

GREEN GOWN AWARDS

Eco-warriors battle to clean up the act

This year's winners had new spins on fuel efficiency, bicycle recycling, environmentally friendly building renovations and course content. Martin Ince reports

The Green Gown Awards are designed to acknowledge achievement in areas where higher education meets the environment. Of the seven categories, two recognise the vital need to green the curriculum itself, with one award for degrees and a second for vocational courses. Two more emphasise universities as users of space and resources in their own right. These awards are for top performance in the use of water and power, and for sustainable construction. Another award is for student-led initiatives, and a further recognises continuous improvement in achievement, while the seventh is specifically for colleges rather than universities.

The colleges winner this year is the Pershore Group of Colleges. It is a land-based college with the interest in sustainability that one might expect of an institution with its own farm and nursery. A variety of initiatives over several years has allowed it to reduce fuel use, cut chemical use on its land and enhance biodiversity, and save money. There have been benefits for staff, students and the local community in Pershore, Gloucestershire.

Staff awareness of the issues has been enhanced by training, for which external funding has been obtained. All students learn about sustainability, and the college is involved in a European Union Leonardo project to develop sustainable land use education across Europe.

Although much progress has been made, the college has more plans, including a

50 per cent cut in carbon output by 2020. The judges found that the Pershore programme could be applied to the whole of the college sector. They were especially impressed with its community connections and its link to local businesses.

The Continuous Improvement category was won by Leeds University for a series of initiatives that have been taking effect since 2002, although the university began using combined heat and power and recycling its paper in the 1990s. Transport, waste, carbon emissions and other main concerns have been identified and tackled over time.

Some areas have been marked by steady progress — for example, a doubling in paper recycling and a growing emphasis on buying recycled goods. Major projects include specific consideration of the environmental impact of any new or significantly refurbished building. The university is heavily involved in environmental research, and its School of Geography was the UK's first carbon-neutral university department.

Leeds regards its commitment to fair trade as an integral part of its sustainability. It became a Fairtrade University in 2005.

The judges praised the university for its "articulate strategic approach" and the way it has involved both staff and external organisations in its plans.

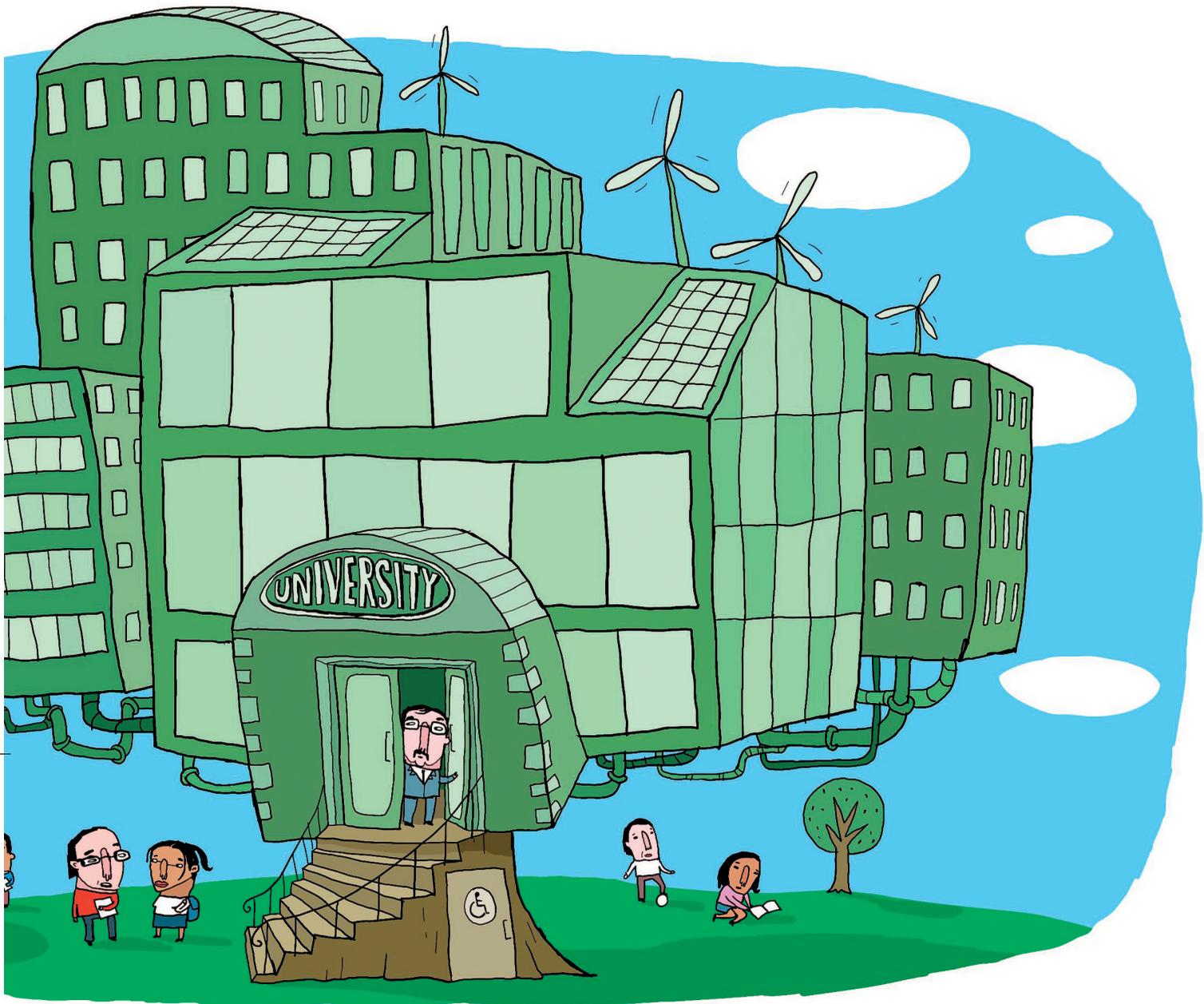
York University Student Union had the winning student initiative. Its Bike Auction is an innovative approach to greening transport and keeping scrap metal out of landfill. York has many keen cyclists, but



some students leave the university without taking their bikes with them. In the past, security staff removed unwanted machines, which were consigned for scrap or to landfill. Now the orphan bikes are tagged for removal but handed to the student union, not the rubbish collectors. And the bikes — 80 in 2006 — are auctioned to students at the start of the academic year.

The money raised is used to fund ethics and environment work by the union and elsewhere. Some of the cash has paid for bikes to keep doctors in Africa mobile so they can visit more villages and treat more people.

According to the judges, Bike Auction "encapsulates everything student initiatives can achieve, is inexpensive and highly



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replicable across other universities and colleges”.

At the other end of the technology scale is the top conservator of water and power, Southampton University. The main aim of its Highfield district heating and combined heat and power scheme is to reduce the university’s carbon footprint by using more efficient equipment. Other priorities are to reduce the whole-life cost of the operation, expand capacity and lower the temperature and pressure at which it operates for heating. This allows heat loss in the system to be cut and in turn reduces the size and cost of the pumping equipment it needs.

The programme involved replacing and refurbishing valves, pumps, heat exchangers and other equipment, the

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installation of new generators and the connection to the system of buildings that previously had their own, less efficient, plant. The judges point to the very detailed and practical engineering of this scheme, with its clearly defined benefits.

The Most Sustainable Construction project award went to King’s College London. The building on its Strand campus in central London was built just after the college was founded in 1829. It is Grade I-listed and, while it needed

extensive refurbishment, this had to be taken into account.

King’s decided to adopt a sustainable approach to the task. The newly restored building makes maximum use of natural light and solar heat. The windows can be opened, reducing the need for air conditioning. Perhaps most intriguingly, King’s claims that the relationship between circulation spaces and staircases has been restored — encouraging people to take the stairs instead of the lift. The building will

●●● **ESTATES**

reduce electricity by 830,000 units a year, saving 383 tonnes of carbon dioxide — and £77,000. The restoration involved extensive demolition, and there was a target of recycling 80 per cent of the resulting material. As much as possible was reused, and the contractors had a range of environmental goals to hit. The judges praised the whole project for “simply doing all the right things”.

Of the two awards for course content, the top vocational innovator is Sheffield Hallam University, with its Landlords for Excellence programme. This course for private landlords is run by the university’s facilities directorate alongside Development and Society, an academic school of the university. It helps landlords reduce the blight and mess associated with much private rented accommodation, including student housing. As well as green issues, it teaches them about substance abuse, fire safety and marketing. For the university, there have been several benefits including a better relationship with the local community. It has also built links between the university and bodies such as the city council, the police and organisations representing the local black community.

The judges felt Landlords for Excellence was an innovative approach to a significant environmental and social issue that engages a hard-to-reach group effectively.

The winner for course content is Bristol University. Its Sustainable Development: Teaching against the Grain course unit was first presented in 2005-06. It was intended to take an interdisciplinary approach to a subject that was not strong at Bristol. The content of the course, which any student can take, ranges from energy generation to congestion charging, and tackles approaches from the scientific to the legal.

The benefits of offering the unit are hard to quantify. The academics involved have gained a sense of involvement in green issues on the campus and now feel less isolated. The students — drawn from 14 departments in the first year alone — have learnt things that will allow them to be greener in their student and their later life. And the university is now preaching what it practises.

The unit is described by the judges as an exciting innovation for a university that can seem more traditional than most. It has also opened the door to more interdisciplinary teaching in Bristol. ●

Martin Ince is contributing editor, *The Times Higher*.

Cut the gas — shed more

The 2006-07 awards are marked by impressive efforts to reduce waste and recycle more, underpinned by cash constraints and the need to cut energy use.

Peter James explains

THIS YEAR’S GREEN Gown Awards show how commitment, energy and innovation enable universities and colleges to respond positively to environmental and social challenges. They show too that universities such as Leeds (winner in the Continuous Improvement category) and Southampton (winner in the Energy and Water Efficiency category, and the only institution to win or be commended in every year of the awards) are developing an impressive capacity to do this in a sustained way.

The awards also illustrate challenges for a sustainable estates strategy. King’s

JULIAN ANDERSON



► **Social inclusion: King’s College London’s new open dining space makes use of natural light and solar heat and aims to reduce heating bills**

light on a low-carbon culture instead

College London, winner in the Sustainable Construction category, proves there can be environmentally positive refurbishment. Financial pressures and slowing expansion in the sector will place greater focus on making the most of the existing estate through better use of space and refurbishment. Minimising newbuild is generally good for the environment as well as the balance sheet.

Sheffield Hallam University, a winner in one of the curriculum categories for its work in educating private landlords on sustainability, highlights a neglected area:

residences. As a new report from Higher Education Environmental Performance Improvement reveals, there is potential for improvement here, but it can be hard to achieve. Divided responsibility between estates and residence managers for running university-owned accommodation often impedes action by either.

Several of this year's winners have been participants in the Carbon Trust's Carbon Management programme and are well placed to respond to new regulations on reducing emissions and increasing energy efficiency. By 2008, it is likely that most

institutions will have to make a formal energy performance commitment and display an Energy Performance Certificate in many buildings of more than 1,000 square metres.

The business case for more sustainable buildings is becoming more compelling. Energy prices may fluctuate, but most experts expect them to rise. There is mounting evidence that some of the key environmental features of such buildings — for example, optimal use of natural light and higher indoor air quality through use of toxin-free materials — contribute to better work performance and cut sickness. The Royal Academy of Engineering estimates that the lifetime costs of a building are about 200 times the initial design and construction costs, with operational costs five times greater. The long-term benefits from even a 1 per cent to 2 per cent improvement in productivity, or a 5 per cent to 10 per cent change in energy performance, can be positive, even if additional capital outlay is needed.

A Heepi report on "high-performance" buildings suggests many of these benefits can be achieved with no, or minimal, additional capital costs. It also shows that the real comparison is often not with "cheaper" buildings that generally perform well but with "low-performance" buildings that don't work for users and guzzle more utilities than stipulated in their design specification, making them costly to run — either because building use was not properly considered or because the equipment installed is bigger than needed. Poor controls that are over-complicated or badly installed also affect running costs.

These and many other problems can be avoided. Universities must set clear objectives, ensure these are implemented through the entire building process and allow time for an integrated design process to get key features right first time. It isn't easy, but the evidence from the best performers shows it can be done. ●

Peter James is professor of environmental management at Bradford University and co-director of the Heepi project, which works with sector partners to organise the Green Gown Awards. For more details, visit www.heepi.org.uk

Green Gown Awards 2006-07	
The winners	
Colleges	Energy & Water Efficiency
Winner Pershore Group of Colleges	Winner Southampton University
Highly Commended Trinity and All Saints College	Highly Commended Bristol University
Continuous Improvement	Student Initiatives
Winner Leeds University	Winner York University Student Union
Highly Commended Cambridge University University of East Anglia Edinburgh University Oxford Brookes University	Highly Commended Loughborough University and Loughborough Student Union Kingston University North Devon College Student Green Group
Course Content (Degrees)	Sustainable Construction
Winner Bristol University	Winner King's College London
Highly Commended Gloucestershire University Plymouth University Queen's University Belfast	Highly Commended Dundee University
Course Content (Vocational)	
Winner Sheffield Hallam University	
Highly Commended Swansea Institute of Higher Education	

