

*TITLE:*

## Reducing Carbon Dioxide Emissions at Leeds

*DATE:*

July 2007



**UNIVERSITY OF LEEDS**

*INSTITUTION PROFILE*

HE

32,000 FTE students

7,560 staff

Urban campus

### SUMMARY

The University of Leeds has developed a carbon management plan to reduce carbon dioxide emissions via infrastructure change, transport planning and offsetting. This case study deals with the infrastructure changes made at the university. Extra money has been provided for energy-saving programmes and installing renewable energy systems. Behavioural change and effective communication are key features to meeting targets. Both energy and transport projects provide new teaching and research opportunities.

### EAUC COMMENT

This case study illustrates how to engage staff and students into strategic plans to reduce carbon. By involving the student union, a key ally was created which helped to promote the plan. The linkage of the plan to teaching and research provides an excellent model of how to link curriculum with campus management, as well as to how to listen to staff and students and respond to recommendations.

### PROJECT PARTNERS

The University of Leeds and The Carbon Trust.

### THE PROBLEM

Global warming is now an accepted reality. The University of Leeds wanted to cut its carbon emissions – and save money at the same time. The university's student union also wanted action on climate change. Rising energy usage – and the resulting impact on costs – confirmed this was an urgent issue. The university felt the activity needed to be strategic and involved the Carbon Trust as the best organisation to help it develop a plan.

Environmental audits are part of the school of environment's teaching programme and the faculty had made recommendations about reducing energy and carbon emissions including replacement of inefficient boilers and switching off lighting when buildings were not occupied.

### THE APPROACH

A group of staff and students led by the Environmental Officer developed the carbon management plan. It was approved in September 2006 by the Vice Chancellor and has an annual budget of £180k.

A programme of infrastructure investment was developed including:

- Installation of renewable energy technologies on university buildings
- Installation of biomass boilers at student residences and the sports pavilion
- Replacement of heating sensors and controls
- Installation of automatic lighting controls and roof insulation

The plan is closely linked to teaching, with two faculties involved in studying output information from the boilers and solar panels and a third studying fuel supplies for the boilers.

### GOALS

- Reduce the university's carbon footprint and energy emissions by 10% over the next 5 years from a 2005/6 baseline
- Reinforce the university's status as the leading HE institution in Yorkshire on environmental issues and set an example for others
- Save money in the medium-term – all projects have to have cost benefit analyses carried out
- Use of projects to provide opportunities for teaching and research
- Demonstrate how individual and institute behaviour can make large contributions to carbon savings

## OBSTACLES AND SOLUTIONS

- How to develop a carbon management plan which covers the whole university and all its activities
- Securing the investment to make the changes
- It is a large institution – how do we communicate the programme?
- How do ideas get included in the programme?
- Are we meeting our targets?
- Involve the Carbon Trust and make the plan strategic
- Get support from the highest level – the VC signed off Leeds' carbon management plan
- Give carbon presentations at staff, student and management meetings
- Give suggestions to environmental co-ordinators
- Monitor performance against targets and provide monthly updates on progress

## PERFORMANCE AND RESULTS

Early feedback has shown six-month reductions in steam usage for heating and hot water of 15.5% and electricity of 1.7% compared to the same 2005/6 period. This contrasts with increases of 3.1% and 6.8% seen in the previous period.

Leeds University Union has started a number of initiatives including developing a new environmental policy and has published major features on the carbon management plan in the Leeds Student newspaper.

New teaching and research programmes are being created from carbon management projects.

Since October 2006 there have been more than 12 student green reps at university-owned accommodation to help develop and implement environmental programmes.

## LESSONS LEARNT

- Make it a strategic programme
- Get it signed off by the vice chancellor
- Ensure there is additional money to carry out the changes
- Communicate to staff and students what the carbon management plan sets out to achieve and how they can contribute
- Give progress updates on carbon dioxide saving initiatives

## FURTHER INFORMATION

For more information about the University of Leeds' environmental initiatives contact:

Dr Keith Pitcher, Environmental Officer

Tel. 0113 343 7255

Email [k.f.pitcher@leeds.ac.uk](mailto:k.f.pitcher@leeds.ac.uk)

or visit [www.leeds.ac.uk/environmental](http://www.leeds.ac.uk/environmental)



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