



**Facilities Management
Sustainability Strategy 2009–2014**

What is Sustainability?

The College's Sustainability policy commits the College to the principles of sustainable development. A widely-used definition of sustainable development, also used by the UK government, is: '*development which meets the needs of the present without compromising the ability of future generations to meet their own needs*'.¹

The College's Sustainability Policy interprets this as:

Being committed to meeting the challenges of sustainable development and working towards improving the environment, preserving natural resources and making a positive, sustainable economic and social impact.

Recognising that sustainability is not something that is achieved, rather constantly worked towards, the policy commits the College to '*continuous improvement*' in the field of sustainability.

Why is sustainability important?

- HEFCE's Sustainable Development Policy states that 'Within the next ten years, the higher education sector in this country will be recognised as a major contributor to society's efforts to achieve sustainability – through the skills and knowledge that its graduates learn and put into practice, its research and exchange of knowledge through business, community and public policy engagement, and through its own strategies and operations.'² Incorporating HEFCE's aims into the College's own strategies will maximise opportunities to receive funding.

HEFCE aims to:

- Continue to raise the profile of sustainable development so that it becomes a mainstream part of university and college activities.
 - Integrate sustainable development into its strategic plan and policy-making.
 - Demonstrate to stakeholders that higher education institutions are making genuine efforts to promote sustainable development and to extend good practice.
 - Facilitate a carbon reduction culture to significantly reduce carbon emissions across the sector.
- Growing public awareness of environmental issues is increasing the importance of sustainable development for employers and students. Initiatives such as the Future Leaders Survey³ and People and Planet's Green League⁴ demonstrate that students increasingly want their universities to leave a smaller carbon footprint.
 - Students and staff have been vocal on issues such as energy and recycling through the annual Go Green Forum, the staff Green Team, the Fairtrade Steering Committee, the Sustainability Steering Group and through communications with the Students' Union.

¹ *What is Sustainable Development*, DEFRA website, last updated 1 February 2008, <http://www.defra.gov.uk/sustainable/government/what/index.htm>

² *Sustainable Development in Higher Education*, HEFCE Statement of Policy, February 2009, p.3.

³ For more information see www.forumforthefuture.org under Our Projects/Future Leaders Survey 07/08

⁴ For more information see www.peopleandplanet.org under Campaigns/Go Green/Green League

- In March 2009, a survey of 254 Royal Holloway students found that 82% of respondents believed that climate change was happening and 79% thought tackling climate change was an important reason to reduce energy use.
- Studies on marketing sustainability have shown that a sense of shared responsibility is key to behaviour change in this field. Organisations seeking to influence behaviour need to lead by example.⁵ This suggests that individuals on campus are more likely to contribute towards improving the College's environmental performance if they can see visible improvement on campus.

Targets

This strategy sets out a number of targets which will help reduce the College's environmental impact. These targets will be reviewed annually and if necessary, revised:

Indicator	Baseline	Baseline Year	Target	Deadline
CO ₂ emissions	14,141 tonnes of CO ₂ in	2005/6	21% reduction	2013
Waste reduction	976 tonnes	2007/8	10% reduction per student (2% per year)	2014
Reuse	3 tonnes of items reused	2007/8	5 tonnes (10% increase per year)	2014
Recycling	25% of waste recycled	2009	50 %	2014
Car journeys to campus	5,984 two way journeys to campus	2004	5% reduction	2014
No. of people car sharing to campus	20%	2007	30%	2014
No. of people cycling to campus	4%	2004	6%	2014
No. of people arriving to campus by bus	5%	2004	6%	2014
Increase response to travel surveys	316	2006	> 1000	2014
Water use	298,322m ³	2008/9	10% reduction	2014

⁵ *Selling Sustainability: Seven Lessons from Advertising and Marketing to Sell Low-Carbon Living*, NESTA, June 2008, http://www.nesta.org.uk/assets/Uploads/pdf/Research-Report/selling_sustainability_full_report_NESTA.pdf p. 22.

Fairtrade	N/A	2009	Increase sale of FT products by 5%	2014
Procurement	n/a	2009	Ensure 80% of fish served is MSC certified	2011
			Ensure menus don't include fish from the MCS 'fish to avoid list'	2011
	30%	2009	80% of paper purchased to have recycled content	2011
Construction		2009	Incorporate energy efficiency measure and whole life costing into new capital developments	2011
Refurbishment		2009	Set a minimum environmental standard for refurbishment projects	2011
Community involvement		2010	3 community 'organic gardening' workshops to be held on the campus allotment and 3 school visits.	2012

How we get there

1. Legal compliance

Comply with all environmental legislation on waste, carbon emissions and pollution

2. CO₂ emissions

The College has a target of reducing its carbon emissions by 15% by 2013.

Conversion factors are used to determine the carbon dioxide emissions caused by using energy. To convert energy consumption (kWh) to kilograms of carbon dioxide emitted, the energy use should be multiplied by a conversion factor. A kWh of electricity produces nearly three times as much carbon as a kWh of gas so the College should focus on reducing electricity use to reduce its carbon emissions most effectively.

The College doesn't have a picture of its energy use by building. Not all buildings have their own electricity meter so it is hard to measure consumption. During the autumn term the Sustainability Officer will create energy profiles for each building on campus based on a combination of:

- thermal imaging
- looking at types of space useage within buildings and the energy intensity of each

- identifying areas within buildings of very high energy consumption (e.g science labs)
- identifying buildings with high amounts of out of hours energy consumption.

Reduce carbon emissions through:

- Increasing the energy efficiency of buildings when refurbishments are carried out by installing energy efficient light bulbs, occupancy and daylight sensor lighting controls, windows that can be opened and zoned heating
- Increasing insulation levels during refurbishments and new constructions to help maintain warmth in the winter and cooler temperatures during the summer.
- Designing new buildings to be more energy efficient by maximising solar gain, using natural ventilation and controlled lighting.
- Specifying energy efficient equipment and appliances such as computers, fridges, lab equipment.
- Surveying existing lighting stock and producing a programme for installing more energy efficient lighting.
- Switching heating off between May and September each year.
- Fitting draught excluders to windows in very energy inefficient buildings.
- Controlling the amount of existing air conditioning that is used and having a policy of non-installation in future construction projects.
- Better management of BMS to control heating and cooling.
- Energy awareness campaigns aimed at students and staff.

Waste management

Reducing:

- Encouraging duplex printing.
- Investigating the benefits of paperless paperwork.
- Reducing disposables in catering.
- Promoting reusable water bottles and tap points on campus.
- Investigating the impacts of not selling bottled water on campus.

Reusing:

- End of term reuse projects
- Swap shops

Recycling:

- Recycling for WEEE, batteries, ink and toner cartridges, paper, cardboard, glass, cans, tins and plastic bottles in all academic, catering and residential areas as well as in outdoor areas.
- Introduce skip segregation – metal, wood, WEEE, batteries, spray cans, hardcore.
- Conduct a feasibility study into composting food waste.

Transport

Encourage the use of sustainable modes of transport

- Promote College and local bus services.
- Promote cycle to work scheme.
- Improve facilities for cyclists.
- Increase the number of people car sharing to College.
- Conduct annual traffic counts, traffic flows survey and on-line travel survey.

Water use

Decrease water consumption by:

- Minimising water lost through leaks.
- Reducing the water intensity of bathrooms – waterless urinals, airflow taps, percussion taps and showerheads.
- Encouraging staff and students to use water efficiently.

Biodiversity

Maximise the wildlife benefits of the campus.

- Review progress against the ecological plan.

Fairtrade

Support and promote local and Fairtrade products as appropriate

- Promote the products as well as the benefits to the producers.

Education, learning and outreach

Continue to embed sustainability concepts within appropriate courses

- Support Centre for Research into Sustainability (CRIS).
- Support relevant College courses.

Communicate sustainability initiatives to staff and students and involve them in the College's initiatives

- Produce and implement a sustainability communications strategy.
- Expand and support the Green Team.

Work with the local community to implement education and improvement initiatives

- Identify and support community groups such as volunteering organisations, churches, school and youth centres who wish to promote sustainability and support them.

Purchasing

Choose products, services and companies with sound environmental credentials.

- Introduce a purchasing policy that gives a weighting to sustainability considerations such as local, free range, organic, recycled, energy efficient products.
- Encourage departments to buy energy efficient computers and duplex printers.
- Encourage departments to buy energy efficient equipment.

Facilities Management Sustainability Action Plan 2009-10

Objectives

1. **To measure the College's environmental impact and agree time bound targets for reducing this impact.**
We can't manage what we don't measure. By July 2010 we aim to have baseline information and targets for improvement for all the College's environmental impacts. Specifically, waste, transport, water, procurement, construction and refurbishment, emissions and discharges, biodiversity and community involvement.
2. **To increase the amount of waste recycled to 35% by July 2010.**
By providing a customer-focussed system for recycling waste from offices and halls of residence. By maximising the amount of waste produced during construction and refurbishment projects.
3. **To reduce carbon emissions by 4% from 2008/9 levels by July 2010.**
By focussing on the installation of better lighting controls and better management of heating across the estate.
4. Through completion of the action plan, to raise the College's position in the annual Green League table.

Action plan 2009 - 2010

	Action	Departments involved	Deadline
Objective 1	Sign up to an accredited scheme for achieving an environmental standard, for example Ecocampus.	Sustainability Office	July 2010
	Set targets for the time-bound reduction of the College's environmental impact.	Sustainability Office	July 2010
Objective 2	Provide a customer-focussed system for recycling glass, cans, tins and plastic bottles in all academic, catering and residential and outdoor areas.	Accommodation Services	July 2010
	Introduce segregated skips to facilitate recycling metal, wood, paint cans and hardcore.	Accommodation Services and Maintenance Services	July 2010
	Promote reusable water bottles and tap points on campus	Sustainability Office	July 2010
	Run a recycling communications campaign for staff and students	Sustainability Office	July 2010
	Increase the amount waste diverted from landfill through the reuse project.	Sustainability Office and Accommodation Services	July 2010
	Encourage departments to use recycled paper	Sustainability and Purchasing Offices	July 2010

Objective 3	Provide input into the plans for Runnymede 2 refurbishment to ensure that energy efficiency and other sustainability measures are included.	Sustainability Office, Projects and Accommodation Services	April 2010
	Produce an action plan to help the College meet its obligations under the carbon reduction commitment	Sustainability Office	August 2009
	Produce an action plan for the College to reduce its carbon emissions	Sustainability Office and Maintenance Services	September 2009
	Survey existing lighting stock and produce a programme for installing more energy efficient lighting and better lighting controls.	Maintenance Services	December 2009
	Put forward a proposal to switch off heating between May and September each year.	Maintenance Services and the Sustainability Office	April 2010
	Investigate the business case for fitting draught excludes to windows in very energy inefficient buildings.	Maintenance Services and the Sustainability Office	April 2010
	Run an energy awareness campaign for students and staff	Sustainability Office	December 2009
	Write a guide to energy efficiency labelling for all purchasers	Sustainability Office, Purchasing Office and IT Services	November 2009
	Investigate measures to improve IT efficiency	Sustainability Office and IT Services	Sept 2009
Other actions			
	Support the catering department in their move towards sustainable food	Catering team and Sustainability Office	July 2010
	Improve accessibility of College and local bus service information	Sustainability Office	Sept 2009
	Cycle 50% challenge	Sustainability Office	Nov 2009
	Review progress against the Ecological Management Plan	Sustainability Office	January 2010
	Lead the proposal for a campus community garden	Sustainability Office	August 2009
	Seek approval for the sustainable procurement policy	Purchasing Office	December 2009
Recurrent yearly actions			
	Annual traffic count	Sustainability Office	Nov 2009
	Annual on-line travel survey	Sustainability Office	Nov 2009
	3 meetings per year of the Fairtrade Steering Group	Sustainability Office	July 2010
	3 meetings per year of the Green Team	Sustainability Office	July 2010
	Promote Fairtrade during Fairtrade fortnight	Sustainability Office, Catering Department and College Shop	March 2010