

# The University of the West of England, Bristol

Presentation by

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## Sustainable

Development and

Planning 2017

Towards a Sustainable

University





## **UWE Bristol**

- UWE is a modern, growing university with over 28,600 students, 3,692 staff and an income of £258 million (2015/16).
- Students come to UWE from all parts of the UK and from over 140 countries worldwide.
- UWE is a multi-site university with three campuses in and around Bristol encompassing fourteen departments covering a wide range of disciplines and expertise.
- Associate Faculty, Hartpury College and a regional education centre, in Gloucester.













## Strategy 2020

- Advancing knowledge,
- Inspiring people,
- Transforming futures

#### **Four Key Priorities**

- Ready and Able Graduates
- Outstanding Learning
- Research with Impact
- Strategic Partnerships, Connections and Networks

#### Two key enablers

- People: Performance and Development
- Place: Resources, Estate and Infrastructure
- http://www1.uwe.ac.uk/about/corporateinformation/strategy.aspx











# The Challenge

- A graduate leaving university today may have as much as 60 years of life after university.
- In that lifetime much will change and the future will be very different from the past.
- Profound sustainability and environmental challenges will confront a graduate both in their work and private life across those 60 years.
- Graduates need to be prepared through their higher educational experiences for the challenges and opportunities they will encounter in their professional and private lives in the rest of the 21<sup>st</sup> century.









## Education – the Problem

- Professor David Orr in his 1991 paper "What is Education For? said
- "Many things on which your future health and prosperity depend are in dire jeopardy: climate stability, the resilience and productivity of natural systems, the beauty of the natural world, and biological diversity."
- How did we get here? Well as Orr also said
- "It is worth noting that this is not the work of ignorant people. It is, rather, largely the result of work by people with BAs, BScs, LLBs, MBAs, and PhDs".









## Education: a (Partial) Solution

- So, if Education is partly the cause of our environmental misfortune might it be also a partial solution?'
- As Albert Einstein once said "The significant problems we face today cannot be solved at the same level of thinking we were at when we created them." Einstein reminded us that doing the same thing over and over again and expecting different results is insanity. We must change.
- Voltaire said "No problem can withstand the assault of sustained thinking".
- Universities are good at thinking!









## **UWE's Commitment**

#### Why are we engaged?

 Because the purpose of the University is the generation, analysis, understanding and transmission of knowledge.

#### **Education is our purpose.**

- Society's collective purpose must be to achieve a sustainable level of development.
- **Universities have an obligation** to society to play their part through the generation and use of knowledge and the education of citizens.













### **UWE Bristol**

- UWE Bristol has steadily increased its engagement with sustainability over many years to the point where it is now an embedded part of our institutional objectives and operations.
- Each aspect of university business now considers the sustainability implications as part of the business decision making process.















## **UWE's Actions**

- We have addressed the management of our campus and our curricula.
- We are infusing sustainable development in the curricula and ensuring sustainable management of our current and future estates.
- We have developed policy, plans and strategy to support sustainable development and implemented these into the business processes of the university both in our educational role and in the management of our estate.
- We support this with training and staff development. All new staff undergo sustainability training and for academic staff this is reinforced in the mandatory PG Cert in HE programme.







## Governance and Change Management

- Embedding sustainability is a change management process and above all a process of winning hearts and minds.
- We have been addressing this since the early 1990s.
- Actions were formerly expressed in our **Environmental Strategy**, then the **Sustainability Strategy** 2007–2012 and most recently in the **Sustainability Plan 2013-2020.**
- The Sustainability Plan is currently undergoing its mid point review and an updated and refreshed plan will be signed off by the Vice Chancellor's Directorate, Academic Board, the Board of Governors and the Students' Union in 2017.
- Recognition of ownership, responsibility and accountability is critical to the success of the approach UWE has taken.
- Successive VC's have demonstrated leadership in this agenda.









# Sustainability Board

- The Sustainability Board meets 5 times a year; it takes it authority from, and reports to, the VC's Directorate, Academic Board and the Board of Governors.
- Elected officers of the Students' Union report on outcomes through the governance arrangements of the Union.
- The AVC for Environment and Sustainability is charged with promoting the integration and enhancing the impact of all our sustainability teaching, research, knowledge exchange and community engagement activities.









# Sustainability Board 2

#### The Board

- advises the university on issues, concerns and opportunities
- reviews progress with the 11 themes of the Sustainability Plan,
- undertakes regular reviews of policies including the Environment Policy and the Ethical Investment Policy,
- approves action plans arising from the Sustainability Plan,
- reviews progress with the commitment to adopt the Principles of Responsible Management Education (PRME) across the institution,
- provides the governance of the whole institution ISO 14001 accreditation process and the Responsible Futures accreditation
- responds to emergent issues









## The Green Team in the SU

- The Green Team is part of the Students' Union and a full time SU employee coordinates the organisation and delivery of Green Team initiatives.
- The SU has an elected Sustainability Officer who sits on the Sustainability Board alongside the President and Vice President, Societies and Communication.
- Students are powerful and articulate advocates for change.
- We expect the Green Team to challenge us and to push us to do better in meeting our Sustainability Plan's aims and objectives.
- In 2016/17 the Green Team has over 1500 members making it the largest society in the SU!













# UWE's Sustainability Plan

- The university's Sustainability Plan sets out our ambition and the Vice Chancellor, with the Chair of the Board of Governors and the President of the Students' Union take collective responsibility to ensure that the aims and ambitions of the plan are secured.
- Progress with the plan is overseen by the University Sustainability Board and action devolved to Services and Faculties to embed sustainable development into their business decision making.













# UWE's Sustainability Plan

#### The Plan:

- Outlines the University's sustainability aims for the period 2013 2020
- Defines the mechanisms by which sustainability is embedded within the University's day to day operation and effective decision making
- Takes its authority from Strategy 2020
- Contributes to UWE Bristol's 2020 Strategy ambition by advancing the health and sustainability of our locality and region
- Contributes to UWE Bristol's 2020 Strategy priorities through the delivery of ready and able sustainability literate graduates
- Guides the development of sustainable estate infrastructure.
- http://www1.uwe.ac.uk/about/corporateinformation/sustainability/policiesplansandtargets.aspx











• A series of interdependent actions driving progress forward on a broad front. Underpinned by implementation plans.

#### Health and Wellbeing

 UWE Bristol aims to provide a positive and enjoyable student, staff and visitor experience. It aims to enhance every ones health and wellbeing by creating and promoting healthier working, learning and social environments.

#### Engagement in the Sustainability Journey

 Supporting active citizenship and providing the opportunity to engage in sustainability issues for staff and students. Challenging routine habits and practices.

#### Education for Sustainable Development

 Ensuring a sustainability culture permeates our curriculum, research and the knowledge base of our staff and students.









#### Sustainable Procurement and Ethical Investment

 To use maximise the opportunity provided by procurement to improve the sustainability of the UWE Bristol supply chain and purchasing decisions.

#### Campus Development

 Sustainability will be included from the outset in all construction, refurbishment and landscaping projects utilising smart design, innovation and procurement to address all relevant aspects of sustainability and in particular human and social impacts, climate change mitigation and adaptation.

#### IT and Enabling Digital Media

 Continually improve the sustainability of the IT infrastructure whilst maximising the wider social and environmental benefits enabled by IT.











#### Carbon Management

 Continual reduction in the carbon footprint of the University in line with the Carbon Management Plan.

#### Waste, Emissions and Discharges

To reduce the amount and hazardousness of waste, emissions and discharges.

#### Water

Reduce the use of supplied water.

#### Smarter Travel

 To reduce single occupancy car journeys to the University, reduce carbon emissions associated with travel and increase the use of sustainable travel options.

#### Biodiversity

 Deliver positive gains for biodiversity including measures to create, enhance and manage habitats, with improved access to campus green spaces.









#### New themes for the refreshed Plan

#### Sustainable Food

 To reduce food waste, increase the sales of Fairtrade products, increase the provision of seasonal fruit and vegetables, increase locally sourced food in restaurants and outlets, reduce meat consumption and use only free range eggs.

#### Climate Adaptation

Preparing the university for the climate uncertainty of tomorrow









## Environmental Management Standard

- UWE, Bristol is proud to have an Institution-wide certification to the Environmental Management Standard BS: EN ISO14001:2004 accreditation.
- Perhaps uniquely this certification covers BOTH the operations of the university and our teaching and learning.
- In May 2016 the external audit of our EMS again confirmed that UWE continued to be certified to EN ISO14001:2004. We are working towards certification against the ISO14001 2015 version from the summer of 2017.
- Increasingly the EMS is helping UWE to plan, manage and deliver its sustainability ambition











# **NUS** Responsible Futures

- The University and the SU at UWE, working in partnership, became the first, post pilot phase, institution in the country to be accredited by the NUS to the new Responsible Futures mark.
- This accreditation recognises the partnership working to embed education for sustainable development (ESD) in the curricula, to help students to understand the sustainability challenge facing society and preparing them to contribute to the green and low-carbon economy.
- This accreditation represents external recognition of the difficulty and impact
  of the work being undertaken to help every UWE Bristol student become a
  globally responsible and future-facing graduate.
- Together we achieved the highest score ever under the scheme.
- As part of the Responsible Futures accreditation process we were able to confirm, and then have external verification of the claim that all UG and PGT programmes of study provide ESD.











## Achieving the Primary ESD Goal

- In Academic Year 2014/15, and every year since, all our UG and PGT programmes of study provided the opportunity for students to engage with the idea of sustainability in the context of their discipline.
- This is a major achievement and UWE may well be the only university in the United Kingdom in which this claim can be verified.
- UWE's annual Quality Management and Enhancement Framework, and annual progress meetings with Academic Departments provide the mechanisms through which we audit and track progress with ESD in the curricula.
- The cross university staff group, Knowledge Exchange for Sustainability Education, is critical to the success of our ESD initiatives.









## Building the Sustainable Campus

- We are investing £300m on projects as part of the UWE New Campus Masterplan.
- Projects include
  - a new Faculty of Business and Law building,
  - a new Student' Union building,
  - redevelopment of the Bower Ashton Campus,
  - acquisition of Bush House and creation of the City Campus
  - and new student accommodation on Frenchay Campus.













## **Energy Security and Carbon Reduction**

- To improve our energy security and meet carbon emission reductions UWE, Bristol is installing a 1.2MWe gas fired CHP (combined heat and power) engine to supply 45% of the Frenchay campus heat, and save in excess of 1,100 t  $CO_2$  y<sup>-1</sup>. This saving is approximately a sixth of the total University 2020 Carbon Reduction Target.
- In 2016 we installed a 450kWp Solar PV (photo voltaic) array on our new University Enterprise Zone building. This array is the largest single roof-mounted array in the UK HE sector and will lead to carbon savings of over  $200t CO_2 y^{-1}$ .
- UWE is committed to achieving certification to ISO 50001-2011 standard in 2018.
- These investments will increase our future energy security and become visible commitments to our sustainability ambitions.









# 100% Electricity Supply from Renewable Sources.

- All electricity supplied to the University of the West of England (UWE Bristol) from October 2016 is from a guaranteed 100% green electricity tariff with EDF under a new framework from The Energy Consortia (TEC).
- The renewable energy status of the supply is verified by Renewable Energy Guarantees of Origin (REGO) certificates.













# Energy Action – more than just supply

- Energy efficiency improvement is more than new energy supply initiatives. It is equally about smaller scale projects cumulatively improving overall efficiency of use.
- Specific energy efficiency projects include lighting upgrades to LED and improved lighting controls, draught-proofing, BMS Controls, insulation and heating system upgrades.
- New cutting-edge awareness projects are being initiated such as using gamification of energy data for on-campus accommodation, and individual faculty carbon budgeting to stimulate behaviour change.

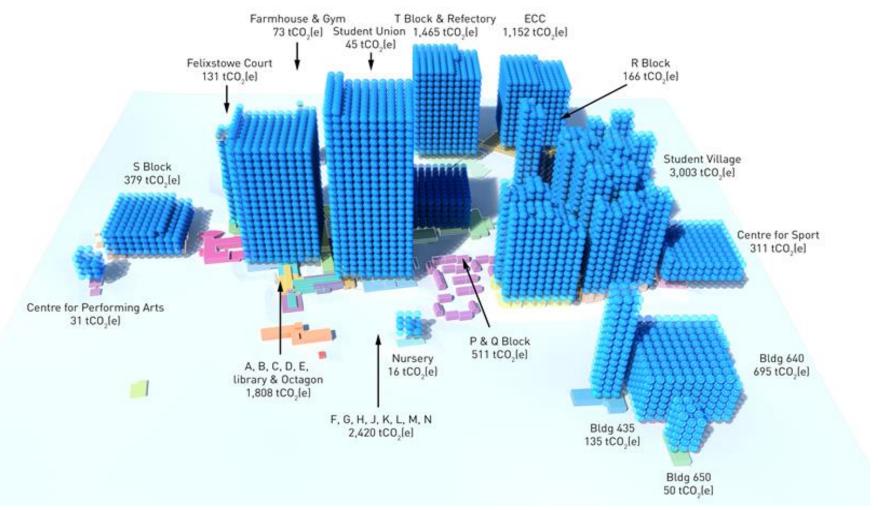








# Carbon Management











### **Smarter Travel**

- Travel accounts for approximately half of our overall carbon emissions at UWE Bristol.
- Our actions are directed at enabling staff, students and visitors to make sustainable travel choices to get to UWE Bristol by walking, cycling, public transport and car sharing.
- Improving cycling facilities route information, bike parks, showers lockers and a cycle loan scheme.
- Electric and hybrid pool cars available for Frenchay Campus staff with 12 free electric charging points at Frenchay Campus.
- Electric charging plate for hybrid buses the only one in Bristol.
- Free bikes to borrow for two weeks at a time from our Centre for Sport.
- Behaviour change initiatives and campaigns











# UWE - Go Ultra Low Company

- UWE is to be one of the first organisations in the UK to receive the 'Go Ultra Low Company' status. This new initiative recognises businesses that are embracing electric vehicles (EVs).
- As part of the Go Ultra Low (West) city project UWE will be the venue of a showcase rapid car charging facility for 8 vehicles.
- The scheme will be evaluated by UWE's Centre for Transport and Society who are also evaluating the public acceptability of the Venturer autonomous vehicle (https://www.venturer-cars.com/).



















## Engagement and Culture Change European Green Capital

- UWE played a very full part in Bristol's year as European Green Capital which provided a wide range of opportunities for thousands of staff and students to engage in, learn from and enjoy the year.
- Now we are working closely with the Bristol Green Capital Partnership CIC to ensure that the sustainability advances made in the Green Capital year continue.













# Whole Earth - a University **Engagement Tool**





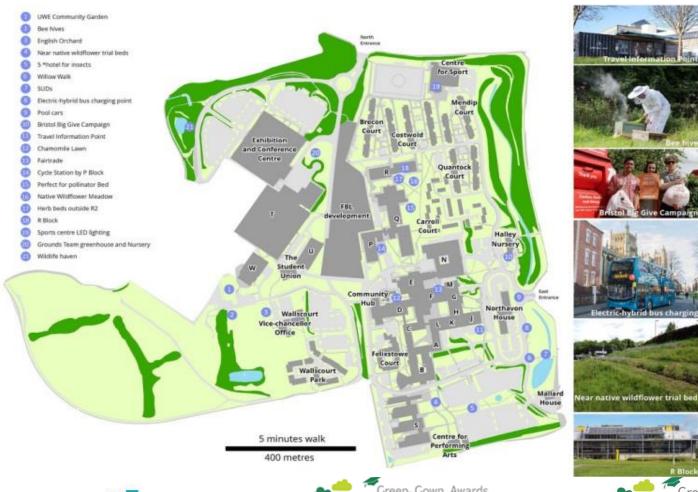








## Green UWE Bristol - 21 good things at Frenchay campus













# **Ethical Investment Policy**

- Read the Ethical Investment policy at <a href="http://www1.uwe.ac.uk/about/corporateinformation/sustainability/policiesplansandt">http://www1.uwe.ac.uk/about/corporateinformation/sustainability/policiesplansandt</a> argets.aspx
- We can not divest from fossil fuels because we have no investments.
- UWE has deposits in banks but no investments in stocks or shares.
- UWE makes pension payments to the Avon Pension Fund and contributes to the investment direction and decisions agreed by the fund trustees and investment managers.
- Read the 2016/16 Financial report and accounts at <a href="http://www1.uwe.ac.uk/about/factsandfigures/financialinformation.aspx">http://www1.uwe.ac.uk/about/factsandfigures/financialinformation.aspx</a>
- UWE's sustainability activities are reported in the Annual Report and Accounts.









## In Conclusion

- UWE will continue our journey, working in partnership with the Students' Union and external partners, to ensure that we
  - provide our graduates with the skills, knowledge and attributes that they need to thrive in the 21st century
  - continue to create **new knowledge** to support attainment of a sustainable future
  - manage our current and future estate in the most sustainable manner
  - Work with local partners to help achieve a sustainable Bristol city- region.













#### **UWE Bristol and the SU@UWE Winner**

#### **International Green Gown Awards 2016**

- Continuous Improvement: Institutional Change
- Student Engagement (with University of Bristol)

## **UWE Bristol and the SU@UWE Bristol Winner 2016 UK and Ireland Green Gown Awards**

- Continuous Improvement: Institutional Change
- Learning and Skills
- Student Engagement (with University of Bristol)
- Leadership Award

## UWE Bristol and the SU@UWE Highly Commended UK and Ireland 2016 Green Gown Awards

- Built Environment
- Student Engagement









# Progress at a Glance





































