

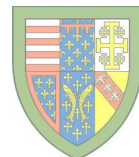


Queens' College - Environmental Plan

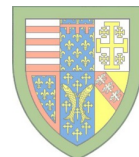
This environmental plan outlines College activities, buildings and estates projects, operations, and change initiatives which will help promote environmental sustainability, with a view to conserve and enhance natural resources and to prevent environmental pollution.

The plan aims to highlight progress being made against our Environmental Policy aspirations, for continual improvement in our environmental performance.

1. Reduce energy consumption, especially energy derived from fossil fuels, in all College property:
 - a. Support renewable and carbon-neutral electricity options on any energy-purchasing consortium, with the aim of supplying all College properties with electricity that can be attributed to renewable and carbon-neutral sources.
 - b. Appreciate that it is preferable to purchase electricity from a company that invests in new sources of renewable and carbon-neutral electricity.
 - c. Look in to future initiatives for on-site micro-generation of renewable electricity on College or investment properties.
 - i. We currently have three wind-turbines located on an investment property.
 - ii. Where we have a future building project or refurbishment planned, we will investigate options for micro-generation.
 - d. Give preference to the most energy-efficient and environmentally-sound appliances available. As a standard we use energy-saving light bulbs and are converting to LED technologies.
 - i. We have a rolling programme of lighting replacement across the whole College.
 - ii. In common spaces where suitable, Passive Infrared Sensor (PIR) or microwave sensors have been installed to automatically control the switching of lighting.
 - e. Provide energy-efficient heating systems, with adjustable controls for individual heating appliances wherever possible, and ensure that comprehensible instructions are available to staff and students on the use of heating controls.
 - i. The College operates a Building Management System (BMS) which monitors and controls all the heating across site. This system is continually being extended to enhance control.
 - ii. The Maintenance Department is installing on a rolling basis secondary glazing to all accommodation buildings, including sourcing suitable solutions for Listed and Conservation buildings.
 - f. Encourage staff, students and conference guests to save energy through visible reminders, incentives and information to increase awareness. This particularly concerns turning off electrical appliances when not in use in both communal and residential rooms.
 - i. At the end of residency, students are encouraged to leave heating on low or off. The Housekeeping staff monitor this during deep cleans after students have left and during conference seasons.
 - ii. Main heating plant rooms are controlled by the BMS and are switched off centrally by the Maintenance Department during the summer months.



- g. Monitor and understand College energy consumption and set appropriate and measurable targets for a reduction in certain areas of consumption and/or in the overall consumption of energy.
 - i. Electrical meters are being converted to automatic readers, linked to our BMS.
 - ii. The College currently monitors all half-hourly meter readings directly through the Utility Supplier, using System Link. The plan is to expand this system to cover more meters and link it to the BMS meters.
- 2. Maximise the proportion of waste that is recycled and minimise the amount of non-recyclable refuse:
 - a. Reduce the absolute amount of waste produced from College kitchens, bar, staff offices and student accommodation.
 - i. Food waste is monitored and recorded by the main kitchen.
 - ii. Modernising the kitchen cooking equipment has meant batches of food can be prepared in smaller quantities, quicker. This means the kitchen can react to demand on short notice, reducing waste.
 - iii. Staff are being equipped with suitable electronic devices to reduce the need to print.
 - iv. Where printers are provided, they are automatically set to double-sided.
 - v. Bins are labelled clearly to indicate waste streams.
 - vi. Recycling points are provided in all student accommodation, including separation of food waste.
 - b. Make full use of all recycling facilities provided by Cambridge City Council and private suppliers, including glass, cans, white, coloured and brown paper, plastic bottles, batteries, print cartridges, cardboard and furniture.
 - i. We monitor our waste providers to ensure good quality recycling.
 - ii. Student and main kitchen food waste is separated from mixed waste.
 - iii. We encourage the reuse of furniture by internally recycling and monitoring the location of assets and their replacement.
 - c. Compost, or cause to be composted, organic waste and green waste produced in or collected from the estate and gardens.
 - i. The Gardeners maintain their own compost heaps.
 - ii. Coffee grounds from the café and kitchens are sent to the College compost heaps.
 - iii. Natural wood piles are left in the Grove to promote wildlife.
 - d. Recycle or safely dispose of white goods, computers and electrical appliances.
 - i. All electrical items are disposed of in line with WEEE regulations.
 - ii. We aim to purchase only low energy whitegoods and electrical appliances, and where possible, replace older inefficient items on a rolling basis.
 - e. Always purchase recycled resources where these are both suitable and available.
 - f. Provide sufficient, accessible and well-publicised collection points for recyclable waste, with responsibility for recycling clearly allocated.
 - i. All student accommodation is provided with recycling points. Waste is collected at these points by the Housekeeping staff who then centrally sort the waste streams.
 - g. Make specific arrangements for events, such the May Ball/Formal Halls and commercial activities, where significant recyclable waste is likely to be produced, in order to both minimise the waste produced and maximise what is recycled/reused.



- i. The May Ball committee has a dedicated Environmental Officer, supported by the College operational staff.
 - ii. Reusable cups and glasses are used for drinks.
 - h. Promote reuse of items and waste recycling among staff, students and conference guests through training, posters and incentives.
 - i. Cambridge City Council run recycling talks for students, we aim to host talks at the start of the academic year.
 - ii. Posters are placed on accommodation noticeboards in Gyp rooms.
3. Ensure that improvements, purchases and developments are environmentally sound. Queens' College therefore commits to:
 - a. Seek and act upon professional advice in order to minimise the adverse environmental impact of any new developments and exceed government regulatory requirements. This includes; efficient heating and water systems, appropriate space for recycling and the use of recycled and/or sustainable building materials where possible.
 - i. At the initial brief for any major building project, sustainability and environmentally friendly building techniques will be considered.
 - ii. On new builds or refurbishments we will consider options for onsite micro-generation and grey water recycling.
 - b. Purchase efficient and environmentally-sound appliances in order to fulfil the commitments in section 1, and consider replacing old stock with 'greener', more efficient alternatives.
 - c. Purchase food that has been produced and delivered with minimal impact on the environment, this includes buying locally produced, organic and free-range food wherever possible.
 - i. The College is increasing the proportion of plant based meals.
4. Minimise the use of unsustainable transport by its staff and students:
 - a. Make available information about bicycle and pedestrian routes, public transport services and car share schemes to staff and students.
 - i. The College has installed a cycle path from the Sport Ground to a local safe cycle route, to allow members of the College to cycle or walk safely to and from the ground and College, avoiding a major main road. This cycle path could also be used to reduce traffic to the main site, as a Queens' park and ride.
 - ii. The College is seeking to double onsite cycle parking, with dedicated cycle entrance to reduce conflicting traffic through the Fisher Gate.
 - b. Reduce the proportion of travel on College business carried out in private transport and eliminate unnecessary and inefficient use of College vehicles.
 - i. All College vehicles will be replaced with electric vehicle by 2022.
5. Minimise consumption of water:
 - a. Repair sources of water leakage, such as dripping taps and showers, as quickly as possible.
 - i. The College has signed up to an intercollegiate contract where all water systems will be surveyed and mapped.
 - ii. The College plans to install meters on all incoming water mains, including fire hydrants.
 - b. Install appliances which reduce water consumption.



- i. The Maintenance Department is in the process of installing water restrictors on all accommodation showers.
 - c. Encourage a decrease in water usage among staff, students and conference guests.
 - i. All public washrooms have automatic close taps installed.
 - d. Purchase the most efficient washing machines and dishwashers available which have an economy setting as default.
6. Preserve and promote the characteristic biodiversity of the College for present and future students, visitors and staff. Queens' College therefore commits to:
 - a. The continued development of a Garden Strategy.
 - b. Promoting Garden interests groups, events, public awareness campaigns to champion our plant life and green spaces.
 - c. Minimise the use of fertilisers and pesticides in College grounds, opting for the use of compost produced on site wherever possible.
 - d. Ensure that all cleaning products used by College staff have a minimal detrimental impact on the environment, i.e. are biodegradable and non-toxic, even where this exceeds the Control of Substances Hazardous to Health (COSHH) regulations.
7. Ensure that the Environmental Policy is enacted, enforced and reviewed. Queens' College therefore commits to:
 - a. Maintain a proactive College Environmental Committee that will hold responsibility for the enactment, enforcement and review of the Environmental Policy.
 - b. The Environmental Committee will be the source of advice and guidance to staff and students on how to implement this Policy.
 - c. The Environmental Committee will consist of appropriate representatives of the relevant College departments and authorities, such as students, Fellows, catering, gardening, maintenance and housekeeping.
 - d. Ensure that on the Environmental Committee there will be the Green Officer representing the JCR and MCR.
 - e. The Environmental Committee will meet at least once a term and report on its progress annually to the Bursarial Committee.
 - f. Ensure that the Environmental Committee will review the Environmental Policy on an annual basis, and will monitor progress and set measurable targets wherever possible.
 - g. Require that members of the College recognise their responsibility to ensure that the commitments in the Environmental Policy are properly put into practice.