ABERDEEN COLLEGE CLIMATE CHANGE ACTION PLAN
PROGRESS REPORT MAY 2011

Introduction

As part of Aberdeen College's Environmental Management System, ISO 14001 accreditation and EcoCampus Platinum Award, an action plan with targets is required where the environmental significance of activities is high.

The College is also a signatory to the Universities and Colleges Climate Commitment for Scotland (UCCCfS) and this requires the College to *implement measures to reduce the overall carbon footprint and engage in the community planning process to deliver low-carbon solutions ("mitigation") by preparing a five-year climate action plan with targets and timescales to achieve significant reductions in emissions from activities.*

The College has chosen to ensure there is only one action plan in place to avoid confusion. Therefore the action plan prepared for the ISO14001 standard has been revised to fulfil the needs of UCCCfS and the ISO 14001 standard.

The College's 5 year Climate Change Action Plan, published in January 2010, was produced to support the delivery of its Climate Commitment, signed on 21 January 2009. Aberdeen College recognises that this requires the allocation of time and resources and therefore the plan has become part of the strategic and operational planning process.

This report records progress made against specific actions identified in Aberdeen College's Climate Change Action Plan since its inception and also identifies further measures implemented by the College to support the sustainability agenda.

Enhancement of Learning and Teaching

Aberdeen College is committed to ensuring that all learners develop citizenship and employability skills that prepare them to be effective contributors, confident individuals and responsible citizens.

The College curriculum includes the development of the core skills of communication, numeracy, IT, Problem Solving and Working with Others.

Environmental Sustainability is considered by the College to be the 6th core skill and this is increasingly being taught across a wide range of courses, contextualised to meet the particular needs of the industries involved.

The following courses include a discrete unit on Sustainability:

- Construction Apprenticeships
- HND Electrical Engineering
- Planning and Sustainable Development unit in HND Travel and Tourism
- Surface Travel unit in Year 1 HND Travel and Tourism
- Environment and Efficiency units delivered to Learning Opportunities students
- Social Awareness and Development includes a project on recycling (this is undertaken by Learning Opportunities students)
- SVQ 1 Food preparation and SVQ 1 Bakery includes projects on waste and recycling
- Self in Society raises awareness of sustainability issues
- NC Digital Media includes an Enterprise activity based on the themes of "reuse; reduce; recycle"
- City and Guilds Computing courses include regulations on disposal of electronic equipment under WEEE guidelines
- Managing Environmental Resources included in Land-Based and Service Engineering

- The World of Carbon unit develops understanding of use of natural products
- Environmental Biology and Genetics and Principles of power included in some Science courses

The integration of sustainability into the College curriculum can also be demonstrated through the following examples:

- Design for Life: HND Textiles students make garments from fabrics from charity shops and these students have also used recycled materials for a WASTE Project where they made waistcoats for the Unit in Design Semantics
- Exhibition and award for Photography Sustainability Brief
- MMC television courses stress the importance of energy conservation
- The Charity Shop operated by Learning Opportunities students raises awareness of re-using materials and the benefits to charity
- MMC project with the RSBP and the Wildlife Conservation Trust to produce a video - both organisations are committed to raising awareness of environmental sustainability and this is of benefit to the students producing the materials
- Students in Business and Economics courses study depletion of natural resources; development of alternative energies; destruction of habitats and impact on society and support for less developed countries
- Students on Marketing courses study the influence of environmental pressures on society and business
- Office Administration courses include electronic data storage and electronic communication
- Advertising and PR students examine high profile campaigns such as those of M&S and John Lewis
- Hair and Beauty students ensure safe disposal of all materials. Needles used for Electrolysis are disposed of by the Local Authority in line with their guidelines
- All electrical equipment used in Hairdressing and Beauty is disposed of in accordance with the Equipment Disposal Procedure

The College only uses paper where it is essential to do so. For example, on many courses, such as Visual Communication, all materials are posted on the VLE and assessments are submitted and marked electronically.

Hybrid delivery (reduced face to face hours and increased self study) now accounts for the main learning method in 15 courses. This reduces travel time and the related impact on the environment and also paper as materials are stored and accessed electronically.

The following are further examples of efficient uses of materials and resources within the College:

- Students on Construction and Engineering courses recycle materials
- Art and Design staff collect waste cardboard from the Council to use with classes
- Chemicals used in Photography courses are collected by the technician and disposed of safely to protect the environment.
- Each classroom has a recycling bin for paper and students recycle all redundant notes
- All foodstuffs in Hospitality are recycled

The good practice examples detailed above are being rolled out across the College through the Good Practice in the Curriculum arrangements and by managers and staff at all levels.

ABERDEEN COLLEGE CLIMATE CHANGE ACTION PLAN
PROGRESS REPORT MAY 2011

Reduction of Carbon Emissions

The table below shows the consumption or usage of key inputs in the 7 months from 01 August 2010 to 28 February 2011 compared to target for the full academic year 2010-11.

Category	Unit	AY2010-11 Target	AY2010-11 Actual to end of February 2011
Gas	KWHr	2,928,043	2,731,803
Electricity	KWHr	4,238,103	2,283,546
Heating oil	Litre	528,213	355,251
Water	Cubic Meters	22,795	13,965
Vehicle Usage	Miles	142,661	82,086
Photocopying	Number	7,169,333	2,845,998

Electricity use, vehicle use and photocopying are within target. In academic year 2009-10 vehicle use exceeded target and efforts to reduce usage have focused on better timetabling of classes and the increased use of video conferencing between sites and external to the College. It is estimated that video conferencing this academic year to date has saved 12,000 miles in addition to saving staff travel time.

Heating oil usage is on target for the time of year given the worst of the winter months are now past.

Gas usage has climbed rapidly following the opening of the new Altens building and the increase in the floor area of the College. This will partly be rectified when the Gordon centre closes and the heating of the older Altens buildings is apportioned between ASET and the College.

The consumption of water is around 3% above target currently and is anticipated to be on target by the year end as usage drops towards the end of the academic year.

Therefore overall the College is on target to achieve the Climate Change Action Plan.

Waste Reduction, Recycling and Responsible Disposal

The targets aim to decrease the overall production of waste whilst increasing the proportion of waste that is segregated as against general waste.

The categories of waste have expanded since the baseline targets were established to include food waste and metal. Most of the targets are expressed as tonnes of waste (paper, card, plastic, wood, construction, food and metal) but some are expressed as "items" (electrical goods and printer cartridges). The "items" are not included in the calculation of percentage segregated which relates to weighed items only.

ABERDEEN COLLEGE CLIMATE CHANGE ACTION PLAN
PROGRESS REPORT MAY 2011

The table below shows the production of waste and its breakdown into different waste streams for the 7 months from 01 August 2010 to 28 February 2011 compared to target for the full academic year 2010-11.

Category	AY2010-11 Target	AY2010-11 Actual to end of February 2011
Paper	21	20
Card	50.4	22
Plastic	8	3
Wood	22.7	12
Construction waste	153.5	29
Food	11	5.8
Metal	26	22.5
General waste	219.2	145
Total	511.8	259.3
Segregated percentage	57%	44%

Total waste excluding electrical good and printer cartridges produced by the College is 259.3 tonnes to date of which 44% is segregated. The segregation percentage has increased by 3% from 41% last year.

The overall production of waste by the College is below target, however the production of general waste is above target and further work is required to reduce this by 2.5 tonnes per month or 12%.

The good practice of many suppliers is making it more difficult to achieve the level of segregation the College would like to achieve. Suppliers have generally reduced packaging or remove the packaging as part of the supply contract. Generally this type of waste is easy to segregate, however it does help to reduce the College's overall waste production.

The table below shows number of electrical items and printer cartridges for the 7 months from 01 August 2010 to 28 February 2011 compared to target for the full academic year 2010-11.

Category	AY2010-11 Target	AY2010-11 Actual to end of February 2011
Electrical items	333.4	146
Printer cartridges	525	405

ABERDEEN COLLEGE CLIMATE CHANGE ACTION PLAN
PROGRESS REPORT MAY 2011

Sustainable Estate Development

In 2010, the College completed the construction of a new campus building, which features a range of features designed to generate positive environmental impact through CO_2 reduction. This new building has the following features:

o   25 kW Wind Turbine
o   BREEAM "Excellent" rating
o   Solar Panels
o   Natural ventilation
o   Modulated lighting
o   Insulation levels higher than building regulations
o   Radiant heat in workshops
o   Collection and recycling of rainwater for use in the building
o   Gas condensing boilers
o   Movement controlled water taps
o   Movement detectors to control heating levels in rooms

The College's estates strategy however has gone further than this new building to address the sustainability agenda. Decisions on the future of the other College campuses have been directly influenced by environmental considerations, and existing buildings are now being reused and recycled.

The College's main campus is a city centre site, built in the 1960s, and in 2007 plans were made to disperse the College's activity away from this site into new-build premises. However, following review in 2010, a decision, influenced by environmental and financial factors, was made to remain in the existing building, and work has been started to reduce significantly the carbon footprint within these facilities. This includes energy efficient lighting, the installation of new high efficiency gas condensing boilers to replace inefficient oil-fired plant, and the introduction of an effective monitoring system to record waste and recycling statistics. The switch from oil to natural gas as the main fuel source for the Gallowgate building will reduce the CO_2 output of the College by 358 tonnes or 7.8%.

The overall net effect of the College's decision to reuse the existing College campus (based on a replacement building of 40,000m^2) is estimated to be a saving of 7,187 metric tonnes of CO_2.

One of the factors influencing the decision to remain in this building was its situation on a large number of public transport routes, which complements the College's positive actions to encourage staff to reduce car usage. These actions include the provision of cycle lockers, the introduction of car share opportunities and a Multiple Occupancy Car Parking scheme.

Sustainable Travel Planning

Aberdeen College has developed a Green Travel Plan, approved by the College's Senior Management Team, and available to all staff through the College intranet.

Responsible Procurement of Goods and Services

The College continues to ensure that sub-contractors and suppliers involved in large workscopes adopt appropriate environmental standards.