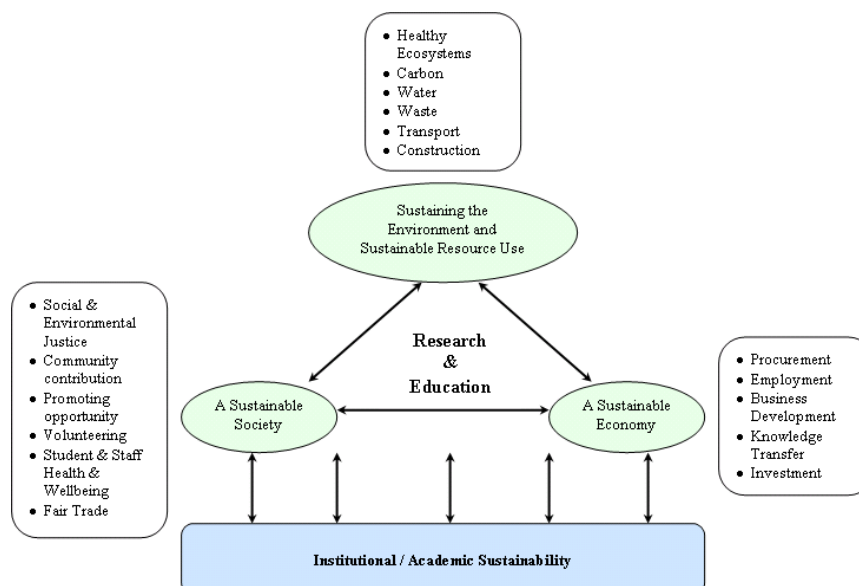


# Sustainable Development Strategic Framework for Cardiff University

## 1. Introduction

- 1.1 As sustainability becomes an increasingly important priority throughout the world, there are various drives, at Welsh, UK, European and International level, to promote the sustainability agenda and to ensure that all organisations are incorporating sustainability within their strategies and throughout their operations.
- 1.2 At Cardiff University, we believe that, rather than doing the minimum in order to fulfil our obligations, sustainability should be integral to the values of the University, and be embedded in our operations.
- 1.3 Aligning our strategies and operations with the key sustainability principles of long-term social justice and environmental protection allows the University to maximise its contribution to an improving quality of life for our staff and students and communities in Cardiff, Wales and internationally. It also helps us to increase our efficiencies, reduce our costs, and provide a better environment, within which the day-to-day experiences of students, staff and visitors reflect our commitment to sustainable development.
- 1.4 We believe in practicing what we advocate through our research and teaching excellence, and that the promotion of our sustainability credentials should be supported by solid, practical policies which ensure we are doing exactly as we say. We also believe in providing tangible evidence of our sustainable credentials, and we are committed to closely monitoring our progress.
- 1.5 As a University, we believe that by promoting sustainability in the areas of environment, economy and society we will in turn ensure our academic sustainability, and ensure the longevity and success of our thriving University. Diagram 1 illustrates the University's approach to sustainable development and the connections between each area.



- 1.6 We believe that sustainable development can ensure a better quality of life for everyone, now and for generations to come, and can assist in ensuring social progress, effective protection of the environment, prudent use of natural and human resources, and the maintenance of high and stable levels of economic growth and development.
- 1.7 Utilising the academic expertise available to us at the University through our internationally recognised research base in environmental and social sustainability, we are able to explore, promote and educate about the issues of sustainability through our research and through the delivery of our courses and modules.
- 1.8 Our decision making framework, procurement and other processes will be underpinned by the principles of sustainable development and will consider the economic, social (including equality and diversity) and environmental impacts and wellbeing over the longer-term and managing any conflicts between these.

## **2. The External Context**

- 2.1 At the European Union (EU) level, the renewal of the EU Sustainable Development strategy in 2006 confirmed the long standing commitment to sustainable development, and the support and promotion of actions to enable the EU to achieve continuous improvement of quality of life for both current and future generations. While environmental protection remains at the heart of the strategy, other guiding principles include social equity and cohesion, economic prosperity, and ensuring policies are coherent with international responsibilities.
- 2.2 The Welsh Assembly Government (WAG), under the Government of Wales Act 2006, places the promotion of sustainable development at the heart of its work as outlined in its Sustainable Development Scheme - One Wales: One Planet. The scheme outlines the WAG's vision of a sustainable Wales; confirms that sustainable development will be the central organising principle of WAG; and that steps will be taken to embed this approach with a commitment to reduce carbon emissions by 3% per annum from 2011 onwards. The WAG sustainable development scheme reflects the priorities of the EU sustainable development strategy.
- 2.3 The Higher Education Funding Council for Wales remit letter 2010/11 clearly sets out the expectations of the WAG on the higher education sector in embedding sustainable development within institutions and abiding by the principles of sustainable development within our decision-making, procurement and other processes.

### **3. Our Sustainability Commitments**

- 3.1 This is taken further as we pursue the principles of sustainable development both in the management of our internal operations and in our engagement with external stakeholders. This is reflected in the key aim of the University's Innovation and Engagement Strategy, which states:

*"Cardiff University aims to benefit society through making a significant and sustainable contribution to health, economy, education and culture."*

Encouraging sustainability is one of the values stated within our strategy. We are conscious of our corporate social responsibilities and of the long-term role we play in both immediate and wider societies. We exercise this responsibility through our academic activities and through managing the University in a sustainable manner.

- 3.2 We recognise that, as a large university operating from multiple sites across the city, our operations will impact on the world around us. Therefore we are committed to taking practical steps to improve and promote sustainable development in all areas and make a positive contribution to our environment, society and economy.
- 3.3 Through utilising the academic expertise available to us within the university, we are committed to exploring, promoting and educating on sustainability issues through our research and degree programmes for the longer term benefit of the next generations in our society.

### **4. Our Academic Excellence in Sustainable Development**

#### **4.1 Our Research**

- 4.1.1 As a Russell Group University, we are internationally recognised as being among the top tier of Britain's research-intensive universities. A defining feature of our University's research portfolio is the degree to which sustainable development research is a key strength across a range of physical, life and social science disciplines. This breadth of expertise is reflected in a number of significant research funding awards and the external funding of leading research centres including the Centre for Business Relationships, Accountability, Sustainability and Society (BRASS), the Low Carbon Research Institute (LCRI), and the UK Energy Research Centre (UKERC) to name just a few examples.
- 4.1.2 The University has recently made a significant strategic investment into the launch of the Cardiff University Research Institute of Sustainable Places (PLACE), which brings together researchers from ten schools covering social, physical and biomedical sciences with the aim of establishing an innovative and entirely new Institute for Sustainable Places, which both builds upon and strengthens existing international research excellence in the interdisciplinary and fast developing scientific field of sustainability. The schools involved in PLACE are Architecture, Biosciences, Business, City and Regional Planning,

Earth and Ocean Sciences, Engineering, Psychology, Medicine, and Social Sciences.

- 4.1.3 Further information regarding our research strengths in sustainability can be found at: <http://www.cardiff.ac.uk/sustainability/ourresearch/index.html>

## **4.2 Our Courses and Modules**

- 4.2.1 We play a key role in educating future generations of citizens, consumers, investors, entrepreneurs, leaders, and decision-makers within Wales, the UK, and globally. Some 7,800 students graduate from the University every year.
- 4.2.2 We recognise our responsibilities towards promoting environmental protection and social justice as a provider of quality teaching and research throughout Wales. We are in an ongoing process of ensuring that sustainability principles and the principles of inclusion are embedded in a wide range of teaching subjects, and in our practices of learning and teaching, thereby empowering our students and graduates to contribute towards a more sustainable, equitable and cohesive society.
- 4.2.3 Our courses and modules at undergraduate and postgraduate levels explicitly address sustainability issues, quality of life and welfare issues, and issues of inclusivity which are central to sustainable development. In addition there are a number of modules available to our students (who do not study mainstream sustainability related courses) that emphasise sustainable development issues.
- 4.2.4 As part of our ambition to integrate sustainable development principles more strongly within the curricula of our schools and the modules they offer, a Inclusive Curriculum Working Group chaired by the Pro Vice-Chancellor for Staff and Diversity has been established to consider the issues.
- 4.2.5 The BRASS research centre has developed the ground-breaking Sustainability Tool for Auditing University Curricula in Higher-Education (STAUNCH). This tool provides a uniquely systematic and holistic review of how the modules offered within the different schools contribute to the education of students on sustainability topics. All our undergraduate modules have been audited using the STAUNCH system and the results will help individual schools, and the University as a whole, to plan the further integration of sustainability principles within our teaching.
- 4.2.6 The STAUNCH tool has also been adopted by all other Universities in Wales to review the contribution of their courses and curricula towards sustainability topics.

## **5. Sustaining the Environment and Sustainable Resource Use**

- 5.1 Cardiff University is committed to taking practical steps to ensure the effective protection of the environment and prudent use of resources. We are working towards auditing and increasing our efficiencies of energy, waste and water

usage, recycling, green procurement, campus maintenance, and biodiversity. For example, the University secured a £1M grant from the Higher Education Funding Council for Wales to install 1,900 new energy meters, to reach a total of 3,000, and their automation system. We are also exploring the potential for alternative energy sources to meet our future energy needs, reducing impact in terms of climate change.

- 5.2 The following are the key environmental areas where we are taking practical steps to improve. These are supported by various operational policies, such as the Energy, Water and Waste policy, and the Environmental policy.

### **5.2.1 Emissions and Carbon Reduction**

We are committed to reducing emissions and making our carbon footprint smaller. We are active participants in the Carbon Trust Higher Education Carbon Management Project. We are working towards a plan to reduce our carbon emissions by 13% between 2006/07 and 2011/12. We are currently ahead of plan and are forecasting a 14% reduction.

A pilot project of implementing an Environmental Management System, ISO 14001, is underway across the Cathays Campus. The Heath Campus is already ISO 14001 compliant, achieved via a joint programme with the Cardiff and Vale University Heath Board.

The Energy, Water and Waste Working Group prepares an annual performance report benchmarking energy, water and waste costs against internal and external norms, comparing data against market based comparators and reviewing energy consumption in CO<sub>2</sub> equivalent terms.

Various energy saving initiatives are also currently being implemented, including energy usage audits and the introduction of automatic switch-off for unused PCs.

### **5.2.2 Waste Management**

We acknowledge our responsibility to protect the environment and as such will, wherever possible, reduce our environmental impact by continually striving to minimise the production of wastes and effluents and ensuring that hazardous wastes and effluents are disposed of in compliance with current legislation. Our action plan for domestic and hazardous/special waste is reviewed annually.

We are committed to recycling, and have implemented a Recycling Scheme which educates staff about what can and cannot be recycled. The University currently recycles around a third of waste, but we aim to consistently improve upon this. Energy and water wastage is avoided by the correct maintenance of the energy conversion plant, distribution systems and energy using equipment.

Each school and division within the University has an Eco Champion member of staff whose role is to promote and encourage the reduction of unnecessary energy and water consumption, minimise waste production and ensure

efficient recycling of unwanted resources. The role of the Eco-Champion will be expanded to include the promotion of 'reduce' and 'reuse' strategies in the near future.

### **5.2.3 Water**

We aim to reduce water consumption as part of our Energy and Water Saving Initiatives. Our water meters are read monthly and closely monitored against expected usage. Abnormal consumption is investigated and corrective action taken. Water wastage is avoided by the correct maintenance of the energy conversion plant, distribution systems and energy using equipment.

### **5.2.4 Transport**

A Sustainable Travel Plan is currently being finalised. The overall aim of the Sustainable Travel Plan is to reduce our carbon footprint through the use of more sustainable travel methods. We will encourage active travel first, i.e. walking and cycling, followed by public transport and the University liftshare scheme. In addition to this we will actively encourage the use of tele- and video-conferencing and, where possible, alternatives to air and car travel whilst on University business within the UK.

### **5.2.5 Construction and Refurbishment**

We aim to ensure that service and building developments are sensitive to visual amenity, and carefully consider their ecological impact on natural wildlife habitats and the local community. Our buildings are now being built to the BREEAM excellent standards and the University was recently commended on its efficiency in the use of Building Energy Management System (BEAMS) processes in relation to its carbon management efficiency.

Our Talybont Court hall of residence is built with timber frames from sustainably-managed forests and has individual solar panels providing hot water to flats for 511 students. In addition, our School of Optometry and Vision Sciences makes use of an energy-saving Ground Source Heating System. Pipes 100 metres below the ground use the earth's latent heat to warm and cool the building, offering major savings on gas consumption.

Projected energy, water and waste costs are always taken into consideration when planning the design of any new building projects, refurbishment and other capital projects. We ensure compliance with the "New Part L" (conservation of fuel and power) and all other relevant guidance and legislation.

We also continually review our space allocation to ensure space is utilised in the most effective manner, taking into account energy consumption and cost. Controlling energy costs and carbon emissions is intrinsically linked to the University's estates strategy.

## **6.0 A Sustainable Society**

- 6.1 We are committed to taking practical steps to work towards social progress. From ensuring the health, safety and wellbeing of our staff and students, to ensuring that our curriculum is inclusive, to participating in outreach and volunteering programs, we believe that we have a responsibility to support the social progress of our students, employees and the wider community.
- 6.2 We aim to contribute to a sustainable society through facilities such as the Student Support Centre and our Health Centre, our Childcare Centre, our trained Dignity Advisors and our Staff Development Scheme and Community Engagement Team.
- 6.3 These are a few of the practical steps we are taking to work towards a sustainable society both within and outside the University.

### **6.3.1 Occupational Safety, Health and Environment Unit**

The Occupational Safety, Health & Environment Unit (OSHEU) is dedicated to promoting the health and safety of staff, students and visitors to Cardiff University, and to create and maintain a safe place of work and a safe working environment through the dissemination of information, instruction, training and by regular auditing and monitoring. The University has a Safety, Health and Environment policy and monitors its implementation closely.

### **6.3.2 Positive Working Environment**

The Positive Working Environment (PWE) programme aims to develop a positive working environment for all of our employees where people feel valued and enjoy positive working relationships; where people work in a safe, supportive, responsive and accessible environment; and where the health and wellbeing of employees is promoted and supported in order to enable staff to maximise their potential and contribute to the development of the University's mission. PWE is a university wide initiative which seeks to improve working life for all members of staff at Cardiff University.

The programme has six key themes which are: Positive Relationships and Valuing People; Health and Wellbeing; Physical and Virtual Environments and Access; Communication; Equality and Diversity; and Building Management Capacity. Our first staff attitude survey in 2008 provided us for the first time with an evidence base against which to measure our progress in delivering the Positive Working Environment. The survey will be repeated every two years and actions emerging from it are closely monitored and communicated to staff.

### **6.3.3 Widening Access**

We are committed to widening access, at both undergraduate and postgraduate levels. As part of our responsibility towards providing equal opportunity to access for all prospective students regardless of their race, age, gender, ethnicity or disability we are encouraging people from disadvantaged backgrounds to gain a University education. This will

contribute towards creating a more sustainable, equitable and cohesive society.

#### **6.3.4 Community Engagement Team**

The Community Engagement Team (CET) is part of the University's ongoing commitment for engaging more effectively with the public. The principle aim of the CET is to work with academic staff to disseminate effectively the University's research and knowledge to increase public awareness of, and engagement with, the University's academic specialisms and expertise.

#### **6.3.5 Student Volunteering Cardiff**

Student Volunteering Cardiff (SVC) is a charity run by the students at Cardiff University. Our Staff and Students undertake voluntary work in and around Cardiff, working with the elderly, young, disadvantaged and vulnerable members of the community on a wide variety of different projects.

### **7. A Sustainable Economy**

7.1 Cardiff University is committed to taking practical steps to help maintain high and stable levels of economic development and employment, not just within the University but also throughout the wider community. We will play our role in contributing towards an economy which is resilient to the negative impacts both of changes in the wider global economy and of climate change.

7.2 We are one of the largest employers in Cardiff, and we support our students to gain the skills and knowledge needed for employability. We also offer support and expertise to many businesses, as well as creating our own spin-out businesses.

7.3 These are a few of the activities which contribute towards a sustainable economy:

#### **7.3.1 Cardiff University Innovation Network**

The Cardiff University Innovation Network (CUIN) aims to support regional economic development. The Network establishes contacts between businesses and the University, organises free business events with top speakers and the opportunity for networking, and is an important source of problem solving and knowledge based resource provision.

#### **7.3.2 Knowledge Transfer Partnerships**

We are an active participant in Knowledge Transfer Partnerships, the government funded scheme that enables businesses to access academic expertise and employ graduates to work on projects under the joint supervision of company and academic staff.

#### **7.3.3 Translating our research expertise**

Our research expertise in general, and in particular within low carbon and sustainable development, offers significant potential for the University to contribute towards the Welsh Assembly Governments 'Capturing the

Potential: A Green Jobs Strategy for Wales'. An examples of this includes the recently awarded SEREN project - an £8.3M project funded from the European Regional Development Fund, Welsh Assembly Government, British Geological Survey, and Private Sector with contributions from University's own funds - that is designed to deliver new and innovative ground engineering technologies and help businesses commercialise innovative ideas and develop new products, services and technologies for the low carbon economy. The impact of this research will help create new industries in Wales supporting new jobs and businesses, with the potential of making a significant contribution to Wales' quest to becoming self sufficient in energy.

#### **7.3.4 Sustainable Procurement**

Sustainable Procurement means looking beyond the initial price to take account of whole life costs, quality and other benefits. We aim for sustainable procurement by purchasing local, ethically sources and fair trade goods wherever possible, and our fruit, vegetables, meat, fish, bread, milk, eggs and mineral water are all sourced locally. Our Purchasing Section provides advice on sustainable procurement. We are a Fair Trade University - recognised since 2007.

### **8.0 Management Arrangements**

- 8.1 The Sustainability Group, under the chairmanship of the Pro Vice-Chancellor for Engagement will oversee the implementation and co-ordination of the Sustainable Development Strategic Framework. A detailed implementation plan accompanies the Framework, identifying performance indicators and timescales for delivery.
- 8.2 The Sustainability Group will provide advice, and receive advice, to and from various working groups and committees within the University on sustainability matters as required and report formally to the Innovation and Engagement Committee, Strategy and Resources Committee, and Council on an annual basis.
- 8.3 The annual Sustainability Week of the University will be the route to raise awareness of sustainable development within and outwith the University. It will be an annual showcase of our sustainability credentials and be a key vehicle to disseminate and engage with our staff, students and external stakeholders on sustainable development.