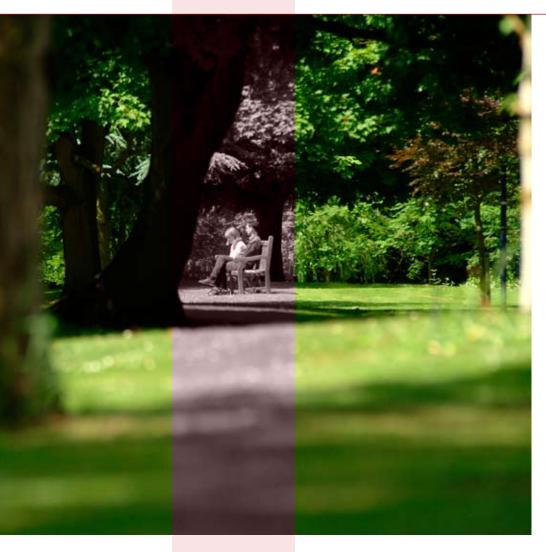
# Environmental Report 2005



Directorate of Estates & Facilities Management



## Environmental Report 2005

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#### 1. 0 Environmental Issues at Brookes – Context of the report

The environmental report is produced annually and aimed at keeping The University community up to date on environmental issues within the university. The report covers the entire university and draws together examples of good environmental practice/behaviour that has been used or adopted over the year. Also included in the report is University environmental data.

#### 2.0 Environmental Impacts of the University

Oxford Brookes has many of the environmental impacts one would associate with a large organisation and more besides. The following list summarises the main areas in which Oxford Brookes has an environmental impact:

Energy consumption Water consumption Transport Waste production (General and hazardous) Biodiversity Purchasing Building and maintenance work Education for Sustainability

#### **3.0 Environmental Policy**

The university introduced an environmental policy in 1997 which is yet to be reviewed. The policy is as follows:

As a signatory of the 1993 Toyne Report on Environmental Responsibility in Higher Education, the University is committed to the principle and practice of environmental protection and sustainable development within the academic milieu, with a focus on continuing improvement. The University will seek to improve its environmental performance in the areas of academic programmes, infrastructure and operations, and communication. The University has drawn up a statement of Environmental Policy objectives relating to these areas.

#### Objectives

#### **Academic Programmes**

 To give all students the opportunity to raise their awareness of environmental issues through incorporation of material on environment and sustainable development into courses.

- To provide specific courses on a wide range of environmental topics and to promote research related to these as part of the University's central mission.
- To provide education, training and encouragement on environmental issues to University employees so that they can pursue their work in an environmentally responsible way.

#### Infrastructure and Operations

- To reduce the volume of waste produced and to recycle as much as possible with University-wide involvement and responsibility.
- To assess the environmental impact of all purchases as far as possible in terms of their raw materials, manufacture, distribution, use and disposal.
- To encourage the use of environmentally-friendly means of transport by staff and students and to examine the operation of University-owned vehicles.
- To further reduce energy consumption and to incorporate long-term strategies for energy efficiency into planning and development.
- · To investigate and reduce water consumption where possible.
- To be aware of and reduce where possible any harmful environmental impacts of University sites, buildings, and future developments or alterations.

#### Communications

- To inform staff and students about local and global environmental issues and to involve them in the University's environmental initiatives.
- To work with the local community and others to develop and pursue environmental initiatives and to provide environmental educational programmes.
- To promote interdisciplinary networks of environmental experts for collaboration on research and teaching projects.

A series of targets will be identified annually. Progress towards their achievement will be reviewed and reported to the Governors and Academic Board.

The University has appointed an Environmental Co-ordinator who will be responsible for this review and report. The Deputy Vice-Chancellor & Registrar is responsible at Board level for environmental matters in the University.

Graham Upton	Jon Lucas
Vice-Chancellor 28/11/97	President OBSU 22/08/05

## 4.0 Environmental Targets 2005

Target	Timescale	Notes	Status
EMS baseline study for Wheatley campus	2005	This would form the beginning of a formal environmental management system. Work on this is dependant on the setting up of the steering group for EMS implementation.	Work commencing Spring 2006
Implementation of environmental initiatives at Marston Road School of Health and Social Care to current standards elsewhere	2004/5	Marston Road now has office paper and magazine recycling provision. As a more extensive recycling facility is being rolled out over the Headington site, Marston Road will also benefit from the extension of this scheme.	Complete
Implementation of a formal Environmental Management System	3-5 years	A steering group has been formed to advise on the direction of the implementation of a formal environmental management system within the University. It is likely that a formal system will be piloted on one campus before being extended over the entire University. See appendix 9.1 for membership of the EMS Steering Group.	In progress
Collection of more quantitative data	Ongoing	This is primarily happening through the data collection process used for Estates Management Statistics, which now require figures such as waste volumes and carbon emissions due to energy consumption. More comprehensive purchasing data has also been made available.	In progress
Revamp of environmental report	2004+	The annual environmental report will undergo year on year improvement	Complete
Improved waste management system	2005/2006	A pilot scheme was put in place in the Buckley Building in August 2005.	Complete
Continued involvement with the Carbon Trust, Carbon Management in the Higher Education Sector	2005/2006	The pilot project that Oxford Brookes took part in is to be rolled out over the sector within an initial 20 universities. The Carbon Trust has produced a DVD for potential participants in the scheme outlining the benefits of being involved. Oxford Brookes is used as a case study in this DVD which features interviews with Rex Knight, Deputy Vice Chancellor and Registrar and Harriet Waters, Environmental Co-ordinator.	Complete

#### 5.0 Environmental Targets 2006

Target	Timescale	Notes	Status
Mobilise the EMS steering Group	2006	First meeting of the EMS steering group set for early February. Terms of reference for the group and an outline programme for implementation of the EMS is to be drawn up.	In progress
EMS baseline study for Wheatley campus	2006	This would form the beginning of a formal environmental management system. Work on this is dependant on the setting up of the steering group for EMS implementation.	Work commencing Spring 2006
Implementation of a formal Environmental Management System	3-5 years	It is recognised that the most efficient way to ensure the fulfilment of the commitments made within the environmental policy is through the implementation of a formal environmental management system. Executive Board have agreed that such a system should be adopted with the direction of a steering group.	In progress
Greening the Curriculum	2006	Aims and methodology to be agreed.	
Improved waste management system	2005/2006	A pilot scheme was put in place in the Buckley Building in August 2005. There are plans to extend the pilot throughout the Gibbs Building in early 2006. The new scheme should be implemented in the majority of the University by the end of the year.	In progress
Update hazardous waste procedures	2006	Look at any opportunity for cost saving on hazardous waste collection through joint working.	In progress

#### 6.0 Progress report

#### 6.1 Energy Consumption

Chart 1 shows that total energy consumption has reduced to a level lower than those measured in both 2003/4 and 2001/2. Energy consumption follows the pattern of degree day data which indicates the effect that weather has on energy use for either warming or cooling.

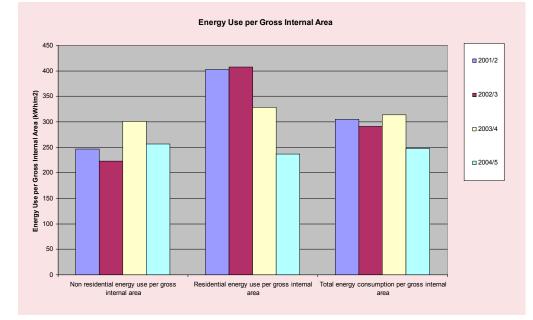
All electricity purchased since October 2005 is from a renewable source, the majority of this is from large scale hydro generation. There could be several

reasons for reduction in energy consumption other than the weather. During 2005 the following changes have been made which will lead to reduced energy consumption:

- Installation of high thermal efficiency boiler at Brookes Centre for Sport
- Radiator valves at the Marston Road and Ferndale sites
- Turning off the monitors of computers in pooled computer rooms

In addition to this improved insulation, energy efficiency lighting and standard specs which include energy efficiency should mean that energy consumption continues on a downwards trend. A programme of meter installation will mean there can be improved management of energy consumption around the University.

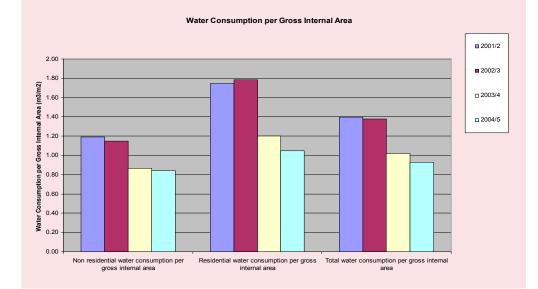
#### Chart 1



#### 6.2 Water consumption

Water consumption has reduced in non residential buildings on a yearly basis from 2001-2005. This is likely to be a result of the rolling maintenance programme on toilet refurbishment and the improved system of reporting leaks through the maintenance help desk. Refurbished toilets have a reduced water capacity compared to older models and there is now less stored water on site. Movement sensitive taps are also being introduced in order to avoid leaks due to dripping taps or taps being left on.

#### Chart 2



#### 6.3 Transport

The Green Commuter Plan Working Group became the Sustainable Travel Plan Working Group during 2005. £77,000 was earmarked for projects linked to sustainable transport during the financial year 2004/2005. See membership of the group in section 9.1 and a copy of the Green Commuter Budget in section 9.2.

The Oxford Institute for Sustainable Development pledged to offset their carbon emissions due to flying this year.

The Green Commuter Plan was entered into the 2004 Green Gown awards, which are awarded in 2005. Oxford Brookes was awarded highly commended in the transport category.

#### 6.4 Waste and Recycling

A wide variety of materials continued to be sent for recycling from Oxford Brookes. The following are the main streams of material sent for recycling from Brookes:

Mobile phones	CDs	Cooking Oil
Computers	Glass	Paper
Cardboard	Cans	Furniture
Toner Cartridges	Rigid plastic	

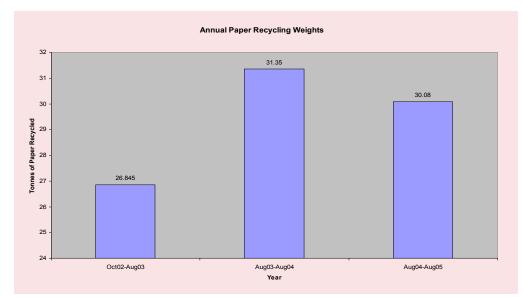
A pilot scheme to increase the amount of waste recycled was introduced during 2005. With funding from the Vice Chancellor's Innovation fund, new bins were bought to be trialled in the Buckley building. The new scheme moves away from individual bins being used by each member of staff and brings in the idea of having waste management stations around the University. This will mean that individuals are more aware of the amount of waste they produce and how much of this waste can be recycled. It is hoped that much more robust data on waste production will be available through this scheme. Fig 1 shows a picture of the new bins, see section 9.3 for a copy of the information sheets placed on the back of the bins.

Fig 1



During the interim period as the new waste management regime is rolled out over the whole university, office white paper recycling will be continued. See Chart 3 for details of the weights of recycled paper obtained from October 2002 – August 2005.

#### Chart 3



#### 6.5 Biodiversity

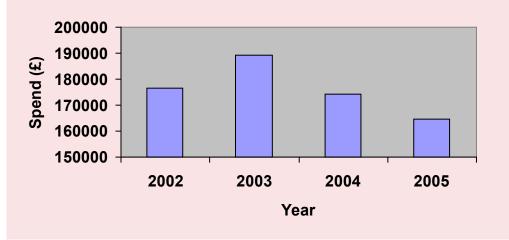
Tree Planting took place at Wheatley, organised by Prof Martin Haigh and Jim Smith, Head Groundsman. Members of Professor Haigh's Gaia module planted trees to make the module the only 'Carbon Neutral' module at Brookes.

#### 6.6 Education for Sustainable Development

The University continues to provide several different courses in the field of sustainable Development and Environmental Management. The majority of these courses are based at Schools of Biological and Molecular Sciences, Built Environment and Social Sciences and Law. The level of sustainability literacy is arguably the greatest indirect environmental impact of the University and there is scope for much more work to be done in this area.

#### 6.7 Purchasing

The end of 2005 saw the switch in purchasing of non recycled paper to buying 80% recycled paper, thus further reducing the University's environmental impact. M–Real EP4 Paper has replaced the University's default brand of paper since it is now better value for money than virgin office white paper. See Chart 4 for the University annual spend on office white paper.



### **Annual Spend on Office White Paper**

#### 6.7a Fairtrade

Fairtrade fortnight 2005 included several fairtrade events for both staff and students – see the annual Fairtrade Report for further details.

#### 6.8 Building and maintenance work

A first draft has been written of a sustainable building policy by Andrew Moore, Deputy Director of Estates and Facilities Management. The policy has been circulated to various stakeholders for comment. The aim is to submit a final version of the policy for approval by the Executive Board in summer 2006.

#### 7.0 External Partnerships

#### 7.1 Sustainable Institutions Group

Facilitated by Oxford Inspires, the Sustainable Institutions Group continues to work on sharing good environmental practice between the two universities in Oxford, Oxford City council and Oxford County Council. Partnership work between the four institutions in late 2005 raised energy efficiency awareness.

At Oxford Brookes, a memo from Ian King, Director of Estates and Facilities Management about energy efficiency was distributed to all staff through attachment to their pay slips.

#### 7.2 EAUC

The Environmental Association of Universities and Colleges seeks to reduce the sector's impact on the environment. Oxford Brookes has a long history of support for the EAUC which it has continued this year. The environmental co-ordinator is a member of the EAUC Board. The EAUC has recently made strategic links with the University of Gloucestershire, where it now has its head office.

#### 7.3 Earthwatch

Oxford Brookes has a memorandum of Understanding with Earthwatch. Through this agreement it was possible to send three members of Oxford Brookes staff on Earthwatch expeditions this year. Bob Pomfret visited the Arctic to look at Climate Change research, Roy Grant looked at Sea Otters in Alaska and Becky Horton studied macaws in the Amazon.

#### 8.0 Future Work

The focus of environmental work for 2006 should be the implementation of a formal environmental management system and the roll out of the new waste management system, taking into account changes of legislation on waste and hazardous waste. In addition to this there will be an environment week during 2006, with the theme energy and climate change.

Harriet Waters Environmental Co-ordinator Spring 2006

#### 9.0 Appendices

#### Appendix 9.1: Membership of the EMS Steering Group

**EMS Steering Group** 

Andrew Moore (chair)

Environment Officer -

Harriet Waters

Bridget Durning

Ian Norriss

Simon Catling

School / Directorate Member	EMS Steering
Estates and Facilities Management	Andrew Moore
Estates and Facilities Management	Harriet Waters
School of the Built Environment	Bridget Durnir
School of the Built Environment	David Shiers
School of Biological and Molecular Sciences	Simon Watts
Directorate of Human Resources	Tim McGill
School of Technology	Peter Philips
Student Union	Environment (

Westminster Institute of Education

#### Appendix 9.2: Membership of the Sustainable Travel Group

School/Directorate member	Green Commuter Group
Business School	Ceri Butcher
Corporate Affairs	vacant
Directorate of Academic and Student Affairs	Anna Hinton (12 month
	secondment 2006)
Directorate of Academic and Student Affairs	Michele Jacobs
Directorate of Estates and Facilities Management	Mike Newell
Directorate of Estates and Facilities Management	Mike Mccluskey
Directorate of Estates and Facilities Management	Andrew Moore
Directorate of Estates and Facilities Management	Harriet Waters
Directorate of Estates and Facilities Management	lan King
Directorate of Human Resources	Bob Price
Finance and Legal Services	Richard Brown
Learning Resources	Nicky Barnard
Research and Business Development	vacant
School of Arts and Humanities	vacant
School of Biological and Molecular Sciences	vacant
School of Health and Social Care	Mary Woolliams
School of Social Sciences and Law	vacant
School of Technology	James Larminie
School of the Built Environment	Graham Smith
School of the Built Environment	John Glasson
Senior Management Team	Rex Knight
Students Union	Environment Officer
Westminster Institute of Education	Simon Catling

#### Appendix 9.3: Green Commuter Group Budget 2004/5

A. Income	£
Parking Charges	77,000
Total Income	77,000

#### **B.** Expenditure

Electrical supply to bus stops for Real Time Display units	7,637
Cycle Shelter, Centre for Sport, Gipsy Lane	7,853
Cycle hoops and racks (Marston Road and Ferndale)	3,783
Printing Costs – parking permits application forms	887
Printing Costs – barrier swipe cards	4,523
Printing Costs – permit discs	2,831
'How to Find Us' leaflets (development and printing costs)	5,897
Cycle promotion (cycle maintenance and breakfast vouchers)	1,299
Travel to Work Survey	5,875
Travel Survey prizes	600
Car Share (software upgrade and promotion)	3,837
Staff costs	
(contribution towards implementation of green Transport policies)	17,224
Total Expenditure	62,246

Appendix 9.4: Waste Management Information, Buckley building

# General Waste

What goes in the General Waste Bin?

This bin is for anything which cannot be recycled and is not hazardous waste.

## **Mixed Recyclables**

# What goes in the Mixed Recyclables Bin?

This bin can take the following: Paper/Cardboard (please flatten)/Cans/ Plastic bottles

Any cardboard which is too big please flatten and place alongside the bin.

The following items can be recycled but DO NOT place them in this bin – follow the instructions below:

**CDs:** send through internal post to Harriet Waters in the Gatehouse

**Mobile Phones:** send through internal post to Harriet Waters in the Gatehouse

**Toner Cartridges:** send through internal post to Phil Shrimpton in Stores

**Glass:** use the glass banks at the back of Gipsy Lane site, next to Cheney School Sports Field.

## **Hazardous Waste**

# What goes in the Hazardous Waste Bin?

Changes in legislation in 2005 has made some everyday objects hazardous waste when disposed of as trade waste.

This bin can take the following:

Aerosols / Batteries: Lead Acid, Ni-Cd, Lithium, NiMH, Alkaline/Solvents/Oil Tins/Cleaning Chemicals/ Caustic Soda/Acid Descalers/Photochemicals/ Paints/Adhesives/Resins/Thinners/Toners/Oil Filters/ Contaminated rags, wipes and absorbents.

These items which will be recycled where possible or disposed of in a designated hazardous waste landfill site.

**NB Fluorescent tubes** are also classified as hazardous waste, please contact Malcolm Bennett (ext 3569) for collection.





Directorate of Estates & Facilities Management