



Reuben College Environmental Sustainability Strategy

Agreed by Governing Body 10th July 2024

Vision

Reuben College tackles the big questions and challenges of the 21st century and environmental change is one of our core academic themes. As part of the University of Oxford, as well as through our own work on education and research, we are fully committed to address these fundamental issues. In times of accelerating climate change and biodiversity loss we must set ourselves ambitious targets: Reuben College will achieve net zero carbon and biodiversity net gain no later than 2035 and hopefully before.

As a new college, we have only taken occupancy of our renovated historic buildings in September 2023. Our students and fellows contribute world leading research, with traditional dissemination routes reliant on international travel. We organise many educational events and cater for a diverse international student body. The challenges on our path to sustainability are numerous and considerable but we are committed to take them on.

This strategy sets out our path to sustainability, with an ambition to prioritise efforts based on quantitative, transparent, findable and public data of our carbon and biodiversity footprint arising from all college activities. We note that many college members have dual affiliations (college and university). This strategy addresses the college contribution to the overall environmental footprint.

In future, we will set five-year targets, monitor our performance, and share our progress annually as part of the college financial reports. However, as 2024 will be the first full year using the college building and grounds, the focus in this initial strategy is on identifying key areas for action and collecting baseline data so relevant metrics can be agreed and performance targets set. Where meaningful actions can be delivered or targets set without further data, these are included here.

This strategy will be updated in early 2025.

Introduction

The college is focussing initially on seven areas of activity in which environmental sustainability impacts should be monitored and managed

- 1) Energy use and carbon emissions of college estate
- 2) Travel
- 3) Food
- 4) Resource use & investments
- 5) Waste management
- 6) Biodiversity
- 7) Education and Research

For each of these priority areas, we begin with a summary of the key environmental impacts and concerns, followed by relevant activities and assets of the college, the scope of this strategy in relation

to these, actions for 2024 and thoughts in preparation for setting targets for 2025 and beyond, including draft general principles for making decisions and investments. In some cases, the college has already made decisions and is taking action, and these are reported.

The governance of this strategy and environmental sustainability in the college is explained. This is followed by a description of resources and responsibilities in relation to the strategy.

1) Energy use and carbon emissions of college estate

Environmental Impacts

Energy use in buildings, and consequent carbon emissions, are key environmental impacts of college operation. Energy use is determined by a number of factors including: building size (area and volume); energy efficiency of the built fabric; energy efficiency of heating, hot water, catering equipment, lighting, IT and other energy end uses; efficacy of control and feedback systems, particularly for space heating and cooling; management of energy services (e.g. what internal temperatures are set); number of building users; user behaviours; weather.

Carbon emissions depend on energy used and the carbon intensity of the energy sources. Purchasing renewable electricity is a route to reducing carbon emissions, with the proviso that some renewable electricity offers are not seen as 'additional', and their environmental status is questionable. Natural gas is a fossil fuel, and no renewable gas options are available.

Buildings can be sites of renewable energy generation, most usually through roof-mounted solar PV, with solar hot water generation as another option.

To reach the overall target of net zero carbon emissions by 2035, we need to understand the current baseline of college buildings and how this will increase with rising student numbers, agree interim targets based on appropriate metrics, measure and report progress annually, and allocate resources and funding to enable targets to be met.

College buildings

The college's buildings currently comprise:

- Reuben College building, Parks Road
- Student accommodation at Farndon Court
- Student and visiting academic accommodation, Winchester Road

As the college grows its student numbers, the amount of student accommodation will increase, as will intensity of use of the main college building.

Scope

- Operational energy use & carbon emissions in the main college building
- Investments related to building energy performance in the main college building & for refurbishment of newly acquired student accommodation (within budgetary constraints)

Action in 2024

Monitoring energy use in buildings requires appropriate meters, particularly in shared buildings. Meter provision to be discussed with the Building Manager and the University Sustainability team operating a university-wide metering system.

- To the extent possible, energy data will be gathered from the first year of operation, bearing in mind that snagging issues with a newly refurbished building often mean that optimum performance is not achieved in Year 1, and that Year 2 may be a more representative baseline. This will also incorporate the work undertaken by the architect as part of the design process.
- A Building Energy Efficiency Survey will be conducted, identifying inefficient energy use in college estate, with the aim to establish a prioritised list for remediation.

- The college commits to incorporate energy efficiency assessments in the planning process for all development of college estate, with the aim to minimise long-term energy use. Reports will be assessed by the Environmental Sustainability Committee before firm commitments for the development are made.

Preparing for target setting from 2025

Setting targets for buildings to reduce environmental impact of operation while meeting the needs of building users is complex. This will take place in 2025. Targets can include those for:

- Remediation of specific issues causing inefficient energy use in college estate from the prioritised list
- Energy use & carbon emissions for the college, per m2, per student etc., and rate of decrease over time
- Refurbishment standard / building fabric standard for new acquisitions, and ongoing improvement of existing building stock
- Dates from which to no longer use natural gas
- Efficiency of lights, appliances, cooking equipment
- Energy controls & feedback [Links with priority: Education and Research]
- Education, feedback, incentives, involvement in management decisions of building users (staff and students) [Links with priority: Education and Research]
- Thermal comfort standards – or more accurately, internal temperatures & other air quality issues (note the university's 'functional estate' heating standard of 19C in winter 2022/23)
- Purchasing of renewable electricity
- Installation of solar PV / other on-site renewable options

The college will follow best practice to combine metrics, both absolute and relative (e.g. total energy use and energy use per m2, per student, per heating degree day etc), as these serve different purposes and provide better management information in combination.

2) Travel

Environmental Impact

The most important environmental impact of travel arises from its use of fossil fuel and contribution to climate change. Other impacts include material and energy used to manufacture transport systems; impact on local air quality; noise; land take. There are also many adverse impacts on human health.

College travel and transport

The College does not own any vehicles and only three shared disabled parking spaces on site. Bicycle racks are provided at the College and its student housing.

College staff may travel on business within the UK and occasionally internationally

Through its travel grants to students, the college may fund academic-related travel.

College travel is regulated by the University's Travel Policy aiming to reduce flights. Unless exceptions or reasonable adjustments are applicable,

- Rail should be used for all domestic journeys under 7 hours.
- Eurostar should be used for all journeys to Paris and Brussels
- First-class flights are not permitted
- Premium economy and business-class flights require pre-approval, with evidence retained

Scope

- Travel of staff and fellows on college business

- Provision of mobility infrastructure and advice for staff, fellows and students

Action in 2024

Provide information via the college newsletter and/or website about low environmental impact transport options and support including:

- University provision of cycle safety and security equipment, advice and cycle repair services
- Public transport information
- For staff, information about Cyle to Work scheme, offering discounted bikes and e-bikes

Preparing for target setting from 2025

To reduce the impacts of travel and mobility, the general hierarchy to follow is “avoid, shift, improve”.

- **Avoid** the need for motorised travel (e.g. replacing travel with on-line meetings, situating events geographically to reduce collective travel)
- **Shift** to more sustainable modes (e.g. from fossil fuel vehicles to electric vehicles, shared vehicles, public transport or ‘active travel’ modes such as bicycles)
- **Improve** transport modes (e.g. use more efficient vehicles powered by renewable energy)

3) Food

Environmental impacts

Food systems are currently one of the key drivers of environmental change around the world¹. While most of the damage occurs during food production, agriculture is currently mainly driven by the choices consumers make at the consumption end of the system. Therefore, managing food demand has become a key lever for food system change and reducing food’s environmental footprint. Making conscious choices around the food served in Reuben College is one of the key levers for the college to address this important environmental challenge.

College catering

The college’s catering is run by a private company (Baxter Storey). The current offer includes lunches Monday to Friday, dinner on Tuesdays and Thursdays. Details of the catering arrangements are constantly under review, as the college learns more about demand and how to meet it, while reducing food & drink waste and increasing diners’ satisfaction. Lunch is a self-service operation; therefore diners are in control of portion size (but see below). The college also operates a college bar.

Scope

- All food & drink served within the college
- Food and drink served at college sponsored / funded events

Action in 2024.

Key initiatives regarding food have already been taken:

- Prominence of plant-based options in the catering provision
- Advice on expected portion size to reduce generation of food waste, with additional charges for above average portions
- Educational activities on the impact of the food system on environmental change and resources but also on food system adaptation needs
- Benchmark the current use of local suppliers and work with Baxter Storey to increase this.

The main task in 2024 are:

¹ OECD (2021), Making Better Policies for Food Systems, OECD Publishing, Paris, <https://doi.org/10.1787/dfba4de-en>.

- Monitoring use of the catering provision, overseen by the Catering Committee. There will be a strong focus on food waste with action taken if food waste levels rise. For more details on food waste management, see Waste section.
- Establish mandatory annual sustainability reporting by the catering provider, monitored by the Environmental Sustainability Committee.

Preparing for target setting from 2025

- Continued monitoring of catering and the annual catering sustainability report will inform target setting for 2025 and beyond.
- Incentivisation of food options that minimise environmental impact.

4) Resource use & investments

Environmental impact

By making informed purchasing and investment decisions, the college can have a positive impact on the environment.

College resource use and the supply chain

Except for catering, the college's ongoing expenditure on consumables is relatively small and primarily covers IT equipment and office supplies.

College Investments

As a Graduate Society, Reuben's endowments are held within the Oxford Endowment Fund, which is managed by Oxford University Endowment Management (OUem), which publishes an [annual report](#) giving details of its environmental, social and governance (ESG) risks. OUem has set restrictions for direct investment in any fossil fuel exploration and exploration companies. It is likely that the College will continue to hold its endowment within OEF after it becomes independent.

Donations

As a Graduate Society, the College must comply with the [University's regulations governing the receipt of donations](#) as a minimum standard. This states:

... in respect of funding opportunities from companies or individuals linked to the fossil fuel industry, the following considerations will be applied:

- *The proposed use of the funding (either the proposed use is unconnected to fossil fuel extraction or is focused on enabling meaningful accelerations away from carbon usage and speeding the transition to net zero carbon).*
- *The funder's commitment to net zero, as evidenced through credible plans to achieve net zero carbon by 2050 or sooner, consistent with the Oxford Martin principles, involving:*
 - *A commitment to net-zero emissions*
 - *A profitable net-zero business model*
 - *Quantitative medium-term targets.*

Scope

- All office supplies and equipment used within the main college building
- College merchandise
- College invested funds and donations

Action in 2024

- The College's IT Manager aims to maximise the life of IT equipment. At the end of life, the College will follow the [University's a policy for the IT equipment disposal](#).
- IT consumables (e.g. toner) will be recycled where possible.

Preparing for target setting from 2025

- Development of a purchasing policy for office supplies (paper, pens, etc.) which reflects best sustainability practice in the University.
- Review the college policy on donations.

5) Waste management

Environmental impact

On average 18% of the food purchased by the UK hospitality and food service sector is thrown away, 75% of which is avoidable. Managing waste responsibly is a key focus and one of our strategic priorities. The college as part of the wider University has already defined two targets, reducing greenhouse gas emissions:

- 10% reduction in the non-residential waste mass per staff and student FTE by 2025.

40% non-residential recycling rate from the total waste mass by 2025. Based on the 'waste management hierarchy', the college will prioritise waste prevention, waste then re-use, followed by recycling.

College waste management

Waste management services are provided by Select Environmental.

Scope

- All waste generated by college activities, in the college buildings and student accommodation

Action in 2024

- Conduct an audit of our food waste in college, to give us a benchmark before implementing a range of initiatives to reduce our waste.
- Enable and encourage students in Reuben accommodation to maximise recycling and reduce domestic and miscellaneous wastes.
- Eliminate single-use plastics, cutlery and crockery across the college.
- Calculate College recycling rates (from information provided by Select Environmental and develop plans to increase these rates.

Preparing for target setting from 2025

- With the evidence gathered in 2024, a more detailed plan and targets can be developed.

6) Biodiversity

Environmental impact of land management and procurement

There is a global biodiversity crisis, caused by land (and sea) management, and indirectly through procurement of goods and services impacting the natural environment. The university has set Environmental Sustainability goals of biodiversity net gain by 2035 and the college will meet this goal on its own estate, as a minimum.

Two particular issues related to land management are use of pesticides and peat. Pesticides have a harmful impact on biological diversity, with short-term toxic effects on directly-exposed organisms, and long-term effects resulting in changes to habitats and to the food chain. They are also linked to health risks. Degradation of peat and other carbon-rich soils is a significant source of greenhouse gas emissions. Peat-free alternatives are available. The College should promote the University's Environmental Sustainability goals of biodiversity net gain by 2035 to staff and students.

College outdoor space

The college has control of a small amount of outdoor space in front of its main entrance. This has recently been laid to grass, with containers to be planted up. Trickle watering equipment has been installed under the lawn, to minimise water use.

Scope

- College buildings outdoor spaces
- At this point it is difficult to assess the biodiversity impact of college supply chains but the aspiration is to include these in future.

Action in 2024

- Initiate or take part in practical initiatives to encourage biodiversity on site during 2024. This could include, but is not restricted to, tree planting, planting and maintaining wildflower meadows, feeding wild songbirds, provision of artificial shelters or habitats for insects etc., creating flower beds for pollinators, planting native species.
- Conduct an initial biodiversity baseline audit of our outdoor spaces and implement annual audits. There is potential for involving students and staff in this audit process.
- The college purchases peat free compost as standard.
- The college will avoid where possible the use of pesticides and identify an action plan for reducing the amount of pesticides used and/or changed to using more environmentally friendly alternatives.

Preparing for target setting from 2025

- Based on the results of our audit, we will improve and promote biodiversity in our external spaces (by working with Estates and GLAM) and informing staff and students about ways to enhance biodiversity at home.
- The college will run its own annual biodiversity themed event for the wider community. Examples include running a sustainable food event, holding an open day at the allotment, community biodiversity walks, seed bomb making sessions and bulbathons.
- Key supply chains need to be identified; these are likely to include: food; stationery; cleaning products; hygiene; electronics; furniture; college merchandise. When capacity is available, we will conduct an initial biodiversity audit of our supply chains, which will include knowing your supply chain; engaging suppliers; implementing strong purchasing standards such as choosing or switching to more sustainable or local suppliers, and implementing monitoring mechanisms; and being transparent.
- The aim is to avoid off-setting except as last-resort.

7) Education and Research

Environmental impact

Education and research do not have a direct environmental impact separate from the use of materials and resources and generation of waste as they are undertaken (as covered previously). However, they have vital indirect impacts, in the actions, attitudes and aspirations of people and organisations influenced.

College education and research

As part of the wider University, we give our students the opportunity to develop their knowledge, understanding and skills to become the sustainability leaders of the future. The college's fellows and research fellows are encouraged to build environmental education, action and networks across the college by running events for and in association with students.

The overall objectives are to enable students to leave the College with more education about environmental sustainability regardless of their subject of study and with an experience of having been

part of an environmentally aware community; to create and support a network of engaged students and staff, and bottom-up initiatives which emerge from them; to develop an interdisciplinary community of staff with expertise in sustainability education alongside their discipline expertise and provide appropriate institutional support; and to promote (post-)graduate research focused on environmental sustainability.

Scope

- Education of all college members.

Action in 2024

- Include progress on fellows' research on sustainability in Reuben's communication channels, including e.g. the website and newsletters.
- Consistently include environmental dimensions in communication with students, e.g. when giving advice on transportation to and from Oxford and when communicating about living in college accommodation etc.
- Continue facilitating the College's academic events and other enrichment activities about sustainability, including Dining with Dinosaurs on environmental topics.
- Encourage students to attend educational extracurricular activities offered in Oxford and beyond, through various communication channels.
- Environmental Change theme to encourage exchanges between staff and students working on environmental sustainability and to coordinate social events that relate to environmental sustainability, for example by supporting environmental documentary screenings and discussions with the GCR
- Educational activities on the impact of the food system on environmental change and resources but also on food system adaptation needs

Preparing for target setting from 2025

- Conduct a small survey at the beginning of the academic year 2024/25 to find out what students are most interested in learning about sustainability and build on these priorities.

Governance

The implementation of the college sustainability strategy is guided and monitored by the Environmental Sustainability Committee (ESC), with representation from all categories of college members (fellows, staff and students), the college sustainability officer, and chaired by one of the college fellows. The ESC committee reports to the college governing body with a standing agenda item at all college governing body meetings. It should be noted that Reuben College is at this point not independent but instead the equivalent of a department of the University, so that it is already subject to the Environmental Sustainability Strategy of the University of Oxford and its implementation.

Resources and responsibilities

Monitoring of our environmental footprint across all priority areas as well as the implementation of our actions toward our path to net zero carbon and net biodiversity gain is a significant undertaking that requires buy-in and support from all members of the college (fellows, staff and students). It is fully endorsed by the governing body.

To ensure the efficient implementation of this Environmental Sustainability Strategy, the college has appointed a part time Sustainability Officer as part of a wider University initiative.

Environmental sustainability is a college priority and embedded in all aspects of college operations. The chair of the Environmental Sustainability Committee serves on the relevant catering and estates and infrastructure committees.

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Beyond this, the college will include a budget for offsetting of residual emissions and impacts after maximisation of all reductions by 2035.

The college is committed to providing a public, annual report on all aspects of environmental performance.

Authorship

The document was co-authored by members of the Environmental Sustainability Committee: Philip Stier (Chair), Tina Fawcett, Monika Zurek, Hattie Warburton, Janet Stott, Stephen Purbrick, Charlotte Lenhard (student representative 2022-23).