



THE UNIVERSITY OF
WINCHESTER

OUR CARBON REDUCTION
STRATEGY TO

2025

becoming the most carbon
efficient campus in the UK



**Your
Campus
Your
Planet**

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OUR VISION

Since 2008 the University of Winchester has worked hard to become a leader in low-carbon higher education.

With the University celebrating its 175th anniversary now is the time to plan for the future, ensuring that the needs of the present users of the campus are met without compromising the ability of future users to meet their needs. The University has reaffirmed the importance of environmental sustainability in its 2015-2020 Strategic Plan, and has now refined its carbon management programme to ensure these commitments are met.

To continue the success of our environmental sustainability efforts and respond effectively to the threat of climate change, the University will invest in technologies that improve our carbon efficiency and generate renewable energy, will develop new low-carbon buildings and will foster a culture of environmental sustainability. The University will work collaboratively with staff and students, drawing on their breadth of knowledge and experience.

It is 'Your Campus, Your Planet' and we look forward to working with every individual that can contribute to our efforts to develop a low-carbon teaching and research environment.



Joy Carter
Vice-Chancellor



I am proud to lead an institution that puts sustainability at its heart, work which is vital to enhance and protect the quality of life for future generations.

This next phase of our programme builds on strong foundations and remains true to the values that underpin all that we do. It will help us to deliver our commitments that sit under our third strategic priority 'Sustain', and will be supported by initiatives like our Climate Change Education strategy.

Your Campus, Your Planet will guide us in our efforts to develop a low-carbon campus and ensure we positively shape the thinking and behaviour of our staff and students in order to create change far beyond the city of Winchester.



Alan Lovell
Chair of the Board of Governors



The threat humans pose to the environment is significant, but there are many things that we can all do to help protect the natural world. I have been impressed by the University of Winchester's commitment to environmental sustainability and have seen the positive steps forward that have been taken in recent years.

By investing in the campus and helping staff and students to reduce their carbon impact, the University will continue to grow without increasing its carbon emissions, contributing towards global efforts to combat climate change.



Mat Jane
Head of Energy & Environment



Since 2006 the University has been successful in managing its carbon and environmental impact, but now we need to look forward to determine how we can continue to deliver carbon savings whilst improving the profitability and resilience of the University.

This plan outlines our commitments until 2025 for how we will manage and reduce our environmental impact across the campus.

The University must look to continuously identify and prioritise carbon reduction projects, measuring the savings to establish their success. We will continue to review, update and communicate this plan regularly to all staff and students, sharing examples of best practice.



WHY IS IT IMPORTANT THAT WE REDUCE OUR CARBON EMISSIONS?

Climate change is happening, evidenced by the significant changes we are seeing in temperature, precipitation and wind patterns with far reaching impacts on our ecological, social and economic systems. We have a role to play in contributing to national and international efforts to combat the causes of climate change, adapt to the impacts, protect the environment and educate our community.

We also have a responsibility to meet the Higher Education Funding Council for England's target of a 43% reduction from 2005 to 2020, and UK carbon targets of an 80% reduction by 2050, against a 1990 baseline.

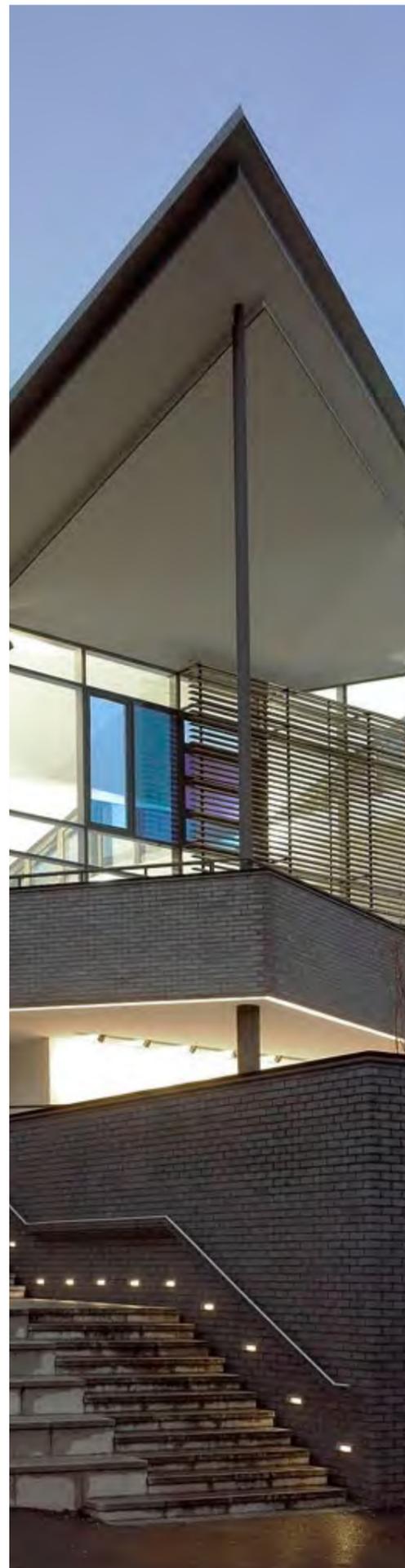
Our students have grown up in an era where sustainability and climate resilience has become high profile and increasingly influential. They are more knowledgeable than previous generations, in terms of passion and belief, and are huge enablers of change. With both students and universities placing more importance on sustainability, the power of our university students must not be underestimated.

WHAT ARE THE BENEFITS OF CARBON MANAGEMENT?

Reducing our emissions will increase our resilience to risk and provide opportunities to make energy and cost savings. This will help enhance our reputation within the Higher Education sector.

It is important that we seek to manage and reduce our carbon emissions due to the following reasons:

- Align with the aims of the 2015-2020 Strategic Plan, in particular the priority 'Sustain'
- Align efforts with Climate Change Education teaching and research
- Lead by example and maintain and enhance our reputation within the local community, the HE sector and with prospective students
- Demonstrate our commitment to reducing our environmental impact and our contribution towards global efforts to combat and adapt to climate change
- Increase our resilience to climate change impacts
- Endorse Winchester Action on Climate Change (WinACC) and provide clarity on the University's role within this organisation
- Engage with staff and students to raise awareness and educate
- Maximise the use of existing resources by increasing space utilisation
- Increase staff and student recruitment and retention
- Ability to grow the University without proportionate increases in carbon emissions



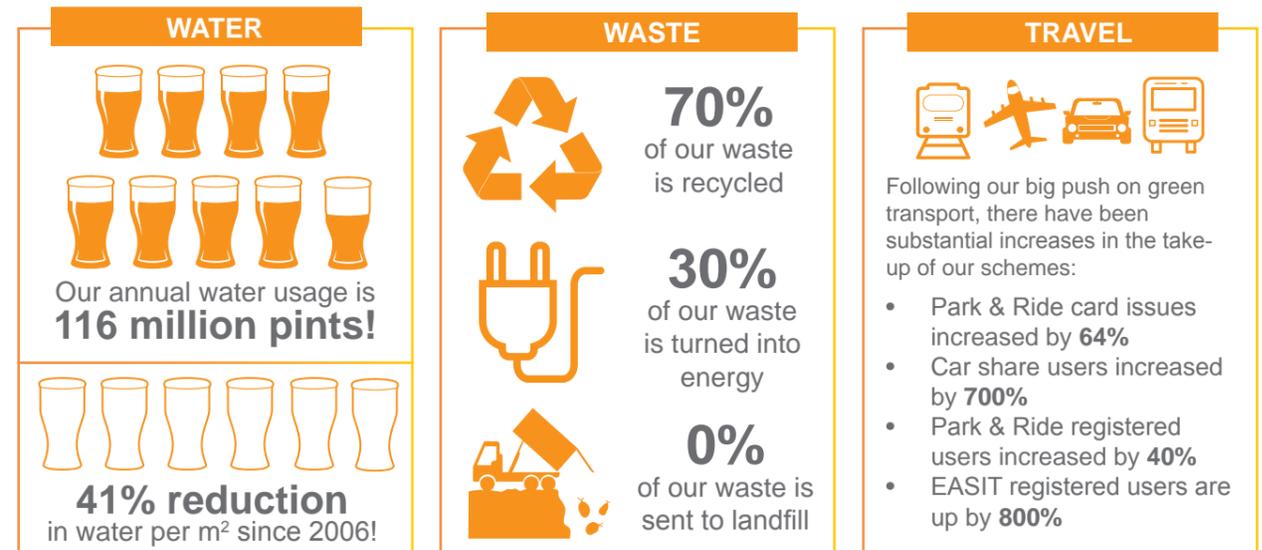
OUR CARBON IMPACT

Since 2006/07 we have reduced our carbon emissions by 45%, smashing our 2015 target of a 30% reduction.

HOW DO WE PRODUCE CARBON EMISSIONS?

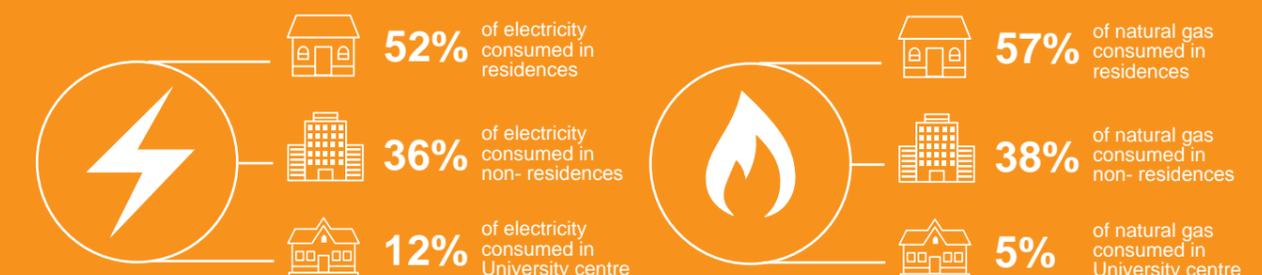


In 2014/15 we emitted 3,979 tonnes of CO_{2e}, equivalent to the carbon impact of brewing 56 million cups of tea!

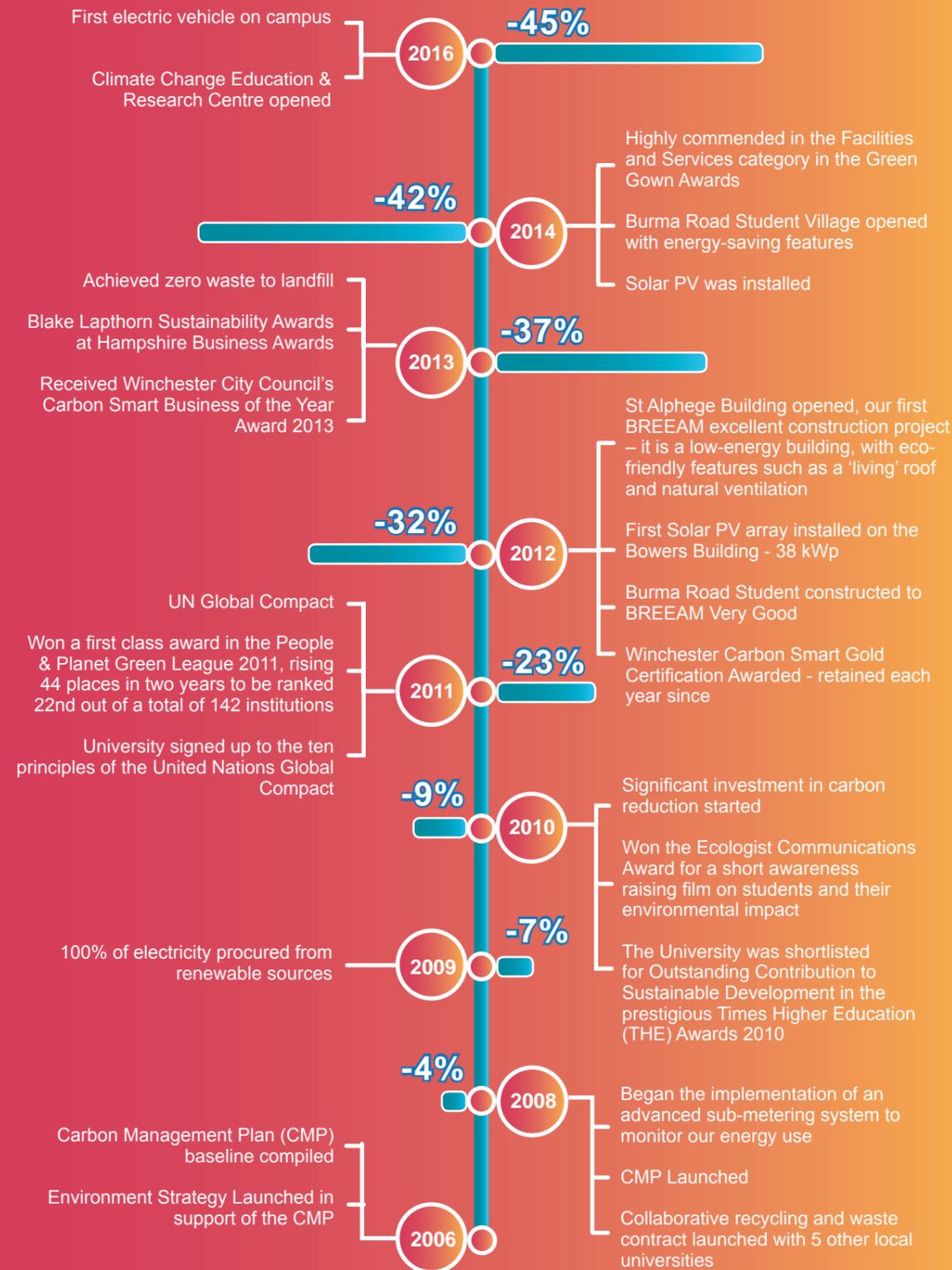


WHERE DO WE USE ENERGY?

The majority of carbon emissions originate from energy consumed in buildings, with over 50% of emissions associated with student residences, which includes both on site accommodation and housing owned by private landlords that is leased directly through the University for students.



WHAT HAVE WE ACHIEVED SO FAR?



EMISSIONS PERFORMANCE SINCE 2006

We have successfully reduced our emissions since our 2006/07 baseline, significantly over-achieving the existing target of a 30% reduction by 2015 in emissions intensity by floor area, delivering a reduction of 45% since 2006/07.

The University has grown remarkably in the last ten years, and this is expected to continue. In light of this a carbon reduction target is challenging but will allow us to grow sustainability. Despite growth in the size of the campus, revenue and staff and student numbers, our total carbon emissions have decreased by 5.5% since 2006/07.

If we had not taken steps to reduce our carbon impact our emissions in 2015 would have been 3,244 tCO₂e higher. This is equivalent to the annual emissions from 57 million minutes on a mobile phone!

Whilst we have identified a number of projects that will deliver energy savings, due to the continuing growth in our campus, we understand that there is still more we need to do. There is now a need to look at what can be achieved moving forward.

CARBON EMISSIONS

We continue to see reductions in the carbon intensity of our activities. From 2006/07 to 2014/15 we have achieved



Emissions by floor area

45% ↓



Emissions by FTE staff and students

35% ↓

Between 2008/09 and 2014/15 the university's emissions intensity per square metre was the 5th most improved in the sector



+48%
Student numbers



+72%
University space GIA

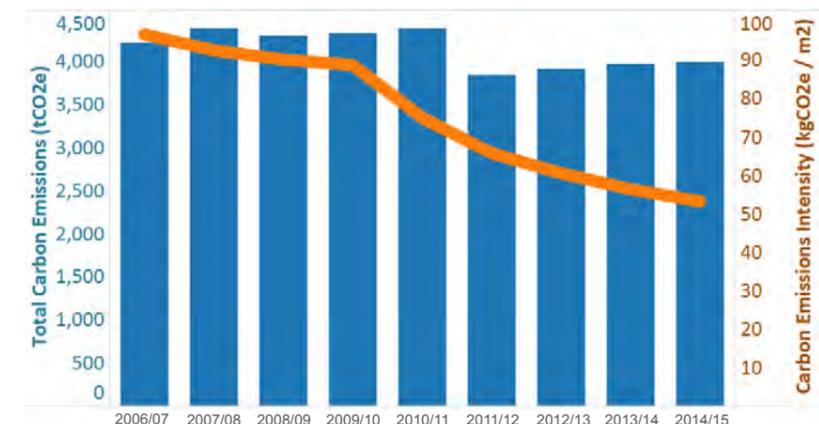


+108%
Total income (2006 - 2013)



-5.5%
Total carbon emissions

The Reduction in Emissions from 2006/07 to 2014/15

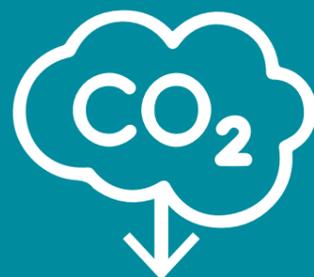


WHAT ARE WE TRYING TO ACHIEVE?

Having surpassed the 2015 carbon target, The University of Winchester is now looking much further into the future to determine what a low-carbon and climate resilient campus looks like.

We have carefully considered emissions targets set by the UK and by the Higher Education sector, and have decided to commit to a 2030 target that is aligned with the level of decarbonisation required to limit global warming to 2°C. This target is based on our total emissions and will be challenging to achieve given the expected growth in the campus.

By evaluating the carbon reduction opportunities that we are aware of and assessing the impact of our campus development over the next ten years, we have also set an interim target to 2025. This target is based on our carbon emission intensity and will allow us to demonstrate the impact of our carbon management efforts in the context of an expanding university.



2030 Target
55% reduction

in total carbon emissions against a 2006/07 baseline



2025 Target
65% reduction

in the carbon intensity of our campus, by floor area, against a 2006/07 baseline

Reducing our carbon emissions is a challenge that will require the innovative ideas and support of all our staff and students. The Carbon Management Programme Delivery Team are responsible for meeting our targets; however, all staff and students need to take responsibility for helping us achieve our carbon reduction targets.

HOW CAN YOU HELP?



Be Champion in your office or student halls

Why not get directly involved? There is a programme of environmental activities and initiatives to take part in throughout the year, including Campus Blackout, tree planting, habitat creation, wildlife surveys and recycling initiatives. Work with the Environment Team and become a Student Switch Off Ambassador in halls and undertake environmental audits for Green Impact - recognised achievements to add to your HEAR.



Turn it off

Before you go home / when you are in your student halls make sure that your computer, monitor and non-essential electronic equipment is turned off. Ensure all lights are switched off. Much of our energy efficiency depends on the awareness and behaviour of our staff and students and individual switch-off actions really do add up and help reduce our carbon footprint.



Recycle

Increase the amount you recycle and be vigilant to help others recycle more too. Make time to check exactly what can be recycled. If you live in halls you will have your recycling bin emptied for you, leaving only the kitchen waste bin for you to deal with. The more you recycle, the less you need to empty your kitchen waste bin!



Eat compassionately

Consider the planet, farmed animals, and your own wellbeing when you eat: enjoy our delicious and growing range of vegetarian and vegan products, with their lower greenhouse gas emissions.



Plan ahead

Before purchasing an item, consider the cost over the lifetime of the product. It is worth saving a few pennies and pounds now only to have to pay them back many times over throughout the life of the item?



Be efficient

Make sure the equipment you use on a daily basis has the correct settings. Before making any changes to heating / cooling settings, consider the impact it will have on other users – rather than turning the heating up, why not wear a jumper?



Use University space efficiently

Make sure that you use the room booking system properly, cancelling bookings if you realise you do not need a room. This will mean we will only provide lighting, heating and cooling to areas that are in use.



Choose a low emissions travel option

Think before you travel – can you hold the meeting via video conference or can you get public transport? Why not join forces with other staff and student commuters to car share or take advantage of University discounts with bus operators serving Winchester and with local cycle stockists. Bring your bicycle to campus for regular maintenance checks with the University's Bike Doctor.

HOW ARE WE GOING TO ACHIEVE OUR CARBON TARGETS?



Governance

- We will clearly define roles and responsibilities across the University
- We will promote carbon management and encourage sustainable lifestyles
- We will identify and secure necessary resources and funding for carbon reduction projects



Engagement & Communications

- We will improve staff and student understanding of the importance and benefits of reducing carbon emissions
- We will engage with staff and students so that they know what they can do to reduce their carbon impact
- We will continue to support WinACC (Winchester Action on Climate Change)
- Undertake a programme of activities to raise awareness and support staff and students to reduce their carbon footprint



Climate Change Education

- We will educate students about climate change causes, impacts and solutions
- We will establish and promote sessions for information drop-ins to raise awareness of the value of carbon management to students and to hear their ideas and feedback



Low & Zero Carbon Generation Technologies

- We will continue to install Solar PV where it is appropriate
- We will investigate the feasibility of installing a District Heat Network
- We commit to LZCT on all new buildings and investigate further opportunities for retrofitting



IT

- We will integrate the consideration of environmental matters into IT's decision-making and implement energy saving initiatives
- We will investigate all opportunities for low energy ICT wherever possible, building on the work already undertaken

Procurement



- We will develop continue to embed the sustainable procurement policy
- We will assess the whole life cost of a product before purchasing it
- We will reduce the number of deliveries and packaging used



Analytics & Reporting

- We will collect, analyse and report data for energy, water, waste and travel
- We will improve visibility of performance to identify further saving opportunities
- We will introduce carbon budgeting for each faculty



Constructing Low-Carbon Buildings Resilient to Climate Change

- We will use BREEAM to guide the design of new buildings and the refurbishment of existing buildings
- We will report the carbon intensity of all buildings
- We will ensure that the whole life cost of services are considered



Energy Conservation Measures

- We will integrate energy efficiency measures with planned maintenance
- We will continue to optimise our building management systems
- We will measure and verify the savings from energy reduction projects
- We will continue to identify and implement new energy conservation measures



Travel

- We will invest in a low-carbon fleet
- We will continue to support our students, staff and visitors to travel sustainably by offering a range of green transport discounts and initiatives
- We will continue to record air travel undertaken for University business to calculate our carbon footprint from flying and provide a series of offset options



Waste

- We will continue to send zero waste to landfill
- We will undertake annual waste audits to help improve recycling rates on campus
- We will investigate the collection of food waste from student accommodation

Biodiversity Action Plan



- We will work to identify which energy reduction projects can support the biodiversity action plan
- We will manage the green spaces across our campuses to provide habitats for species vulnerable to the effects of climate change.

REDUCING THE ENVIRONMENTAL IMPACT OF YOUR CAMPUS



45%

reduction in emissions
intensity from 2006 - 2015



4TH

most carbon efficient
campus in the UK



0%

zero waste to landfill



41%

reduction in water use

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