

Sustainability Report 2013/14

Key Performance Indicators

Environmental Management System (EMS)

The University successfully passed its re-certification audit for ISO14001 (giving a fourth year of holding ISO14001) and has included Education for Sustainable Development within this management system. This has been a significant step to include curriculum within the EMS to have a full institution certification, the first within the Russell Group and one of only a handful in the sector. Sustainability continues to maintain an annually reviewed environmental legislation register available on our web site.

Carbon/Energy Management¹

From the table below we note that **carbon dioxide emissions are 1.1% below the baseline**, a lower reduction than the 2% noted in the previous year. The reason for this change can be ascribed to the increased carbonisation co-efficient for electricity (due to more coal being burnt nationally). The other factor in this change is increased electricity usage due to new facilities such as the National Composite Centre (NCC), High Performance Computing (HPC) and the works at Life Sciences, as well as additional activity around the Precinct due to higher student numbers.

	Elec GW h	Gas GWh	Oil GWh	Stea m GWh	Total	Elec tCO2	Gas tCO2	Oil tCO2	Stea m tCO2	CO2 (t) tCO2	Total tCO2
05/06	60.0	79.9	1.2	1.4	142.6	31,229	14,801	336	335	46,701	0%
06/07	55.2	77.4	0.6	0.9	134.1	28,630	14,329	167	207	43,332	-7%
07/08	56.8	85.1	1.2	0.5	143.6	28,969	15,753	320	124	45,166	-3%
08/09	57.8	86.4	0.9	-	145.1	30,146	16,000	259	0	46,404	-1%
09/10	56.3	87.4	0.3	-	144.0	29,767	16,187	95	0	46,049	-1%
10/11	56.5	84.0	0.4	-	140.9	28,520	15,552	108	0	44,179	-5%
11/12	57.5	81.6	0.3	-	139.4	28,425	15,111	81	0	43,617	-7%
12/13	57.8	94.5	0.3	-	152.5	28,246	17,436	70	0	45,752	-2%
13/14	60.6	81.0	0.1	-	141.7	31,226	14,957	19	0	46,201	-1%

²

If we remove the effect of NCC, HPC, Colston St and the works at Life Sciences, the key areas of additional estate that have been added since 2005/6, emissions would have fallen by a further 10.2%, even though the carbonisation rate for electricity for 13/14 was 2% higher than 05/06.

¹ We have considered for this report, as in previous years, the areas for which we have full operational and financial control. These are areas owned and leased by the University at which we contract and pay for fuel. This is the area considered by Carbon Reduction Commitment. Estates Management Records now require us to also consider leased areas where we do not pay for fuel and do not have maintenance control – largely space within hospitals and leased accommodation. We have very limited control over consumption in these areas, and do not include them in our Carbon Management Plan.

² The co-efficients with which carbon emissions are calculated have been changed retrospectively by DEFRA to take into account the effect of imported electricity, which tends to be less carbon intensive. The figures within this report have been re-calculated to take account of this.

The University has been recertified for the Carbon Management Standard ISO 14064 (achieved April 2014).

Our utility procurement via a flexible purchasing arrangement continues. We are confident this will protect us against market extremes for wholesale prices for both gas and electricity, but the industry is predicting large increases in non-commodity charges to pay for generation, transmission and distribution infrastructure. Our energy efficiency work is not only directed at consumption reduction but to avoiding these non commodity changes wherever possible.

Projects delivered this year include: fitting on existing boilers, where they are basically sound, with new well-controlled burners; new boilers at a number of properties; further voltage optimisation, heating controls in electrically heated residences, insulation, and LED lighting.

Water

A full audit of consumption at all supplies was undertaken in Dec 2013, correcting some historical errors. The University's water consumption was 21% down in 2013/14 against its baseline year of 2007/08. We have seen a 3% increase in water consumption on the previous year, reflecting a tension between water conservation activities and a 6% increase in student numbers. One major increase has been at the Student Union, as repopulation continues and the swimming pool came back into use. However, the pool consumes markedly less water than before refurbishment.

	07/08	08/09	09/10	10/11	11/12	12/13	13/14
M3	477,153	432,235	429,139	432,555	401,619	365,627	377,114
	0	-10%	-10%	-10%	-16%	-24%	-21%

The reduction between 07/08 and 08/09 was largely due to the renewal of the ring main on the Precinct. The further reduction in 11/12 stems from the ring main works at Stoke Bishop. Further savings were made at the Richmond Building and the repair of a long-standing, undetected leak at Stock Lane Farm. The installation of waterless urinals was tested during the year, but proved to be more expensive than current controlled flushing systems.

The avoidance of tap water being used for cooling electrical equipment is now a key strand of our water conservation and cost saving activity.

Transport

In 2013 81% of staff were travelling to work sustainably down from 82% in 2011 and compared to the target of 85% by 2016. 2013 saw an increase in bus usage (to 11%), formal car sharing (to 3%) and working from home (to 6%). The most popular mode of travel was walking accounting for 30% of staff up from 28% in 2011. Students commuting between their term-time accommodation and their place of study by car rose from 4% to 5% between 2008 and 2012. Both staff and students will be re-surveyed in 2015.

Key actions this year:

- A new transport management structure was introduced (Strategic Transport Group and Consultative Transport Group), replacing the previous management body TWIG.
- The University's Bus Service 16 transported 560,000 passengers from September to June; increase of 18% from 2012/2013 and a 106% from the first year of operation in 2010/2011.
- The ongoing implementation of the £265,000 Local Sustainable Transport Fund (LSTF) grant, which includes the additional cycle parking facilities, Real Time Information (RTI) at the Stoke Bishop Transport Hub, continued employment of the Travel Plan Assistant and a pilot 'night bus' from the Stoke Bishop Halls of Residence.

- The cycling package offered to staff and students was enhanced to include a new Cycle to Work tax benefit scheme (staff only), discounted locks and lights, an increased number of cycle clinics and an additional 148 cycle parking spaces (including the introduction of double stacking facilities) bringing the total to 3,756 spaces.
- The University launched its car parking review in March 2013, due to be completed in September 2014. This policy review covers all aspects of parking within the Precinct and its satellite sites and the supporting systems.
- The University started to implement the recommendations from the Access and Movement study undertaken in 2013, in partnership with the Grammar School and Bristol City Council. The initial focus is on the re-routing of the Service 16 bus, with supporting highway alterations.
- The University's Transitions Officer undertook some extensive market research into student travel, which helped form the transitional work programme and communication strategy for the year.
- The successful implementation of the communication strategy has seen a 50% membership increase for the University's Bike Users Group (TUB-BUG), currently 1,048 members

Waste

In 2013/2014 the University **reused, recycled and composted 80% of its total waste** at the University, **achieving our target of 65%**. The amount of general (residual) waste to landfill produced at the University has consistently fallen since our baseline year of 2007/2008 and is generally stable now. Proportion of general waste going to landfill is:

	07/08	08/09	09/10	10/11	11/12	12/13	13/14
% waste sent to landfill	59.7	52.0	51.3	44.3	24.12	5.0	5.8

Over the last year the amount of waste produced per FTE has grown by 8%. This is a reflection of the new build projects and associated office/laboratory moves. The move into Life Sciences in particular has produced a significant amount of waste as old materials are discarded. It is hoped that there will be a reduction in moves over the coming year and the level of waste going to landfill and being discarded will fall.

Can and plastic recycling has increased by an incredible 80% in the last year as staff are now able to recycle all of their plastics, and not just bottles. Over 130 tonnes of confidential material was securely disposed of by the University, compared to 80 tonnes the previous year.

In 2013/2014 Sustainability continued to manage several programmes to clear backlogged waste at the University in line with office moves due to refurbishment and the capital programme and maintenance services, outcomes of which include, 130 tonnes of metal was segregated for recycling earning the University £10,000 in income, with over 300 tonnes of bulky waste being removed from the University due to office moves, an increase of 11% on the previous year.

An additional 30 centralised waste and recycling resource stores were installed at the University in 2013/14, further improving waste management, security and improving the aesthetic of the University.

Construction Waste

Current average rates for 2013/2014 is 89%.

Carbon Dioxide emissions from waste

Our target of achieving a 50% reduction by 2016 in emissions was met in 2013/2014 with a recorded reduction of 59% of the baseline year.

Hazardous waste

- This area has been growing until recently due to new laboratory processes and awareness of staff about storage of old materials. The aim is to reduce the amount incinerated by 50% by 2018 (baseline 2010/11), **in 2013/14 this amount fell by 6%**. Initiatives to speed up reductions include more compliance audits, staff training and improved disposal systems and contracts during 2013/14. New contracts for hazardous waste and recycling have pushed the University's recycling rates up by allowing all plastic to now be recycled. These contracts have also saved the University £130,000. There has been a continued trend in chemical waste disposal as the University continues to develop best practice in laboratory management and reduces backlogged waste. Over 70 tonnes were disposed on in 2013/2014.

Feasibility of zero waste to landfill

The amount of general (residual) waste to landfill produced at the University has consistently fallen since our baseline year of 2007/2008. There were particular leaps in this target over the last two years as the University was able to retender contracts and make use of new technological solutions for waste management. **We do not feel 100% diversion is ever achievable, but about 95% has been achieved consistently over the last two years.**

Reuse

The University expanded a reuse website Re-Store that re-homed directly over 13 tonnes of reusable furniture within the University and a further 10 tonnes externally. This has helped avoid buying new furniture saving between £50k and £100k, plus saved disposal costs.

Staff Waste/Compliance Training

The University CIWM (Chartered Institute of Waste Management) Training Centre in 2013/2014 trained and certified 60 members of staff in general waste management while a further 60 members of staff were trained in spill response and more specialist areas of laboratory waste management, helping the University to run more efficiently and remain compliant with complex waste legislation.

Sustainable Procurement

A review of the flexible framework was carried out in January 2013 and highlighted scores of 2 and 3 across the framework. An action plan was developed that feeds into the annual implementation plan. The Sustainable Procurement strategy was revised as was the risk register which assesses suppliers and service providers 'sustainability impacts' to enable more effective supplier engagement and tender specification. With changes to Procurement staffing and structure, work on sustainability in this area has been on-hold. There is continued significant engagement with VWR on laboratory equipment; particularly -80 Freezers and drying cabinets, which is starting to see the rest of the lab market moving towards sustainability. 2014/15 will see regular meetings between sustainability and procurement to try to deliver sustainability through the supply chain. Estates contracting and procurement aims to deliver the flexible framework within estates operations.

Sustainable Construction

2013/14 saw the continued implementation (and completion) of a number of major projects, including Life Sciences (BREEAM Excellent), Hiatt Baker Halls (BREEAM Excellent), National Composite Centre Two (BREEAM Excellent), Richmond Building phase two (BREEAM Excellent), 30-32 Tyndalls Avenue refurbishment (BREEAM Very Good). Capital Projects within the Estates Office have been instrumental in delivering this BREEAM scores. Achieving an EPC rating of A has been prohibitively expensive, but the University still investigates if it is cost effective for projects. The SKA assessment method is being trialled at Richmond Building Film and Television as a possible standard for sub-£1million projects for the future.

Biodiversity

This year has seen the further implementation of a biodiversity action plan including further phase 1 habitat surveys, with 75% of surveys carried out within residences, and these will be fully completed and converted to ArcGIS mapping system in 2015, as per the revised implementation plan. New

green roofs have been included at Berkley Square and Richmond Building, with a new 'Living Wall' at Life Sciences.

The first benchmarking surveys of key indicator species were completed in 2014 for: Birds (particularly: House sparrows, Swift, Green Woodpecker); Hedgehogs; Amphibians (particularly Common toad and Great crested newts); Butterflies; and Ivy Broomrape.

External Estates have continued to establish links and schemes in order to "work in partnership with environmental groups and involve staff and students in biodiversity issues". A 25 acre woodland (Providence Plantation) is being used to pilot a new approach in which students can 'manage' the natural environment together with TCV and local groups.

In 2014 External Estates engaged Wessex Ecological Consultancy to "develop projects that enhance biodiversity and then seek funding and grants to facilitate these"; it is anticipated that group activities will focus on identifying and monitoring the key indicator species (previously mentioned).

This area of the policy has been delivered by the External Estates Team

Staff and Community Communications

A full communication plan was implemented during 2013/14 and included the running of Green Impact in 20 departments, a joint Green Impact scheme with the Bristol University Hospital Trust, a Green Impact scheme for Dentists (with over 45 practices taking part in the south west). A pocket sized flyer reporting on progress to date was distributed to all staff. Members of the Sustainability team spoke at a number of staff events, including the Human Resources away day, Professional Services Divisional Heads meeting, Technical Managers Conference and Site Services Supervisors meetings. Sustainability is one of half a dozen teams that now regularly 'speed dates' with new staff at welcome lunches!

Student Communications

A continued partnership with the Bristol Student Hub supporting a schools' plus outreach program, ethical internship scheme and three conferences on social enterprise, international development and sustainable futures. The first year of the £180,000 HEFCE/NUS funded Student Green Fund project was completed, one of 25 out of 125 applications funded. The project is a partnership program between UBU and Sustainability and has been branded as UBU Get Green. The project aims to encourage sustainable behaviours in students across all accommodation. The first year saw a program of volunteers working in halls to encourage recycling and save energy and a '20 steps' initiative to get students living in private landlord accommodation involved in sustainability. Two notable successes were the introduction of recycling into all Unite Halls of residence, something which had not been possible before and the expansion of the 'Big Give' end of term reuse scheme, which grew from a scheme that generates £20,000 for charity to one that generates £200,000!

S-Labs Initiative

In 2013/14 a new initiative was started aimed at improving the safety, security and sustainability of laboratories, called S-Labs. Actions undertaken so far include, replacement of old lab equipment with energy/water efficient equipment including -80 freezers and drying cabinets. Work has been undertaken to reduce energy use within Chemistry looking at Liquid Nitrogen use, fume cupboard management and drying cabinet replacement. Other projects include a cold storage sample inventor system, chemical inventory systems and a £1million fume cupboard program. S-labs will run for at least two years. We have also been lucky and received £13,000 from HEFCEs catalyst fund.

Education for Sustainable Development (ESD)

UBU Get Green conducted a survey into student attitudes towards sustainability and found that 90% of students thought sustainability was important to them, 96% thought that sustainability should be embedded in their course or covered in a stand-alone unit, with 48% already seeing sustainability being taught in their course and 30% were involved in some activity that promoted sustainability. Using the survey's results, UBU Get Green have; set up an 'Engage café' providing the opportunity for students to network; recruited 10+ Act Ambassadors to educate on waste and energy

issues, significantly reducing waste at Welcome Fair; run training for course reps, sports and societies and investigated how a charity shop might integrate with the Big Give. All of these activities are aimed at the informal curriculum area of ESD.

£5,000 was awarded to departments as part of the Green Apple Scheme in 2014 with over £3,500 going to a package of projects proposed by the Department of Archaeology and Anthropology. The funds serve as a catalyst to test out innovative curriculum ideas that are embedded within the discipline but also relate to ESD. Titles of the projects were: Local learning: sustainability practice, global links, and ethics; Community engagement, ethics and ESD: students as creators of learning; Integrating critical reflection into fieldtrips: conflict, resolution and ESD-thinking; Child-focused research and empowerment: putting anthropology into action; and Interdisciplinary learning: archaeology, anthropology and engineering

For the second year in a row, an ESD question placed within the Annual Programme Review (APR) was used as a quantitative mapping tool of the formal curriculum and basis for engagement with academics. The Chairs of Faculty Quality Enhancement Teams (FQETS) and teaching and learning committee meeting leads were approached directly to engage with the APR mapping results. All faculty academic leads of the APR process were provided with feedback on their responses and tailored ESD guidance.

A baseline postgraduate mapping exercise was completed. Training and discussions have been taking place with the library to see how the service can promote ESD. The ESD network, as well as resources on the wiki, have continued to grow. All resources and reports are available on the ESD wiki page accessible by searching for 'ESD wiki'.

The Bristol ESD team has promoted their work outside of the University with two HEA sponsored events at Bristol, as well as presentations at conferences in Manchester, London and Nottingham.

The University/ESD Team was highly commended at the Green Gown Awards under the 'Courses' category for Embedding Education for Sustainable Development across the curriculum. Academic Lead for ESD, Chris Willmore, was awarded Staff member of the Year at the University of Bristol Student Union Awards. ESD Coordinator Aisling Tierney was short-listed and further commended for her ESD efforts in the Bristol Teaching Awards, and served as an invited speaker at the House of Commons at the launch event for the *Manifesto for dialogue, collaboration and action Post Rio+20*.

She was also funded by PVC Nick Lieven to travel to Japan on the Research and Education Network for Knowledge Economy Initiatives (RENKEI) Summer School. RENKEI brings together 6 universities from the UK and 6 from Japan and this school looked at the theme of *Energy Supply within Traditional and Environmentally Conscious Growth Models*.

Food

The implementation of the Ethical and Sustainability framework for food continues, noting locally sourced seasonal foods, fairtrade and rainforest alliance certified products, all milk used is organic and all eggs are free range and good egg award status has been achieved. Sourcing of only 'Red Tractor' meats continues as does sourcing fish from Marine Stewardship Society approved suppliers. On site bottling of water continues reducing transport carbon emissions and saving money. Veg-wear, which is compostible disposable plates, cups and cutlery is being introduced. The team continues to work with suppliers to reduce our scope 3 carbon impacts, with our sandwich supplier being a carbon neutral company. Building on the Soil Association Bronze catering award last year Hospitality have achieved a Silver award this year. The hospitality team has also won a regional award for its Fair trade work as best fair-trade business in the south west. Delivery of ethical and sustainable food is a major success story for the University.

Awards

In October and November 2013, the sustainability team were received the following awards;

- The Chartered Institute of Waste Managers awarded the University a Community Champion award for our work on the Big Give.

- For work over the last five years the University has been awarded the prestigious **Continuous Improvement Award at the Green Gown Awards** (the sector sustainability awards),
- The University was also awarded for our innovative work on Education for Sustainable Development a highly commended award under the Courses heading.
- A Gold Award for its Travel Plan within the South West Regional Travel Awards.
- A People and Planet Green league award for our staff and student engagement work.

Appendix one – Target update 2013/14 for Sustainability Policy

Environmental Management System and Legislative Compliance

Targets:

1. To implement a fully operational, externally verified environmental management system across the entire University including curriculum by 2014

In 2012/2013 the University's EMS ISO 14001 was externally audited and certified including Education for Sustainable Development (ESD / Curriculum). A further EMS for permitted Installations at Langford was also achieved. **Target achieved.** Certification continued in 2013/14.

2. To expand the influence of the University's EMS, by process, to other relevant stakeholders such as contractors by 2016 to ensure best practice for environmental management.

In 2013/2014 the University carried out a programme of CIWM training which was offered to contractors most likely to produce waste as part of their work activities. The University also committed to achieving Flexible Framework level 5 for the Estates Office. **On target for completion 2016.**

3. As part of the EMS, an environmental legislative register will be maintained which will include emissions and discharges. This will outline the compliance required; responsibilities for compliance, the controls needed and detail resultant actions.

A full legal register has been developed including emissions and discharges and is audited against in accordance with EMS auditing procedures. The register is updated regularly and communicated to relevant staff. **Target achieved.** Register updated annually.

Energy

Targets:

1. To put the University on a path consistent with a reduction in carbon emissions of 80% by 2050, from a 2005/06 baseline, entailing a reduction of 15% by 2016. This target covers all scope 1 & 2 carbon dioxide emissions. Investments planned for measures consistent with delivering this target will deliver a net cost saving in-period. This will be undertaken using the measures detailed in the Carbon Management Plan, which is aimed at producing a 38% reduction in emissions from buildings by 2020.

Carbon Descent plan allows for current slow reduction of emissions, but continued student growth and estate expansion may mean a review of this target is required. Underlying trend without new buildings and student numbers sees a 10% carbon emissions reduction. **On target for completion 2020.**

2. The University will reduce scope 3 carbon dioxide emissions by 10% from a baseline of 2010/11 by 2020.

New work is being planned with procurement, with a commitment from senior management to include scope three within procurement practices. **On target for completion 2020.**

Water

Target:

1. An initial target to reduce water consumption by 10% by 2016 from a 2007/8 base year and to do this cost neutrally or better within period was achieved in 2009/10. We now aim for a 20% reduction on 2007/08 by 2016.

21% reduction achieved, but consumption is rising (3% over last year) due to student numbers. Further work is needed to maintain this reduction. **Target achieved.**

Management of Waste as a Resource

Targets:

1. To achieve continuous year on year reduction in waste arising per FTE staff and students.

In 2013/2014 waste produced by the University totalled 97.7kg per person an increase on the previous year of about 8% (2012/2013 - 90.6kg per person). **Target not achieved for the year.**

2. To reuse, recycle and compost 65% of total waste produced at the University 2016.

In 2013/2014 The University reused, recycled and composted 80% of its total waste at the University. **Target achieved.**

3. To reduce the amount of hazardous waste incinerated at the University by 50% by 2018 based on a baseline of 2010/2011.

In 2011/2012 the University increased waste incineration due to changes in legislation and process and increased laboratory activity. This figure dropped in 2012/13 by just 4%. In 2013/2014 this figure fell by another 6%. **Currently on target for completion 2018.**

4. To recycle or reuse 85% of construction and demolition waste by 2018.

The University's contractors all use a combination of waste transfer stations and segregated skips for construction and demolition waste. The average segregation rates range from 65-100% for waste transfer stations and 95-100% for segregated skips. 72% of waste from construction was reused or recycled in 2010/2011, this increased to 82% in 2011/12 and 87% in 2012/2013. Current average rates for 2013/2014 are between 58 and 90%. **Target achieved.**

5. To reduce emissions from waste management by 50% from a 2007/8 baseline by 2016.

In 2013/2014 emissions were recorded at 59% of the baseline year. **Target achieved.**

6. By 2013, to test the feasibility of the University sending zero waste to landfill by 2016.

The University has consistently achieved 5-6% waste to landfill for the last two years and will continue to minimize this where possible in line with available technology and targets. **Feasibility tested, target achieved.**

Transport

Targets:

1. Develop a framework to support sustainable modes of transport to work and study at the University by staff and students (e.g. walking, cycling, public transport and car sharing).

Achieving 85% (baseline 2007) and 96% (baseline 2008) respectively by 2016 for sustainable modes of transport.

In 2013 81% of staff were travelling to work sustainably down from 82% in 2011 and compared to the target of 85% by 2016. Student travel in 2012 (the last time surveyed) was 95% and will be surveyed again in 2015. **Currently on target for completion in 2016.**

2. Reduce the percentage of single occupancy car journeys made to the University by staff and students by 2016 from 21% to 15% (baseline 2007) and to remain at 4% (baseline 2008) respectively.

Current level for staff is 18% and for students 5%. **Currently on target for completion in 2016.**

3. Reduce the percentage of All students and Stoke Bishop Students bringing a car to the University by 2016 from 27% to 14% (baseline 2008) and 19% to 7% (baseline 2008) respectively.

Survey to be completed 2015 to identify changes. **Currently on target for completion in 2016.**

4. Increase the percentage of All students and Stoke Bishop Students usually travelling by bus from 4% to 10% (baseline 2008) and 3% to 60% (baseline 2008) respectively by 2016.

Last survey (2012) noted all students 12% and Stoke Bishop 55%, but the University's Bus Service 16 transported 560,000 passengers from September to June; increase of 18% from 2012/2013 and a 106% from the first year of operation in 2010/2011. Survey of students due in 2015. **All students target complete, currently on target for completion in 2016 for students at Stoke Bishop.**

5. Reduce car and aviation business mileage by 5% by 2016 (from a baseline of 2009).

The data we have for 2009 baseline is incomplete. Sustainability has put in place collection protocols for the data and now has a good understanding of all data sources. This means our first robust baseline is 2012/13. This will mean, a change to the baseline year, but keep 5% and move the target to 2020. We don't have progress data for 2013/14 yet, we should know as the EMR/CEMARS process progresses over the next few months. **Target recast.**

6. Review the University's supply and demand for fleet vehicles and produce a Fleet management plan by 2014.

Review not carried out, review required when this will be feasible to do. **Target not met.**

7. Measure and analyse visitor activity to the University; develop and implement a management plan to encourage sustainable travel by visitors by 2016.

Not action to date, **currently on target for completion 2016.**

8. Identify measure and monitor carbon emissions related to all University related transport by 2015.

This is in the baseline and regular data now. **Target Complete.**

9. Identify how 'deliveries' to the University can be reduced and develop a reduction plan by 2016.

Not action to date, **currently on target for completion 2016.**

10. Analyse and seek opportunities to reduce student travel to and from Bristol by 2016.

No action to date. Currently on target for completion 2016.

Sustainable Procurement

Targets:

1. To implement the Government's 'Flexible Framework for Sustainable Procurement' to level 4 by 2016.

Current assessment across the areas of procurement place us between levels 2 and 3.

Currently on target for completion 2016.

2. To implement a new sustainable procurement policy/strategy produced in 2011 with individual actions for the different areas of the flexible framework.

Policy written, due for review with new head of procurement. **Target to be reviewed with Head of Procurement.**

Sustainable Construction

Targets:

1. To build new buildings that cost over £1million to at least BREEAM "Excellent" and Energy Performance Certificate (EPC) "B" rating.

All new builds built to excellent standard. All achieved EPC of 'B'. **Target achieved.**

2. To undertake refurbishments over £1million to at least BREEAM "Very Good" and EPC "B" rating, with an aspiration to achieve 'Excellent'.

All refurbishments built to very good or excellent standard. **Target achieved.**

3. To assess for each building the cost effectiveness of achieving EPC "A" rating.

Each project is assessed to this level, but as yet none have been cost effective to build to 'A' rating. **Target achieved.**

4. Develop guidelines, targets and procedures for introducing sustainability issues into projects smaller than £1million by July 2014.

Trialling SKA assessment for smaller projects. **Target achieved.**

Biodiversity

Targets:

1. Using the data supplied, every two years, by the Bristol Regional Environmental Records Centre, produce comparative data indicating levels of Biodiversity surrounding key University estates (Precinct, Stoke Bishop and Clifton Village Halls).

Agreed and on-going process.

2. Complete Phase 1 habitat surveys:
 - Of all halls of residence - by the end of 2011,
 - For the Precinct, sports grounds and other outlying properties – by the end of 2012,
 - For agricultural land – by the end of 2013.These have been completed are currently being converted to the industry approved mapping system ArcGIS - **Target achieved**

3. The University maintains four categories of tree stock, these are:

- a. Native Woodland
- b. Tree collections
- c. Landscape
- d. Heritage landscapes and veteran trees

- 3a. From 2013, individual woodlands will have a management plan, informed by the specific British Plant community (Rodwell *et al* 2003) together with a short report containing the actual tree species growing. The objective will be to remove, over a period of time, undesirable species which have become established in the past and to prevent their regeneration. Subsequent reports will be written on a three year basis to display, as a percentage, an increase in desirable community and native trees.

On target with initial plans being written during the winter of 2014/15.

- 3b. Gardens and Grounds have a list of viable trees within specified collections. Each collection has a management plan which aims to maintain the current range of species and identifies, an objective to increase the diversity. On a three year basis, collections will be surveyed to ensure the objectives of the management plans are achieved; and, in a short report, new stock levels will be identified.

On target with initial plans being written during the winter of 2014/15.

- 3c. All landscape trees, within University grounds, have been identified and tagged. As a holistic approach, over a large disparate estate, species diversity is a main objective to achieve. Starting in 2013, and then on a three yearly basis, a short report will be produced, which will statistically calculate the diversity index.

On target with initial plans being written during the winter of 2014/15.

- 3d. Heritage Landscape and veteran trees (located in numerous sites), have been mapped. By 2015 management plans will be produced for the reinstatement of trees lost within a heritage landscape, and successional planting. Within the same time frame a veteran tree plan will be produced, establishing a strategy for their protection and on-going maintenance.

Currently on target.

4. A biodiversity protocol has already been established, whereby each University development (over £1m) must achieve a BREEAM excellent award. In order to achieve this award each project will appoint a suitably qualified ecologist, at the development stage, to identify existing ecology and habitats; biodiversity must be maintained and enhanced. Consequently biodiversity targets can be identified for each project, within a specific target date.

Target achieved for 2013/14.

5. From 2013, Gardens and Grounds will run a competition which requires students to identify a biodiversity project which they wish to run on University grounds. Gardens and Grounds will award funds to run the project and the student/group will receive a prize and publicity after the receipt of a short report which identifies a quantifiable measure of success.

External Estates have commissioned Wessex Ecological Consultancy to organise and run this. Currently the consultants are establishing initial information, through surveys, before launching the competition in 2015. **Currently on Target.**

Communications

Targets:

1. Annually review the communications strategy for sustainability which will inform each annual communication action plan.

Annually reviewed as part of EMS, communications implementation plans also reviewed annually. **Target Achieved.**

2. Develop an annual communication action plan for each academic year starting with the year 2009/10. Report on progress with each plan at the end of each academic year.

Implementation plans on the sustainability web site. **Target Achieved.**

3. Produce an annual sustainability report covering all aspects of the sustainability strategy.

Annual report produced. **Target achieved.**

Teaching and Research

Targets:

1. To annually monitor progress in the three areas of formal curriculum provision, informal curriculum opportunity and subliminal experience through estates provision.

Formal curriculum monitored via APR annually.
Informal curriculum being reviewed as a baseline in 2014/15.
Subliminal curriculum to be reviewed.
Currently on target for completion by 2017.

2. Implement a new Education for Sustainable Development (ESD) strategy starting in 2012.

Strategy approved and delivery of implementation plan. **Currently on target for completion 2018.**

Food

Targets:

1. Approval of an Ethical and Sustainable Food Policy for the University by 2012.

Policy approved and being implemented. **Target Achieved.**

2. Deliver targets as set out in the Ethical and Sustainability Food Policy by 2016.

Significant number of actions taken, but implementation plan still has actions to achieve.
Currently on target by 2016.