



Environmental Sustainability Report 2021-22



The Department of Computer Science and
Technology bike shelter, Faculty of Law, Entopia
Building and Department of Earth Sciences.



CONTENTS

Foreword	03
Materiality	03
Stakeholder engagement	03
A year of recovery and renewal	03
Progress table	04
Carbon	06
Waste	12
Biodiversity	15
Built environment	18
Travel and transport	21
Sustainable procurement	24
Collaboration	26
Engagement	30
Looking ahead	33
Statement from Interim Head of Sustainability	34
The accuracy of our data	34
Sustainability as a core value	35
Environmental Management System	35
Governance	35
Key Performance Indicators	36
Help build a sustainable University	37

The scope of this report does not cover the 31 Colleges, which are independent and autonomous institutions, nor Cambridge University Press & Assessment (CUP&A), our principal subsidiaries, associate undertakings and significant investments. We work in partnership across the wider Collegiate University on a number of environmental sustainability matters and highlight a small number of examples of this work in this report. Next year, the Colleges will be publishing their first Environmental Sustainability Report, outlining the range of sustainability measures they are taking.

The KPI Number of awards won by Green Impact Teams and the KPI Number of members of the Sustainability Champions Network on page 36 can include any of the 31 Colleges, CUP&A, principal subsidiaries, associate undertakings and significant investments.

Strong, resilient, sustainable

Welcome to the University of Cambridge Environmental Sustainability Annual Report 2021-22. This report outlines the initiatives and activities that have been underway from 1 August 2021 to 31 July 2022. It's a year characterised by adjusting to new normal ways of working and in which new post-pandemic priorities have come increasingly to the fore. We have continued to make progress towards our science based carbon reduction target, which commits the University to reducing scope 1 and 2 emissions to absolute zero by 2048, as well as make progress on a number of other fronts.

Foreword

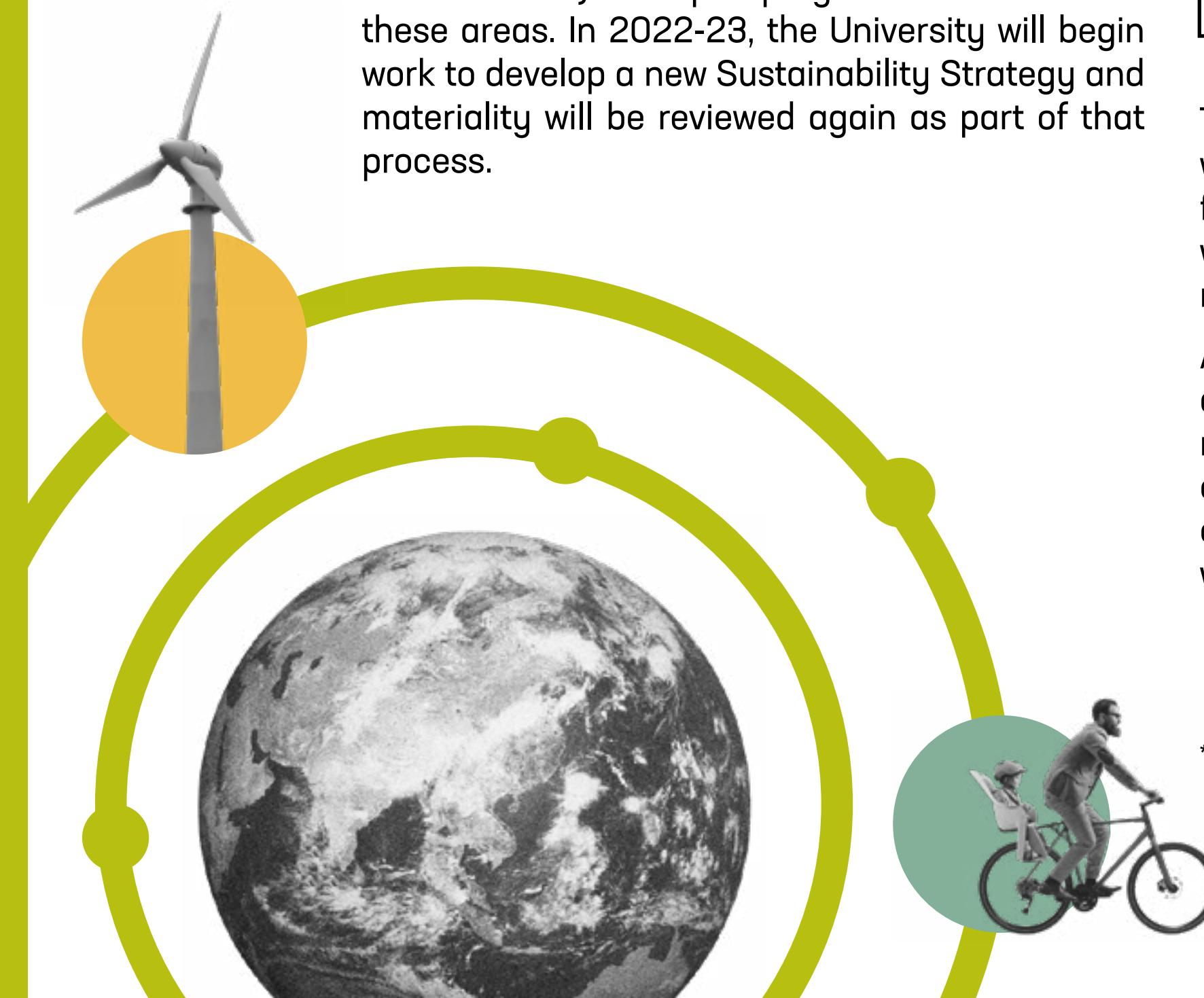
This report, covering the final year of my term as Vice-Chancellor, shows once again how Cambridge's innovative approach to sustainability is having real impact across the University.

I am very proud of the progress made during my time in office. The launch of **Cambridge Zero** and our commitment to a science based carbon reduction target are two examples of what we have achieved. The teams involved in making our University more sustainable have done outstanding work at a challenging time, developing and delivering projects with both passion and academic rigour.

Professor Stephen J. Toope, Vice Chancellor

MATERIALITY

Material environmental sustainability issues are those that are of most importance and significance to the University and to our stakeholders. Back in 2014 - when we were developing our **Environmental Sustainability Vision, Policy and Strategy** - we asked our staff and students what was important to them in terms of sustainability and considered the risks and opportunities of each. From this, we identified nine environmental sustainability impact areas as most material. These nine areas are energy and carbon; recycling and waste; water; biodiversity; travel and transport; sustainable procurement; sustainable construction and refurbishment; partnership and engagement*; and teaching and research* (Cambridge Zero and CISL). We report progress and activities in these areas. In 2022-23, the University will begin work to develop a new Sustainability Strategy and materiality will be reviewed again as part of that process.



STAKEHOLDER ENGAGEMENT

Our commitment to sustainability means that there are initiatives, projects, research and commitments right across our University. In compiling this report we engaged with our Departments, Faculties and Institutes to get a full picture of sustainability here at Cambridge.

Of course, we cannot include everything in one report, but if you're working on a sustainability project, we'd love to hear about it. Please **get in touch** so that we can highlight your achievements in our future reporting.

A YEAR OF RECOVERY AND RENEWAL

This year has seen many of us come back to the workplace, but with a significant amount of working from home. As we settle into this more hybrid-working pattern, it's a chance for the University to review the estate and how buildings are being used.

A hybrid-working pattern reduces staff commuting and could provide the opportunity to use our space more efficiently, leading to reduced energy related emissions. However, it may result in displacing the environmental impact elsewhere, the magnitude of which is not yet known.

*Partnership and engagement and teaching and research do not have targets, as these are tools to support us in delivering our targets.

Progress to date

IMPACT AREA	TARGET	POSITION 21/22	CURRENT PROGRESS 21/22
ENERGY AND CARBON	To reduce total scope 1 and 2 carbon emissions to absolute zero by 2048, with an aspiration to achieve this by 2038.	We are making good progress.	 <p>Our location-based carbon emissions decreased by 10.9% compared with the previous year. Our market-based carbon emissions (which take account of our procured renewable energy) have decreased by 10.6% on the previous year, keeping us on track to meet our target. This was primarily due to a reduction in heat demand, as a result of a less harsh winter.</p>
WATER	To reduce water consumption by 20% by 2020/21 against a 2005/06 baseline.	We can do better and have a plan.	 <p>We did not achieve this target, as our water consumption (m^3) reduced by 4.3% from our 2005/06 baseline to our target year 2020/21.</p> <p>Water consumption fell 7.4% in 2021/22 compared to the previous year. Work is underway to develop a new consumption target.</p>
BIODIVERSITY AND ECOSYSTEMS	In the expert opinion of the Ecological Advisory Panel, that no construction, refurbishment or maintenance work* on the estate (including emergency repairs) has a net negative** impact on biodiversity and that, where possible, the impact is net positive**.	We have achieved this target.	 <p>All of our construction projects this year have had a net positive impact. We are continuing to create additional biodiverse habitat, restoring and enhancing existing habitat, communicating and engaging with staff and students to support data collection to measure progress and are working with city wide stakeholders to promote nature recovery on a landscape scale.</p>
WASTE	To send zero non-hazardous waste to landfill by 2020/21.	We can do better and have a plan.	 <p>Waste to landfill increased to 148 tonnes from 2020/21 mainly due to construction and operational waste on the previous year. The increase in operational waste was mainly due to an increase in biological, clinical and other non-recyclable wastes, some of which is tied to increased waste generation resulting from the Covid-19 pandemic. The re-tender of the hazardous waste contract is underway and once completed will help to divert more waste from landfill.</p>
WASTE	To achieve continuous year-on-year reductions in waste arising per FTE staff and student.	We have achieved this target.	 <p>Waste mass generated per FTE staff and student (tonnes/FTE) has reduced from 0.22 tonnes/FTE in 2020/21 to 0.12 tonnes/FTE in 2021/22. Construction waste reduced by more than half of the previous year, partly due to the delivery of fewer projects. Operational waste increased by 14%. Efforts are underway to tackle waste generation through the Waste Strategy and more sustainable procurement.</p>

*These are defined on page 26 of the [Biodiversity Action Plan](#).

**These are defined on page 12 of the [Biodiversity Action Plan](#).



We have achieved our target.



We are making good progress.



We can do better and have a plan.

WASTE	To recycle at least 95% of total waste produced at the University by 2016/17.	We can do better and have a plan.		This year 56.4% of our waste was recycled. The recycling rate for operational and construction waste decreased this year. The re-tender of the University's main waste collection contract has been completed which will increase recycling rates.
SUSTAINABLE PROCUREMENT	That central University procurement frameworks are more attractive financially, more environmentally friendly and faster than other routes and, therefore, more institutions use them.	We are making good progress.		We have started setting baselines and putting in place processes and systems to support the implementation of new procurement policies and ways of working.
SUSTAINABLE PROCUREMENT	To achieve at least level 4 'Enhance' across all themes of the Sustainable Procurement Flexible Framework by December 2015.	We are no longer reporting against this target.		We are no longer reporting against the Flexible Framework as we have changed our approach and are continuing to work towards the international standard in sustainable procurement, ISO 20400.
SUSTAINABLE PROCUREMENT	For institutions to consider sustainability criteria within their procurement activity.	We are making good progress.		We have started to implement criteria with a minimum weighting around sustainability as part of our sourcing and tender process to ensure it is considered in every procurement project.
SUSTAINABLE CONSTRUCTION AND REFURBISHMENT	To establish and implement a standard for sustainable construction at the University of Cambridge that is context specific and is considered a leading approach in comparison to our peers.	We are making good progress.		Sustainability reporting has been embedded within the capital projects process. The Passivhaus certified refurbishment at the Entopia Building is informing standards for future refurbishment projects.
TRAVEL AND TRANSPORT	At least 75% of staff to be regularly commuting to work by sustainable modes* of travel by 2024.	We have achieved this target.		This target has been met. The staff travel survey recorded 80% of staff travelling to work via sustainable modes*. This being: worked from home 43%, bus 2%, train 3%, cycle 23%, walk 6% and car share 3%.
TRAVEL AND TRANSPORT	To reduce per capita carbon emissions from business flights by 25% against 2014/15 levels by 2024/25.	We can do better and have a plan.		We published Guidelines for Sustainable Business Travel.



We have achieved our target.



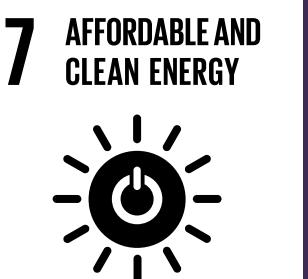
We are making good progress.



We can do better and have a plan.

*Sustainable travel modes are WFH, bus, train, cycle, walk and car share.

Carbon



A continued focus on our science based target

We remain on track to meet our science based carbon reduction target, in part due to the zero carbon electricity we procure through the Power Purchase Agreement (PPA). We are now exploring options for further PPAs, to increase the proportion of our electricity that is sourced from certified zero carbon and sustainable sources.

Although the carbon intensity of the UK electricity grid is rapidly reducing, we cannot rely on that to reach zero carbon. There is no expectation that the gas supply will decarbonise significantly over the next 20 years, so - as gas makes up a significant proportion of our scope 1 and 2 emissions - we need to reduce these in order to stay on track and meet our carbon reduction target. This year we started feasibility work on two University sites - West Cambridge and Sidgwick - looking at how we can remove gas and provide electric-based heating to the sites. The work is still in its early stages and we will be able to report on progress next year.

Building on renewable energy generated on site, the University applied for planning permission for a solar farm in late 2021. No update has been received at the time of publication. The proposed solar farm would generate up to 20% of the University's electrical consumption, and would be a significant step towards our carbon reduction target.

Cambridge University Press & Assessment (CUP&A) is a signatory of **UN Global Compact** the world's largest corporate sustainability programme that helps organisation's align strategies and operations with Ten Principles on human rights, labour, the environment and anti-corruption. It published its **progress as a joint organisation** on 27 April 2022. CUP&A's total UK scope 1 & 2 carbon emissions for the year was 3,237 tCO₂e, a reduction of 7% from the previous year.

Note that the 31 Colleges, CUP&A and our principal subsidiaries, associate undertakings and significant investments emissions data is not included within the graphics and KPI tables within this report.*

*The KPI Number of awards won by Green Impact Teams and the KPI Number of members of the Sustainability Champions Network on page 36 can include any of the 31 Colleges, CUP&A, principal subsidiaries, associate undertakings and significant investments.

West Cambridge site: Roger Needham Building and Department of Materials Science & Metallurgy. Sidgwick Site: Faculty of Law, History Faculty and Department of Earth Sciences.

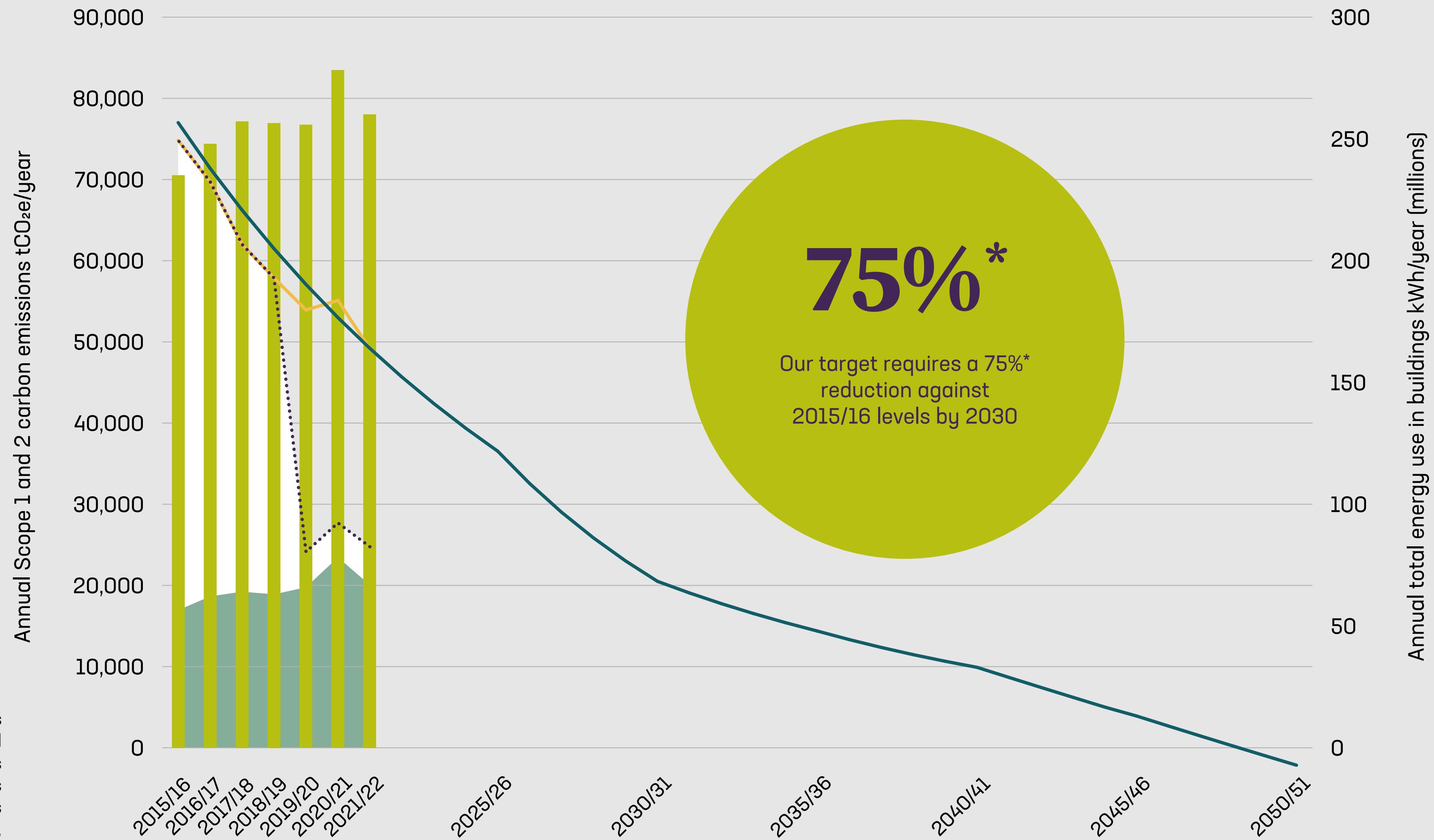


TOTAL SCOPE 1 AND 2 CARBON EMISSIONS (tCO₂e)/YEAR AGAINST OUR TARGET

- █ Total kWh
- Actual Scope 1 & 2M carbon emissions (Market-based)
- Actual Scope 1 & 2L carbon emissions (Location-based)
- █ Market-based emissions from purchased electricity and steam
- █ Market-based emissions from gas, oil and fuels
- Our target

The University's long-term strategy for its procured electricity is to incrementally increase the proportion that is being sourced from renewable sources via PPAs. As an interim step towards zero carbon energy sources, the proportion of the University's procured electricity that is currently not sourced via a PPA is generated through nuclear power. In the interests of transparency, we have calculated the amount of nuclear waste that has been generated as a result of the University's use of nuclear power (since we started reporting market-based emissions in 2019/20). Conversions factors from <https://www.edfenergy.com/fuel-mix>

These figures can be found [here](#), on page 4. These nuclear waste figures have not been assured.



tCO₂e = Tonnes of carbon dioxide equivalent

*Progress against our target is measured against our Total Scope 1 and 2 Market-based carbon emissions (energy and fuel use) (tCO₂e), which includes purchased electricity and steam, gas, oil and fuels.

The data represented within this graphic relates to the University of Cambridge and does not include the Colleges, CUP&A and our principal subsidiaries, associate undertakings and significant investments.

REDUCING EMISSIONS FROM BUSINESS TRAVEL

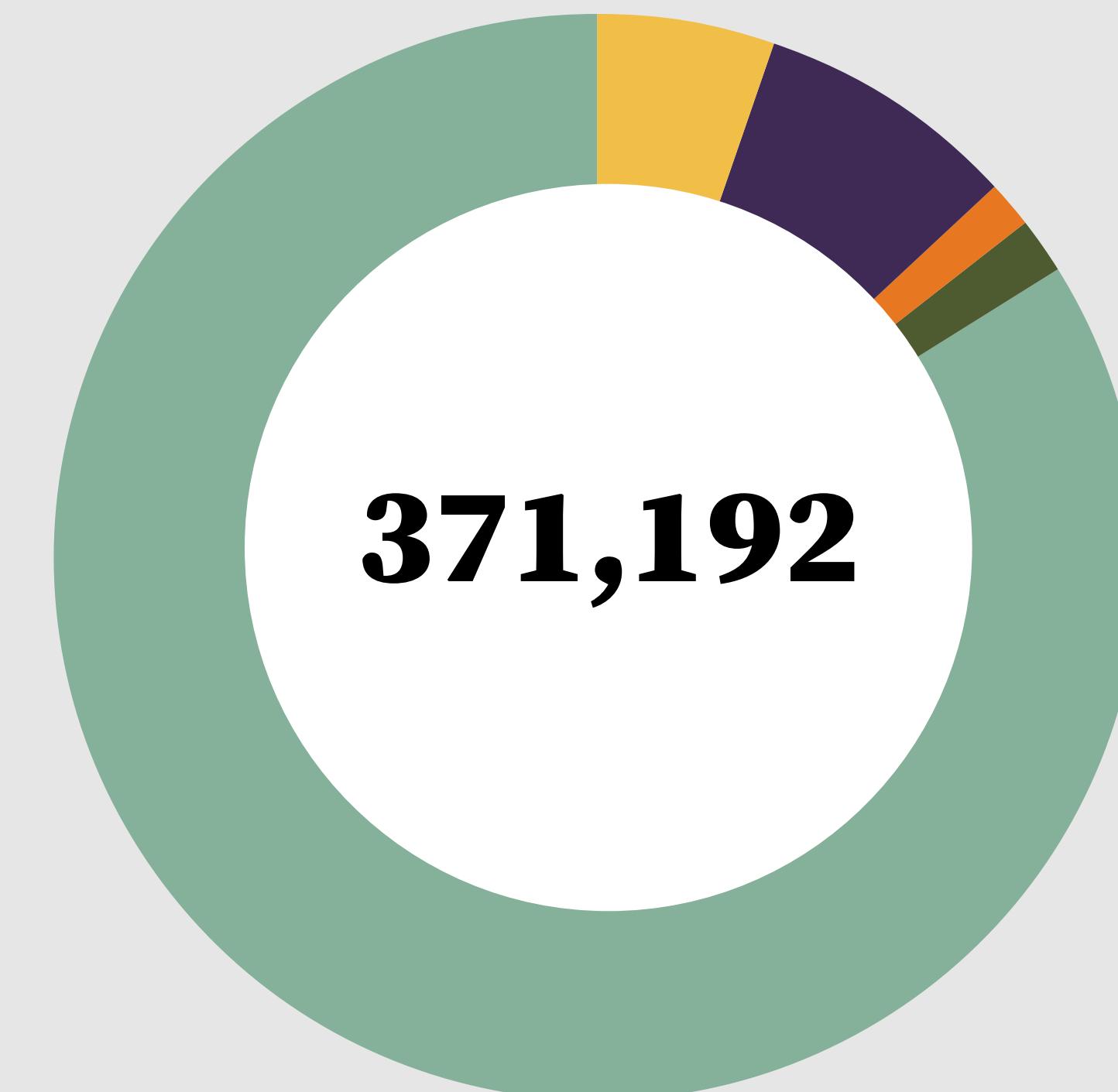
We understand that national and international business travel can play a key part in achieving our academic, research and educational objectives. However, we also need to consider when and how we travel - and if we need to travel at all.

In March 2022, the University published its [**Guidelines for Sustainable Business Travel**](#), designed to encourage and support a reduction in non-essential business travel and its associated carbon impacts. In particular, we want to reduce the number of flights and the total distance travelled by air by University staff and students.

The new guidelines strongly encourage staff and students to adopt climate conscious travel behaviours and choices when undertaking University business travel. This starts with not travelling unless absolutely necessary or considering virtual attendance where appropriate, to using sustainable modes, to offsetting emissions when flying is unavoidable.

In 2018-19 emissions from air travel made up around 95% of our business travel carbon emissions by University staff and researchers.

TOTAL SCOPE 1,2 & 3 EMISSIONS 2021/22 (tCO₂e)



20,057 tCO₂e

Scope 1

29,068 tCO₂e

Scope 2 – location-based emissions

5,138 tCO₂e

Scope 3 – business travel (air)

5,683 tCO₂e

Scope 3 – staff commuting

504 tCO₂e

Scope 3 – other

310,742 tCO₂e

Scope 3 – supply chain

tCO₂e = Tonnes of carbon dioxide equivalent

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SCOPE 3 EMISSIONS

The University's carbon reduction strategy remains to reduce our emissions in absolute terms as much as possible. However, with regard to scope 3 emissions, we recognise the need to consider offsetting as a way of addressing our unavoidable emissions. This year, we started a scope 3 screening assessment to understand and to prioritise all relevant scope 3 categories of the [Greenhouse Gas Protocol](#). Through this, we will better understand the magnitude of emissions related to each scope 3 category and where we have most opportunity to reduce our emissions. With this knowledge, we will be able to prioritise further data improvements and target setting. The screening assessment is ongoing and due to complete in early 2023.

ACCELERATING TO ZERO CARBON

The [Cambridge Institute for Sustainability Leadership \(CISL\)](#) Accelerator has developed a framework to help companies achieve their net zero goals by taking a whole system approach to net zero transformation. The report, [Net Zero Business Transformation](#), includes contribution and support from over 30 companies. Alongside this, CISL's [Accelerator to Net Zero](#) empowers SMEs to realise their pathway towards commercial success while increasing their overall sustainability. In early 2022, CISL partnered with the SME Climate Hub to develop resources including educational courses, guidance on business strategies and financial support, and tools for reporting emissions.



APPLYING ACADEMIC RIGOUR TO OFFSETTING
OUR CARBON OFFSETTING SCHEME WILL DELIVER CARBON BENEFITS AND POSITIVE OUTCOMES FOR PEOPLE AND NATURE.



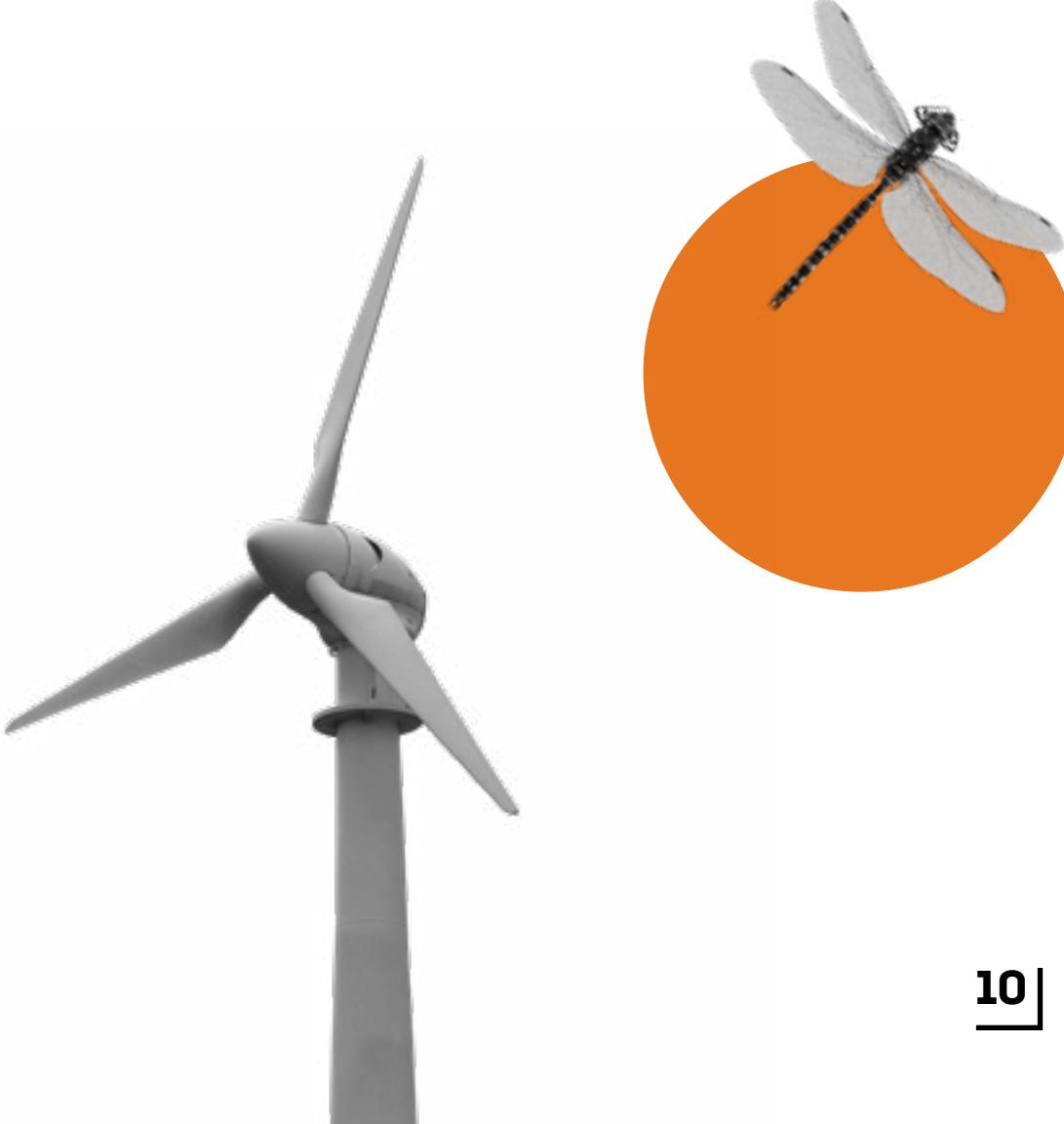
CARBON OFFSETTING

Offsetting carbon is one part of the mix when it comes to reducing emissions. However, at the University it will only be used to address unavoidable emissions - at the moment, specifically unavoidable emissions from business travel. The Carbon Offsetting Working Group (COWG) is undertaking work to identify robust offsetting measures that can be used to offset our unavoidable business travel emissions. We know that all offsetting schemes are not equal. In fact, some have been found to do more environmental harm than good. The work of COWG is being informed by the academic expertise of the Cambridge Carbon Impact project in the Department of Zoology to ensure that our carbon offsetting scheme delivers demonstrable carbon benefits and ensures positive outcomes for people and nature. Guidance has also been published, for staff and students, on how to calculate business travel emissions, and how to offset any unavoidable emissions.

The new [Cambridge Centre for Carbon Credits \(4C\)](#) emerged from this work. It brings together computer scientists and conservation scientists to create a trusted decentralised marketplace where purchasers of carbon credits can confidently and directly fund trusted nature-based projects with other offsetting options. 4C also supports students and faculty members conducting foundational research in the relevant areas of computer science, environmental science, and economics.

"Potential offsetters face significant challenges understanding the relative performance of different types of offsets. The interdisciplinary partnership at the core of 4C is assembling new tools to address this gap, enhance buyer confidence, and ultimately increase investment in offsets that save carbon while addressing other pressing environmental and social concerns as well."

Professor Andrew Balmford, Professor of Conservation Science, University of Cambridge and Principle Investigator, Cambridge Centre for Carbon Credits



THE UNIVERSITY'S ENDOWMENT FUND

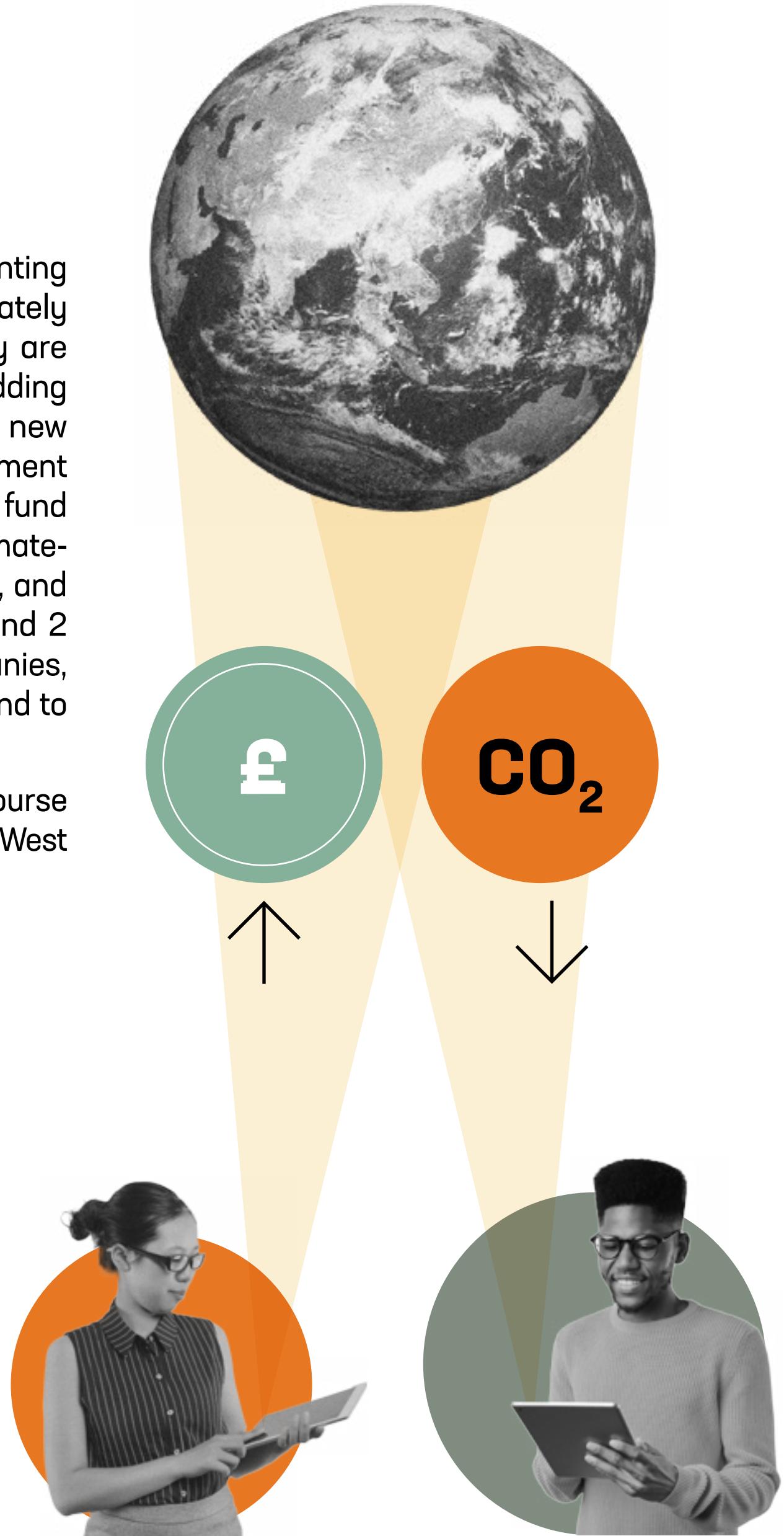
The Cambridge University Endowment Fund is valued at £3.8 billion and over the last year has distributed £125 million of returns to the University, supporting over 800 activities, including research teaching and scholarships. The fund is committed to achieving net zero by 2038.

The Cambridge Institute for Sustainability Leadership worked with University of Cambridge Investment Management to support its sustainability strategy. This included engaging with its community of investment partners by delivering four online and in-person workshops, designed to show how they can deliver financial performance in a carbon constrained world. The programme ran over eight weeks and comprised of in-person sessions, a virtual workshop and a team project.

THE CAMBRIDGE
UNIVERSITY ENDOWMENT
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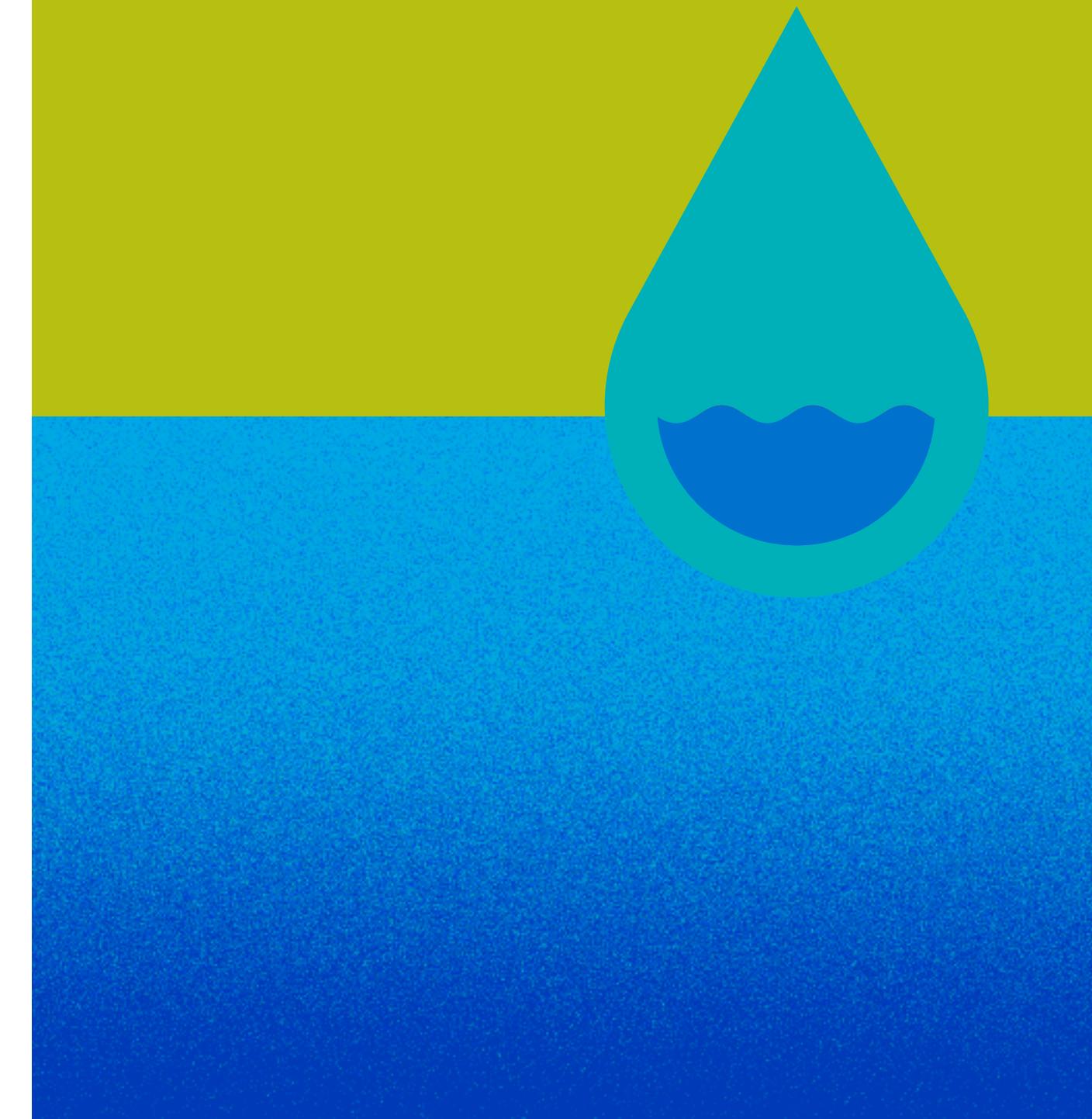
Two cohorts of eleven fund managers, representing total assets under management of approximately \$95 billion, have attended the course. Many are now improving their sustainability approach, adding climate-related factors to their screening of new investment opportunities and linking management incentives to emissions reduction targets. One fund manager is now making requests for clear climate-related targets from companies in its portfolio, and another has committed to enforce scope 1 and 2 emissions measurement from portfolio companies, to engage on climate change at board-level, and to publish an annual report detailing progress.

In 2023, we will run the first US-focused CISL course for the Fund's investment partners based on the West Coast of the US.



WATER: GETTING A PLAN TOGETHER

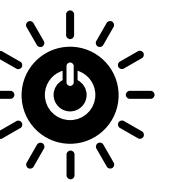
This year, we have been working to identify a supplier that can help us improve data on our water consumption and wastewater. Better data is critical in laying the foundations for the creation of a new Water Management Plan. We need to better understand where and how water is being used across the estate, establish a water consumption baseline and identify priority areas for reducing our water use.



Waste



7 AFFORDABLE AND
CLEAN ENERGY



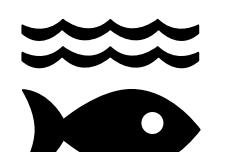
12 RESPONSIBLE
CONSUMPTION
AND PRODUCTION



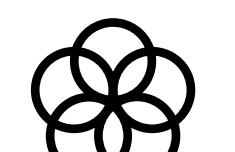
13 CLIMATE
ACTION



14 LIFE BELOW
WATER



17 PARTNERSHIPS
FOR THE GOALS



Strategic sourcing for sustainability



The Department of Computer Science and Technology bike shelter, The Maxwell Centre and Cavendish Laboratory

The Waste Strategy provides a framework through which to set out how the University is managing waste through elimination, reduction, reuse and recycling. This year our Sustainability, Procurement and Facilities Management teams have been working closely, looking at strategic sourcing and the renewal of our waste contracts.

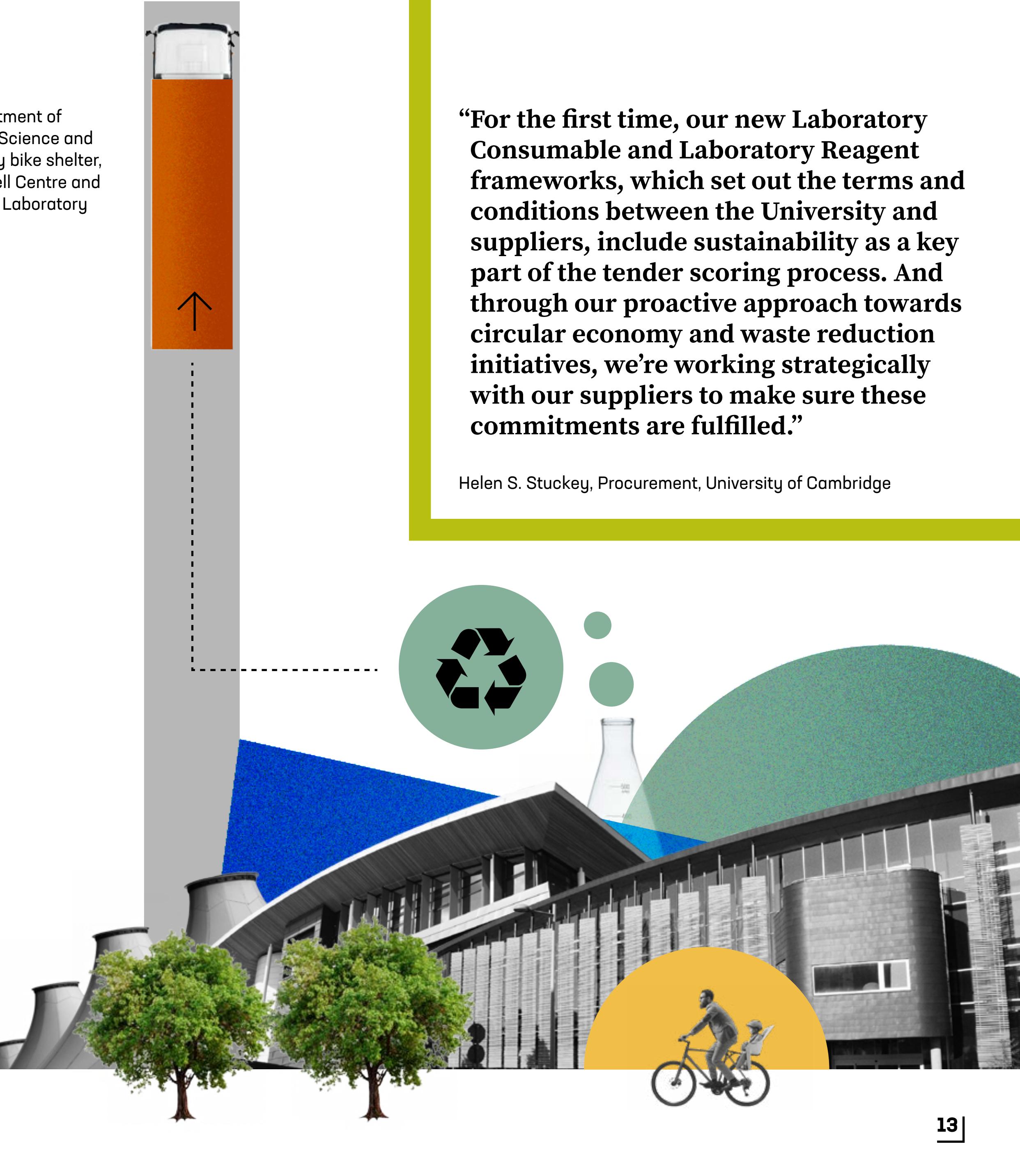
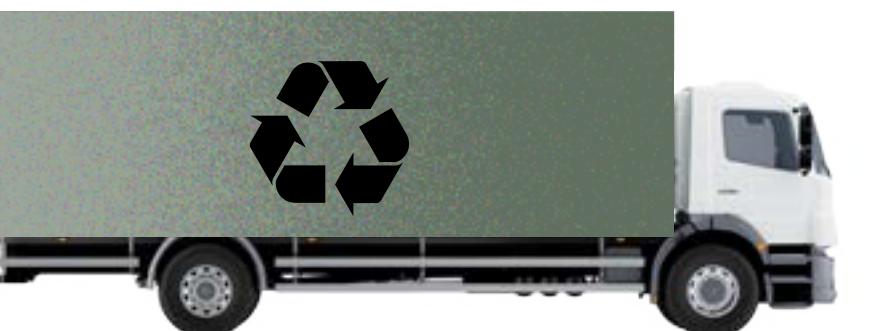
Following last year's **Single Out survey**, we knew that waste from packaging and deliveries account for the most single-use waste, followed closely by research-related waste (mainly lab disposables). Together these account for over half of all single-use items.

As the contract for our lab consumables framework is coming up for renewal, we have taken the opportunity to prioritise sustainability and give it a more significant weighting in the framework contract. We are asking all suppliers to reduce and manage the environmental impact of their products and services and consider products with the potential for resource circularity, reusability and end-of-life recycling. This means looking for sustainable alternatives or solutions - for example,

substituting disposable single-use plastic products for reusable glassware (ensuring compatibility with scientific research) will help the University to significantly reduce waste.

We have also looked at the framework for our hygiene and cleaning contracts before retendering starts, introducing sustainability specifications that meet both the WELL Building Standard and the EU Ecolabel. These specifications have been developed to eliminate, or reduce, the main environmental impacts over the entire life cycle of the cleaning services, equipment and products used.

In the new contracts, the University's minimum standards will include eliminating and reducing waste at source, reusing resources and recycling; the use of sustainable and environmentally friendly cleaning products and cleaning equipment; and staff training that will help to meet University's zero waste to landfill and recycling targets.



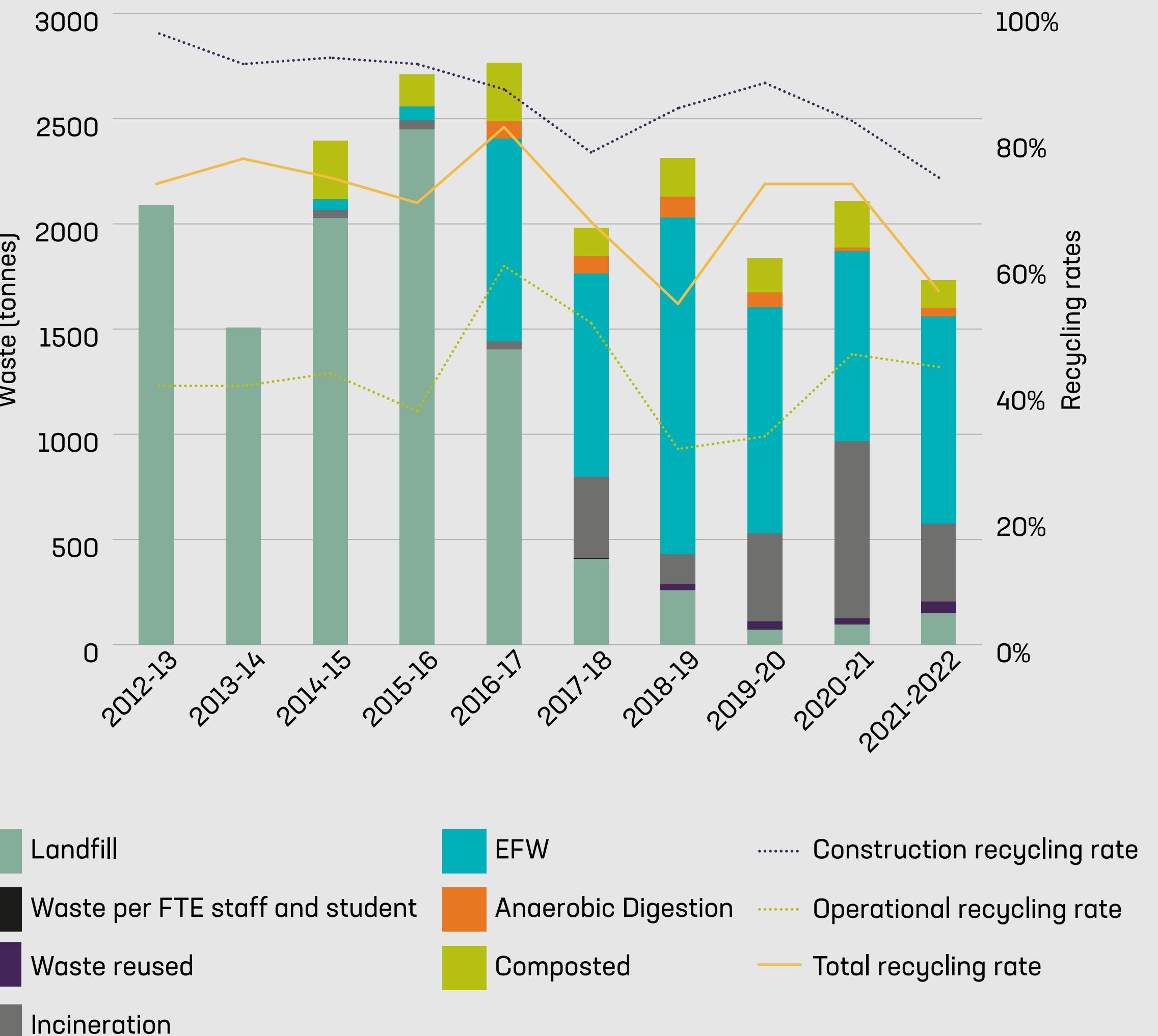
"For the first time, our new Laboratory Consumable and Laboratory Reagent frameworks, which set out the terms and conditions between the University and suppliers, include sustainability as a key part of the tender scoring process. And through our proactive approach towards circular economy and waste reduction initiatives, we're working strategically with our suppliers to make sure these commitments are fulfilled."

Helen S. Stuckey, Procurement, University of Cambridge

WASTE DISPOSAL ROUTES AND RECYCLING RATES

We retendered for non-hazardous waste, with sustainability issues as key factors in the process. All suppliers must maintain the 'zero to landfill' requirement. We also asked suppliers to increase recycling rates (open loop, closed loop, or composting) and ensure Vegware or compostable packaging can be dealt with through the food waste stream. Suppliers were asked to provide weight data for each bin collected by waste stream and date, and clearly communicate what can and can't be recycled.

All this is contributing to the University's waste targets and allows us to fully understand where and how we can reduce, reuse and recycle even further.



EFW - Energy from Waste

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WASTE NOT, WANT NOT

When the Department of Physics was sourcing furniture for its new Ray Dolby building, the operations team had the perfect upcycling solution. Chairs, desks, lecture equipment and more have been taken from a University building that was up for sale, and refurbished for use in the new building. It's a great example of reusing perfectly good furniture, rather than simply disposing of it.

A CITY OF CYCLES

There are lots of bikes in Cambridge. Lots and lots of them. And many of them are abandoned. The Facilities Management team has developed a scheme where we tag bikes that appear to have been abandoned, retrieve them, hold them for six weeks (just in case the owner turns up) and then donate them to the local prison or charities for reuse. In the last twelve months, we've donated around 250 bikes that can then be sold on to people in the local community.

Biodiversity

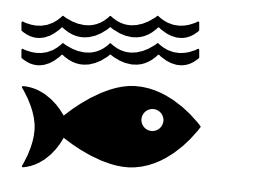
3 GOOD HEALTH
AND WELL-BEING



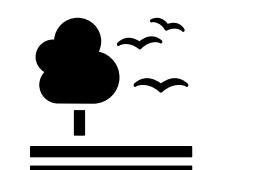
13 CLIMATE
ACTION



14 LIFE BELOW
WATER



15 LIFE
ON LAND



Nurturing a more biodiverse estate

This year we have continued to deliver the University's **Biodiversity Action Plan (BAP)** with projects across the estate being supported by a whole host of staff and students from University departments, Colleges and environmental groups. It's been great to see so many of our staff and students engaged with biodiversity.

Since the BAP was launched, over 1,800 square metres of wildflower meadows have been created across the estate this year, including outside the Institute for Manufacturing, alongside accommodation blocks on the West Cambridge site and in the Vice Chancellor's garden. These meadows are already boosting biodiversity, attracting wildlife, specifically invertebrate pollinators, and enhancing the natural environment, with more planned in the coming years.

At the Fitzwilliam Museum, the operational grounds team, with support from the Ecological Advisory Panel and Cambridge City Council, transformed an area of lawn to a beautiful blanket of wildflowers. Created to coincide with the Museum's 'True to Nature' exhibition of open air painting in Europe 1780-1870,

the wildflowers provide a colourful welcome for visitors and a place to relax, while encouraging bees and other wildlife.

On the Madingley Estate, part of the University's rural estate, we continued pond improvement work to create a more diverse habitat for wildlife. This year, the team pollarded willows and cut back overhanging trees from the banks of Horseshoe pond and removed overhanging trees and bramble at Fish pond.

1,800 SQUARE METRES OF MEADOW HAVE BEEN CREATED SINCE THE LAUNCH OF THE UNIVERSITY'S BIODIVERSITY ACTION PLAN.



Our focus on biodiversity doesn't - and shouldn't - just stop at the boundaries of our estate. Ensuring a truly biodiverse Cambridge is a wider goal that benefits all. This year, a College Biodiversity Assistant was recruited and mapped all of the Colleges' (31) operational land holdings. These were added to the existing digital map and, along with the City Council greenspace, can provide a complete overview of the green corridors in the city. Through this, any gaps can be identified and prioritised to create cohesive and consistent biodiversity corridors to connect physical areas of high biodiversity value across Cambridge. Alongside this, a College [Biodiversity Baseline report](#) has also been published.

WE DON'T MOW OUR MEADOWS

GRASS ACROSS THE ESTATE IS BEING LEFT TO GROW TALLER TO IMPROVE PLANT DIVERSITY AND PROVIDE A BETTER HABITAT FOR INVERTEBRATES.



CARBON OFFSETTING AT EDDINGTON

Over at Eddington, and as part of the University's carbon offsetting scheme, we are planning a mixed native tree planting scheme on 25 acres of land next to the site. The scheme will include grassy rides and hedge planting, which will bring benefits for biodiversity as well as creating an attractive area for residents.

BIODIVERSITY GUIDES

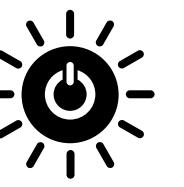
We're always looking at ways to encourage staff and students to get involved in biodiversity. This year we published three new self-guided biodiversity advice sheets to inspire even more people. Each is packed with advice on [monitoring and identifying wildlife](#) as well as ideas for improving outdoor spaces to [enhance biodiversity](#) and [attract wildlife](#).

INTEGRATING NATURE INTO BUSINESS DECISIONS

The University of Cambridge Institute for Sustainability Leadership (CISL) created a diagnostic tool to advance business understanding of nature-based solutions (NbS). A report, [Decision-making in a nature positive world](#) and a set of [sector briefings](#) outline the challenges and solutions needed to adopt and implement these nature-based solutions in multiple sectors. CISL also created a set of new resources to help financial institutions integrate nature into their decision making along with a paper, [Integrating climate and nature: The rationale for financial institutions](#), exploring the broader relationships between nature and climate action and outlining the rationale for adopting an integrated approach. The resources are already being used by the Taskforce for Nature-related Disclosures, Principles for Responsible Banking and Central Banks.

Built environment

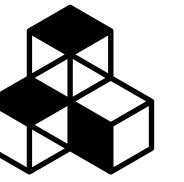
7 AFFORDABLE AND CLEAN ENERGY



8 DECENT WORK AND ECONOMIC GROWTH



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



11 SUSTAINABLE CITIES AND COMMUNITIES



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION



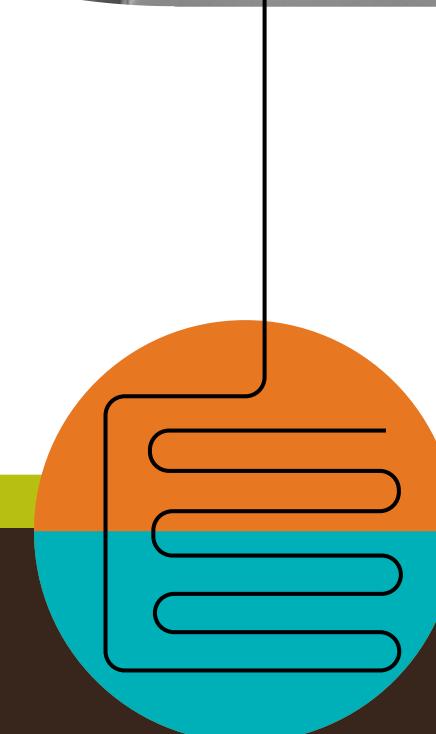
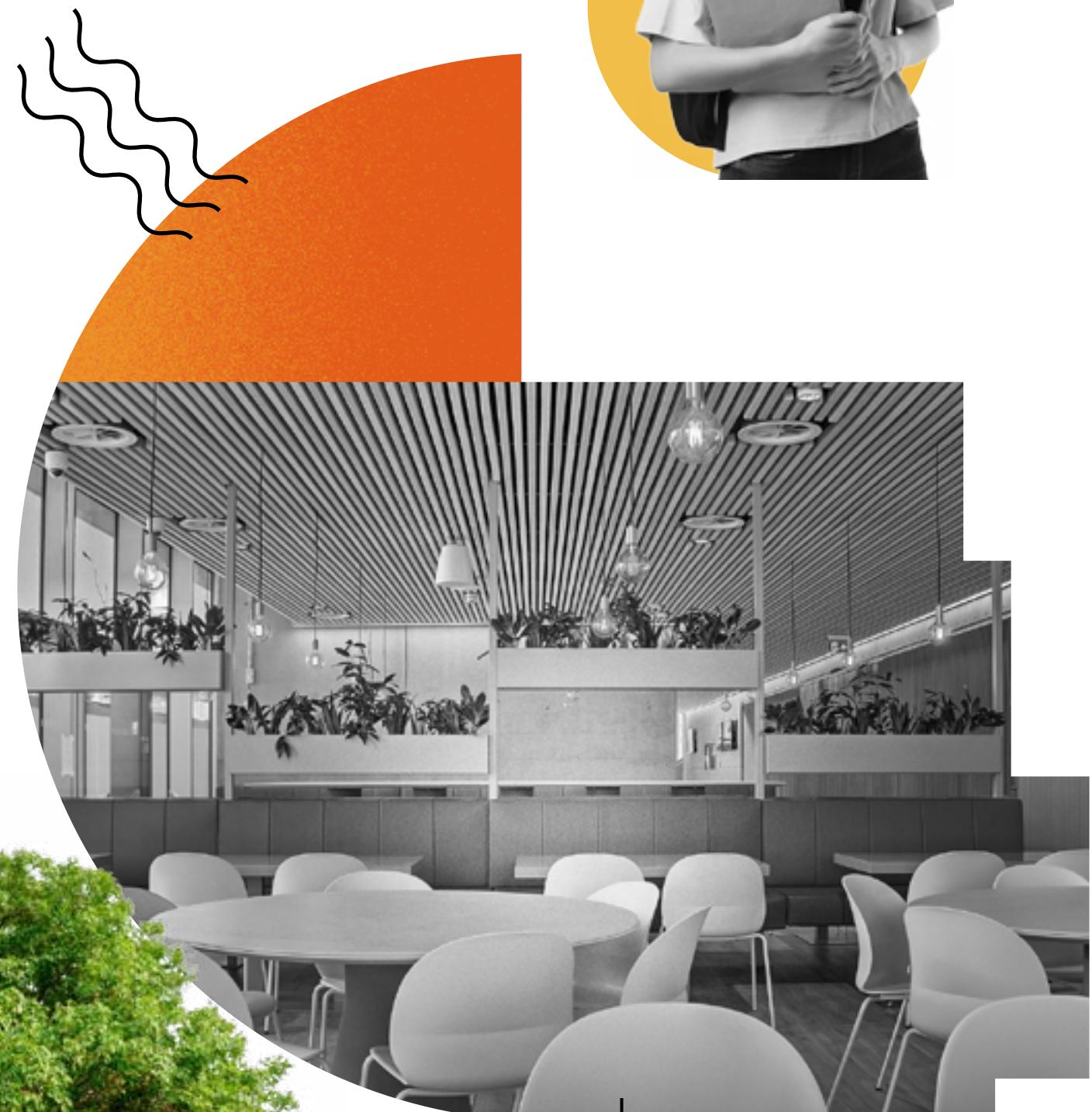
Campus transformation

The **BREEAM** Excellent **West Hub** on the University's West Cambridge site is now open to academics, researchers, students, staff, businesses and the wider community. The building creates an exciting series of spaces that can be used to foster collaboration. The three-storey development is a highly sustainable environment. Active design measures, such as lighting sensors and heat recovery, reduce energy demand and low and zero carbon technologies - including ground source heat pumps - have helped us to move away from gas as the primary fuel for generating heating and hot water.

The opening of the West Hub represents the start of a radical transformation of the research campus to create a new and lively destination quarter in the city - the **West Cambridge Innovation District**.

AN EXCELLENT
TRANSFORMATION
**THE WEST HUB HAS
BEEN AWARDED
AN 'EXCELLENT'
BREEAM RATING**

(within the reporting year ended 31st July 2022).



Another highly sustainable building - **Entopia** - was officially opened in March 2022 as the headquarters of the Cambridge Institute for Sustainability Leadership (CISL). Entopia was officially awarded the prestigious EnerPHit Classic certification by the **Passivhaus Institut**. Being outside of our reporting year ended 31st July 2022, this building is not included in External awards for sustainable construction/design KPI on page 36.

As part of the retrofit, one of the most thorough reviews of carbon emissions associated with refurbishment works was carried out. This found that the upfront 'embodied carbon' emissions associated with extracting, manufacturing, transporting and installing the materials (predominantly glazing, linings, and mechanical and electrical systems) resulted in emissions of 130kgCO₂e per sqm of gross internal floor area. This is just 13% of a typical new build office and shows how beneficial it is to re-purpose our existing buildings.

Over 34% (by mass) of the materials used in the building's refurbishment are bio-based, including the wood fibre and cork insulation, and timber

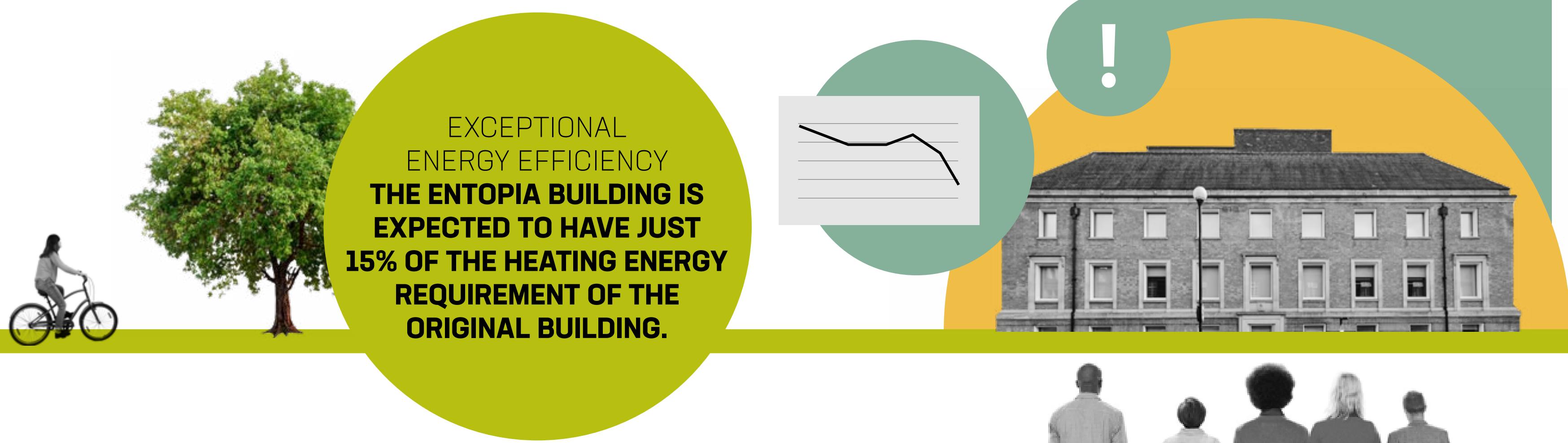
studwork. These are intrinsically low carbon and also lock up 76 tonnes of CO₂ for as long as they remain in place.

The project has also helped encourage the transition toward a 'circular economy', one that eliminates waste by keeping products and materials in use. In the Entopia building, 350 nearly new LED luminaires and a beautiful oak and marble reception desk were recovered from speculative developments in London and adapted to suit their new home. The steelwork in the pergola that supports a photovoltaic array was adapted from a former life in a film studio saving two tonnes of carbon emissions compared to newly smelted steel.

The building is already attracting widespread interest from designers and clients wishing to learn how to emulate the ambitious targets for environmental sustainability set by the project. Feedback on how the building performs in use will be disseminated as data is collected. CISL has produced an in-depth, technical **case study**, which provides a detailed account of the project's early stages, challenges, outcomes and learnings.

"The Entopia building embodies in its architecture and design CISL's ambition to inspire leadership and solutions for a sustainable economy. By offering a space that brings together academics and business leaders, and by offering a space that will soon house start ups and small businesses, the building is creating a real community dedicated to embedding issues of sustainability in business leadership."

Professor Anthony Freeling, Acting Vice Chancellor, The University of Cambridge



THE DAVID MACKAY AWARD FOR THE CIVIL ENGINEERING BUILDING

In March 2022, the Civil Engineering Building picked up the David Mackay Award for Engineering and Sustainability at the Greater Cambridge Design and Construction Awards. Sustainability was central to its design and the result is a very low energy building, using only 85kWh of electricity per sqm per year and making it the most energy efficient of its type at the University.

HELPING SMALL BUSINESSES TACKLE BUILT ENVIRONMENT CHALLENGES

CISL's accelerator programme, Innovators for the Built Environment, has helped over 20 SMEs to explore cutting edge sustainable innovations, from transforming organic waste into secondary raw materials to digital tools to monitor the carbon footprint of buildings from the outset.



Entopia building © SOLK Photography Ltd / Architype.

Travel and transport



Sustainable travel on the rise

This year's Annual Travel Survey* (carried out in October 2021) told an interesting story. So interesting that we decided to carry out an interim survey in May 2022 to track what was happening. The initial survey showed high numbers of people still choosing sustainable modes. Excluding those that worked from home and those with a non-working day, the percentage of those travelling to work by bike were 44% and by walking were 12%.

Thinking that this could be the after effects of the pandemic, we carried out a second survey six months later, which also showed high numbers of people travelling sustainably. The move to more hybrid working could be an influencing factor here, with people travelling in less and choosing to maybe cycle or walk when they do.

As people started returning to the workplace - albeit not always every day - our Travel Advisor Service officially launched and is helping staff with everything from information on cycle routes and cycle training to advice on public transport tickets.

Our Borrow a Bike scheme proved hugely popular this year with staff taking advantage of the chance to test out cycling for up to 3 months before committing to buying a bike. We ran 35 sessions, which resulted in 17 12-week loans, 5 8-week loans, and 13 4-week loans. The scheme includes all kinds of bikes including electric, folding and cargo and gives people the chance to try out commuting by bike.

We also restarted our Pool Bike scheme, with bikes and electric bikes available to borrow at locations across the University estate. This year 81 bikes - including 44 electric and 3 cargo bikes - were used right across the estate, from the Cambridge Biomedical Campus to the University Library, West Cambridge to the New Museums Site. It is often the easiest way to travel to meetings and site visits. All bikes come with lights, reflectors and panniers, and staff can also take part in our cycle safety and training sessions if they want to improve their confidence before getting on a bike.

*The KPIs Percentage modal split for commuting by staff on page 36 are based only on the October 2021 survey.

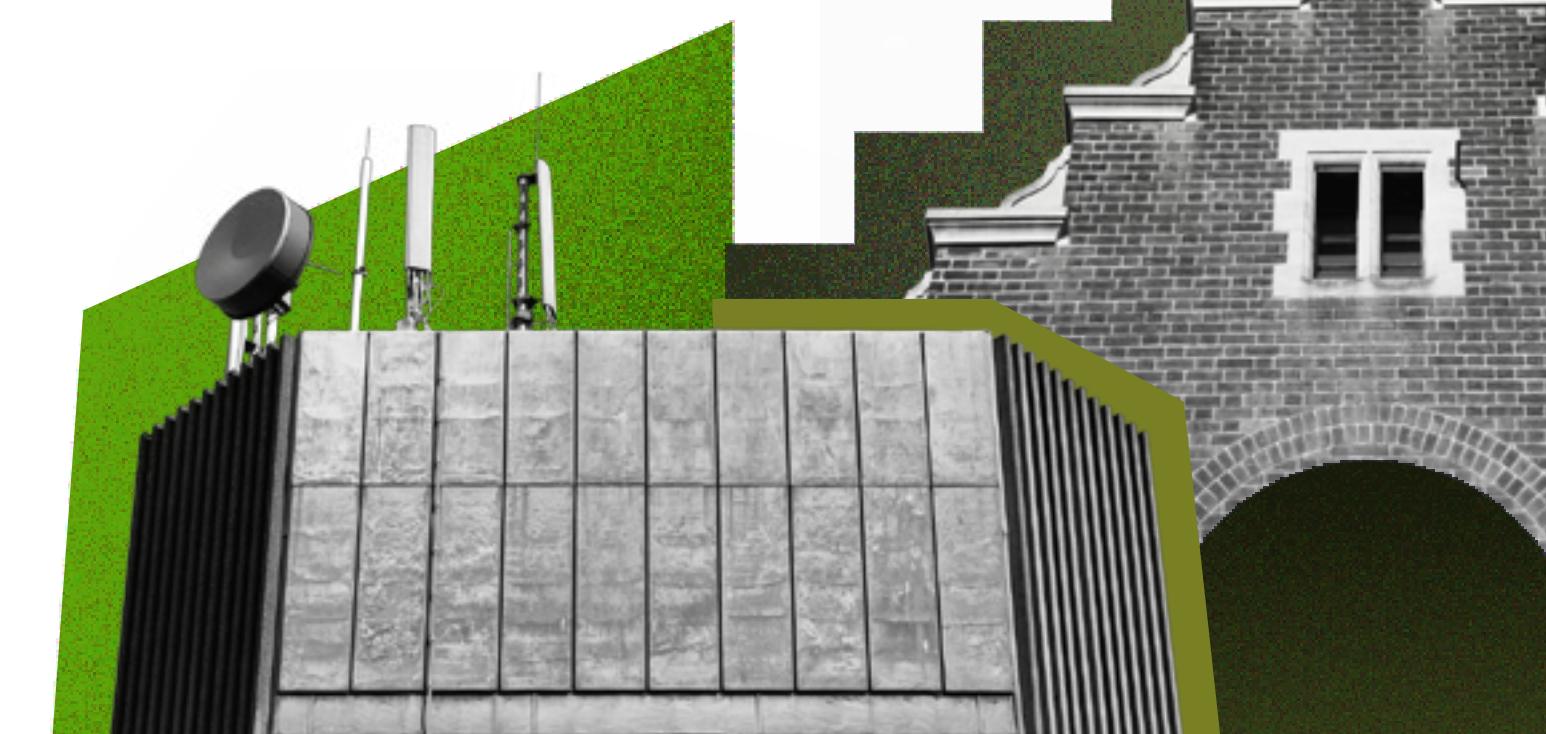
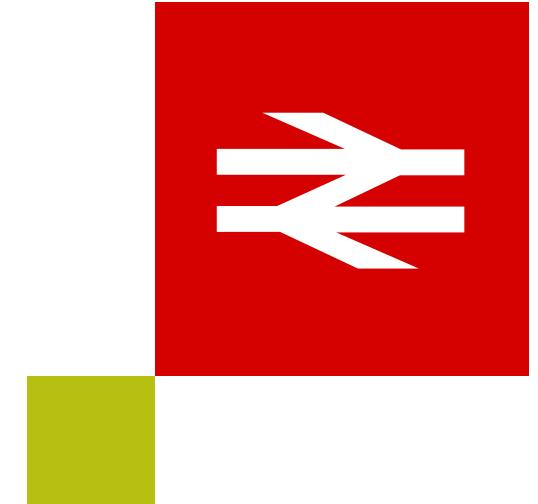
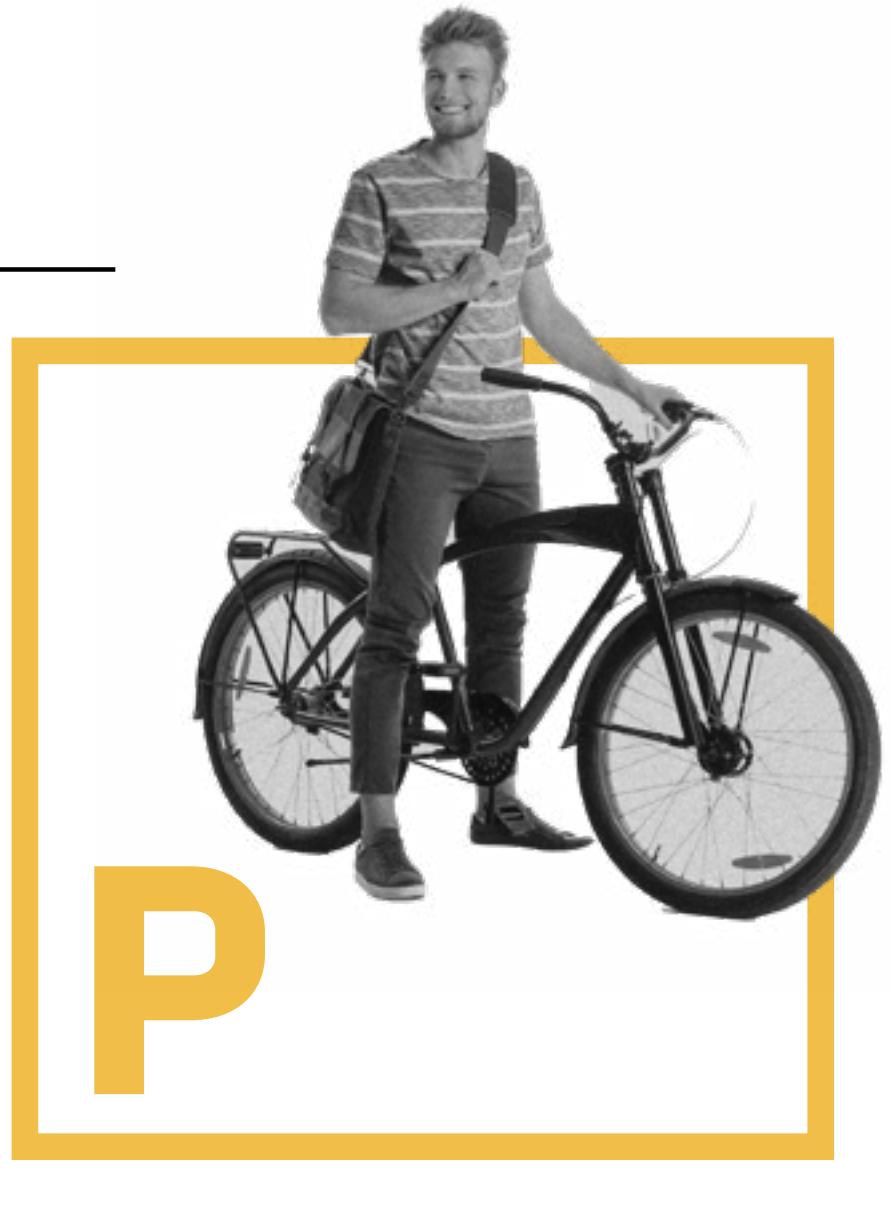
**Active travel modes excludes the KPI Percentage modal split for commuting by staff other than worked from home, as this includes worked from home.

Department of Chemical Engineering and Biotechnology (image © University of Cambridge Department of Chemical Engineering and Biotechnology), The Centre for Advanced Photonics and Electronics and The Department of Computer Science and Technology bike shelter.



OF THE 3,766 STAFF SURVEYED IN THE ANNUAL SURVEY IN OCTOBER 2021,
52% ARE USING ACTIVE TRAVEL MODES SUCH AS WALKING AND CYCLING.**





BACK TO THE BUS

Passenger numbers on the Universal Bus service continued to rise this year, with numbers back to almost 60,000 passengers a month. Since June 2022, the Universal Bus has been running at over pre-Covid levels.

Where the Universal Bus doesn't yet run, we're plugging the gap with our 'Taxi Bus' service. Staff and students can book a journey on the app and a shared taxi will take them where they need to go on the existing bus routes. The provider is prioritising electric vehicles with over 50% of trips by hybrid and 10% by fully electric vehicles. It's demand responsive travel that works just like public transport.

MORE SPACE FOR CYCLES

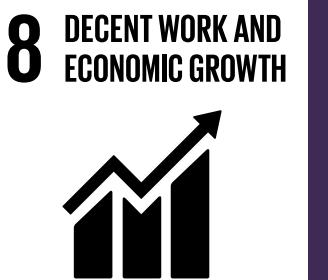
Cycle improvement works at our Downing site got underway in early summer 2022 to deliver new, modern facilities for all bikes, including adapted and cargo bikes. Future phases will deliver new cycle parking spaces to accommodate the increasing numbers of staff and students cycling to the site.

PARTNERSHIP WORKING

This year has seen continued progress as we engage and contribute to transport projects within and beyond the University's estate to create a sustainable Cambridgeshire for all. We continue to work closely with partners including [Cambridgeshire and Peterborough Combined Authority \(CPCA\)](#), [Greater Cambridge Partnership \(GCP\)](#), [Network Rail](#) and the local councils to ensure their projects bring positive impacts for the University and help

staff and students to travel more sustainably. Projects such as East-West Rail, Cambourne to Cambridge, the Road Hierarchy and City Access proposals and a number of the GCP Greenways have all moved forward significantly this year; we responded to consultations for the proposed new Classification of the Road Network in Cambridge and Comberton Greenways; and contributed to a Cambridge Ahead positioning paper on micromobility schemes in the City.

Sustainable procurement



8 DECENT WORK AND
ECONOMIC GROWTH



13 CLIMATE
ACTION

Implementing our new procurement policies

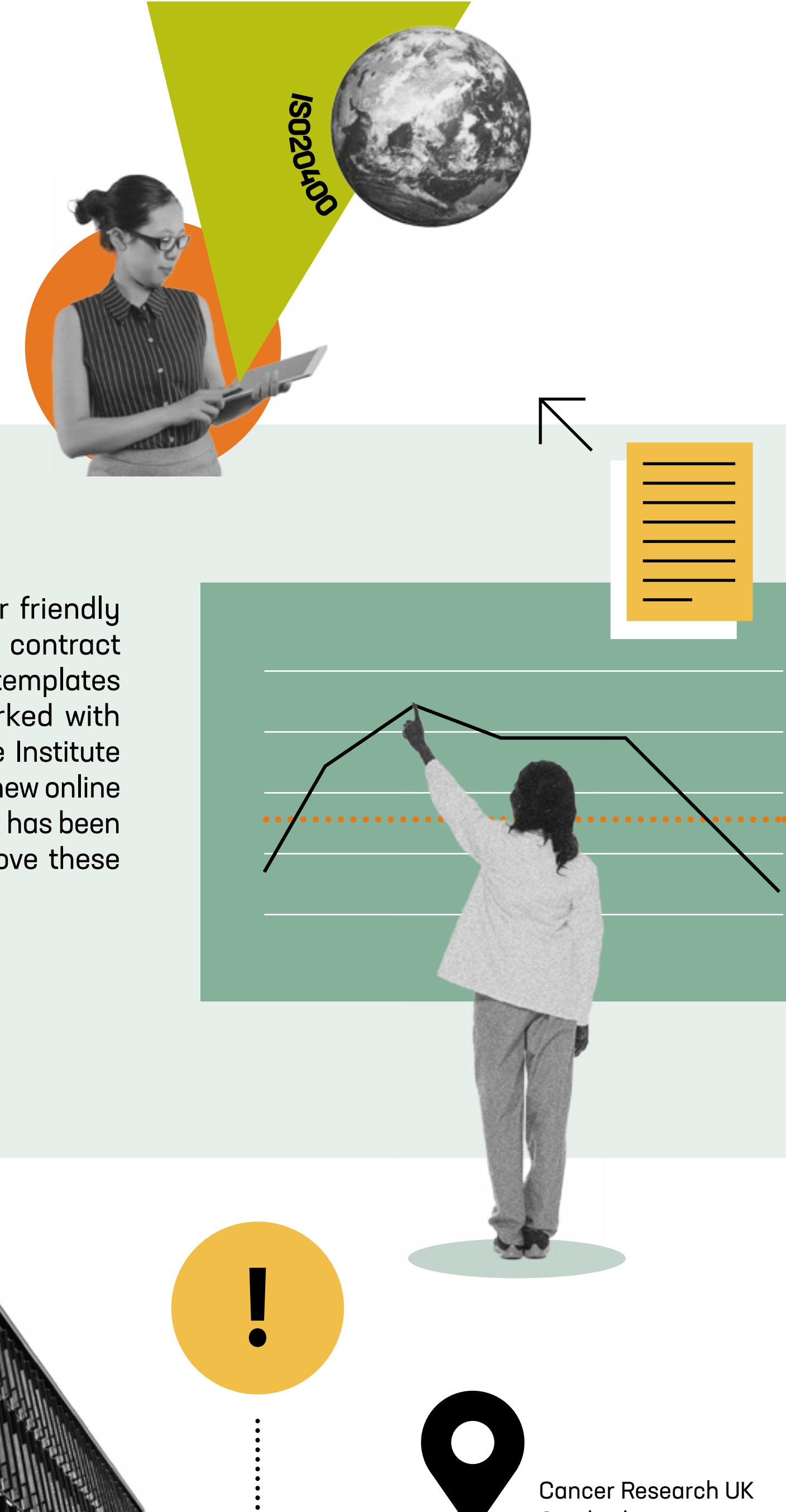
Since launching in last year's reporting period, the Strategic Procurement and Purchasing project (SPP) has been setting baselines, improving systems and running pilot schemes to make it easier and quicker for staff to buy the goods, works and services and to get additional value for money, all while minimising the University's environmental impact.

Recruitment was a major endeavour, especially during the pandemic, but there is now a team in place to lead on SPP. All staff are being trained in ISO20400 - a key milestone as we work towards implementing the standard across the University.

External consultants have also been running a gap analysis and the results of this will inform the implementation plan and allow us to track the carbon and financial savings in the future. The procurement team has also put in place a criteria and minimum weighting around sustainability to ensure it is considered in every purchase.



The new procurement website has user friendly access to relevant information such as contract libraries, good practice guides, policies, templates and 'green thinking' tips. We have worked with Cancer Research UK (CRUK), Cambridge Institute (CI) and Physics departments to pilot the new online portal and provide training. Their feedback has been invaluable in helping to refine and improve these before launching to all departments.



Cancer Research UK
Cambridge Institute

SUSTAINABLE PROCUREMENT IN ACTION

Procurement Services - working with Wellcome Stem Cell Institute, The Gurdon Institute, Physiology Development and Neuroscience Department and CRUK CI - developed a new University framework for confocal microscopes. The project has sustainability as a core objective, and the new framework makes it possible to account for sustainability in a coherent way when making purchasing decisions. The framework now in place has delivered over £1 million of savings to date, with more to come as the project rolls out.

MAPPING THE CARBON OF CONSUMABLES

In July 2022, a new sustainability intern started working with the procurement team to map the carbon journey of three lab products - pipette tips, nitrile gloves and lab coats. Working with three suppliers and three of the highest spend departments, they are collecting and analysing carbon data and mapping the carbon impact of each stage of the products, from extraction to potential disposal.

Collaboration

3 GOOD HEALTH
AND WELL-BEING



11 SUSTAINABLE CITIES
AND COMMUNITIES



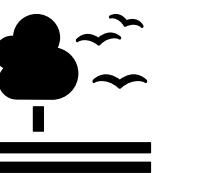
12 RESPONSIBLE
CONSUMPTION
AND PRODUCTION



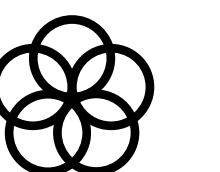
13 CLIMATE
ACTION



15 LIFE
ON LAND



17 PARTNERSHIPS
FOR THE GOALS



Working together to increase our impact

Throughout this report are examples of strategies and initiatives that are helping us to achieve our environmental sustainability commitments. All are characterised by co-creation and collaboration, something that runs deep across the University.

Here, we look at some more of the work being undertaken to share our research, enhance knowledge and innovation and spread our influence in our community, nationally and internationally.



Queens' College,
Churchill College and
Downing College.

COLLEGES

The University is working with the Colleges to deliver a number of College-wide sustainability initiatives. Our Sustainability Team is helping the Colleges to compile data on their energy use and associated emissions, so that they can better understand and manage their consumption. The Team have also this year worked with the Colleges to complete their first biodiversity baseline survey of city landholdings and mapping of greenspace. Over the coming year, the Sustainability Team will also be supporting the Colleges in publishing their first Annual Environmental Sustainability report.

The carbon emissions and other data sets contained in the KPI table at the end of this report do not include data relating to the Colleges, excluding the KPI Number of awards won by Green Impact teams and the KPI Number of members of the Sustainability Champions Network on page 36.

GREEN GOWN AWARD **2022 - MONEY FOR GOOD**

THE UNIVERSITY OF CAMBRIDGE, ALONGSIDE TRINITY AND JESUS COLLEGES, WON FOR EFFECTIVE ENGAGEMENT WITH THE BANKING SECTOR ON CLIMATE FINANCE.





CAMBRIDGE INSTITUTE FOR SUSTAINABILITY LEADERSHIP

DEVELOPING LEADERSHIP AND SOLUTIONS FOR A SUSTAINABLE ECONOMY

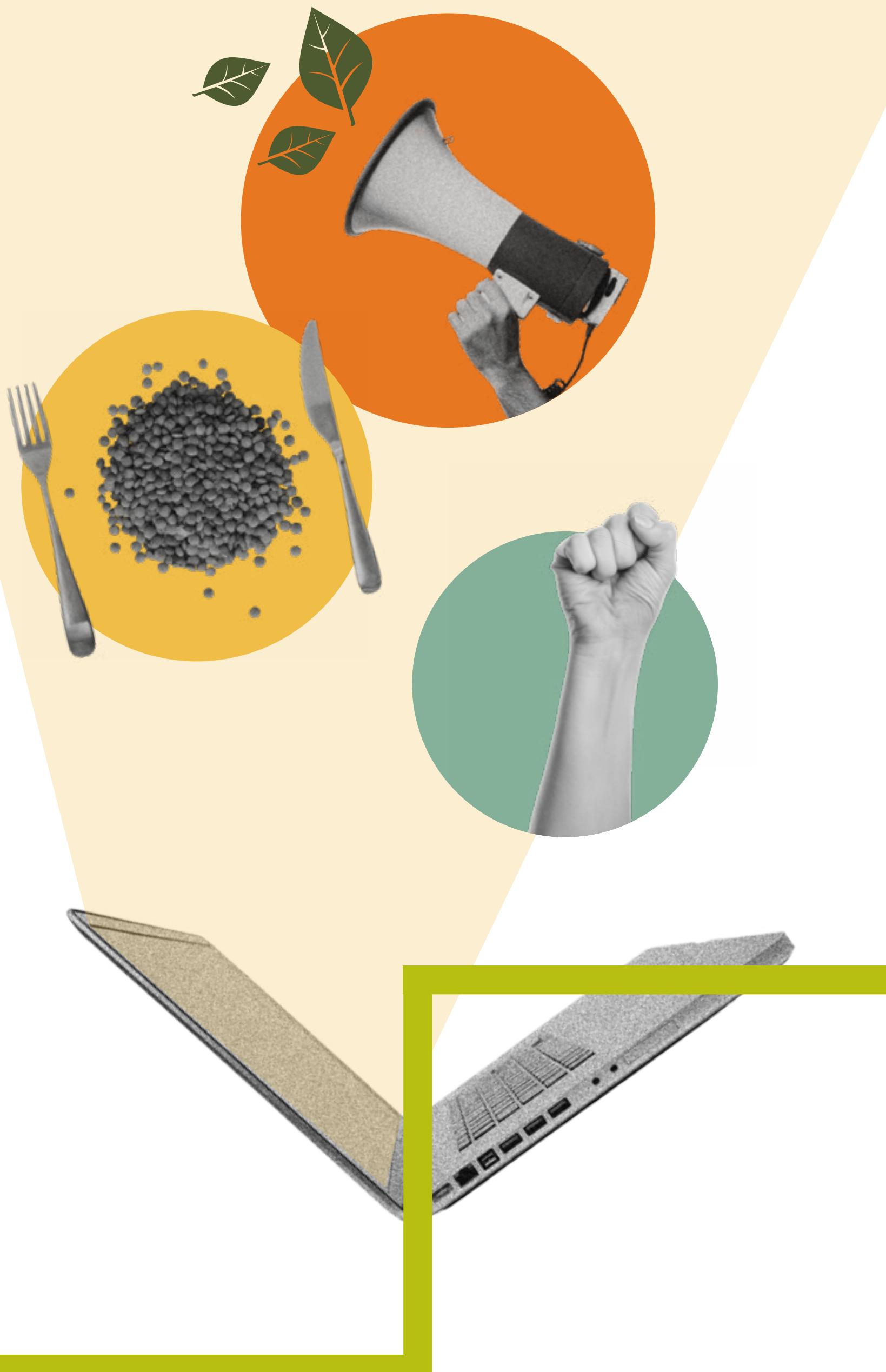
The Cambridge Institute for Sustainability Leadership (CISL) has published its first annual review. This includes examples of how CISL is driving impact through its global network of 27,000 leaders across business, finance and policy.

CISL has set a global benchmark for sustainability leadership education, from helping corporate leaders to develop understanding and strategy related to sustainable development to working with corporate boards and non-executives across global value chains. Hundreds of major organisations and thousands of individual leaders have gone on to deliver change, aligning their commercial performance with the delivery of positive outcomes for society.

Over the past year CISL has seen significant growth in its online, executive and graduate education programmes and corporate advisory services with over 8,600 students completing the courses. Alongside seven established online programmes, CISL introduced three courses on sustainable

food; sustainable marketing, media and creative; and women leading change. Targeted at mid-level and senior leaders across all business functions, the open executive education programmes have welcomed hundreds of delegates to courses in Cambridge, Melbourne and Cape Town. The team also worked with major organisations, including Chanel and Lloyds, to deliver bespoke courses to help clients frame a response to sustainability challenges and take a leadership position. In total, twelve thousand people attended one of CISL's education programmes in the past year.

OVER 8,600 STUDENTS
COMPLETED CISL'S ONLINE, EXECUTIVE AND GRADUATE EDUCATION PROGRAMMES.



POSTGRADUATE ACADEMY

This year Cambridge Zero launched the Postgraduate Academy to bring together postgraduate students from across all disciplines at the University who are working on, or have a research interest in, climate change and net zero. With over 200 members, the Academy provides a space to connect, discuss, and collaborate. A year-round calendar of events offer opportunities to get involved with Cambridge Zero activities, workshops and personal development programmes to develop research and communications skills, as well as socials, presentations and networking events.

CLIMATE CHANGE FESTIVAL

This year, Cambridge Zero ran the second edition of the [Cambridge Zero Climate Change Festival](#), dedicated to raising awareness of climate change and decarbonisation through engagement between academic and broader communities. Virtual seminars, webinars, talks, films and workshops took place over 6 days in October 2021, with 42 online events in total reaching over 549 attendees.

FUTURES WE WANT

Presented at COP26 in November 2021, Cambridge Zero was part of the [Futures We Want](#) project. Cambridge is the main academic partner in the Deloitte-led project that aimed to explore what the future could look like in a climate-resilient, net-zero world. The work was based around the four themes of water, energy, built environment, and food and land. Working with academics and citizens of 6 regions - Arabian Peninsula, Kenya, India, Jamaica, Brazil and the UK - the project identified the innovations being used across the world to address climate change and created visions of a resilient future in which people actually want to live.

WITH OVER 200
MEMBERS CAMBRIDGE
ZERO'S POSTGRADUATE
ACADEMY PROVIDES A
SPACE TO CONNECT,
DISCUSS AND
COLLABORATE.

CLIMATE RISK SUMMIT

In August 2021, the [UK Universities Climate Network](#) awarded 7 fellowships to 10 academics and practitioners with expertise in climate risk and its communication. Managed by Cambridge Zero and the Grantham Institute at Imperial College London, the fellowships launched with the [Climate Risk Summit](#) followed by the publication of the Communicating Climate Risk handbook and toolkit and a podcast series on climate risk decision-making.

Running over 3 days, the Climate Risk Summit tackled climate risk from a variety of angles - climate science, public health, neuroscience, law, finance, sustainability and communications. Each fellow curated a session around their particular area of expertise, including 'Risks and attribution of extreme events in a changing climate'; 'Climate resilience insights from global cities' and 'The Climate Domino Effect'. The fellows then published a series of Climate Risk Notes based on the content of each session - all of which can be found on the [Cambridge Open Exchange](#). A podcast series - [The Climate Papers](#) - was also produced, with fellows delving into the topics of their Climate Risk Notes.



Engagement

11 SUSTAINABLE CITIES
AND COMMUNITIES



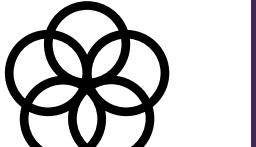
12 RESPONSIBLE
CONSUMPTION
AND PRODUCTION



13 CLIMATE
ACTION



17 PARTNERSHIPS
FOR THE GOALS



Green Impact

This year marks the tenth year of Green Impact at the University of Cambridge. We returned to in-person Green Impact events, but our teams worked in a hybrid way, some fully back in the workplace, others still working from home.

In total, 42 teams achieved 43 unique awards and completed over 2,100 actions. The 43 unique awards are reported in KPI Number of awards won by Green Impact teams on page 36. In our College awards, no team achieved a level lower than Gold, with 8 being awarded Platinum status.

Green Impact 2021-22 has seen some great projects - here we look at the three Excellence projects.

The Number of awards won by Green Impact Teams KPI on page 36 can include any of the 31 Colleges, CUP&A, principal subsidiaries, associate undertakings and significant investments.



MRC EPIDEMIOLOGY'S NORDIC ULTRA-LOW TEMPERATURE STORAGE SYSTEM

The aims of this Green Impact project were to reduce the energy consumption of MRC Epidemiology's current cold storage system and to reduce the environmental impact of repeat journeys to the storage site in Bishop Stortford. The MRC was awarded £715,000 from the University's Carbon Reduction Fund to part-fund the installation of a Nordic ULT modular storage system at a new local facility. It's estimated that the Nordic system will deliver an annual electricity saving of 300,000 kWh, a carbon emission saving of 70tCO₂e and a cost saving of £43,200 per year. On top of this, the new site is much closer to the University, reducing travel time and emissions.

Laboratory Manager Steve Knighton said: "*The successful completion of the project will be a great step forward for the Unit and University in the move toward a more environmentally sustainable model for biological sample storage.*"

A NEW SENSORY GARDEN AT GIRTON COLLEGE

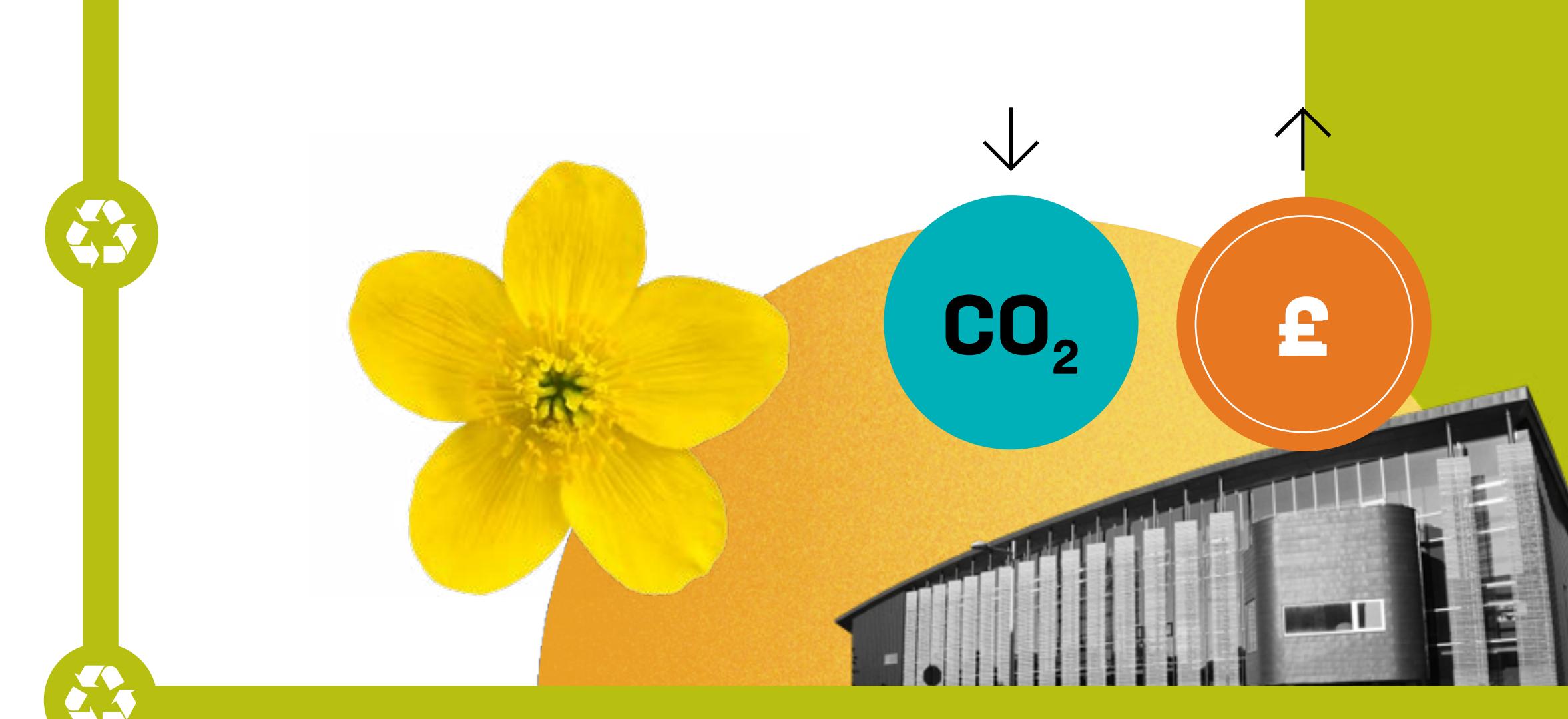
This year, Girton College launched a competition to design a new sensory garden as their Green Impact Excellence project, celebrating the centenary of the sixth mistress, Miss Elizabeth Welsh, who helped landscape the garden. The garden project looked to address the links between sustainability and wellbeing, highlighting the importance of interacting with nature and other people. As part of judging the 10 designs, they also held a Garden Walk for the community and alumnus and guest judge, Robert Myers, talked them through his and the winning designers' ideas.

From this success of this project, the Green Impact team is now looking to the future: "*Through this competition, it has become apparent that, as a College, we need to work more closely with each other. With this in mind we have created a Green Forum so that students, staff and fellows can meet to discuss their ideas for future projects and what they are currently focusing on.*"

REDUCING THE ENVIRONMENTAL FOOTPRINT OF JESUS COLLEGE

In partnership with Veolia, [Jesus College](#) have created four new recycling points to both increase recycling across the College as well as educate people as to how to use them properly and the impact they were having. Thanks to this project, none of the waste from Jesus College ends up in landfill. In six months, the College significantly reduced carbon emissions and saved 12,210 kg of CO₂. More broadly, they have succeeded in creating a culture of recycling by providing College members and visitors with a clear vision of their project and why it matters.

Giovanella Dell'Orto, Manager of the Roost café bar, who spearheaded the project with **former Roost employee and Jesus resident, Justine Lancelin**, said: “It’s great to see that many people bring their waste to the Roost to be recycled. We hope to diversify the type of waste collected and are already thinking of other changes we could implement.”



SPECIAL AWARDS

As part of the Green Impact Awards*, team members are nominated for special awards to highlight their achievements over and above the Green Impact Workbook. This year we awarded the following special awards:

Sustainability Hero – Alexander Carvell, Department of Chemical Engineering and Biotechnology

Innovation for Engagement – Department of Geography COP26 student takeover

Environmental Improvement – Andri Johnston

Community Action – Amy Budd and Ruth Carter

Student Leadership – Megan Groom

* The KPI Number of awards won by Green Impact teams on page 36 can include departments of the University, the Colleges, CUP&A, principal subsidiaries, associates undertakings and significant investments. It does not include personal awards.

LEAF

Tailored to laboratories, [LEAF - Laboratory Efficiency Assessment Framework](#) – is our new tool to help labs make changes to reduce the carbon impact of their work. It's a tool that is already being used in research institutions across the country and provides the guidance and criteria needed complete meaningful actions and earn an award in the process. It estimates the carbon and financial savings of any actions taken to aid decision-making and show the impact of the initiatives taken.

LOCAL SUSTAINABILITY PLANS (LSPs) PILOT PROJECT

This project has been delivered to test an approach to support institutions to create local level plans aligned with the University’s strategic ambitions and priorities, to provide support and guidance for institutions to demonstrate their commitment and contribution to sustainability. Wide stakeholder engagement working with four pilot institutions – School of Clinical Medicine, University Library, Endowment Fund Office and the Faculty of English – has supported the development of a bespoke online tool to aid institutions in creating their own bespoke LSPs and deliver meaningful work towards meeting the University’s sustainability targets.

Looking ahead

Undertaking engagement with the University community to inform development of a Sustainability Strategy

Develop and implement a programme of thermal efficiency improvements to reduce our energy use and costs

Identify and prioritise buildings for small scale renewable systems

Use findings of the scope 3 screening assessment to inform target setting for the University's most significant scope 3 emission sources

Monitor impact of the new Sustainable Business Travel Guidelines and improve reporting

Publish our Water Management Plan

Develop a business case for delivery of medium and longer term Biodiversity Action Plan (BAP) objectives

Work up project proposals with city-wide partners to highlight wildlife corridors that can be created

Promote iRecord sign up, facilitate more recording and monitoring across the estate and explore the possibility of targeted Bioblitzes on the West Cambridge site

Roll out Local Sustainability Plans to ensure innovation and ambition

Develop further strategy and guidance on retrofit using findings from Entopia Building and feasibility work

Centralise lab consumables procurement, working with suppliers to reduce and reuse plastic waste and explore more ambitious polystyrene and nitrile glove recycling options

Re-procure the Universal Bus contract with a view to introducing electric buses and route extensions

Continue to deliver improvements to cycle parking across the estate

A year of progress, and a farewell

In a year of sustained uncertainty and more change, the University has stayed committed to its environmental sustainability goals. Increased zero carbon electricity, with a focus on moving to renewables over time, sustained levels of sustainable travel, the opening of the BREEAM Excellent West Hub and swathes of wildflowers across the estate are just some of the highlights in this report.

The progress we have made over the past year is in part due to the hard work and commitment of the members of my team, but credit for our achievements goes way beyond my team and the Estates Division, to departments right across the University. Our staff and students have continued to play a key role in driving forward environmental sustainability, and I thank them for their ideas, passion and hard work.

Our progress is also an indication of the extent to which environmental considerations are becoming embedded throughout the University's day-to-day operations and decisions - which is great to see.

I would like to take this opportunity to thank Joanna Chamberlain, our outgoing Head of Sustainability, for her hard work and commitment over the past ten years. The University has come a long way under her leadership. There is more to be done, but thanks to Joanna's endeavours the University has well and truly started its journey towards an environmentally sustainable future.

Sally Pidgeon, Interim Head of Sustainability, University of Cambridge

THE ACCURACY OF OUR DATA

Having accurate data is key to evaluating the success of the sustainability projects we implement and is essential to measuring our progress against our environmental targets and KPIs. It also helps the University address risk 14 within the University's Risk Register: Failure to set and achieve appropriate environmental sustainability targets. This risk can only be managed if we have robust and reliable environmental data. Without it we cannot set appropriate targets or measure our progress against them. Having our environmental data externally assured increases the transparency and accuracy of our data.

Consistent with prior periods of independent limited assurance activity we are proud to say that PricewaterhouseCoopers LLP (PwC) have performed an independent limited assurance engagement on selected information in the 2021-22 data in the KPI table on page 36. We want to drive continual improvement in the quality and credibility of our data and the assurance process helps us do this.

Within our [Methodology Statement](#), we provide more transparency around how we compile our figures, being clear about gaps or assumptions made. [PwC's Independent Limited Assurance Opinion](#) can be found on our website alongside this annual report.

SUSTAINABILITY AS A CORE VALUE

The mission of the University of Cambridge is to contribute to society through the pursuit of education, learning and research at the highest international levels of excellence. Sustainability is key, with a core value under the theme of 'relationship with society' stating 'concern for sustainability and the relationship with the environment'.

Our Risk Management Policy sets out the University's approach to risk management. Effective risk management is crucial in protecting the reputation and sustainability of the University. It means we can achieve objectives and make well-informed decisions that make sure the University's activities are sustainable and compliant. Environmental sustainability is on the Risk Register as a factor that has a fundamental impact on the University's ability to deliver its mission.

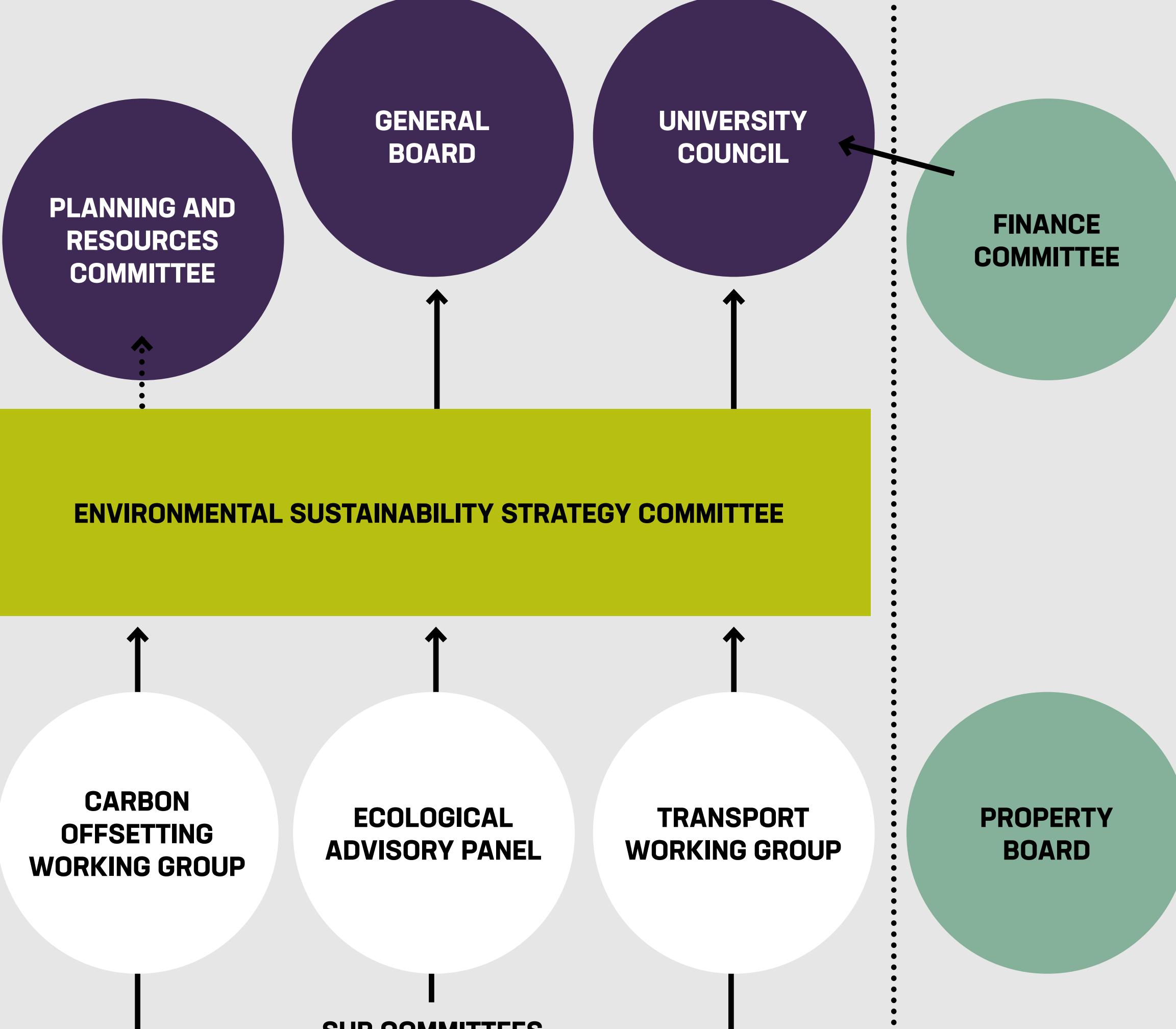
ENVIRONMENTAL MANAGEMENT SYSTEM

The University has an established Environmental Management System (EMS) and is working towards it being externally accredited to the international standard ISO 14001:2015. Through the EMS, the University identifies and manages its significant environmental impacts, achieves cost saving through efficiency, ensures compliance with environmental legislation and provides benchmarks for improvements.

As part of the development of the new Sustainability Strategy, the Register of Significant Environmental Aspects and Impacts will be formally reviewed to ensure it is aligned with the new strategy.

GOVERNANCE

OPERATIONAL ESTATE



KEY PERFORMANCE INDICATORS	2021/22	2020/21 RESTATED	2020/21
Total Scope 1 and 2 Location-based carbon emissions (energy and fuel use) [tCO ₂ e]	49,124 [Ⓐ]	55,106	55,106
Total Scope 1 and 2 Market-based carbon emissions (energy and fuel use) [tCO ₂ e]	24,766 [Ⓐ]	27,695 ¹	30,141
Carbon emissions from water use [tCO ₂ e] ²	145 [Ⓐ]	156 ¹	167
Total Scope 1 and 2 Location-based carbon emissions per FTE staff and student (tCO ₂ e/FTE)	1.5 [Ⓐ]	1.8	1.8
Total Scope 1 and 2 Market-based carbon emissions per FTE staff and student (tCO ₂ e/FTE)	0.8 [Ⓐ]	0.9 ¹	1.0
Carbon emissions from water use per FTE staff and student (tCO ₂ e/FTE)	0.005 [Ⓐ]	0.005	0.005
Total Scope 1 and 2 Location-based carbon emissions per total income (tCO ₂ e/£000)	0.044 [Ⓐ]	0.048	0.048
Total Scope 1 and 2 Market-based carbon emissions per total income (tCO ₂ e/£000)	0.022 [Ⓐ]	0.024 ¹	0.026
Carbon emissions from water use per total income (tCO ₂ e/£000)	0.0001 [Ⓐ]	0.0001	0.0001
Percentage of energy generated from onsite renewable or onsite zero/low carbon sources (%)	0.27 [Ⓐ]	0.26	0.26
Total water consumption (m ³)	367,600 [Ⓐ]	396,920 ¹	424,785
Total water consumption per FTE staff and student (m ³ /FTE)	11.5 [Ⓐ]	12.6 ¹	13.5
Waste mass generated per FTE staff and student (tonnes/FTE)	0.12 [Ⓐ]	0.22	0.22
Waste sent to landfill (tonnes)	148 [Ⓐ]	96	96
Percentage of waste generated that is recycled or composted (construction and non-construction waste) (%)	56 [Ⓐ]	73	73
Scope 3 emissions (water; commuting; business travel; waste) (tCO ₂ e)	11,325 [Ⓐ]	4,044 ¹	4,055
Scope 3 emissions (supply chain) (tCO ₂ e)	310,742 [Ⓐ]	365,961	365,961
The percentage of new buildings that are certified at least BREEAM Excellent or equivalent (%)	100% [Ⓐ] (1 of 1)	50% (1 of 2)	50% (1 of 2)
External awards for sustainable construction/design (An award received)	One [Ⓐ]	No awards	No awards
Percentage modal split for commuting by staff single occupancy car journey (%)	14 [Ⓐ] ³	10	10 ⁴
Percentage modal split for commuting by staff car share (%)	3 [Ⓐ] ³	1	1 ⁴
Percentage modal split for commuting by staff bus (%)	2 [Ⓐ] ³	2	2 ⁴

KEY PERFORMANCE INDICATORS	2021/22	2020/21 RESTATED	2020/21
Percentage modal split for commuting by staff train (%)	3 [Ⓐ] ³	1	1 ⁴
Percentage modal split for commuting by staff cycle (%)	23 [Ⓐ] ³	13	13 ⁴
Percentage modal split for commuting by staff walk (%)	6 [Ⓐ] ³	4	4 ⁴
Percentage modal split for commuting by staff motorbike (%)	1 [Ⓐ] ³	0	0 ⁴
Percentage modal split for commuting by staff other (%)	48 [Ⓐ] ³	69	69 ⁴
Per capita carbon emissions from flights (tCO ₂ e/FTE)	0.33 [Ⓐ]	0.03	0.03
Number of awards won by Green Impact teams ⁵	43 [Ⓐ]	49	49
Number of members of the Sustainability Champions Network ⁵	83 [Ⓐ]	71	71

For each of the years above, the reporting period covers 1 August to 31 July.

Management Statement:

The Council of the University of Cambridge's Directors' Statement on The University of Cambridge's selected environmental sustainability performance data (the "Selected Information") within the Environmental Sustainability Report for the year ended 31 July 2022 ("the Report")

As the Council of The University of Cambridge, we confirm that we are solely responsible for the preparation of the Report including this Directors' Statement and for reporting the Selected Information in accordance with the reporting criteria set out within this document. We confirm, to the best of our knowledge and belief, that we have:

- designed, implemented and maintained internal controls and processes over information relevant to the measurement, evaluation and preparation of the Selected Information that is free from material misstatement, whether due to fraud or error;
- established objective reporting criteria for preparing and presenting the Selected Information, including clear definition of the entity's organisational boundaries, and applied them consistently;
- presented information, including the reporting criteria, in a manner that provides relevant, complete, reliable, unbiased/neutral, comparable and understandable information;
- reported the Selected Information in accordance with the reporting criteria.

Sally Pidgeon
Interim Head of Sustainability
For and on behalf of The Council of
The University of Cambridge
27 February 2023

¹ Figures updated to be in line with our updated methodology as per our restatement policy.

² This includes waste water.

³ When working from home is removed from the modal split calculation for 2021/22, the modal split is Percentage modal split for commuting by staff single occupancy car journey (%) 27%, Percentage modal split for commuting by staff car share (%) 5%, Percentage modal split for commuting by staff bus (%) 5%, Percentage modal split for commuting by staff train (%) 5%, Percentage modal split for commuting by staff cycle (%) 44%, Percentage modal split for commuting by staff walk (%) 12%, Percentage modal split for commuting by staff motorbike (%) 1% and Percentage modal split for commuting by staff other (%) 1%.

⁴ The modal split for commuting by staff other 2020/21 is unusually high due to the Covid-19 pandemic. When working from home is removed from the modal split calculation, the modal split is Percentage modal split for commuting by staff single occupancy car journey (%) 32%, Percentage modal split for commuting by staff car share (%) 4%, Percentage modal split for commuting by staff bus (%) 5%, Percentage modal split for commuting by staff train (%) 4%, Percentage modal split for commuting by staff cycle (%) 42%, Percentage modal split for commuting by staff walk (%) 12%, Percentage modal split for commuting by staff motorbike (%) 1%, Percentage modal split for commuting by staff other (%) 0%.

⁵ The KPI Number of awards won by Green Impact teams and the KPI Number of members of the Sustainability Champions Network can include departments of the University, the Colleges, CUP&A, principal subsidiaries, associates undertakings and significant investments.



HELP BUILD A SUSTAINABLE UNIVERSITY

Everyone has a role to play in reducing our environmental impact and creating a sustainable University. Collectively all of our actions add up to make a big impact.

Get involved in the development of the [University's Sustainability Strategy](#)

Become an ambassador for environmental issues as a [Sustainability Champion](#)

Join a [Green Impact](#) team and make real environmental change in your department

Test out your research on the University estate through a [Living Lab](#) project

Download posters and all the resources you need to [spread the sustainable message](#)

Keep up to date with the latest sustainable news and events with our [Greenlines newsletter](#)

Find out what's going on across the University to tackle the climate crisis on the [Sustainable Earth](#) site

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