

## OXFORD AND ENVIRONMENTAL SUSTAINABILITY



*The PV array on top of the recently completed New Radcliffe House*

Environmental sustainability remains an important consideration for the University, and throughout the past few years Oxford has implemented a wide range of activities aimed at reducing the environmental impact of its departments and colleges.

### Travel and carbon emissions

During 2011–12, 95% of the University's total travel carbon (CO<sub>2</sub>) emissions were from business air travel, which forms 7% of its total CO<sub>2</sub> emissions. The remaining 5% of travel emissions were from University-owned fleet vehicles. Business air travel emissions increased from 6,981 tonnes CO<sub>2</sub> to 7,226 tonnes CO<sub>2</sub> – up 3.5% compared to last year. Air travel emissions are measured according to the number of trips logged in the University insurance records, so the increase could be due to more reporting of trips, or an increase in the number of trips made. Currently, data on other business travel (train, car hire, staff and student commuting) is not recorded centrally. However, during the forthcoming year the University will be exploring how more travel data can be captured for next year's reporting.

### Business road travel

University fleet vehicle emissions decreased from 412 tonnes CO<sub>2</sub> to 401 tonnes CO<sub>2</sub> (down 3%) due to a reduction in the number of fleet vehicles (112 compared to 115 the previous year).

### Sustainable travel initiatives

Staff and students are encouraged to use sustainable travel options such as cycling, travelling by train instead of plane, walking and public transport. In support of this, there are a number of staff benefit and sustainable travel schemes now in operation, which include:

- a business travel toolkit which provides advice to help staff choose the most appropriate business travel mode, as well as alternatives including use of the University's videoconferencing facilities

- the Journey Share car sharing scheme (76 staff members registered this year, bringing the total number registered to 251)
- 5–8% staff discount on annual season tickets for train travel

In addition to the above, there were also various activities to encourage more cycle use, including:

- 272 more cycle parking facilities at five major locations, a 'mobile mechanic' free cycle repair service and the establishment of five safe-cycling workshops provided free of charge to both staff and students.
- A five-yearly travel survey was sent to all departments; 9,000 staff and students responded. The information gathered will help the University shape its new Travel Plan and give sustainable travel support to staff and students.

### Sustainable buildings

The University aims to achieve a BREEAM\* Excellent rating for all new buildings and major refurbishments costing more than £1 million. The New Radcliffe House building, which was completed this year, achieved a rating of Excellent. Three other buildings currently under construction – the Kennedy Institute, the Nuffield Department of Medicine and the Mathematics Institute – are all on course to achieve BREEAM Excellent ratings.

Four University buildings have rainwater harvesting systems and the University has developed its Sustainable Buildings Philosophy (SBP) document, which provides detailed guidance to project managers, clients and project sponsors on how to improve the sustainability outcomes for new buildings at each stage of a project. The new Blavatnik School of Government building is currently piloting the SBP.

## Water use

Total University mains water consumption fell 8.2% during the year, saving the equivalent of nearly 29 million litre-bottles of tap water! This decrease was achieved by implementing the first year of the University's Water Management Strategy. This included upgrading equipment in departments and ongoing washroom refurbishment by Estates Services. Indirect carbon emissions\*\* from water consumption also fell 8.2%, making up 0.4% of the University's total CO<sub>2</sub> emissions.

## Rainwater

The four buildings with rainwater harvesting systems used for flushing toilets consumed a total of 1,269 m<sup>3</sup> of rainwater (0.4% of total water consumed in the University). Biochemistry decreased rainwater use to 204m<sup>3</sup> (2.2% of the building's water use) compared to 837m<sup>3</sup> (8.6% of the building's water) last year. The Old Road Campus Research Building increased rainwater use to 638m<sup>3</sup> (4.3% of the building's water use) from 400m<sup>3</sup> (2.8% of the building's water) last year. The Oxford Molecular Pathology Institute used 372m<sup>3</sup> of rainwater and Earth Sciences used 55m<sup>3</sup> of rainwater (3.2% of the building's water use).

## Material resources

The University reused a total 8,010 tonnes of good-quality items through in-house schemes (Swap Shop, Lab Swap and Plant Swap), compared to 9,381 tonnes last year. This saved £44,627 of income by not buying new items, compared to £37,157 last year. The University recycled 3,009 tonnes of printer cartridges compared to 1,717 tonnes last year and 46,648 tonnes of shredded confidential paper. Colleges and departments collectively recycled 2,015 tonnes of textiles. In addition, the University decreased its general office waste by 42 tonnes. Of this, 543 tonnes was recycled compared to 594 tonnes last year and 1,802 tonnes was landfilled compared to 1,793 tonnes last year.

\*Building Research Establishment Environmental Assessment Method

\*\*Due to the energy used for abstraction, processing and transportation of mains water. Calculated using Thames Water metric for indirect tonnes CO<sub>2</sub> emissions for mains water