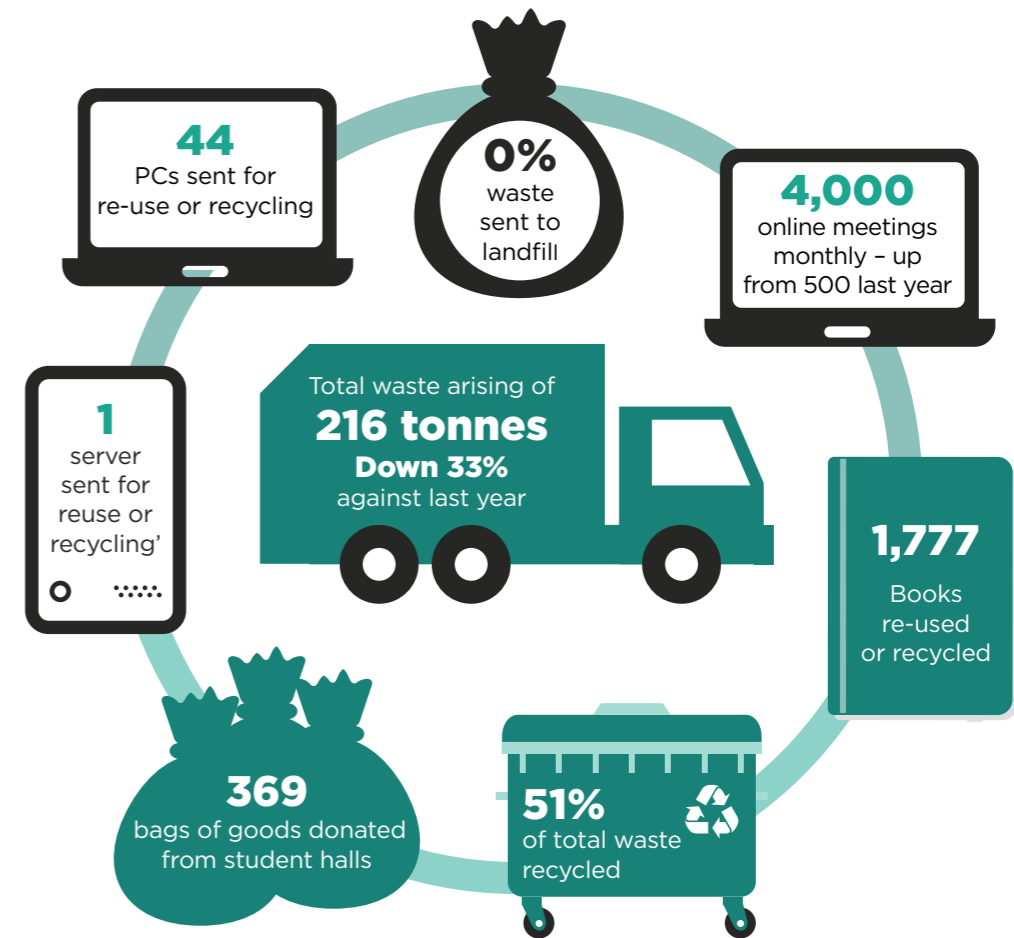of heat recovered by ground source heat pump

Resource use

Efficient resource use is an important improvement priority and we continue to record zero waste to landfill, working with our waste contractor. Inspired by our Who Cares campaign to drop the printed prospectus, we moved other key documents to online-only this year, including our IT and Library Guide for students and our Annual Sustainability Report.

Waste arising from our activities was lower this year due to reduced campus operations and occupation during the pandemic. Recycling rates are not currently on target and action is needed to address this.

We monitor and improve waste management and re-use in several key impact areas:

44 PCs sent for re-use or recycling

0% waste sent to landfill

4,000 online meetings monthly – up from 500 last year

1 server sent for reuse or recycling'

Total waste arising of **216 tonnes** **Down 33%** against last year

1,777 Books re-used or recycled

369 bags of goods donated from student halls

51% of total waste recycled

Value from Waste at Student Halls

We work with British Heart Foundation's Pack for Good initiative, creating value for the charity through donated goods when students move out of halls of residence.

Normally this averages around 1250 bags of goods annually, but with collections interrupted by the pandemic in 2020 this year's results were:

- **253 bags** from 8 donation points at our 3 main campuses
- **116 bags** from our new Pittville Student Village campus

Value to BHF was **£5,166** from these donations. Environmental benefits were:

- **2.9 tonnes** diverted from waste stream
- **61 kgs** of carbon emissions saved

Spaces and travel

Our sustainability plans are becoming more responsive to changes in workplaces, use of space and assets, and our patterns of study and work, to help us run our university responsibly and efficiently.

Space efficiency

We monitor the efficiency of our campus spaces by measures of Gross Internal Area (GIA) against our staff and student headcounts and review these ratios each year. We have a strong positive ratio on GIA efficiency for our sector and this helps manage the costs of our multi-campus spaces:

University GIA measure 2019-2020: **7.1 per student and staff FTE**
Currently available sector median: **9.9 per student and staff FTE**

Building performance

With a range of spaces across our campuses, including many older and listed buildings, we assess these annually to plan maintenance upgrades that can improve energy performance. Display Energy Certificates are part of our Environmental Management System and the 2019-2020 data shows:

Residential

B	C
57%	33%

Non - residential

B	C	D	F
17%	33%	42%	8%
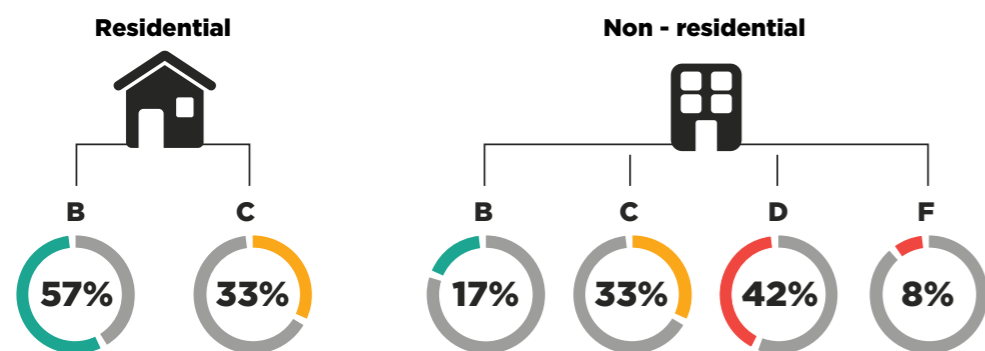
Cross campus travel

We survey our staff and student travel patterns across sites annually to understand choices and communicate incentives we offer for healthier and sustainable travel to improve air quality and cut emissions. At our Pittville Student Village, 2020 data show over 98% of students using sustainable modes overall.

Data below show the mode patterns of staff and students in 2019-2020 plus new students in September 2020 at all sites. There are slight increases in solo car use, but also in students and staff choosing to walk and staff choosing to cycle.

Some changes this year show the effect of the pandemic, such as drops in bus use and car sharing. Solo car use increased, particularly among staff, which needs to be reassessed as travel patterns settle after the pandemic.
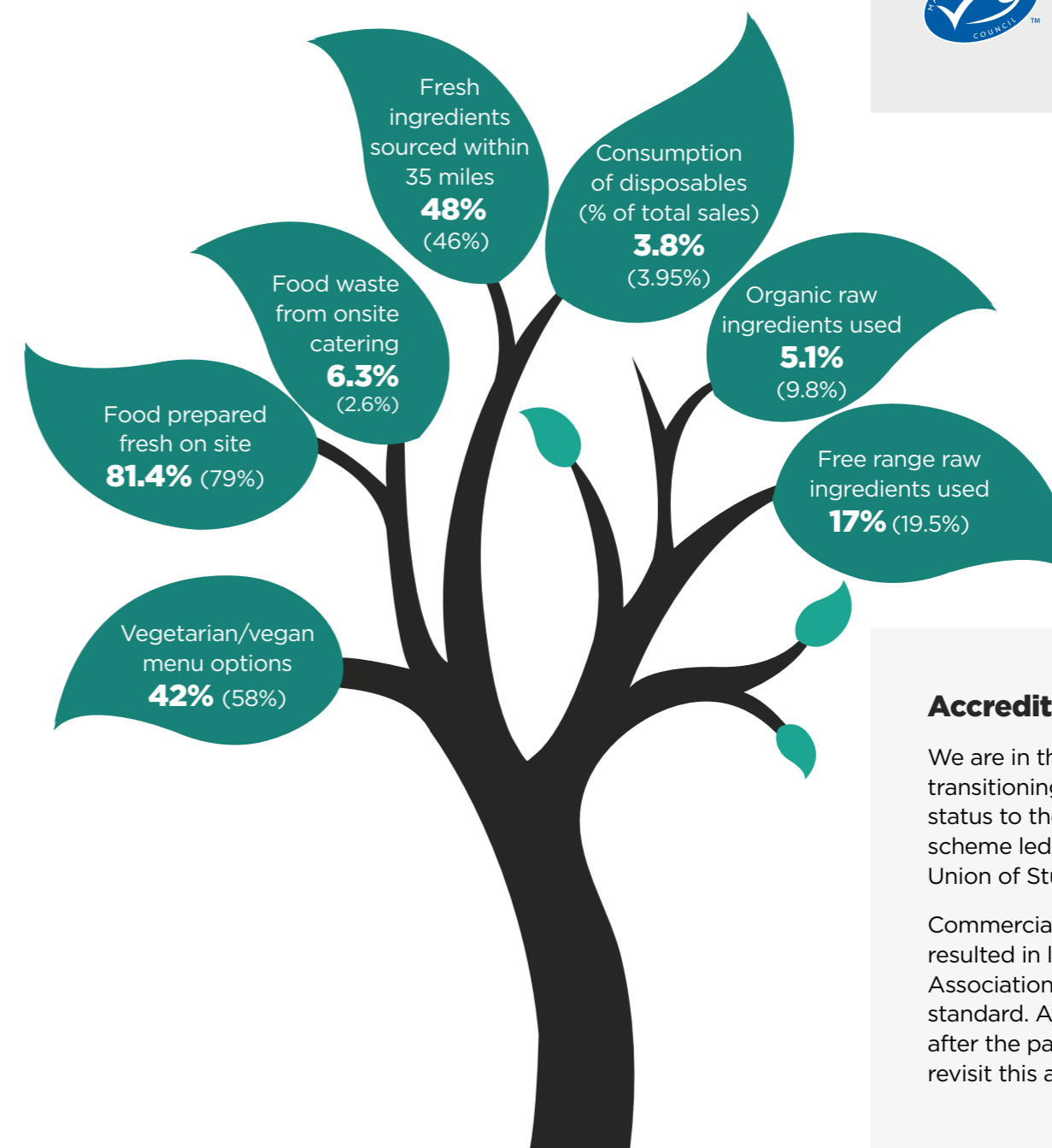
2020 Travel Survey Results (2019 results in brackets)	Solo car use	Car Share	Bus	Bicycle	Walk
Students (response rate 25%)	**27%** (26%)	**8%** (9%)	**12%** (17%)	**3%** (4%)	**44%** (40%)
Staff (response rate 48%)	**62%** (60%)	**3%** (5%)	**4%** (6%)	**11%** (9%)	**15%** (14%)

Food and wellbeing

Our caterers, BaxterStorey, work with our policy requirements on healthy, seasonal and responsibly sourced food, as well as good environmental management in our refectories and kitchens.

Monitoring of the sustainability indicators across our catering offer and how products are sourced is shown below. These indicators show performance for 2019-2020 (2018-2019 data in brackets).

The pandemic impact on the catering service was significant. It followed changes to menus in response to student requests for lower prices and new 'grab and go' choices to suit changing patterns of study on campus. The fact that positive performance was maintained on several target areas for sustainability is credit to the commitment of our caterers.

Fresh ingredients sourced within 35 miles **48%** (46%)

Consumption of disposables (% of total sales) **3.8%** (3.95%)

Food waste from onsite catering **6.3%** (2.6%)

Organic raw ingredients used **5.1%** (9.8%)

Food prepared fresh on site **81.4%** (79%)

Free range raw ingredients used **17%** (19.5%)

Vegetarian/vegan menu options **42%** (58%)

Accreditation held

We continue to specify:

100% of meat is Red Tractor scheme approved

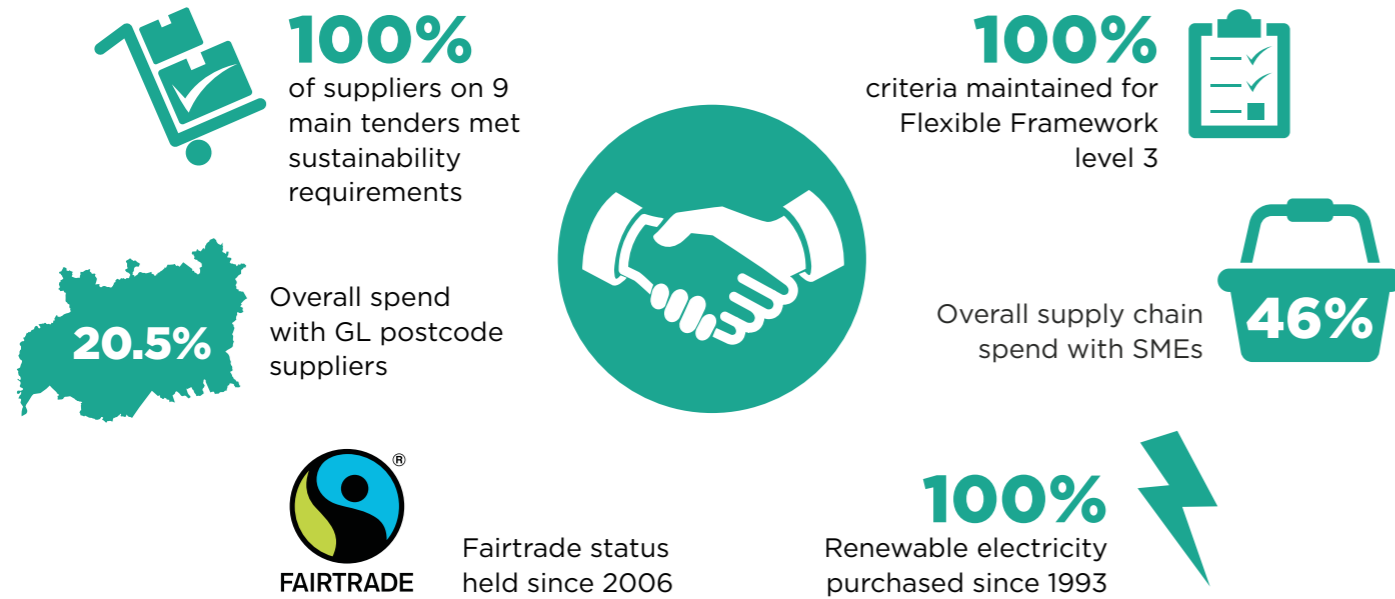100% of fish is Marine Stewardship Council approved

Accreditation changes

We are in the process of transitioning our Fairtrade status to the new accreditation scheme led by the National Union of Students.

Commercial pressures have resulted in loss of Gold Soil Association 'Food for Life' standard. As services resume after the pandemic we will revisit this accreditation.

Supply chain and finance

We continue to work with our finance team using the approach of our Power of the Purse project, to build sustainability into purchasing decisions across the university. We are working to improve the way whole lifecycle perspectives can guide project plans and ways to support local economies and increase positive impact through our supply chain.

100% of suppliers on 9 main tenders met sustainability requirements

100% criteria maintained for Flexible Framework level 3

20.5% Overall spend with GL postcode suppliers

46% Overall supply chain spend with SMEs

Fairtrade status held since 2006

100% Renewable electricity purchased since 1993

Environmental Management Efficiencies

We gained auditor approval to make 3 system changes to improve the effectiveness and efficiency of our Environmental Management System due to its maturity: cutting external audits and the associated fees by 50%; moving to risk-based internal audits; and online audits of academic objectives. Repairs to the solar array at Oxstalls this year now make financial savings annually due to the boost to our energy generation capacity.

Savings and Sustainability Benefits

The pandemic significantly changed spending patterns this year. Alongside our waste reduction decisions this led to savings in three areas:

Printing and reprographics - £180K less this year

IT consumables - £13K less this year

Postage and shipping - £14K less this year

Total savings from these actions were:

£207,000 cost savings

139 tonnes of carbon savings

Our Southern Universities Purchasing Consortium scope 3 emissions report for 2019-2020 showed:

8,445 tonnes for supply chain emissions

The sector tool that calculates scope 3 emissions was updated in 2020 to reflect more accurate emissions by spend category, so comparison to last year's figure is not a meaningful indicator.

We completed major estates works in 2018 so no construction projects in 2019-2020 meant:

12.5 tonnes less emissions from construction (compared to 2018-2019).

Coronavirus Effects

The COVID-19 pandemic and lockdown in spring 2020 fundamentally changed activities and campus use across our university.

From a sustainability perspective, this had positive and negative impacts.

Some trends continue into 2020-2021 and we will be monitoring ongoing effects:

Positive
• Lower emissions from less travel and energy use due to home-based study and work

• Greater focus on wellbeing and more walking to campus.

Negative
• Rising car use and falling bus use due to health concerns

• Overall rise in waste including food waste and takeaway disposables.

Work and study patterns:

Commuting journeys reduced by around 65% and inter-campus travel dropped by 60% - positive impact for our CO2 emissions.

Moving meetings online brought 5-fold increase in the use of virtual meeting technology which continued when lockdown lifted and reduced staff time travelling across sites.

Travel pattern changes saw walking increase slightly but a rise in single occupancy car use and significant drop in use of buses – see page 22 for more details.

Emisssions from working from home will rise - we may need to measure this to fully account for future carbon emissions.

Resources and waste:

Initial supply of face coverings provided for all employees sourced from a sports company using recycled polyester and organic cotton.

Over double our usual food waste (6.3%) due to sudden lockdown and drop in refectory footfall – reduced as far as possible but some wastage was unavoidable.

60% average decrease in use of paper/printing due to the move to online working, lack of events and avoidance of hard copy products, reducing energy, paper use and waste.

British Heart Foundation annual collections of unwanted items from halls of residence and campus areas dropped by 75% compared to last year.

Campus activity:

9.5% drop in energy use in the second half of the year - less electricity used for lighting, desktop IT, catering and early exits from student residences.

Park campus accommodation given to key workers at Cheltenham General Hospital, supporting NHS emergency response, reducing their travel and using our empty spaces.

More local people enjoyed nature on walks through the parkland at our campuses and Park campus was opened for dog walking for the duration of the lockdown.

Quieter campuses saw opportunities for local wildlife to expand their habitats, including 2 fallow deer discovered living at FCH during spring and summer.

UN Global Goals reporting

The University supports the UN Sustainable Development Goals (SDGs) as signatory to the sector SDG Accord and host of RCE Severn, our UN Regional Centre of Expertise in sustainability education.

Here we capture how the impacts shown in this 2019-2020 report contributes to 13 of the 17 UN Global Goals, including the critical role and impact of our educational innovations.

3 GOOD HEALTH AND WELL-BEING
- Over 81% of all food in our refectories is prepared fresh on site – up from 79% last year

4 QUALITY EDUCATION
- Learning Innovation for Tomorrow initiatives to build sustainability into 5 new courses
- Students recognised in 3 national awards schemes for sustainability work in their course area
- Brief Cases industry-led curriculum assignments in Graphic Design on the UN SDGs
- Executive seminar for MBA programme delivered by sustainability leaders Interface
- Live Smart educational communications – 27 blogs and 2 social media series led by students

6 CLEAN WATER AND SANITATION
- Water and sanitation improvement research in India and Sierra Leone by Professor Kenny Lynch

7 AFFORDABLE AND CLEAN ENERGY
- Completion of Carbon Strategy 2010-2020 – all goals met including 40% emissions drop
- Joined £50m consortium with 19 universities sourcing power from a portfolio of UK windfarms
- Solar PV array repairs at Oxstalls campus increased renewables capacity by 14000 kWh
- Continued organisational policy commitment to remain fully divested from fossil fuel
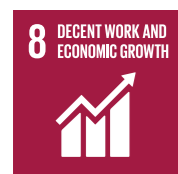
8 DECENT WORK AND ECONOMIC GROWTH
- 2 current students took up paid year-long roles working in the Sustainability Team
- Question the Professional series and Change Agents UK workshop on sustainability careers

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
- UN RCE award for Radical Sustainability industry partnership with low carbon leaders Interface
- New books published on sustainability including review of SDG innovation in 8 industries
- 4 graduates featured for driving change in design, ecology, linguistics and technology

10 REDUCED INEQUALITIES
- New decolonising learning initiative to address inequalities across all curriculum areas

11 SUSTAINABLE CITIES AND COMMUNITIES
- Live Smart partnership action projects – 19 students worked with 20 community partners
- 48% of ingredients used in refectories sourced within 35 miles of campus – up 2% on last year
- Facebook live series 5 minutes to change the world showcasing local sustainability actions

12 RESPONSIBLE CONSUMPTION AND PRODUCTION
- Maintained zero waste to landfill across all campuses working with waste contractor
- 63% reduction in waste produced – exceeded our 2020 target of 25% reduction
- Waste avoided - not producing 45,000 prospectuses or hard copy IT & Library students guide
- £5,166 value from waste donated to charity via BHF Pack for Good initiative in student halls

13 CLIMATE ACTION
- 63% carbon emissions reduction recorded since 2005 (scopes 1 and 2 emissions)
- Students Green Team led over 1,000 local people in the Cheltenham climate action
- 98% of students at Pittville Student Village adopt sustainable modes of cross-campus travel
- 139 tonnes of emissions avoided and £207,000 cost savings as result of spending efficiencies

15 LIFE ON LAND
- Anti-poaching research-based solution in South Africa restored white rhino population by 50%
- Biodiversity solutions project delivered at Oxstalls campus – winner of CPRE award
- SUFISA research collaboration completed with UK case studies on fisheries and dairy
- Host of 4th global Capacity Building for Conservation conference with NGO partners
- Hedgehog Friendly Bronze status achieved for improvements at Francis Close Hall campus

16 PEACE AND JUSTICE STRONG INSTITUTIONS
- Successful re-certification audit of ISO 14001 Environmental Management System
- 1 Winner and 2 Finalist places in the 2019 UK Green Gown Awards for sustainability leadership
- Transparent governance on sustainability performance via the Annual Sustainability Report
- Students' Union and 18 SU student societies improved their sustainability actions
- Implementation of environmental management efficiencies saving staff time and costs

17 PARTNERSHIPS FOR THE GOALS
- Climate change activities with EAUC, Interface, Hawkwood College & Interfaith Cheltenham
- Community sustainability learning projects featured in UN 5 year highlights publication
- Sustainability strategy session for Heads and Governors of leading UK independent schools
- Participation in UN RCE European network event sharing our local makerspace projects

Stakeholder feedback

Sustainability is about linking environmental protection with social impact and financial viability, to create overall benefit for the wider world. We aim to create positive impact for students, staff and partners by connecting these issues - and we seek regular feedback to help us improve.

Our primary stakeholders are students and our main source for their opinions is their responses to the NUS annual skills survey questions on sustainability in their university experience. Responses to 3 headline questions nationally, and in our university dataset, are below (last year's in brackets).

	Responses 2019-20	"universities should actively promote sustainability"	"sustainability should be integrated into all courses"	"my university takes action to limit negative impacts"
University of Gloucestershire results	**234** (147)	**89%** (87%)	**78%** (76%)	**81%** (81%)
National results across UK universities	**6,000** (6,000)	**91%** (86%)	**83%** (80%)	**79%** (74%)

Feedback from stakeholders and expert voices on 2 of the headline stories from this report include:

Who Cares campaign – student feedback

Students' Union:

"We're all much more aware of reducing waste, so retiring the printed prospectus is definitely a move in the right direction. Students want their concerns on sustainability heard and the University is responding to these concerns well."

Open Day applicants:

"The University is keeping its sustainability going - this is something I'm very excited to be part of"

"Interesting to know about sustainability and opportunities whilst I am there"

"I learnt that it's one of the most eco-friendly universities and it really cares about its students"

Green Gown Awards – judges' feedback

Institution of the Year category:

"Gloucestershire's sustainability approach is very comprehensive and innovative. The initiatives around learning and teaching are particularly impressive."

Research with Impact category:

"Excellent initiative. We liked the fact that the method is easily transferable to other animal populations and has had an immediate impact."

See page 14 for more on this research story supporting white rhino conservation.

Oversight of sustainability

Sustainability programme

Sustainability staff: We have 4 permanent core staff in our Sustainability Team plus 8 staff in other departments who have formal responsibilities in sustainability. The Sustainability Team work collaboratively with staff, students and partners and students take up paid part-time roles in the team to help deliver our strategy.

Sustainability policy: Sustainability has been one of our core values since 2010 and is one of 6 pillars of our Strategic Plan 2017-2022, delivered through the Sustainability Strategy 2017-2022.

RCE Severn: Our Regional Centre of Expertise in sustainability education, acknowledged by the United Nations University, supporting public engagement and learning partnerships in sustainability.

Sustainability governance

Our governance systems include both internal oversight and external validation, to ensure we meet quality standards, maintain compliance obligations and monitor continual improvement.

Our Environmental Management System is an externally-accredited vehicle for transparent review and reporting on sustainability, covering our material impacts, key risks and improvement priorities. EMS objectives are built into our Sustainability Strategy and performance data are monitored at external audits annually. The University is now required to follow Streamlined Energy and Carbon Reporting (SECR) protocols and these data are included in our 2019- 2020 Annual Financial Statements.

This provides a robust process to understand our operating context and identify sustainability issues most important to our business. Our main stakeholder groups include our executive, students, academic and professional staff, regional and international partners, and University Council as our governing body. Internal assurance is provided by an annual Sustainability Performance Review chaired by our executive lead on sustainability, involving all senior managers with responsibilities in sustainability, and our Students' Union.

Delivery against our Sustainability Strategy is also progressed and monitored internally through our University operating plan and the Sustainability annual business plan. Individual departments take responsibility for adoption of specific priorities into their business plans and reporting internally against these, including targets shown in this report. Our accounting and finance students review this report annually and provide feedback as part of their formal studies.

Our people:

- 7,979 Students (FTE 6,652.1)
- 1,465 Staff (FTE 912.9)

Our locations:

- 4 sites in Cheltenham
- 1 in Gloucester

Our footprint:

- 97,249m^2 Gross Internal Area (GIA)

Our activity:

- 8 Academic Schools
- 10 Professional Services Departments

bsi. ISO 14001 Environmental Management

↘ Find out more

Sustainability Online
www.sustainability.glos.ac.uk
e: sustainability@glos.ac.uk

Sustainability Strategy
www.sustainability.glos.ac.uk/about/
strategy-performance/

Key Contact
Dr Alex Ryan
Director of Sustainability
e: aryan@glos.ac.uk

Follow us

🐦 @UniGlosSustain

📘 UniGlosSustainability

📷 UoGSustainability

www.uniofglos.blog/livesmart