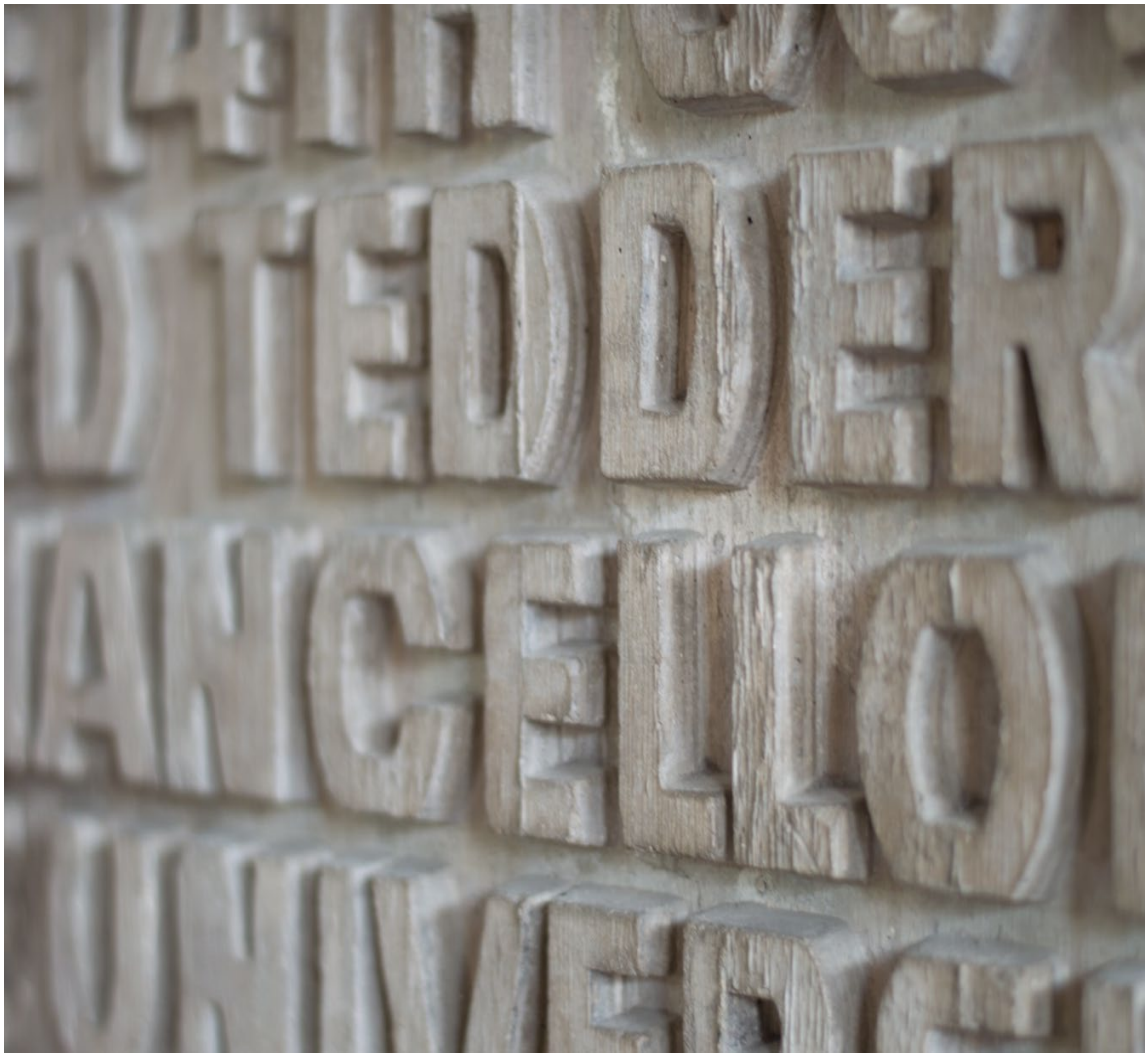
SUSTAINABILITY STRATEGY

CHURCHILL COLLEGE
UNIVERSITY OF CAMBRIDGE

Contents



1. Introduction

Uniquely amongst the Oxbridge colleges, Churchill College was founded as an institution with science and technology (the STEM subjects) at its heart: by statute, 70% of the fellowship and students must be in the STEM disciplines. It is therefore appropriate that we use the depth of our scientific knowhow to facilitate work around sustainability, be that with the fellowship, the staff or the entire student body. We know students care passionately about the climate crisis and are full of innovative ideas as well as deep commitment to making things work. Across the fellowship the research of many is directly linked to these issues. To take just a few words describing some of our fellows from our website:

- Dame Polly Courtice formerly led the Cambridge Institute for Sustainability Leadership and is a member of the Cambridgeshire and Peterborough Independent Commission on Climate;
- Professor Henning Sirringhaus is actively researching thermal energy harvesting and converting heat energy into more useful forms of energy, such as electricity;

- Professor Manish Chhowalla has demonstrated that it is possible to induce phase transformations in atomically thin materials and utilize phases with disparate properties for field effect transistors, catalysis, and energy storage;
- Professor Diane Coyle is an economist who has sat on the Natural Capital Committee;
- Professor Markus Kraft is the CARES Director for the Singapore-Cambridge CREATE Research Centre. In this centre he is also a principal investigator in the 'Cambridge Centre for Carbon Reduction in Chemical Technology (C4T)' programme.
- Dr Anna-Maria Kypraiou has been working on projects on the reduction of fuel consumption and fuel oil consumption uncertainty reduction in the maritime industries. Most recently, she worked on system energy optimisation and development of methods for fuel consumption reduction on very large crude carriers;
- Dr Matthew Agarwala leads the Bennett Institute's Wealth Economy project, which seeks to transform economic measurement to better reflect sustainability, inequality, and human wellbeing.

As this shows, the depth of activity and expertise amongst our fellows in this space is impressive, not just in STEM but also in the social sciences. There is much to do and the work is urgent.

Our sustainability strategy is designed to build on our strengths to satisfy the existential crisis we are facing, and to ensure that all parts of our operation are considered and improved. We need to set ambitious targets and place ourselves as a leader amongst the colleges, so that others can learn from our experience. We need to speak to past generations of alumni, as well as the alumni of the future, carrying all of them with us on this important journey. Our success over the last years in the University's Green Impact Awards are testament to the activity in the College and demonstrates our commitment: we have received the top level of award (Platinum) in each of the last four years, despite all the challenges of the pandemic.

We will constantly monitor our KPIs, refreshing them regularly, to ensure these keep stretching the College's operations. This means not just investing in infrastructure, but in people and working on the mind-set of all who live or work here. As a specific example, over the past two summers, solar panels have been installed on two of the courts. By ensuring members of the maintenance team were trained to carry out the installation, we have both been able to cut costs substantially, but also given the team confidence and pride in what they are able to do. This work will continue over future years.

Master, Professor Dame Athene Donald

2. Our Strategic Priorities

a. The basis of our strategy is formed using the United Nations (UN) 17 Sustainable Development Goals (SDGs) with a notable focus on the following:

7) Affordable and Clean Energy
9) Industry, Innovation and Infrastructure
11) Sustainable Cities and Communities
12) Responsible Consumption and Production
13) Climate Action
15) Life on Land

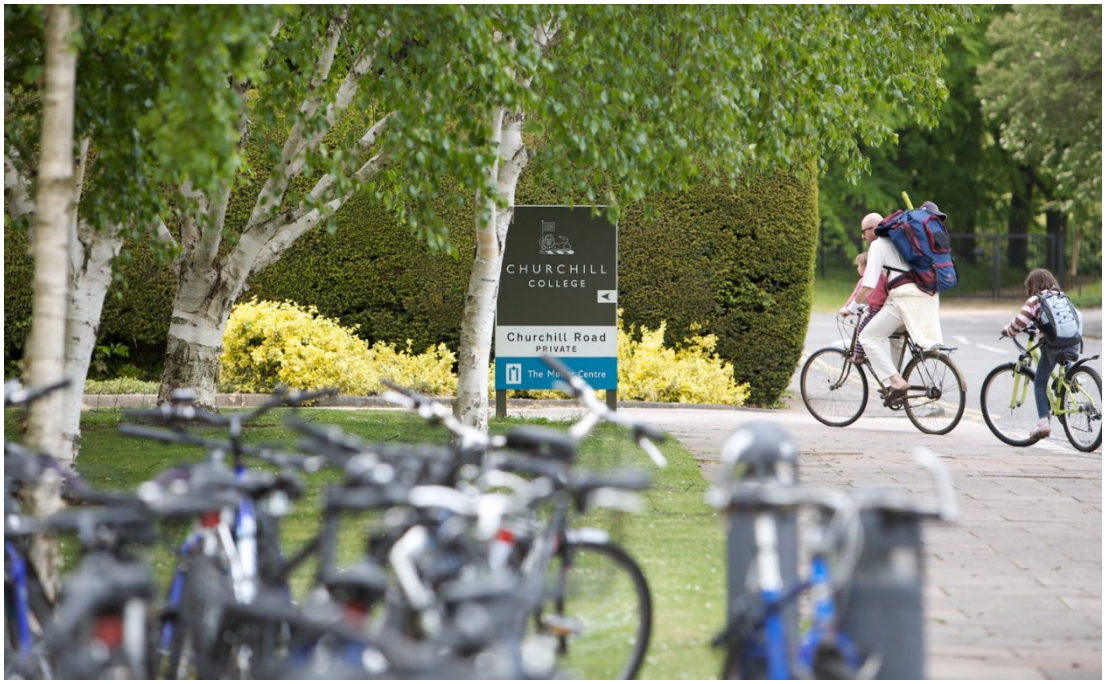
b. These goals focus on the areas where we recognise opportunities for the greatest gain and have informed our objectives and corresponding KPIs. Further details of these key goals can be found online within the dedicated UN Website found here:

https://sdgs.un.org/goals

c. The Objectives and Key Performance Indicators (KPIs) are driven by the following key priorities as set out within the body of the report:

- Carbon and Energy
- Investment and ESG
- Built Environment and Operations
- Landscape and Ecology
- Travel
- Procurement

d. This Strategy is designed to lead the College to its overarching sustainability ambitions with various key deadlines notably in relation to Carbon reduction. The evolving nature of the challenges and our continuing progress means that we plan to review this strategy annually.



3. Objectives and KPIs

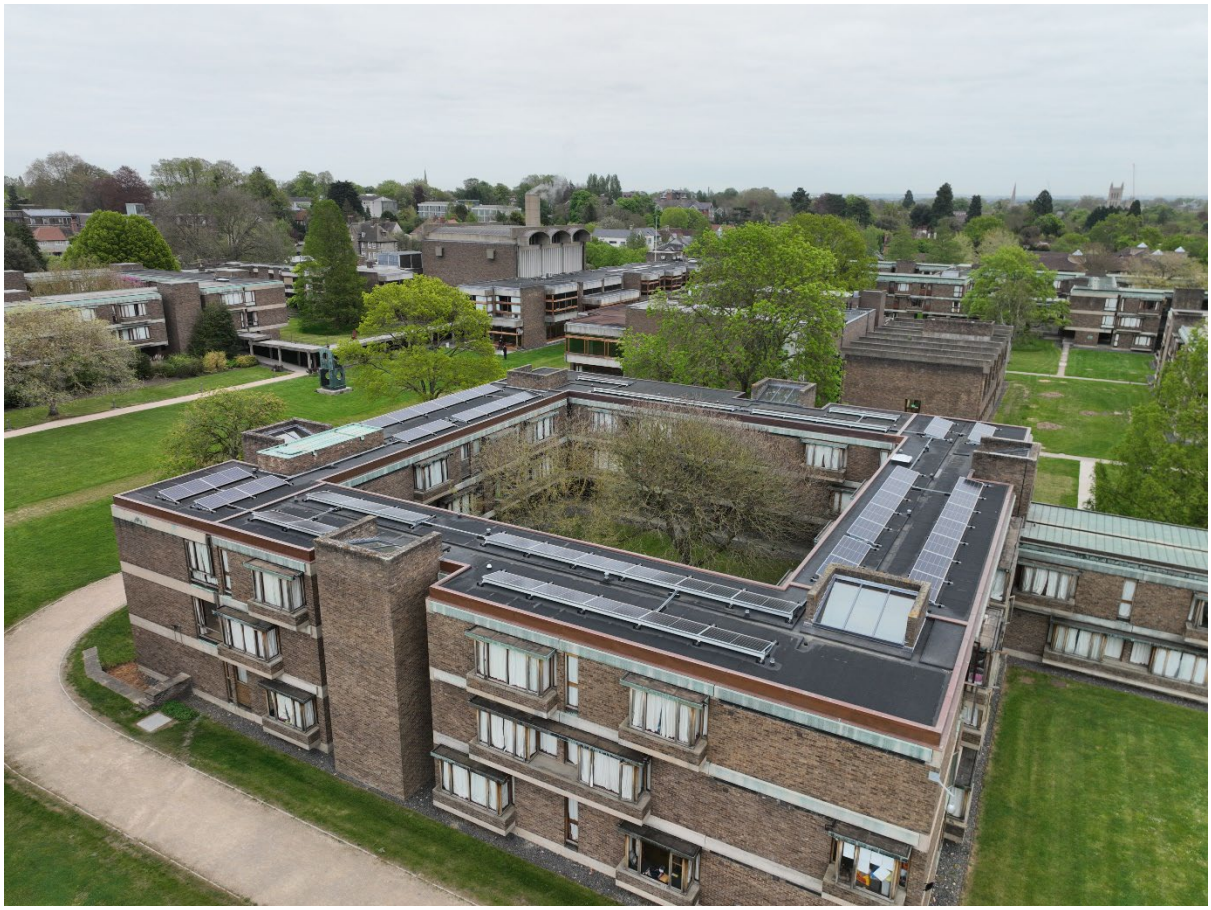
a. The body of this report will set out our strategic sustainability objectives and corresponding Key Performance Indicators (KPIs). The objectives below are intended as specific strategic targets to fulfil the College's wider objectives as a centre of sustainability excellence and are intended to align where policy with the wider University of Cambridge aims. All data is based against 2019 baseline levels.

b. The objectives are listed within each policy priority and a format for ongoing review is appended to the document (Appendix A).

4. Governance

a. Given the vital importance of this strategy the College maintains a Sustainability Committee reporting directly to College Council and incorporating the work of sustainability student groups, operations groups and the Green Impact Sub-Group.

b. The purpose of the Committee is to support the College to become an institutional leader in the development and introduction of sustainability by bringing together College wide expertise in the areas of sustainability notably including carbon foot-printing, carbon reduction and offsetting, development and installation of green technologies.



5. Carbon and Energy

SDG 7: Affordable and Clean Energy

SDG 13: Climate Action

Our Objective

To reduce scope 1, 2 and 3 carbon emissions to zero.

Our KPIs

- *Utilising the University's science-based targeting approach for carbon reduction, reduce all energy related carbon emissions to zero by 2038 with scope 1 and 2 emissions by 2030.*

- *Progress towards elimination of natural gas usage with elimination of natural gas consumption by 2030 (measured in kW/h per year) utilising innovative and forward looking solutions wherever possible.*

- *Commence monitoring of environmental conditions and energy usage across College in 2022 utilising innovative student led projects for data collection.*

What have we done so far?

- Adopted the University's Science-based targeting (SBT) approach for carbon reduction which provides a framework for consistent forecasting and measuring of carbon for the College.

- We have removed several properties from fossil fuel usage through the switch to zero carbon fuels and investment in widespread insulation.

- We have not installed any new or replacement gas or oil-fired installations since 2019 with all new installations operating using heat pump and other greener technology.

- We use our estate to generate power with major investment in solar power generation targeting over two thirds of our demand. A number of projects have already been completed and further details can be found in our case studies section.

6. Investment and ESG

Our Objective

The College believes it is important that its endowment is managed in a way that encourages decarbonisation and to mitigate against the risks associated with climate change in line with the goals of the Paris Agreement and the Glasgow Climate Pact.

As a *'Universal owner'* (a very long-term investor who has an interest in the long-term health of the financial system as a whole and takes account of the long-term impact of its investment decisions on the economy and society) the College also has a role to play in influencing other investors, agents and actors who are involved in financial and property investments and seeks to collaborate with others to enable wider sectoral change.

Our KPIs

The College has already eliminated meaningful fossil fuel exposure and holds no active funds with more than 1% exposure and is committed only to:

(i) invest through investment managers whose aims are consistent with the College's investment objectives targeting net zero carbon in our financial investments by 2038;

(ii) engage with investment managers to encourage pro-active participation in coalitions with other investors on environmental, social and governance (ESG) issues;

(iii) seek to ensure that human wellbeing, environmental sustainability, energy efficiency and biodiversity are respected and advanced;

(iv) use its influence along with other Colleges to place active pressure on the banking sector and seek best practice in terms of environmental impact from it's bank.

Gifts of shares in companies whose output, pollutes or degrades the environment will not be accepted.

7. Built Environment and Operations

SDG 11: Sustainable cities and communities

SDG 12: Responsible consumption and production

Our Objective

To reduce the environmental sustainability impacts of our operations and buildings.

Our KPIs

- *Reduce water consumption by 20% by 2030.*

- *In 2022, adopt a strategic approach to the use of the existing estate through more efficient use of buildings and space and increasing the use of shared facilities as opposed to demolition and new construction.*

- *To send zero non-hazardous waste to landfill by 2025 incorporating the implementation of an innovative recycling strategy to provide protocols for the management of waste materials across all operations notably including catering, housekeeping and construction.*

- *Develop and implement at least 12 significant innovations across the built environment and operations each year.*

- *Eliminate all single use items such as paper cups and plastic cutlery by 2022/23. This may include the selection of higher cost but higher quality items with longer lifespans.*

- *Ensure carbon budgeting is applied consistently across medium and large projects and adopt mechanisms for simpler carbon budgeting for smaller and reactive projects and operations in 2022/23.*

- *Minimising paper usage as far as possible with an 80% reduction against 2018/19 levels by 2022/23. Where paper (and timber) are used preferentially sourcing all timber and paper from Forest Stewardship Council-certified suppliers and requiring our preferred contractors to do likewise.*

- *Develop a Sustainable Food Policy that aims to minimise the indirect biodiversity impacts of the food that we purchase. For example, through adopting Marine Stewardship Council standards within 2022/23.*

- *Reduce power used for lighting as far as possible with installation of LED fittings and motion sensor activation to remaining all viable spaces by 2022/23. Note approximately 98% of lights are already LED.*

- *Implement digital signage installation across site notably for key variable information such as room availability and menus by 2022/23.*

- *Reduce the use of chemical cleaning products and bleaches by 20% by 2022/23.*

What have we done so far?

- We are consistently recognised at the National Union of Students' Green Impact Awards with Platinum level awards.

- We have made a wide range of changes in our use of materials often involving simple switches such as moving to concentrated, plant based non-bleach cleaning products. We use several waste materials in the construction of furniture such as using waste wood for desks.

- All of our waste is already recycled or used to generate power but we are adopting waste compaction to majorly reduce the number of collections and significantly reducing the number of refuse lorry journeys. Further details can be found in our case studies section.

8. Landscape and Ecology

SDG 13: Climate Action

SDG 13: Life on Land

Our Objective

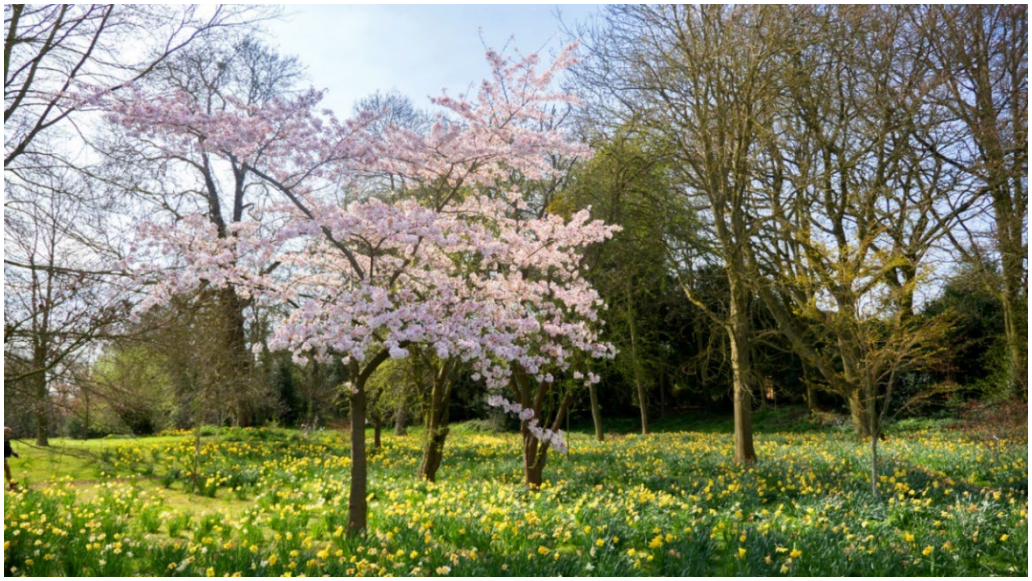
To limit all negative ecological impacts and instead have a strongly positive affect on biodiversity and natural landscapes.

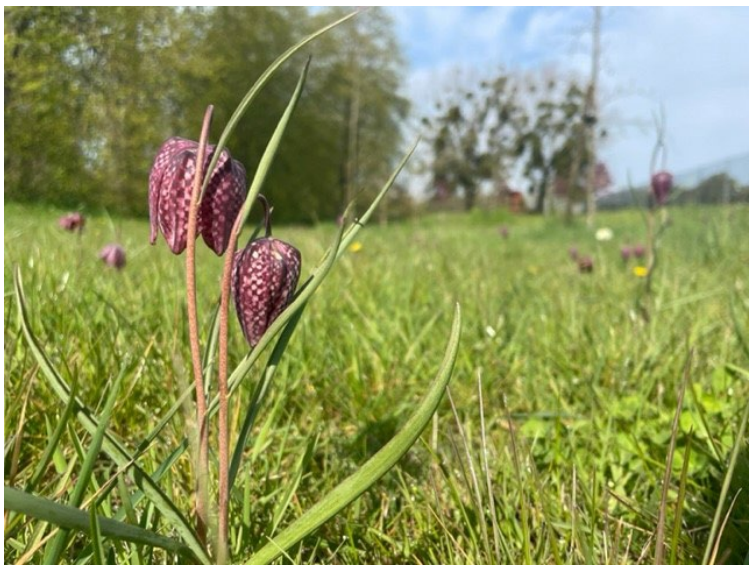
Our KPIs

- *Reach and maintain 1,100 trees on the campus by 2024 from the base level of 840.*
- *Introduce and maintain a rolling programme of wildlife and landscape training and education*
- *Obtain Hedgehog Friendly Campus Accreditation in 2022/23.*
- *Develop wildlife ponds at two or more campus locations seeking educational and volunteering input wherever possible in 202/23.*
- *Develop and maintain a biodiversity plan and species register informing local and national conservation stakeholders.*
- *Expand meadowing and wildlife habitat to cover an additional five acres on campus by 2025.*

What have we done so far?

- A 10% increase in the total tree numbers on site with a strong emphasis on native species since 2019.
- Continuing our work to support our plant conservation work through our Plant Heritage National Collection Holder status.
- Eliminated all pesticide and herbicide usage.
- Establishment of several beehives.
- In 2021 alone we planted twenty thousand native bulbs with the support of hundreds of volunteers.





9. Travel

SDG 9: Industry, Innovation and Infrastructure

Our Objective

To provide viable and accessible sustainable travel options for staff, Fellows and students for travel to work, travel at work and travel for work which results in a reduction of carbon emissions.

Our KPIs

- *Electrification of operations vehicle and plant fleet by 2025 and installation of EV charging points serving a third of all parking spaces by 2024 to encourage the use of more sustainable alternatives to petrol and diesel vehicles.*

- *Implementation of improved options for staff and students to travel between College and University sites via sustainable transport notably electric vehicles and bicycles before 2023.*

- *Implementation and supply of technology to support remote working and attendance at events and meetings in 2022/23. Notably including installation of improved video-conferencing and hybrid meeting facilities and the provision of support on how to use them.*

- *Introduction of a Sustainable Travel Policy incorporating our agile working policy and environmental impact travel assessment which encourages and supports our community to make greener traveling decisions both on land and by air.*

What have we done so far?

- We only use electric tools, plant and vehicles across a significant majority of the operation including within Gardens, Maintenance and Housekeeping teams.

- The College site has fifteen electric vehicle charging stations.

- We are considering the use of other electric vehicles such as E-Scooters for use on the Churchill Road and potentially within Cambridge. Our growing photo-voltaic power generating capacity means these could be charged without the use of fossil fuels.

10. Procurement

SDG 12: Responsible consumption and production

Our Objective

To positively influence the sustainability performance of suppliers and the sustainability credentials of the goods and services that we purchase.

Our KPIs

- *Extend compliance with Churchill College Procurement Guidelines to all purchasing teams and provide appropriate training and guidance to purchasers/procurers to ultimately reach ISO 20400 standards for Sustainable Procurement.*

- *Ensure procurement of goods consistently includes ESG factors such as social sustainability, carbon and locality within scoring criteria within 2022/23. This may include a focus on key supplier accreditation such as Fairtrade.*

- *Develop and implement a supplier engagement programme to promote continual improvements by both suppliers and College purchasers. Programme to focus on four key long-term suppliers in 2022/23.*

What have we done so far?

- We are committed to engaging with our full supply chain in an environmentally and socially responsible way. This means that when procuring any goods or services we ensure that the whole supply chain are able to evidence their commitment to sustainability.

- We adhere to the Department for Environment, Food and Rural Affairs guidance on sustainable procurement for a number of different sectors (e.g. cleaning products, electrical goods, furniture, etc.).

- We always look to simplify and localise our produce supply chains. This work has resulted in our forming direct commercial relationships with a number of local farms generally in Cambridgeshire and neighbouring counties.

11. Progress and Review

The College will review KPI progress annually.

The Objectives will be reviewed annually by College Council and the relevant College Committees. This review will assess the progress as well as the continuing suitability of the Objectives and KPIs.

Appendix A entails a format for progress and review reporting.

Appendix A – Objectives Review Schedule (October 2022)

Behind Schedule
In Progress
Complete

Carbon and Energy

No.	Objective	KPI	Date	Evidence / Commentary	RAG
1.1	To reduce scope 1, 2 and 3 carbon emissions to zero.	Utilising the University's science-based targeting approach for carbon reduction, reduce all energy related carbon emissions to zero by 2038 with scope 1 and 2 emissions by 2030.	10.22	The College has added significant solar power arrays in 2022 forecast to produce 120,000kWh per annum bringing the total to over 200,000kWh with further projects planned in to 2023 and beyond.	A
1.2		Progress towards elimination of natural gas usage with elimination of natural gas consumption by 2030 (measured in kW/h per year) utilising innovative and forward looking solutions wherever possible.	10.22	Gas usage has been significantly reduced this summer aligned with the target. This included the removal of fossil fuels from further properties in our residential estate and introduction of induction cooking in our main kitchen. Continued reductions are planned through our capital expenditure forecast to meet our target date.	A
1.3		Commence monitoring of environmental conditions and energy usage across College in 2022 utilising innovative student led projects for data collection.	10.22	The monitoring project is underway with third generation sensors installed in a variety of core College areas.	G

Built Environment and Operations

No.	Objective	KPI	Date	Evidence / Commentary	RAG
2.1	To reduce the environmental sustainability impacts of our operations and buildings.	Reduce water consumption by 20% by 2030.	10.22	Changes to water hygiene protocol are being trialled to minimise water intensive pipework flushing forecast to reduce water usage by 2.5% Major refurbishments have included installations of water saving technologies and removal of redundant pipework dead-legs and unused sanitary appliances this year accounting for a further 1% of the total usage.	A
2.2		In 2022, adopt a strategic approach to the use of the existing estate through more efficient use of buildings and space and increasing the use of shared facilities as opposed to demolition and new construction.	10.22	Estates Committee have supported this approach to decision making most notably in relation to the 36a/b Storey's Way Project where the decision was made to refurbish the house rather than rebuild or redevelop the site.	G
2.3		To send zero non-hazardous waste to landfill by 2025 incorporating the implementation of an innovative recycling strategy to provide protocols for the management of waste materials across all operations notably including catering, housekeeping and construction.	10.22	Significantly ahead of schedule we now do not send any non-hazardous waste to landfill. This is predominantly due to our wide-ranging recycling policies.	G
2.4		Develop and implement at least 12 significant innovations across the built environment and operations each year.	10.22	More innovations across operations and projects are to follow but some examples this year to date are below: data sensors, tree root bags, solar film, solar panel green roofs, off grid ancillary buildings, heat optimisation strategies, water flow regulators, in house solar installations.	A

No.	Objective	KPI	Date	Evidence / Commentary	RAG
2.5		Eliminate all single use items such as paper cups and plastic cutlery by 2022/23. This may include the selection of higher cost but higher quality items with longer lifespans.	10.22	Single use items have been significantly reduced with the removal of single use cups. During the pandemic some single use cutlery was employed but this has since been removed.	G
2.6		Ensure carbon budgeting is applied consistently across medium and large projects and adopt mechanisms for simpler carbon budgeting for smaller and reactive projects and operations in 2022/23.	10.22	We are presently investigating simplified options for budgeting smaller projects involving online software options.	A
2.7		Minimising paper usage as far as possible with an 80% reduction against 2018/19 levels by 2022/23. Where paper (and timber) are used preferentially sourcing all timber and paper from Forest Stewardship Council-certified suppliers and requiring our preferred contractors to do likewise.	10.22	Significant reductions have been achieved in 2022 through the implementation of electronic issue tracker systems and removal of most personal printers. We are presently awaiting exact data.	A
2.8		Develop a Sustainable Food Policy that aims to minimise the indirect biodiversity impacts of the food that we purchase. For example, through adopting Marine Stewardship Council standards within 2022/23.	10.22	Sustainable food policy in place including the adaption of key standards and carbon labelling for menu choices both on the digital displays and on the website.	G
2.9		Reduce power used for lighting as far as possible with installation of LED fittings and motion sensor activation to remaining all viable spaces by 2022/23. Note approximately 98% of lights are already LED.	10.22	Works on programme with only circa 80 light fittings remaining for replacement across the estate.	A
2.10		Implement digital signage installation across site notably for key variable information such as room availability and menus by 2022/23.	10.22	Menu signage has been installed in the servery with works in progress for room availability.	A
2.11		Reduce the use of chemical cleaning products and bleaches by 20% by 2022/23.	10.22	Chemical cleaning products have been reduced by 20% with plans for further reductions in 2023.	G

Landscape and Ecology

No.	Objective	KPI	Date	Evidence / Commentary	RAG
4.1	To limit all negative ecological impacts and instead have a strongly positive affect on biodiversity and natural landscapes.	Reach and maintain 1,100 trees on the site by 2024 from the base level of 840.	10.22	By the end of the year we will have over 1,000 trees on site.	A
4.2		Introduce and maintain a rolling programme of wildlife and landscape training and education.	10.22	Several team member have undertaken formal wildlife or landscape training including whole department hedgehog awareness training.	G
4.3		Obtain Hedgehog Friendly Campus Accreditation in 2022/23.	10.22	We have obtained the “bronze” Hedgehog Friendly Campus accreditation level with plans now progressing for Silver and Gold.	G
4.4		Develop wildlife ponds at two or more campus locations seeking educational and volunteering input wherever possible in 2022/23.	10.22	Potential locations for wildlife ponds have been identified in areas suitable for community input, notably the garden of 68 Storey’s Way close to the Garden Society area and bees.	A
4.5		Develop and maintain a biodiversity plan and species register informing local and national conservation stakeholders.	10.22	We are approaching the end of a year long biodiversity survey to inform the biodiversity plan. The survey work has included a species register to inform local and national conservation stakeholders.	A
4.6		Expand meadowing and wildlife habitat to cover an additional five acres on campus by 2025.	10.22	An additional acre of planting was established in 2022 aligned with the 2025 target. This included wildflowers but also an array of native bulbs.	A

Travel

No.	Objective	KPI	Date	Evidence / Commentary	RAG
5.1	To provide viable and accessible sustainable travel options for staff, Fellows and students for travel to work, travel at work and travel for work which results in a reduction of carbon emissions.	Electrification of operations vehicle and plant fleet by 2025 and installation of EV charging points serving a third of all parking spaces by 2024 to encourage the use of more sustainable alternatives to petrol and diesel vehicles.	10.22	Additional EV chargers have been installed over summer at several graduate houses working toward the 2024 target. We are trialing electric horticultural vehicle options to complete electrification of the vehicle fleet.	A
5.2		Implementation of improved options for staff and students to travel between College and University sites via sustainable transport notably electric vehicles and bicycles in 2023.	10.22	We are presently working with the Local Authority on how public transport could better support our community.	A
5.3		Implementation and supply of technology to support remote working and attendance at events and meetings in 2022/23. Notably including installation of improved video-conferencing and hybrid meeting facilities and the provision of support on how to use them.	10.22	Our video conferencing and hybrid meeting technology has been significantly improved in 2022 with room bespoke solutions across several key College meeting rooms.	G
5.4		Introduction of a Sustainable Travel Policy incorporating our agile working policy and environmental impact travel assessment which encourages and supports our community to make greener traveling decisions both on land and by air.	10.22	Travel and traffic surveys to inform the sustainable travel policy are planned in early 2023.	A

Procurement

No.	Objective	KPI	Date	Evidence / Commentary	RAG
6.1	To provide viable and accessible sustainable travel options for staff, Fellows and students for travel to work, travel at work and travel for work which results in a reduction of carbon emissions.	Extend compliance with Churchill College Procurement Guidelines to all purchasing teams and provide appropriate training and guidance to purchasers/procurers to ultimately reach ISO 20400 standards for Sustainable Procurement.	10.22	Guidelines are now employed across the operational and estates teams with work ongoing to expand this to the remaining purchasing teams.	A
6.2		Ensure procurement of goods consistently includes ESG factors such as social sustainability, carbon and locality within scoring criteria within 2022/23. This may include a focus on key supplier accreditation such as Fairtrade.	10.22	Procurement of goods consistently includes ESG factors such as social sustainability, carbon and locality within scoring criteria. This is the leading criteria in the procurement of food and similar supplies helping to inform the carbon reporting for menus.	G
6.3		Develop and implement a supplier engagement programme to promote continual improvements by both suppliers and College purchasers. Programme to focus on four key long-term suppliers in 2022/23.	10.22	In 2022 we have focused on catering suppliers and have established several commercial partnerships. This includes a local brewer and a farm supplying almost all of all vegetables used.	G

Appendix B – Case Studies

CASE STUDY 1: 72 Storeys' Way Project Refurbishment

CASE STUDY 2: Solar Power Project

CASE STUDY 3: Volunteer Ecology Project

CASE STUDY 4: Waste and Recycling Project

CASE STUDY 1: 72 Storeys' Way Project Refurbishment

72 Storey's Way is a large early 20th century arts and crafts style building to the north side the main site. The building is home to postgraduate residents and is the latest building to be repaired and refurbished in the cyclical capital projects schedule. In addition to these practical requirements the project presented an opportunity to significantly improve the energy performance of the building and, as with all our building projects, to eliminate fossil fuels.

Drawing on the knowledge and the expertise developed from recent similar projects such as the refurbishments at 70 Storey's Way and Whittinghame Lodge the team were eager to go even further at 72. The building was almost entirely uninsulated and the windows a combination of ill-fitting late 20th century single glazed casements and failed UPV-C units. The project included installation of extensive insulation and new sustainably sourced timber framed double glazed windows ultimately exceeding modern regulatory standards despite the building's age. This retrofitting enabled the installation of an air source heat pump system replacing the energy intensive and aged gas fired boilers. The new system eliminates the use of fossil fuels but is also much less energy intensive using less than a fifth of the energy required by the inefficient previous system.

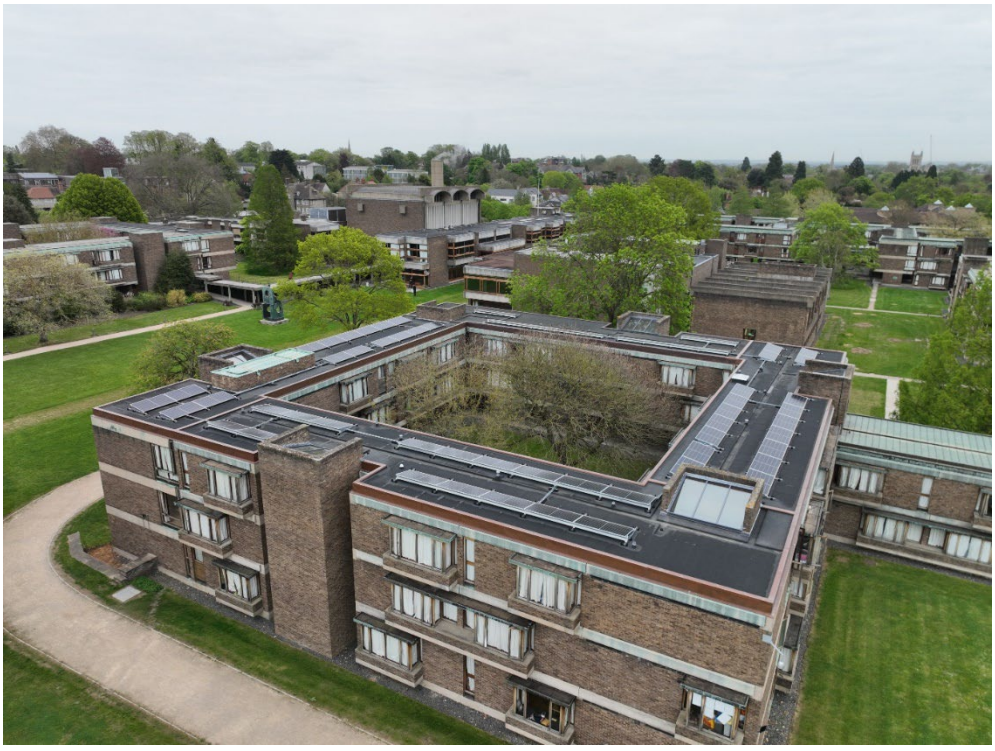
Further efficiencies were achieved with the installation of a heat recovery system. The system is designed to utilise excess heat and redistribute it within the building whilst also supplying fresh air and managing humidity.

Solar power panels have been installed to the viable south facing pitches of the building's roof forecast to generate up to 80% of the power required by the residents.

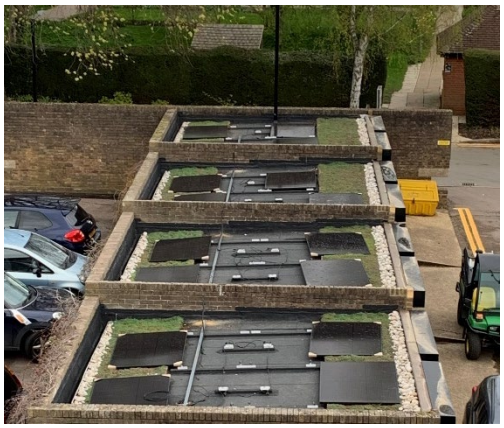
CASE STUDY 2: Solar Power Project

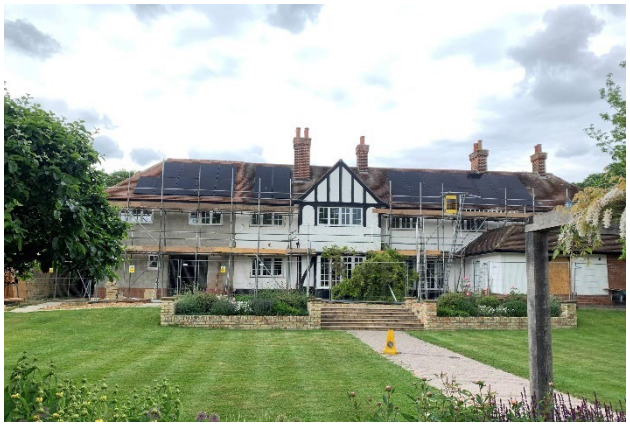
The College estate is uniquely well positioned to benefit from solar power generation. We have 20,000sqm of flat roof space on our main site alone and the majority are suitable for solar power generation. The project is made possible by the work of our skilled in-house teams. In 2020 our electrical team trained in the installation and maintenance of solar panels and their input ensures we deliver high quality, economically viable projects.

The photo below shows an aerial view of a part of our West Court Solar Power Installations. Completed in 2021 the project represented the first phase of a four-stage project to generate significant solar power on all of our buildings. When all phases are complete the project will generate over two thirds of the College's power.



The second phase of the project will be completed in Summer 2022 at our North Court buildings, but other smaller projects are happening all year round to stores, garages and smaller residential buildings. The photos below show some recent in progress work.



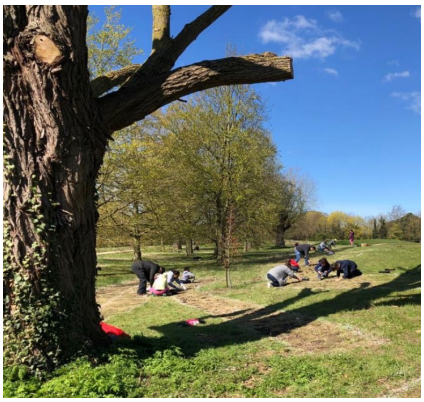


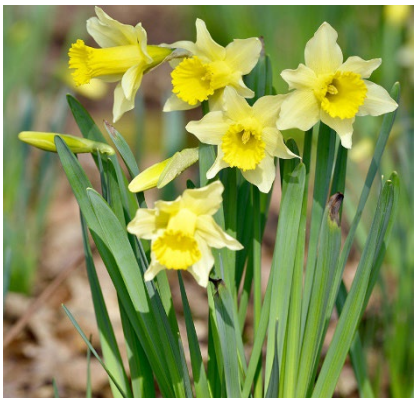
CASE STUDY 3: Volunteer Ecology Project

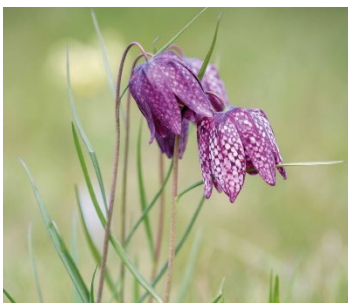
Our main site is more than 50 acres in total and the majority of this space is garden, grounds or sports fields. We have been working to further improve the biodiversity of our site with the introduction of several additional acres of tree planting, native wildflowers and bulbs.

In 2021 alone this rolling project succeeding in planting over 30,000 bulbs and wildflower plants due greatly to the hard work of over 150 volunteers from across the College community. The project is ongoing but we have already seen species of flora and fauna return to the site or appear for the first time. We have joined a wider collegiate ecology survey and have seen significantly greater species diversity on site.

In 2022 the project is moving to the areas adjacent to the football and rugby pitches with planned volunteer days scheduled in the Spring and Autumn.







CASE STUDY 4: Waste and Recycling Project

In a single year the College generates over 100 tonnes of waste which is entirely either recycled or used to produce power. None of our waste enters landfill. The college will continue to encourage all of our community to minimise waste, through careful choice of packaging and trying to ensure that the correct bins are used for the correct materials.

The college is looking at other ways in which to improve our waste protocols and to this end we have adopted the use of compactor machines. The machines compact the waste so that three tons of waste can be collected per machine per collection. Prior to this project there were over 600 waste collections per year. By using compactors waste collections have dropped four-fold. This reduction in vehicle movements significantly reduces heavy vehicle traffic on site but also in the local area reducing air pollution and further reducing carbon emissions from our supply chain.