



UWE

**CELEBRATING
BRISTOL GREEN
CAPITAL
2015**

THINK • ACT • CONNECT



University of the
West of England



BRISTOL GREEN CAPITAL 2015:

A catalyst for enhancing UWE, Bristol's student and staff sustainability engagement

The University's sustainability ambitions and civic responsibilities are clearly set out in UWE, Bristol's [Strategy 2020](#) and apply to all areas of the university's business whether teaching, research, knowledge exchange or campus management and operations. In 2015 the city of Bristol was European Green Capital, the first UK city to achieve this honour (<https://www.bristol2015.co.uk/>). Given the ambitions and expectations of Strategy 2020 it was a natural fit for UWE to work closely with Bristol City Council and others to take a leading role in supporting the bidding process for the award as part of the city wide [Bristol Green Capital Partnership](#). UWE was one of the founder members of BGCP, now comprising 850 organisations. Professor Martin Bigg was the chair of BGCP and a key player, with other UWE colleagues, in drafting and editing the successful bid.

UWE wished to ensure that all staff and students, who equal about 7% of the city's population, had the opportunity to engage in, contribute to, enjoy, and learn from the Green Capital year which we had done so much to help win. A [UWE Green Capital Strategy](#) was produced and implemented with the aim of creating institution-wide engagement with themes of the Green Capital via activities and events which were designed to raise awareness of Green Capital issues and to facilitate pro-sustainability behaviour and action by staff and students.

UWE will build on the success of the year, working with partners, to ensure that Bristol 2015's wish that "It doesn't stop here" is achieved in 2016 and that our students continue to have a wide range of opportunities to develop and enhance their sustainability experience and skills.

Green Capital and UWE's 2015 Year Led by the AVC Environment and Sustainability (Prof. Jim Longhurst) a cross university team, including the Students' Union, prepared UWE's Green Capital Strategy, the Vice Chancellor's Advisory Board gave its approval confirming a £50000 budget. The development team became the Green Capital Implementation Group and Dr Georgina Gough and Vicki Harris were appointed as UWE Green Capital Coordinators to oversee implementation of the strategy. An impressive array of events and activities have been organised within the university and across the city involving students, staff, residents and visitors. Social media channels were used extensively to connect students and staff and promote activities. Budget allocations encouraged engagement and innovative action from academic departments, professional services, the Centre for Performing Arts, the Students' Union and others, embracing research, teaching, music, work in schools, volunteering, internships and extra curricula activities. One of UWE's busiest thoroughfares was transformed into an outdoor art gallery for [The Whole Earth?](#) Exhibition.

UWE won a Bristol 2015 Strategic Grant of £50000 to develop the [Our Green City: Global Challenges, Bristol Solutions](#) MOOC showcasing the themes of food, nature, energy, transport, resources and cities. In November 2014 UWE, with the University of Bristol, led a successful bid for £250000 to HEFCE's Catalyst Fund for the [Green Capital Student Capital project](#). UWE's contribution to the year culminated in a celebration event on 9/2/16. Attendees reflected upon the year, shared memories and relived events through viewing the extensive [digital imagery archive](#) developed through the year.

In summary during UWE's Green Capital, more than;

- 5,300 staff and students attended presentations/stalls specifically about Bristol Green Capital 2015 including 200 events either led, co-ordinated or facilitated by UWE
- 3000 students engaged, volunteered, interned or undertook Green Capital projects
- 700 UWE students undertook more than 60000 hours of voluntary activity in the city. That's more than 34 years of work!
- 600 students signed up to the SU Green Team starting 8 student-led sustainability projects
- 7,000 people attended conferences, seminars and other externally facing events related to themes of Green Capital, either led, coordinated or facilitated by UWE
- 300 performers and over 1300 students, staff and friends of UWE

attended the Green and Pleasant Land Centre of Performing Arts Concert and UWE's Big Green Carol Service

- 70 UWE researchers contributed to Bristol Bright Night which was attended by more than 2,300 people.
- [Bristol ParkHive](#) employed 5 graduate interns, attracted more than 800 people to events during 2015 and received more than 4000 images from more than 1300 unique site users of green spaces in Bristol to its online digital archive
- More than 1,400 registrations were made from across the world for Our Green City MOOC during its first run. [See UWE Green Capital in numbers press release](#)

This catalogue is intended to showcase and celebrate examples of the work of the hundreds of UWE staff and students who contributed to Bristol Green Capital 2015.

However, it doesn't stop here.

UWE will continue to engage staff and students in sustainability thinking and action and to facilitate internal and external connections for sustainability. We will continue to play a significant role in helping to make Bristol happier and healthier whilst contributing to the creation of a more sustainable global society.

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THEMES:



ENERGY



RESOURCES



FOOD



HEALTH



NATURE



TRANSPORT

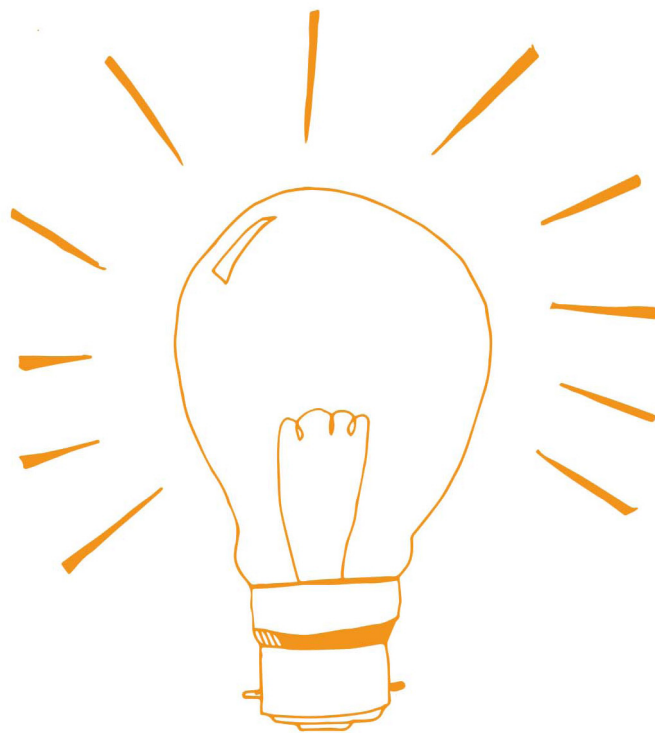


HAPPINESS



CITIES





THINK

debate. research. consider. listen. innovate



OUR GREEN CITY

Global Challenges, Bristol Solutions

The University of the West of England launched a free, online course that gave an overview of the current environmental and social challenges faced by cities across the world and the solutions that are being found to these in Bristol.

Open to the global population, this six week course aimed to “showcase the spirit and practice of Bristol Green Capital” by exploring and educating the themes that were deemed essential for Bristol 2015: food, nature, energy, transport, resources and cities.

As well as gaining a better understanding of sustainability and cities, organisers hoped that the emphasis on positive stories of change would inspire and empower enrollers to take action on sustainability issues in their own life. With participants committing just a few hours each week, organisers hoped this course would provide learners with the skills and capability to lead environmental change in their own communities. The course was free of charge and opened to participants from around the world with an interest in learning about sustainability in the context of a city; who were also willing to engage with the methods used to bring about community change. By

offering this course, UWE Bristol provided an opportunity for mass participation in education and development towards world-wide action; whilst providing input into a vision for a more sustainable future.

All of the learning materials were contained within the ‘Open Education’ virtual learning environment. The course included video presentations from UWE lecturers, quizzes and reading materials to provide a variety of engaging and stimulating learning methods. It expertly ensured a rich mix of theoretical and practical skills. Through the community learning approach, it was intended to offer the opportunity for students to build their own network of likeminded people to work with, to develop ideas with and to create approaches with.

Each week followed a specified template so that members became familiar with the tasks that were set. For those who wished to



develop their understanding of the issues and debates, a suite of additional reading and signposting to other areas were included.

The course achieved a global reach, with 1400 registrations from all over the world.



“MOOCs are a new way of learning, and they provide an easy and effective way for people to access learning at a time that suits them and in the location that suits them”

-Simon Bates

1400

people register for 'Our Green City' on-line learning



Our Green City will commence again on the 1st of February 2016



ORGANISER CASE STUDY:

OUR GREEN CITY

Sarah Hills, Senior Lecturer: Geography and Environmental Management

Sarah Hills was the academic lead for “Our Green City”. Sarah designed the overall syllabus and worked with each of the academic and community contributors to ensure that the course gave participants a holistic and integrated insight into sustainable cities. About the course, Sarah writes: “The Green Capital themes gave the course a strong structure. At the same time we shaped the content so that participants could appreciate the interconnectedness between key issues such as energy, food, resource use, nature and transport.

The Bristol case studies were juxtaposed with global challenges and examples in order to bring sustainability theory to life. We purposely didn’t want to go down the “best practice” route, but instead hoped that the tenacity and creativity of real people working

in imperfect circumstances would inspire others to think about what they could do where they lived.

I think all the academics enjoyed the creative process of distilling complex ideas into a few minutes of video. In our normal teaching we would draw heavily on academic research, but this is often copyright restricted. One of the biggest challenges, therefore, was to find suitable but copyright free learning materials.

When the course finished some of the participants contacted us to say that they wanted to connect with others on the course in order to start their own action groups – we couldn’t ask for better feedback than that !”



““The Green Capital themes gave the course a strong structure.”



CONTRIBUTOR CASE STUDY:

OUR GREEN CITY

Richard Spalding, Senior Lecturer in the Department of Geography and Environmental Management

Richard Spalding is an academic contributor to “Our Green City”. He provided input to the week that addressed the theme of ‘food’. Richard believed the response and engagement from the 1300 participants, who he described as “first class contributors”, was “incredibly inspirational” and he was impressed with the high number of postings from participants.

Richard highlighted the freedom given to contributors in making their short films, and that because restrictions were not imposed an “honest” depiction of their thoughts and learnings was facilitated. The MOOC was designed to enable leaders and organisers to say “here’s our story” whilst provoking participants to share their own experiences. Richard believed this gave “them a sense that they were part of something real, something

that’s not a sham”. He also feels that this experience enabled the contributors to educate him in return, for he read of stories in places all over the world like Nigeria and Bogota. He admired the ways that participants used the MOOC as a framework to articulate their own stories.

The experience of working on a MOOC was a learning process for most contributors, Richard stresses the importance of adaptability when approaching a task like this and identified the realisation that a significant amount of time is required both to construct and complete learning activities in this format as one key learning point from his involvement in the process.

Overall, Richard feels that the MOOC has stayed true to its initial intentions and what was promised has “largely been delivered”. He enjoyed the

challenge of condensing detailed information into short videos and he praised it as a way of “crystallising the main thing you are trying to do, which is to share knowledge and to be enthusiastic about learning.” He stated that materials created for the MOOC will be continued to be used for lectures, open days and elsewhere.

“To give them a sense that they were part of something real.”





PARTICIPANT CASE STUDY :

OUR GREEN CITY

Becky Golding, freelance writer

Becky Golding, a freelance writer from Knowle in Bristol, was an enthusiastic participant of “Our Green City”. Having previously worked for “Spark” magazine, an “eco-ethical quarterly”, Becky has always been interested in sustainable issues. After the magazine discontinued, her engagement began to decline – but UWE’s MOOC offered her the chance to become involved in sustainable issues once more. Becky explained that the MOOC made her feel like she had “been involved with Green Capital”. She was made aware of “what was going on in Bristol and the world” and it has “re-ignited her green attention”. Becky applauded the MOOC for “backing ideas up with theory and philosophy.”

When pressed for a critical evaluation and areas for improvement, Becky highlighted the “overwhelming” first week of work and that that she has become “lazier as the weeks have gone on” because she hasn’t

had enough time to engage with the discussion. Nevertheless, she did hold the MOOC in a very high regard and described the quizzes as “very pleasing”, the videos as “very good” and the reading “effective, but head-scratching in some places”.

Becky commented that the MOOC, opened her eyes to the impact of cities of the development to a sustainable world. The learning alerted her to the idea that cities are both good and bad places to live, but they can be “a radical spot for innovative change”. As well as opening Becky up to new ideas, the MOOC has reinforced her own beliefs with theory and assured her own actions. Living in the notoriously hilly area of Knowle, Becky’s kitchen window looks out onto the roof of her garage. Therefore week 4’s instructions to create a garden on your roof benefited her in many ways. Now, instead of a grimy grey shed roof, she looks out onto

a natural and colourful roof-garden.

She really felt a personal connection to the Nature week and admired the MOOC as a tool for change. This week reinforced her values and ideas after failing to influence her neighbours on implementing greener attributes to their neighbourhood before seeing its effectiveness on the MOOC. She claimed it was “a ratifying of things she felt she knew, with a theoretical underpinning.”

“Re-ignited her green attention”





PARTICIPANT CASE STUDY 2:

OUR GREEN CITY

Anonymous users

As a way of monitoring the success and impact on its participants, the course leader designed an end-of-week survey to offer a chance for feedback on that week's learning. The following are responses to week 1 - Cities.

One key piece of learning that I will take away from this week.

- The huge impact of cities in sustainability, both in negative and positive ways - and how huge the city populations of the world will become in the future.
- It feels so good to be back learning again, and to be involved in such an interesting area and course!

An activity, action or change I could make in my life, work or community.

- Keep learning! I thought I had gathered a pretty good understanding of sustainability, just through osmosis, following

my interests, and my work (writing and web stuff on green and well-being issues), and talking to people. But I realise that I had not theoretical knowledge to speak of and this has been really useful - so I shall keep on with the course!

- Since starting the course, I look at everything very differently. I am more cautious about energy saving and recycling. I have had sit downs with my family to discuss on ways in which we can reduce energy consumption in our home; where they have been very receptive.

One aspect of the week that I particularly enjoyed.

- I have really enjoyed to discover so many projects on the city and around the world that I was not aware of, all the lectures were really interesting and led me to even more research on internet.

One further comment added by a participant was: I am inspired!

As part of discussion activity, participants began to pledge future actions they would take as a result of their engagement with the course. Actions included people promising to "grow my own salad vegetables and share seeds and produce with my neighbours", "work on making a septic system that could create fertiliser for surrounding gardens, fields", "make every effort to make less visits to the supermarket and more to the local retailers", "introduce plants and wild plants to my own front garden, and share ideas with neighbours", "use green energy and look for those non-profit companies that promote their green energy" and to "Cycle more it is free it is healthy"!

"I am inspired!"



STAFF AWARENESS

Staff sustainability engagement took on added meaning during Bristol 2015 with numerous activities and events taking place

Vicki Harris (UWE Sustainability Engagement Officer) outlined the engagement objectives for the Green Capital year. Following from the UWE Green Capital Strategy, they were:

1. To let people know what is happening in the city and to promote the public events and offers available to the UWE community.
2. To encourage staff and students to "Do15".
3. To engage a wider audience via provision of numerous events, both academic and practical in nature.
4. To provide options to enhance involvement with communities and to connect students and staff with the city.

A key element of staff engagement is the staff welcome fair. Right from the start of their time here, staff are made aware of UWE's sustainability ambitions at our fairs which take place quarterly. Over 200 people attended this year's events. Vicki stated: 'Bristol

2015 has been brilliant; By being part of something bigger and something tangible where people live and work, it has given meaning and relevance to all that we do at UWE. It has made it so easy to engage with people – students and staff have found it all really interesting and have shown a real desire for making positive changes'.

UWE's efforts in engaging staff and students have been aided by 2015's Do15 campaign, and the city's targets such as 20% of commuters to travel by bike by 2020. To draw attention to the campaign, UWE bought a large electronic green button with the 2015 logo which, when pressed by people making a pledge, makes a clapping sound. It proved really popular and is now in The Student Union reception drawing attention to the 2016 message 'It doesn't stop here.'

In addition, to get the message across to wider audiences, the year has seen an increase in use of a wide range of communications outlets, from electronic screens to social media. Moreover as a result of all the exposure, there has been an increase in liaison with academics and the sustainability team. All this activity has resulted in an increase of the voluntary Sustainability Network which has grown from 245 to 580 people who want to make a difference in how we do things. And 'It doesn't stop here'; already we are preparing for all sorts of events and activities in 2016.





ORGANISER CASE STUDY:

Staff awareness and curriculum

Georgina Gough and Vicki Harris

UWE's 'Raising the Baseline' project, was implemented to increase the standard of Education for Sustainable Development (ESD) delivery across academic departments, integrating staff development, the student experience and the student voice to ensure consistency across the institution. Dr Georgina Gough (Senior Lecturer in Education for Sustainable Development) said, "Our ESD work reaches all our disciplines and we have made good progress in increasing staff confidence and capabilities related to delivering ESD. This has resulted in the development of more opportunities for students to engage with sustainability as part of the formal, informal and extra curricula. Green Capital has provided a fantastic opportunity for showcasing and developing academic engagement with sustainability issues at UWE".

Vicki Harris (UWE Sustainability Engagement Officer) has helped to organise a huge number of events throughout the year in support of Green Capital. She believed Bristol 2015 has captured a "bigger and broader" audience for events at UWE and in Bristol. Overall, Vicki has described the Green Capital as "a complete gift to be able to engage people. Bristol 2015 has inspired and energised students and staff, engaging them in the issues at UWE, in the city and beyond above all it has provided a solid foundation on which to build in 2016."



"This has resulted in the development of more opportunities for students to engage with sustainability as part of the formal, informal and extra curricula"



WHOLE EARTH

The whole earth exhibition is an ongoing outdoor space, curated by Mark Edwards it's a visual journey about the state of our current world.

As part of its Green Capital Strategy, UWE is hosting the Whole Earth? Exhibition. The Hard Rain Project and the National Union of Students launched the exhibition with Students Organising for Sustainability (SOS) at universities around the world in September 2015. The project's website states that "Whole Earth? is based on the premise that the future belongs to today's young people and that students and universities everywhere can play a major role in making society more sustainable.

Students, staff and members of Bristol 2015 were invited to the opening of Whole Earth? exhibition, where speeches were given by UWE Deputy Vice Chancellor Helen Lloyd Wildman, AVC Jim Longhurst, Students' Union at UWE president Jack Polson and Hard Rain director Mark Edwards.

This 66-meter long exhibition was positioned on a major public thoroughfare through Frenchay Campus, used daily by hundreds of people. The exhibition profiles issues associated with global social, environmental and economic challenges and inequalities. It is an invitation to students and their tutors to articulate the kind of world they want to live in, and, through Students Organising for Sustainability bring them together to show political and business leaders support to take the difficult long-term decisions that underpin security for all.

There was live music before the three speakers offered their thoughts and ambitions for the work on show. Helen Wildman was sure the exhibition would 'raise key environmental and social issues' whilst Jack Polson praised the

exhibition as a way in which students can be 'informed and empowered' to take action for sustainability. Finally, the Mark Edwards explained the origins of the exhibition and his hope that students and universities will respond to the challenges highlighted. The SU at UWE has subsequently challenged UWE to respond to these challenges. The SU held discussions on Whole Earth in the curriculum of UWE which were open to both staff and students. One occurred on the 9th of December and another was held in January. Further events will be held and the results of these will be released in 2016.





ORGANISER CASE STUDY:

Whole Earth

Mark Edwards, Creator

Mark Edwards, Hard Rain director and Whole Earth project lead, claimed the target for his exhibition is students, who are 'the generation that have to fight for change'. He was impressed with UWE's engagement with the Green Capital, whilst reiterating the need to open up a student's mind to counteract a. He desired a 'combined effort from students across all disciplines to make a change' as these issues 'affect people across all walks of life.' The exhibition identifies 'university challenges' for a variety of subjects. The subjects chosen were intended to be 'controversial' to attract attention and combat preconceptions of the type of people that can take action for sustainability. Mark believed working with the NUS was 'very important' and 'absolutely crucial' in achieving their goals.

The Hard Rain project (of which Mark Edwards is director) partnered with the Environmental Association of Universities and Colleges (EAUC) and the National Union of Students (NUS) in developing the Whole Earth exhibition. Mark believed working with the NUS on the Whole Earth project was 'very important' and 'absolutely crucial' in achieving their goals.

Mark hailed Bristol's achievements in becoming European Green Capital. He stated 'Bristol stands out as a city that takes sustainable development seriously' and that this title must surely benefit UWE.





ACADEMIC CONFERENCE: 'LEARNING FROM THE SHARP END

Implications for Sustainability in HE'
(Education for Sustainable Development Conference)

UWE co-hosted the 'Learning from the Sharp End: Implications for sustainability in HE' Conference with the University of Bristol as part of the HEFCE-funded Green Capital Student Capital project.



Learning from the Sharp End ran on 7-8 September and attracted nearly 100 delegates from across the UK and abroad. The programme contained more than 40 presentations, alongside workshops, roundtable discussions and networking opportunities.

The event served as a useful opportunity for the ESD community to reconnect and reflect on its engagement with current global sustainability activity such as the Sustainable Development Goals and COP21. A manifesto was developed at the end of the event to capture the themes of the two days and to set a future agenda for the UK ESD community.

Feedback from attendees was extremely positive, particularly in relation to the range and diversity of presentations. The value of the event for networking was highlighted by many delegates. The involvement of students (as presenters, delegates and helpers) was also identified as one of the most positive elements of the conference.

Many delegates identified ideas from the conference which they were going to take back to their roles. Thus, the conference helped to impact on practice across the UK HE sector and beyond.







ACADEMIC CONFERENCE: BUILDING INFORMATION MODELLING (BIM)

UWE hosted the 1st International Conference on Building Information Modelling (BIM) organised by that Institution and the Wessex Institute with the collaboration of Robert Gordon University

The 1st International Conference on Building Information Modelling (BIM) Conference was chaired by Professor Lamine Mahdjoubi of the University of the West of England, Bristol; Professor Carlos A Brebbia of the Wessex Institute; and Professor Richard Laing from Robert Gordon University, Aberdeen.

Delegates of the conference discussed BIM as a catalyst for change in the twenty-first century. BIM is essentially value creating collaboration throughout the entire life-cycle of an asset, underpinned by the creation, collation and exchange of shared 3D models and intelligent, structured data attached to them. BIM has far reaching consequences on both building procurement and infrastructure. This recent emergence constitutes one of the most exciting developments in the field of the Built Environment. These advances have offered project teams multi-sensory collaborative tools and opportunities for new communication structures.

Modern built environment disciplines have been transformed through the development of new and innovative tools and techniques. These have fundamentally altered the manner in which the supply chain operates the processes through which designs are evolved, and the relationships between conceptual, detail, construction and life cycle stages.

Fundamental decisions taken early in the design process have far reaching consequences. Major mistakes are often made in the first few days of the design process. Professor Mahdjoubi explained that it is important to consider the following matters at an early stage:

- Constructability
- Environmental impact
- Operation and maintenance

The cost of design change continues to grow during the building programme while the ability to impact cost savings decreases.

BIM is also essential in safety planning as it fosters a collaborative approach to the problem. In the UK in particular health and safety is now considered an integral part of the project. Architecture ought to be seen as a manufacturing process, Professor Mahdjoubi said. There is currently a whole range of building components that are built in the factory rather than on site. BIM is affecting almost every aspect of design management, construction, operation and end of life.

The BIM conference facilitated the bringing together of experts from industry, practice and academia to debate topics, develop innovative solutions and predict future trends. The papers reflected the importance of interdisciplinary and collaborative practices. These papers are available to the international community through the eLibrary of Wessex Institute (www.witpress.com/elibrary) as well as via a book of papers, which is distributed internationally in paper and electronic format.



ACADEMIC CONFERENCE: ROUTES TO CLEAN AIR

'Routes to Clean Air' was a two-day conference where academics, professionals and policy-makers shared their experiences of improving traffic emissions. A number of international speakers spoke, highlighting the importance of public communication and behavioural change surrounding road transport and air quality issues. UWE provided two academic speakers at this event, Prof. Graham Parkhurst and Prof. Jim Longhurst.

Prof. Graham Parkhurst spoke on the Air Quality Implications of New Technologies for Urban Mobility. This presentation was: four processes which lie at the contemporary intersection between urban mobility management and new technologies: automation, electrification, collectivisation (asset-sharing), and information (data-sharing). Each of these has implications for air quality. The presentation considered whether those implications are likely to be positive or negative. It argued that much depends upon how the technological innovations are applied and, critically, what prospect there is for these four processes to be integrated in coherent local transport policy.

Prof. Jim Longhurst spoke on air Quality in Historical Perspective, or why we fail to learn the lessons of history. This presentation explored contemporary issues of air pollution through the lens provided by history. It presented a perspective drawn from an analysis of historical, and mostly failed, attempts to manage air pollution from classical times until today. It asked the question why have we not learnt from the lesson history provides? It did so with the benefit of 2020 hindsight!

Dr Enda Hayes (Associate Professor Air Quality and Carbon Management and Director of the Air Quality Management Resource Centre) commented that "The Routes to Clean Air Conference was a great event and we should be proud of our involvement with it as well as of the contribution UWE makes to this important area of research".





ACADEMIC CONFERENCE: ENVIRONMENTAL LAW

Prof Jona Razzaque (Professor of Environmental Law) is a member of UWE's Environmental Law Unit, a group of lawyers which recognises that human well-being depends on maintaining the long-term sustainability of ecosystems such as forests and water.

2015 was a particularly productive year for UWE's Environmental Law Unit as they worked towards drawing on their strengths to engage staff, students and the general public with the themes of Green Capital. During the year, an inspiring array of student led activities took place that looked at the relevance of green economy to sustainable development, hazardous waste management, importance on biodiversity action plans in relation to green infrastructure, renewable energy, and the application of market based tools to address climate change. This is just the beginning... the enthusiasm displayed by students during 2015 will continue to grow.

Prof Jona Razzaque was closely involved with a number of events during 2015 including her Inaugural Lecture: "The Green Economy and Forest Ecosystem Services: Assessing the global North – South Divide"

Further, staff from the unit supported the Environmental Law Student Conference, organised by Dr Onita Das and Dr Benjamin Pontin of the Environmental Law Research Unit, Centre for Legal Research, Bristol Law School (UWE Bristol, 11 March 2015).

"This is just the beginning... the enthusiasm we have seen among the students will continue to grow"



VISITING SPEAKERS: HERBERT GIRARDET AND JONATHON PORRITT

*Prof. Herbert Girardet posed the question 'Is an urbanising world a triumph of the city', or an environmental tragedy in the making?'
Jonathon Porritt gave his views about the prospects for sustainability under a new government*

UWE Visiting Professor Herbert Girardet presented a specially convened seminar chaired by Jim Longhurst on urban change. He argued for a fundamental conceptual shift in the way we organise our urban systems, and for thinking and acting beyond 'sustainable development'. Girardet's 2014 book, 'Creating Regenerative Cities' has been described by Huffington Post as one of the world's three best green books of 2014. His visit to UWE was particularly welcome in this Bristol 2015 European Green Capital year, when questions about the sustainability of our city were being debated.

"Really inspiring"

Jonathon Porritt has been a renowned figure in the world of sustainable development for the last 40 years. He is a former Director of Friends of the Earth, Chair of the Sustainable Development Commission (2000-2009), and founder director of Forum for the Future, he is an eminent commentator. Jonathon lead a discussion on the prospects for sustainability under the new government. The Big Green Week event attracted 70 staff and students. When asked what his definition of sustainability is, Jonathon answered 'At its simplest, living as if we hoped human life would continue forever on this planet.'



VISITING SPEAKERS: BRISTOL DISTINGUISHED ADDRESS SERIES

The Bristol Distinguished Address Series has provided an exclusive opportunity to hear about the challenges, issues and decisions being made at the highest level of strategic leadership. The series is delivered by the Bristol Business School in partnership with ACCA, Bristol City Council, Bristol Junior Chamber, Bristol Post, Business West, CBI, CMI, FSB, IoD, ICAEW and the West of England LEP

The Bristol Distinguished Address Series has provided an exclusive opportunity to hear about the challenges, issues and decisions being made at the highest level of strategic leadership. The series is delivered by the Bristol Business School in partnership with ACCA, Bristol City Council, Bristol Junior Chamber, Bristol Post, Business West, CBI, CMI, FSB, IoD, ICAEW and the West of England LEP. With advanced public exposure to the sustainable issues raised in mind, the events were opened up to the whole of social media as they were encouraged to discuss the event on Twitter using the hashtag #BristolLectures. During 2015, the lectures were inspired by the Green Capital year and promoted via the Bristol 2015 website. The speakers were chosen to represent the Green Capital themes and a variety of industries. This year's programme included

- Peter Mather (Grp Regional Vice President, Europe and Head of Country) on 'the long term context for the energy industry and more specifically what this long-term view means for Europe and the UK's energy challenges.'
- Angela Knight (Chief Executive Officer, Energy UK) on how a series of decisions made by all the political parties has brought the UK to the brink of not having enough electricity to meet demand a year or so from now. Entitled

'Is Energy Just Another Power Game?', Angela highlighted the motives for closing down the cheap coal fired power stations for climate change reasons and flagged that not only does the timetable not link with building new renewable generators, but that the cost is much higher than ever expected—and no one has explained this to the public.

- Rick Haythornthwaite (Chairman of Centrica) on how disruption is rapidly becoming the new normal. Rick asked the question 'what is the evolving nature of this disruption and what might be the implications in years to come, particularly with regard to leadership?'
- Mike Clasper (CBE, Chairman of Coats Group plc and CMI President) delivered the annual Bolland Lecture as part of the series. Mike talked about why leaders need to think again about the performance of middle management and why middle management could be key to their productivity and long-term success. He looked at why so many people are 'accidental managers', why they struggle with the difficult conversations that every manager faces – and why employer attitudes to investing in much-needed skills have to change.

- The Rt Hon Sir Richard Needham (The Earl of Kilmorey) presented a tale of two cities, Bristol and Belfast, two of the greatest and most successful industrial ports of the Empire. Sir Richard discussed the arrival of new technologies, particularly SMART solutions and the Internet of Things and how they had the opportunities to re-inhabit, redevelop and reconnect the centres, the suburbs and beyond. Sir Richard asked the question 'do they have the ambition, the political structure and the leadership to promote, organise and develop their true potential?'





VISITING SPEAKERS: ROLF JUCKER

A round table conversation with Rolf Jucker on his new book 'Do We Know What We Are Doing? Reflections on Learning, Knowledge, Economics, Community and Sustainability'

UWE welcomed Rolf Jucker to a round table conversation with Rolf Jucker on his new book 'Do We Know What We Are Doing? Reflections on Learning, Knowledge, Economics, Community and Sustainability.' The atmosphere was conversational and informal before Rolf addressed, staff from various faculties, PhD and Masters students with an interest in sustainability.

His book, he explained, aimed to look at the validity of what we think we know and what we are doing educationally. He believes that what we think as original thought rarely is.

After presenting his critique on current educational practice outlining his suggestion that education has a direct influence on a person's long term carbon output, Jucker asked the attendees for their views on "What kind of education can lead to progress?" The discussion was vibrant and stimulating, traversing a wide range of themes. It was a great opportunity for academics to reflect on the role of HE in the creation of a more sustainable world.





UWE GREEN CAPITAL SEMINAR SERIES

UWE's Green Capital Seminar Series enabled UWE staff to present their expertise and experience linked to the themes of Green Capital. The 20 presenters were drawn from across UWE's four faculties and from professional services, as well as from key external organisations.

UWE's Green Capital Seminar Series enabled UWE staff to present their expertise and experience linked to the themes of Green Capital. The 20 presenters were drawn from across UWE's four faculties and from professional services, as well as from key external organisations. All the seminars consisted of short, high quality, sometimes provocative presentations followed by open question and answer sessions that sparked stimulating debates and innovative ideas.

Seminar one addressed the themes of resources, food and cities. Tom Appleby (Senior Lecturer in Law), Darren Reynolds (Professor of Health and Environment), Jo Barnes (Research Fellow: Air Quality Management Resource Centre), Mat

Jones (Associate Professor of Public Health) and Richard Spalding (Senior Lecturer in Geography) led a lively session which tackled the challenges associated with feeding growing global populations and keeping them and the environment healthy.

Seminar 2 centred on "Urban energy and transport", with presenters Graham Parkhurst (Professor of Sustainable Mobility), Bill Gething (Professor of Architecture), Fabia Jeddere Fisher (Energy Engineer), Billy Clayton (Research Fellow) and Chris Donnelly (Travel and Access Manager) exploring challenges for both UWE and Bristol in moving towards a low carbon future.

The focus of seminar 3 was "Business, Communities and Engagement in

Sustainability". Ian Brooks (Senior Lecturer in Sustainable IT) spoke on business engagement, Alan Greer (Associate Professor in Politics and Public Policy), Ian Holmes (Director of the Centre for Performing Arts) and Sam Thomson (Director of Civic and Cultural Engagement) discussed public engagement, whilst Gem Heywood (SU Vice President Societies and Communication) profiled student engagement.

In the final seminar, Martin Bigg (Chair of Bristol Green Capital Partnership 2012–13), Andrew Garrad (Chair of Bristol 2015), Gary Topp (Development Director of Bristol 2015), Robin Hambleton (Professor of City Leadership) and Alan Bailey (Chair of Low Carbon South West) reflect on the Green Capital year and next steps for Bristol. After this seminar, Andrew Garrad stated "Engaging young people is vital to our goals. I've been very impressed by UWE's wholehearted participation in the year."



"Engaging young people is vital to our goals. I've been very impressed by UWE's wholehearted participation in the year"



INNOVATION: UWE FORMULA STUDENT ELECTRIC RACE CAR

This year, the team at UWE Formula Student have made the decision to build an electric car, making our team the first in the South West to do so.

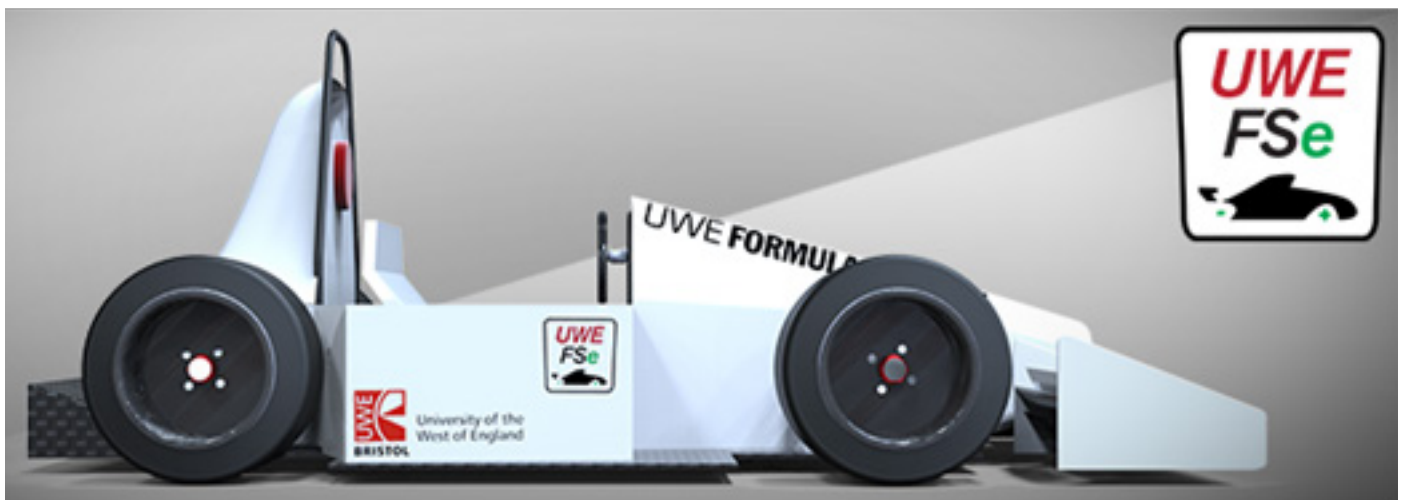
This year, the team at UWE Formula Student made the decision to design an electric car in the Student Garage, making our team the first in the South West to do so. The plans stemmed from a realisation that 2015 offered a unique opportunity: "What better year could there be to launch our green race car?" Electric cars can have a negative stigma attached to them for being sterile, lacklustre, boring and unimpressive. With UWE's car, the team plan to eradicate all traces of this misconception, harnessing the impressive performance with tremendous acceleration that an electric powertrain can offer. Combined with lightweight materials and construction techniques to create a highly competitive car.

Their design objectives are clear: simple, light, combine. They are considered in all aspects of the car maintaining its essence throughout its journey from conception to reality. The UWE Formula Student Electric team is comprised of 20+ engineers from a number of different backgrounds. The team operates in sub teams, each concentrating on a different section of the car while preserving a collective vision of the vehicle.

There was a free networking and educational event ran by our student engineers (25th March) showcasing their innovative designs made to reduce waste, improve efficiency and produce a race ready electric zero-emission race car for Silverstone 2016. This event was an opportunity for possible sponsors to get more

information about the team and find suitable packages for brand exposure and company collaboration.

This project showcases UWE student's innovative approach to sustainability and renewable energy sources. It sustainability with career & enterprise projects, a fundamental aspect of higher education. Our students are actively paving the way for a future with lower carbon emissions.





ORGANISER CASE STUDY:

ELECTRIC RACE CAR

Tom Ward, Student

UWE Formula Student Team Principle, Tom Ward, was grateful of the Green Capital title in many ways. Although the electric race car will not be their project for this year due to sponsorship complications, it is a project that the team of 60 have steadily in their sights. Tom stated that “electric race cars are the future... You go into any garage and they will be thinking about how to use electricity.” They always knew they wanted to build an electric car, but the Green Capital year definitely encouraged them to speed up the process in planning and designing. To reinforce their ambitions, the team will present their plans at Silverstone next year.

In terms of Green Capital influence, Tom firmly believes the added title has strengthened their capability of attracting sponsorship. It also kick-started their determination to take on an electric race car, which although has not come to fruition, still remains a key priority for the team. The launch event was hosted to entice potential sponsors, and the added Green Capital publicity they believe, boosted the interest. Tom stated that their work is “driven by sponsorship”, so any efforts that can help this are of huge significance for the team. The team’s garage is always incorporating sustainability, from recycling materials to seeking alternative energy resources – they also offer the opportunity for outsiders to view the sustainability measures they take in the garage.



INNOVATION: THE GREEN ENTREPRENEUR BUSINESS CHALLENGE

The Green Entrepreneur Business Challenge' was a two and a half day challenge run by UWE Enterprise which tasked attendees to apply business concepts to a real world environmental challenge.

On the 10th of June, the two-and-a-half day Green Entrepreneur Business Challenge was run by UWE Enterprise, tasking attendees to apply business concepts to a real world environmental challenge. UWE Enterprise help to offer extra-curricular activities to increase the enterprise skill sets of students and in 2015 the organisers used Bristol's status as European Green Capital to as a focus for the real life challenge set. With the help of Steve England (local conservation educator), the team decided to focus on the urbanisation of city parks, especially Stoke Park, a space just a short walk from Frenchay Campus. Urbanisation included things like destruction from gangs, and the challenge

was to come up with ideas to combat these issues, through punishment or support. Students explored the issues and devised a strategy in teams to combat the problems before offering a presentation to a panel of judges (including Sustainability Engagement Officer Vicki Harris). A £250 prize was awarded to the winning team.

The programme included presentations from guest speakers, including key people involved in Bristol Green Capital and improving green spaces, as well as workshops on:

- Leadership and the Team
- Creative Idea Generation
- Business Model Canvas Tool
- Marketing and the Power of Social Media
- Pitching and Presenting

- Wild Foods
- Historic Parks

Over 2.5 days, students had the opportunity to:

- Learn how effective teams are formed and trial different leadership styles
- Participate in practical workshops on finance, effective presentations, creativity and influencing policy
- Work on a real business challenge and pitch solutions to representatives from Bristol
- Find out more about the history of Bristol's local parks and forage for and make their own lunch using wild foods under the tutelage of Naturalist Steve England.

“This challenge provided me with a new vision towards our parks and the importance of maintaining them”



INNOVATION: PEE POWER ENERGY RESEARCH

A pioneering experiment using renewable energy sources is the result of a partnership between researchers at UWE Bristol and Oxfam.

A 'pee-powered' toilet was installed on Frenchay campus that demonstrates how pee can be used to generate electricity. The team behind the research intend to use the toilets in refugee and displacement camps and it is hoped the urine-tricity technology will lead to the lighting of cubicles which are often dark and dangerous places, particularly for women. Representing UWE to external audiences, the toilet was trialled at Glastonbury music festival. Unlocked for festival-goers, it was hoped the toilet's presence would raise awareness both of the issues which this technology has been developed to address and of the potential for innovation in electricity generation.

The application of urine-tricity to lighting toilets in remote villages will benefit thousands of people, particularly women. The research behind the project is part of a wider UWE research agenda of innovation in the energy sector.



“EVERYONE IS TALKING ABOUT IT”

-Jane Healy Glastonbury Festival Sanitation Manager





SOCIAL SCIENCE IN THE CITY

Social Science in the City is a free public engagement event which represents the commitment of speakers and audiences to the generation of discussions about important questions relating to how we might live and work in today's society

Social Science in the City is a free public engagement event which represents the commitment of speakers and audiences to the generation of discussions about important questions relating to how we might live and work in today's society. The initiative is an opportunity for members of the public to listen and contribute to critical and informed debate in a congenial café atmosphere.

There have been many talks and discussions throughout the year which have focused on the themes of Bristol 2015. On the 22nd of January UWE Professor Paul Hoggett led a talk at the Bristol Watershed on 'the emotional and political dimensions of climate change denial.' The focus of the presentation was to ask whether there 'is some kind of perverse dimension to our culture which means we are only too ready to be deceived and reassured by the denialist lobby of fossil fuel industries and reactionary populism (Tea Party, UKIP) which tell us that the problem either doesn't exist or has been greatly exaggerated.'

"Who are we and what do we want from politics?" occurred at the Watershed on the 30th of April, where attendees could take part in a café psychologique in the approach to the general election. It was an opportunity to reflect and discuss crucial questions in a year in which Bristol is working to engage citizens in issues key to our future in European Green Capital year. The session was convened by Anne-Marie Cummins (UWE SSiC Convenor) who leads the 'Emotions in Public Life' stream of UWE's Social Science in the City.

On the 23rd of September 2015, UWE's Social Science in the City held a Knowledge Café in the heart of Bristol's Harbourside called Climate Change: Connecting Conversations. This event offered a unique opportunity for discovering thoughts, ideas and insights into this topic and to consider the ways in which there is collective pressure to 'silence' and censor thinking about climate change: both in the wider world but also perhaps in our own inner worlds.

This was a partly facilitated event but mostly it aims to provide an opportunity to hear ourselves think as citizens. It was led by Anne-Marie Cummins and Professor Paul Hoggett (Chair Climate Psychology Alliance and psychoanalytic psychotherapist in private practice).

The debate, 'Nature after Nature: The Value of Being Natural in the Age of Marvelous Technologies' was concerning hopes, fears and expectations surrounding synthetic biology. This event, hosted by UWE, brought together scientists, philosophers, and ecologists to discuss how ideas about the value of nature and naturalness fit into debates about emerging technologies and how these debates should impact upon scientific research if at all.

"Get people together to talk about Green Capital"

-Alan Greer



SUSTAINABLE HEALTHCARE: A GREEN SOLUTION?

Glenside campus hosted "Summer School in a Day 'Sustainable Healthcare: The Green Approach'" run by The College of Medicine on the 14th of November. The event focussed on improving the health of both patients and the planet simultaneously.

This was a unique multidisciplinary student event for current, potential and recently graduated healthcare students. It was a fantastic day of fascinating talks, discussion and interactive workshops that explored how green concepts can influence healthcare for both environmental benefit and better patient care. All this included competitions and certification of attendance to boost CVs and continuous professional development.

There was a series of talks and networking opportunities aimed at informing and inspiring students in the theory behind and application of green principles in healthcare. Presentation by expert speakers included:

- 'The Fall of the Disposable Curtain how high quality healthcare doesn't have to cost the earth' by Dr Trevor Thompson (UWE Reader in Healthcare Education and National Teaching Fellow 2015).
- Organic Blooms, a model for preventative healthcare?' by Joanna Wright (Director Natureworks Training CIC)
- 'Green Care: Principles, Practices & Evidence' by Jon Fieldhouse, (UWE Senior Lecturer for Occupational Therapy)
- 'Setting up a centre for integrative medicine-the vision and the challenges' by Dr Elizabeth Thompson (CEO, Lead Clinician

and Honorary Senior Lecturer School of Social and Community Medicine Portland Centre for Integrative Medicine)

- 'Entrepreneurial thinking Bringing an idea to life' Charlotte Downs (Managing Director and Education Ambassador at Cinter)

These talks were supplemented by interactive opportunities to gain skills in forming innovative ideas for sustainable practice into meaningful business cases that can be taken to commissioning bodies. A poster competition also took place which gave students a chance to earn recognition for their work and boost their job prospects.

"It was so rewarding to see such enthusiasm for the environment and green principles from students, (who will be) future healthcare professionals"

Emily Downs (UWE graduate and event co-ordinator)

1000

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BRISTOL PARKHIVE

UWE/Bristol Park Exchange

Bristol Parkhive was launched at the Festival of Nature. It is an app which promotes engagement with and use of public green spaces. Users can search for parks by name or location. There are thousands of images of Bristol's parks, uploaded by users, and even a 'feature view' which identifies facilities and landmarks at individual parks. Bristol Parkhive is a collaborative project between the University of the West of England (UWE) and the Bristol Parks Forum.

Bristol Parkhive was a remarkable success and a beacon of achievement for the university's Green Capital efforts. It exceeded initial goals and embodied many of the university's ambitions for the Green Capital year.

Members of UWE Bristol's Faculty of Arts, Creative Industries and Education congregated at the beginning of the year to brainstorm ways in which they could enhance the university's civic engagement. As Sam Thomson (Director of Civic and Cultural Engagement for the faculty) recalls, they strived towards 'improved outcomes for the city'. This emphasis on city-specific interaction was combined with an interdisciplinary involvement from across UWE.

With Bristol being the European Green Capital, the members pinpointed a unique opportunity to make a contemporary change to sustainability in the city. The "State of UK Public Parks" report concluded

that 'parks are in a big crisis' in the UK. These were two stimuli for the Bristol Parkhive project.

The project team renewed existing links with Bristol Parks Forum to develop a project in which UWE students and staff could help local communities to reach a positive outcome, whilst developing their own skills. The project offered a variety of opportunities for students to gain a deeper connection with local communities whilst also gaining experience of working or volunteering.

By encouraging users to submit their photos of parks via a specially developed app, Parkhive have created an extensive digital archive from hundreds of contributors, of green spaces across the city. Attendees at exhibitions run by the ParkHive team have been amazed at the number and beauty of parks that are easily accessible to them.

The success of the project has led to requests for the project team to support similar initiatives at Southampton University and across South Gloucestershire, amongst other places.

During 2015, a number of spin off projects were launched as a result of Parkhive activity:

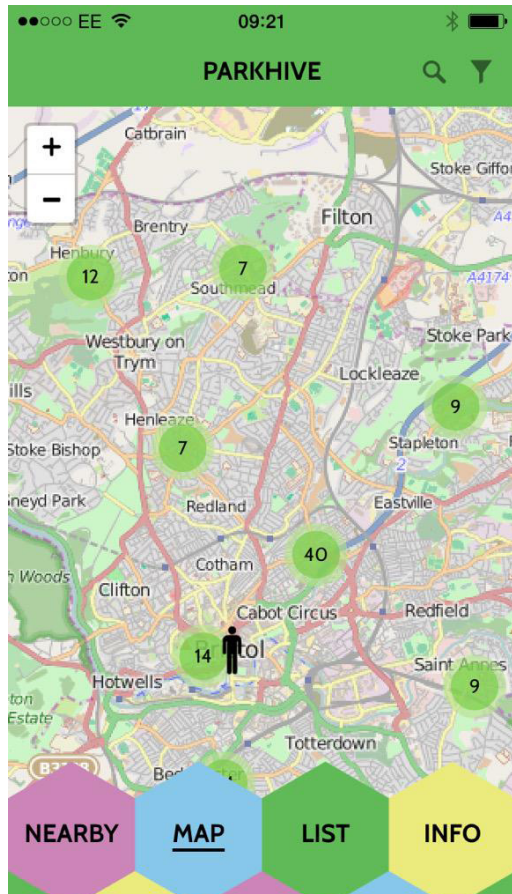
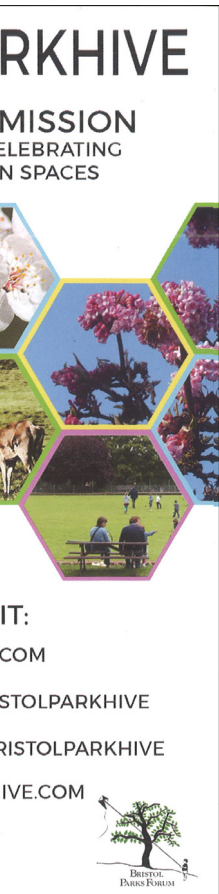
- 'Artride' was launched providing an opportunity for aspiring artists to showcase their talent via a board connected to a bike, which artists can cycle to green spaces all over the city. This both exhibits local talent and advertises a sustainable form of travel.
- The 'Pipeline Walk' aimed to celebrate the first source of clean water delivered to Redcliff from the 12th century. UWE Creative Industries Teaching and Learning Fellow, and Digital Media Specialist, will work with VPAG and other community organisations in South Bristol to create a showcase app combining this walking route with stories of the

BRISTOL PARKHIVE
PHOTOGRAPHY SUBMISSIONS
A COLLABORATIVE ARCHIVE OF
BRISTOL'S PARKS AND GREEN SPACES

HOW TO SUBMIT

- BRISTOLPARKHIVE.TUMBLR.COM
- TWEET YOUR PHOTOS @BRISTOLPARKHIVE
- POST TO FACEBOOK.COM/BRISTOLPARKHIVE

VISIT WWW.BRISTOLPARKHIVE.COM FOR MORE INFO.



people and histories of the area through film, photography and sound.

- Project Ardagh involved a collective determination from UWE (Architecture and Planning, Environment and Technology, Sports Management and others) with the aim of transforming the neglected Ardagh sports facility site on Horfield Common into a multi-purpose community centre.

- There has also been a film on the function of parks in a city told through those directly involved with Bristol's green spaces.

During the end of November at Bower Ashton Campus, the Bristol Parkhive exhibition unveiled an exhibition of photographs celebrating Bristol's parks and green spaces. There were talks and presentations from the staff and students involved in the projects described above. The team have received more than 1200 images that have been archived, available for public perusal.



BRISTOL PARKHIVE

The Parkhive App will remain a great resource to help enable residents and visitors to Bristol to get out, explore, and enjoy the City's myriad parks and green spaces.

We believe this project demonstrates that the University can in fact serve as an anchor institution, and that it has showed the benefits of working more collaboratively with the city of Bristol and community groups. It will continue to give students the opportunities to be involved with cross disciplinary externally engaged projects.



ORGANISER CASE STUDY:

PARKHIVE

Sam Thomson, Director of Civic and Cultural Engagement

Sam Thomson is keen to ensure that Parkhive is 'not just a one year project' but has the capacity to expand and develop. This provides students with the 'opportunity for skills' development and 'brilliant outcomes' that are 'very visible in the city'. They would like to expand into other civic agendas, with the potential of helping homelessness and many more municipal concerns. Sam believes that all students should have the chance for placements and by combining all faculties and uniting the university, the Parkhive model can provide these opportunities to support the healthy sustainable development of the city.

Sam highlighted some influences for the project. She showed how in 2010 sixty eight parks in Bristol were proposed to be available for sale. 30 000 people protested – "the largest public response in Bristol ever." Sam said that most of these parks were smaller areas but integral to communities and Parkhive is a way of "making these parks visible".

Sam has identified elements which the ParkHive team believe are key for successful outreach and project management:

1. A team, rather than solo effort, is best to undertake a complex project, with each member having clearly defined, separate roles and responsibilities.

2. To have a 'project development' point of view, in order to spot and create new opportunities. The relevant members need to act as 'creative producers' or 'intrapreneurs', in order to generate new projects and relationships.

3. To have a 'collaboration mindset', with an eye and desire to work across faculties, departments and academic subject areas. One should think about what skills, knowledge, and strengths staff members and students of each faculty/course possess, and how they could best be utilised and built upon.

4. Having clear objectives and tangible final outcomes for every project, thus being accountable for internal staff, students' and external partners' time and effort.

5. Setting and maintaining relatively short timescales, recognising that successfully working

with external partners requires a fairly quick turnaround and response time in order to get projects off the ground.

6. Monitoring and oversight of student placements and projects-first vetting students and then shepherding first contact with external partners to make sure it is a good fit for both. Checking in on project progress periodically, and keeping final outcome on track for completion.

7. Having a completely accessible, clear point of contact and centralised information source for internal staff/students and external organisations to engage with.



"The largest public response in Bristol ever"



TESTIMONIALS:

PARKHIVE

"Bristol has a huge number of wonderful green spaces but it has often seemed to want to keep them secret and not tell people about them. Working with Parkhive this year it has been refreshing to find a group of people who want get the message out that these spaces exist and also want to encourage more people to get involved with looking after them."

-Rob Acton-Campbell, Chair, Bristol Parks Forum

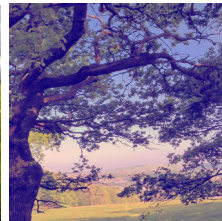
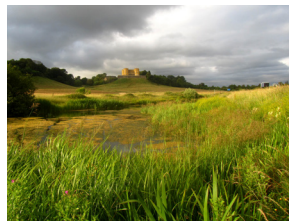
"Happy to say that working with Sam Thomson and the Parkhive Team has been great."

"The Parkhive App is a great resource that allows local citizens and visitors to the city to quickly and easily find out more about our parks as well as sharing what's great about our parks and green spaces."

-Rob Stephen, Environment and Leisure Project Manager, Bristol City Council

"It has been a pleasure to work with the enthusiastic and determined Parkhive team. Being part of a project that has engaged so many community groups is really rewarding and we are delighted by how well the app has been received."

-Jo Reid, Managing Director, Calvium



"Bristol has a huge number of wonderful green spaces"



STUDENT ACTION: GREEN CAPITAL, STUDENT CAPITAL

Green Capital Student Capital is a collective effort between Bristol's two dominant universities. Its intentions were threefold: Increasing student engagement in business, community, and voluntary organisations. Dissemination activities to examine the role of Higher Education in Green Capital initiatives, Evaluation of the experience of Student capital for both students and host organisations

The University of the West of England and The University of Bristol collaborated with Bristol Green Capital in order to fully capitalise on the potential for the power of their combined student populations to contribute to the ambitions of Bristol's Green Capital year. This collaboration was possible thanks to HEFCE Catalyst funding for the Green Capital Student Capital project. Students were encouraged to undertake voluntary activity in the city and were recognised for their efforts with "Green Capital Change Maker" award. To receive the award, students had to complete at least seven hours of activity with a focus on sustainable issues - environmental, social, economic, or cultural. If the student completed twenty hours or more of sustainable activity then they were eligible to be a "Gold Change Maker".

This student engagement project has also led to the development of Skills Bridge, an online web portal which aims to simplify the process

of connecting organisations across Bristol with the universities to facilitate student-community engagement projects. Opportunities are available for businesses, social enterprises, schools and colleges, local authorities, charities and community groups to benefit from student time and skills. The portal provides examples of the work that students and communities undertake together; whilst making it more straightforward to reach the teams involved, either to start up new projects or join existing ones. Whether a team of volunteers is needed to help clear up a potential green spot, or a research report required to inform a fundraising strategy, this platform helps match organisations requirements to students skills.

The "Green Capital Student Capital" project simultaneously celebrated and promoted our students' efforts. And enabled students to be put at the heart of UWE's Green Capital year, encouraging and facilitating student engagement in a wide range



of both curricular and extra-curricular placement and volunteering activities with a Green Capital focus.

The objectives for "Green Capital Student Capital" are:

- **Increasing student engagement in business, community, and voluntary organisations**
- **Dissemination activities to examine the role of Higher Education in Green Capital initiatives**
- **Evaluation of the experience of Student capital for both students and host organisations**

The first 'Change Makers' award ceremony saw sixteen students recognised for their efforts. The awards were presented by Dr Andrew Garrad (Chairman of the Bristol 2015 Board of Directors) who said "It is vital that young people are engaged in the greening of our society. In



Bristol 2015 we have encouraged that through the primary schools education programme, the Green Youth Day and now through the active engagement of our two universities: 'Green Capital Student Capital'. Today we are recognising some students who have done exceptional work of all different types the Change Makers. Well done."

The second Change Maker award ceremony in February 2016 saw 6 students from across the two universities receive awards, again from Andrew Garrad. These six represented 7000 students who have been made eligible for the award thanks to their voluntary activity during 2015.



The Student Capital project was short-listed in the Student Engagement category of the 2015 Green Gown Awards, run by the Environmental Association of Universities and Colleges.

6,000

hours on green projects...that's 34 years of work!



TESTIMONIALS:

Green capital: Student capital

Professor Jim Longhurst (Assistant Vice Chancellor: Environment and Sustainability and UWE Bristol project lead) who said: "I am delighted that HEFCE has funded this exciting project and that it has recognised the benefits it will bring to students and the city. It will unleash student energy and creativity and allow them to become active participants in developing a more sustainable Bristol. It will enable students to gain valuable experience and skills that will be useful for their future careers."

Dr William Clayton, (UWE Green Capital: Student Capital Project Manager) said, "Students have given more than 60000 hours of their time to improving our university and city. This is a huge achievement and students truly deserve their title as Green Capital Change Makers. Change Makers has been a key outcome of Green Capital and I hope that the award will continue as it provides deserved recognition for the good will and hard work of students."





PARTICIPANT CASE STUDY:

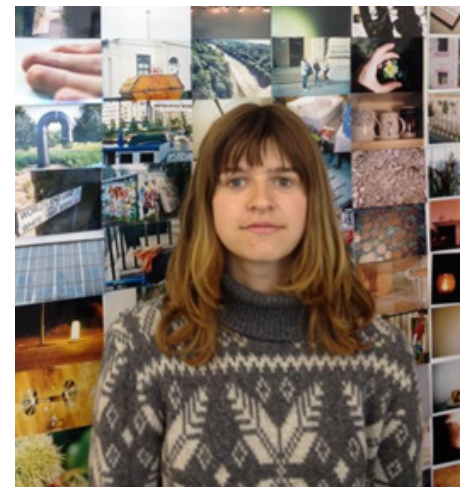
Green capital: Student capital

Tom Rowlands, Sustainability Officer and Daisy Bryant, Graphic Designer

Tom Rowlands took up the post of Sustainability Officer, a brand new post to champion the green student voice and take action to reduce UWE's carbon footprint. He worked with the Green Leaders, a group of students who are passionate about 'greening' the university, and led the 'Plastic Ain't my Bag' Campaign to reduce the amount of single-use plastic on campus. As a result of the campaign, The Students' Union enacted policy change to ban plastic bags and introduce more Fairtrade products in all Student Union shops. Tom's highlights of his time as sustainability officer were; "Meeting like-minded people and proving to myself I am capable of being useful when given the opportunity. Encouraging others from years below to share my passion or ambitions for change and good cause."

With support from the Students' Union Green Leaders Project, Daisy Bryant put her Graphic Design degree into practice in the name of sustainability. Daisy put together a 5 minute film about cycling in Bristol called Bristol on Two Wheels, a beautifully hypnotic film promoting cycling and giving some top tips to encourage students and the wider community to give cycling a go for 2015.

Daisy says that she learnt that Bristol "loves cycling, and that it's green and very concerned with reducing carbon emissions". She also commented about sustainability, "I learned that it is important in more than one aspect of society. We at the moment have a warped view of how to live life in a city and I believe that things like my film can show alternate ways of living".





STUDENT ACTION: UWE VOLUNTEERING

Volunteering schemes contribute to Bristol European Green Capital 2015

UWE's volunteering team have developed and facilitated many volunteering opportunities which have enabled UWE students to contribute to the ambitions of Bristol European Green Capital 2015. There has been a focus on opportunities which enable students to engage with the city and the communities within it. By contributing their time and sharing their skills, students simultaneously enhance their own work experience whilst having an impact and real influence on the community/organisation which they have helped. Volunteering is a great way for students to gain skills and experience to add to their CV and gives them the chance to meet new people whilst supporting local communities.



On Wednesday the 30th of September, UWE hosted a Volunteers' Fair at the ECC. The fair gave students the chance to speak to over 60 organisations offering a variety of volunteering opportunities, many of those being environmentally themed. The opportunities on offer ranged from long term projects with local community organisations, to international summer break volunteering. The fair provides organisations with an opportunity to enlist practical support from students and offers students the opportunity to share and gain skills and experience, whilst supporting environmental and social projects.

UWE volunteering provided many further opportunities for students to engage with their communities during 2015 and to make a difference. Examples of projects which students could engage with are;

- My Future My Choice (with Bristol Loves Tides)

- Green Spaces clean up
- The Green Ambassadors Project (in partnership with schools and community groups to help to teach children in Bristol about the importance of sustainability)
- UWE Bristol's student consultancy scheme (working in partnership with community or voluntary groups, social enterprises and others in the Bristol area).

A further volunteering opportunity was facilitated by the Department of Computer Science and Creative Technologies. Green CAKE (community action and knowledge exchange) enabled IT students to make a difference in community settings whilst enhancing their knowledge and skills through meaningful, relevant community action.

Further information on UWE volunteering activities can be found elsewhere in this report.

*“The students
real projects
organisations
get great experience
working for*



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or a client”



-Paul Hulbert, Senior Lecturer



PARTICIPANT CASE STUDY:

UWE VOLUNTEERING

Christina Appleton, student

'The A team', a group of five students, worked with Thornbury in Bloom to help them reach out to the younger members of the town's community.

Guy Rawlinson (Chairman of the Thornbury in Bloom group and Mayor of Thornbury) said he found out about the student consultancy projects following a social media course run by the Thornbury Volunteer Centre in the town. "We really wanted to engage a wider section of our community and to get young people involved in civic pride and making the town look beautiful which is at the heart of the 'In Bloom' national competition. We were very lucky to win a bid for the consultancy run by UWE Bristol as the scheme is well known now and has a reputation for delivering excellent work.

The student team were fantastically professional in their approach and have helped us to develop a new website that is easy for us to use. The team also extended our social media presence growing our twitter following from a handful of followers to over 1,500. We are delighted with the work they have done for us."

Christina Appleton (Final year Web Design student) was part of 'The A Team' and said, "Thornbury in Bloom set us a challenge to revamp their web site and grow their Facebook and Twitter following in a way that would appeal to younger people. We set up a WordPress site and redesigned the appearance to make more of their content.

The A team also developed a map showing the route of the Thornbury in Bloom planting to help the judges find their way around. "We were quite flattered when they included a page relating to the project with our team and it was good to see how quickly the volunteers took to uploading text and images after a few tips from us. We also learned all about creating a web site using a WordPress template which was ideal for the client, as when we are no longer there to offer support the group will not need to understand complex coding. "The placement was a fantastic opportunity for us to work to a brief for a real client. We all now have something tangible to show that will help us to demonstrate our abilities to potential employers."

“SAVE THE PLANET!”

700

*UWE STUDENTS
VOLUNTEER FOR GREEN
CAPITAL STUDENT
CAPITAL PROJECTS*



STUDENT ACTION: THE BIG BEACH CLEAN

Case Study, Natalie Selwood, Student

UWE Volunteering engaged students in tidying the beach at Sand Bay to raise awareness about the impact of litter on our coast line and the broader environment,

Third year student of BSc Environmental Resource Management, Natalie Selwood, volunteered for the “Big Beach Clean” and was also awarded the “Change Maker Award”. Natalie was partially influenced to study in Bristol because of its “green” mind-set and UWE for their efforts towards the sustainability route. She believed her experience of volunteering helped her realise that Bristol is “moving in the right direction towards a greener city.”

She has always wanted to participate in a beach clean-up, with her connection to the sea from growing up in the Caribbean. “I really enjoyed it” but felt “like a drop in the ocean...a little bit helpless”. Nevertheless Natalie still feels that they made a difference.

Personally, she states, the event “opened my eyes to the stuff that’s left behind. There were toys, gun shells and cotton buds... Lots of cotton buds.” Cleaning helped to raise her

awareness of the extent of damage and she was particularly shocked that it was happening on our own beaches – in a country where people are supposedly trying so much to help the environment. Her fellow beach-cleaners were also surprised at the amount of rubbish they retrieved, but the determination and ambition to do more; (which Natalie believes was a direct result of the clean) derives from the feeling that you have done something - “made a difference”. She also received a change maker award which was a “nice recognition” and a positive addition to her CV.

Overall, Natalie feels is proud of the positive impact she made, but she was fully aware of the fact that this was only a minor operation. She claimed “if everyone does a little bit, it can collectively be a lot”. In her evaluation of the event, Natalie believed It helped her realise “the things that we throw away without thinking, end up in our seas and on

our beaches that kids then play on! Unless we reduce our consumption and throwaway culture, then our natural world will be destroyed. We are leaving behind a legacy that the next generation would not thank us for.”



“The things that we throw away without thinking, end up in our seas and on our beaches that kids then play on!”



STUDENT ACTION: GREEN INTERNSHIPS

UWE Bristol launched a new funding scheme during Big Green Week in June 2015 to help local businesses to recruit graduate interns. The new Green internship scheme hoped to enable 35 businesses to develop green policies and practices. The scheme was one of the ideas created by the university to highlight commitment to Bristol Green Capital 2015.

Organiser

Hannah Newmarch (Head of Employer Partnership Services in UWE Bristol's Careers Service)

Hannah helped to set up the Green Internships scheme. She said, "As a university we do an enormous amount of work to highlight and support green and sustainable agendas so we thought that this would be a really good way of embedding values held up by UWE Bristol in a scheme that would enable businesses to achieve projects that they may not otherwise have had the chance to do. We are not putting any restrictions on the kind of project that a company might want to implement as we do not want to restrict creativity. The sole requirement is that graduate must be working in a role that in some way contributes to the sustainability of the business or the environment surrounding the business."

Participant

Kyle Sellick (UWE Law Graduate) undertook a Green Internship at Change Agents UK.

"My role at Change Agents UK Charity was that of the European Projects Support Officer. In brief, my primary role was to establish a movement towards creating a more sustainable future. This was achieved by facilitating a partnership between volunteers from our European partners, and 'green' orientated organisations within Bristol. Our intended purpose was to create a network where like-minded people could come together to work towards the common goal of creating a more sustainable future."

"The sole requirement is that graduate must be working in a role that in some way contributes to the sustainability of the business"



STUDENT ACTION: THE GREEN TEAM

The UWE Students Union offer a student directed society called “The Green Team” which provides the opportunity to ‘identify, develop and support student lead sustainability projects. Being a member provides you with knowledge, training and resources to help you engage, motivate and support students and staff and encourage a sustainable university and lifestyle.’ Their passion and enthusiasm has been unremitting and their productivity will surely continue to flourish beyond 2015 into the future.



The passion and enthusiasm of the Green Team has led to a number of action projects and the raising of the sustainability agenda within the SU.

Co-ordinated by Laura-Kate Howells, The Green Team (previously Green Leaders) have organised, attended, supported and acted in a huge number of events throughout 2015. They have led and attended ‘Community Action Days’ and multiple Green Team meetings, the Tree Party Eco Festival, volunteering fair and the fresher’s fair. These events serve as promotional activities for the group as well as facilitating action on sustainability challenges. More than 400 students signed up to the Green Team at Freshers’ Fair alone. Their productivity will continue beyond 2015.

The Change for Change initiative was launched during 2015 which offers up to £500 to support students to run their social and/or environmental change projects.

The “Greener Futures” certificate, also launched in 2015, recognises Sports Clubs, Societies and Networks who have taken positive steps to encourage their members to think and act more sustainably.

In October 2015, UWE signed up to the Responsible Futures initiative of the NUS which provides an opportunity for universities to demonstrate their commitment to and delivery of education for sustainable development. It requires institutions to work with their students’ unions which strengthens the relationship between these two organisations and helps to ensure real action on education for sustainable development.

Frenchay campus is now home to its very own hive of bees, thanks to the persistence of the Students’ Union. Laura-Kate Howells reported that “we have around 60,000 happy and healthy European honey bees” on campus and she is optimistic that in 2016 it will be possible to harvest the

honey and create a beautiful student enterprise.

Students’ Union Sustainability Officer, Leyth Hampshire, successfully passed a motion for a new sustainability policy at the Students Union Meeting (SUM) on 26th November 2015. The Policy outlines how the Students’ Union will strive to improve its environmental impact in all areas and operations. The Students’ Union also promised to lobby the University to push the implement sustainability into the curriculum of all programmes.

Other SU 2015 projects:

- ‘Still Good’, pop-up shop
- Christmas Fair at the SU
- Project Green, ‘On your Bike’
- The Whole Earth Exhibition Workshop
- Gardening and Growing days.

The Enactus Student Society also brings together students, particularly who are passionate about the transformative power of entrepreneurship, .



600

*students signed up to the
Student Union Green Team*

**THE GREEN
TEAM**

**THE STUDENTS'
UNION**





CASE STUDY:

The Green Team

Laura Kate Howells, Green Team Co-ordinator

The Green Team has delivered a number of highly successful projects, and instigated bans on certain unsustainable behaviours. Bristol winning the European Green Capital Award has provided the Green Team with additional energy to make a difference not only on UWE campus but to take their passion into the community.

As a result of their efforts:

- water fountains have been introduced on campus;
- plastic bags are now banned from shops within the Students' Union;
- plastic cups have been removed from the Union's bars
- bee hives have been introduced on campus to help pollinate local flora and fauna;
- Community Garden has been introduced in partnership with Bristol's branch of Incredible Edible and UWE's Grounds Team.

Students have been encouraged to reuse and recycle through upcycling events and initiatives like the Flea Market and the 'Still Good' swap shop. The Green Team also arranged talks on sustainable fashion so students could hear from activists involved in the Labour Behind the Label campaign.

One particularly popular project has been the introduction of a Green Wall. This project encouraged students from geography, journalism, marketing, psychology, accountancy, architecture and planning and environmental science to get actively involved with the planning, delivery and marketing of the project. This project was beneficial for the students as it allowed them to use skills learned in their course and apply them to a real life project. Her Green Capital highlight was 'having over 800 sign ups to the Green Team during

Freshers' Week and seeing students develop their skills and confidence by running a range of student led projects to encourage students and staff to be more sustainable.



“Student led projects to encourage students and staff to be more sustainable”



PARTICIPANT CASE STUDY 2:

The Green Team

Matthew Dewsbury

The Green Team is co-ordinated by the Students' Union at UWE and is made up of a team of students who are passionate about sustainability both on and off campus. The activities of the Green Team cover a wide range of areas including food, transport, recycling, campaigning and much more and students are encouraged to come up with their own ideas and projects around sustainability.

One ongoing project for the Green Team has been the #saynotoplastics campaign which has seen the Students' Union get rid of plastic bags way before the charging system was brought in and reduce the usage of plastic cups in bars.

Final year Geography student, Matthew Dewsbury, made his

contribution to Bristol Green Capital on behalf of the Green Team by leading the #saynotoplastic campaign. Despite being on placement this year and missing a large proportion of Bristol 2015, Matthew provided an original project to coincide with Green Capital themes. Whilst on placement, he was given the task of raising awareness for the environment whilst working with no budget. This was when he found the inspiration for his Green Capital contribution. He used "recycled bottle tops to create a form of visual art". Using a recycled wooden board from Bristol Wood Recycling Project and the Green Capital logo, students and staff were encouraged to stick a bottle top onto a Bristol Green Capital stencil in order to help complete the artwork and sign a pledge that they would

#saynotoplastic.. Those that pledged received a free water bottle and Matthew hoped this could "create an impact by doing something different". To engage the whole university, there were three boards, one stationed at Glenside, Bower Ashton and Frenchay campuses. People were also educated about the negative impacts of marine litter through the visual display.

Matthew said of his experience: "The most enjoyable about my experience was being able to network with a variety of students all studying different subjects. I found it enjoyable educating them about the negative impacts of Marine litter and encouraging them to say no to plastic by offering a free reusable water bottle."





SUSTAINABLE UWE: ESTATES AND FACILITIES

Engagement with sustainable campus management

UWE's Sustainability Team and wider Estates and Facilities team have a long history of engagement with sustainable campus management. The institutional Sustainability Plan includes a wide range of targets which ensure the facilities on campus are as sustainable as possible. Action on meeting these targets has been accelerated in many areas and communication of such activity received significantly greater profiling throughout 2015



In November 2015, the UWE Grounds Team installed new seats for the community garden on Frenchay Campus. The seats were made from pallets and cable reels and “a perfect example of staff initiative combining cost-saving with environmental sustainability,” said Paul Roberts (Waste and Resources Manager). A community garden brings together staff and students to create a shared, growing and relaxation space away from the bustle of the campus. The garden has planted beds where people can grow their own herbs and fruit bushes, as well as some seasonal crops. Once a month there is a session, supported by grounds staff, with staff and students undertaking various tasks ranging from basic weeding, preparing of beds and planting as well as furthering the overall design and structure of the garden.

In terms of Biodiversity and Ecology, the 2020 goal is for the University grounds to be managed as an integrated ecological system.

We are working to sustain the ecosystem at UWE through:

- Increasing nectar rich planting such as lavender by 10 per cent annually
- Increasing bird boxes and feeding stations, and recording diversity of birdsong on campus to measure changes in population
- Increasing artificial habitat creation by 10 per cent annually
- Increasing wildflower meadows by 10 per cent annually, involving a five year trial of different grasses grown from seed on site
- Decreasing lawn mowing and increasing in-planting of wildlife friendly ornamental grasses instead
- Students and staff can join the Wildlife walks, embrace the UWE vegetable garden or simply take advantage of the facilities available for appreciating wildlife such as the willow arbour.

Energy

The University is on track to be a Carbon Neutral campus by 2040, and carbon budgeting is being considered as one vehicle to contribute to the achievement of that goals.

To meet ambitious carbon reduction targets, UWE has been working on low carbon design of new buildings, focused on reducing energy demand, as well as tackling our existing buildings with energy efficiency improvements and on-site renewables.

Waste

For waste and recycling, the 2020 strategy target is for UWE to be wholly integrated in a circular economy: that is the life cycle of products is considered and the university buys things that have a future economic purpose designed into them from the outset, so that they can be recycled for new usage at the end of their life.

To reduce waste to landfill and overall volume of waste, UWE is:



- Increasing recycling rates year on year with an 80 per cent target by 2020.
- Introducing kitchen waste recycling bins in all cafes, staff offices and student accommodation.
- Working with the Students' Union to provide swap shops on all campuses.
- Running an annual "Big Give" campaign at the end of the academic year to collect unwanted items and food from students in halls and private accommodation.





SUSTAINABLE UWE: UWE TRANSPORT

Transport was a key theme for Bristol Green Capital and UWE's Transport Team were actively engaged in the year and delivered many projects aimed at reducing single occupancy car journeys to UWE and increasing use of sustainable modes of transport. UWE has set an ambitious cycling aspiration for 2020, when it wants 20 per cent of all journeys to and from the university to be made by bike

During 2015, cycling provision at UWE Bristol was expanded as it aimed to become one of the most bike-friendly universities in the UK. Dr. Bike has offered free, weekly bike check-ups in term time at his repair workshop across campuses. When at Frenchay, his van has been situated by reception near the P and Q block cycle stands. His expertise has helped to restore bikes to a fully functioning state, enabling and encouraging cycling to UWE. Multi-campus Bike Workshops have also offered bike repair basics sessions – 1 hour hands on group sessions with a mechanic running through the basics of brakes and gear adjustment and maintenance.

The Frenchay Travel Roadshow and the Bike User Group were both features of UWE's transport activity during 2015. The Travel Roadshow launched the 'European Cycle Challenge' - an urban cycling team competition, taking place from 1 to 31 May. On the day, the TravelWest roadshow team were on hand to give

travel advice, maps, bus and train timetables and freebies including water bottles and high-vis gear. The Bike User Group provides a forum for the sharing of travel plans and the opportunity to receive feedback on what students wanted to see to support cycling for the coming year. Sustrans support cycling initiatives at UWE too. A Bike Train ran from the arches on the Gloucester Road to UWE to help people to become familiar with routes to Frenchay campus, taking in quiet roads, the Concorde Green Way and avoiding the major hills.

As a special event in 2015, mountain bike legend, Steve Peat, and friends created a marketplace for people to buy and sell new and used bikes, bike parts and other cycling paraphernalia (Peaty Bikes Bonanza). The marketplace allowed attendees to view items of interest and purchase them at discounted prices or direct from bike manufacturers.

UWE have made available Electric



Cars for use throughout the year. There are 4 pool cars, two of which are hybrid, two electric and three are available as part of the car club. There have also been 6 electric bikes placed in docking stations at UWE properties to be open for use. These were introduced in the Green Capital year. To boost knowledge and awareness of this, UWE offered electric car and Bikes Taster Days to encourage people to use the more sustainable vehicles available to them.

Cycle To Work Day was on the 3rd of September, where everyone who cycled to work on this day were entitled to a free breakfast, free security marking, Dr Bike basic check-ups and an opportunity to test drive an electric bike. This was a national event, which aimed to encourage everyone to take to two wheels and cycle to work for at least one day. An additional Big Bicycle Breakfast initiative was part of UWE's green travel activities during 2015 which aims to improve health, make roads



18%

of staff cycle to work



safer and boost the local economy.

Further developments included the installation of cycle stands by the new SU building at Frenchay, a new cycle hub outside P/Q block, the establishment of a cycle travel office on Frenchay campus, and the creation of a cycle lease scheme established for students only (75 bikes available).

The hire bikes have been hand-assembled by Jake's Bikes, an independent business based in Bristol city centre. With robust frames and high-quality components, the bikes come in two designs named after well-known city streets. Participating students will receive a lock, lights and cycle training. Loaned bikes will be maintained free of charge, with an on-call mechanic on hand to visit a student's home or site of a breakdown to carry out an emergency repair. Some 120 students have already registered an interest in joining the scheme.





ORGANISER CASE STUDY:

UWE Transport

James Morvan, travel engagement project officer

James Morvan, recognised an “extra buzz” around the university’s engagement with sustainability this year because of the Green Capital title. He explained how it has helped “keep motivation levels up and it keeps me driven”. Having worked in sustainability for years, James stated that the year “makes you proud of the city.”

James highlighted the Green Capital’s influence in enhancing the completion and delivery of projects and schemes. He said it has enabled a smoother process in terms of delivering projects as “it helps the business case” because management are more enthusiastic to approve sustainable projects in the Green Capital year. The approval of plans has been complemented by the Green Capital addition.

James praised the university for having “amazing awareness” of Green Capital, from staff, students to senior management. James stated “people are always asking about Green Capital. It’s a real conversation starter.” He said “anything that shines light on sustainability is welcome”.

James believes the updated access to new transport has helped to “facilitate better behaviour” in the university’s staff and students as well as the members of public who take advantage of the offerings.



“Anything that shines a light on sustainability is welcome”



TESTIMONIALS:

UWE Transport

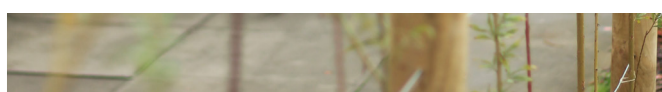
Karl Keating (student) and Tsara Smith (Internal Communications Manager)

Third year UWE student Karl Keating signed up for the 'bike loan scheme' in an effort to participate in Bristol Green Capital. He previously car-shared or took the bus to university, but having recently moved closer, he wished to transfer from four wheels to two. He described the scheme as 'affordable, accessible and a great way to get fit.' He uses his bike every day and he feels much healthier as a result, not just from the exercise but by the opportunity to ride along the cycle-paths, enjoying the wildlife and escaping the car fumes.

Tsara Smith said, "My personal highlight of UWE Green Capital was getting on a bicycle for the first time in many years. I was given a pre-loved bike by a friend and used the free Dr Bike service at UWE to get it checked out and to get some advice, now I'm cycling along my local canal with my dog on a regular basis!"



"Affordable, accessible and a great way to get fit"





SUSTAINABLE UWE: BIG GREEN WEEK

Throughout the week commencing the 12th of October, a numerous events and activities were offered by UWE to get people involved with green activities. There was mass promotion to students and staff via a range of media and communications channels to ensure awareness of the opportunities on offer.

Throughout big Green Week, a range of events and activities took place to increase awareness of and engagement in sustainability at UWE and the wider Bristol 2015 European Green capital year. The week was promoted through online media, electronic screens, banners stalls and more to get through to as many people as possible. Here are a few examples of what happened:

Commencing Big Green Week was the UWE commuter challenge. Run yearly, this challenge aims to change commuter behaviour by showing the comparative travel times of different forms of transport to its Frenchay campus from 3km away on Gloucester Road at 08:15 in rush hour traffic. The results show that cycling running walk and bus travel all took far shorter than driving by car and act as an effective boost to any-one thinking of making a change.

The results were publicised later in

the day by a lunch-time 'Small Green Fair 2015' at Frenchay, with vegan food stalls, volunteering opportunities, and an introduction to the 'Say no to plastic' campaign, all to the sounds of UWE buskers.

Outside the busy Student Union buildings UWE's Air Quality Management Resource team displayed a large map of Bristol in order to raise awareness of the appalling air quality along city centre routes. To explain the mapping, Ben Williams was there to answer questions about air pollution, its impact on our health and the challenges and solutions involved in reducing it.

This was followed by the launch of WHOLE EARTH? Exhibition, a 60 meter outdoor gallery of images and words, by environmental photographer Mark Edwards. Launched simultaneously at universities across the UK, Scandinavia, and Australia, the exhibition aims to connect students

to the issues depicted, encourages them to think of the future of our world, and asks the crucial question, "How can we live better with less?"

On Tuesday there was a special UWE Farmers' Market with local produce, street food, student society stalls and local crafts. On Wednesday, those with an interest in gardening were invited to an action day at UWE's community garden; people dropped in to have a look and to help the grounds team in their work, all using the sustainable gardening techniques of permaculture. For those interested in bees, our resident bee-keeper Jeff Davey took a group of students and staff over to our hives, whilst he talked about the natural history, usefulness and husbandry of honeybees and other pollinators. There was also the chance to get some hands on experience at the hives like feeding and putting on mouse-guards.

A lunch-time talk took place on Green





Politics. Darren Hall, who stood for the Green Party in the last general election in Bristol West, addressed the issue: 'What future for Green politics in the UK?'. Fresh from the Green Party conference he spoke about the prospects for Green politics and policies under the current Conservative government, fascinating for any-one concerned about climate change and all its implications.

Thursday saw events focused at Bower Ashton campus, with cake stalls, further volunteering opportunities, and other events encouraging people to get involved. The Vegetarian Society and The Green Team also hosted an evening at The Phoenix Café with food and a showing of the film 'Cowspiracy': an engaging look into the devastating impact of large-scale commercial animal agriculture on the environment. Towards the end of the week at the SU bar, you could've played "Pocket Planet", a game where student and staff can manage the prosperity of

their planets by saving water from their household. The objective of the project is to change the behaviours towards consuming water by using gamification and peer competition as an incentive. The project operates over technology, social, sustainability and hardware disciplines and is currently being used in our student village.

The week culminated in a UWE Volunteering action day on the Community Farm near Chew Magna involving hoeing, planting, and everything in between. A great time was had by all and valuable support given to a key local growing group.



SUSTAINABLE UWE: HEALTHY UNIVERSITY INITIATIVES

Many health related schemes and events have taken place for Bristol European Green Capital 2015. There have been monthly Farmers' Markets on campus that encourage purchasing of local produce and Fairtrade goods. As well as this, there was a fruit and veg stall at Frenchay every week day offering healthy, locally sourced foods

2015's "Feel Good February" was a great success! The following figures express this success:

- 217 events held across campuses; 130 at Frenchay Campus, 49 at Glenside Campus and 38 at Bower Ashton Campus.
- 6,200 total participants.
- 1,254 loyalty cards handed out. 947 prizes awarded.
- 250 plus people in face to face communication with Feel Good Champions.
- 1,700 views of the UWESU Feel Good website in February 2015.
- £2,002 total amount raised for St Peter's Hospice by the Pedometer Challenge.
- 6,670 weekly news email opens in February 2015.
- Contributing to this, 545 members of staff took part in UWE Charity

Pedometer Challenge 2015. A total of £2067 was raised for St Peters Hospice. The total distance walked was 41,304,831 steps which equates to 20,652 miles which is an increase of 6.3% steps compared to last year. This distance is the same as walking from Bristol to Melbourne and back.

Food

- MSC award criteria to be rolled out to other campuses
- Launch of fully compostable coffee cups and lids at Bower, 1st university to do this
- Wellbeing charter commitment level achieved
- UWESU focusing on locally sourced food and food miles
- Sustainable cooking demos for

students focus on using leftovers and minimising waste

- Bower Ashton new healthy food provisions

Active Travel

- 6 electric bikes on city campuses (Arnolfini, BA, Watershed)
- Cycle stands to be implemented at new SU building
- New cycle hub outside P/Q block
- Cycle travel office established on Frenchay campus
- Cycle lease scheme established for students only (75 bikes)



5300

**STUDENTS AND STAFF
ATTENDED UWE EVENTS
AND ACTIVITIES**



HANDS ON BRISTOL

Hands on Bristol' is a collaboration between the Bristol School of Architecture, University of the West of England and the Bristol community, that seeks to encourage and strengthen knowledge exchange between education programmes and local communities through collaboration in live projects.

Hands on Bristol' gives local groups and specialists the unique opportunity to transform spaces across Bristol. Previous projects have included self-built pocket parks, light installations, densification proposals, a community cinema, recycling clothes shop, community art interventions and greening the high street. The possibilities are broad and endless. For example in 2015 as part of the European Green Capital students undertook a visioning exercise to explore interventions which would encourage clean, safe and financially viable swimming within Bristol Harbour. Another commission came from the Bedminster Town Team. The question was, how can we design low-budget interventions in order to change perceptions and encourage a more vibrant high street? Following extensive consultation with businesses and local people, final proposals were developed for an outdoor gallery and the installation of a pocket park. Pocket parks

otherwise known as a 'parkette' are tiny parks often created on a single vacant building lot, or small irregular pieces of land.

Using a built environment challenge posed by community groups or organisations as the starting point, Architecture students work through a number of steps to develop and deliver a design brief for a project.

Typical stages involve:

1. Client and student meeting to develop a detailed brief for the project
2. Survey of the project leading to the production of drawings and models
3. Context research exploring the wider surroundings and the networks of actors or stakeholders involved
4. Production of a design report including details of costings, and similar projects for comparison

Working with communities has helped to develop practice-ready professional experience for UWE graduates, whilst stitching a bond between the student and the city. Many of the proposals developed are self-build and (almost) zero-budget solutions.



ORGANISER CASE STUDY:

Hands on Bristol

Matthew Jones, Sally Daniels and Rachel Sara

Speaking at a seminar presentation on “Hands on Bristol”, Matthew Jones (Senior Lecturer, Architecture and Planning) described the project as a way to “develop skills and communication” and to “respond to community issues with the skills of Architecture students”. He explained the actions of students in the project “Reclaiming Totterdown” which aimed to reduce the speed of vehicles in the narrow, steep and busy roads and utilise the space that is neglected in the area. He also believed that the projects can lead to “social and professional benefits for new MArch students” who can meet their peers and judge the level they are at in a practical environment.

Sally Daniels (Senior Lecturer, Architecture and Planning) offered information and examples of two contrasting projects from Bristol

and Norway which expressed “the scope of the breadth of what the live projects do”. Sally said the “practical benefits can be amazing” as they can offer communities a “future vision, aspirations for fundraising and in some cases a physical structure to be used”. If only a semi-permanent building, then this can still be “a precursor to a more permanent building.”

Rachel Sara (Programme Leader for Master of Architecture) explained that “a lot of research of the benefits of students has been done” and that this project meant they can undertake a project with “something that makes a difference and isn’t just what the teacher’s mark.” The clients “learn a lot on the practicality of the students and they learn about the architectural process more so it’s a two way education between the community and the university.” Also, Rachel

explained that all the clients are non-profit organizations to ensure the “students don’t feel exploited.” Rachel has held interviews for potential MA students and she described how “they want to come to UWE for the live projects” and those that have undertaken live projects have stated its “a really rewarding process... never boring.”

This is a “socially sustainable project and it’s easy to forget the people that these projects have an impact on.” It helps to “connect UWE with the city” and epitomizes the “think global, act local” philosophy.

In terms of negatives, Sally underlined the importance of “being clear on the deliverables & what the client will get” as there is a danger of the community receiving a structure that they don’t want or don’t know what to do with.

“They want to come to UWE for the live projects”



CENTRE FOR PERFORMING ARTS

The CPA have proficiently supported and reflected on the Green Capital themes in a number of different ways throughout the year.



Th projects so far these have included a four night run of *The Secret Garden* at the Redgrave Theatre in March 2015 which was based on the novel by Frances Hodgson Burnett with lyrics by Marsha Norman (Playwright) and music by Lucy Simon (Composer). This was followed by a very successful and well-supported concert reflecting on the green theme in a concert at Bristol Cathedral in April 2015. Event organisers were particularly appreciative of the extra audience numbers seemingly attracted by the additional green capital website publicity.

Nevertheless, the year's performances were all building towards the group's pivotal event at Colston Hall - *Green and Pleasant Lands* on the 6th of December. This included the following music:

- George Fenton – *Blue Planet*
- Delius – *Sea Drift* with baritone soloist Martin Le Poidevin
- Paul McCartney – *Celebration* from *Standing Stone*

- Arnold – *English Dances*
- Vaughan Williams – *Toward the Unknown Region*
- Parry's – *Jerusalem*

These scores not only reflect on a green theme but also latterly celebrate 100 years of The Women's Institute.

Furthermore, the most significant part of the programme for *Green And Pleasant Lands* was the commissioning of a brand new piece of music supported by funding from the green initiative. This was a large-scale composition for symphony orchestra in the form of a theme and three variations on a Bristol Sea Shanty of approximately 10 minutes duration with the composers being three UWE members of staff all of whom work in FET as part of the extensive Music Technology programmes; it is hoped that this new work was warmly received by the Bristol audience with potential for many future performances by local and national groups.

The final CPA event for 2015 was the UWE Carol Service on 10th of December with music reflecting on the green theme. This included a brand new commissioned piece of music – *The Gift* – written by Liz Lane (Senior Lecturer in Music Technology - Composition and Performance) for the UWE Singers with organ accompaniment with the performers totalling about 200 CPA members. Ian Yemm (University Coordinating Chaplain) performed a particularly fitting tribute to the Green Capital year in his sermon. He later described the event as "a great occasion!"

UWE sustainability engagement officer, Vicki Harris, claimed the "buskers have been lovely" in their contribution to sustainable events this year. They have performed at farmer's markets, the launch event and the Whole earth exhibition plus much more. She highlighted their efforts as providing "a much friendlier response. The busking brings some of the events to life with their music".





ORGANISER CASE STUDY:

Centre for Performing Arts

Ian Holmes, Director of the Centre for Performing Arts

Ian Holmes believed the added title of Green Capital was ‘fantastic’ for the Centre of Performing Arts’ publicity, for raising awareness of their activities and achieving their goals. Although it was at times challenging to incorporate ‘green’ themes into artistic performances, Ian was adamant in expressing the positive impact the year’s green efforts have had on his team – he stated “It’s been a challenging year for us but we hope we have overcome these challenges”.

He claimed ‘Bristol European Capital 2015 inspired our programming this year. We have been able to reflect on the theme and through this we have engaged with an ever-widening audience whilst raising awareness for sustainable issues.’ He believes that the CPA’s staff and students understand sustainable issues and goals ‘very well’ and that this year’s green involvement has influenced its members. One member of staff has decided against driving his car to regular rehearsals at Glenside and has instead opted for the electric car made available by the university to

reach his destination and reduce his carbon output. The Green Capital year has benefited the Centre through to the core, with many events offering students the chance to perform, such as the UWE buskers who helped contribute to the ambience of the Whole Earth? Exhibition launch.

Ian pressed for further networking that has developed as a result of Green Capital’s knowledge sharing and brainstorming of ideas, whilst connecting with other university faculties and learning of their involvement.

Ian was also proud of the CPA’s contribution to the health and wellbeing goals of sustainability. Nature has posed as the muse for the most ingeniously creative thinkers, writers, musicians and artists throughout history; with this in mind, Ian was aware of the effects that the CPA’s events can have on a person’s wellbeing; whether they are watching for enjoyment, stress relief or as a form of escapism – the arts industry has the ability to directly improve

someone’s happiness for the better.

Although embracing the Green Capital year, Ian did share his doubts on whether the Centre could sustain the engagement and continue to build on the awareness raised after the year is over. He believed that identifying a lasting legacy was one of the most difficult challenges when questioned on the Centre for Performing Arts’ Green Capital engagement. Despite this, he was more than happy to embrace sustainability and incorporate it into the Centre’s performances if the opportunity arises for future engagement.



“Green Capital was ‘fantastic’ for the Centre of Performing Arts’ publicity, for raising awareness of their activities and achieving their goals”



ORGANISER CASE STUDY:

Centre for Performing Arts

Maxwell Davies, Associate Lecturer of the Centre for Performing Arts

Dr Max Davies (Associate Lecturer, Centre of Performing Arts) coordinated the UWE Buskers for on-campus Green Capital events, organised the UWE Big Band and Sting Band at the EAUC Green Gown Awards and performed at the Green and Pleasant Lands concert. He believes the “individual awareness for CPA members, and audiences at our events, on what the Green Capital is, and what it is trying to achieve was improved by our efforts this year. Due to our focus on the Green Capital, our performers learnt to realise that Bristol is a beacon for sustainable thinking, eco-friendliness and environmental issues; and that it is important to contribute to this. I was privileged to be commissioned by the university, along with two other UWE lecturers, to write a piece for the UWE Symphony Orchestra for performance during the Green and Pleasant Lands concert at the Colston Hall. Its starting point was linked to the reasons why Bristol was awarded Green Capital from the initial application. The piece charts, in sound, our relationship with the environment and it was my hope that

it would be an invitation to ponder the question of ‘how are we redefining our relationship with our natural surroundings while maintaining a comfortable way of life?’

Our aims at the CPA this year have been twofold. Firstly, we have helped lift the atmosphere at various Green Capital events such as the Green Gown Awards and the farmers’ markets. Secondly, the work that we have done in terms of concert programming, new commissions, the composition competition and performances have all helped to highlight the green message.

If we just focused on one event, it would have been more difficult to raise this awareness amongst our members and audiences. Offering a series of events linked to the green theme helped us to achieve our objectives.

To continue the spirit of 2015, we have three projects in contemplation for 2016.

1. A composition competition, open to students and UWE alumni, to submit a piece of music, art, performance etc. to respond to the issues raised by the Green Capital.

2. We will be recording the commissioned pieces, and remembering the reason for their composition at the time of release.

3. This is only in its primitive stages of conception but we are hopeful of planning an “eco-performance.” This would involve fashioning instruments out of recycled/ recyclable materials, and would be produced in collaboration with the SU. Students would create a piece of music in response to Bristol European Green Capital. Although this is not yet confirmed, it emphasises Green Capital’s as a focus for our creative thinking.



PARTICIPANT CASE STUDY:

Centre for Performing Arts

James White and Harriet Copeland, Musicians

One performer offered his views on the Centre's engagement with Green Capital - James White is a trumpet player, CEO of his own company and former Development Officer of the CPA. James is already sustainably orientated as he prefers to walk than drive, recycles and is an advocate for saving energy. He believed the Green Capital title has "definitely" improved the university engagement with the UWE buskers and helped collaboration between the performers and the Student's Union – which has really "kick-started" thanks to the Green Capital engagement. He has noticed that there is a higher inclination to find other modes of transport within the centre, as "getting to and from rehearsal is a major part of performing with the CPA." Schemes such as UWE's "rent-a-bike" have influenced the transportation of CPA members. Similarly to Ian, James fully emphasised the effect that

music can have on a person's health and wellbeing, with a proportion of performers playing "just to enjoy it". He played in The Secret Garden production and was impressed with the verdant aesthetics involved with the set and the music. He recognized the newly composed music for Green and Pleasant Lands as the standout legacy from this year, but identified that in hindsight, the link between their performances and Green Capital could have been more overtly advertised to the performers as a way of igniting a realisation of their involvement.

Another participant, Harriet Copeland, was in her third year of study for a Biomedical Sciences degree. Whereas James performs to benefit his career, Harriet is a player purely for enjoyment. She was a trumpet player in the April concert and was grateful for the contribution

of Jonathan James, a guest conductor and musicologist. The Green and Pleasant Lands concert was explicitly related to nature and a presentation from John James explained the 'influence of nature in the composition of the piece' which she highly appreciated and made her think about the ways nature can affect people.

Harriet believed the CPA did a great job in raising awareness for Green Capital. She praised the CPA as being a 'nice, welcoming and appreciative environment' and she would happily contribute to sustainably themed performances in the future.

"She praised the CPA as being a nice, welcoming and appreciative environment"

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***UWE GREEN CAPITAL
EVENTS WERE HELD ON
UWE CAMPUSES***



CONNECT

network. share. listen. collaborate. communicate



UWE BRISTOL GREEN CAPITAL 2015 LAUNCH

UWE's Bristol Green Capital launch was a showcase event at the Community Hub which enabled participants to find out what is happening across the city and at the university during 2015.

UWE's Bristol Green Capital launch (26th January) was a showcase event held at the Community Hub (Octagon) which enabled participants to find out what was happening across the city and at UWE during 2015. The tone of the event was of celebration and opportunity. There were staff and student information stalls accompanied by live music. The event was supported by Green Ambassadors and the UWE buskers equipped with promotional materials traversing the campus and informing people of the Green Capital year.

These ambassadors surveyed 980 people, which revealed that 80% of students and 95% of staff knew Bristol was Green Capital.

The event was attended by approximately 440 staff and students. Over 900 people were spoken directly to, with electronic and paper communications being distributed during the lead up to the event and on the day.

Jamie Darwen Head of UWE student experience and enrichment stated that 'I have never seen the Octagon so full of people!'





PUBLIC ENGAGEMENT

UWE have actively encouraged and participated in city-wide community involvement this year. They attended, hosted and organized several events to advance public engagement

This year, many Green Capital and sustainability related events have been hosted, organised, attended and supported by UWE students and academic and professional staff. Bristol Food Connections in May, the Festival of Nature, in June, Bristol Bright Night in September, and The Festival of the Future City in November all received significant engagement from UWE. More detail on each of these events can be found in the individual activity reports contained elsewhere in this document.

The 16th of June was the launch of Bristol's global food project 91 Ways. Held at The Station in Broadmead, the day included inspirational speakers and food from around the world. The event website provided the following description of the 91 Ways project:

The choices we make about how we eat have a direct impact on our quality of life and our environment through this projects. People were able to share their stories, their recipes and their passions to build understanding between communities and help people make better decisions about food, their wellbeing and the health of our city.

Sally Greenwood (Student Enrichment Project Officer) writes, 'we have good relationships with 91 Ways as we are working together on the Creative Writing project. We have a team of student volunteers who will be delivering 5 workshops in a local primary school aiming to teach the children creative writing skills. The project will be themed around 91 Ways' aims: about connecting communities

and exploring language by focusing on food stories. The school, Fishpond Academy, have chosen a small group of children from diverse backgrounds who may be underachieving slightly in creative writing / English. At the end of the project a booklet/ anthology of the creative writing will be produced, both for the school and for 91 Ways' summer exhibition.'

“It has been great to have the focus of the Green Capital, an important city-wide initiative, as it has empowered and encouraged us to develop very creative multifarious responses to the green capital themes”

-Dee Smart, organiser



PUBLIC ENGAGEMENT: BRISTOL FOOD CONNECTIONS

Food Connections was established in 2014 as a partnership event between the people of Bristol, the BBC in Bristol and leading Bristol organisations, including UWE Bristol.

All over Bristol, dozens of individuals, groups, organisations and businesses – united by their passion for good food – came together to stage a food event unlike any other. “Food Connections” aspired to change how we think about food and how we eat by ‘bringing people and good food together’ and by celebrating the people, the produce and the projects that are putting Bristol on the map as a sustainable food capital. It ran from the 1st – 9th of May in Millennium Square.

As the flagship food event for Bristol 2015, “Food Connections” comprised over 130 events all over the city divided into six themes: land and growing, wellbeing, feasting and festivities, get cooking, brain food and families.

UWE’s roaming social media team reporting took followers on a journey through Food Connections 2015 with their own unique insight on, and responses to, the wide-ranging and varied events. Children’s University ran workshops to inspire young people and their families to grow, prepare and eat healthy food.

Students on UWE’s MSc Sustainable Development in Practice helped local community interest company Eat Drink Bristol Fashion put on a well-attended Sustainable Food Summit which helped local restaurants to build sustainable menus. Louise Denham (a student on the MSc) worked for ‘EatDrinkBristolFashion’s’ new sister company called ‘Field to Fork’, helping them to prepare and document their event and associated Sustainable Food Conference.

Louise created a ‘how to’ guide which combined “information captured during the summit and contained relevant advice, case studies and information for sustainable catering.”

This project was beneficial for both parties; Louise believes it helped her gain “confidence in my own abilities and expertise” and the ‘how to guide’ acts as the legacy of the summit and allow us to remain engaged with the local catering and restaurant community, proving our commitment to helping them in their efforts towards sustainability. It demonstrates our understanding of the difficulties that can be encountered during this, but also offers practical and feasible solutions and creates a real business case for sustainability.”

“Information captured during the summit and contained relevant advice, case studies and information for sustainable catering.”



PUBLIC ENGAGEMENT: FESTIVAL OF NATURE

The Bristol Festival of Nature Wild Weekend was a two day city-wide celebration of the natural world. Its key aims were to be exciting, educational and dynamic. UWE Bristol contributed to this event with enthusiasm and innovation.

This festival provided a perfect platform for the launch of UWE Bristol's Parkhive app. Thousands of visitors to UWE's tent took part in a range of interactive activities suitable for all ages. Highlights included: Bug Booth with bioluminescent bacteria (UWE bioscience experts), Your Green City (online course), Avalon Marshes (a collaborative project developed with the Science Communication Unit), Hydrocitizenship Project (Research Centre for Floods, Communities and Resilience) and Robots vs Animals (Bristol Robotics Laboratory).

Those interested in energy used specially designed bikes to generate electricity. The "Hydrocitizenship Project" wteam helped visitors to explore our relationship with water and its importance to our sense of

self and identity. Visitors to "Robots vs Animals" had a chance to see how high-tech robotic engineering seeks to copy the behaviour and capabilities of some animals and insects; with the chance to hear about this fascinating collaboration between zoologists and engineers.

Sam Thomson (ACE) led a talk about Bristol Parks and films by the MA Wildlife Filmmaking students were played on the Big Screen.

Featuring over 100 organisations, the Bristol Festival of Nature Wild Weekend gave wildlife-lovers of all ages a unique opportunity to discover and enjoy the natural world in the heart of the city. With a line-up of hands-on activities, fascinating talks, live entertainment, a market bursting

with local produce and much more, the weekend attracted over 15,000 people to Bristol's Harbourside.

Corra Boushel (Project Co-ordinator for Robots Vs Animals) explained "It's nice to be part of festivals, and stalls offer a relatively easy way for PhD students and ECR to get some public engagement practice."

Erik Stengler (Senior Lecturer , Science Communications) noted "Having the Festival in the horizon every year has been useful for us to work towards a specific event and as such it has helped to increase public engagement by staff."



"It has been essential to count on UWE's central support in coordinating UWE's participation in the event"

Erik Stengler (Senior lecturer in Science Communications)



PUBLIC ENGAGEMENT: BRISTOL BRIGHT NIGHT

As part of the prestigious EU Researchers' Night, supported by the EU Commission, Bristol Bright Night was a collaborative event that brought to the public the excellent research conducted at Bristol's two universities. More than 70 UWE researchers took over At-Bristol and other venues to showcase their work through an engaging selection of hands-on activities.

This event took place on the 25th of September, as part of a network of over 270 European cities hosting Researchers' Nights. More than 2,300 people attended engaging talks, debates, demonstrations, films and stand-up comedy taking place throughout At-Bristol. The Planetarium was full as the Flavour and the Mind Show, from the Understory team, delighted audiences with drones, a brain scanner, edible bugs and the world's rarest chocolate.

UWE's research excellence in environmental research was

highlighted during The Green Hour Talks. Exploring 'green' themes, from air pollution and sustainable transport to water and marine security, the speakers discussed their findings with the audience members and explored ideas for a sustainable future.

In his talk entitled 'Air pollution, why we fail to learn the lessons of history', Prof. Jim Longhurst explored the contemporary issues of air pollution through a historical lens. Looking at historical, mostly failed, attempts to manage air pollution from classical times until

today, the talk explored why have we have not learnt from the lessons history provides.'

Prof. Glenn Lyons explored the challenges of predicting future demand for transport in a changing society and what this means for policymaking. In his talk 'Top gear or click: Transport's uncertain future', he presented divergent plausible futures that may lie ahead for transport and society.

In his talk, 'Getting to Sustainable Behaviour - What do we Change? Individuals or Society?', Dr Tim



Chatterton argued that only by moving beyond the scope of individual action will we stand a chance of realising the collective action that will be necessary to both adequately mitigate and adapt to climate change.

Putting a spot light on water and marine security Chad Staddon, Mark Everard and Tom Appleby shared their research findings with diverse audiences. Drawing on case studies from around the world Chad argued that, despite huge challenges, few places in the world were at risk of running out of water. In his talk *Thirsty Cities: will we run out of water?* he suggested that our burgeoning cities might hold the

key both to understanding the crisis and to resolving it. Mark Everard's talk *'Water security: are we tackling it from the right end?'* argued for a more systemic approach to water security and flood risk management, rather than addressing symptoms. In *'Management of UK marine waters – science or security?'* Tom Appleby shared the experience of a group of people passionate about marine conservation and local communities who took on the policy makers and Scottish government to change the marine laws.

'Wandering about Bristol', a video installation by Pam Seanor, was given the first public viewing at Bristol Bright

Night. Exploring different narratives of what Bristol Green Capital meant to people actively involved in green practices and those not well engaged in the 2015 'European Green Capital' process, the project also explored complex aspects of sustainability.

Jim Longhurst, Assistant Vice Chancellor, said "Bright Night provided a great example of the two universities working together to share their knowledge and excitement for research with their home city. Bright Night 2015 was a great success and I hope we are able to run it again in 2016."





PARTICIPANT CASE STUDIES:

Bristol Bright Night

Ben Williams, Enda Hayes, Glenn Lyons

UWE's Air Quality Research and Management team presented their huge laminated map of Bristol which enabled viewers the chance to learn about the air quality where they live, work and play. Ben Williams (Research Associate - Air Quality) was at Bristol Bright Night to inform attendees about air pollution, its impact on our health and the challenges and solutions involved in reducing it. In the light of the Volkswagen car emissions scandal, the content of the map offered renewed urgency - to make us think more about how we are contributing to air pollution and how we can reduce our impact. Ben expressed his belief that it was vital to raise awareness of air pollution for students, staff and the wider public. He described the map as a way of 'offering a visual stimulus for a problem that is invisible to the naked eye - a great way of raising awareness'. Bristol Bright Night was a chance for children to participate and engage with researchers across Bristol. 'Once we got them sat down on our map, we could then talk to them about air pollution'. By offering

a place to sit for the youngsters, Ben and the Air Quality Management team at UWE were then able to highlight the issues Bristol faces and what areas of the city suffer most from air pollution. Ben indicated that there were 'masses of people viewing research that they normally wouldn't, thanks to Bristol Bright Night. We helped by making an invisible issue visible whilst hopefully maintaining an engaging atmosphere for all that that attended our demonstration'.

Dr Enda Hayes (Associate Professor, Director of AQMRC and Principal Investigator for the Bristol Bright Night initiative) said the event was "a great platform which enabled us to showcase some of the research we have undertaken. It's important to share our knowledge with the wider public so they can understand the risks they face from air pollution, risks that they probably don't usually consider. It's also interesting to hear the views of the public to grasp their knowledge of air pollution in the city and the role they can play in

implementing solutions."

Glenn Lyons, Associate Dean (Research and Knowledge Exchange, FET) and Professor of Transport and Society, used the event to explore sustainable transport and how the government decides where to invest in the future. "My activity invited people to explore their views on different plausible futures for connectivity in society (transport, cities, internet). They were then asked to put themselves in the shoes of the chancellor and transport minister and decide how they would invest."

"It was great to get a sense of strengthening the civic connection of our research and fascinating to be put to the test of communicating science to a very different type of audience. I'm very glad I took part - it stretched me personally and enriched my appreciation of how we communicate our knowledge to the world beyond academia."

"It's important to share our knowledge with the wider public"



PUBLIC ENGAGEMENT: FESTIVAL OF THE FUTURE CITY

The Festival of the Future City, one of Arts Council England supported Exceptional projects, was the largest debate ever about the city and the future which span from the 17th –20th of November.

The Festival of the Future City – one of Arts Council England supported Exceptional projects – was the largest debate ever about the city and the future ran from the 17th –20th of November. Organisers explained that “cities are the future: more than half of the world’s population now live in cities”. Held in venues across Bristol including @Bristol, Watershed and the Arnolfini, this event brought together academics, city planners, artists, writers, filmmakers, games makers, architects, politicians, journalists and commentators, poets, community leaders, businesses, scientists, think tanks and others to debate the future city with the public. The festival was programmed by the Bristol Festival of Ideas with the University of the West of England as an academic partner. UWE experts attended and contributed to a multitude of these events across the duration of the festival.

The aims of the festival were as follows:

- To inspire wide thinking and debate about the future of cities
- To look at examples of good practice in cities that will help promote a better and more resilient, sustainable and prosperous future for all;
- To examine and debate good examples of city futures from the past and what they can tell us now;
- To provide models for future city development;
- To promote debate and discussion about the future city by the widest range of people and organisations.

The Festival brought together and provided a platform for existing programmes of work – such as Innovate UK, Foresight, Future Cities Catapult and Centre for Cities, amongst others.

Many UWE staff supported the Festival. On the 17th of November, UWE contributed to the health strand of the festival, coordinated by Bristol Health Partners. The event ‘How do we know if cities and neighbourhoods are healthy places?’ included a talk from Sarah Burgess (UWE). ‘Health, housing, places: how can we get better at creating places that support health?’ involved Jane Powell (UWE) and Hugh Barton (UWE) who both offered talks. Richard Kimberlee was a speaker for ‘How do we support mental as well as physical health?’

On the 18th, Jonathan Mosley spoke on ‘Assemble: The Hand-Made and the Improvised’ which asked whether hand-made, improvised and small-scale interventions have any real impact on the long-term social and political life of a city.



STUDENT ENGAGEMENT: YOUR GREEN FUTURE

UWE Bristol hosted "Your Green Future", a free event for schools across South Gloucestershire and Bristol.

Through a range of interactive workshops and an exhibitor hall, young students had the opportunity to explore the growing job opportunities in a low carbon, resilient economy. The Your Green Future event began with keynote talks and students then went on to participate in a range of professionally facilitated activities. In each activity, students had the opportunity to work with diverse businesses and education providers. Event supporters include Jaguar Land Rover, Sainsbury's and Ecotricity.

The workshops tackled many key environmental and business related necessities such as:

Innovation

- Students developed creative and ambitious ideas for meeting an organisation's waste reduction targets.

Business

- Students worked with businesses to develop and enter products into the Future Food and Fashion Awards

Energy

- Students utilised the skills of businesses to develop a sustainable energy plan for Snowdonia National Park.

Waste

- Students developed creative and ambitious ideas for meeting an organisation's waste reduction targets.

Exhibition

- Students were tasked with identifying the range of organisations and jobs involved in sustainability

440 students, from 15 local secondary schools engaged in the event and had the chance to work alongside 34 businesses and 16 university students

Patrick O'Flynn (Senior Lecturer: Building Services and Energy Management) believes 'this outreach activity to be one of the best career advice events in the region.'

Chris Spencer (Senior Lecturer for Geography and Environmental Management) praised the event for "taking students from across a range of ages and showing them how relevant sustainability challenges are to them, to our world and to their careers and that all professions can have a green and environmental dimension."





PARTICIPANT CASE STUDY:

Your Green Future

Lauren Winfield, Student

Lauren Winfield (Architectural Technology and Design student and Green Ambassador) explained the educational benefits she gained from working at this event. Also a recognized “Change Maker”, Lauren does as much as she can for sustainability such as cycling to university and recycling where relevant. She helped students design the best ‘eco house’ and dab their hand in fashion with recycled material. Commending the event, she stated ‘it made students understand why we act sustainably and emphasised the importance of green living.’

She praised her faculty leaders for promoting the Green Capital

through emails, and this how she was made aware of the event which she described as ‘a really interesting day that I learnt a lot from!’ One thing that she found particularly memorable was the energy efficient aircraft proposed by Airbus which she ‘never considered before’.

Lauren also undertook an ‘eco project’ for her university course. Similar to the “Your Green Future” tasks, they had to design an environmentally friendly house that could be implemented in Bristol. The Green Capital contributed to the motivation of this project massively, as her whole city was wrapped in an eco-constructed bubble. She could create a direct

link to what they had achieved and how it compared to Green Capital’s intentions. Overall, she believed the Green Capital year ‘makes you more conscious of what you are doing...It makes you stop and think “I need to do more” and it encourages a cross generational difference’. Lauren has ambition to work in an eco-driven industry and believes this experience has improved her determination in achieving this.

“It makes you more conscious of what you are doing...it makes you stop and think”



STUDENT ENGAGEMENT: GREEN YOUTH DAY AND STUDENT DAY

Two day long events were held in the city to enable students and other young people to learn about and debate key sustainability issues and to contribute to Bristol's 2015 objectives.

Green Youth Day (20th April) was led by an advisory group of young people. It was a day which addressed issues recognized by the group as important to them and their friends. Subjects included:

- the science of climate change
- protecting wildlife and the oceans
- human rights; the clothes we wear
- equality
- how to campaign successfully
- why questioning the establishment is essential.

In addition to passionate and inspirational talks, films and demonstrations from people who have helped campaign and change Bristol and the world – the day included practical examples of how to make what we own last longer; meet-the-speaker sessions; smaller group discussions and presentations; and a chance to vote on a major prize.

The UWE journalism team set up a 'student blogging' campaign to document the events of the day. This gave our students the opportunity to gain live experience in the world of reporting and blogging whilst engaging with a green capital event.

The Bristol Festival of Ideas held a Student Day (21st April) where around 100 students from the city's universities were able to shape the message that Bristol 2015 delivers to the UN Climate Change Conference in Paris at the end of the year. The Student Day saw students debate the key concerns facing cities, from future energy needs to broader climate change issues.

Both events were held at Colston Hall and At-Bristol.



STUDENT ENGAGEMENT: STUDENTS' UNION GREEN CAPITAL PROMOTION

Students' Union at UWE and University of Bristol Students' Union in February 2015 collaborated for a "Green Capital launch party" to celebrate student involvement in Bristol 2015 and a showcase event in October to engage the public in student activity.

This was a collaborative event between the Students' Unions at UWE and the University of Bristol to showcase ways in which students can benefit organisations in the city. Held in central Bristol at the Bristol 2015 Lab on the evening of the 8th of October, organisers hoped to attract the public, students and organisations. Those that attended could view the variety of events and projects that have been led or helped by either university.





STUDENT ENGAGEMENT: ECO FESTIVAL AND TREE PARTY

The University of the West of England hosted 'The Tree Party Eco Festival' on the 28th of September 2015. This event was admirably organized by the SU to contain a concoction of local projects and establishments.

The University of the West of England hosted 'The Tree Party Eco Festival' on the 28th of September 2015. This event was organized by the SU to provide a vehicle for sustainability-focused local projects and organisations to come together for a celebratory event and for awareness raising. Each of the attending organisations had one thing in common – their passion and aspiration to encourage a more sustainable and eco-friendly city on behalf of 'Bristol European Green Capital 2015'. The festival was located in an ideal setting outside the new Students' Union. There were approximately fourteen organizations present, each showcasing their own stands, activities and complimentary gifts to enhance the sense of community

created at the event. Students were guaranteed a fresh insight into the efforts of Bristol European Green Capital 2015. They were informed of upcoming events, multiple organizations, ways in which they can become more environmentally friendly and the opportunity to get involved and influence the future.

Due to its location, the event attracted the attention of students without a previous sustainability interest and thus extended the reach of UWE's Green Capital activity. Awareness raising was the primary purpose of the festival. Attendees were encouraged to make 'pledges' to undertake small actions to embrace sustainability and to adopt environmentally conscious behaviour.





ORGANISER CASE STUDY:

Tree Party: Eco Fair

Leyth Hampshire, Students Union Sustainability Officer

Leyth Hampshire (Students Union Sustainability Officer) organised the event and was proud of his effort to 'try something different' to engage students in sustainability. The aim for the festival was to 'raise collective awareness of students around sustainable development and green movements.' In keeping with the Green Capital intentions, he hoped the event would be a 'catalyst for change' by 'flooding' students with different organisations. He argued 'creating a festival atmosphere around sustainable development education is a great way to inform students'. Although 'very successful' he wished for a slightly higher footfall.

In terms of impact from the Green Capital title, Leyth can identify a 'higher student union engagement'.

Also, it helped his organisation of the event hugely. He believed that the festival's connection to Green Capital enticed more organisations to attend. He used this as 'leverage to gain organisations' who all contributed to the event. He had no doubts that Bristol and UWE would capitalise on Green Capital, and that 'Bristol can be the catalyst for other cities in the country.'

Doing what he can to be sustainable in his day-to-day life, Leyth's intentions are for 'big things to make a bigger change'. One of his priority concerns is encouraging people to turn vegetarian; something he believes will have a 'massive impact' on the environment. As this event was based around organisations, he would like to focus on sustainable

foods and people's eating habits. This is why a one day vegan food festival is commissioned for Feel Good February. He believes people's food habits are the 'biggest challenge to change as it is such a big thing to ask of people'. Major organisations tend to focus on simpler things such as turning off lights to save electricity because people are hugely more reluctant to give up meat, but Leyth envisions a massive impact if people just gave up meat once a week. He would also like the university to ensure an 'embodying, embedding and imprinting' of sustainable development into the curriculum.



“CATALYST FOR CHANGE”



BUSINESS ENGAGEMENT: ENVIRONMENTAL iNet

The Environmental iNet supports SMEs in the environmental sector. This support primarily takes the form of advice, consultancy, events and networking opportunities.



The Environmental iNet was 50% funded by the European Regional Development Fund and was managed by UWE with support from over 30 university staff. It has delivered around 100 events and activities to support environmental business. Several of the events in 2015 were run in collaboration with Bristol 2015 and involved UWE students who were working on Go Green, supported Bristol 2015, as well as for the Bristol Green Capital Partnership. One example event was delivered by a partnership comprising the SW Environmental iNet, the Association of Public Sector Excellence, the Knowledge Transfer Network and the UK Hydrogen and Fuel Cell Association. This event invited representatives from SME's in the region to learn about sustainable business adaptations.

The aims of the event included exploring funding and business opportunities in the fuel cells and hydrogen space. Focus was also given to the benefits of using fuel cells and hydrogen in heat, power and transport applications through various case studies across the country. It provided an update on hydrogen infrastructure and roll-out development, and how markets are developing.

The event helped SMEs and other companies understand and access the opportunities offered by hydrogen and fuel cells and the important role provided by local authorities and other public procurers in supporting development of new markets and in stimulating sector development and growth.

Ian Brooks of the Environmental iNet stated that although iNets was an initiative that begun before the 2015, Green Capital has enabled an active delivery right in the middle of the year. He stated that "Green Capital has been a great vehicle for continuing engagement in an effective way". Continuing his praise, Ian claimed it has been "a boom for us". The Bristol 2015 activity calendar has been a "driving" mechanism to encourage larger audiences and the "Green Mingles" have been great for attracting a large and diverse range of people to Bristol's sustainability work.

"Green capital has been a great vehicle for continuing engagement in an effective way"



BUSINESS ENGAGEMENT: SUPPLYING PUBLIC SECTOR PARTNERS IN PROCUREMENT

As Bristol was awarded the European Green Capital 2015 award, the pre-break sessions focussed on this and Go Green – the business tool for improving organisational sustainability. Topics for the second half of the event included procurement directives and regulations updates, Contracts Finder and a very well-received presentation on Bank Fraud. Following lunch there were two workshops – one on Social Value (including training, UWE interns, etc) and the other was a practical session on the Go Green tool.

The event was chaired by Helen Baker (Head of Procurement, UWE). Other speakers included: Vicki Harris (UWE Sustainability Engagement Officer), Andrew Parsons (UWE Procurement), Gary Topp (Bristol Green Capital Partnership) and Jessica Ferrow (Go Green).

The event was aimed at SMEs in the West of England region with each individual PIP member inviting their SME suppliers and/or potential suppliers. Out of 170 people who registered to attend, approximately 100 attended.

As a result of the event, several delegates were going to sign their organisations up to Go Green. In general, all the sessions were well received with none of them receiving overall negative feedback.

The lead of the Go Green workshop (Jessica Ferrow) was very pleased with the event as she had reached a whole new audience for the Go Green toolkit. The Social Value workshop was a good example of BCC, B&NES and the UWE all working together for the benefit of the attendees.





GREEN CAPITAL WALKS AND IDEAS FOR GOOD

Green Capital walks engaged people with their areas, discuss and share their thoughts on the city and what they wanted out of the spaces around them.

Ideas for Good explored the role of social enterprise in building sustainable futures.

The organisers for this event invited people engaged or interested in the Green Capital Initiative to walk & talk about Bristol as European Green Capital. This was one part of the project; they then invited 3 differing community groups to walk in their neighbourhoods, to share their ideas and talk about what they do in the city. For these later walks they were especially seeking the voices of those not engaged in Bristol Green Capital events and projects. For the initial walk, Pam Seanor (Senior Lecturer - Strategy and Enterprise) had created a map and route whilst posing questions to open up conversation on Green Capital themes. Such questions included:

- What's it like to live and work in this city?
- How are spaces in the city used?
- What images are conjured up when we think about Bristol as a Green Capital and how do these ideas differ to those that are commonly used already
- How might these lead to new stories of change in cities?

Social enterprises play a key role in the sustainability agenda, developing entrepreneurial solutions with communities in housing, waste, food and energy. An Ideas for Good event in June focussed on the core value that social enterprises offer to the challenge of building sustainable futures an asked how we can form the right partnership to further these aims.

Featured in the agenda was an open space at The Engine Shed for participants to share their work, business or research with delegates.

UWE's contribution was through Dr Pam Seanor: Senior Lecturer, Strategy and Enterprise at the Faculty of Business & Law. A member of Bristol Leadership Centre, Pam's research focus was on entrepreneurship & social entrepreneurship. Her recent work explored change with the city region and how sustainability is being enacted by the Bristol Green Capital 2015 project.







WOMEN IN ENGINEERING SCHOOLS RESIDENTIAL EVENT

The Women in Engineering Schools Residential event to explore engineering in an open, friendly and interactive environment. The event was built around a Green Energy Challenge - what are the engineering challenges we face in generating green energy?

The Women in Engineering Schools Residential event provided the opportunity to meet current engineering students and recent graduates, to participate in an engineering challenge which promised to stimulate and stretch them, to see something of Bristol and to have a taste of university life. This year's challenge, which links to Bristol being Green Capital of Europe 2015, was around the engineering challenges of providing truly green energy. Participants had the opportunity to explore the issues around sustainable energy, to learn some modelling techniques and to take part in practical experiments to verify their models. They also saw some of the cutting edge research energy-related projects taking place at UWE and had the opportunity to

visit sites of relevance to the green energy topic in Bristol. The event culminated with a chance to present their work to each other and to a panel of experts.

Following this, The Bath Bristol Area of the Institution of Mechanical Engineers invited people to a talk from Jane Austin, Head of Engineering at Network Rail, who shared her personal account of working in engineering and what the future will bring. Currently women make up less than 10% of the engineering sector. With a large skills gap looming, and the additional need for a more diverse workforce, it has never been more important to encourage women to choose a career in engineering.

Twelve participants completed the two day Summer School in July 2015. Eleven participants stayed in student accommodation overnight as part of the experience. Eight participants were from schools or colleges local to UWE Bristol and four from farther afield; Devon; Hampshire; Redditch.



TESTIMONIALS:

Women in Engineering

Catherine Hobbs (Head of Department for Engineering Design and Mathematics) described the event as “the department’s major contribution to the Green Capital year. We feel it incredibly important to educate Year 12 girls on the importance of sustainable behaviour and the benefits of a career in engineering. By ensuring a ‘Hands on’ approach the girls could demonstrate their growing knowledge of the sustainable solutions in Engineering.”

The Summer School experience helped all participants in deciding if a future career in engineering was for them, through a better understanding of the areas of engineering they were most interested in, to feeling more confident about making an application to study a related subject in higher education.

Students were encouraged to complete an evaluative form, where one commented the main thing they got out of Summer School was an “Experience of staying on campus [and] hands on experience in building renewable sources of energy”. One participant believed the best part of the day was the “Hands on lab work – I’ve never really experienced it before and it was fun and informative” whilst

another claimed “How hands on it was made it so good, making the plane and solar oven.”

All participants either agreed, or strongly agreed, with the following statements;

- Summer School has given me a real feel of what it is like to be a student at UWE Bristol
- I have a better appreciation of what I would be letting myself in for if I study engineering

“Hands on experience in building renewable sources of energy”



BRISTOL METHOD

The Bristol Method was created to offer information and understanding of Bristol's 40 year journey in pioneering sustainable living (which has gained momentum over the last five to ten years). It highlighted many dangers that threaten us, and by using Bristol as a case study, analysed ways in which we can combat these threats. UWE researchers, professors and doctors worked towards contributing to the Bristol Method with hope of educating people on the issues they face and ways in which they can make a change

The Bristol Method is a knowledge-transfer programme aimed at helping people in other cities understand and apply the lessons that Bristol has learned in becoming a more sustainable city, not just in 2015 but over the last decade. Made up of a series of modules, it is presented as an easy-to-digest 'how to' guide to creating sustainable cities, based on the Bristol experience. The method meets two of the goals set out by Bristol 2015, those being international reach and sustainability leadership. Specifically, the Method aimed to:

- Motivate and empower other local governments;
- Demonstrate and quantify the benefits of the EGC award in order to inspire other cities to apply for it;
- Grow Bristol's global profile as the UK's most pioneering, sustainable city region;
- Build awareness of and pride in Bristol's sustainability achievements and leadership; and,

- Increase Bristol's appeal to investors.

The various modules were organised under the following categories:

- Transforming the city
- Economy
- Energy
- Transport.
- Resources
- Food and nature

The Method is intended to showcase the local excellence and celebrate Bristol's leadership, UWE has expertise in many of issues highlighted by the Bristol Method. UWE contributors included: Prof Jim Longhurst (Assistant Vice Chancellor, Environment and Sustainability) Dr Jo Barnes (Air Quality Management Resource Centre), Prof Graham Parkhurst (Centre for Transport and Society), Dr Miriam Ricci (Centre for Transport and Society), Dr Caroline Bartle (Centre for Transport and Society), Dr Steve Melia (Centre for Transport and Society) and Dan Black

(Visiting Research Fellow). One module titled "How to reduce traffic and its impacts" was a collaboration between UWE academics and Bristol organisations and explains how "congestion leaves Bristol with some of the lowest peak hour traffic speeds of major UK cities and air quality fails to meet national and EU standards in much of the centre." It looks at "the air quality impacts and the traffic reduction interventions which are being used to improve the situation."

UWE influence was also found in the module "How to protect and enhance green spaces in a city", which uses the UWE-led Bristol Parkhive project as a case study. This module praised Bristol as "a hub for naturalists, with many wildlife and nature organisations headquartered here, as well as leading academic research and courses including at UWE Bristol, and a nationally important natural history collection held by Bristol's Museums and Galleries".

UWE's Billy Clayton was the author for the module "How to increase public transport use" and Laura-Kate Howells (Green Team Coordinator) contributed to the Bristol Method chapter entitled "How to empower and engage youth" which used UWE Green Team as a case study. She was quoted as saying "It's inspiring to work with students who are standing up and demanding change and who are equipped with the drive and passion to create innovative solutions. I am proud to be part of a university that is harnessing that passion and providing students with a platform to turn their ideas into a reality." Jamie Darwen (Head of Student Experience and Enrichment) also contributed to this chapter with the case study of "encouraging volunteering".



ORGANISER CASE STUDY:

Bristol Method

Katherine Symonds Moore, Project Manager of the Bristol Method

Katherine Symonds Moore (Project Manager of the Bristol Method) said “The purpose of the Bristol Method is to share Bristol's knowledge about sustainability with a global audience, helping others to replicate the city's successes and learn from the challenges it has faced. The contribution of the academic community has been central: many different people at UWE have contributed case studies about a particular topic and two have authored complete modules from scratch.”

“The practical nature of so much of UWE's work has added huge value. In a number of instances, the academic writing about a particular subject has

also been closely involved with the work itself at the city level, either as a consultant to Bristol City Council or as a member of a Green Capital Partnership subgroup.”

“I was delighted by UWE's enthusiasm for this project. From the outset, Jim Longhurst and his team have been proactive supporters of the Bristol Method, initially helping to shape the strategic approach and then putting me in contact with the relevant people throughout the university. The project has benefited hugely from UWE's support.”

“The project has benefited hugely from UWE's support”

ACKNOWLEDGEMENTS

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April 2016