



Green Gown
Awards 2014

Finalist's case study



Dissemination
supported by:



Dundee & Angus College Best Newcomer

Dedicated to raising awareness

Aspiring to reduce emissions



Profile

- FE
- 8,902 students (includes full and part time students)
- 1010 staff
- Both Urban and Rural

Section 1 About the project

Summary

Saving the planet while simultaneously saving cash, shrinking the College's carbon footprint whilst, at the same time, stimulating staff and learners' imagination in terms of taking responsibility for minimising their contribution to the College's carbon footprint. Investment in and effective use of the real time Eniscope Energy Monitoring system, allowed us to keep staff and learners informed of the College's electrical consumption, costs and CO² emissions. It also allowed us to set baselines and target areas where energy waste was prevalent. The energy monitoring system has proved highly rewarding on so many levels.

Section 2 The results

The problem

Dundee and Angus College has demonstrated its commitment to reducing its carbon footprint through the development and implementation of its Carbon Management Plan. Through this plan numerous sustainability projects were completed; installation of a biomass boiler, 400 Solar panels, solar thermal panels, rain water harvester, electric vehicle purchased for local journeys, rolling replacement of older light fittings with LED and the installation of real time energy monitoring technology.

These initiatives enabled the College to significantly reduce its carbon footprint in just a couple of years. But it was noted that one area where it was failing was energy waste. Numerous audits of the buildings showed that electrical equipment was being left on when the areas were unoccupied. We realised that we would have to reach all users of our building with the message that we needed to reduce our electricity consumption.

The approach

To assist with reducing our electrical consumption, in August 2013 we invested in a real-time energy monitoring system called Eniscope. This innovative piece of software, which provides instantaneous real-time and analytic energy information, enabled us to set energy usage baselines, identify any hidden energy leaks and effectively monitor our electrical consumption. An energy monitoring 'Dashboard' was featured on large LCD screens around our three campus buildings, displaying real-time electricity usage, cost and CO² output.



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The positive outcomes of the Eniscope system were promoted to staff and students via 40+ presentations. The presentations also aimed to raise awareness of the Carbon Management Plan and highlighted our commitment to carbon reduction and environmental sustainability.

To raise awareness of the impact of energy saving, a marketing poster campaign '**Shut Down Switch Off!**' was also launched indicating how much the College spends on electricity over a year and how much CO₂e this produces. Posters were, and continue to be, displayed in every classroom, workroom and social space across all campuses encouraging staff and students to 'Shut Down and Switch Off' all their electrical items at the end of each day.

To maintain momentum, '**Big Switch Off**' campaigns was also devised and promoted. This involved 3 Big Switch Off weekends where all staff and students were reminded, and encouraged, to switch everything off when they left the College for the weekend. Staff and student volunteers assisted the College Environment team in carrying out a sweep of the buildings ensuring everything was switched off. This enabled us to create new baselines and compare the data with previous results, all of which was communicated to staff and students.

The College's commitment to reducing its carbon footprint was also further enhanced by the appointment of a dedicated part-time Environmental Officer in March 2014.

Our goals

This project was just one of a range of initiatives that had been developed and assisted in the College meeting its carbon reduction target of 25% well in advance of the 5 year plan period as outlined in our Carbon Management strategy document.

The '**Shut Down Switch Off!**' campaign was particularly developed to raise awareness and encourage staff and students to take responsibility and contribute to reducing not only the College's carbon footprint, but to also promote these values in their wider communities and families.

Obstacles and solutions

<ul style="list-style-type: none"> Staff and Students involvement 	<ul style="list-style-type: none"> 40+ presentation to staff and students 3 "Big Switch Off" weekends, where everyone was reminded to switch off electrical equipment. At the end of the day volunteers then swept the buildings to ensure everything was powered down.
<ul style="list-style-type: none"> Lack of knowledge 	<ul style="list-style-type: none"> Posters with the Colleges' annual electricity spend were situated throughout the campuses. Eniscope energy monitoring system displayed on big screens on each campus showing real time energy usage. Regular updates on savings
<ul style="list-style-type: none"> Senior Management support 	<ul style="list-style-type: none"> The project was one of a number of sustainable initiatives that have been fully supported by the Principal and the Executive team.
<ul style="list-style-type: none"> Funding a project 	<ul style="list-style-type: none"> The investment in Eniscope energy monitoring system has already proven its worth by paying for itself with the savings generated in the first four months. No cost/low cost initiatives such as presentations and posters

Performance and results

By the end of our Campaign year 1 August 2013 – 31 July 2014, Dundee & Angus College had reduced its electricity consumption by 545,763kwhs, generating a 270 tonnes reduction in CO₂e as well as a saving of around £56,000. This reduction represented an overall reduction in electricity consumption of 10% in one year, and contributed to the College reaching an overall carbon reduction of over 30% since the implementation of its 5 year Carbon Management plan in 2011.

The savings generated will be re-invested in the future development of the College estate and in particular systems and equipment which will assist in further reducing our carbon footprint.

Section 3 The future

Lessons learned

Together we can make a difference. By including both staff and students and keeping them up to date with savings (or lack of), we are able to make a bigger impact than trying to do it on our own. Support from the Principal and Senior Management team was also critical to the success of the campaign, in particular investment in sustainable systems and equipment that have short payback periods.

Partnership working with the Student President and Student Association also assisted greatly in engaging effectively with the students.

Sharing our project

Our successful presentation and poster campaign will be updated and again taken to staff and a fresh intake of students. We are confident we can reach at least 90% of all staff and students with this approach. To further aid and assist with our campaign over the coming year, the College Environmental Officer part-time provision has been increased to full-time and the Student Association have also appointed a Sustainability Officer which will further enhance the student engagement aspect of our campaign.

Our drama students are also planning to use our project as a theme for their annual drama roadshow which they take out to primary and secondary schools in the Dundee and Angus area.

What has it meant to your institution to be a Green Gown Award finalist?

Dundee & Angus College are extremely proud to be a finalist for the Best Newcomer award. The Green Gown Award Finalist recognition is a fitting endorsement for the College Environment team, staff and students who have embraced the '**Shut Down Switch Off!**' campaign with passion and enthusiasm.

It has also further enhanced our reputation within the FE Sector, as well as with our external stakeholders and the wider community.



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Eniscope Energy Monitoring System - www.energyperspective.co.uk