

SUSTAINABLE DEVELOPMENT GOALS



A UNIVERSITY RESPONSE TO THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

CANTERBURY CHRIST CHURCH UNIVERSITY (UK)

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Introduction

The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs), supported by 169 targets, which are an urgent call for action by all countries in a global partnership. They recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth, while tackling climate change and working to preserve our oceans and forests.



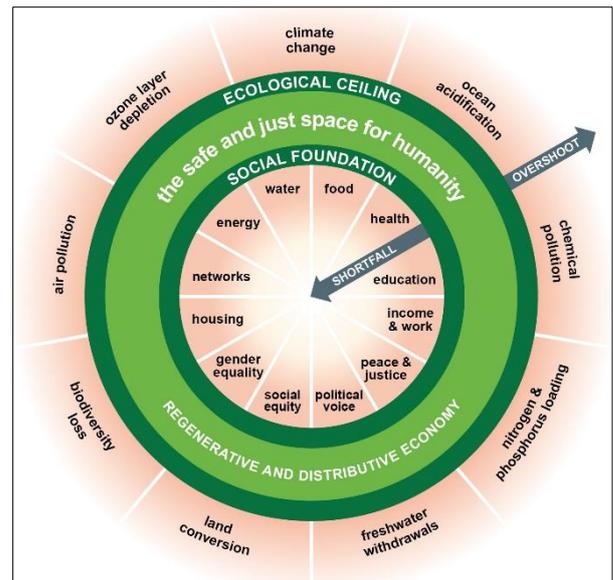
Global Goals, Economics and Social Foundation

The SDGs provide a series of lenses through which to explore the many interconnected facets of sustainability, and whilst somewhat segregated and instrumental, they are simple and intuitively appealing. However, in the context of higher education, it is important to raise a critical awareness of the goals, whilst supporting the achievement of applicable targets.

SDG 8 (Decent work and economic growth) presents a particular issue, since economic growth links to GDP, which is presented as one of the key reasons why the world is finding it so difficult to change.

This is an argument made most powerfully by Kate Raworth, author of *Doughnut Economics* (2017). By redrawing the core concepts of the SDGs, as a doughnut of social and planetary boundaries, Raworth provides a simple visualisation of the dual conditions that underpin collective human well-being. The aim is to bring humanity into the "safe and just space" between the outer and inner rings

of the doughnut through a regenerative and distributive economy.



© Raworth 2017

It is easy to see how the social foundation, derived from the SDGs, should be balanced by the ecological ceiling comprised of the 9 core planetary boundaries. The model is perhaps best summarised by the following quote, which provides a more contemporary definition of sustainability:

"Meeting the needs of all within the means of the planet." Raworth (2017)

Our Community and Sustainability

Canterbury Christ Church University (CCCU) is a widening participation Higher Education institution with a Church of England foundation. It has 15,000 students, across three campuses in Kent and Medway, and at collaborative partner institutions in the UK and overseas. It has four Faculties: Arts and Humanities, Health and Wellbeing, Education and Science, Engineering and Social Sciences.

The disciplines covered have grown to respond to regional and national demands, with the recent inclusion of a Medical School and other STEM subjects.

Engagement with sustainability at CCCU began in 2005 and is now at the core of the University's Strategic Framework (2015-2022). We interpret this through our mission statement as 'preparing individuals to contribute to a just and sustainable future'.

Target 12.8: By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature.

The Academy for Sustainable Futures

Sustainability is one of the central challenges facing a world that is already experiencing unprecedented levels of biodiversity loss, natural resource depletion, extreme weather events caused by human induced climate change, and relentless population growth, in addition to on-going inequity and injustice. Universities are in a key position to develop a principled response to current issues and to support the development of a hopeful future in uncertain times. The University's Strategic Framework places sustainability at its heart through its mission and values and as a cross cutting theme. The Framework for Sustainability sets out a whole-of-institution response and shows how we can connect to the environment, to each other and to ourselves at a range of scales from the local to the global.

In 2020 an Academy for Sustainable Futures was launched as a structure through which the University can build momentum, showcase activity and demonstrate leadership for sustainability. It is the delivery mechanism for the Framework for Sustainability and its vision for a sustainable future, with an expectation that we will go *further and faster* in response to significant external challenges.

The Report

This report provides a flavour of the work of the University, as it relates to the 17 SDGs or Global Goals, and is not intended to be exhaustive. Rather than taking a generalised view of the Global Goals, we provide examples that respond to all of the Global Goal targets that are relevant to our university. Where there are no appropriate targets (SDGs 1, 2 & 3), we use examples of activities that respond to the ethos of the Goal, as they are relevant to university stakeholders.

It is intended that this will be a 'live' report, available and updated on-line that will be regularly added to during the year, and reprinted annually.

Institutional Statement

"Canterbury Christ Church University, located firmly within Kent and Medway, prides itself through a community commitment, to promoting and achieving sustainability that is relevant to us all, both locally and globally. Our greatest contribution to sustainability solutions originate from the students that we nurture through our pedagogy, to become global citizens of the future."

Critically, our Futures Initiative programme challenges the learners' pre-conceptions about global issues and encourages the exploration of values systems and attitudes. Engagement is enhanced, academic experience is enriched, and social activism is encouraged among the students and colleagues at the University, to find new solutions to embedding sustainability and sustainable thinking into our curriculum."

[Prof Rama Thirunamachandran, Vice Chancellor and Principal]



Associated issues (no specifically relevant targets)

Commitment to the National Living Wage

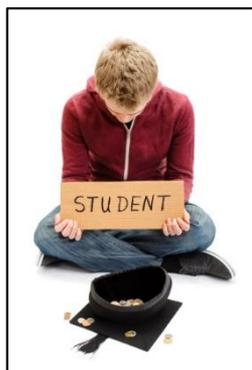
From January 1 2016, the University committed that all colleagues working within the University will receive a minimum rate of pay matching the new Living Wage level. Earning a Living Wage not only demonstrates commitment to being a socially responsible employer, but also our commitment to supporting our staff in line with our values.



The Living Wage is described as the hourly rate of pay necessary for people to meet their basic day-to-day needs, including housing, food and clothing. The rate is calculated by the Centre for Research in Social Policy at Loughborough University and is closely linked to changes in the cost of these basic items. Unlike the national minimum wage, it is not legally enforceable and is a voluntary benchmark.

Financial support for students

The University supports an Access to Learning Fund (ALF), which provides discretionary financial assistance for UK students to access and remain in higher education. ALF awards

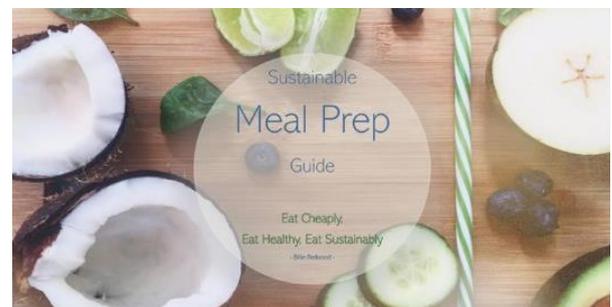


are provided either as short-term loans when receipt of student funding is delayed, or can be awarded as a grant. The amount awarded depends on the individual circumstances and the number of applications received throughout the year. During academic year 2018/19, 305 students were supported with a total of nearly £400k being allocated.

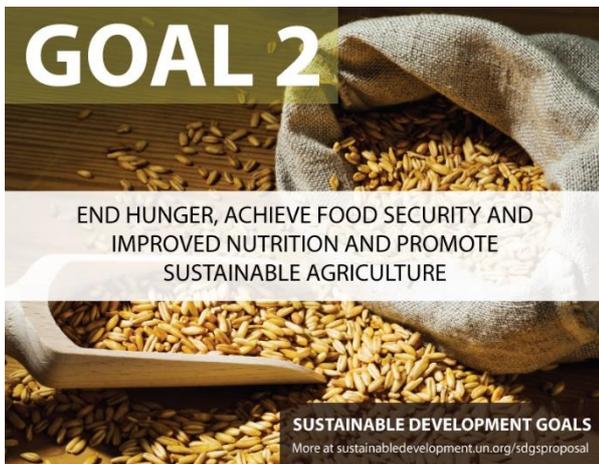
The University also provides an Exceptional Support Fund (ESF), which is a discretionary Hardship Fund to help students with Overseas, Channel Islands, Isle of Man or EU status, and students who would normally be eligible to apply to the ALF but cannot due to the fund being exhausted or before the fund opens. During academic year 2018/19, 17 awards were allocated totalling £6,000.

Student Green Office tackles student poverty

Recognising that food is an area where both environmental sustainability and poverty often intersect, over the past three to four years, our Student Green Office have delivered and created much of their engagement with students through the medium of food, including the creation of a cookbook with affordable, costed recipes for students, written by students and revised and re-released with more vegan and vegetarian options, and more contributions from international students in the subsequent year.



The SGO have also been responsible for the creation and dissemination of meal prep guides which give guidance on batch-cooking in bulk for healthier and more affordable meals, for cooking demonstration videos, and for regular and varied recipes released through their sustainability blog. They've also worked side by side with our Chaplaincy team to raise awareness of and encourage donations to an on-site food bank in conjunction with the Salvation Army.



Associated issues (no specifically relevant targets)

Community Lunch

Community Lunch was born at the beginning of the academic year in 2018, and takes place every Wednesday in the University Chapel. It replaced the Chaplaincy service of 'Sing Pray Eat', so that the eating moved to lunchtime and the singing and praying took place in the evening at the new 'Sacred Space' service in the Crypt of Canterbury Cathedral.

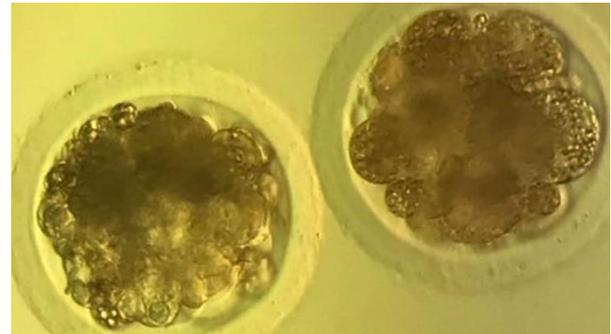


Community Lunch strives to give a simple meal and dessert to anyone who attends. Everyone is welcome to join, staff and students alike. Since its inception it has grown to see up to 40 people attend some weeks. The community help to serve up the food, and whilst the event currently uses a number of large round tables, the future will bring a single large table that allows all to sit together. The whole lunch fosters community by joining at the table to eat and chat.

In-vitro pig fertilisation

Over the last 50 years, livestock breeding has greatly increased meat yield whilst decreasing the associated costs and limiting climate impact; that is, more meat is now

produced from fewer animals, using less land and less feed. Given that the global population is expected to increase by over two billion people over the next three decades, the demand for meat will also undoubtedly increase over this time. Assisted reproductive technology (ART) procedures are routinely performed in human embryology clinics globally. Some of these approaches are now commonplace in cattle, but this is not currently the case in pig production.



This research focusses on improving pig embryological procedures, including both the production, and vitrification (freezing) of embryos. Achieving these goals would limit the transportation of live animals and would allow more rapid propagation of genetically superior animals from breeding facilities to farms. The research therefore directly contributes to three of the Sustainable Development Goals (SDGs): Zero Hunger, Responsible Consumption and Production, and Climate Action. [Dr. Katie Fowler, Senior Lecturer, Programme Director for Human Biology]

Chaplaincy food bank



When you enter the University Chapel you will find a foodbank there, often full of pantry essentials with other hidden gems. The idea is that if you're coming in to use the service that you would stop and chat to the chaplains

who are ready to offer other means of pastoral support.

During Advent a reverse advent calendar event was run, during which staff and students were encouraged to donate supplies to the foodbank. It was well received and used at the beginning of 2020, and is free for anyone in need to use.

Supporting students during self-isolation

During the early stages of the Coronavirus related university shutdown, teams across the university pulled together to provide vital care packages for students who were vulnerable or self-isolating in student accommodation. Packages were delivered weekly, and provided essential food and supplies to students who were unable to leave accommodation.



This was a truly collaborative effort, with provisions being supplied by Catering and Housekeeping, deliveries by Security, and communications being managed by the Accommodation Office.

Feeding the community

Lay Chaplain, Alanna-Jayne Williams helped to fight hunger in the community during the Coronavirus crisis through the Community Fridge, which delivers food to people struggling in Canterbury and the surrounding villages.

Working with the Canterbury Baptist Church and Lily's Bistro (a not-for-profit social kitchen), the Community Fridge was set up in February 2020 to allow people to take what they needed from the weekly Fareshare allocation that Lily's Bistro didn't use. During the crisis the Community Fridge was repurposed to help ill,

vulnerable or self-isolating people who were unable get out to buy food, with deliveries being made as far afield as Ash and Swalecliffe.



The Hunger Games

An activity has been developed for students and staff which aims to increase awareness of poverty and hunger at a range of scales. It begins by reflecting the uneven distribution of global wealth using sweets, with members of the class representing the richest 1%, 10% and The Rest. Those representing the world's rich are then given the opportunity to allow others to join them as part of the rich elite, or to share some of their wealth with The Rest.



This is followed by a "Play Your Cards Right"-style game using global hunger statistics. Will the next country's hunger rate be higher or lower than that of the current country? The session is rounded off by a short presentation, looking at some of the details of SDG2 Zero Hunger, and hunger at the global, national and local scales. [John Hills, Sustainability Projects officer and Geography Technician]

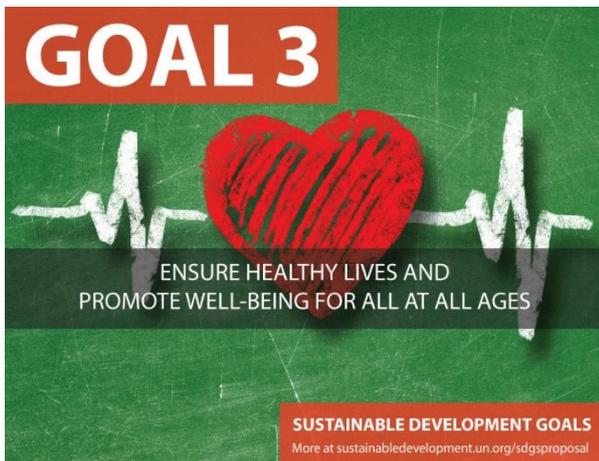
Catering for diversity

Food is essential for life, health and learning but can also be emotive. Providing a wide variety of reasonably priced healthy options for a highly diverse population is a difficult task, especially with a variety of outlets across campus, and direct competition throughout the city. The growing popularity of vegetarian and vegan diets, especially in response to the climate emergency, adds further complexity to ensuring that the offer remains affordable, and provides a sufficient range of healthy options for our whole community.



The University Catering Service works within a sustainable food policy with key objectives to enhance the sustainable food offer:

- Purchase food and raw materials that ensure animal welfare and traceability; reduces the environmental impact of production and transport; maintains sustainable food stocks; maximises nutritional value; minimises artificial colours and preservatives; and ensures farmers get a fair deal (Fairtrade).
- Reduce meat and dairy consumption in order to improve human health.
- Increase levels of customer engagement with sustainable food.
- Ensure that free drinking water is available at all catering outlets to reduce the purchase of bottled water.
- Minimise the use of disposable cups and food containers, in order to reduce waste.
- Minimise food waste and ensure remaining waste is appropriately recycled or composted.
- Minimise energy and water use in the production and provision of food and drink.



Associated issues (no specifically relevant target)

Community Wellbeing Wildlife Garden

The garden nestled between Johnson and Daphne Oram, and bound by part of the ancient flint wall, has been the realm of the Sustainability team for several years. Once providing a home for beehives, it is being slowly developed into a haven for wildlife, students and staff. The pond was renovated some years ago and sizable community allotments are available to grow fruit and vegetables. More recently, a memorial table and tree stump seating has been installed. Using permaculture principles, it is being developed with the help of staff and student volunteers as a quiet contemplative space. Gentle 'Space for Nature' mindfulness activities, as well as regular Friday lunchtime 'Prune and Potter' gardening sessions are offered for teams and individuals.



Staff Wellbeing

The Mental Health and Wellbeing Framework, launched in 2019, builds on the University's strategic Values, through adopting a holistic, whole institutional approach to mental health, which enables all staff to thrive and realise their potential at work. The Framework explicitly acknowledges our institutional responsibilities and recognises the value of every member of staff in our diverse

community. Good mental health and wellbeing is the responsibility of everyone.

Opportunities to build individual and community wellbeing are divided in to the four focus areas of:

- **Community:** providing access to staff networks, community groups, events and lectures.
- **Support** for employees through services such as CIC, the Big White Wall, the Chaplaincy, and Occupational Health; as well as more particular assessments and assistive technologies and services.
- **Learning** opportunities for managers.
- those supporting students, health & Safety, and a whole variety of learning events for all.
- **Living** activities to support and build physical, mental and community wellbeing; such as through cycling to work, sport and exercise, growing on campus, and the Wellbeing Wildlife Garden.

The 'All of Us' Staff wellbeing events planner brings together a whole host of opportunities in to an easy to plan format.



Confronting Global Public Health

As part of MSc Public Health programme, we deliver 'Global Public Health' module that introduces students to the United Nation's Millennium Development Goals (MDGs) and Sustainable Development Goals (SDGs). This module informs their critical understanding of how the goals address global public health challenges to achieve a better and sustainable future for all.

Global public health issues such as communicable and non-communicable diseases, inequalities in health and society, poverty, hunger, education, maternal and child health, housing, water, sanitation and hygiene, along with the impact of globalisation and trade on health and

wellbeing of the global population are all critically evaluated within the framework of the MDGs and SDGs.



Students bring their knowledge and experiences to explore and analyse, in depth and critically, these challenges and the range of geographical, environmental, political, economic, social and cultural factors that influence global public health issues, to unwrap the complexities of major global public health threats in the local, national and international context. By the end of the module, students are able to critically analyse a local public health issue within the global context using the framework of the Sustainable Development Goals. One student on the course commented:

“Extremely interesting module, covering a wide area – really informed my knowledge of the topic. Due to lack of time I sometimes felt I needed more knowledge, but this was covered by extra reading made available on BlackBoard. High standard of teaching, I particularly enjoyed the guest speakers on refugees; Good and interesting ...”.

Playing a vital role in Covid-19 pandemic

Diagnostic Radiography is a key strength within the School of Public and Allied Health Professions, with a great team of academic staff supporting educational programmes and research.



Dr Nick Woznitza, Senior Lecturer in the School and Consultant Radiographer in the NHS, is working with the College of Radiographers and the British Society of Thoracic Imaging, in reviewing and keeping health professionals

up-to-date with emerging issues during the pandemic, in addition to national and local policy.

CT and X-ray scans have helped to produce a body of evidence which doctors have used to diagnose Covid-19. The CT scans of Covid-19 patients have revealed white patches in the lungs which indicate Coronavirus-induced pneumonia.

Combating student stress

Library staff work collaboratively with the Students' Union and other student-facing staff throughout the year, to facilitate a wide range of activities designed to enhance and support wellbeing. 'Chooseday Chill' is a popular initiative offering students regular opportunities to socialise, enjoy free refreshments and play a variety of games each week on a Tuesday evening in the Augustine House Library.



'Stressless' is a programme of activities offered twice a year during winter and summer, that enables students to take a break from the intense demands of their studies, producing assignments and preparing for exams. The 24/7 Library designates 'Relaxation' and 'Activity' zones to offer places for rest, and a wide range of creative activities and games. Advice on study skills is always available, but a focus on promoting healthy eating and maintaining good health is also a priority. Staff facilitate free, fun events too, such as, pebble painting, biscuit decorating, growing cress from seeds, making fresh herbal teas and arranging free massages from trained Sports Centre staff.

Students join forces during Covid-19 isolation

With loneliness amongst the elderly becoming increasingly worse during these uncertain times Alex, a Nursing student, set up a telephone call project with other mental health students, with the help of his mother who gardens for the elderly. Being unable to undertake placements due to the Covid-19 lockdown, which are a critical part of their training, he saw a need to keep students active in terms of their development.

The elderly people involved are informed that by speaking to the students they are in fact helping to shape the nurses of tomorrow, which gives them a sense of empowerment amongst the elderly; they feel they are benefiting others rather than feeling a burden. Feedback has been very positive, and the students have expanded their support to a local care home.

As the project grew, they began to recruit student midwives who also wanted to help. This proved very beneficial as they were working alongside other professionals which would not have been normal practice. Further developments came when Alex received a phone call from the Programme Director for the physiotherapy cohort in Medway, who also wanted to get involved. Consequently, physiotherapy students have

created a light exercise program for those at home, which has been added to the project website.



Alex writes enthusiastically that:

"The beauty of this is we are talking to other professionals and there is not "us and them", there is just us and this is something I hope to continue to do so when I qualify."



Target 4.7: By 2030, ensure all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture’s contribution to sustainable development.

Contemporary Media Debates: BA Media and Communications

Through the Contemporary Media Debates module, one of the topics explored is media and sustainability. The nature and implications of this relationship is examined, focusing on whether media devices are produced in a sustainable and ethical way, what the environmental impact of our digital consumption is, and e-waste, and what happens to media devices that we no longer want or need. As part of their assessment students have the opportunity to write an essay about the topic, an extract of which is provided from Korina Oltran, Year 1, Media and Communications student. [Prof Agnes Gulyas, School of Creative Arts and Industries]

How do the media contribute to climate change?

In today’s time and age technology is being used every day in enormous amounts and it is considered normal and necessary in modern day life of every individual. At the same time, with great changes happening to our planet and the atmosphere, climate change is being talked about more and more. We are trying to use less plastic, go to work by bus instead of by car, we recycle and reuse in hopes of saving the planet. But we do not really think about the damage we are making every time we use our mobile phones, browse The Internet or text with our loved ones. As Rust, Monani and Cubil stated in their work “Our love of media and media technology has become part and parcel of our global environmental crisis” (Rust et al., 2015) but most of us do not even realize that.

One of the reasons why media endangers the environment is the production technological devices. All of the well-known companies, such as Samsung and Apple, make their products from parts imported from many different developing countries. For them that is a way of making products so that the expenses can be as low as possible. But the harm they cause to countries and their environment is not to be neglected. To put together an iPhone made in California, Apple uses parts made in different countries. For example, touchscreen controller, flash memory and audio controller are made in USA while Bluetooth and Wi-Fi components are made in Japan. To even make those parts, countries such as Japan need materials which are mined in conflict zones. This causes great harm to the environment because of the way the mining process is carried out. In some countries workers are often payed very low wages and they exploit children as child labour is present. CO2 is released in all stages of making these products and to make things even worse the life span of these devices is set for two years. Part of the solution for this problem would be Fair trade. Fair Trade is a

Introducing ALBERT

Albert is introduced to all Year 1 students in the Professional Perspectives module and Albert certification will be included from September 2020. Albert Certification is embedded in Year 3 Professional Perspectives assessment and the first cohort of Albert Certificated students will leave the University in 2021.



Albert exists to support the UK production and broadcast industry’s transition to environmental sustainability, working in collaboration to accelerate the adoption of best practice. Discussions focus on sustainability in relation to film and TV production, and set out ways in which student productions can be part of the Albert checklist process as a key element of their production experience. As part of the Albert consortium, the School intends to initiate Albert as part of all student production practical work from September 2020. [What is Albert?](#) [Dr Ken Fox, School of Creative Arts and Industries].

Project 93

University is not simply about seeking common answers. It's about understanding the diversity of questions. Understanding, in the variety of enterprises and disciplines that go on in a university, just what it is for intelligence itself to be shaped by diversity, by conversation, and interaction. Cross-disciplinary awareness and cross-disciplinary conversation become absolutely crucial to the life of a university in this sense. One of the saddest things that can happen in the world of higher education is when people lose sight of or lose touch with that sense of cross-disciplinary cross-fertilisation.

Rowan Williams

Former Archbishop of Canterbury

Since 2016, the Futures Initiative's 93rd project has been transforming our curriculum landscape with key aims; to enrich the academic experience, enhance critical engagement, encourage social activism and incite solidarity and hope amongst our staff and students. Over the first two years, Project 93 organised over 50 collaborative events, each attracting 30-40 participants to a mixture of lectures, discussions, film screenings, interactive workshops, poetry readings and podcast projects on themes to do with sustainability and social justice.

This dynamic has then enabled access to individual tutors, University departments such as the Equality and Diversity Unit and the International Office, the BAME Staff Network, LGBT Staff Network, Women's Staff Network, and student societies to create further collaboration. Events are held within specific seminar times to guarantee a minimum audience; aligned across Faculties that combines students to make large multi-disciplinary, rich and diverse audiences; advertised through the official University and Students' Union communications channels as well as on social media.

Staff recognise the impact of Project 93; one colleague commenting: "Social activism and political engagement do not have a strong or embedded history at our university, but this is now changing thanks to Project 93".

Meanwhile, feedback from students shows that the project had enabled them to expand their horizons: "It has changed the way that I question and feel about myself, my capabilities, the world, culture and everything and everyone around me".

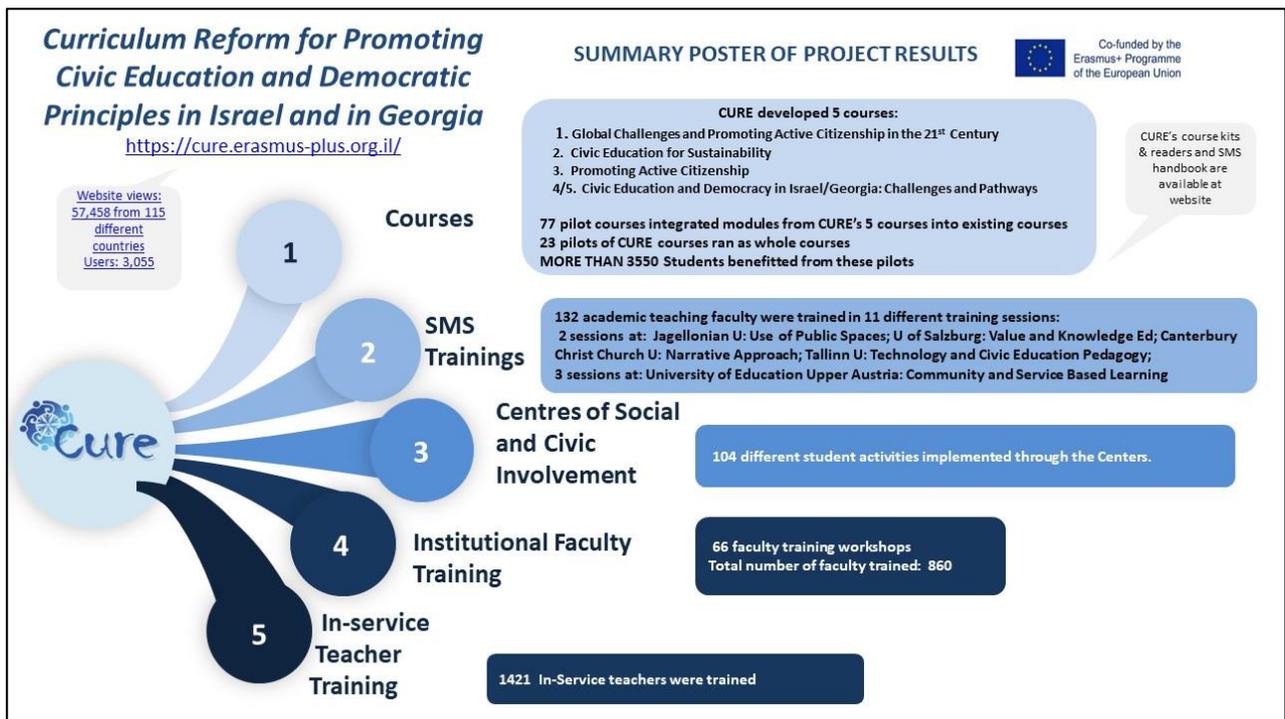
Project 93 has since led to a University-wide initiative to encourage active participation in debate and action around sustainability, equality, environment and social justice, entitled 'Us in the World' that has, for the first time, brought together multiple partners across the University.

CURE: ERASMUS+ Program

The CURE project constructed and developed a multi-dimensional program that promotes curricular reform for democratic principles and civic education in Higher Educational Teacher-Training Institutions or Faculties/Departments in Israel and in Georgia. The project involved 5 HEIs from Israel and Georgia, with support from 5 EU HEIs, including CCCU, and 3 NGOs.

The model on Civic Education for Sustainability provides students with knowledge relating to issues of environmental sustainability, globally and locally. The University's Sustainability Team have had considerable influence on this aspect of the project, with particular reference to the 'Exploring Sustainability website' created and developed by Dr. Stephen Scoffham.

Yocheved Yorkovsky, the leader of the CURE sustainability curriculum describes Stephen as being a "very significant member in the international team that wrote the course: Civic Education for Sustainability' adding that 'His extensive knowledge, professionalism and excellent interpersonal skills contributed to the great quality of the course.'" [Dr. Alan Bainbridge, Senior Lecturer, Faculty of Education]



Exploring Sustainability



The [Exploring Sustainability](#) website, which was originally devised in 2013 has been completely revised over the past year. The

updated version includes new readings and video links which reflect the way the sustainability agenda is changing and evolving. Extinction Rebellion and School Strikes are now featured along with resources on plastic pollution and international migration. There is also a completely new section on the UN Sustainable Development Goals, which as well as being informative, invites a critical response. The growing interest in sustainability both within and beyond the University means that this website is becoming increasingly important. [Dr Stephen Scoffham, Visiting Reader in Sustainability Education].



Target 5.5: Ensure women’s full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life.

Aurora: Developing female leadership

Over the last 8 years, 66 of our female academic and professional services staff, who think of themselves as future leaders, have participated in the national AURORA programme by Advance HE. This is a positive action leadership development initiative for women and those who identify as women, which has provided a way to develop leadership skills, knowledge and confidence. It has also helped to build social capital by networking at local and national levels. Beyond this, an additional 29 members of staff have become mentors and at least 18 other members of staff have become Aurora role model champions.



Achieving gender equality in HE

The University has signed up to the key principles of the Athena SWAN Charter, demonstrating its commitment to gender equality in academia. The Charter acknowledges that academia cannot reach its full potential unless it can benefit from the talents of all and provides a framework for

advancing and developing staff at all levels of the decision-making process.

It has helped identify where our current policies and practices can be improved to better support gender equality and remove barriers inhibiting women’s careers. Many women have attended dedicated development and leadership programmes which has helped start address the gender imbalances at senior levels across the University. Although positive changes are being observed, the University recognises there is still much more work to be done.

The School of Psychology, Politics and Sociology is the second school to have achieved a Bronze Award and follows the School of Human and Life Sciences achieving a Bronze Award in 2018, and who try to attract more women into the sports sciences, currently dominated by male students.



The School of Engineering, Technology and Design has used gender decoder software to review marketing literature for students, and adverts for staff, to try and attract more female applications.

There is on-going support available for both staff and students in their career development. For example, increasing the number of male students undertaking Nursing degrees and then supplying them with support to help them develop and possibly

progress to an academic career.





Target 6.4: By 2030, substantially increase water use efficiency across all sectors

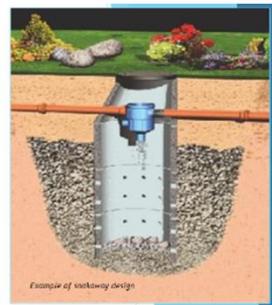
Building 2 water efficiencies

All Sanitary ware and brassware have been chosen based on flushing capacity for WC's and flow rates for taps and showers, to provide water efficiency while still delivering good performance. The main incoming water meter at the boundary and at the incoming point to the building, are linked to the Building Energy Management (BEM) system so that the amount of mains water use can be recorded and monitored for leaks. Live monitoring, using pre-set high and low points will also monitor flows outside these limits, notifying abnormal flows immediately. Leak prevention is also implemented in the water supply to toilets, which will be isolated by a valve linked to a presence detector, which activates when there is nobody in the room. This will mean that any leaks or overflows will be minimised. [Stephen Hawkins, Deputy Director of Estates and Facilities]

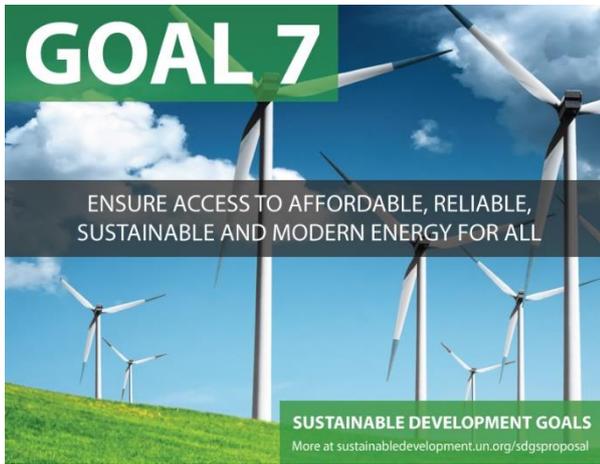


Engineering students use on-site construction for CDIO project

Year 1 Chemical Engineering students undertook a Conceive Design Implement Operate (CDIO) project based upon the wastewater system associated with Building 2. Students reviewed design documents and engineering drawings to understand the design basis and the constraints placed upon the project team, including a lack of capacity in the Canterbury sewerage systems. They learned about the volume of water run-off that could be expected from large constructions, about worst-case flood scenarios, and the future impacts of global warming. Students also learned how engineers took these factors into account when they designed a wastewater infrastructure that embraced sustainable water management.



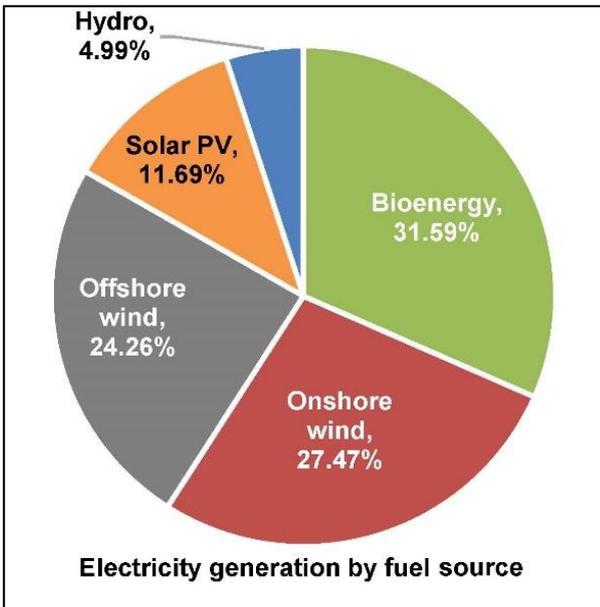
Investigating the operation of soakaways involved building their own models to understand the permeability of soil and other ground based media. Whilst learning how these systems were incorporated into the design to provide effective drainage of clean water back into the environment, they were also able to review the design by using hazard identification and risk assessment techniques, and built mathematical models of the system using spreadsheets.



Target 7.2: By 2030, increase substantially the share of renewable energy in the global energy mix.

Travelling to carbon neutrality

The University generates very small amounts of renewable energy through three roof-top solar arrays. So, our approach has been to purchase renewable energy and reduce demand. From February 2020 the University switched to a 100% renewables tariff, which added 0.5% to the electricity bill, amounting to about £30K. This decision is not without risk however, since as other organisations switch to renewables tariffs, supply may outstrip demand and could result in increased costs.



There is now a significant amount of biogas entering the market that is produced largely through anaerobic digestion of food and agricultural waste. However, the cost of moving to a carbon neutral gas supply is currently not viable, as it would increase costs

by approximately 30%. So our aim remains to reduce use.

Target 7.3: By 2030, double the global rate of improvement in energy efficiency.

New demands on carbon reporting

The Government's Carbon Reduction Commitment (CRC) Scheme was introduced in 2010 under the enabling powers of the Climate Change Act 2008. It required energy use reporting and the purchase of a matched amount of CRC credits. The scheme was scrapped in 2019, and was replaced by the Streamlined Energy and Carbon Reporting (SECR) scheme.



All companies with more than 250 employees and an annual turnover of more than £36m are required to comply with the scheme. It mandates reporting of Scope 1 (directly burnt fuel, e.g. gas) and scope 2 (purchased electricity) carbon emissions, whilst reporting of scope 3 emissions (indirect emissions, such as business travel, waste and water) remains voluntary. Reporting follows the University's tax year and will form part of the University Annual Report.

This change increases the priority of emissions reporting and will help to drive down emissions, as more analysis of building by building reports are undertaken.

Building 2: BREEAM (Building Research Establishment Environmental Assessment Method)

The Building 2 project has a good performance across the board with no section targeting less than 25% of the available BREEAM credits. The strongest performing sections are Management, Water, Materials, Waste, Pollution, Land use and Ecology, all of which score more than 50% of the available credits.

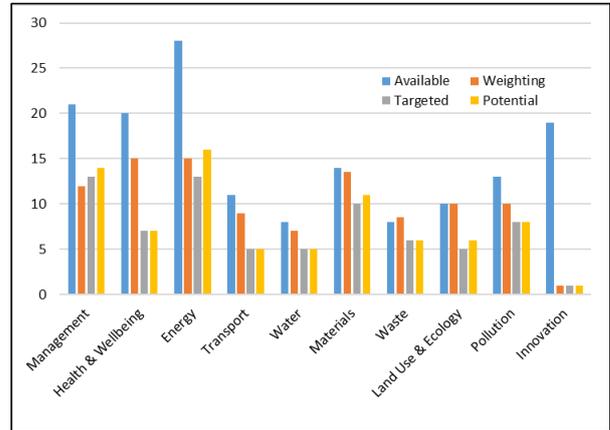
Executive Summary - Design Stage

Scores:

	Available	Weighting	Awarded	Targeted	Potential
Management	21	12	11	13	14
Health & Wellbeing	20	15	5	7	7
Energy	28	15	10	13	16
Transport	11	9	5	5	5
Water	8	7	5	5	5
Materials	14	13.5	10	10	11
Waste	8	8.5	4	6	6
Land Use & Ecology	10	10	5	5	6
Pollution	13	10	8	8	8
Innovation	19	1	1	1	1
Total	152		64	73	79
Awarded:	49.91%				
Targeted:	56.28%				
Potential:	60.42%				

Building 2 will provide a balanced environmental, social and economic performance with BREEAM being the driver to steer the design down a path that achieves sustainable measures for the construction process, as well the building design itself. This

means BREEAM rated developments are more sustainable environments that enhance the well-being of the people who live and work in them, help protect natural resources and deliver more attractive property investments.





Target 8.5: Achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.

Local jobs for local graduates

GradForce is a project based at the University, funded by the Office for Students (OfS) to help local students transition into graduate employment. The GradForce project team build close relationships with local small-to-medium enterprises (SMEs) in Kent and Medway to provide and increase the overall number of graduate opportunities available to CCCU graduates.



The GradForce initiative helps to nurture local talent and gives them the keys to step through the door into the graduate workplace. A Get Hired! bootcamp has been created for students to participate in during their final year, to help optimise their soft and hard skills and ensure their readiness for their first graduate job.

In particular, Gradforce focuses on students from widening participation groups; Black, Asian and minority ethnic (BAME); those who register as having a disability; mature students and all from the low socio-economic backgrounds. It aims to work with students in their personal and professional development, by providing training and development opportunities which build on their existing skills and knowledge gained from studying their

degree and showing how those skills transfer into the world of work.

An important role for Gradforce is to help build self-confidence and self-esteem so students feel confident in applying for roles when they graduate. There is evidence that these particular groups of students lack resilience along with self-confidence in their skills and abilities, so they are supported in changing their mindset as well as improving their emotional intelligence and resilience

Working with Local employers in Kent and Medway Gradforce is securing vital roles for students, and as part of the signing up to Gradforce, offer a variety of employer training opportunities, including:

- Disability in the workplace – Tackling barriers and fear: finding solutions to enable employers become disability confidence
- Mental health First Aid in the workplace
- Coaching and mentoring programmes for staff
- Belbin for Teams training
- Cyber security for staff

The Gradforce logo is green to reflect a care for the environment, and student merchandise is all eco-friendly and recycled, with corporate merchandise being sourced from local companies. The majority of Gradforce marketing is online to reduce paper use.

Target 8.7: Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking.

Safeguarding our supply chain

The University is committed to ensuring that slavery and human trafficking is not taking place in its supply chain in line with the Modern Slavery Act 2015. The actions taken by the University include identifying high risk supply chains and following up with these suppliers to gain confirmation that they comply with the requirements of the Act.

As part of the University's procurement strategy the tender process has been updated to ensure that appropriate activities are undertaken for all high-risk contracts. This includes questions relating to the Modern

Slavery Act being stated in the Pre-Qualification Questionnaires.



By continuing to expand its knowledge of the supply chain with all managers, budget holders and staff engaged in procurement activity, the University continues to uphold its commitment to ensuring all vulnerable staff, students and those working in the supply chain are safeguarded against exploitation in all forms.

Raising awareness of modern slavery and human trafficking is slowly growing, but the signs are often hidden, making victims even harder to recognise. In 2019 Staff and students came together to form a human

chain around Augustine House in protest against the slave trade and human trafficking in Kent.

"It's a growing issue in Canterbury. It's something that is on our doorstep and the reality is that quite often we don't see it and we don't know what to do about it even when we do see it."

"As a team of chaplains we have great links with The Salvation Army who are at the forefront of helping people out of human trafficking and the modern day slave trade."

[Reverend David Stroud, Senior Chaplain]





Target 9.4: By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies.

Increasing IT efficiencies

The University IT Service continues to implement technology efficiencies as opportunities arise through new service provision and contract review, such as:

Data Centre Simplification. Ongoing implementation Nutanix/VMWare hyper-converged infrastructure that reduces the physical and power requirement of university data centres. The legacy tape-based backup service replaced with Rubrik Azure cloud-based service, eliminates consumables and reduces the power consumption.

Printer Fleet Refresh. During 2018/19 university-wide leased printing services were retendered and replaced with Hewlett Packard devices, which have a lower energy and carbon impact than the legacy Xerox printers. Estimated operational savings are £1,000 in electricity costs and 2,500 kg CO₂e.

Software as a Service (SaaS). IT Service continues to work with business stakeholders to implement or move to SaaS where possible and commercially appropriate. This transfers the environmental impact from CCCU to more efficient cloud hosting providers that should result in a reduced overall carbon and energy footprint of these services. For example, a Linux desktop service can be provided to support the delivery of Bioscience teaching and research software.

Long Range Wide Area Network (LoRaWAN).

IT Service is investigating the introduction of a LoRaWAN gateway alongside the recently deployed next generation Wifi access points. This would provide the infrastructure to adopt low energy, Internet of Things (IoT) devices to allow Estates & Facilities and IT Services to explore and deliver new ways of monitoring and controlling our environmental, location and utilisation services, including monitoring:

- Empty rooms with the lights left on
- Room temperature
- Unoccupied pre-booked spaces

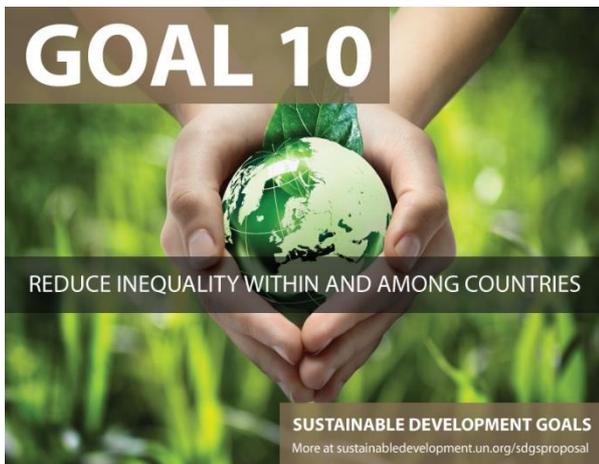
Improving Student and Staff flexibility

One Device Strategy. An overall approach has been agreed to gradually move the majority of staff across to the use of a single, laptop type device. As funds permit, IT Service will look at providing staff with either a desktop or a laptop computer with associated docking station, with keyboard and monitor. This will allow staff to work more flexibly and will reduce the overall energy consumption as we move from desktop to laptop computing.

Hot Desk and Wi-Fi services. IT Service continue to support the Estates Master Plan to increase the adoption of staff hot desk areas with appropriate provision of docking stations, wireless and other services. Next generation ubiquitous Wifi 6 is being deployed across the estate to provide a faster, more consistent wifi service.

Remote Support. Improvements to remote support capabilities will allow for staff and students to be remotely supported more completely. This will both improve flexible working and reduce the need to travel to the University IT Hubs to have IT problems resolved.





Target 10.2: By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, race, ethnicity, origin, religion or economic or other status.

University Equality Objectives

The University has three high level equality objectives underpinned by actions and cross-referencing the University's Access and Participation Plan and its People Strategy:

- To become a more inclusive employer, increasing the diversity of our workforce alongside the growing diversity of our students; Through attracting, recruiting, inducting, developing, retaining and recognising a highly diverse community.
- To work towards achieving equal outcomes for our all students, regardless of their protected characteristics; through the delivery of an inclusive curriculum.
- To deploy an inclusive lens across all areas of the University, providing opportunities for staff and students to reflect on the equality impact of their activities; through rigorous implementation of Equality Impact Assessment and EDI professional development programme.



Kent and Medway EDGE Hub

The Kent and Medway Engineering, Design, Growth & Enterprise (EDGE) Hub is an ambitious and far reaching initiative designed to unlock regional economic growth and employment in engineering, science and technology sectors. It is supported, amongst others, by the South East Local Growth Fund (SELEP) and the former Higher Education Funding Council for England (HEFCE).

One of its key objectives is to:

- Create a sustainable and diverse regional talent pool with 30 to 40% of graduates from disadvantaged backgrounds and 30 to 35% women graduates by 2024.



The Equality Impact Assessment covered five areas including: a new building, the Teaching and Learning strategy, the Industry Engagement strategy, the Marketing and Communications strategy, and the Staff Recruitment and Development strategy.

The Roots Project

In 2016 the School of Language Studies and Applied Linguistics set up a student led project to promote greater cohesion and a sense of identity within the School. The Roots Project organises activities and events that counteract possible feelings of isolation among students and tap into a rich cultural diversity. New students take on the leadership of the Project annually, while being true to the Sustainability Learning and Teaching principle of Global Citizenship and Internationalisation.

Student experience has improved and links with the local community enhanced through litter picks and wild flower planting in the

continued protection and enhancement of Kingsmead Field.



Students are offered support to develop their skills in areas such as budgeting, project management and presentations. With support from a staff member project leaders grow in to their leadership roles and take control, enhancing employability and education the whole person.

"I think, the idea of encouraging students to read poems in their first language is just great. Though I had no background knowledge in nearly all the languages that were used, I felt I can understand what was being read, and the idea of having a translation or an explanation of the original poem helped a lot in transmitting not only meaning, but also the feelings a native of that language would feel." [Student]

[Antonia Linehan, Senior Lecturer, Centre for Language and Linguistics]

Target 10.4: Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality.

Gender pay gap

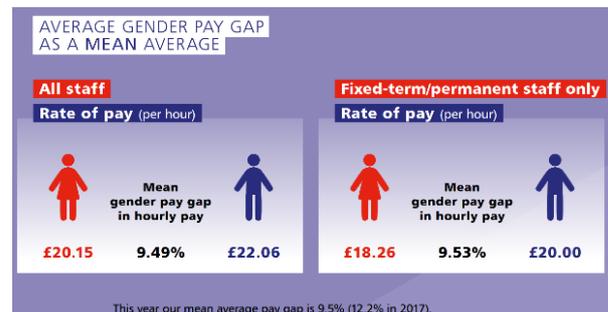
The gender pay gap is expressed as a comparison between what, on average, men and women earn across an organisation and

is based on the calculated 'hourly pay' for each relevant employee, which means that data for part-time staff are directly comparable with data for full-time staff.

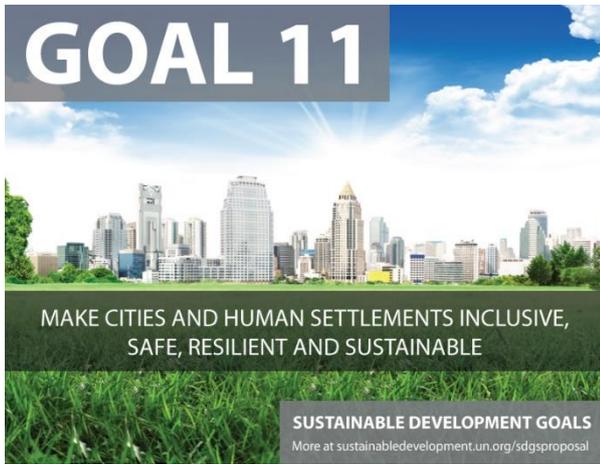
The data for 2017/18 shows a decrease in both the mean and median pay gaps between male and female employees.

The University is committed to a range of activities to continue to improve gender equality and close the pay gap, including:

- Promoting shared parental leave and flexible working opportunities
- Ensuring job evaluation processes are fair and consistent
- Designing job descriptions and recruitment material to support applications from women
- Providing development opportunities for specific groups of staff including the Aurora programme that supports female employees into leadership roles
- Unconscious bias training across the organisation
- Prioritising diversity on recruitment and promotion panels, committees and Governing Body
- Support our Women's Network and continually reviewing facilities for nursing mothers



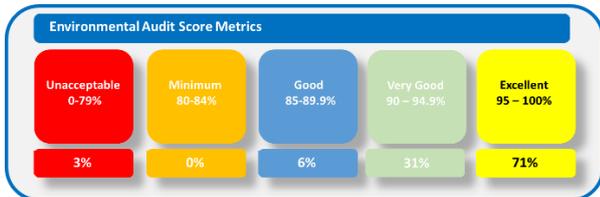
View all equality monitoring reporting [here](https://bit.ly/2Kb5Lso) - <https://bit.ly/2Kb5Lso>.



Target 11.2: By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport

A sustainable shuttle bus service

As the Canterbury campus expanded in the early 21st century there was a need to provide shuttle transport to ensure an accessible estate and to make the most efficient use of a distributed campus. The shuttle operates several times an hour, servicing three main university sites in Canterbury, the East railway station, bus station and the University’s own Park & Ride facility, whilst minimising the impact of independent inter-site travel by the University community.



The service was re-procured in 2019 and as part of the exercise the University wanted to appoint a contractor that was able to evidence environmental initiatives that have been fully implemented and ensure that the Contractor complies with all relevant University Policies in relation to Invoicing, Sustainability and Modern Slavery. The contract was awarded to King’s Ferry, a subsidiary of National Express. Reducing environmental impact was a key element of the procurement assessment criteria, paying particular attention to supporting university ambitions for a sustainable future and reducing its overall carbon footprint. The company’s own environmental policy and targets, which operate within the principles of CCCUSDG2020.1

ISO14001, are class leading; minimising vehicle emissions; retrofitting low energy infrastructure and generating electricity at bus depots; reducing waste production and use of raw materials; and a whole host of staff and community initiatives.

Target 11.4: Strengthen efforts to protect and safeguard the world’s cultural and natural heritage.

Antidotes for Plant Blindness

‘Plant blindness’ has been identified as a significant issue, with fewer young people engaging with plant science, agriculture and horticulture, so critical to the health, wealth and well-being of society. The CCCU Bioversity Initiative seeks to address this through the celebration of our green spaces on campus. Sited within St. Augustine’s Abbey in the Canterbury UNESCO World Heritage Site, we combat ‘plant blindness’ through education related to the medicinal herbs in our physic garden, the rare varieties in our orchard and nuttery, and growing heritage hops on site for our own craft beer.



Our contribution is recognised through the award of Gold to Canterbury in the regional ‘In Bloom’ competition (judged by the Royal Horticultural Society). Research at CCCU on the issue of plant blindness has been published by the internationally renowned New Phytologist Trust. [Prof. Peter Vujakovic, Professor in Geography]

Target 11.6: by 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality, municipal and other waste management

Saying it with flowers

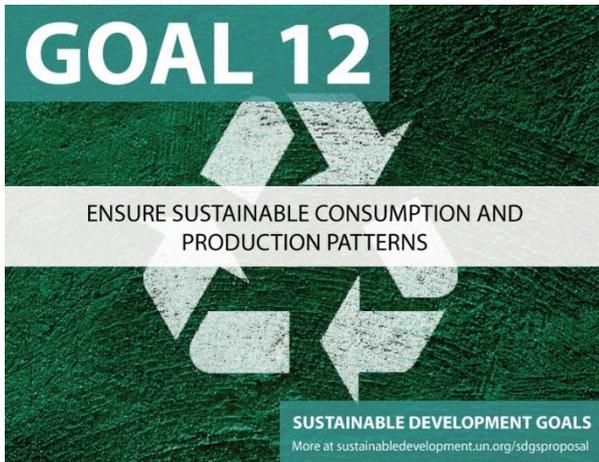
Urban air quality impacts on the lives of the majority of the world’s population and the race is on to develop effective ways of monitoring it, and the effects that it can have



on the urban environment. As such, it falls within the remit of the Sustainable Development Goals adopted by all UN

member states in 2015. One strategy adopted by Dr Gregg McIntosh at CCCU is magnetic biomonitoring, where plants are utilised as passive samplers of air particles.

The magnetic properties of the plants are then used to infer the quality of the air to which the plants were exposed. The results obtained from Petunias, found in hanging baskets placed around Canterbury during the summer of 2019, highlight the influence that the heavily trafficked ring road surrounding the city centre has on air quality. [Dr Gregg McIntosh, Senior Lecturer, Natural and Applied Sciences]



Target 12.5: By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.

Managing waste

The University continues to treat waste reduction as a priority, and whilst recycling rates remain relatively static, there has been a marked downward trend in waste generation since 2013.

On-going education of students and staff is a key focus, since waste stream collections vary throughout Kent and are different within the University as well. Waste stream contamination continues to be a problem that can cause a bag of recycling waste to end up as general waste.

great! The bag numbers have increased by 97% from last year's campaign"

All cooking oils from all kitchens are sent for recycling, and converted into 6275 litres of bio-fuels. And, although there is now very little kitchen food waste, all raw and cooked vegetable food waste from the Food Court is composted on-site in the Ridan food waste composter by the Eco-Students Society.

IT waste management

Since 2018 Computer Disposals Ltd (CDL) have been contracted for the removal and disposal of University IT waste. In the year ending July 2019 20,054 kg of IT waste was generated, resulting in £14,617 of revenue. However, working with CDL identified missed opportunities for reuse and recycling of waste IT that still had a useable life beyond the University. During the same year it was established that approximately £13,800 of rebates were forfeited due to missing parts, damage, failure to remove BIOS passwords and fixed asset tags.

** IT achieved £11k from rebates on their waste

* Creating income for the BHF: 628 bags equates to £8,792, diverting 5t from landfill

Waste Stream	Waste Tonnage					
	13/14	14/15	15/16	16/17	17/18	18/19
General non-hazardous waste & skips	526	465	431	523	389	224
Dry Mixed Recycling	292	146	209	190	167	68
Glass	167	186	173	19	15	7
Food Waste	27	49	70	24	28	22
Confidential waste paper	6	9	8	14	19	24
General WEEE	29	20	7	5	1	0
IT Recycling (since March 2016) **			4	17	9	15
Person items: British Heart Foundation *	3	2	5	1	3	5
Other misc. items	5	11	8	0	1	44
Total waste	1054	888	915	794	632	410
Total recycling	529	424	484	270	243	185
Recycling rate as a percentage of total	50%	48%	53%	34%	39%	45%

Last year's British Heart Foundation collections produced 5 additional tonnes of used equipment and clothing donations. All items are reused or recycled, which creates income for the charity – "628 bags, which amounts to up to £8,792 for the BHF and has helped to divert 5 tonnes from landfill which is

The Living and the Dead

Burial sites provide an amazing insight into a range of SDGs including responsible consumption. The dead are often neglected in the discussion of sustainability, which focuses on present and future. Geography

students are introduced to sustainability issues through both classroom teaching and field visits to burial sites. Issues covered include ecosystems services, such as biodiversity enhancement, green spaces and health and well-being, and the fact that graveyards are a special type of landfill, involving burial of bodies, but also a wide range of other materials including embalming fluid, pace-makers and artificial joints. Death is an issue which cannot be ignored, especially when thousands live in graveyards in Manila and the Chinese government is providing incentives for burial at sea in its crowded coastal cities.



Target 12.7: Promote public procurement practices that are sustainable, in accordance with national policies and priorities.

Procuring demolition of the Prison back lands and associated works

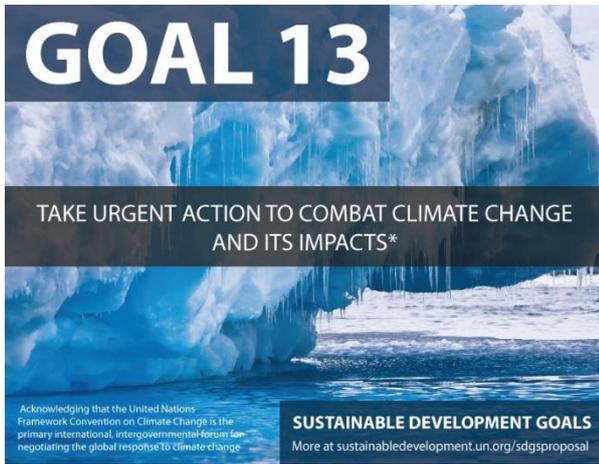
Procuring the works required to enable future redevelopment of the Prison back lands area as part of the University Masterplan was on

the critical path for construction of Building 2 and needed to be carried out with due care and expediency.

DDS Demolition, who won the contract, were to remove waste materials derived from the works to a suitably licensed recycling facility or suitably licensed landfill after it was processed and segregated on site, in accordance with current Landfill (England and Wales) Regulations. The offer was made in accordance with DDS Demolition Limited Terms & Conditions for Demolition and Asbestos Removal Services (160316RO), with the requirement to supply all relevant documentation including waste transfer notes.



Site works generated large quantities of recyclable materials. Concrete was initially broken up to remove the majority of steel reinforcement, and along with brick was crushed into two grades using on-site crushing machinery; one for roadways and one for the piling mat, forming the basis of the new building. All finer material was removed by a local waste contractor, washed and then separated to produce sand and gravel for sale. In total 35% of the waste material was reused on site.



Target 13.3: Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.

Declaring a Climate Emergency



The University and Christ Church Students' Union (CCSU) have joined with other organisations across the globe to declare a climate emergency.

Around 7,000 other higher and further education institutions and networks from across six continents have signed a letter to take action against the growing threat of climate change.

The letter, organised by the Environmental Association for Universities and Colleges (EAUC), which includes a three-point plan, calls on governments and other education institutions to join and declare a climate emergency and back this up with actions that will help create a better future for both people and the planet.

The three-point plan includes committing to going carbon neutral by 2030 or 2050 at the very latest, mobilising more resources for action-oriented climate change research and skills creation, and increasing the delivery

of environmental and sustainability education across curricula, campus and community outreach programmes.

Carbon Literacy Training

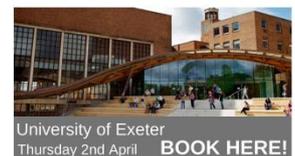
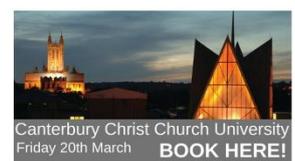
As part of our commitment to the Climate Emergency, reducing operational carbon emissions, and supporting our staff and students to do so, the University partnered with The Alliance for Sustainability Leadership in Education (EAUC) to offer a Carbon Literacy training day. The training was developed by Manchester Metropolitan University, Nottingham Business School and the Carbon Literacy Project.



The training is run by the Carbon Literacy Trust, and results in full certification on completion. All participants receive full course materials and having taken it, are then able to offer the training to colleagues and or students. The training covers five key areas:

- The basic science behind climate change
- Social equity and climate change.
- What we need to do to meet the Paris Agreement targets and achieve a zero carbon society
- What you can do to act on climate change, in your personal life and at university
- Strategies and skills for communicating action on climate change

Four courses were offered across the country between 19th March to 2nd April (Exeter, Keele, UEA and CCCU). Unfortunately, all had to be postponed due to the UK lockdown.



Canterbury City Council has declared a Climate Emergency.

What does this mean and what can you do?



Set up in 2019 and hosted by the CCCU Sustainability Team, CCAP (which has since become a Community Interest Company), has developed a set of aims to:

- To support the City Council in the implementation of their Climate Emergency Declaration and associated actions
- To reduce our carbon footprint/emissions throughout the district and work towards a net zero carbon Canterbury by 2030.
- To promote the regeneration of our ecology and biodiversity and to increase the amount of energy we generate locally from renewable sources.
- To work with and support other groups that are campaigning for a more sustainable future and SDG implementation for/in our District.
- To support the work of the Canterbury Society and the Canterbury SDG Forum in respect of the above

and a 10-point action covering:

- Inform, educate and behaviour change
- Campaigning and advocacy
- Land management

- Economy and business
- Sustainable transport
- Buildings and infrastructure
- Sustainable food supplies
- Waste avoidance and recycling
- Affordable and clean power
- Monitor and evaluate

Low carbon living

In response to signing The SDG Accord Climate letter in July 2019, the University hosted a course facilitated by Jo Barker, an experienced, local garden designer, forager and permaculture practitioner, that explored low carbon living.

Three evening sessions aimed to empower those attending to plan for the worst and hope for the best; to shake free of the crazy panic, and uncover various ways to make a difference in our own lives that will help reduce our carbon emissions, support natural systems, and meet our human needs. The three sessions each focused on three particular areas of impact and action:

The Behavioural Field. Patterns of Decision and Action that includes how to make beneficial connections, care for people, and consider how behaviour can develop.

The Biological Field. Patterns of life and growth that explores effective land and resource use, including growing food and regenerating the land and wildlife in everything we do.

The Built Field. Patterns of Human Habitats that looks at the built environment and includes eco-retrofitting the home.

[Unfortunately, UK lockdown meant that only the first session could be run. The course will continue once the University campus is open again.]



THERE'S A CLIMATE EMERGENCY, BUT WHAT CAN YOU DO?

TOP TIPS TO REDUCE YOUR CARBON FOOTPRINT AND BE MORE SUSTAINABLE

MAKE YOUR COMMUTE GREEN

Cars emit greenhouse gases that destroy our atmosphere. There are always ways to make your commute eco-friendlier. For starters, take public transport it's a great way to reduce emissions. Or riding your bike is also incredibly helpful to the environment and is a great form of exercise.

REDUCE YOUR ENERGY USAGE

Becoming more energy efficient is a great way to reduce emissions, producing less greenhouse gasses. Cut down on energy usage in your household, workplace, or study areas. Make sure to turn off lights and unplug unused devices. Replace light bulbs with energy-efficient light bulbs to help you save electricity too.

USE YOUR VOTE

Have a positive impact on climate change by helping those who fight against it get into power. This means voting for legislation and politicians that aid against the detrimental effects of climate change. Voting the right people into office will help pass legislation that can fight against corporations which are mainly responsible for climate change.

REDUCE, REUSE, RECYCLE

Manufacturing emits many greenhouse gases. It is unavoidable in the production of goods that we use on a regular basis. However, a cleaner alternative would be to reduce your consumption of goods, reuse items where possible and commit to responsible recycling. Consider getting second hand, using charity shops, putting out your recycling properly.

EDUCATE YOURSELF AND OTHERS

The importance of educating others about climate change cannot be overstated. There are many platforms which allow us to spread our message. Whether word of mouth or social media, there are always ways to educate others on what climate change is doing to our planet.

We recently petitioned the University to switch its electricity supply from a **Fossil Fuel** mixed energy to **Fully Renewable!** The University is reducing its Carbon Footprint. What is YOUR Carbon Footprint right now? Find out here: footprint.wwf.org.uk

Us in the World





Target 14.1: By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.

Assault on disposables

In 2017 the University introduced a 10p levy on all disposable food and drinks containers, which was accompanied by providing a reusable cup to all staff and new students. In 2018, the disposable cup and food container levy increased to 25p, in line with emerging practice in the commercial and education sector. This action resulted in a two thirds reduction in the number of disposable cups being purchased.



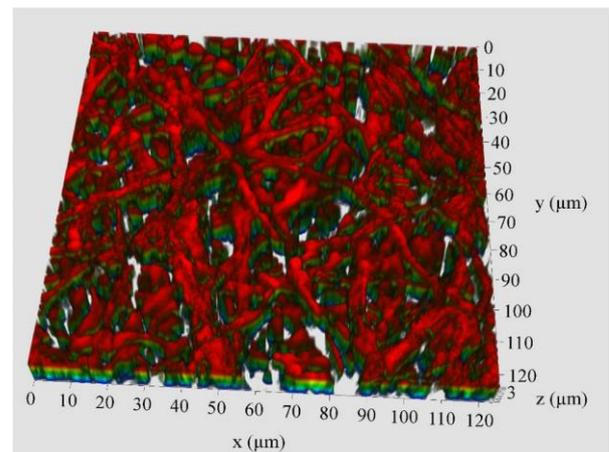
During 2019 the University Catering service embarked on a programme to replace all single use plastics with biodegradable versions. This included cereal pots, takeaway food containers, salad packs and cutlery. Whilst the University has little control over the

destination and treatment of its waste, this policy ensures that items finding their way in to the natural environment will biodegrade. During the same year the University sandwich supplier moved to providing all food in biodegradable packaging.

Many areas of the University have already moved away from using disposable plastic bags, such as the Students' Union for Fresher's Fair, Student registration Welcome bags, and the University Bookshop.

Countering effluent pollution with nature

Dr Asma Ahmed, Senior Lecturer in the School of Natural and Applied Sciences received a prestigious grant from the Leverhulme Trust for research into the biological treatment of industrial effluents using novel biofilm-membranes.



The grant, of more than £263,500 is for a project which aims to develop a proof-of-concept, sustainable process for the treatment of the large quantities of effluent containing lignin-derived phenolic compounds formed during the processes involved in the paper and pulp industry.

These compounds, designated as 'priority pollutants' by the European Commission are toxic to animals and aquatic life. The project will use biofilm-membranes formed by a non-pathogenic fungus *Neurospora discreta*, which has shown the ability to degrade such contaminants effectively. This work could also pioneer the use of biofilms as biodegradable and renewable materials.



Target 15.5: Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity.

Canterbury is blooming marvellous



For many years the CCCU North Holmes Campus has been a core part of Canterbury City's entry in to the South & South East In Bloom competition (S&SEIB). Organised by the Canterbury Business Improvement District (BID), the tour always begins and ends on the campus. In recent times the campus has also been entered independently in the 'Business Landscape' category, achieving 'Gold' on the last occasion. However, a hiatus has been created by the major construction projects on site since 2017, but the campus will re-enter independently in 2021. In September 2019, Canterbury In Bloom was awarded a 3rd successive Gold award and automatically entered in to the national Britain In Bloom

competition. Judges' comments remain very complementary:

"The city looked beautiful, prospering and well maintained. Horticulture was of a very high standard – the hanging baskets looked really good and the centre looked clean and well maintained. Planters and planted areas were also very good. The meadow at Greyfriars and Solly's Orchard were looking very good – the new planting along the wall at the latter was particularly good. Westgate and Dane John Gardens looked superb! The new forest school at St Peter's (School) was an inspiration. The grounds at Canterbury Christ Church University were really interesting and a great credit to the city. Whitefriars shopping area was also very good – great to see the Fifth Trust involved in maintenance."

"Canterbury excels at community engagement – there were so many good projects that people took time to tell us about and quite a few that we didn't have time to see. Congratulations to all involved."

Long-life learning through engagement with trees

Research in Geography into the survivorship of trees in southern England following the Great Storm of 1987 has been used to engage students with the concept of long-life learning; learning from the phytobiographies of these long-lived organisms.



Trees, despite the fact they appear to be static and inflexible organisms, display incredible genetic plasticity, allowing them to adapt to major disturbance, including being toppled. Students learn about the legacy of ecosystem disturbance and its importance for such matters as micro-habitat creation, for

example rot hollows and dead wood, that are essential to many organisms like beetle larvae. The findings of the research and its pedagogic benefits have been published by arboricultural societies in the UK, the US and Australia.

Wilding Kent



The Kent Wildlife Trust (KWT) and Wildwood Trust plan to 'wild' the East Kent Blean through a trial release of large herbivores, including European bison within a 3000-acre area. Wilding in Kent would restore landscapes by reintroducing missing species to provide natural grazing, creating a dynamic mosaic of habitats and enriched woodlands. This would provide the habitat for the return and recovery of other native species, such as the turtle dove along with other initiatives such as the reintroduction of the pine martin that could be the first step to reintroduce the red squirrel to Kent.

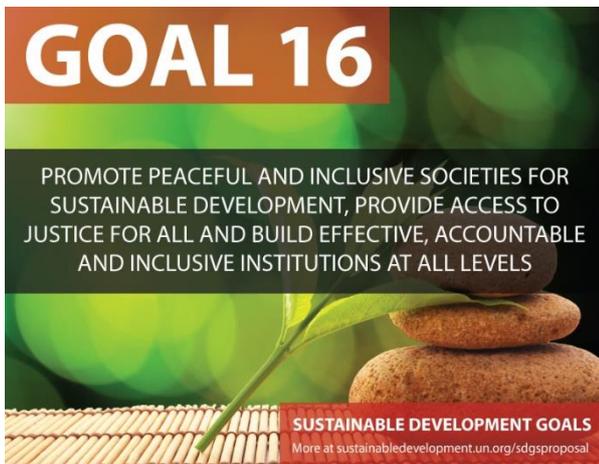
There are many benefits experienced by people that result from increased biodiversity and healthier landscapes, but the

reintroduction needs to be conducted in spaces where there can be interactions between people and wildlife.



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Dr Adriana Consorte-McCrea (CCCU and Chair of the IUCN's Human-Wildlife Interactions Working Group, of the Conservation Translocation Specialist Group) works with cross-disciplinary research teams at CCCU to assess the needs to include people from diverse interest groups in the planning of wilding projects. The research indicates that people's attitudes towards the return of native species can vary according to social economic variables, such as occupation and livelihood, education and place of residence in relation to reintroduction sites. [Dr. Adriana Consorte-McCrea, Education for Sustainable Futures Lead, Sustainability Team].



Target 16.4: By 2030, significantly reduce illicit financial and arms flows

Ethical Investment



The University's investment policy is to generate funds with which to further the ambitions, aims and values of the University.

For ethical reasons, the University will not directly invest funds in the following:

- Activities that conflict with the University's sustainability measures; within which there is an aim to reduce the carbon footprint
- Fossil fuel companies, including coal and tar-sands
- Corporations complicit in the violation of International law
- Arms companies, including sales to regimes
- Where such investment might have an adverse impact on the reputation of the University
- Where the investment fund is not able to demonstrate social responsibility within the context of the locality of the investment activity
- Where the investment is considered unethical and not in keeping with the University's values.

Additionally, the ethical banking policy of university service providers is obtained and reviewed annually during the term of service to ensure best fit with university values is maintained.

Target 16.6: Develop effective, accountable and transparent institutions at all levels.

Peace and Sport

In 2017, Dr Dikaia Chatziefstathiou led the contract negotiations for securing funding (£10,740) from the world-renowned organisation Peace and Sport, which is under the High Patronage of H.S.H. Prince Albert II of Monaco. This was the first contract of its kind that the organisation has ever signed since its foundation in 2007. Dikaia managed a team of four researchers in evaluating the organisation's fieldwork programmes worldwide in relation to how these meet the UN SDGs. A questionnaire was designed in which each question responded directly to one SDG.

The results were presented to ministers, NGOs partners, and other international key stakeholders in the esteemed Peace and Sport Forum in Monaco for the organisation's 10th anniversary in 2017. In 2018 a blueprint of guidance for the provision of fieldwork programmes was shared with all the partners of Peace and Sport. Since then our recommendations have been taken forward and are applied to the world fieldwork programmes today.



In 2019 the work was presented to international conferences and symposia, with papers submitted to peer-reviewed journals in 2020. [Dr Dikaia Chatziefstathiou, Reader in Olympic Studies & the Social Analysis of Sport].

Target 16.b: Promote and enforce non-discriminatory laws and policies for sustainable development.

Responding to Refugees

Tutors Alex Ntung, (an ex-refugee from the Congo), and Jonathan Barnes, founders of the local charity 'education 4 diversity', devised a new module within the Education Studies programme, entitled Refugee Studies. This course is for those planning to enter a wide range of public facing professions. The module is founded on beliefs that all working for the public should understand the background, facts and benefits of today's unprecedented global migrations. Students met and shared with newly-arrived young refugees living in Canterbury, heard from charities working to support and integrated those fleeing conflict, discrimination, climate change and poverty and conversed via Skype with refugees living in one of the world's biggest refugee camps. They investigated primary evidence of global migrations of the 17th, 18th and 19th century around Canterbury and learned about the causes and effects of past and current global displacements.



But it was learning directly from individuals who had suffered the dreadful impact of conflict and now enjoyed the benefits of relative security, that most powerfully communicated the importance of global efforts towards peace and justice. Students' excellent logs and blogs recorded new thoughts on the multi-layered impact of inequality and the need for global partnerships to build more inclusive education, more sustainable communities and resilient individuals. [Dr. Jonathan Barnes, Academic Sessional].



Target 17.16: Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilise and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals

Responsible Futures Partnership

The partnership began in 2017, when the University and Christ Church Students' Union (CCSU) signed a commitment to embedding sustainability across the curriculum. It built on the success of the *Futures Initiative* and provided a great opportunity to take part in a supported national programme. Full Responsible Futures Accreditation from the National Union of Students (NUS), was achieved in May 2019.



The first audit over a two-day period was carried out by four students under the guidance of the NUS Responsible Futures Lead. One student auditor said:

"It surprised me how much I enjoyed [the audit] and how much I learned from it. My skills developed and I believe that these will be transferrable into the professional workplace and beyond university life."

Another commented:

"I have been surprised by how my own views of sustainability have changed. I have been pleasantly surprised by how much the University has done to make a positive impact with the Responsible Futures project."

Ellie Martin from the Students' Union said:

"This has been an amazing period when relationships between CCSU, the Sustainability Team and Student Green Office have really become embedded. The partnership goes from strength to strength and we feel that we are really responding to student demand for sustainability to be embedded within their courses".

Climate Emergency Collaboration



In early 2020 the Responsible Futures partnership held a Climate Action planning day to establish a response to the University's and Students' Union's joint Declaration of Climate Emergency. Both partners had signed the SDG Accord Climate Emergency letter, and developed specific responses to the three-point commitment to:

- go carbon neutral by 2030, or 2050 at the very latest
- mobilise more resources for action-oriented climate change research and skills creation
- increase the delivery of environmental and sustainability education across curricula, campus and community outreach programmes

During the day an open staff consultation was attended by more than 40 colleagues

from professional services, academics, the students' union, researchers, and senior management, with a lively discussion informing the production of more concrete proposals for action by the partnership.

Target 17.17: Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships.

Developing a Cross-Kent Natural Environment Community of Practice



The Commonwork Trust (based at Bore Place), the Kent Downs Area of Outstanding Natural Beauty (AONB), the Kent Nature Partnership, and the CCCU Academy for Sustainable Futures have applied to the Heritage Lottery Climate Action Fund (CAF) for a £200k development grant. The proposal ensures that CAF funding will focus on activities that have the potential to make a meaningful and lasting difference on the carbon footprint of communities. Within the place-based focus of a beacon landscape, the Kent Downs Area AONB, the greatest opportunities for change have been identified as the land and nature management, which underpins the local economy, society and environment.

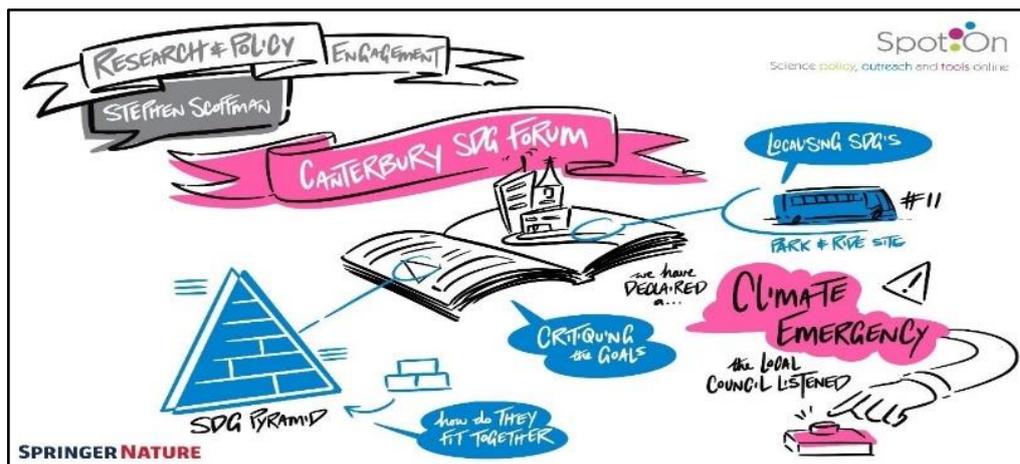
Bore Place is central as a beacon hub and spokes model for change in a place based,

landscape-scale approach. Its' 500-acre organic dairy farm located in the Kent Downs AONB is an exemplar in reducing CO₂ emissions, having already secured a 50% reduction and offering programmes for experiential learning about our planet and how to care for it for over 35 years.

During the development phase a number of satellite hubs at other locations within the AONB representing different land and nature management systems and learning opportunities, will be established. The hubs will provide diverse sites to deep dive test and deliver approaches to low carbon land and nature management, behaviour change and community climate education initiatives. The hubs will be connected to the wider rural community through partnerships by spoke organisations including the Kent Nature Partnership and the National Farmers Union.

Canterbury SDG Forum

The Sustainability Team have been supporting and contributing to the work of the Canterbury SDG Forum since its inception in 2018. The Forum involves 12 local organisations including both CCCU and the University of Kent and it is demonstrating the value of partnerships and community co-operation. The Forum is a particularly good example of how the SDGs can be localised. Dr Stephen Scoffham brought this to the attention of an international audience at a conference organised by SpringerNature in November in which he explored how academic research can impact on public policy.



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We are living in times of dramatic change. The SDGs could prove a rallying point that will facilitate a shift towards more sustainable ways of living; but if they are to provide an effective bridge to the future they will need to be interpreted with vision. At CCCU we are striving to put this vision into practice through a widespread collaboration of individuals and teams across the University.

[Dr Peter Rands]

