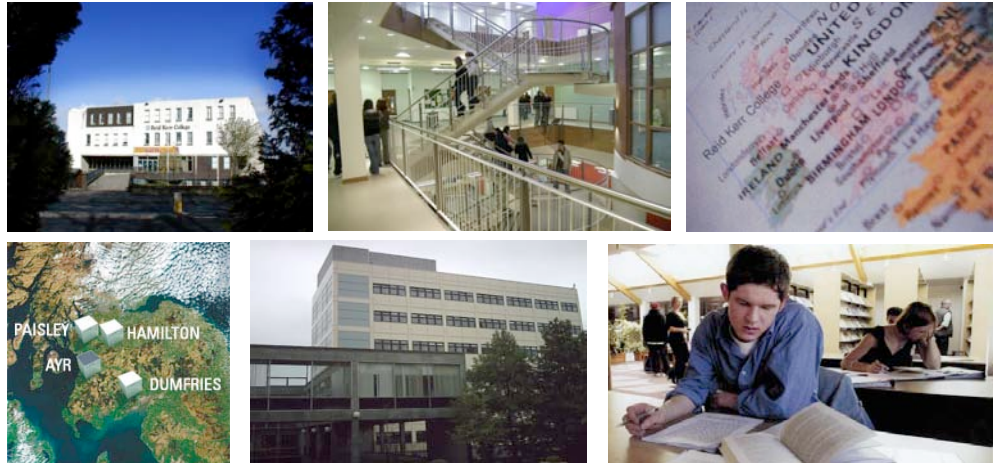## AMA

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EAUC

Behaviour Change Management Programme

Final Report on:
WorkWare SUSTAIN toolkit
Change Management Action Plans

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Version 2.0

Behaviour Change Management Programme

facilitated by: **eauc** The Environmental Association for Universities and Colleges

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In partnership with:

Action for Sustainability | **AMA** Alexi Marmot Associates | **esd** consulting | **Delaney & Hart** | **n u s** national union of students | **Sustainability** Insight

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1   Introduction

1.1 Behaviour Change Management Pilot (BCMP)
Identifying how best to engage with staff and students to achieve the wide scale reductions in energy use and carbon emissions needed to protect and conserve our environment is a key challenge for educational institutions.

Recognising this challenge the EAUC is developing a package of materials and services to support the promotion of sustainable behaviour. The package will benefit signatories of the University and Colleges Climate Commitment for Scotland (UCCCfs) and the wider sector.

A pilot project to test the package has been funded by the Scottish Funding Council, running from September 2010 to February 2011 after which the overall project will be formally evaluated. The University of West Scotland and Reid Kerr College, both based in Paisley, Renfrewshire, acted as pilot participants.

1.2 WorkWare SUSTAIN toolkit
As part of this project AMA Alexi Marmot Associates deployed the WorkWare SUSTAIN toolkit at both institutions. Devised to inform behaviour change programmes to reduce energy and carbon, the toolkit's objective is to gather evidence on attitudes and behaviours of students, staff, estates and energy managers across key topics: space and energy use; environmental governance and policy; energy saving; travel; recycling and waste, catering and purchasing.

1.3 Change Management Action Plan
Following the consultation and data review process, each institution was provided with a summary of findings and a recommended change management action plan identifying:

a) The greatest opportunities for energy saving through behaviour change;

b) The groups and behaviours most amenable to change;

c) Recommended change management tools;

d) Benchmarks against which future change can be evaluated.

1.4 About this report
The purpose of this report is provide EAUC with:

*   a review of the pilot implementation and recommendations on the future application of the SUSTAIN toolkit;

*   a summary of key findings from the SUSTAIN toolkit and emerging recommendations on promoting sustainable behaviour across the education sector.

2 Pilot implementation

2.1 The pilot institutions
The University of the West of Scotland is the largest modern university in Scotland, with approximately 20,000 students and 1,500 staff. It is located across four main campuses - Paisley, Hamilton, Ayr and Dumfries. Given the geographical distribution of the campuses the main focus of the pilot were the Paisley and Hamilton campuses. The main university contact was Claire Roxburgh, Energy & Environmental Manager.

Reid Kerr College is the tenth largest college in Scotland, and is located close to the UWS Paisley campus. There are approximately 18,000 students and 550 staff based across three sites. The main college contact was Judith Paxton.

Like many educational estates, campuses at both institutions comprise a mix of old and more recently constructed buildings, which presents significant challenges in terms of energy use and management.

2.2 WorkWare SUSTAIN toolkit
The following WorkWare SUSTAIN tools were applied within the UCCCfS Behaviour Change Management Pilot:

- Site visits to review campus facilities
- Interviews with key stakeholders in energy and carbon management
- SUSTAIN questionnaire (web-based) issued to staff and students
- Facilities management questionnaire (FMQ)
- Review documents and policies
- Collation and interpretation of available information relating to sustainability, space and energy use

The following additional elements of the WorkWare SUSTAIN toolkit were excluded from the pilot as they were considered too resource intensive for the project scope:

- Detailed building walkthroughs
- Focus groups with staff and students

These could be included as additional components of future projects.

2.3 Implementing the toolkit

2.3.1 Site visits

Visits to each institution were scheduled during September 2010 in order to conduct a short walkabout of campus facilities, hold interviews, gather data to inform the FMQ and make detailed arrangements for the distribution of the SUSTAIN staff and student questionnaires. Requests for information on energy and space use and for interview contacts were made in advance.

A total of 1.5 days were spent on site at UWS (1 day at Paisley campus and 0.5 days at Hamilton) and 1 day at Reid Kerr. The duration of the visits was sufficient to hold arranged interviews and conduct a short tour of public campus facilities (e.g. reception areas, corridors, canteen facilities, external areas).

To conduct a more detailed walkthrough of campus facilities, including sample teaching, learning and workspace areas, would require additional time – dependent on the size of the estate. This activity would provide more data to inform recommendations on how the physical environment can be used to promote sustainable behaviour and could be included as an optional extra for future projects.

2.3.2 Interviews with key stakeholders

At project inception, requests were made to hold face to face (or telephone) interviews of up to 45 minutes with key stakeholders in energy and carbon management at each institution. The table below shows the roles suggested by AMA `and the representatives provided by each institution.

AMA Suggested Role	Reid Kerr representatives:	UWS representatives:
Estates Director (or equivalent)	Finance Director (responsible. for estates)	Depute Director of Estates
Energy/Sustainability Manager	Facilities Manager	Environmental Manager
ICT Manager	Director of Information IT Manager	ICT Director
HR Manager	Director of HR HR Manager	
Catering manager	Catering Manager (outsourced)	Catering Manager (Hamilton campus only)
Procurement manager	Finance Director Procurement Manager	Procurement Manager
	Student Liaison Officer Student President	

Interviews provided a wealth of context and information and were invaluable in preparing the change management action plans. While not specifically requested, discussions with the Student Liaison Officer and Student President at Reid Kerr were very useful and should be included as standard.

For a 'light touch' study the above list of people is able to provide the base information required to inform the change management action plan. To conduct a more in-depth review of organisational culture and propensity to embed change, it would be necessary to also meet with:

- Principal/Vice Chancellor
- Faculty/Department heads (to discuss curriculum and sustainability)
- Sustainability champions (staff and students)
- Members of staff sustainability boards/action groups
- Student president or NUS representatives
- Members of active student groups (e.g. people & planet)

Meetings may either be held individually or in group settings, depending on what is most appropriate for a given institution. Holding focus groups with staff and student representatives would also enable greater understanding of current barriers and opportunities for change.

2.3.3 SUSTAIN questionnaire

The SUSTAIN questionnaire is designed to provide a baseline of staff and student attitudes and behaviour relating to sustainability on campus and includes a series of questions devised by DEFRA to enable wider benchmarking against national surveys. During September the final content and format of the SUSTAIN questionnaire was agreed with EAUC, NUS Services and individual institutions. The questionnaire is completed online, taking about 10 minutes.

At UWS the questionnaire was available for a 3-week period and was issued to all staff by email. It was also available to staff and students to complete via a link placed on Blackboard.

At Reid Kerr the questionnaire was also available for a 3-week period (including half term) and emailed to all staff. In parallel it was made available on the student intranet and sent by email to 140 students by the Student President. Regular reminders to complete were sent during the live period and several prizes of £20 vouchers for a local shopping centre offered to students.

At Reid Kerr 38% of staff responded to the questionnaire, compared to only 13% at UWS – the difference most likely due to the frequency of reminders issued. For students, response rates were low at both institutions. A total of 139 responses were received from students at UWS and 104 from Reid Kerr (less than 1% in each case), suggesting that achieving higher response rates requires better marketing of the

questionnaire – possibly through posters, bulletins to course leaders and bigger prizes. Data from other AMA projects shows at least a 13-15% response rate from students is possible where these tools are used.

Low response rates and project scope precluded breakdown of results by department and/or role – again this may be optional for future projects as it would enable the development of a more detailed framework for opportunities for change within different groups.

2.3.4 Facilities management questionnaire (FMQ)

The FMQ was originally developed for office buildings, to be completed during a facilitated interview with the designated facilities manager. The tool was specially adapted for this pilot but, given the greater complexity of educational environments, could not be completed by one designated individual. Instead parts of the FMQ was completed by AMA based on findings from interviews and walkthroughs.

Based on this pilot study AMA has identified a series of updates to the tool required to improve the scoring mechanism which will be implemented before the SUSTAIN toolkit is launched as part of the UCCCfs resource pack.

2.3.5 Information/Data on sustainability, space and energy use

A thorough review of all available information and data on sustainability, space and energy use was conducted in order to compare against available benchmark data and determine the extent to which sustainability was embedded into organisational processes.

AMA Requested information	Reid Kerr provided:	UWS provided:
Most recent EMS/eMandate return spreadsheet	Not available – data not collected	Yes
Any separate held records on annual energy consumption	Yes	No
DEC ratings for each separate building across all campuses	Most buildings	Most buildings
Building floor plans	Yes	No
Carbon Trust Carbon Management Plan	Yes (not fully complete)	Yes
UCCCfs Climate Change Action Plan	Not available	Yes
Sustainability policy/statement	Yes	Yes
Relevant organisational policies	Green travel policy Family friendly policy Purchasing policy	Procurement policy ICT strategy
Details of previous staff awareness campaigns	Example newsletters	Communicating sustainability strategy

Most relevant policies were available, however data on space holdings and energy consumption were more difficult to obtain and often partially complete or difficult to interpret. This in part reflects the complexity of data and reporting processes. The step by step guide to finding, collating and reporting data produced by Action Sustainability for the resource pack should be invaluable for energy and carbon data. In future EAUC may wish to work with AMA to provide a sister publication which outlines how to record and actively manage data on space holdings.

In parallel a review of each institution's website was conducted to identify sustainability references. It would be useful in future to repeat this process for staff and student information portals e.g. intranet, blackboard etc. to gain a more detailed understanding of how information is presented to the university community and how easy it is to access.

2.4 Summary of recommendations

- Offer two versions of the toolkit:
    - o WorkWare SUSTAIN LITE – as per pilots;
    - o WorkWare SUSTAIN - full version including additional time to conduct detailed building walkthroughs, wider interviews and focus groups with staff and students.

- For both versions offer a detailed analysis of questionnaire results by department/role as an optional extra.

- Based on pilot study findings make the following updates to existing SUSTAIN methodology:
    - o Ensure student representation during interview process;
    - o Revise the Facilities Management Questionnaire;
    - o Conduct a review of information availability on staff/student intranet portals.

- Develop guidelines and template communication materials to encourage increased response rates and consider including an eco-themed prize as standard (cost included in fee).

- Develop a sister publication to the UCCCfs guide on how to find, collate and report energy data which outlines how to record and actively manage data on space holdings.

3 Key findings from SUSTAIN toolkit

3.1 Summary data tables

The following tables show key metrics emerging from the study that provide a set of benchmarks against which projects can be evaluated.

	University of West Scotland	Reid Kerr College
Total staff*	**1,500**	550
Total students*	20,000	18,000
Total Gross Internal Area	139,618	28,612
GIA per learner FTE**	7.0	4.3
Total carbon emissions per annum (tonnes)	13,002	2,130
CO_2 emissions per learner FTE	0.65	0.12

	Staff	Student	Staff	Student
Beliefs, attitudes and motivation				
Ecological worldview score (DEFRA)	75%	62%	66%	50%
Motivation score (DEFRA)	68%	52%	64%	41%
% people fully/partly aware of sustainability policy	70%	40%	80%	59%
Campus behaviour				
% people always/partly perform environmentally friendly behaviours	63%	56%	63%	59%
Business travel				
Tonnes of CO_2 per person per annum	0.9	0.1	0.7	0.1
Daily commute				
% people who drive solo to campus	61%	27%	70%	20%
Tonnes of CO_2 per person per annum	0.7	0.1	0.7	0.1

3.2 Policy, attitudes and behaviour

Similarities and differences between results from the two pilot studies allow some preliminary findings to be drawn from the SUSTAIN toolkit:

- A post of environmental officer, or similar, acting to co-ordinate activity across the institution, significantly increases the extent to which sustainability and carbon management is embedded in policy and practice;

- Governance processes for sustainability are in place although a key challenge is engaging staff and students who attend meetings to own issues and progress them;

- There is clear potential to grow and expand environmental champion networks, recruiting both staff and students;

- Work by the Carbon Trust has helped build a clearer picture of the organisational carbon footprint, although the contribution of staff business travel has been underestimated;

- Targets for carbon reduction by 2014 have been set and a range of projects identified to achieve this target;

- Improvements to the amount and quality of data on energy use are being made, e.g. installation of automatic meter readers, collation of data on central spreadsheets;

- Minimising energy wastage in existing buildings which are either inefficient or in a poor state of repair will be a key challenge moving forward – innovative retrofit solutions must be explored alongside new build projects;

- Fewer than 50% of staff and students currently agree that sustainability is a core part of the institutional vision;

- While most staff are aware that their institution has a sustainability strategy many do not know the full details. A large proportion of students are not aware of the existence of a sustainability strategy;

- Staff and students report a strong belief that people should be personally responsible for acting in a more environmentally responsible way. This does not however translate clearly to behaviour.

- Both staff and students report a greater frequency of reducing overt energy waste (e.g. by switching off computers and lights, turning down thermostats) than avoiding carbon intensive activities (e.g. flying, purchasing over-packaged or non-disposable products).

- Despite reporting a high frequency of minimising energy waste, over 50% of staff and students report regularly seeing energy wasted on campus through unnecessary heating and lighting. Very few people report this energy waste to the facilities team;

- Compared to national averages there are more staff and students who report doing little to help the environment. However they would like to do more;

- Staff are generally more environmentally conscious and concerned about climate change than students;

- Students would like more information about what they can do to be more environmentally friendly. A significant number of both staff and students want any changes to fit with their current lifestyle;

- Students are more inclined than staff to be influenced by financial reward and peer group behaviour;

- Amongst staff, car use is heavy – both for business travel and commuting to campus. There are few disincentives to drive and many people are travelling short distances (5 miles or less) by car.

- Recycling rates for consumables other than paper are generally quite low and could be improved. Student recycling rates for paper are significantly lower than staff. Staff are good at paper recycling but other recycling can be improved

- At present very few staff and students prioritise purchasing products or meals which are environmentally friendly when on campus.

3.3 Promoting sustainable behaviour

AMA has conducted research into how to engage successfully with staff and students to promote sustainable behaviour. Key areas of influence upon attitudes and behaviour in educational environments can be broadly distilled into three main categories: university policies, curriculum and social influence. Key recommendations based on an analysis of findings from the WorkWare SUSTAIN toolkit across both pilot studies are given below:

3.3.1 Engagement through policy – for the institution

- Develop a clear and simple mission statement - outline clearl commitment to change;

- Define a low carbon vision and communicate widely, making it personal to staff and student bodies. In parallel outline clearly commitment to change;

- Publicise what the institution has done already, future plans, what staff/students can do;

- Create a visually engaging version of the sustainability strategy and communicate widely;

- Increase visual prompts on campus - signage, recycling bins, purchasing and catering promotions (e.g.. Buy recycled, meat-free Mondays);

- Maintain up to date records of space and energy use and benchmarks and use a simple reporting mechanism to feed back energy use to management meetings/department heads;

- Monitor business related travel and continue to work with suppliers and catering providers to promote environmentally friendly options.

3.3.2 Engagement through curriculum

- Work with teaching staff and students to explore how sustainability can be embedded in the curriculum;

- Hold focus groups to find out what information/learning opportunities staff and students would like;

- Develop a program of extra curricula activities which explore environmental issues and solutions and encourage university wide debate.

3.3.3 Engagement through social influence

- Hold a series of regular open meetings at every campus to share ideas and encourage action;

- Use shared noticeboards (physical or online) to promote departmental competition, collect ideas and incentivise action;

- Recruit and train champions and develop support materials; consider using annual awards or a points scoring system based on activity to motivate action;

- Work with student committee to develop roles and responsibilities of environmental officers

3.4 Key areas of focus for behaviour change

- Expanding environmental champion networks and incentivising action within role

- Saving energy on campus – reinforcing switch off campaigns through increased visual prompts, encouraging environmental guardianship and reporting of energy wastage

- Choosing paper saving print options and switching off shared equipment

- Reducing business related air travel and car use (staff only)

- Reducing the number of solo car drivers who commute to campus through car share incentives and parking charges
- Promoting cycling and walking for students supported by buddy schemes, lockers and showers
- Increasing staff recycling of cans, plastic bottles and electrical equipment and increasing student recycling of paper based materials.

3.5 Key campaign messages and focus

- Many staff and students would like to do more to help the environment and believe climate change is a problem that can be solved.
- There is a strong belief that people should be more personally responsible for behaving in an environmentally friendly way
- Gather pledges to do more, with specific ideas for departmental initiatives
- Begin with changes that can be made without significant lifestyle change
- For staff, focus on reward and recognition instead of financial motivators; for students provide a mix of incentives
- Promote environmental behaviours with low rates of take up by profiling behaviours with high take up (to help promote image of an environmentally conscious community).