



## **Sustainable Thinking Meddwl Cynaliadwy**

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Cardiff Metropolitan University  
Prifysgol Metropolitan Caerdydd

# **REPORT ON SUSTAINABILITY AND THE ENVIRONMENT**

**AUGUST 2014 - JULY 2015**



**Cardiff**  
Metropolitan  
University

Prifysgol  
Metropolitan  
**Caerdydd**



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## FOREWARD

I am fully committed to sustainable development in learning, teaching, research and enterprise and in our leadership and management practices. The University will continue to embed sustainability principles within its strategic, business and operational activities.

A key emphasis will be to ensure that our graduates are 'future proofed', motivated and inspired to make a positive difference: we are committed to promoting and incorporating education for sustainable development and global citizenship within the curriculum, developing sustainable graduates with the awareness and critical capabilities to respond effectively to challenges throughout all aspects of their lives and careers.

I am proud of our achievements in these areas, which were reflected in the last People and Planet League Table, where the University was ranked 19th in the UK, in the First Class Category and 2nd in Wales. We have been certified against the ISO14001 Standard for Environmental Management Systems (EMS) since 2012, and work in partnership with others in Wales and in wider communities.

**Prof A J Chapman**  
Vice-Chancellor

## ABOUT THE UNIVERSITY

Located in an exciting, modern European capital city, Cardiff Metropolitan University is a global university that provides education and training opportunities that are accessible, flexible and of the highest quality to students from over 140 countries worldwide. The university has been integral to the City of Cardiff since 1865 and prides itself on being a strong, sustainable and student-centered, focused on the economic, social and cultural wellbeing of Cardiff and southeast Wales; promoting student employability, applied research and knowledge transfer. Cardiff Metropolitan University is made up of five Academic Schools: Cardiff School of Art and Design, Cardiff School of Education, Cardiff School of Health Sciences, Cardiff School of Management and Cardiff School of Sport. 2015 saw the 150 anniversary of Cardiff Metropolitan, tracing its heritage back to 1865, with the formation of Cardiff's first School of Art and now in 2015, offers over 100 different courses, spread between five schools, across two campuses, with over 12,000 students.

It is a truly global community, with connections stretching across the globe. In 2014, Cardiff Metropolitan recorded its highest ever level of overall student satisfaction and remains the highest ranked 'new' (post 1992) university in Wales. All schools specialise in courses that are career orientated and have been designed in conjunction with business and industry. Through work placement programmes, professional accreditations and opportunities to study abroad, our focus on employability has ensured that 94% \*of our graduates enter employment or further study within six months of graduation.

*\*Destination of Leavers from Higher Education 2013*

Learning and teaching is central to what the University does and it has a developing research profile which informs and helps develop/enhance teaching and learning activities.

Cardiff Metropolitan University is proud to be associated with a number of high-calibre partners in the UK and internationally. This means that students from over 140 countries are able to study Cardiff Metropolitan University degrees and MBA programmes.

## POLICIES, STANDARDS AND BENCHMARKS FOR THE ENVIRONMENT AND SUSTAINABLE DEVELOPMENT

- a) The University's work on the environment and sustainability is guided by an Environment and Sustainability Policy. This policy was reviewed by the Board of Governors in and is attached at Appendix 1.
- b) The University participated in the last People and Planet League Tables and was rated 19th of universities in the UK, 2nd in Wales and was ranked in the First Class Category. The University will continue to use this league table as a measure of its performance. The next league table in 2016 will be based on information made public on the University website as well as information collected by the Higher Education Statistics Agency, with an additional audit on some questions.
- c) The University achieved ISO14001 in March 2012, with annual review.
- d) Inclusion of Major Incident Plan at Appendix 3.
- e) Next academic year will see the implementation of a new sustainability scorecard that has been commissioned by the Association of University Directors of Estates (AUDE) to provide an independent methodology for benchmarking and encouraging sustainability within Higher Education Institutions.
- f) The review of the Ethical Investment Policy – no investments to report during the period.
- g) The University continues to uphold the values within the Ethical Investment Plan and specifically has not made any investments as in f) in fossil fuels or arms.
- h) During this reporting period the University has begun the development and consultation of a new Healthy University Strategy – a key theme of the strategy will be corporate social responsibility and how the University interacts with local and wider communities. It is envisaged that the new strategy will be approved in July 2016.

# RESPONSIBILITIES

The Board of Governors has responsibility for environmental performance and the sustainability strategy. The Resources Committee of the Board oversees the detailed work on the environment and sustainability in the organization and its business operations. The ISO14001 Environmental Performance Group reports to the Vice-Chancellor's Board.

The Environmental Management System (EMS) covers all University activities from energy and utilities, to waste management and recycling, but more significantly includes embedding education for sustainable development in the curriculum and into research and enterprise activities. During early 2015 it was decided that the support provided previously by Penarth Management for the maintenance of ISO14001 would be brought in house to complement the proposed Healthy University strategy.

## THE UNIVERSITY'S APPROACH TO SUSTAINABLE DEVELOPMENT

During the year, Cardiff Metropolitan University made strides to cohere various strands of its activity on the sustainability agenda, recognising that the concept of sustainable development is complex, spanning economic development, environmental quality and social equity. The University believes its actions must address these environmental, economic and social factors. Its approach to sustainability is characterised as an organic, or a bottom-up approach within a management framework, rather than a top-down imposition of a high level concept. The approach, whilst comprising individual operational areas, each focussing on specific targets or standards, allows the University to implement relevant and meaningful change. The specific strategies and action plans are overseen and steered via a range of senior management groups and committees, inter alia Environmental Performance Group, Equality and Diversity Forum, Staff Development Panel and Health and Well-being Steering Group, to ensure appropriate priority, resource and outcome is provided to meet agreed objectives.

**When aggregated, the outcomes clearly amount to a sustainable development position evidenced by the following achievements:**

- An Investor in People organization.
- Gold in the Wales Corporate Health Standard.
- A Fair Trade University.
- Gold in the Welsh Government's Travel Plan Awards and developing second generation Carbon Management Plan.
- ISO14001 certified Environmental Management System.

- 1st Class Award and being ranked within the top 20 universities in the UK for its environmental performance.

As a result of developing action plans for Investors in People, Corporate Health Standard, ISO14001 and the Strategic Equality Plan, it became clear that much of this work is, by nature, complementary. A number of activities and actions are relevant to all areas of work and whilst many of the University-wide achievements are accolades in their own right, the combined sum of this work opens up new dimensions of thinking. Next academic year will see the start of a drive towards a Healthy University Strategy.

The University has adopted sustainable behaviours and continues to meet the challenge of embedding these into all staff and student activities. These behaviours are guided by the Strategic Equality Plan, Environmental Management System, Health and Well-being Strategy (Corporate Health Standard), Carbon Management Plan, Water Efficiency Plan, Investors In People Standard, Transport and Travel Plan, Fair Trade Policy and Sustainable Procurement approach via the Welsh Sustainable Procurement Assessment Framework. The University's adoption of these behaviours is linked to clear measurable objectives such as ISO14001.

In July 2014 the Major Incident Plan was developed. This Major Incident Plan (MIP) sets out how the University will deal with the threat, immediate consequences and aftermath of a major incident. The MIP will be reviewed annually and tested through a simulation exercise periodically.

As part of its commitment to raising the awareness of sustainability and engaging staff to make a difference, the University has implemented an on-line, e-Learning module which can be accessed by all staff as part of their induction and staff development process. This course introduces staff to the topic of sustainability and policies of the University, and is a compulsory part of all new staff's corporate induction into the University.

The University has publically declared its commitment to Sustainable Development principles by signing the Sustainable Development Charter.

The Charter encourages and enables organisations in Wales to become more sustainable – to make decisions that produce the best long-term outcomes for themselves and for the future of Wales.

The Sustainable Development Charter is Wales' highest profile commitment to sustainable development. Signing the Charter is a voluntary commitment aimed at improving the economic, social and environmental well-being of Wales, See Appendix 4





## PEOPLE AND PLANET: GO GREEN WEEK 2015

Go Green Week is People & Planet's annual national week of action on climate change in schools, colleges and universities.

The University celebrated the People and Planet Go Green Week 2015 between Monday 9th to Friday 13th February. A team of students from the Cardiff School of Management International Hospitality & Events students and International Tourism & Events programmes led and organised a series of activities aimed at raising student awareness of environmental issues, and to encourage their engagement with this topic through a range of practical workshops and recycling opportunities to support a low carbon future.

Activities included a 10% discount for staff & students alike on hot drinks at both Costa & Starbucks outlets within the university to discourage the use of insulated disposable cups, workshops showing how to recycle jars, bottles & cans into useful household items, a dried & tin food collection in aid of Cardiff Foodbank, a clothes collection for the YMCA and a day where staff and students were asked to wear something green and have their faces painted to heighten awareness.

The week was successful and engagement of staff and students was greater than the previous year. The planning & organising of the Go Green week gives the students the opportunity to learn more about global environmental issues as well as building their transferrable skills such as leadership, team working and time management which all help to aid employability.



## PROGRESS ON ACADEMIC DEVELOPMENT

**A number of existing key initiatives have been continued during the period as well as the on- going implementation of further schemes in the field of Academic Development as applied to Sustainability and Environmental agendas at Cardiff Metropolitan University. Of note are the following:**

- The Learning and Teaching Development Unit has continued to monitor and improve the prevalence and quality of Education for Sustainable Development (ESD) across Cardiff Met curricula through Quality Assurance and Annual Review processes.
- The design, implementation and rolling out of a programme audit tool and related supporting resources which has sort to identify existing academic provision in the field of ESD across the institution and importantly identify gaps and areas that can be developed further. As at July 2015 the audit was taking place and results (whilst some are still being chased up) have been informing and will enable LTDU to take proactive curriculum development action to address areas highlighted by the audit.
- Sustainable campus curriculum development interventions have seen LTDU liaise with staff from both CSM and CSAD in developing active live projects in which students engage in real world sustainability issues facing either the university or indeed external business 'clients'. The interventions have proved incredibly fruitful for students with feedback demonstrating real benefits gleaned by learners in terms of their understanding of the impact the sustainability agenda can have on businesses in terms or organisational practice and customer awareness. It has been clear that students who have participated in the interventions are better able to understand and articulate the relevant agendas and skills they have acquired through their involvement in the live projects.
- LTDU has continued to promote and further develop a range of electronic learning and communication systems that seek to reduce the need for unnecessary travel as part of Quality Assurance processes with overseas collaborative partners and also make online information access more effective and efficient for institutional students both home and international. Examples include the use of Adobe Connect and the implementation of a Moodle based Virtual Learning Environment platform.
- LTDU have planned and delivered a number of 'fact finding' events in order to provide networking opportunities whilst also canvassing views of both staff and students with a view to developing a community led agenda in the field of environmental and sustainable development. These events have broadly been a success with a range of data and issues identified and the embryonic formation of a potential community of practice within the institution. This will likely be developed further with the implementation of the forthcoming Healthy University Strategy.



# PROGRESS ON RESEARCH

Consistent with the University's Strategic Plan 2012-17, activities in Research and Enterprise address the cross cutting themes of Internationalisation, Partnership, Social Justice and Sustainability.

## **Schools contribute in different ways and together address the three specific targets of:**

- 50% of research activity returned to the Research Excellence Framework to be world leading or internationally excellent
- Increase the average research income per academic staff to £10K by the end of planning period
- To have supported the creation of 20 successful new business ventures by the end of the planning period.

## **The Research Strategy 2014-19 also makes explicit its ambitions to enhance the University's research environment(s) by, amongst other things:**

- Addressing gender and other inequalities by removing both personal and structural barriers to sustainable academic career progression;
- Implementing structured and consistent approaches that encourage staff to share responsibility and pro-actively engage in their personal and career development;
- Adopting best practice in respect of talent management, staff retention and targeted recruitment;
- Enhancing the quality and sustainability of research student supervision and supporting the environment for research students;

Illustrative examples of some of the best applied research conducted at the University were included in the submission to the Research Excellence Framework 2014. Four impact case studies show the scope and influence of our work linked to health, well-being and sustainability outside academia.

## **1. Digital design methods lead to major improvements in reconstructive surgical procedures whilst reducing costs**

By using digital data to plan surgery and develop prostheses, major advances in reconstructive surgical procedures have been made possible improving the quality of life for thousands whilst saving money for the UK taxpayer. Computer Aided Design techniques have improved accuracy of prosthetic development, leading to better quality and consistency. This has reduced the number of invasive patient interactions from four to one, and cut the time required to provide a patient with a correct prosthetic 'fit' from one year, to just six weeks. The methods have already benefitted around 2,500 patients across 84 hospitals. (This work was recognised in the Queen's Anniversary Prizes for Higher and Further Education)

## **2. Sport and Physical Activity Policy in Wales: The Impact of Evaluation Research on roll-out and revised implementation**

Research evaluating two national programmes central to the Welsh Government's national strategy Climbing Higher, aimed at increasing participation in sport and physical activity, has informed policy decisions and altered the nature of the provision of leisure services in Wales. The changes implemented have influenced the engagement of both the 16 and under and 60+ age groups which together make up 45% of the Welsh population. Indeed, the number of young people participating in sport or physical activity at least three times per week increased from 27% in 2011 to 40% in 2013.

## **3. Cardiff Met KITE project gives lift to Welsh food industry**

Research has shown that pro-active engagement with small and medium sized enterprises in the food industry sector can achieve actual benefits in terms of food production and food safety management systems. Using £3.9 million initial investment from the Welsh Government and the European Agricultural Fund for Rural Development, since 2008 the Knowledge, Innovation and Technology Exchange programme has resulted in £27 million of increased sales, £540k of waste reduction within processing and the creation and safeguarding of over 1000 jobs.

**4. The impact on the organic waste industry from research on workers' exposure to bioaerosols: Adoption of technical guidance** Immediate and interim impact of our research for the organic waste industry has contributed to effective management of the risk to the health of workers from exposure to bioaerosols. In collaboration with the Association for Organics Recycling, a technical guidance document for the composting industry was developed in 2012 which provides guidance for high-risk work activities. Recommendations on risk reduction strategies and good practice have since been endorsed by the Health and Safety Executive.



# PROGRESS IN SCHOOLS

## CARDIFF SCHOOL OF HEALTH SCIENCES (CSHS)

### Sustainability in Learning and Teaching

The School has increased its emphasis on the use of Turnitin electronic submission of coursework. Following a pilot project, Psychology now utilises this form of submission almost exclusively, and other discipline areas are following suit with pockets of good practice embedded in a range of disciplines at undergraduate and postgraduate levels including Environmental Health, Podiatry and Dietetics and the school is rolling out this technology to enable all degrees to move to paperless submission, assessment and feedback. The Taught Programme Office has introduced electronic student files. This not only reduces our use of stationery but also allows more efficient administration and directly assists with the storage problems the school encounters.

Sustainability has been embedded in programmes using the University Sustainability and Internationalisation toolkit on a programme by programme basis to identify actions to enhance sustainability in the curriculum. Within the Housing and Environmental Health curricula this was informed by a range of sources including the Professional, Statutory and Regulatory Bodies, the Brundtland Report (1987) which laid out the concept of sustainability as containing environmental, economic and social aspects, and the UN Sustainable Development Goals. Through a range of modules students are able to study broad concepts of sustainable development; technical aspects of sustainability including design; the Code for Sustainable Homes. This Code is a “single national standard to guide industry in the design and construction of sustainable homes” includes minimum standards for new buildings and measures the sustainability of a home against 9 design categories, rating the ‘whole home’ as a complete package. Students also study alternative forms of energy provision/generation, energy saving strategies, fuel poverty and design and technology solutions. Class room sessions are supported by study visits which enhance the student experience and enable a broader understanding of sustainable development.

### Study visits have included the following developments:

- Merthyr Valleys Homes - Housing and Community Regeneration
- Newport City Homes - Pill Regeneration Project - Residential regeneration
- Barry Waterfront Regeneration Development - Mixed use regeneration scheme
- Cardiff Community Housing Association - Hamadryad Park, Cardiff Bay - residential and educational development

Opportunities for student mobility in Africa have been used in Environmental Health to enhance student understanding of sustainability within the framework of the UN Strategic Development Goals. Students, funded by the Student Mobility Fund, visited Uganda, to represent the University at an international Public Health and Environmental Health Conference at Makerere University in Kampala, Uganda. They each presented to an audience of around 250 students, academics and government staff, then answered questions as a panel afterwards. Short video interviews, a survey and a dissemination event for other students on the programme who were unable to travel are being used to capture some of what was learnt and how the experience affected those attending. Another group of students from the programme are attending a global public health meeting in Malawi in May 2016 and will again capture issues on sustainability to share with all students.

### Sustainability in Learning and Teaching

Laboratories have a large carbon and environmental footprint, with especially high energy consumption as well as use of finite materials and production of hazardous waste. The Technical Support Unit led by the Technical Operations Manager have undertaken a review of the laboratory environment and introduced a number of initiatives.

**Above:** Cardiff Mets' winning team at Ecotrophelia UK for their innovative product Cwtch Circles.



### Managing chemicals

The European Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures has been directly applied to all EU member states, including the UK from 2015. The School relabelled all chemicals during 2014 and used this process to bring in stronger management of chemicals by:

- Reducing the number of chemicals held on Campus identified as dangerous to the environment.
- Substituting or selecting chemicals that are less dangerous to the environment.
- Amendment of the School's CoSHH risk assessment form to ensure that disposal is considered before use.
- Maintaining a list of chemicals in stock to minimise unnecessary ordering.

### Managing freezers

- Reducing the number of laboratory freezers
- Consolidating contents and switching off unused freezers
- Purchasing energy efficient freezers

### Be conscious of what you use and why

- Using environmentally conscious suppliers
- Encouraging reduction in the use of consumable materials e.g. laboratory plastics.
- Reduction in the frequency of laundering laboratory coats.
- Ensuring that equipment is switched off when not in use, especially over weekends
- Ensuring that where appropriate, air conditioning is programmed to be switched off when not in use and especially over evenings and weekends.
- Closing fume hood sashes when not in use to reduce the amount of heated or cooled air escaping the room.

### Improving Recycling and Disposal

- Raising awareness of recycling and disposal
- Reducing the number of clinical waste containers sent for disposal through careful segregation of clinical and non-clinical waste.
- Returning equipment to supplier for recycling.



## CARDIFF SCHOOL OF ART & DESIGN (CSAD)

Rather than create specific and therefore isolated sustainability modules and projects, the CSAD elected, from an early stage, to integrate sustainability thinking fully into all its areas of activity. The School's approach is now implicit in its procedures for the use of materials and workshops, as well as in its teaching and student assessment. It is also evident in the CSAD's research and enterprise portfolios.

Some leading examples of where our research has a direct impact on our environment is the work being undertaken by Professor Steve Gill and Bethan Gordon who are engaged with a KTP which aims to produce a waterless cleaning system for aircraft. Water washing is banned in many airports (e.g. Heathrow) because aircraft gather heavy metals at altitude which then get washed into the groundwater via the sewerage system. Unfortunately aircraft have to be regularly cleaned because a dirty aircraft can burn up to 3% more fuel which has serious financial and environmental consequences. Also John Littlewood is involved in developing techniques for using thermography in order to spot insulation defects in housing stock during construction. The aim of the research is to help Wales reach its targets on low carbon housing.

Because of the considered design and planning for the School's new accommodation, CSAD can now boast of an award winning building which meet its design goals to be energy efficient when compared to other typical sector buildings. A recent audit the building was found to be contributing around 7.1% of its electricity and hot water requirements coming from its roof top PV and solar thermal systems.

CSAD's aim is to develop artists and designers who reflexively and consciously consider environmental issues in their practice. This starts with the responsible use of materials and well-developed approaches to recycling and up-cycling. This goes along with an awareness of the amount of energy deployed in production, with strategies to minimize energy consumption. Where possible the school opts to use materials which have a lower environmental impact with water based inks and paints in greater and greater use. Each workshop and some studios have an offcut, reuse area where items that would otherwise go for waste are used and reused.

The examples of sustainability in the curriculum can be drawn from all areas, as it is an implicit feature of student learning. The examples are therefore numerous and can be drawn from all areas. Indeed the new undergraduate curriculum has been especially developed to enable all students to engage in the issues of sustainability. Projects available challenge student thinking on reuse, up-cycling, hacking, as well as how the deployment of some new technologies can transcend issues of waste and scarce resources.

One example of students and the course of study engaging in this area is BA Graphic Communication third year students have been collaborating with 9 mentors from the design industry to work on a 'Real World' brief. The brief, set by clients from Cardiff Metropolitan University Estates Management, was to develop communication campaigns that aim to generate greater awareness of the need for sustainability within the University and to bring about a behavior change amongst Cardiff Met students. The winning team focused on reducing waste packaging through the introduction of a Farmers market stall in student halls of residence. The outputs were so successful that several of the campaigns are being implemented by the clients, and both clients and mentors were impressed by the capacity of CSAD students to tackle challenges, seek solutions and to champion their ideas.

## CARDIFF SCHOOL OF SPORT (CSS)

The Cardiff School of Sport has taken steps to embed core principles of sustainable practice within the everyday delivery of its undergraduate and postgraduate programmes, as a part of a wider perspective of sustainable practice across the School. The School recognises that this is particularly pertinent for its undergraduate operations because the scale of its teaching portfolio and student population means that even modest shifts towards more sustainable practice has potential for significant improvements across a number of sustainability indicators. Subsequently, the key social, environmental and economic sustainability initiatives in the School have surrounded the transition towards digital information delivery and administration workflows across as much of the teaching portfolio as possible. Using a combination of Sharepoint, Moodle and Turnitin platforms, combined with extensive staff development interventions in support of these technologies, this has been largely achieved in the relatively short period of time since 2012-13 when all student coursework submission through Turnitin was made mandatory. As a consequence of this policy, in the 2015-16 academic year, at least 60% (80 out of 135) CSS Undergraduate modules and Postgraduate modules (28 out of 46) will be submitted and/or marked electronically via Turn-it-in, encompassing over 50% of the assessment elements (150 out of 304) for UG and 55% (46 out of 84) for PG. In 2014-15 it was decided to move all first year modules to Moodle a year earlier than the planned roll out of the VLE platform across the university. The purpose of this was to enhance the student experience by ensuring that all L4 students would not have to undergo a transition from Blackboard to Moodle in their second year thereby reducing the human resources involved in facilitating a second transition for this cohort. In 2014-15 the School began piloting the use of an online scheduling service (Doodle) with 100 users with the aim to roll this out to all staff in 2016-17. This service offers students and staff the ability to make tutorial arrangements from on and off-site locations (via either a web interface or a free smartphone app) thereby greatly simplifying the student/staff processes of booking and undertaking tutorials and greatly reducing unnecessary wastage of time and resources in booking, un-booking tutorials. Links to these tutorial schedules are embedded within Moodle module sites on an increasing number of modules. Combined with this initiative is the use of VOIP services such as Skype to offer students video tutorials. This practice is being encouraged in the school as an option rather than the norm, but provides a social, environmental and economically sustainable solution for those

groups that need it (e.g. athletes away travelling and competing, student's suffering from illness, research students working in the field, as well as part time students etc). These developments are ongoing. In 2014, CSS participated in an LTDU audit of sustainable teaching practice. The process revealed a considerable amount of curriculum content was devoted to issues surrounding social justice and equality in sport, indicating a strength in the provision of social sustainability. Throughout 2014, many of the School's basic administrative functions have been further revised to shift towards entirely paperless workflows. These are planned to continue over the coming academic year. For example, CSS utilises Career Hub CRM to manage the administrative forms for all work placements. User guides and tutorial videos will be further developed in 2016 to support employers, staff and students in using the system. From 2016, final year students will not receive pass letters, instead they will be directed to the portal for marks. A standard process for student references will be rolled out in 2016. References will be emailed as PDF's and only printed where necessary. The coursework, examination, question preparation, student evaluation and external examiner evaluations have all been digitised via SharePoint in the 2012-13 Academic Year and were also further refined in 2014-15. CSS now issues iPads to all its academic and senior administrative staff. Outlook calendar is now used extensively for personal and school business. This has removed the need to print minutes and papers for committee meetings and paper diaries are no longer purchased for staff. Guest wifi access has been rolled out, enabling and encouraging visitors to be paper-free. The presence of the izone at Cyncoed has supported CSS to reduce the amount of paper and email traffic to staff, with enquiries being managed at this 'one-stop-shop'. In addition, printers for individual staff offices are no longer purchased. For example, in a new office block in the school 33 staff share one MFD. In other areas of the school staff either use a MFD or a multiple share networked printer. This shift in policy is realising a reduction in the costs of toner cartridges and repair bills for printers as well as reducing the environmental involved in the procurement, use and disposal of these devices. Recycle bins have been placed in offices and other well used spaces around the school. The School was part of the HR trial into online recruitment and selection. This led to paper based application forms being replaced by pdf documents and online shortlisting. Finally, in the built environment the school has worked with estates to replace the windows in the Syd Aaron Gym reducing the amount of heat lost through the old ill-fitting frames and single glazed panes of glass.





## CARDIFF SCHOOL OF MANAGEMENT (CSM)

In conjunction with Programme Directors in other Schools in Cardiff Metropolitan University, all of the full time Programme Directors in Cardiff School of Management conducted a sustainability audit of their programmes during the current (14/15) academic year.

The individual audits will be summarised in an overarching report written by the Director of learning and Teaching. This report will be considered at a future meeting of the University L&T Board. Many of the audits are already complete and early indications are that there are many examples of good practice evidenced throughout the set of programmes.

In particular the Foundation programme has demonstrated a holistic integrated approach in some responses and areas of specific relevance in others.

### **For example in relation to Ethics in the curriculum:**

Ethical issues are addressed throughout the curriculum. For example, Academic Skills looks at the issues around plagiarism, in Marketing issues regarding trade and Marketing are explored and considered throughout the year. Specific identification and discussion of differences in ethical standards, 'norms' and viewpoints are discussed and debated i.e. what is an acceptable consumer practice or product to one group is not necessarily acceptable to another. In addition corruption is discussed and its effect on society, the marketplace and legal implications. In Personal Finance, different perspectives on finance are discussed, particularly in relation to Islamic finance and in IT, legal and ethical

issues surrounding Big Data from social media etc. are considered and students are encouraged to debate the right to anonymity and privacy online.

### **Specifically in relation to the Marketing module:**

Sustainability is discussed in relation to global business, the role of Multi National Corporations (MNC's) and the impact this has both developed and developing economies, in addition when discussing consumerism and its effect on the planet, other societies and cultures is discussed.

For example Apple, Nike and other MNC are discussed in relation to slave labour, the issues of conflict minerals that are used to make iPhones etc. Ethics in relation to corruption, and corrupt practices act (US and UK) are discussed. Furthermore intercultural perceptions of sustainability and views of corruption are utilised as this has an impact on Sustainable Development.

### **The Business and Management Programme Director gave clear and incisive answers also demonstrating a holistic approach where possible:**

Ethical issues are looked at BSP4O64, BSP5O03, BSP4O02, BSP5O15, BHL5O00, BSP6O00, BAC6O04, BSP6O64, BSP6O04, BHL6O06, BHL6O08, BHL6O16, BHL6O02. In Finance in discussion of profit maximization and shareholder wealth maximization; ethical leadership; ethical behaviour in decision making of directors and towards shareholders/stakeholders; ethical approval required in research; influence of international companies upon the workers they employ and the communities within which they operate; ethical issues in trade and marketing; codes of ethics in professional bodies; free trade and fair trade.

### **The MBA Programme Director highlighted the following**

**interesting example:** Problem-solving is included in the core module MBA7O02 Strategic management module and here students are encouraged in their sustainability literacy. This can be challenging with their different perspectives and so team presentations bring out cross-cultural comparisons.





**The Accounting Programme Director identified the programme area as one where there is limited opportunity to embed sustainability education due to the prescribed and technical nature of many of the modules. However in relation to Ethical considerations, good examples were able to be provided:**

Ethics is a major element of accounting and this is embedded into the curriculum of all modules. For example, students are expected to fully assess the professional ethical implications of auditing decisions and of the distinctions between tax planning, tax avoidance and tax evasion in the taxation modules.

The Programme Director of the Computing/IS suite of programmes provided an interesting perspective and examples.

**In all three of our undergraduate programmes, there is a strong theme of legal, social, ethical and privacy issues address at each Level. This has been partly driven by professional body accreditation (BCS, The Chartered Institute for IT), as well as fully addressing the socio-technical/socio-cultural aspects of the 2007 QAA Computing Subject Benchmark Statement. Also in the programme-level outcomes:**

**Sustainability-related issues are primarily covered in the following core modules:**

- Legal and Ethical Issues in Computing (BHL4005)
- Legal Regulation in Information Systems (BHL5005)
- Professional and Ethical Issues in Computing (BCO6003)

This is evidenced through certain learning outcomes and assessment in these modules, cutting across technological, economic, social and environmental sustainability. Furthermore, module-specific sustainability issues would be addressed; a good example would be in software development (covered in a number of core and optional modules): the importance of developing high quality, useful and maintainable software artefacts, software carpentry, linking to specific technological, social, cultural or economic issues.

In summary the above extracts give a flavour of the in depth responses provided by CSM Programme Directors in the audit. Very good examples in terms of curriculum and activity were provided where you would expect them to occur together with honest reflection in relation to programmes where this is more difficult.

**The Programme Director for MSc International Tourism and Hospitality Management provided the following evidencing the integrated approach: Sustainability is a key issue within the study of Tourism, Hospitality and Events and is, therefore, embedded throughout our programmes. Sustainability-related issues are explicitly examined in modules such as Event Tendering, Feasibility and Conceptualisation where the learning outcomes include:**

1. Evaluate the potential success of individual events in terms of long term sustainability and legacy impacts.
2. Analyse the power of stakeholders and evaluate their impacts on event conceptualisation and feasibility.
3. Investigate political, economic and socio-cultural and legislative environments and their influences on event feasibility and tendering.

**THE Industries in Context is another module which explicitly addresses sustainability and indicative content includes:**

- DEEPLIST factors impacting on current and future THE demand and supply e.g. changing demographics, the world economy, sustainability, digital marketing, globalisation.
- Concepts of business stewardship and triple-bottom line approaches to sustainability.

Knowledge and understanding of the key principles of sustainability and their application to the THE industries are explicitly assessed within these modules.



## CARDIFF SCHOOL OF EDUCATION (CSE)

As the major provider of initial teacher education (ITE) in Wales, Cardiff School of Education - as part of the South East Wales Centre for Teacher Education and Training (SEWCTET) - plays a key role in the development and implementation of Welsh school curriculum strategy. The Successful Futures report on the future of the school curriculum in Wales, published in February 2015, proposed that one of the four key purposes should be the development of 'ethical, informed citizens who show their commitment to the sustainability of the planet.' This commitment builds on the seven interlinked themes identified in the Education for Sustainable Development and Global Citizenship (ESDGC) dimension, all of which are addressed and embedded as a core features of Cardiff School of Education ITE programmes and are part of the Qualified Teacher Status (QTS) Standards that students need to achieve. The health and wellbeing of student teachers is paramount within the Department of Initial Teacher Education. Student teachers are supported throughout their study and during school experience, beginning with 'Student Teacher Wellbeing' events as part of induction onto ITE programmes. Individual student teachers with medical and disability needs are supported by the Safeguarding, Equality and Diversity Co-ordinator through the risk assessment process using the SEWCTET Medical and Disability Experience Pack.

Cardiff School of Education's purpose-built, eco-friendly Outdoor Learning Centre in the woodland area at the Cyncoed Campus opened in April 2015 and provides a range of learning opportunities linked to sustainability issues. The market for Forest School courses is strong and the Centre is ideally placed in South East Wales to meet the demand; a unique feature is our ability to deliver Forest School training through the medium of Welsh. The Centre is reaching a wide range of people within the local community and across South East Wales, promoting the principles of sustainability through a range of courses, including Forest School training, Earth Education workshops and curriculum focused events, such as literacy, numeracy and science, promoted within a natural environment. Highlights of 2014-15 included the Discovery Project, a research project tracking primary-aged pupils' interactions with the outdoor environment and a conference on using the outdoors in the teaching of science.

In other departments within the School, all programme directors have included sustainability as a standing item within their committee agendas. The Learning and Teaching Development Unit Sustainability Toolkit was used by programme directors to form the basis of their annual monitoring reports for the first time in 2014-15. Within the Department of Humanities, the periodic review of the Humanities Matrix, Educational Studies and Associated Pathways in March 2015 ensured that the principles within the LTU Sustainability Toolkit were reflected in all awards. This will also apply to those courses scheduled for review in 2015-16 (BA Secondary Education, BA and PGDip Youth and Community Work, PGCE PCET, PCE PCET and the International Foundation Course). In the Department for Professional Development, programmes preparing students for the youth and community development professions promote a commitment towards social justice, inclusion, equality and global citizenship. A recognition of environmental, political and cultural issues is central to these courses and students are encouraged to develop critical faculties that will prepare them for working in a wide range of contexts, including voluntary and statutory organisations, many of which are situated in socially disadvantaged local communities.



## STUDENT UNION AND FAIR TRADE

The Students' Union organised a beach clean at Llangennith beach in October '14 in partnership with Keep Wales Tidy. 7 students volunteered alongside other community groups to collect 30 bags of litter.

Another environmental project that took place in October '14 was a 'forest school' project at Tredegaville Primary School in Cardiff. During this project, 6 volunteers helped the school to transform an unused and overgrown outdoor area into an outdoor classroom by weeding and then laying down bark.

The Environmental Champions volunteer group organised a litter pick in March '15 at Bute Park, where 5 volunteers collected rubbish alongside staff from a local McDonalds. In June '15, another litter pick took place with SU staff and students who teamed up with local councillors, Keep Wales Tidy and local residents in Roath to collect 14 bags of rubbish in just one hour.



**Above:** Volunteer moving bark at the Forest School project



**Above:** VVolunteers at the Forest School project- Oct 14



**Above:** Volunteers at Llangennith Oct 14



**Above:** Volunteers at Bute Park litter pick- March 15



**Above:** Cardiff Met SU staff and students with a Councillor and local residents at a litter pick in Roath- Jun '15





## EMISSIONS AND EFFLUENTS

The University continues to be exempt from Emissions to Air Consent, due to its insignificant impact (ref Natural Resources Wales) This exemption was re-confirmed in July 2015.

However, despite this exemption, the University continues with its robust maintenance strategy in line with statutory obligations, its Schools continue to maintain their risk assessments to ensure minimal impact on the local environment (dealt with at a local level within Schools)

The University has completed a full survey of surface and foul water drainage at its Cyncoed (and Llandaff), and has an action plan to address all remedial work identified.

The University continues to hold a letter of consent, issued by Welsh Water, again this was re-visited in July 2015 which permits the University to deposit trade effluent into the local drainage system. This consent recognises the insignificant impact that the University effluent has on the water course.

### Air-Conditioning Inspections

The University contracts specialist services to maintain its air conditioning equipment. This contract includes robust testing for refrigerant leaks, and oversees the phased replacement of the ozone depleting gas, R22, with more environmentally friendly gas, as and when necessary.

Refrigerant leak tests also form part of the servicing schedule, as even the environmentally friendly gasses have a global warming potential.

The Estates and Facilities Department will continue to pursue an active regime of reducing, where possible, the amount of chemicals in use through its procurement of contractors and materials.

Throughout the implementation of ISO14001 the University has been working to become compliant and to ensure emissions to air are kept to a minimum, including identifying further potentials for improvement. All relevant environmental legislation relating to emissions to air has been identified and the University is working toward full compliance.

# ENERGY AND UTILITIES

## Carbon Management Plan

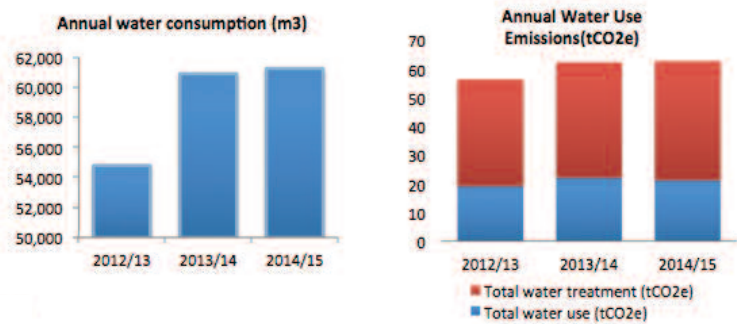
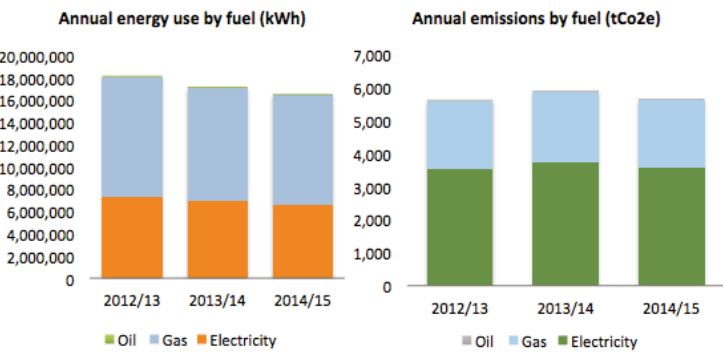
This year represents the second year of the University's new five-year Carbon Management Strategy and Implementation Plan for the period 2013-2018. This plan builds upon the previous strategy which was successful in achieving emissions reductions of 16.3% against a 12% target largely from behavioural change, technical projects and improved housekeeping. The current strategy tasks the University with reducing a further 3% in carbon emissions per year up until 2018 in line with Welsh and UK Government long term ambitions.

Over the last year we have continued to consolidate our site portfolio with the sale of our Howard Gardens campus. This resulted in reduced supply costs for electricity, gas and water and represents a contributing factor to the overall reduction we have achieved in our energy performance.

## Energy and Carbon Emissions

The University has continued to reduce its electricity and gas consumption across the estate. In 2014/15, energy use dropped by 3.7% overall compared to the previous year from a total of 17.07 GWH to 16.4 GWH. Electricity consumption reduced by 4.17% and gas consumption reduced by 3.5%. Oil use remained consistent but represents less than 1% of total energy consumption. Overall energy performance represents a reduction of 9% compared to the baseline year 2012/13.

Energy emissions for 2014/15 are down 4.3% compared to the previous year from 5,868 tCO2e to 5,616 tCO2e, but unfortunately they have increased by 0.33% against the baseline year as a result of continued volumes of coal being used in the electricity fuel mix, sustaining the emissions conversion factor at last year's levels. Looking ahead, carbon targets will become increasingly challenging to achieve given the scale of future development and planned growth in occupied space.

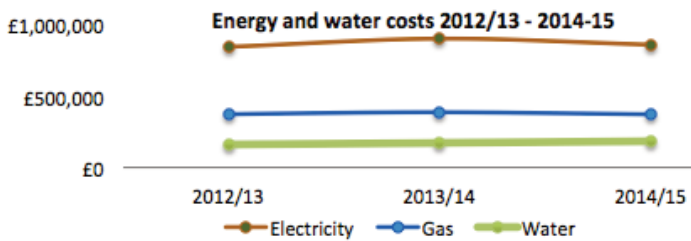


## Water and Carbon Emissions

Water consumption has remained broadly the same as the previous year with a marginal increase of under 1%. Consumption has increased by 11.7% since the baseline year 2012/13 since the construction of the new Cardiff School of Art of design building at Llandaff and marginal increases in consumption in the Cyncoed Campus.

Emissions associated with the supply and treatment of water have risen by 11.7% in line with increased consumption. Further reductions in water use will be a challenge with upcoming developments in Cyncoed Campus, however there are water reduction projects identified in the Carbon Management Plan that will be considered in the coming year to help us achieve cuts in consumption.





### Energy and Water costs

In 2014/15, the University spent £1.41m on energy (electricity, gas and oil) and water representing a 3.6% reduction in overall energy costs compared to the previous year in accordance with a 3.7% reduction in energy consumption.

Electricity accounted for 61% of this total, with gas contributing 26%, water at 13% and oil under 1%. The new strategy places a specific focus on reducing electricity consumption as the primary contributor to our total utilities costs and an LED replacement programme aided by a comprehensive lighting survey for prioritisation purposes has commenced to address this.

This year represented the final year of our existing electricity and gas supply contract and the University's Procurement and Estates team have taken advantage of the continued decline in wholesale energy prices to secure new contract tariff rates at considerable discounts compared to the previous supply agreement.

## ENVIRONMENTAL AWARENESS

The University recognises environmental awareness as a key aspect in its Environmental Management System, particularly in respect of the large number and annual migration of students, staff, visitors and contractors on site, presenting a challenging mixture of backgrounds, cultures and interests. The environmental awareness supports all aspects of the Environmental Management System.

Different methods are used in order to engage initially with all but also to contact the right people at the right time, for example the reference earlier in the report of Go Green Week and the e-learning sustainability module for staff induction. There is also compulsory student Halls induction which communicates the recycling and waste on Campus.

The use of television screens, posters, emails and signage continue to confirm the message. Attendance at awareness sessions e.g. Freshers Fayre, Go Green Week and the collaboration of Aspect Owners and other parties e.g. Cardiff Digs, in terms of waste management, noise pollution etc, Cynnal Cymru and Fairtrade Fortnight, Student Blackout etc.

## OCCUPATIONAL HEALTH AND SAFETY

The University recognises that the health and well-being of staff and students is essential to its success and therefore is committed to the provision of an environment which supports the adoption of healthier lifestyles. The philosophy which underpins this commitment is one of self-help and individual responsibility within a corporate framework, promoting and supporting good practice to comply with legislation, addressing key workplace risks to health and encouraging a healthy lifestyle culture. The encouragement of healthy lifestyle culture among staff and students includes active support to staff and students that use sustainable forms of commuting (walk/cycle/public transport) to/from and between their places of work and study. Health and well-being development is a key component of the Corporate HR Strategy and improvement goals have been set which target key preventable ill-health issues and the Welsh Government's Health Challenge Wales priorities.

**The aims of the strategy are to enhance the University's reputation as a health promoting University through:**

- Improving the health (physical, emotional and psychological) of the University community; and
- Increasing employee engagement.

To achieve these aims, key strategic objectives have been identified as being crucial to its success. Attached to Appendix 5 is a table which identifies those objectives and provides an outline of progress made on their respective achievement during 2014/15



**Above:** Students working in Cardiff School of Art & Design.

## CHEMICALS AND HAZARDOUS SUBSTANCES

Schools and Units are required to identify and assess risks posed to staff, students and the environment by hazardous chemicals and to liaise with Campus Services over their safe disposal. During 2014/15, Schools and Units continued to ensure that risk controls implemented for hazardous chemical substances remained effective. Progress continues to be made towards the establishment of a University-wide Code of Practice for the use and disposal of chemical substances. A cross school working group was established in the summer of 2013 and a Hazardous Chemicals User Workshop event was held in 2014/15 as part of the Corporate Staff Development Programme.

# PAPER

The university continued to source the majority of its paper through Antalis Paper under the Higher Education Purchasing Consortium for Wales (HEPCW). Following some paper feeding issues with Discovery 75gm, tests confirmed that the most suitable paper was Image Light. An FSC approved environmentally friendly paper that is suitable for both mono and colour printing. The following summarises paper purchased 'centrally' by the University over the last 6 years. Last year the target was changed as the previous target was exceeded. The new target was to reduce paper purchased by 50% from 2008/9 and 2016/17.

2008/2009 - volume of paper purchased: 11,129,152 sheets  
2014/2015 - volume of paper purchased: 7,075,729 sheets (63%)

The year actually saw a slight increase in the volume of paper used of 1% on the previous year, this may be attributed to the increase in staff numbers within the university over the same period.

NB This increase included an increase in specialist paper volume since last year, this can be attributed to improvement in Quality Professional Print within the university print service. Products such as Business Cards which used to be outsourced to external printers with a minimum order of 250 cards per person, are now produced internally and have a lower minimum quantity of 100 cards per person.

## Document printing

During the year the university made a decision to adopt a centralised print policy, and a project was implemented.

In March 2015 a full print Audit was completed by Canon (our current Multi Functional Device supplier) and the recommendations of installing a further 31 devices across the university was endorsed by the Vice Chancellors Board.

The Print Audit captured print volume and also identified energy and cost associated with the devices before making recommendations which are targeted to have a positive impact across the university in the future.

The project has 2 phases, the first phase was the installation of the new devices this took place in August - September 2015. The second phase due to start in November 2015 and expected to take approx. 12-18 months to complete involves the removal of the majority of desktop printers across the university.

## Double sided printing

We continue to encourage double sided printing with staff utilising this as much as possible. This year in print was extraordinary as total print volume increased by 15% from the previous 12 months, and the total number of duplex pages increased by 5%. However as a overall percentage of the total print volume duplex printing dropped this year.

Duplex percentage 13/14 = 49%  
Duplex percentage 14/15 = 46%

## Job deletion

The deletion of jobs shows actual savings in print due to the controls on the Print Management system adopted by the university when compared to direct print queues on printers where prints are released immediately and without a secure log-in.

### There are two main categories of deletion:-

#### 1. Deletion maintenance - when the system deletes a job after 24 hours in the print queue

Year 13/14	166,808 mono pages 48,477 colour pages
Year 14/15	161,144 mono pages 65,043 Colour Pages

#### 2. Manual deletion - is when the user deletes the job from the queue themselves

Year 13/14	321,493 mono pages 299,768 colour pages
Year 14/15	229,051 mono pages 75,272 colour Pages

#### 3. Total Deletion Savings (Paper to trees calculated as 17 reams equals 1 tree)

Year 13/14	836,546 pages approx. 800 reams of paper saved (47 trees)
Year 14/15	530,510 pages approx. 500 reams of paper saved (29 trees)



## SUSTAINABLE ESTATE

In academic year 2014 – 15 the University Estates Strategy was renewed and approved within the academic year, with the Estates Implementation plan approved by Governors. This has resulted in a focus on refurbishment and upgrade of existing space whilst the larger projects are planned and designed. This refurbishment programme has allowed the LED lighting programme to be delivered earlier, as our Strategy is to replace all lights affected by works, to be replaced by LED's and controls, effecting significant levels of electricity reduction. In terms of the planned projects we continue to adopt a passive design strategy to ensure that our buildings are efficient in use and capital expenditure and designed beyond current building regulation requirements.

**The Sustainable Estate covers a number of aspects and we have made very positive steps in improving the Estate using these aspects as an action plan ie:**

- Flood: We now have in place a planned maintenance programme for inspection and clearing of all main drains on our campuses.
- Campus appearance: Campus walkabouts are diarised prior to terms to ensure that the campus' retain a good appearance, that we continue to enhance the soft and hard landscaping and that all pathways are safe for students and staff.
- Planning: We have engaged with the City Council on a number of developments and have instructed a number of ecological surveys to our campus' to work with the Council's Ecology Section, to agree appropriate strategies to limit damage to plant and animal life. A number of separate initiatives have been undertaken relating to bird boxes, beehives and encouragement of insects and wildlife by the retention of fallen/felled trees. In addition we completed our Outside Learning Centre at our Cyncoed Campus which is a facility that allows local school children to learn about wildlife within this ancient woodland. Knotweed: We continue to follow through our knotweed eradication plan which is greatly enhancing the border areas to our campus' especially at Llandaff.

## SUSTAINABLE PROCUREMENT

The University's procurement function is a key contributor to the achievement of sustainability objectives through its role in managing all aspects of tendering and the appointment of preferred suppliers.

Whilst the primary objective of all University procurement is the achievement of best value for its goods and services needs, the

University seeks to configure all procurements to include all forms of corporate policy objectives, of which sustainability is a major consideration, and to do so in a manner consistent with the Welsh Government 'Welsh Procurement Policy' statement.

When developing the specifications for its procurement requirements, the University strives to include sustainable benefits, which in the last twelve months have ranged from a continuation of the growth in use of office products manufactured from recycled materials; the procurement of more foods from local sources; through to the delivery of a number of 'community benefits' deriving from tendering exercises.

Wherever practicable, the University divides its tenders into regional or requirement 'lots' to assist in ensuring smaller and local businesses are able to engage in University procurement exercises and to help reduce the carbon footprint in its direct and indirect supply chains.

The benefit to the local economy of these various 'local supply' initiatives can be illustrated through the fact that in the last twelve months, some 58% of the University's influenceable spend was placed with Welsh based suppliers, which reflects an increase of some 5% over the last 4 years.

The University seeks to make full use of electronic tools wherever appropriate in its procurement processes. The University has been using electronic tendering for almost 10 years and also has a well-established e-procurement ordering process utilising an e-marketplace that hosts electronic catalogues and facilitates the transmission and receipt of electronic purchase orders and invoices. The University also transmits non-e-marketplace purchase orders via automatically-generated emails and uses the same technology to electronically issue remittance advices to suppliers. Implementation of these processes has resulted in a dramatic reduction of the use of hard copy documents and stationery used in communicating to bidders and suppliers and, as a consequence, dramatically reduces the use of surface mail services.

In the coming twelve months, the University will: be expanding the positive impact of paperless business trading by increasing the number of suppliers trading through the university's e-marketplace; seek to make use of the changes to the Public Contracts Regulations ("EU procurement rules") to further enable small businesses to participate in tender exercises; and intends to complete the development of an enhanced approach to commodity management that should allow the University to further influence environmental improvements through its supply chains.

# TRAVEL AND TRANSPORT

## Walking / Running

The past year has seen an increase in walking or running to campus as a lifestyle choice amongst both students and staff. The 2013/14 travel survey indicated that over a quarter of students and 14% of staff now daily walk to campus.

### This has been supported by:

- An increase number of students and staff accessing the dedicated showers, storage and changing facilities.
- Provision of safe campus walking guides.
- The provision of 90 places at the Cardiff Half Marathon in October 2014 purchased by Cardiff Met for staff.
- The introduction of a weekly staff/student running/walking club.
- The addition in September 2014 of a further 150 student bedrooms located within walking distance of campus.
- Walk to Work free breakfast packs available four weeks a year.

## Cycling

Cardiff Metropolitan University has the largest work based Bike User Group in Wales with in excess of 320 members of staff regularly cycling to work. In addition to this, over 800 students have currently requested card access to the cycle stores be added to their ID card.

Our continued focus on cycling as a preferred travel method for staff and students has resulted in 7.1% of students (745) and 11.7% of staff (146) cycling regularly. This has been supported by the University free breakfast scheme which has witnessed in the past three years an average of 308 members of staff annually participating in the Cycle or Walk to Work weeks. Cardiff Met having provided a staggering 6,565 free healthy breakfasts during this period.

### Recent cycling initiatives have included:

- The upgrading and completion of the Cycle Hub at Llandaff – a direct cycle lane from the front of the campus that safely skirts the perimeter and delivers the user safely to the cycle stores and shower facility
- The purpose built Cycling changing, storage and shower facilities that opened in September 2014 in the new Cardiff School of Art & Design.
- The 28 days a year of FREE breakfast for staff who opt to cycle or walk to work.
- The addition of a further all weather cycle stand at Llandaff Campus in July 2015, taking the total to four stands providing cover for 160 bicycles.
- Continued sales of Grade 10 security D-Locks for to purchase at £20 from Print Studios. RRP £69.99

- The April 2015 participation in the staff Cycle to Work purchase window resulted in 29 Academics and 28 support staff participating. A total of 57 new staff bicycles.
- The annual provision of 1,000 Cardiff cycling maps courtesy of the Cardiff City Council given to staff and students from September 2014.
- Donation of discarded cycles on campus to a local cycle charity to be rebuilt and reused in the community.
- Cycle repair workshops for staff and Dr Bike repair days for students and staff cyclists in April and May 2015
- The launch of the Cardiff Met Cycling Club and participation in Velothon Wales in August 2014



## Met Rider

Since the Met Rider was launched in 1997 usage has grown from just 100 permits a year to in excess of 2300 passes a year, making it the largest student bus service in Wales. The Rider offers students and staff an affordable and subsidised method to travel safely around the city of Cardiff. Student passes are valid from 1st September until 30th June each year and cost under £6 a week for the entire year. Staff passes are valid for the entire year at under £24 a month which is deducted monthly throughout the year.

During the 2014/15 term the university peaked at 6,200 individual journeys being made weekly on the Rider with over 130,000 journeys being taken in total that year. It is not just members of Cardiff Met that benefit though, as the Rider is a public service linking Cardiff East and West with routes that did not previously exist.

The 2013 Student Travel Survey illustrated that of the 1277 respondents, 508 (39.8%) confirmed they have used the Rider to attend Campus during the past year. Of 427 staff respondents 79 (20.1%) confirmed they had used the Met Rider in the past year to either travel to campus or between campuses.



## Car Share

Cardiff Met is a founder member of CarShare2Cardiff joining within the first week of the schemes launch in 2006. Since the introduction of the scheme the university has experiencing fluctuating demand for car share spaces dependent upon the success on our periodic car share campaign. The University currently has a total of 731 members (148 staff and 583 students) and 39 active groups registered with the car share scheme.



Our active car share groups reduced their car mileage by approximately 133,592 miles in 2013, which equated to savings of 33.4 tonnes of CO2.

	731 members (148 staff and 583 students) and 39 active groups registered with the car share scheme.	Mileage saved if members in group travel together	Tonnes CO2 of members in group if driving separately	Tonnes CO2 saved if members in groups travel together
Per Week	5,618	2,969	1.4	0.74
Per Year	252,803	133,592	63.2	33.4

## Business travel

Business travel is an essential part of Cardiff Met's daily operations, but where applicable we always seek to ensure that staff are travelling via the most sustainable option. The University encourages staff to reduce their business travel via the utilisation of technology, such as web conferencing, virtual learning and one to one skype discussions.

With an expanding overseas student market, we will always have a necessity for air travel to promote the University and its courses. Where possible air travel is kept to a minimum with long haul visits being combined to several destinations in one trip rather than repeated long haul flights from the UK.

## Collaborative Working

SEWTA - We have continued to work closely with SEWTA (South East Wales Travel Alliance) hosting and presenting at the HE/FE Travel Group as a founder member twice in the past reporting period.

Cardiff Council - Ongoing consultation with Cardiff City Council and continual recognition from them as 'best practice' in the Higher Education sector in South East Wales.

Traveline Cymru - Continuation of our eight year relationship with Traveline Cymru and guidance provided on effectiveness of their new promotional campaign to be launched January 2016

## Social Media

September 2014 saw the addition of the Met Rider timetable and directions to campus being added to the Cardiff Met App, along with regular travel promotions via the University Facebook and Twitter accounts.

July 2015 saw the launch of the latest Cardiff Met Travel Plan - Annual Report 2014/15

Link to Travel Plan:

[http://campaigns.cardiffmet.ac.uk/documents/accommodation/TravelPlan\\_2014-15.pdf](http://campaigns.cardiffmet.ac.uk/documents/accommodation/TravelPlan_2014-15.pdf)

## WASTE MANAGEMENT

All of the General Waste produced by the University is still being sent to the Trident Facility in Cardiff Bay for Energy Conversion. This means that very little, if any, waste is sent to Landfill. Recycling is at an important stage. The change to mixed recycling during 2010 / 2011 took the monthly average recycling weights from circa 15 tonnes per month to 30 tonnes per month very quickly. Unfortunately the graph below shows that the average monthly weight for recycling has settled at circa 33 tonnes per month.



The University has facilities in place to recycle most of the common waste streams that arise and Campus Services are able to make special arrangements for any other particular waste that might be produced but the system is only as good as the people using it and their commitment to sustainability.

Any new recycling initiatives will be considered and / or implemented but the main emphasis for 2015 / 2016 will be to re-introduce the "Message" by starting a new advertising campaign to promote Recycling for all users of the University.

A Recycling Stall was set-up and run successfully during the "Freshers' Fayre" for students in September and a similar stall is planned for the "Go-Green" week in February at Llandaff to promote recycling and publicise the on-site facilities. Other methods of internal advertising and publicity will also be adopted to try and ensure that all users of the university are exposed to our sustainable policy and are fully aware of our recycling targets and facilities.

## FUTURE GENERATIONS ACT AND SUSTAINABLE DEVELOPMENT CHARTER

The Well-being of Future Generations (Wales) Act 2015 became law in Wales on 29 April 2015. The Well-being of Future Generations (Wales) Act is about improving the social, economic, environmental and cultural well-being of Wales. This will help to create a Wales that we all want to live in, now and in the future. As the University is not a Public Body, it does not have to comply with the Act but we still face the same challenges now and in the future, to tackle these we need to work together with Public Bodies to give current and future generations a good quality of life we need to think about the long term impact of the decisions we make.

Cardiff Met signed up as a Sustainable Development Charter Signatory in July 2015. The Sustainable Development Charter for Wales is a group of 260 (and growing) cross-sector organisations operating in Wales who are embedding sustainable development at the core of what they do. Since 2009, these organisations have been working towards making Wales a more sustainable place to work and live. In signing up as a signatory Cardiff Met has demonstrated publicly the University's commitment to creating a prosperous, resilient, healthy and more equal Wales – a nation with cohesive communities, a vibrant culture and thriving Welsh language and one which is globally responsible (see Appendix 4)

This partnership enables the University to become a member of the Charter Network with the opportunity to attend a range of events to support learning and leadership within the Network.

Each year, Charter signatories commit to completing a challenge and, at the end of the year report achievements to us for inclusion in an annual report. This year as a new signatory the first challenge is to provide evidence of how Cardiff Met is embedding sustainable development at the heart of the University. In addition this year we will be providing evidence that can be used to assist the public sector in reporting on the Well-being of Future Generations (Wales) Act.



## CONCLUSION

The University continues to make excellent progress on the environment and sustainability agenda and thanks are due to the staff and students for their contribution. Its pursuit of becoming a top 10 university in the next five years opens up further challenges. There are many examples where the University makes a difference, but it can do more. This is a great opportunity to lead in pushing forward the principles of sustainable development. By committing to the sustainable development agenda, Cardiff Metropolitan University can win the hearts and minds of staff and students, create positive impacts, shift the culture from compliance to alliance and drive up performance and invest in the future.

## COMMUNITY ENGAGEMENT

2015 saw the production of the Cardiff Student Community Plan 2015-18, a partnership document developed by the City of Cardiff Council and three Universities, namely Cardiff, Cardiff Metropolitan and University of South Wales. The Student Liaison Management Group strategically addresses the challenges of the Student Community Action Plan and makes recommendations for the direction and priority of the plan by reviewing, monitoring and developing the Action Plan. Whilst key partners consist of the Council and Universities, much progress has been made to integrate a wide range of key partners from public, private and charity enterprises. The plans success relies on partnership s and introducing new stakeholders to the plan is integral to success. The wider joint working is secured by the Student Liaison Officer who liaises with a range of stakeholders, including :- University Accommodation Managers, Student Union Reps, Environmental Champions, local community groups, local residents and sustainability groups. These activities have been complemented within the University with awareness initiatives on promotion e.g. Waste management, recycling, Environmental Champions, Get it Out for Cardiff Campaign, energy initiatives and sustainable transport.

## APPENDIX 1



**Sustainable Thinking**  
**Maddwl Cynaliawd**  
Cardiff Metropolitan University  
Prifysgol

*[Handwritten signature]*

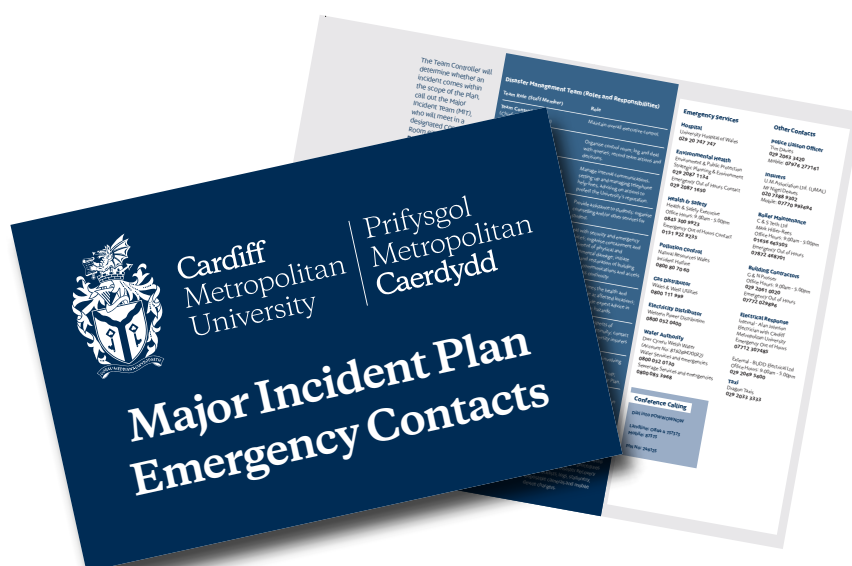
## APPENDIX 2

### ENVIRONMENTAL ASPECTS AND ASPECT OWNERS

Aspect	Owner
Academic Development	Dean of Learning and Teaching
Research into Environmental subjects	Director of Research and Graduate Studies
Emissions and Effluents	Maintenance Operations and Space Manager
Energy and Utilities	Energy Manager, Estates and Facilities
Environmental Awareness	Environmental Performance Manager
Operational Health and Safety	Health and Safety Advisor
Paper	Commercial Services Manager
Sustainable Estate	Head of Property Services and Deputy Director
Student Union and Fairtrade	Chief Executive, Cardiff Metropolitan University Student Union
Sustainable Procurement	Head of Procurement
Travel and Transport	Travel Plan Manager, Estates and Facilities
Waste Management	Facilities Manager, Estates and Facilities

## APPENDIX 3

### MAJOR INCIDENT PLAN



**Above:** The Major Incident Plan Z-Card Wallet leaflet distributed to all Senior Managers.



## APPENDIX 4

### SUSTAINABLE DEVELOPMENT CHARTER SIGNATORY CERTIFICATE



Y SIARTER SUSTAINABLE  
DATBLYGU DEVELOPMENT  
CYNALIADWY CHARTER

#### Cardiff Metropolitan University | Prifysgol Metropolitan Caerdydd

##### Llofnodwr y Siarter Datblygu Cynaliadwy

Cydnabyddiaeth ar gyfer eu hymrwymiad i wneud datblygu cynaliadwy yn egwyddor drefnu ganolog eu sefydliad.

Llofnodwy signed:

Enw name: **Natalie Rees**

##### is a Sustainable Development Charter Signatory

recognised for their commitment to making sustainable development the central organising principle of their organisation.

Dyddiad date:

23/09/15

Swydd position: **Cydlynnydd y Siarter Charter Coordinator**



Mae'r Siarter Datblygu Cynaliadwy yn fenter gan Lywodraeth Cymru a weinyddir gan Cynnal Cymru – Sustain Wales.

The Sustainable Development Charter is a Welsh Government initiative administered by Cynnal Cymru – Sustain Wales



✓ Datganiad o ymrwymiad i'r Siarter Datblygu Cynaliadwy

✓ Declaration of commitment to the Sustainable Development Charter



## APPENDIX 5

### OCCUPATIONAL H&S

#### STRATEGIC AIMS AND OBJECTIVES - WORKPLACE HEALTH AND WELL-BEING STRATEGY

**The aim of the Workplace Health and Well-being Strategy 2010 - 2015 is to improve performance through the achievement of:-**

- 'a healthier and more engaged staff and students population' and
- 'the development of Cardiff Met as an exemplar health promoting university' \* physically, emotionally and psychologically healthier

In order to achieve this aim a number of specific strategic goals are also identified in the strategy. The strategic goals for 2010-2015 are contained in Table below along with a range of specific activities associated with the achievement of those goals.

#### **Strategic Goal 1 - To improve awareness of health and well-being Linked activity**

- Development of a Workplace Health and Well-being Communication Strategy
- Development of dedicated health and well-being element on intranet
- Provision of Health MoT's for staff
- Access to discounted health plan service (Healthshield)
- Staff development training on stress and mental health awareness
- Encourage staff participation in School/Unit health & well-being research projects

**Strategic Goal 2 - To provide supportive mechanisms to enable staff and students to make informed health oriented lifestyle choices. Linked activity Support the implementation of the;**

- Eatwell project
- ASH Wales Smoking Cessation programme
- Cycle Purchase scheme
- Bike Doctor and MoT schemes
- Healthy Working Wales – email cascade

#### **Strategic Goal 3 - To increase engagement through encouraging participation in workplace health and well-being activities Linked activity**

- Support for events and initiatives recommended by the Health Promotion Group
- Staff release for active participation in university health and well-being related research
- Staff release to complete biennial health and well-being survey

**Strategic Goal 4 - To improve the general health and well-being of staff and students Linked activity**

- Improve fitness through annual exercise initiative
- Encourage active forms of transport through support for Bike and Walk to Work weeks throughout the year
- Discounted fitness centre membership both internally (SFM) and externally (Cardiff Council's Corporate Membership scheme)
- Discounted access to University health clinics and centres
- Flexible family friendly HR policies, procedures and work allocation
- Access to taster sessions in art and design and creative writing and thinking sessions

**Strategic Goal 5 - To reduce sickness absence. Linked activity**

- Provision of an effective proactive Occupational Health service
- Support managers through provision of a health referral process for staff access to a range of internal and external health professionals
- Access to on-site counselling

**Strategic Goal 6 - To provide and maintain a safe and healthy work and study environment. Linked activity**

**Implementation of the;**

- Health and Safety Policy
- Corporate Health Standard Award Gold Level criteria
- Temperature in the Workplace Policy



**Strategic Goal 7 - To develop Cardiff Metropolitan University's reputation as being a health promoting university.**

**Linked activity**

- Development of a Centre for Occupational Health and Well-being - EmWell
- Enabling public access to health and well-being provision and support
- Publication of health and well-being related research papers

**Key Performance Indicators**

Performance of strategic goals will be reviewed at least annually. The key performance Indicator for the strategy will be measurement of health and well-being provision against the Welsh Government Gold Level Corporate Health Standard criteria.

**Key Performance Indicator**

Corporate Health Standard: Gold Level provision

Year	KPI	Verification
2010/11	Achieved	External confirmation Independent assessor
2011/12		Achieved External validation by Welsh Government assessment
2012/13	Achieved	Satisfactory completion of CHS Action Plan
2014/15	Achieved	External re-validation by Welsh Government assessment



**Above:** Example of staff email promoting Health & Wellbeing at Cardiff Met.

