

THE ENVIRONMENT

Green Policy

The College will comply fully with environmental legislation and relevant officially approved codes of practice, in order to:

- promote sound environmental management policies and practices in all areas of its activities
- minimise the consumption of carbon-rich energy and of water
- minimise waste and pollution and operate effective waste management and recycling procedures
- increase awareness of environmental responsibilities among Fellows, students, staff, and guests
- encourage modes of transport which minimise the environmental impact

Management Policy

The College aims to be at the forefront in environmental planning and implementation among Cambridge Colleges. It will achieve this by:

- researching techniques to achieve energy and waste reduction
- implementing stringent intra-College policies, with pre-determined targets for energy and waste reduction over time
- applying environmentally sustainable purchasing policies, including total supply chain and whole-life-costing techniques
- communicating targets, monitoring achievement, and feeding back results to participants

Scope

The Environmental Policy covers the following areas:

- reducing the carbon footprint by consuming less energy and converting to more environmentally-friendly sources of energy where practicable
- promoting recycling, aided by minimising and responsibly disposing of non-recyclable waste (eg under the WEEE regulations)
- reducing the *per capita* consumption of water
- promoting a Green Travel policy for Fellows, staff, students, and guests
- monitoring consumption of energy and water, investigating anomalies, and feeding information back to consumers
- using environmentally-sound building and refurbishment methods

Reducing Consumption

The College aims to meet or exceed all national and sector targets for carbon reduction. These targets include those under the Carbon Reduction Commitment (CRC), the Higher Education Funding Council for England (HEFCE), and those defined by the Cambridge Colleges.

Current targets include:

- requalification of the Carbon Trust Standard; Downing is the only Oxbridge College to have achieved certification, which it held from 2009 to 2013. We are currently cited as 'verified' by the Carbon Trust.
- The "13/13" Commitment. The College will aim to use 13% less energy in 2013, compared with that used in 2010
- reducing *per capita* water consumption by 10% by 2012 (baseline 2009)
- reducing carbon consumption by between 34% and 50% by 2020 (baseline 2005)
- reducing carbon consumption between 80% and 100% by 2050 (baseline 2005)

Recycling and Waste Management

The College undertakes to reduce the absolute quantity of waste generated and, specifically, the volume sent to landfill, year-on-year.

This reduction will be achieved by:

- purchasing items with reduced packaging
- reducing waste arising from food preparation by means of better stock control and portion management
- involving staff and students in correctly segregating waste streams to maximise recycling
- working with the City Council and other waste disposal agencies to recycle more effectively
- creating new recycling channels where possible

Greater Environmental Awareness

The College will actively promote environmental awareness among Fellows, students, staff, and conference guests.

Increased awareness will be achieved by:

- actively publicising national and local environmental initiatives
- managing College initiatives through the Health, Safety & Domus Committee and the Buildings and Environment Committee
- involving JCR and MCR Green Officers in all initiatives
- including environmentally-based incentives in staff performance targets and in student rents

- monitoring and publicising energy-saving and environmental targets and performance, including informing conference guests
- improving conformance with the qualification criteria for Green Tourism

Green Transport Policy

The College encourages responsible travel arrangements:

- generally, students may not bring motor vehicles to Cambridge
- Fellows, students, and staff are encouraged to walk or bicycle to work more frequently
- by publicising information on routes, conference and non-conference guests will be encouraged to come to the College by public transport
- work patterns may be adjusted where possible to facilitate use of public transport: the College will provide incentives to staff to use public transport if economically justifiable

Actions and Targets

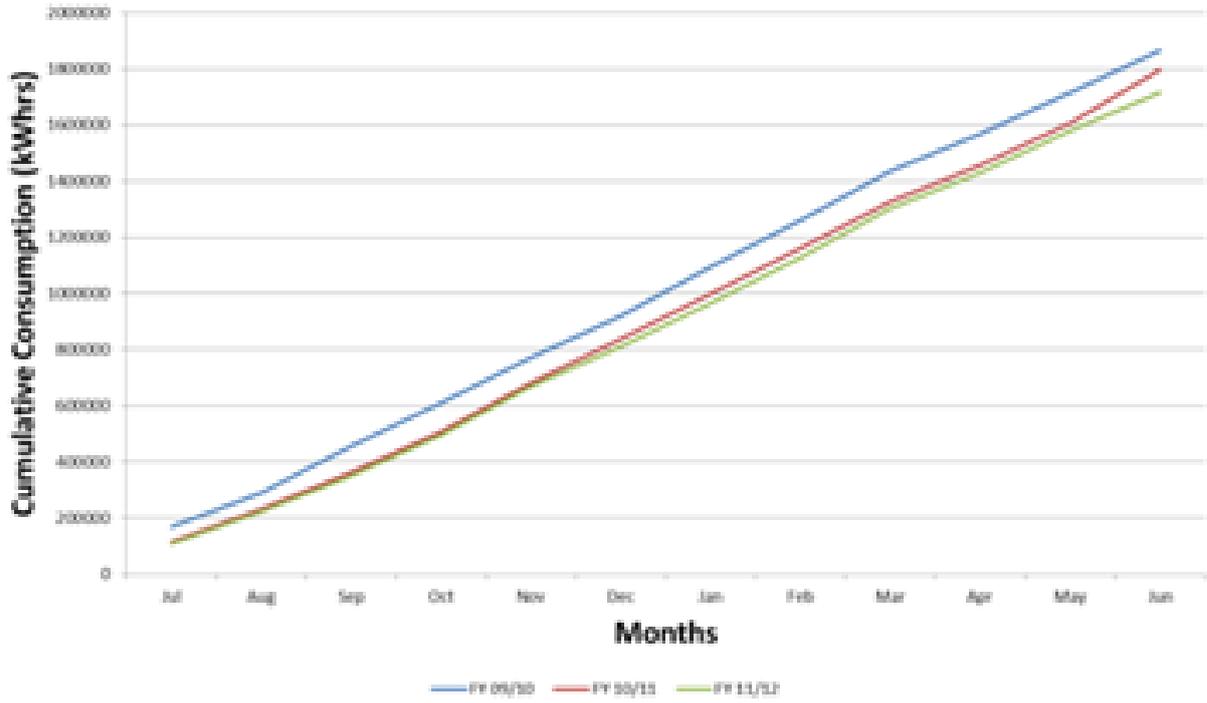
The College will:

- aim to reduce gross energy consumption by 13% in 2013, compared with a 2010 baseline
- install additional voluntary metering and provide monthly data to residents on their energy consumption
- regain Carbon Trust Standard Certification
- reduce volumes of waste by 10% in 2013 and increase the proportion recycled by a further 10% against the 2009 baseline
- continue to assess buildings for energy efficiency and undertake a programme of remedial action to improve their performance (insulation etc)
- achieve 20% renewable content in electricity procurement by 2015
- support the efforts of Green Officers by providing past annual and current monthly energy consumption data. A continual display of on-domus energy consumption is displayed on a screen inside the Porters' Lodge

PROGRESS ON GREEN INITIATIVES

- 19 February 2008, Downing was the first College to sign the Cambridge Climate Change Charter and has remained in the forefront of environmental improvement
- 1 July 2009, the College became the first College, and remains the only College to date, to gain Carbon Trust Accreditation. Accreditation was renewed in 2012, but lost in 2013 but we are seeking recertification for 2014.
- On 1 April 2010, the Climate Change Act 2008 came into force, which imposed a mandatory carbon trading scheme. Downing was a leader in defining the processes for the Cambridge Colleges to participate jointly
- 2010, Quentin Blake (1953-56: English), an Honorary Fellow and Children's Laureate, donated the drawing of a "Green Griffin" to the College. The Green Griffin is the figurehead for the environmental awareness strategy
- In May 2012, the College came top (equal with Jesus) in the Colleges' Environmental League Table.
- In both March 2013 and March 2014, Downing again topped the Colleges' Environmental League Table.
- During 2011-12, while degree days increased by 4% compared with 2010-11, gas consumption increased by 11%. This was largely because of a very cold April and May, which meant that heating was kept running for three weeks longer than normal.
- In 2012-13, the College kept heating running for an additional 6 weeks because of cold weather, which meant that we used more gas than in any of the preceding 3 years. Electricity use, while unacceptably high, was better than that in 2009. However, this cold weather lost us Carbon Trust certification, since degree-day adjustments are not recognized by the Carbon Trust.
- A further six BMS systems were retrofitted to boilers on the Domus
- In 2012, Solar PV was installed on the East Range, contributing 1.76MWh during the first 8 months of operation
- Solar PV was installed on the newly converted Grifphon House, increasing daily generating capacity by 11.5kWp
- A survey was undertaken using advanced infra-red imaging to detect areas of heat loss, and this data, allied with student feedback on cold rooms has helped to prioritise draught-proofing work
- The College obtained English Heritage support for retrofitting windows in room C03 with specialist double glazing
- Room rental agreements have been amended where practicable to reduce the need for parental transport during Christmas and Easter vacations
- The College provides incentives to staff to use the train and other lower carbon modes of transport
- In 2012, the College signed up to the "Student Switch Off" Campaign, designed to emphasise energy and water savings initiatives; Downing had the highest percentage sign-up rate among the Colleges, and came 3rd overall. We are signed up again for the 2013/14 Campaign, and are currently placed highest in the rankings.
- In Oct 2013 we entered the NUS Green Initiative campaign, and presented our workbook – which highlighted a number of additional general environmental initiatives – in March 2014.

Electricity Consumption by FY



Gas Consumption/Degree Days Comparison

