

BOARD OF GOVERNORS

18 OCTOBER 2006

SUSTAINABILITY IN THE UNIVERSITY

THE BOARD'S TERMS OF REFERENCE TO WHICH THE ITEM RELATES

- 1 The Board is responsible for:
- i) the determination of the educational character and mission of the University and for oversight of its activities;
 - ii) the effective and efficient use of resources, the solvency of the University and the Corporation and for safeguarding its assets;

PURPOSE

- 2 This report gives a summary of some of the achievements made towards sustainability in the last academic year.

OVERVIEW

- 3 The University has seen further developments in pursuit of sustainability. Examples are:
- Resources management including energy, water, waste;
 - Management of the estate;
 - Increased activities in line with the University's integrated transport policy;
 - Reviewing and revising policy;
 - Activity to reduce the negative effects of student behavior on the local community and action to raise the profile of the University's positive contributions;
 - Raising staff and student awareness of sustainability issues;

WATER, ENERGY AND WASTE MANAGEMENT**Water**

- 4 Total water consumption was reduced by 3.3 million litres and savings of 2.8% were achieved. Water use is now 40% lower than in 1996-97 and annual consumption has been reduced by 80 million litres over this period.
- 5 The University's sustained campaign to reduce water consumption was recognised by HEEPI (Higher Education Environmental Performance Improvement) when they awarded us the prestigious Green Gown Award for Energy and Water Efficiency. The Judges' commented on "Sheffield Hallam University's intelligent use of limited time and resources to identify priorities, and then achieve considerable savings, provides a model for other institutions. Notable features include good use of 'no' cost and 'low' cost measures, the quantification of savings, and collaboration with stakeholders. The programme also shows the difference which individuals can make and the valuable role of maintenance in achieving energy and water savings."

A target of a further 3% reduction in water consumption across the estate has been set for 2006/07. A trial is being undertaken to consider mains fed water cooled drinking water instead of bottled water coolers around the estate. This system uses water from the mains supply and therefore greatly reduces the impact from having bottled water delivered. The project will also consider what cost savings may be gained from the initiative.

Energy

- 6 Total emissions of carbon dioxide fell by 76 tonnes, or 0.6%, to 12,182 tonnes over the last year. This is due to seeing our programme of fuel substitution, e.g. replacing oil and propane with natural gas coming to fruition. By using cleaner fuels, carbon emissions associated with heating our buildings fell to 3,825 tonnes - a reduction of 146 tonnes or 3.7%.
- 7 However, carbon emissions associated with electricity use increased by 0.8% or 70 tonnes to 8,357 tonnes. This was because electricity consumption increased by 1.3% to 20.6 million kWh as a result of the first full year operation of the new Students' Union and Health buildings along with more intensive use of the Collegiate Crescent Campus.
- 8 Green electricity continued to power 30 small properties and around 4% of electricity purchased by Sheffield Hallam University came from renewable sources.
- 9 To address the challenge of growing demand for utilities, the Facilities Directorate has established an Energy Action Group with the following terms of reference:
 1. To develop and oversee the implementation of a 'spend to save' plan.
 2. To initiate studies aimed at gaining a better understanding of energy usage.
 3. To examine longer term energy options in the context of the estate strategy.
- 10 Projects initiated by the Energy Action Group have so far been focused on water and heating controls. A target of 2% reduction in carbon emissions from heating fuels has been set for 2006/07. This will be achieved by improved control of existing heating plant.

Waste

- 11 The University continues to operate recycling initiatives for paper, glass, plastic batteries, green garden waste and other products. General waste generated by Sheffield Hallam University increased by 7% or 77.48 tonnes taking the University's total to 1044.578 tonnes. Our recycling processes continue to be reviewed and in particular we are looking into ways in which our capture of recyclable waste can be made more effective. 95% of our general waste goes to incineration at Sheffield Heat and Power supply.
- 12 Since new hazardous waste regulations came into force in 2005 several initiatives to minimise the impact of the new legislation on the University are being implemented in particular it relates to our disposal of IT equipment. The new regulations on WEEE (Waste electronic and electrical equipment) expected this year have been delayed. Sheffield Hallam University will continue to monitor the introduction of these regulations to ensure compliance. It is expected that the introduction of this new initiative will result in extra costs for our institution.
- 13 Through the Health and Safety section a new group has been set up to review and monitor the Universities purchase, use and disposal of chemicals. The group, which consists of staff from both support and academic sections is currently working

together to audit current practice from across the organisation. Proposals for the remainder of the project will be presented during the course of the next year. Funds generated through toner cartridge recycling continue to contribute to a student hardship fund.

- 14 The generation of green garden waste has now proved so successful across our sites that in addition to re using this waste to create compost and bed cover we are exploring bio mass boilers so that we can use this surplus waste to heat some buildings at Collegiate campus in the future.

Management of the Estate

- 15 Energy efficient, censored controlled lighting has been installed in numerous refurbishment programmes around the University's estate. We have continued to refurbish the old heating boilers around the estate including the transfer from propane to natural gas at Bawtry Road. This change provides cleaner burning fuel with lower CO2 emissions as well as requiring fewer deliveries being made.
- 16 The implementation of a rolling programme to install new boiler controls is now taking effect. This allows for more efficient monitoring and controlling of their operation through the building management system in operation.
- 17 In areas identified as high water usage, work is still being undertaken to install spray taps to try to reduce the water consumed. The same proactive approach is being used to reduce water used by our toilets by installing low cost volume reducing items.
- 18 The BREEAM environmental assessment system continues to be used to help us to create new buildings that are sustainable. The plans for our new building to accommodate ACES includes many new initiatives such as Solar to power external lighting, sensor activated lighting in some parts of the building, ground source heat pumps and natural ventilation as well as a comprehensive travel plan.

Transport

- 19 The University continues to encourage the use of non car forms of transport through awareness raising activities about the use of public transport, cycling and walking amongst staff and students.
- 20 The University launched its Cycle 2 Work scheme in June 2006. The scheme was run in conjunction with Halfords and allows Sheffield Hallam University staff to purchase bikes on a 12 month salary sacrifice scheme that can save staff up to 40% off the retail prices of bikes. A total of 37 members of staff took up this offer at the launch of the scheme and plans are being made to run this scheme again the following year.
- 21 Reduced cost tickets for local public transport for purchase by staff are being introduced for the new academic year.

Reviewing policy

- 22 The University's integrated transport policy is being reviewed; so far this has resulted in a comprehensive transport plan, the content of which is being shared openly with the local authority to help with planning applications for our future estate redevelopment. Monitoring and review mechanisms are being agreed with them.
- 23 In tandem with the review of the University's health and safety policy we are exploring how we might incorporate the environmental elements of the

sustainability policy. This is to ensure that our legal compliance is met where health and safety and environmental legislation meet. Overlapping information will also provide a better framework to allow staff to meet these requirements.

- 24 The University's energy policy has been reviewed and as a result a revised policy is now in place. A copy of the new policy is attached for your information.

Community and Society

- 25 As a result of the Sheffield Hallam University taking part in the Business in the Community Corporate Social Responsibility (CSR) framework, it received a detailed confidential report on its performance. The framework is comprehensive and considers a wide range of CSR activities which includes: workplace, marketplace, community and environment. The information that we have learned from taking part will be used to create a gap analysis and action plan.
- 26 Sheffield Hallam University improved its position from 47th to 42nd in the Business in the Environment Index this year. This is one of the external benchmarks that we use to help set our direction and priorities. There are 155 other organisations that take part in the benchmarking.
- 27 The University continues to be very active in trying to reduce the effects of anti-social behavior created by a minority of our students. In addition to well established training sessions for staff and students, awareness raising campaigns and partnership working to reduce litter, fly posting and noise nuisance are carried out continually. A new City-wide task group became active in May this year, called "Students in the Community". This task group pulls together many of the activities that are already taking place in the City. All the key agencies take part (SCC, police, environmental health etc.) and in addition representatives from interested resident groups.
- 28 Sheffield Chamber of Commerce short listed Sheffield Hallam University for two prestigious awards this year. "Environmental Practice" and "Regeneration". These awards recognised that our organisation demonstrates best practice in environmental practices and a successful track record in social and economic regeneration.
- 29 Work with the City's Planning department and the University of Sheffield continues in considering the implications of "zoning" and "restraining" areas for future student developments and houses in multiple occupation across the City. The intention is to have a positive impact on diluting areas of the City potentially faced with saturation of students (Studentification) and helping to create or sustain balanced communities. Both Universities are keen to ensure that our students' welfare are not forced into areas of the City that are not attractive to them and have an adverse effect on recruitment and retention.
- 30 To help support the spatial planning and housing needs survey for the City, staff from the Facilities Directorate are working with colleagues in the Centre for Regional Economic and Social Research (CRESR) and Development & Society on pilot research into the impact of students on housing and their effect on communities. The research is looking at the physical standards of the housing and street environment as well as the social impact on the economy and local amenities.
- 31 The University continues to be an active participant and host for a variety of community groups and activities. These include: Sharrow Community forum, Botanical Gate Community Association, Neighborhood Action Groups Broomhall Park Conservation Group.

Events

- 32 Numerous events have taken place to raise money for charitable organisations. Charities that have benefited this year are many and include Marie Curie Cancer Care, Weston Park Hospital, Childline and Niger crisis.
- 33 World Environment Day was celebrated with awareness raising information internally and this year in partnership with other organisations which included the Environment Agency, a large public event at Meadowhall shopping centre. Organised trips from local schools also came to the event and children were able to make a pledge for their contribution to sustainability. Sheffield Hallam University was able to promote the organisation as well as its sustainability activities to everyone visiting the stand.
- 34 The University again celebrated Fairtrade Fortnight, with product sampling for both staff and students on all campuses and hosted a Fair Trade wine tasting for all the local businesses including hotels in the City. The catering department continues to supply fair trade goods at all its outlets.

ACTION REQUIRED

- 35 The Board is asked to receive the report.

TO BE INTRODUCED BY

Alex Pettifer
Director of Estates and Facilities

Prof Kevin Bonnett
PVC Strategic Planning and Sustainability

Energy Management Policy

1. POLICY

The Energy Management Policy forms part of Sheffield Hallam University's operational strategy designed to achieve its vision to be a leading sustainable university.

The University is committed to the protection of the environment through the implementation of an effective energy management programme that meets or exceeds all legislative and regulatory requirements placed on it.

The term "energy" embraces electricity, oil, gas, district heating, and also water and sewage.

2. RESPONSIBILITY

The Pro Vice-Chancellor Strategic Planning and Sustainability and the Director of Estates and Facilities are designated with overall responsibility for the achievement of the University's aim to be sustainable.

The Energy Manager is responsible for the development, initial implementation and subsequently the monitoring of the application of the energy management policy. The Energy Manager is supported by the Energy Action Group which has the following terms of reference.

1. To develop and oversee the implementation of a 'spend to save' plan.
2. To initiate studies aimed at gaining a better understanding of energy usage.
3. To examine longer term energy options in the context of the estate strategy.

University Faculties and Departments will work within the policy as appropriate to achieve the aims. All staff and students have a responsibility for ensuring that energy and water are not wasted because of their individual actions.

3. ENERGY AUDITS

All buildings will be audited in respect of energy use to identify:

- the amount of energy used in buildings and the pattern of use;
- the comparative energy costs between buildings;
- the general condition of the building and its plant and consequent impact on the use of energy and running costs.

Users will be made aware of the implications of energy use, to encourage conservation and increase awareness of energy as a controllable cost.

Consumption targets will be developed for major buildings and monitored against use.

4. ENERGY MANAGEMENT

Energy costs will be reported monthly against budget, the trend of energy and water consumption will be monitored, and variances will be investigated.

Potential projects for reducing energy consumption will be identified and prioritised with estimated costs and payback savings. The Energy Action Group will develop an annual programme of measures to improve energy use, to be justified by projected savings.

Investment appraisals will be carried out on a life-cycle basis at key stages of energy conservation projects and energy management initiatives.

The Facilities Directorate and Finance Directorate will regularly review supply and service contracts with utility suppliers to achieve best value for money and the most efficient supply.

5. REFURBISHMENT AND CONSTRUCTION PROJECTS

Sheffield Hallam University recognises that its activities have an impact upon the environment and will endeavour to make continued improvement. This will be achieved by applying current best principles of environmental management.

All refurbishment projects will contain an appraisal of energy efficiency measures and the incorporation of appropriate items.

New buildings will be designed with energy efficiency and running costs as a key component of the brief. Performance targets will be established and monitored.

6. COMMUNICATIONS

Channels will be positively maintained to facilitate exchange of information within and outside the University on energy management, use and conservation through relevant organisations.

Awareness raising activities will encourage staff and building users to recognise their potential contribution to the achievement of a sustainable University.

Energy management performance figures will be published in the University's annual Sustainability Report.

Energy Performance Certificates will be displayed in key buildings accessed by students and members of the general public.

Approved by the Energy Action Group

Ratified by the Facilities Directorate Management Group

September 2006