

Annual Sustainability Report

2017 - 2018



UNIVERSITY of
GREENWICH



FOREWORD

This is our Third Annual Sustainability Report and illustrates the great progress we're making at the University of Greenwich.

We understand that many of the challenges the world faces, such as the climate crisis or access to clean water, will be solved through the application of sustainability thinking. Through our staff, students, graduates and research we help change the world for the better, aligning with the University's core values.

In 2017/18 for the 6th consecutive year we're proud to have achieved a First Class award in the People and Planet University (Green) League amongst the top 20 of universities and colleges in the UK. The work we undertake to provide sustainable food continues to be recognised nationally through our retention of Food for Life Gold and our Fairtrade University accreditation. An innovative project developed by our graduates encouraging the use of reusable drinks containers in cafés was a finalist in the EAUC's Green Gown Awards. The carbon footprint of our energy use has continued to fall and we are now 48.9% below our 2005/06 HEFCE baseline, against a target of a 40% reduction.

Further progress has been made in our strategic delivery. We have improved our data capture and reporting systems, enabling us to focus and prioritise action more effectively. Programmes incorporating sustainable building design and operation within our estates have helped improve the performance of the Dreadnought building and this work continues with the Avery Hill, Southwood Site redevelopment. We continue to work with academics to integrate sustainability into curricula and research, and with directorates ensuring sustainability can deliver the needs and expectations of our students in an ever-changing world.

Many students have worked with us on campaigns and activities, including the energy saving initiative 'Student Switch Off' and our 'Hall's End of Term' reuse campaign. In 2017/18 student residents collected over six tonnes of clothing and other items with a value of over £10,000, which was donated to the British Heart Foundation.

I hope this report illustrates the progress made so far, which has been achieved thanks to all our staff, students and stakeholders, and provides a benchmark from which to make further progress. There is still a lot more to do, but with your help we can achieve great things for our University, and the planet.

Professor David Maguire,
Vice Chancellor, University of Greenwich.

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A WORD OF THANKS

Improving sustainability performance is down to both individual and collective effort. The University sees all our staff, students, service partners and suppliers as part of our sustainability team, where everyone has a role to play in reducing our impacts and developing opportunities and solutions that can help improve the University and the world beyond it.

A thank you goes to everyone who goes the extra (sustainably travelled) mile to make a positive improvement in their work or studies.

Particularly we would like to thank our Sustainability Management Board Chair, Per Reiff-Musgrove who has been a great supporter in helping drive forward change. We would also like to thank Kimberley Lewis who has been critical in helping us improve our environment management, data analysis, reporting and communications (including designing our Annual Report). Both are leaving Greenwich in the summer of 2019 and the sustainability team wishes them well for their futures.

2017/18 HIGHLIGHTS

43 Student
Volunteers

Receiving
TRAINING and
gaining **SKILLS**

Part of
Student Switch Off



**FAIRTRADE
ACCREDITED**

Since 2012

902 books donated to
charity for use in the
developing world



35093 kWh

of electricity
generated
from Solar Panels

Reduced Carbon
Emissions By

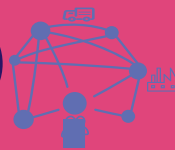
48.9%

Based on a 2005 Baseline
for Scope 1 and 2 emissions

6 Tonnes
of clothes and
items donated
to charity



Scope 3
Emissions



**SUPPLY CHAIN
Carbon Emissions**



1416
Tonnes

**Environmental
Management
System**

**ISO
14001
CERTIFIED**

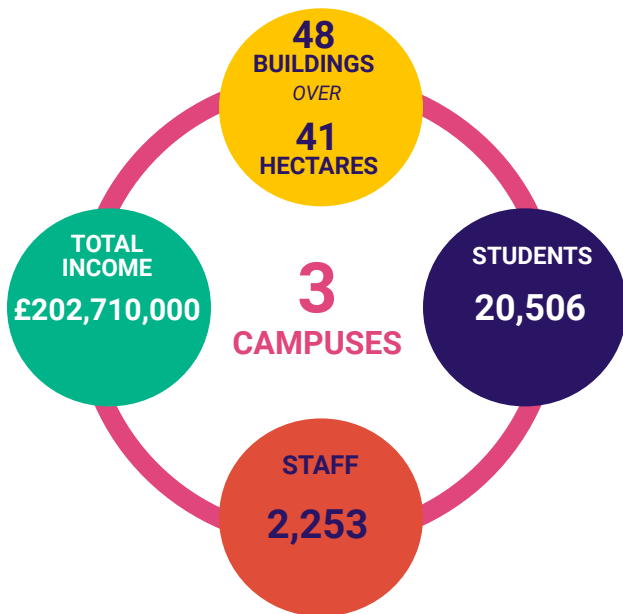
50%

**RECYCLING
RATE**

INTRODUCTION

At the University of Greenwich our mission is to transform lives through inspired teaching and research. We seek to improve society and the lives of all those who study with us through the embodiment of our values of excellence, determination, inclusivity, creativity and ambition.

Based at three historically rich campuses, we combine rich heritage with significant high-tech learning and research facilities, providing an environment which stimulates enquiry, celebrates scientific endeavour, and promotes well-being.



OUR APPROACH TO SUSTAINABILITY

The nature of our organisation is complex, and the social, economic and environmental impact of our activities and the extent of our academic influence are as far reaching as they are long lasting. However, so too are the influences on the University.

This is why we take a risk management approach. We seek to anticipate regulatory changes, student needs, resource demands and internal requirements, as well as the longer term global mega-trends that will ultimately affect all our futures. Understanding and recognising these influences in the context of the University allows us to plan for the future, helps us achieve our goals and create a resilient institution.

We are motivated by our ability to empower change, the difference we as individuals can make and the significance of our global contribution when we act together; from the smallest action to life-changing research.

Our Sustainability Policy is ambitious and wide-ranging, providing high level aims and objectives that help drive efficiencies and raise awareness amongst the next generation of leaders. How we are progressing on our policy is set out within this report.

GOVERNANCE

The Sustainability Management Board (SMB) exists to help provide direction and accountability for the delivery of sustainability at Greenwich.

The Board comprises professional services staff with responsibilities for key sustainability related impacts including Estates and Facilities, Finance, Procurement, and Information and Library Services.

Importantly it also includes key representatives from our Faculties and the Students' Union to ensure the group can connect our students, academics (including teaching and research staff) to the potential that exist in the application of sustainability at Greenwich. It also helps us take advantage of the many opportunities that we can utilise coming from within and outside of the University relating to sustainability.

To view a copy of the SMB structure visit:
<https://blogs.gre.ac.uk/greengreenwich/sustainability-management-board/>

ABOUT THIS REPORT

The University is fully committed to functioning as a socially responsible and sustainable institution, aiming to minimise our impact on the environment and to achieve significant cultural, economic, environmental and social contributions at local, national and international levels.

This report has been prepared by the Sustainable Development Unit to illustrate the University's performance against our most significant sustainability impacts for the academic year 2017/18 and includes examples of our achievements as well as tips that our students, staff and wider community can take to continue supporting our goals.

The data for this report represents our owned activities only and is sourced from the Estates Management Record 2017/18 that is publicly available from the Higher Education Statistics Agency (HESA).

It is important to us that we create materials that our students, staff and other interested parties want to engage with, therefore your feedback is welcomed and encouraged. If you have suggestions for future content or any questions regarding the data within this report and the work the University is doing then please contact us:

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- ☎ 0208 331 8794
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- 📘 @UoGSustainability
- 🌐 www.greenvich.ac.uk/sustain

SUSTAINABLE DEVELOPMENT GOALS

In 2015 the United Nations launched the Sustainable Development Goals (SDGs). These 17 goals with associated targets are to be achieved by 2030 through individual and collective action on a local to global basis. Institutions such as the University of Greenwich have a key role in highlighting the goals and applying and helping achieve them in our teaching, research and operations. The SDGs are relevant as almost every subject we teach will relate to at least one of them, opening up explorations into sustainability teaching and research.



1 NO POVERTY
We can support this goal through the teaching and research we do illustrating that poverty can often be avoided through the decisions and actions made systemically and through effective interventions.

Work for example undertaken by the Natural Resources Institute (NRI) has a powerful role in reducing hunger, particularly through protecting crops and produce and improving the livelihoods of workers in the developing world.



3 GOOD HEALTH AND WELL-BEING
The University and the Students' Union (SU) work hard to help our stakeholders access and utilise services to improve health and well-being. In addition to this we provide excellent teaching, training up paramedics, nurses and midwives.

We are proud to deliver high quality teaching and especially reach out to individuals in our local communities who may not consider tertiary education as relevant to them.



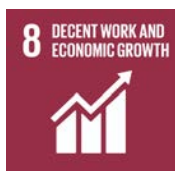
5 GENDER EQUALITY
We act strategically to ensure that we can achieve gender equality objectives. We have in place policies that are carried out to give equal opportunities regardless of gender.

Access to clean water is a fundamental right. At Greenwich we enable academic and student research to improve the access and availability of clean water and sanitation. We ensure free water is available to staff and students.



7 AFFORDABLE AND CLEAN ENERGY
Academics in Medway continue to conduct research looking at how novel new approaches can be used to create cleaner fuels. Work by Professor Pat Harvey exploring the use of algae to create biofuels is just one example.

Greenwich academics, including the research group the Greenwich Political Economy Research Centre, have been working to support this goal for a number of years producing invaluable findings and research papers.



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
A large amount of our teaching and research is devoted to improving the capabilities of business through innovation and the improvement of systems upon which societies depend.

The University is proud of its inclusive nature and the progress it has made in improving the equality of the needs and expectations of our diverse communities.



11 SUSTAINABLE CITIES AND COMMUNITIES
Research and work by Systems Management and Strategy and Tourism and Events departments illustrates how Greenwich is helping enable cities and towns to thrive and do so sustainably.

Creating more with less makes good economic and environmental sense. As a university our work output has been growing although we produce less carbon dioxide and generate less waste.



13 CLIMATE ACTION
We have many academics working on climate change including one who has been recognised as contributing to the award of the 2007 Nobel Peace Prize to the Intergovernmental Panel on Climate Change.

Plastic waste in our oceans is one of many impacts that are becoming more obvious. Work by our Greenwich Maritime Centre is undertaking important work helping protect these precious spaces.



15 LIFE ON LAND
We improve the natural habitats of our estates though the work our Ecosystems Services Steering Group does. Our research and teaching, especially at Medway, is of real importance and impact in helping meet this global goal.

The University's teaching and research staff are involved in helping achieve this in particular through the work done by the NRI and the Business School.



17 PARTNERSHIPS FOR THE GOALS
Achieving the SDGs will not be done by individuals and organisation working in isolation. Greenwich prides itself in the partnerships and collaborations it has fostered, many of which are contributing in the attainment of the SDGs.



To reduce energy use and to further explore the possibilities of less carbon intensive energy sources



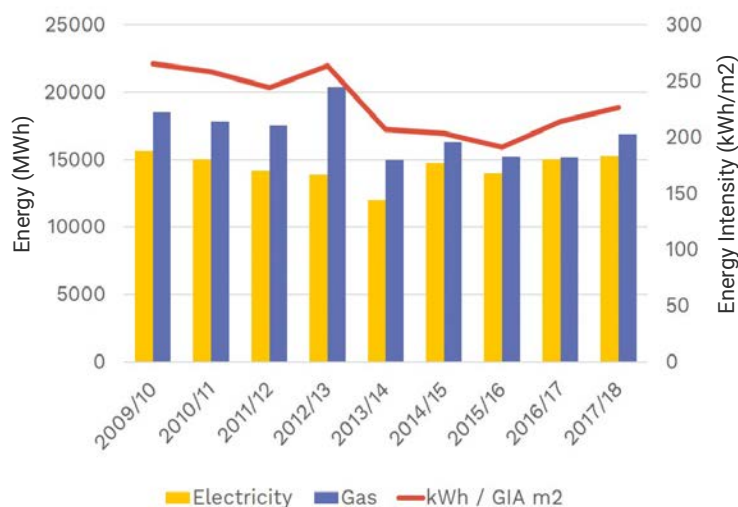
ENERGY

Our energy consumption has a significant impact on the environment as well as our utilities spend. Costing approximately £3 million a year, it is important that as a University we strive to meet our energy needs as efficiently as possible, ensuring we optimise resource use, deliver value for money and minimise our reliance on the burning of fossil fuels.

In 2017/18, we used **32.2 million kWh** of energy, equivalent to meeting the annual energy needs of 2,000 homes. The vast majority of this energy, **94%**, was used in our non-residential buildings.

A breakdown of our electricity and gas consumption is shown below together with an indication of our energy consumption per meter square of estate (Gross Internal Area (GIA)).

University of Greenwich Energy Consumption



Our current energy use is 12% lower than in 2009/10, though there has been a gradual increase in consumption since 2014 due in part to additional buildings such as Stockwell Street. However, there is still work to do.

The University has set a strategic KPI to reduce our energy consumption by 14% by 2022 across all non-residential areas. This has been set against a 2015/16 baseline as it best represented our operations at the time.

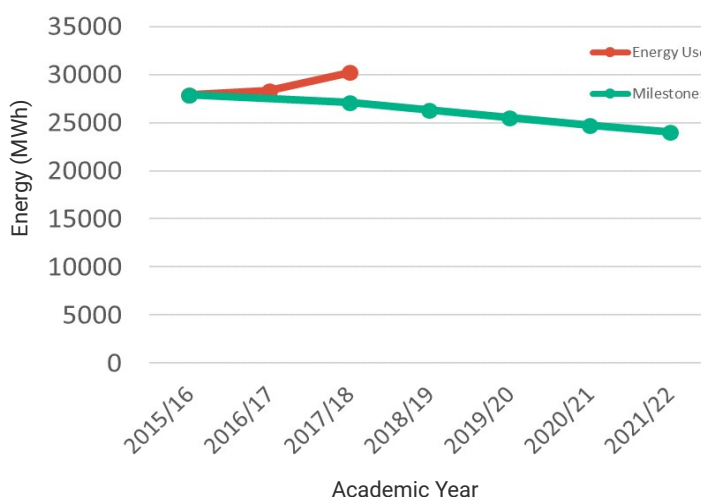
The graph opposite shows current performance against key milestones.

Target



To reduce Non Residential Energy Consumption by 14% by 2022 from a 2015/16 baseline

Non Residential Energy Consumption



Since the baseline position in 2015/16 our estates have seen the addition of Devonport Halls, the Medway Student Hub and the Dreadnought building, all of which have inevitably contributed to increases in energy consumption across our estates. Over the next twelve months the team will be preparing a plan of works to optimise energy use in our highest consuming areas. Key works includes improved monitoring, boiler upgrades in Greenwich and Medway, an environmental reset of Stockwell Street and the introduction of efficiency improvements within refurbishment works at Avery Hill.

For the past four years the University has been working with Student Switch Off to influence the energy using behaviour of our students in our halls of residence.

This project trains our students to become energy saving ambassadors who influence residents to save energy through simple but impactful measures. These can include turning down heating and putting on an extra layer, putting lids on pans, having shorter, cooler showers, switching off electrical items etc. Residents are incentivised through the awarding of prizes (tubs of Ben & Jerrys ice cream).

Five tonnes of carbon and 13,000kWh of electricity were saved, equating to 408,844 cups of tea. Over 2,300 students living in our halls were reached.



To reduce energy use and to further explore the possibilities of less carbon intensive energy sources

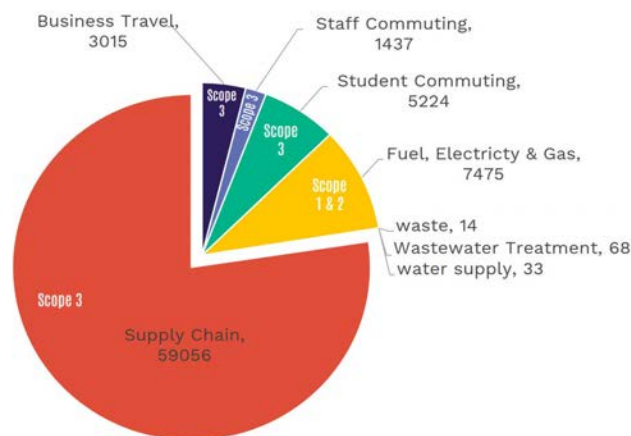


CARBON

To achieve a 40% reduction in Scope 1 & 2 emissions by 2020 against a 2009/10 baseline (Carbon Management Plan target)

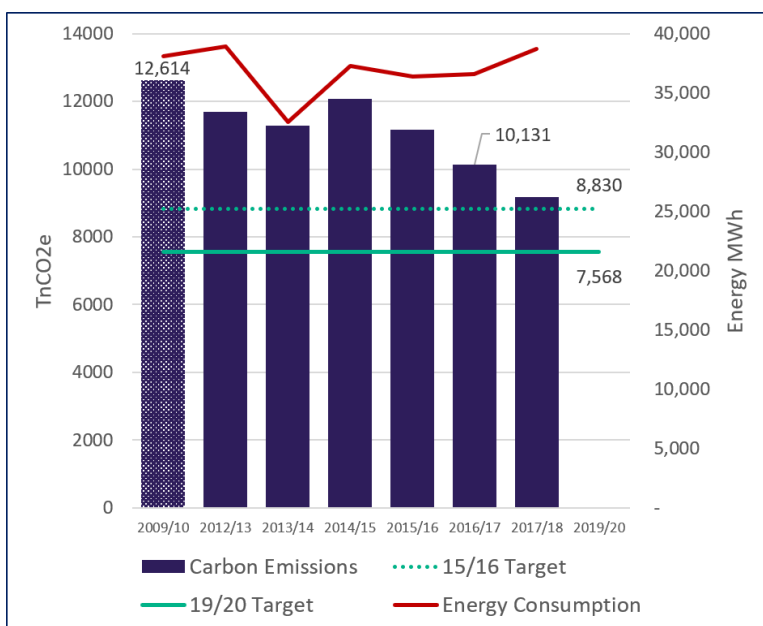
Our Scope 1 and 2 carbon emissions, that's the carbon produced directly from sources owned by the University (i.e. gas used for our boilers and fuel in our vehicles) and purchased electricity, have been reduced by **48.9%** as compared with our 2005 Higher Education Funding Council for England (HEFCE) target of a 40% reduction to be achieved by 2020.

A separate Carbon Management Plan (CMP) target that includes a wider scope of carbon contributions from our estate has continued to improve, with a 27.2% carbon reduction against our 2009/10 CMP baseline. The 40% reduction target to be achieved in 2019/20 will require a number of significant improvements to the efficiency of our estate and operations. The Dreadnought building will be operational from 2018/19 and will add to our absolute emissions, meaning further efficiencies and initiatives similar to the Medway Combined Heat and Power system will be essential to help meet this carbon target.



This pie chart breaks down our carbon footprint into a range of categories. Procurement (categorised as Scope 3 emissions) has a significant impact on our carbon emissions suggesting we need to buy less or buy items or services with a lower carbon footprint. Travel is also significant particularly private transport (cars) for commuting and the use of flights (a short-haul return flight from London to Edinburgh contributes more CO₂ to the atmosphere than the average annual emissions of a person in Uganda or Somalia).

Carbon Management Plan Performance



BE THE CHANGE:

On Campus

- Switch off lights and non-essential equipment including chargers when not in use
- Ensure doors and windows are closed when it's cold outside and in air conditioned buildings when it's hot outside
- Use the University bus services rather than your car when travelling between campuses - or teleconference
- If you have an idea to save carbon then act on it or share it with the sustainability team.

At Home & in Halls

- Put on another layer and turn down the heating
- Eat less red meat and dairy
- Switch off electrical items when not in use
- When making a cuppa, boil only the water you need
- Take shorter, cooler showers (aim for less than four minutes)
- Put lids on pans when cooking
- Cook communally/batch cook and store safely
- Consider the carbon footprint beyond the energy you use e.g. the carbon embedded in products and services you buy, the travel you take, etc.

To minimise harmful emissions arising from business travel, commuting & deliveries



TRAVEL & TRANSPORT

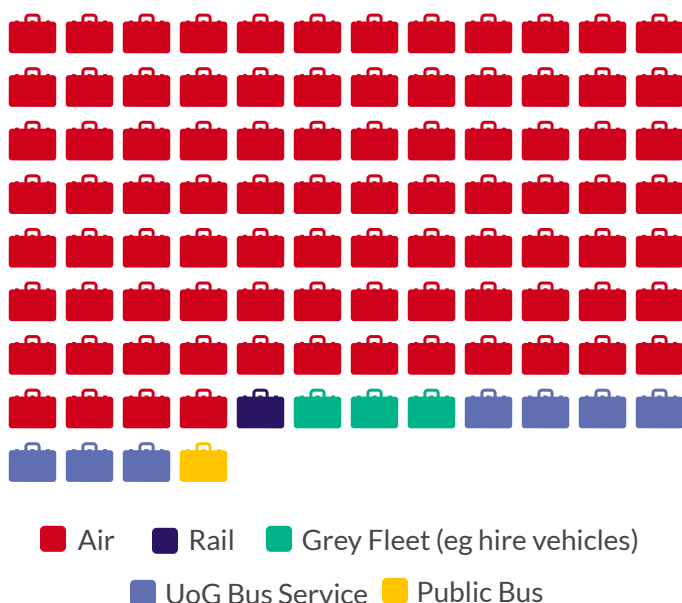
- To achieve a 40% reduction in Scope 1 university vehicle fleet emissions by 2020 (2009/10 baseline) 10% reduction achieved by 2017/18
- To achieve a 20% reduction in Scope 3 work related travel emissions by 2020 (2012/13 baseline) 45% reduction achieved by 2017/18
- To achieve a 20% reduction in Scope 3 commuting emissions by 2020 (2007 baseline) 2% reduction achieved by 2017/18

Our transport needs have substantial environmental impacts but through changing behaviours or modes this can be reduced. Impacts include traffic congestion, carbon emissions, air, water, noise and light pollution, road casualties, stress and the fracturing of communities.

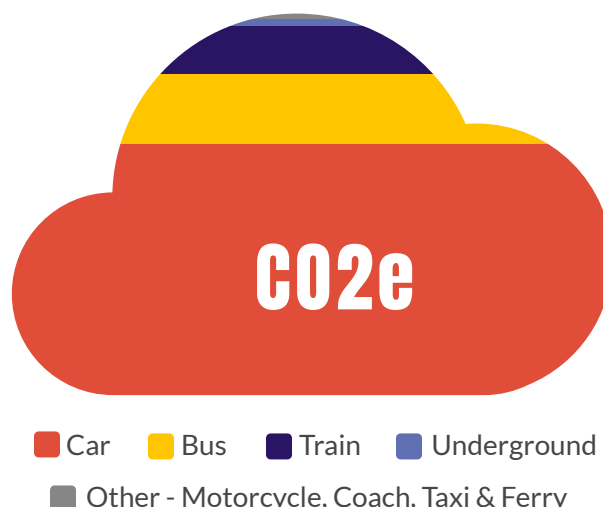
The University has made progress in the improvement of services to encourage a shift away from private car use and has invested significantly in zero emission electric, hybrid and cleaner diesel vehicles.

Research suggest that by 2036 London will have ten million residents, over a million more than now. To cope the city will not be able to build more roads and improve mass public transit systems in time. To avoid gridlock we will need to change our travel behaviours, reduce our use of private vehicles and walk, or cycle more.

Proportion of Carbon Emissions by Business Travel Type (TnCO2e)



Proportion of Carbon Emissions from Student & Staff Commuting by Travel Type (TnCO2e)



BE THE CHANGE:

On Campus

- Use the University bus system rather than your car when travelling between campuses
- If you don't physically need to be somewhere call, tele/video conference or Skype
- If you drive then car share using this platform: <https://liftshare.com/uk/community/unishare>
- Need an incentive to walk, cycle run or carshare (Medway) to work? Then use the Better Points App to gain tickets to win prizes
- Reduce the number of flights you or your department takes.

At Home and in Halls

- If you are able to; walk, run, cycle, or use public transport rather than drive
- Otherwise consider an electric vehicle
- Get rid of your car and join a car club
- Avoid or reduce flying if you can as this has a huge carbon footprint.

To prevent pollution and to promote 'zero waste', encouraging Reduce, Reuse, Recycle to minimise our impact



WASTE & RECYCLING



- To achieve a 70 % recycling rate (by weight) of non-construction wastes
- Reduce total weight of non-construction wastes by 5% annually

Waste Recycling & Disposal

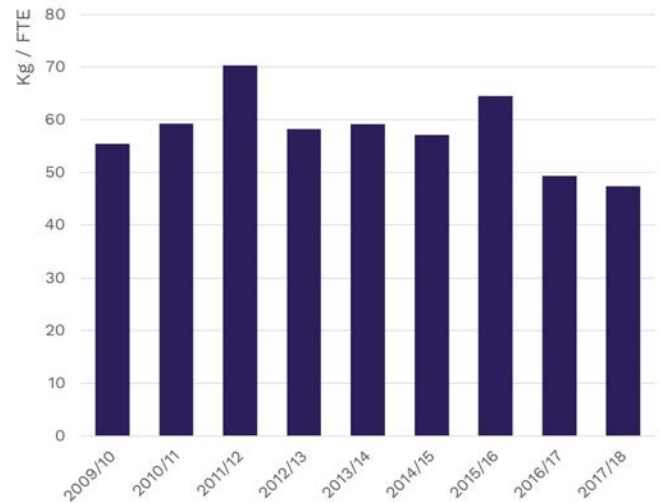


The above graph shows we are continuing to generate and dispose of less waste than ever, with a 30% reduction since 2009/10. Although we have missed the reduction target the improvement is impressive and we continue to expect further reductions through initiatives, such as the surplus reuse platform Warpit, that are in the planning stages. Possible reasons for this improvement includes reductions in procurement and the use of paper as increasingly we are moving towards more electronic processes.

The graph also illustrates that our recycling rate has remained steady at 50%. Although this is a very slight improvement it is below what we could expect. Evidence from bin audits indicates that there continue to be high levels of recyclable materials that are put in our general waste bins. There is also, in some places, high contamination of non-recyclable waste in our recycling bins, meaning that sometimes the whole recycling load is deemed contaminated and must be incinerated.

The University recycling target of 70% is achievable but means that all waste generated by staff and students must be separated effectively and put into the correct waste bin to avoid contamination.

Waste Produced per Staff, Researchers & Students (FTE)



BE THE CHANGE:

Follow the Waste Hierarchy:

- Avoid potential waste being generated in the first place through wise purchasing decisions
- Reuse or share what you can
- Recycle all that is possible
- Dispose carefully so as not to contaminate recycling streams.

On Campus

- Follow the guidance on the waste and recycling bins
- Ask for china or use your own reusable coffee cups at our catering outlets
- Refill your water bottles for free at our cafe water points, at our water fountains and selected kitchenettes
- Use the surplus reuse platform Warpit (www.warp-it.co.uk/greenwich)
- If you generate a lot of waste through your work set up a plan to tackle this as it is a cost and often indicates inefficiencies that can be fixed.

At Home and in Halls

- Buy less stuff. There is often a large environmental impact through what we buy and use
- Items you don't need should be given to charity (or use our British Heart Foundation bank at the Southwood site).

To reduce water use and establish a utilities monitoring and targeting system



WATER

Progress toward Estates & Facilities Water Consumption Target



To reduce water consumption by 1% per annum

Water is a commodity that is often overlooked yet is essential to our survival. It is also scarcer than we think and it is likely both through the increasing demands for water in London and with the impacts of climate change, that water shortages could soon become common in London and the South East.

In 2017/18 we again missed our water consumption reduction target, in large part due to an irrigation system on the Stockwell Street landscaped roofs being left on. Often leaks are hidden yet can have a significant negative impact on our performance. There is also a cost as water is not free. Lower flow taps, toilet cisterns and waterless urinals have been integrated within the Dreadnought building

Our residential (halls) water use increased too so we ask our student residents to be careful with how they use water and follow some of the tips in the side panel.

BE THE CHANGE:

On Campus

- Turn off taps or don't leave them running for longer than you need to
- Report dripping taps and leaks to your campus FM Helpdesk
- If you do research work, check that you are using only the water you need to effectively undertake your work.

At Home and in Halls

- Take shorter showers - aim for 4 minutes as a maximum
- When using a dishwasher or washing machine only run when you have a full load
- Turn off the tap when brushing your teeth (use a cup of water instead)
- Use a washing up bowl rather than rinse under a running tap.

To work with catering contractors to ensure our food policy is met and our Fairtrade accreditation maintained



SUSTAINABLE FOOD



- Fairtrade Foundation University status maintained
- Food for Life Gold maintained
- Marine Stewardship Council Award for sustainable fish maintained

The University is proud of the work it has done in improving the sustainability of the food it provides.

We have attained Food for Life Gold at all our outlets and for all our menus, as well as being a Fairtrade Foundation University since 2012.

Working in partnership with our caterers Baxter Storey (who provide food at all campuses apart from Southwood Site), Sodexo (who provide catering at the Dome) and the Students' Union we have collaborated to develop initiatives and partnerships that are recognised externally.

In 2017/18 the University employed two graduates who developed the 'Reuse Race,' an incentive scheme encouraging hot drink consumers to use china or reusable takeaway drinks containers. The concept is that the higher the percentage of reusables used then the higher the discount that will be given to these users. The project ran from February to March 2018 and proved very successful. It was shortlisted as a Finalist at the Environmental Association of Universities and Colleges Green Gown Awards Scheme in 2018, and the initiative has been run again at the University.

Full results can be found using this link: <https://bit.ly/2Z47Iwp>

BE THE CHANGE:

On Campus

- Choose more sustainable menu options, reduce your consumption of meat (particularly red meat) and dairy, and select local, organic and Fairtrade food items
- Use/ask for a china cup/mug when in the cafes or bring your own re-usable cup for takeaway hot drinks. At University catering outlets you will receive a 10p discount for every hot drink you buy
- Free water is available at outlets, at drinking water fountains across our campuses and in selected kitchenettes
- Remember to put any unwanted food, and packaging in the proper waste container
- Try to avoid wasting food - request a box to take away your left-over lunch to eat later
- Become a staff or student representative on the Sustainable Food Steering Group.

At Home and in Halls

- Avoid food waste and buy only what you know will be consumed
- Avoid over-packaged food items
- Buy fruit and veg that is seasonal and locally grown
- Try cutting out meat even if it's just for a couple of meals a week
- Avoid foods that you think may have been air freighted (e.g. asparagus from Peru)
- Compost all of your waste food and peelings.

Our Intern Highlights



Ethical & Fairtrade Fortnight AND Green Week

25

Events organised across 3 Campuses



203%

Increase in Twitter Engagements



31.5%

Hot Drinks Purchased in Reuseable Cups at Pilkington Cafe

A New Sustainability Facebook Page

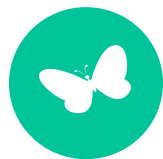


Dr Bike

Workshops at Greenwich & Avery Hill



To protect and conserve the heritage buildings we occupy and to actively protect and enhance wildlife on campuses



ECOSYSTEM SERVICES



To develop and implement a biodiversity policy that seeks to protect and enhance wildlife on campus. Achieved

We are fortunate to have three beautiful and varied campuses. Each of these offer opportunities to encourage nature to thrive.

Ecosystems services is a term used to describe the many and varied benefits that humanity freely gains from properly functioning ecosystems. These provide us with agricultural produce, timber, and aquatic organisms such as fish. They also provide us with clean drinking water, the decomposition of waste, and the natural pollination of crops and other plants, essential to our own success as a species.

Our landscape roofs at Stockwell Street provide us with research, teaching and leisure space, meet users wellbeing needs, provide food crops, support pollinators and other important insects and reduce the impact of flooding by storing rain water in the soil.

Our Southwood Campus at Avery Hill has many different habitats, including established woodland, laid hedges, wildflower meadows and ponds. There is also an organic food garden and a forest garden, both run by volunteers. The diversity of habitats brings an abundance of insect, bird and animal species. This then brings opportunities to use the spaces for teaching, research and leisure and wellbeing, illustrating that the protection and improvement of our natural spaces is an investment vital to all our futures.

The beautiful Medway campus has woodland areas, green spaces, beehives, and is the home for a significant amount of critically important research and teaching on Ecosystem Services, farming and land use practices.

BE THE CHANGE:

On Campus

- Get out into our natural spaces, your local park, or the countryside if you can. Appreciating nature is important to human wellbeing, helping us to connect with nature and encouraging us to protect it when it is threatened
- Consider how you can use our natural spaces for your teaching, learning and research. This guide explains how you could do this at Greenwich: <https://bit.ly/2M1x8YC>
- Volunteer to undertake species surveys, help improve our natural spaces or volunteer at the Community Edible Garden at Southwood Site.
- Look out for University of Greenwich honey in our Students' Union shops - produced by our own bees
- This is your campus, don't litter - it's unsightly and harms nature on land and in water
- Take part in events including harvesting in the summer.

At Home and in Halls

- If you can, set aside space for nature, let weeds grow and allow your lawn grow longer if you have got one. Build log piles or a pond to encourage wildlife
- Even having a pot plant or two can help you connect with nature
- Volunteer with a local nature volunteering group such as a Wildlife Trust or RSPB
- Consider your day-to-day actions and how they can impact on nature. Make decisions that can protect nature rather than damage it. Eat less meat, eat organic and Fairtrade, buy less stuff
- Use less energy (including flying less) as climate change will have one of the biggest impacts on nature.

To incorporate the principles of sustainable development into all new build & refurbishment projects



CONSTRUCTION & REFURBISHMENT



To meet BREEAM Excellent/Very Good standard according to the value and type of project

The University has a rich and varied estate, ranging from the historic 17th Century architectural masterpiece of Greenwich Maritime and the Edwardian redbrick splendour of Medway Campus to the parkland mosaic of buildings at Avery Hill and the futuristic and sympathetic BREEAM - Excellent rated Stockwell Street Building.

Each of our buildings has unique challenges, particularly in making them meet the dynamic nature of our teaching, student and staff needs. Our Estates Team works throughout the year consulting, designing, planning, building and reviewing our buildings.

The Dreadnought project, a £30m redevelopment of a Grade 2 listed building at our Greenwich Maritime campus has been the main estates project for the University. The aim was to build a student hub, a space containing all the elements that support our students to thrive at Greenwich. From Autumn 2018 this will be the home of the SU, including its offices and work spaces, bar, entertainment spaces and gym, Student and Academic Services, ILS, plus part of the Faculty for Education and Health. The space will also be the main catering outlet for the campus and it will provide exhibition and events space using the huge atrium that encapsulates the original building's courtyard.

There was extensive consultation with users of the building to ensure that it would meet the current and future needs of the varying users. During construction guided tours were given to ensure staff and students understood how the building could work and to answer any questions that arose. These tours were particularly valuable to some of our teaching programmes, giving our students direct experience of how complex building projects are undertaken.

The building has a number of sustainability features. A key one is that by retaining the building the 'embedded' carbon of the structure is not wasted when compared to a new build. In addition the steel and wood structure of the atrium has a lower impact than concrete and the use of tempered air handling means the building can operate effectively without energy intensive air conditioning.

The 2018 summer heatwave focused our minds on the potential impact of climate change and particularly increased summer temperatures on our estates. Research conducted by one of our volunteers was presented to our Estates team so that we are now better aware of how to design and plan for the expected changes in our climate.

The University also delivered some further refurbishment projects including:

- The University of Greenwich International College (UGIC) which required a redevelopment of the ground floor of part of Devonport House to create office and teaching space, and,
- The Medway Greenwich Research and Enterprise students and staff research areas in Pembroke which were upgraded, integrating sustainability principles in the design and fit out including the use of carpet tiles that are made from discarded fishing nets (a significant risk to sea life).

BE THE CHANGE:

On Campus

- Participate in consultations on future plans for our campuses and estates
- Consider how your academic research could help us make further improvements in construction and refurbishment projects, following the 'Living Lab' concept.

At Home

When making changes to your home seek to reduce the impacts of the work:

- Select low VOC paints and adhesives
- Try and reuse materials that may otherwise be thrown away
- Ensure that projects maximise energy efficiency, including insulation
- Avoid cement and concrete if you can as this has a high carbon footprint
- Safely dispose of potentially hazardous chemical and other materials.

To actively encourage and support the teaching of and research into sustainable development in the University



EDUCATION & RESEARCH

The university sector has a major role in helping deliver sustainability and contributing to the Sustainable Development Goals (SDGs).

The ability to influence and engage our student body on sustainability is a real opportunity. Research conducted by the Higher Education Academy and the National Union of Students clearly also shows that students demand sustainability is taught to them. Rising awareness of global challenges and the need for action means students are wanting to be part of the solution and we can therefore illustrate the relevance of sustainability and integrate it into our courses. Having sustainability literate graduates is increasingly important to employers who are looking for the skill sets that sustainability learning and application can bring.

Many of the solutions we need will come from research and innovation from the university sector. The Natural Resources Institute is seen as a global leader in areas of agronomy, crop and pest science, climate change and food storage. Academics are capitalising on research, creating spin out businesses able, for example, to make construction materials out of waste and creating net carbon negative products (Carbon8).

STAFF PROFILE

Dr. Andres Coca-Stefaniak, Associate Professor of Tourism and Events at the Faculty of Business, launched the first edition of a new undergraduate taught module in Sustainable Tourism in January 2018, along with another new undergraduate course in Sustainable Events planned to start in September 2018. In March 2018, building on his 16 years of research on the management and competitiveness of town centres and high streets, he submitted written expert evidence to a UK Parliament inquiry on "High Streets and Town Centres in 2030", which was launched to investigate the decline of the UK's high streets in terms of their social sustainability and economic viability.

BE THE CHANGE:

In Teaching

- Consider how sustainability relates to your subject. As a teacher, explore how you could apply sustainability or the SDG's to your courses
- As sustainability is rarely out of the news always consider connecting live stories and issues to the student's learning
- If you teach sustainability elements in your subject then include reference to this in your course descriptions as many students are keen to choose courses relating to sustainability
- Collaborate with staff or join an Education for Sustainable Development community of practice to share ideas around how to teach and engage your students in sustainability
- Explore the research findings around student interest in sustainability teaching: <https://sustainability.nus.org.uk/articles/student-expectations-for-action-on-sustainability-as-strong-as-ever>

In Research

- Consider how you can use the 'lens' of sustainability to create novel research perspectives, or alternatively consider how your research could tackle some of the many local and global sustainability challenges
- Sustainability offers great opportunities for interdisciplinary research. Reach out to researchers across the University to see how you can collaborate to solve or inform some of the key sustainability challenges we face
- Use our estates data for your research - contact us to find out more.