

Christ's College, Cambridge

Environmental Sustainability Strategy

Our Vision

As a leading academic institution for over 500 years, with core values of education and research, our vision is that our environmental impact should not negatively harm future generations.

Environmental sustainability is a symbiotic and responsible co-existence with the natural environment. We strive to live in such a way as to maintain the environment without adverse impact or harm.

Now, more than ever, we recognise our responsibility to conserve and protect natural resources, encourage diverse global ecosystems, enhance biodiversity, and support the health and wellbeing of our communities by making choices that maintain, if not improve, the environment for future generations. To this aim, several Fellows are engaged in research related to climate change and one of our Fellow-Commoners, Prof Charlie Kennel, has endowed a fund that supports an annual seminar series on Climate Change.

The College community has almost 500 undergraduates and postgraduates who live in student accommodation within the grounds of the College or in external hostels within Cambridge, and about 70 Fellows and 130 staff members with varied working patterns.

The College consumes an average of 3,936,548 KWh Gas and 1,615,950 KWh Electric a year (based on 2018/19 data) and serves over 80,000 meals, hosting a wide range of events and functions throughout the year.

Given that activity to improve sustainability must not materially disturb current students' education and research activity, implementing an environmental sustainability strategy in an organisation with many historic buildings is a significant and costly challenge that will take many years to complete.

Science-Based Targets and Journey to Net Zero

We have given early attention to quantifying our environmental carbon impact and establishing our Science-Based Targets (SBTs). However, as described later, many actions have also been undertaken in the past few years.

In early 2020, the College established a baseline audit of emissions using the SBT model – a set of tools that helps organisations determine what they need for sustainable change and to measure their progress. The SBT model reflects how global emissions need to be reduced to achieve goals set out in the 2015 Paris Agreement.

SBTs relate to Scope 1, 2 and 3 emissions. For the College, Scope 1 targets involve removing gas; Scope 2 involves increasing renewable electricity supplies; and Scope 3 involves the wider impact of college, such as travel.

Our primary efforts have concentrated on Scope 1 and 2 emissions to reduce our carbon footprint. More work is needed to understand how the College can reduce Scope 3 emissions.

The plan for achieving Net Zero carbon emissions will evolve over time, working with other Colleges and the University, sharing best practice as knowledge and understanding grows.

The baseline audit, using 2018 data, estimated that the College is creating 920 CO₂e tonnes per year, and set the SBT to reduce this by 31% to 632 CO₂e tonnes by 2030.

To achieve this target, the College would have to remove gas from all its hostels (20% of our gas usage) and from the Fellows' Building and C, D, and E Staircases in Second Court (14% of our gas usage) by 2030.

Governance and Reporting

The College has an Estates Strategy and Environmental Policy Committee (ESEPC), attended by Senior Members of the College and with representation from staff and students. This Committee considers the detailed environmental and estates plans for the College and assesses their effectiveness and impact, including reviewing usage data for both gas and electricity. The Committee reports regularly to the College's Governing Body and makes recommendations as necessary. Progress is also reported in the College's Annual Report and Accounts. Information is also available on our website, [Sustainability | Christs College Cambridge](#)

The College's Investments Committee reviews on a regular basis the integration of environmental, social and governance (ESG) considerations into the investment process of each appointed investment manager.

The May Ball Committee have also committed to considering sustainability issues for their Event.

Our core strategy for achieving our vision is based on four strands:

1. Carbon, Energy and Water Management
2. Biodiversity and Ecosystem Management
3. Social Behaviour and Sustainable Procurement
4. Responsible Investment

This Strategy was approved by Governing Body on 29 November 2022 and will be reviewed regularly.

Strand 1: Carbon, Energy and Water Management

The College is required to reduce its overall carbon footprint to Net Zero by 2050 and would like to match the University's ambition of doing so by 2038. However, achieving this is hugely challenging and dependent on significant funding not yet sourced. With this in mind, the College is focused on its SBT of reducing its carbon footprint by **30% by 2030**.

The medium-term planning framework agreed by the College Council envisages applying £5m/year of capital expenditure in each of the financial years 2022/23, 2023/24, 2024/25. Capital investment and

funding beyond this has not yet been agreed or identified. It is likely to require a combination of government funding, internal College resources, donations, and long-term loans.

The College is also committed to reviewing all its building projects to comply with and exceed environmental building regulations, as demonstrated by the replacement of gas boilers with cleaner Air Source Heat Pump (ASHP) technology in Yusuf Hamied Court (currently under construction).

The College is also focused on reducing the usage and wastage of water within college buildings to preserve these precious resources.

What have we done so far?

The College has completed a boiler efficiency programme that replaces the existing gas boilers on the Domus site with more efficient condenser boilers, reducing gas consumption by an average over 600,000kwh per year.

In 2018, the College removed gas as the primary source of heating in Hamied Villa, replacing it with an ASHP and significantly improving the thermal properties of the building. This hostel was the pilot for 'degasifying' other College hostels in future years.

As previously mentioned, Yusuf Hamied Court will also be heated by ASHPs, and the thermal properties are 10x more than those specified by building regulations. The new commercial retail space within the building on King Street will not be provided with any gas connections either, with tenants required to use electricity for all their energy.

The College procures its electricity from a green tariff provider, and a rolling plan to upgrade lighting to low energy LED bulbs - and install motion sensor lighting wherever practical - has also been undertaken.

The College has promoted the benefits of washing laundry at 30 degrees and the benefits of efficient use of heating to students. Aerated showerheads within our accommodation save water, water coolers have timer switches to reduce unnecessary costs at night, and all College bathrooms are fitted with water-saving devices.

With the support of the Students Union (JCR) and Graduate Society (MCR), all students are inducted on relevant environmental issues within the College, led by active JCR & MCR Green Officers who front the Colleges Green Engagement initiatives each year.

Rainwater is captured from the roofs of the greenhouses in the Fellows' Garden and used to water plants growing in the greenhouses.

The College has installed Electric vehicle charging points during the summer of 2022 and has already replaced one of the College-owned vehicles with an electric vehicle.

What are our next steps?

The College is now commencing a rolling programme of hostel refurbishments, starting with Hamied House and two hostels on Jesus Lane, removing gas and improving the thermal efficiencies of the buildings. The programme will continue in line with our SBT, providing sufficient funding can be secured.

The College also aims to install Solar Panels onto the roof of the Yusuf Hamied Court and the tops of the New Court Building over a four-year period, starting this year with Yusuf Hamied Court.

The remaining College-owned vehicles will be upgraded to hybrid or electric as they reach the end of life (by 2025). Investigations into Ground Source Heat Pumps (GSHP) utilising the College grounds are also being undertaken. The energy requirements of selected buildings will be assessed during 2022/23 to understand fully what thermal improvements are needed.

The current First Court building refurbishment project - whilst not removing gas as the heating source for now - includes additional insulation and more extensive pipework to accommodate future installation of GSHP technology when the Christ's Research & Study Hub (CRASH) project is undertaken. The recent enabling works, which removed the heating pipe from behind the parapet wall, were installed into the ground of First Court in a specific way to avoid future borehole locations.

The Gardening team will review planting schemes and reduce the amount of water needed to keep the beautiful gardens so colourful. We will then investigate ways to harvest more rainfall from the buildings within the Domus site and investigate more effective sprinkler systems that water the grounds during the night.

Strand 2: Biodiversity and Ecosystem Management

The College is committed to preventing/reducing actions that harm biodiversity and ecosystems. Inspired by the Green Impact Award scheme, the College has made significant steps.

What we have done so far

The College gardeners do not cut hedges during the nesting season from March to August, have committed to using standard peat-free compost materials, and chip and mulch excess wood cuttings, rather than send them to landfill.

The College does not use pesticides or fungicides in its operations.

In recent years, the College has successfully grown vegetables within the grounds, which were given away free to College members.

The Housekeeping team has reviewed the chemical products it uses to keep the College clean and now only uses products that do not cause harm to the ecosystem.

What are our next steps?

More work is needed to develop a biodiversity baseline audit and formulate a biodiversity action plan for the College. The University has undertaken its own [Biodiversity Baseline](#) and produced a Biodiversity [Action Plan](#). The College will learn from the University's experience.

Catering will conduct a chemical review, taking the additional learnings from the Housekeeping department's review.

Strand 3: Social Behaviour and Sustainable Procurement

Christ's College is committed to encouraging the community to live and work sustainably; behavioural change is a vital aspect of any successful sustainability strategy. The College is actively engaged with the community to find solutions to reduce, re-use and recycle resources.

The College is committed to participating in the University's Environmental Accreditation Scheme. In 2018, and again in 2022, the College achieved a Green Impact Gold award for its commitments and actions on sustainability. We intend pursuing a Platinum award in future years.

What we have done so far

The College kitchens ensure that MCS certified suppliers supply our fish and that all chicken and eggs are sourced from non-caged systems. Our Chefs look to source items locally and from within the UK wherever possible. Regular kitchen maintenance ensures the filters are cleaned regularly to prevent the build-up of grease and results in lower running costs.

Front of house, we offer jugged water to events rather than single use bottled water, and the College uses reusable containers for takeaway food.

The College provides recycling bins in all rooms and communal areas and recycles paper, cards, cans, batteries, and plastics through the City Council. Small food waste bins are provided in all gyp rooms which is deposited into the kitchen specific bins for food waste collection.

The College participates in the Government's "Cycle to Work" Scheme and has recently increased bicycle storage facilities in the College to encourage usage.

What are our next steps?

The College will undertake a more in-depth procurement review to ensure that all suppliers are committed to using sustainable and ethical products. The College will look for other ways to help support and encourage sustainable habits by all its members.

The College will continue to highlight the Waste Hierarchy to its members and look for ways to prevent waste from materialising in the first place.

Within Catering, we will look to improve the promotion of local products being served and promote greener, seasonal, healthy, vegan, and vegetarian items. Further work will be undertaken with the

purchasing consortium to ensure that most of the meat used by the College is Red Tractor certified. More significant promotion of reusable mugs within the College Catering outlets will be made. The Catering team will look to reduce food waste further and investigate ways of limiting over production in the first place.

The College will look to become a Fairtrade College, committed to supporting and using Fairtrade in as many places as possible.

The College will continue to encourage members to switch off electrical equipment when not in use, and will be further increasing bicycle storage

The College will continue to encourage the use of bicycles over motorised vehicles and will set up a small self-service repair station for cyclists to use.

Strand 4: Responsible Investment

The College wishes to act as a responsible investor so that its endowment is invested in a way that reflects its purpose and values, mitigates the long-term risks that it faces, and reduces any significant reputational risks that may result from its investments.

The Council has adopted (October 2020) the following statement:

“The College Council believes that decarbonisation of the economy represents a social imperative (in the face of global warming caused by greenhouse gases). It has therefore agreed:

- The College will not hold direct investments in the shares or bonds of fossil fuel producers and their suppliers (defined in each case as companies deriving 10% or more of their revenues from fossil fuel production). It does not currently hold any such investments.
- The College will continue to seek opportunities in sustainable businesses, including renewable energy. It already has significant investments of this type.
- The College expects to have no material direct or indirect exposure to investments in fossil fuel producers and suppliers by 2030.
- The College has the ambition to achieve net zero greenhouse gas emissions from its investment portfolio by 2038. For the directly held property investment portfolio, a study is being commissioned on the existing carbon footprint to inform a roadmap to net zero – this may be later than 2038.
- The College’s work to reduce the carbon footprint of its own operations will also remain a high priority.”

This policy is incorporated into the College’s Statement of Investment Principles, approved by Council in January 2022.

What we have done so far

ESG considerations have been incorporated into decision-making on various investment/divestment opportunities during 2021/22, including:

- An additional investment of £15m with Cambridge University Endowment Fund (CUEF), with whom we share the same net zero target ambition for investments
- Investment of £13m in Amundi ESG Global Low Carbon Fund
- Investment of £2.5m in Partners Capital ESG Co-Investment Equities Fund
- Commitment of \$750k to Partners Capital 15 Degrees Fund, which makes private equity investments primarily in the decarbonisation theme
- Transitioning an investment in Vanguard S&P 500 Index Fund to the Vanguard ESG US Stock Fund
- Disinvestment of £3m from a Fund which had poor carbon credentials

What are our next steps?

A study is being commissioned on the existing carbon footprint of the directly held property investment portfolio to inform a roadmap to Net Zero – this will inform the setting of a realistic date for the ambition to achieve Net Zero for this element of the portfolio – which may be later than 2038.

We are encouraging our farm tenants to take advantage of opportunities for improving environmental sustainability and habitat enhancement and are in discussions with a Countryside Trust on the disposal of some land to support nature recovery plans.

The Investments Committee will be stepping up its engagement with our managers on reporting progress on Net Zero as a key element of their ESG reporting.