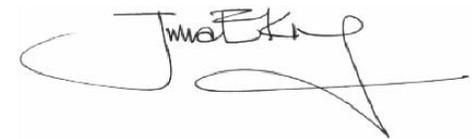


Sustainable Aston Working Group Annual Report 2008/2009



“The future of the environment is the responsibility of all of us, both collectively and individually.”



Contents

Introduction	2
Governance	2
Sustainable Aston Working Group	2
Sustainability Team.....	3
Policies / Documents.....	3
Major Achievements.....	3
Procurement	4
Curriculum	5
United Nations Principles of Responsible Management Education (UNPRME)	5
ABS Curriculum Report.....	6
Research	6
European Bioenergy Research Institute (EBRI)	6
Centre for Sustainability and Innovation (CSI).....	7
Sustainable Environment Research Group (SERG)	7
Campus	7
Residences development.....	7
Combined Heat and Power (CHP)	8
Transport plan.....	8
Waste management.....	9
Community.....	9
Volunteering / mentoring schemes	9
Fairtrade	10
Events.....	10
Future plans.....	11

Introduction

Aston University is committed to sustainable development and is aiming to become a leader in this field. This report summarises our achievements over the last academic year (2008/2009) and outlines our priorities and plans for 2009/2010.

Prior to 2008/2009, Aston had already taken a number of steps towards improving our environmental performance. Our Vice-Chancellor, Professor Julia King, has wholeheartedly supported our actions in this area.

- In 2007, the Sustainable Aston Working Group was launched and subsequently developed Aston's Sustainability Aims and the Sense of Direction document which is used to guide the groups work.
- Also in 2007, Aston was awarded Fairtrade status by the Fairtrade foundation, following the adoption of our Fairtrade policy in June 2007.
- During 2007 Aston worked together with Atkins Consultants to produce a Transport Action Plan, designed to reduce the carbon footprint of our staff and student travel.
- In January 2008, Aston appointed an Environment and Sustainability Manager; this led to the development and adoption of our University Environment Policy, approved by the Executive, Council and the Students' Guild.
- In March 2008, Aston held a Teaching and Learning workshop to establish where and how sustainability was being taught, and how it could be further incorporated into the curriculum.
- During the summer of 2008, two research seminars were held to bring together sustainability research from across the University's four schools: Life and Health Sciences, Engineering and Applied Sciences, the Business School and Languages and Social Sciences.

Governance

Sustainable Aston Working Group

The Sustainable Aston Working Group (SAWG) was created by a group of passionate individuals, determined to make a difference, and has grown into an interdisciplinary group of academics, students and support staff. Although SAWG remains a lobby group, rather than a formal committee, the role of SAWG has developed to include:

- responsibility for implementing Aston's Sustainability Policy;
- monitoring of Aston's progress towards sustainability and produce an annual report;





A selection of SAWG members

- promotion of initiatives and programmes to enhance sustainability within both the University and the wider community, and with respect to all aspects of research activity;
- striving for the incorporation of sustainability within all taught programmes;
- implementing the sustainability agenda within the University Strategy “Aston 2012”.

A network of satellite groups to the Sustainable Aston Working Group is evolving. There are currently sustainability groups focusing on [Procurement](#), the [School of Life and Health Sciences](#) and Aston Business School. At Aston University there is also a [Fairtrade Steering Group](#), a [Bicycle Users Group](#) and a student [People and Planet](#) Group.

Sustainability Team

To enable Aston University to deliver its commitment to environmental improvement an Environment and Sustainability Manager, based in Estates and Facilities, was appointed in January 2008. Aston also appointed an Environment and Sustainability Officer in October 2008. The team work together on implementing projects and policies as well as communicating progress to staff and students.

Policies / Documents

In the last year, SAWG and the Sustainability Team have been instrumental in the creation and adoption of Aston’s Sustainability Policy and Ethical Investment Policy. SAWG also developed a Definition of Sustainability for the University, to be used as a basis for any future documents. The Sustainability Team have also created Aston’s first Carbon Management Plan, with targets to reduce overall carbon dioxide emissions by 16% before year end 2009/2010. All these policies are available for the public to view online, through the Environment and Sustainability web pages <http://www.aston.ac.uk/environment/>. However, although having these policies in place is important SAWG believe that action is equally important and Aston is committed to making real improvements in its performance.

Major Achievements

Aston has made a lot of progress this year, a fact which was highlighted in the People&Planet Green League, published in June 2009. The University jumped an incredible 27 places, from 45th to 18th in the league, up from 93rd only two years ago. This placed us in the First Class category which included only 20 out of the 127 universities that submitted information.

Also in 2009, Aston put forward a successful bid for the Revolving Green Fund and received £250,000 of funding to put into energy saving schemes. This will be spent on, amongst other projects, covering our swimming pool, installing more efficient metering systems and lighting and insulating our pipework. This will result in significant energy and carbon dioxide reductions in the future, with estimated savings of over 450 tonnes CO2 every year. All the projects are designed to have a payback period of less than 3 years, allowing us to reinvest the money into new energy saving projects.

Procurement

Turning the theory of environmental sustainability into a reality on campus is a challenge which is being tackled by the Sustainable Procurement Working Group (SPWG).

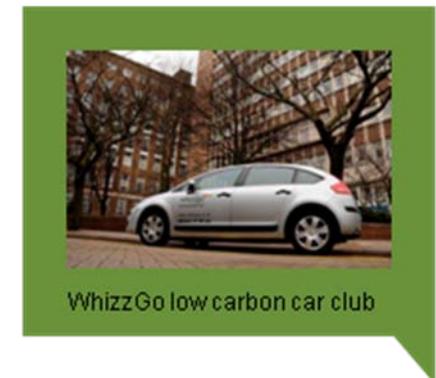
During 2008/2009, the SPWG made a lot of progress; in particular by securing agreement to use only 100% recycled paper across the entire University; organising the contract for WhizzGo, our on campus car club and organising and participating in events such as the Procurement Environmental Day in 2008 and the Aston Green&Fair event in 2009. The SPWG is also working on our waste management contracts, IT equipment, and developing a Sustainable Procurement Policy.

2009 has also seen some changes to cleaning services; the cleaning products used at the University have been reviewed and have been dramatically reduced and chemical dilution stations have been installed on site to reduce transport; a system to replace hand towels with energy efficient hand dryers has also been started.

Astons catering department has also been reducing waste through the introduction of Mugs for Life to reduce the amount of paper cups being used; these have proved very popular with both staff and students. Catering has also sourced a supplier for compostable cups and food containers, in readiness for the on-site composting facilities we plan to install next year.

Information Services Aston has been working with the SPWG on ways to reduce the environmental impact of our IT equipment. In the last year, the department has introduced recommendations for the latest processor technology, which cuts the average power consumption in half while offering around a 40% higher performance rate. ISA has also implemented an automated switch off policy – all lab computers turn off automatically if they are unused for 30 minutes. Another of the key steps this past year has been in introducing new systems to enable departments to work towards the 'paperless office'.

To address the issue of disposal, ISA has introduced a new policy ensuring that everything we purchase, from computers to servers and paper to printer cartridges, is the most environmentally friendly available. In particular, ISA has focused on improving the printers across the University; all new



printers are Kyocera models which comply with the new Blue Energy Star standard, use significantly less energy than other models, emit zero ozone and are designed for easy recycling at end of life.

Curriculum

One of the core aims of sustainability at Aston is to ensure that no student graduates without an insight and understanding of the principles involved and its relevance to them as individuals. Consequently over the past 12 months a cross disciplinary group has been exploring the teaching of sustainability within Aston, and out of these deliberations, three strands have emerged.

Firstly an interdisciplinary combined honours course on sustainability will be launched, with the first intake in October 2010. Secondly, the Business School will be hosting an MSc focusing on the themes of social responsibility and sustainability, which will draw on expertise from all Schools across the University.

Finally, it is proposed that a relevant aspect of sustainability be integrated into every taught programme within Aston. As a first step towards this, a seminar is being organised for January 2010, with invited speakers from across the UK sharing their experiences.

United Nations Principles of Responsible Management Education (UNPRME)

The mission of the PRME initiative is to inspire and champion responsible management education, research and thoughtful leadership globally in order to develop a new generation of business leaders capable of managing the complex challenges faced by business and society in the 21st century. Aston Business School became an early signatory of this initiative in 2008, committing to incorporate these issues into their curricula, research and institutional strategies.

In December 2008, ABS representatives attended the First Global Forum at the UN in New York with representatives of 270 Universities from across the globe to discuss the implementation of the principles into Higher Education. On June 19th 2009, ABS co hosted the UK follow up event to the UN Global Forum at Aston Business School. The event was supported by The British Academy of Management, The Association of Business Schools and The Higher Education Academy and welcomed more than 40 delegates from Universities across the UK plus academics from Spain, the USA and Australia. Professor Julia King introduced the days sessions and speakers included the Chief Executives of the Association of MBAs, The Association of Business Schools and representatives of a range of Universities including Warwick, Royal Holloway, Sheffield and Carole



Parkes from Aston. In July 2009, Carole Parkes was also invited to attend the American Business Schools accreditation organisation - AACSB (The Association to Advance Collegiate Schools of Business) Sustainability Conference to discuss the inclusion of the UN PRME principles into their accreditation requirements.

ABS Curriculum Report

As part of the ABS commitment to the PRME initiative, a complete review of all modules and courses in both the Undergraduate and Postgraduate programmes in Aston Business School was undertaken during 2008/09. Following this, recommendations have been endorsed within the school:

1. Incorporating Social Responsibility and Sustainability into the core programme for all ABS undergraduates with the aim of producing Social Responsibility and Sustainability literate graduates.
2. Including core content that addresses Social Responsibility/Sustainability and related issues in all MSc courses.
3. Investigating the introduction of an MSc in Social Responsibility and Sustainability.

Research

The University has a significant presence in sustainability research. The most important developments in the past year concern the European Bioenergy Research Institute (EBRI), the Centre for Sustainability and Innovation (CSI) and grants obtained by the Sustainable Environment Research Group (SERG).

European Bioenergy Research Institute (EBRI)



The European Bioenergy Research Institute at Aston University was officially launched on Monday 30th June 2008; the launch was attended by academics, Industry representatives, Governing bodies, local councils and many others.

The EBRI will create a unique platform for the development and implementation of bioenergy systems in local, national and European contexts as well as reaching the International community. The Institute, led by Prof Andreas Hornung, will also provide operational and test facilities for industry and provide heat and power to the local Aston Science Park. The EBRI's activities and complementary research at Aston University will act as a focus for pan-European activities on scientific and technological aspects of biomass production, conversion and utilisation of products used for renewable power, heat, transport fuels and chemicals.

Centre for Sustainability and Innovation (CSI)

This year has seen the launch of Aston's new CSI; this multidisciplinary initiative brought together researchers from all the Schools across the University to stimulate and develop ideas for future collaborative research focused on innovation and sustainability. The first actions of CSI have been to hold a series of internal workshops to enhance cross-disciplinary research collaboration and to run a competition for seed grants in order to encourage the preparation of larger scale research projects. The first applications were submitted in July 2009 and decisions for allocation of the grants were made shortly afterwards; details are available on the CSI web pages.

A closely related initiative and an outgrowth of the initial seminars has been the planning for a series of Aston Sustainability Colloquia, a series of one day workshops on research areas concerning sustainability which will take place throughout the 2009/10 year.

Sustainable Environment Research Group (SERG)

SERG brings together experts from a range of backgrounds; their aim is to develop tools and technologies that conserve and rehabilitate ecosystems while enabling international development. Current research projects include Natural and constructed wetlands; Biodiversity Enhancement and Management; Solar-powered cooling; Brackish water treatment system for villages in India; Tri-generation system for villages in India; Spatial Data Modelling; Micro Combined Heat and Power Systems; Automotive Vehicle Usage and Duty Cycle Development.

In 2009, SERG were successful in receiving funding for both the *Coventry and Birmingham Low Emission Demonstrators* project focussing on the testing of low carbon cars, and the Science Bridge Project (in collaboration with EBRI) to build bio-energy power plants. In March, SERG also held a successful 2 day international workshop about wetlands, attracting experts from Argentina, India, Germany and Spain.

Campus

Residences development

In July 2009 Aston received confirmation that the BREEAM Excellent rating has been achieved for the new residences project on campus. This accreditation provides a benchmark that is higher than regulation standards and ensures that best environmental practice is incorporated into a building. Construction is under way and the project is due for completion by October 2010.



Aston campus redevelopment plans

The new residences will be far more efficient than the current accommodation, with double glazing, and more sophisticated lighting, heating and mechanical systems. We are also implementing various innovative features such as greywater and wastewater recycling, green roofs and a wind turbine on the roof, along with improved recycling facilities and cycling parks in each building.



Arrival of the CHP engine

Combined Heat and Power (CHP)

Aston has just launched its own CHP plant. The plant has been operational since 1st June 2009, running at 1MW and an additional 2MW engine was delivered on the 20th July 2009 which will become fully operational as of the 1st October. The new engine is the first of its kind in the country, and the combined output of the plant will help deliver annual carbon reductions of around 4,500 tonnes.

The CHP engines will generate power whilst capturing and using the waste heat which would otherwise be typically emitted into the atmosphere. The waste heat will provide heating for the campus and the electricity will feed into our existing capacity and networks, as well as offering us the opportunity to sell on to local organisations and buildings.

Transport plan

As part of Aston's ongoing commitment to improve sustainable transport to and from campus, a number of new initiatives have been put in place this year. The results of these were highlighted by our staff and student travel survey which was conducted in March 2009; only 34% of staff now drive to work, train and bus use rose to 30.5% and 20% respectively, and cyclists and walkers now make up a combined 8.2% of staff.

There is now a WhizzGo low carbon car on campus for staff to use, and Aston has signed up to carshareBirmingham to encourage more staff to car share on their journeys to work.

Additionally, 5 new cycle shelters were installed around the campus over summer, offering facilities to store around 100 bikes and motorbikes. To encourage people to cycle, we are also developing plans to build showering and changing facilities in the Main Building.

Aston have also designed a Sustainable Transport Campus Map, available for staff, students and visitors which highlights bus routes around campus, cycle paths and shelters and pedestrian access.



Aston Sustainable Transport Map

Waste management

Aston University has committed to an ambitious target of achieving zero waste to landfill by 2012, and a short term target of increasing recycling by 20% in 2008/09. To this end we have launched a number of new schemes, including facilities to recycle ink cartridges, mobile phones, batteries and books.



Waste and recycling

A binless office system has also been trialled in some areas and is ready to be rolled out across campus over the next academic year. This allows staff and students to recycle plastic bottles, cans and glass, as well as offering more facilities to recycle paper and card. We hope to achieve a minimum recycling rate of 20% through this system which, together with the waste that we currently recycle, would bring our total recycling figure up to around 42% of all our waste.

Recycling in Halls of Residence has also been trialled this summer, with a view to putting this in place in all of our current accommodation ready for our new 2009/10 intake. Additionally, we have installed a number of new recycling facilities around campus for our students, including textile banks.

Community

Volunteering / mentoring schemes

As part of its Culture and Values Strategic Strand, the University has given its support to the development of a Staff Volunteering Scheme, to complement the already well embedded student volunteer effort. The scheme was launched at a volunteering fair in July 2009.

Staff volunteering activity will be focussed on a defined range of external organisations, whose work impacts on the communities immediately adjacent to the Aston campus and in the Birmingham area more generally and will be focused on four general volunteering themes: education, advice and support, environment / heritage, local communities.

For a number of years, the Outreach Office currently has run successful student volunteering schemes. The office currently runs two volunteering programmes for students, Active Community Engagement (ACE) and Student Tutoring, both designed to raise young peoples' awareness of Higher Education and create links between Aston University students and the local community.

Aston University is also part of the national Aimhigher Associate Scheme. The last year saw some changes to this scheme, which now focuses on using undergraduate students (Associates) to support underrepresented learners in Schools and Colleges at key points in their education so that they will be able to progress to higher education equipped with the skills and knowledge needed to succeed.

Fairtrade

Fairtrade products are currently used in all of our catering outlets as well as in our hospitality where possible. Throughout 2009/10 we hope to extend this even further with a wider range of products, increased promotion and a campaign to increase use of Fairtrade cotton products.

Continuing to demonstrate Aston's commitment to Fairtrade, this year the Fairtrade group have been involved in a number of University events, including the Green&Fair day in February and the University Open Days in September 2008 and July 2009, as well as the biggest event of the year – Astonbury where the Group organised a number of Fairtrade Fairground games to celebrate their 2nd birthday.

One of the most significant moments of the year was at our March 2009 Graduation ceremony where Aston awarded an honorary degree to Harriett Lamb of the Fairtrade Foundation. We are very proud that Harriett is now one of our Aston Alumni.

Events

This year has seen a number of sustainability related events at Aston, ranging from academic lectures and conferences, to fairs and fashion shows.

In November 2008, one of our students organised the first Birmingham Inter-University Sustainability Conference which was a huge success, bringing together staff and students from Aston University, Birmingham City University and the University of Birmingham for a day of presentations on sustainability research.

February 2009 saw the return of our annual Fairtrade fortnight event, this time even bigger and better. The Green&Fair Event was very popular, showcasing some of Aston's research, local companies and a number of eco ideas and initiatives.

To celebrate World Environment Day in June, Aston hosted it's first ever Eco-Fashion Show. This event brought together a number of local and national companies, all promoting sustainable fashion – be it vintage, recycled, Fairtrade or organic and was designed to open up sustainability to a wider audience. Hopefully this event will become another of our annual fixtures.



Finally, Aston has run a number of events to promote cycling throughout the year. The On Your Bike days, giving out information and selling second-hand bikes with charity organisation Cycle Chain were a huge success with both staff and students. During National Bike Week we ran a further week of cyclist's breakfasts, information sessions and bike sales.



Future plans

SAWG and the Environment Team have developed a number of targets and initiatives for the coming year 2009/10, including:

- Sign up to the 10:10 Campaign, targeting a reduction of 10% in carbon emissions by the end of 2010.
- Aim to raise our position in the Green League so that we are in the top 10 of all UK Universities.
- Plans to focus on waste management in line with our target of zero waste to landfill by 2012.
- Development and implementation of a 5-year Biodiversity Action Plan.
- Further targets to reduce the impact of staff and student transport and plans to launch a carbon offsetting scheme for staff business air travel.
- Continue to improve on the range of sustainability related modules available and incorporate sustainability into all teaching.
- Further encourage sustainability related research through the CSI and SERG groups.

These will be reviewed again at the end of the academic year. Our aim is to improve year on year until we reach our goal of being a leading University for sustainable development.