

TITLE:

Carbon Management at Adam Smith

DATE: April 2010

ADAM SMITH COLLEGE
INSPIRING LEARNING

SUMMARY

Adam Smith College has drawn up a climate change action plan which includes all college activities, including the curriculum. This case study will focus on the carbon footprint aspect.

If successfully implemented, the plan will reduce the college's carbon footprint by 25 per cent – the equivalent of 1,250 tonnes of carbon, in five years. It has sourced help from the Carbon Trust and drawn inspiration from various sources such as the EAUC and from as far afield as New Zealand.

The plan will also inevitably save the college money. If the 10 per cent saving on energy bills achieved in the first three months of the initiative is maintained, this saving could be as much as £60,000.

INSTITUTION PROFILE

Large FE & HE college
Five campuses in four towns
950 staff
30,000 student enrolments per year

EAUC COMMENT

Committing to the UCCCfS has given Adam Smith the basis from which to flesh out its own climate action plan. Tackling carbon in all its aspects the college is making real savings, costs and environmental. The EAUC lauds the college's seeking-out of best practice in the sector.

THE PROBLEM

Adam Smith College, like most of the universities and colleges in Scotland, was under pressure to meet its commitment to the Universities and College Climate Commitment for Scotland (UCCCfS). By signing the UCCCfS in 2009 the college had agreed to tackle climate change and to reduce its carbon footprint.

At the same time energy costs were rising and the college's Principal had set the objective of creating "sustainable practitioners". Inspired by best practise from Otago and Christchurch Polytechnics in New Zealand shared through the Post-Secondary International Network (PIN), he wanted all students to graduate with a thorough understanding of how sustainability would impact on their activity in the workplace when they went on to employment.

The college had already achieved the easy wins on energy saving and recycling. It also had an active sustainability group that while enthusiastic, lacked strategic focus and influence.



THE APPROACH

The college first sought out good practise elsewhere and used the EAUC website, case studies and events for ideas. It learnt about the Carbon Trust's initiative to help smaller organisations manage their carbon and signed up to the pilot of the project, named Carbon Lite.

The pilot lasted five months and included support from the Carbon Trust in the form of seminars, tools and phone support. By the end of the project, aided by the tools, the college had carried out a thorough analysis of its carbon footprint.

The college did a calculation to show the cost of business as usual versus the cost of the reduced emissions scenario – known as 'value at stake' calculations. These savings provided the ammunition essential to present the case for carbon management in an objective manner.

Senior management support was essential if the college was to achieve results so the Principal proposed the formation of a Sustainability Strategic Group which would provide senior leadership on the issue across the college. This was agreed and the group is chaired by the Principal and includes the Vice Principals of Curriculum and Resources.

A carbon management plan (CMP) was created and the college's estates team was heavily involved, providing energy consumption data for all sites. The investigation was extended to looking into patterns of energy usage. The team used half-hourly monitoring at some sites, special meters at others and improved its control of building management systems to ensure they were as efficient as possible.

Travel is a key part of any college's carbon footprint and Adam Smith used staff mileage claims to gather travel data. Waste is another key component of a carbon footprint and the college asked its waste contractor to provide new monthly reports on how much waste was being disposed of and what proportion was being recycled. Initially the college intended to have one major CMP project and a voltage optimisation initiative had been scoped. But following a Carbon Trust survey of the proposed site for the project, this was dropped in favour of several smaller ones which have shorter payback times.

Following the analysis of the data a plan to reduce the college's carbon footprint was created. It included 10 carbon management and nine behaviour-change projects which spanned both curriculum and the community. Each project is owned by a member of staff and has to report quarterly to the Sustainability Strategy Group.

The college also recognised it needed to involve suppliers and worked with its heating and ventilation contractors to agree they would report on how they operated building management systems and identify inefficiencies. They were also encouraged to suggest improvements on each site.

OUR GOALS

- Create a whole-college commitment to sustainability
- Reduce carbon dioxide emissions by 25% by 2014 from a baseline of 5,000 tonnes CO₂ in 2008
- Equip students completing full-time programmes to be "sustainable practitioners"
- Influence the wider community to consider sustainability and reduce its carbon footprint through the attitude of our graduates

OBSTACLES AND SOLUTIONS

Obstacle

- Sustainability previously viewed by college management as desirable but not a priority
- An impression that climate change and carbon management were Estates issues
- Obtaining an accurate carbon footprint for all college activities
- Resistance to expenditure on sustainability and carbon reduction projects.

Solution

- Formation of strategic group chaired by principal and including Vice Principals of Resources and Curriculum reinforced how important the college considered sustainability. It was no longer a 'nice to have'
- The strategic group looked at tackling carbon across the college, sending the message that it was for everyone to participate in the changes
- Using the expertise of the Carbon Trust's 'Carbon Lite' Carbon management plan gave a tried and tested framework to get this data
- Use of Carbon Trust's Carbon Management - rapid assessment of potential (RAP) tool to quantify current position and highlight business as usual (BAU) versus reduced emissions scenario. (RES) These make a convincing financial case for funding projects.

PERFORMANCE AND RESULTS

In preparing this Climate Change Action Plan Adam Smith College has identified projects/initiatives that:

- should reduce its carbon footprint by 25% (1250 tonnes CO₂ per annum) over five years
- provide free on-line training to the general public
- will work with the local authority and community groups to increase awareness of the importance of sustainability in the wider community
- will also integrate sustainability into all courses

In the first three months after implementation of the plan an average decrease of 10.5 per cent in electricity use was recorded. If this level was to continue it is the equivalent of saving £60,000 in one year and would mean all projects had paid for themselves in less than one year. Much of this saving has come from improved control of heating, cooling and ventilation, demonstrating how key it is to work with suppliers as well as to strive to change behaviour of staff and students.

The curriculum initiatives will take three years to fully embed and results will be assessed on an ongoing basis.

LESSONS LEARNT

- Make use of existing plans and strategies. With hindsight Adam Smith could have used these to quickly and easily identify carbon reduction projects. While it is essential your plan fits your organisation, there's no need to reinvent the wheel
- Get help from experts. The Carbon Trust provided the framework and tools for the college to accurately assess its carbon footprint, something it would have struggled to do alone
- You can't do it all at once. Adam Smith recognises it doesn't have good information on the college's travel footprint and will be doing some work on this with the Carbon Trust in the future so its travel plan can be updated
- Strategic support from the sector is also important. The broad approach adopted by the EAUC in Scotland to support the Universities and Colleges Climate Commitment for Scotland (UCCCFs) has provided the direction and support required to produce a Climate Change Action Plan that encompasses energy, travel, waste, curriculum and community

FURTHER INFORMATION

Our Carbon Management Plan and Climate Change Action Plan can be found on the College website at

<http://www.adamsmithcollege.ac.uk/environment/sustainability/default.aspx>

For further information contact Bob Grey, health, safety & environment manager.
e-mail bobgrey@adamsmith.ac.uk

UCCCFs

<http://www.eauc.org.uk/ucccf>

Post-Secondary International Network (PIN)

<http://www.pinnet.org/>



The Environmental and Sustainability Champion within Further and Higher Education in the United Kingdom.

The EAUC provides training, advice and support to our members as well as providing a forum for best practice in the sector.

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