



Towards a Healthy & Sustainable
University: Maximising
Synergy & Co-Benefits in the
context of the SDGs













# Overview & Context Design Principles for a Healthy & Sustainable Campus Healthy & Sustainable Travel







#### **Overview & Context**

Mark Dooris, Professor in Health & Sustainability
University of Central Lancashire







## Health & Sustainability: Convergence & Connections

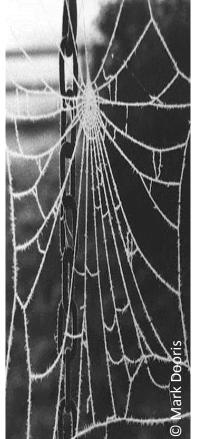






"Human health ultimately depends on the health of ecosystems...the interface of human and ecosystems health now deserves to be central for policy making."

Lang & Rayner, 2012



- Living sustainably and living healthily are inseparable. If we want a healthy future for ourselves and our children, we need to change how we live...we must look after the things that look after us.
- Environmental changes threaten human health across our planet. To avoid these impacts we need to move to a more sustainable way of living and working.
- Better health is both a goal of sustainable development and a means to achieving it. Our future depends on our actions both individual and collective. We can create a more sustainable, healthier and happier future. But we must act and we must act now.

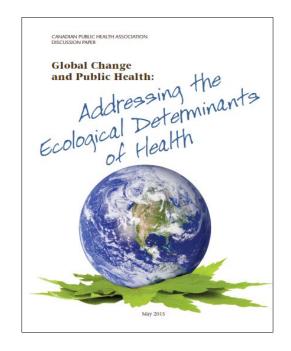
### **Health & Sustainability: Convergence & Connections**

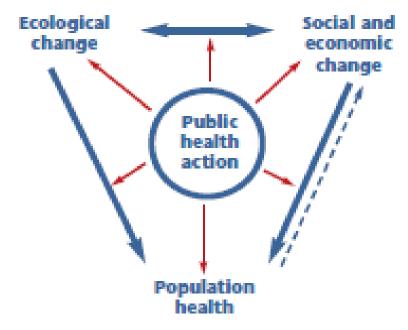






"The changes in the Earth's ecological systems are driven principally by our social and economic systems, and by the collective values and institutions that support them...The social and ecological determinants of health intertwine and interact, influencing each other and ultimately the health of people, communities and societies, along with the health of countless other species with whom we share the planet."





## Health & Sustainability: Convergence & Connections

HEALTH





"The fundamental conditions and resources for health [include]...a stable ecosystem and sustainable resources."

"The inextricable links between people and their environment constitutes the basis for a socioecological approach to health. The overall guiding principle...is to encourage reciprocal maintenance [and] conservation of natural resources."

WHO, Ottawa Charter for Health Promotion, 1986

SUSTAINABILIT

"Human beings are at the centre of concerns for sustainable development ... entitled to a healthy and productive life in harmony with nature."

UN, Rio Declaration on Environment and Development, 1992

"People's health can no longer be separated from the health of the planet."

WHO, Shanghai Declaration on Promoting Health in the 2030 Agenda for Sustainable Development



WELLBEING

### Health & Sustainability: Relevance of the SDGs







**Public Health** 

Fairness /
Justice

Sustainability







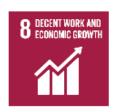
































"The UN SDGs establish a duty to invest in health, ensure universal health coverage and reduce health inequities for people of all ages."

### **Healthy Universities**







Healthy Universities – one application of the healthy settings approach, which emphasises the importance of supportive environments and contexts for health and wellbeing:

"Health is created and lived by people within the settings of their everyday life; where they learn, work, play and love. Health is created...by ensuring that the society one lives in creates conditions that allow the attainment of health by all its members."

WHO, Ottawa Charter for Health Promotion, 1986

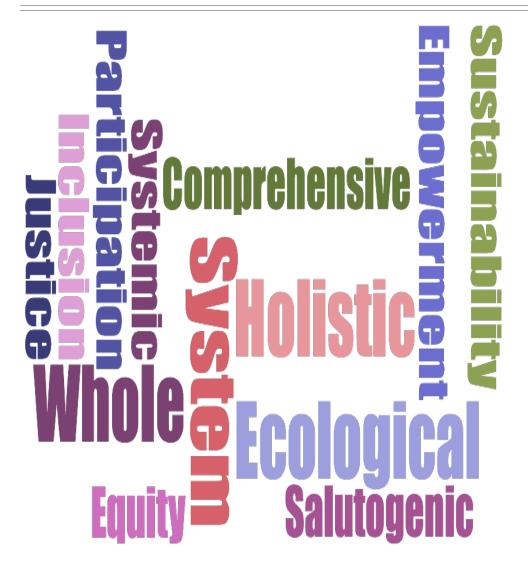


#### **Healthy Universities**











- Salutogenic Orientation
- Ecological Model
- Systemic Perspective
- Holistic Change Focus
- 'Core Business' Alignment

Adapted from: Dooris, 2006

#### **Healthy Universities**







#### **Higher Education Drivers**

Key Focus Areas

**Underpinning Values** 

Create healthy and sustainable working, learning & living environments for students, staff & visitors

#### WHOLE UNIVERSITY APPROACH

Increase profile of health & sustainable development in learning, research and knowledge exchange

#### WHOLE UNIVERSITY APPROACH

Contribute to the health, well-being & sustainability of the wider community

**Public Health Drivers** 

Deliverables & Impacts

Source: Adapted from **Dooris et al, 2010** 

### **UK Healthy Universities Network**









Newsletters News Links FAQs Contact Us Case Studies Template [DOC]

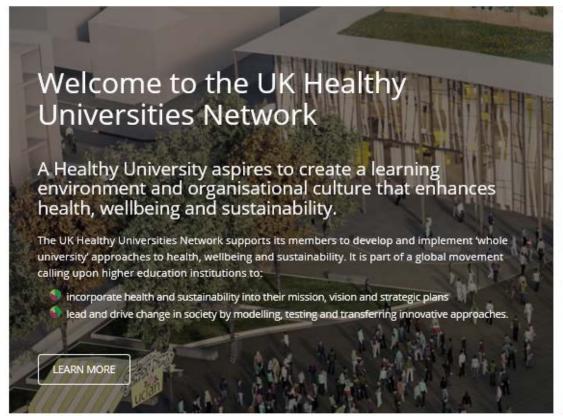


Supporting the wider community

Search ...

Search

About the Network About Healthy Universities Meetings & Learning Events Structure & Governance Network Membership International Activities Research & Development

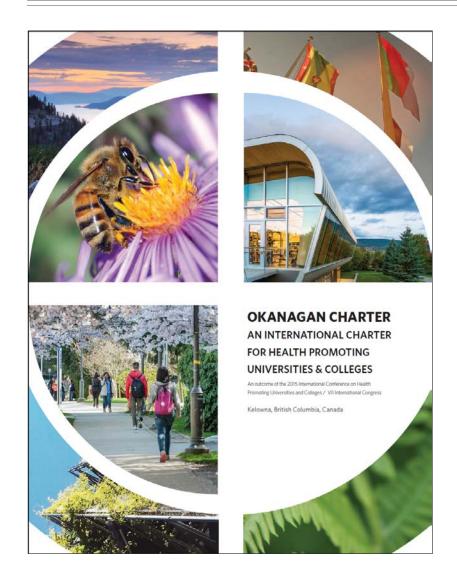




#### Okanagan International Charter







"Health Promoting Universities and Colleges transform the health and sustainability of our current and future societies, strengthen communities and contribute to the wellbeing of people, places and the planet."

### Healthy & Sustainable Universities: Joining Up





- 1. Avoid disconnected programmes → reduce duplication of effort
- 2. Identify, make transparent and minimise potential conflicts
- 3. Align drivers for change & achieve more through co-benefits approach



## Healthy & Sustainable Universities: Examples





- 1. Campus & Building Design
- 2. Travel





#### Okanagan International Charter





"Health Promoting Universities and Colleges transform the health and sustainability of our current and future societies, strengthen communities and contribute to the wellbeing of people, places and the planet...They infuse health into everyday operations, business practices and academic mandates. By

doing so, they enhance the success of our institutions; create campus cultures of compassion, well-being, equity and social justice; improve the health of the people who live, learn, work, play and love on our campuses; and strengthen the ecological, social and economic sustainability of our communities and wider society."





## Design Principles for a Healthy & Sustainable Campus

Clair Engl, UCLan Environment & Sustainability Manager,

**University of Central Lancashire** 





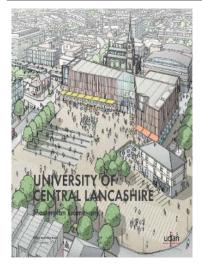


### **Supporting Strategies**







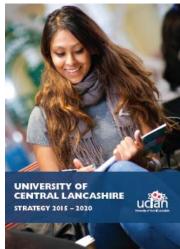


Campus Masterplan 2015-2025

"Deliver a healthy, safe and sustainable campus."

"Promote healthier, more pedestrian friendly campus."

"Reinforce connectivity and legibility of pedestrian and cycle routes...to integrate our campus seamlessly with the rest of the City."



University Strategy 2015-2020

"Supporting the health, safety & wellbeing of all."

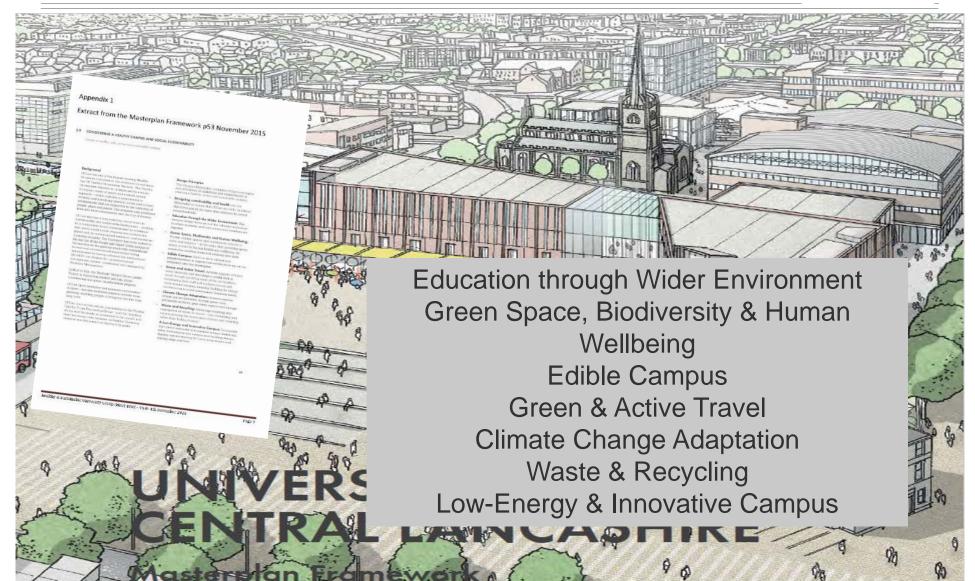
"A healthy university committed to the physical & mental wellbeing of its students and staff."

"Transformational change...
underpinned by a commitment to
environmental sustainability."

## **Creating Design Principles**







#### Governance







### HEALTHY & SUSTAINABLE UNIVERSITY GROUP

[Chair: Chief Operations Officer]

Environment & Sustainability Manager Director, Facilities Management Students' Union -General Manager Students' Union – Campaigns Officer

& Sustainability

Executive Dean — 'aculty of Health & Wellbeing

Healthy University Coordinator



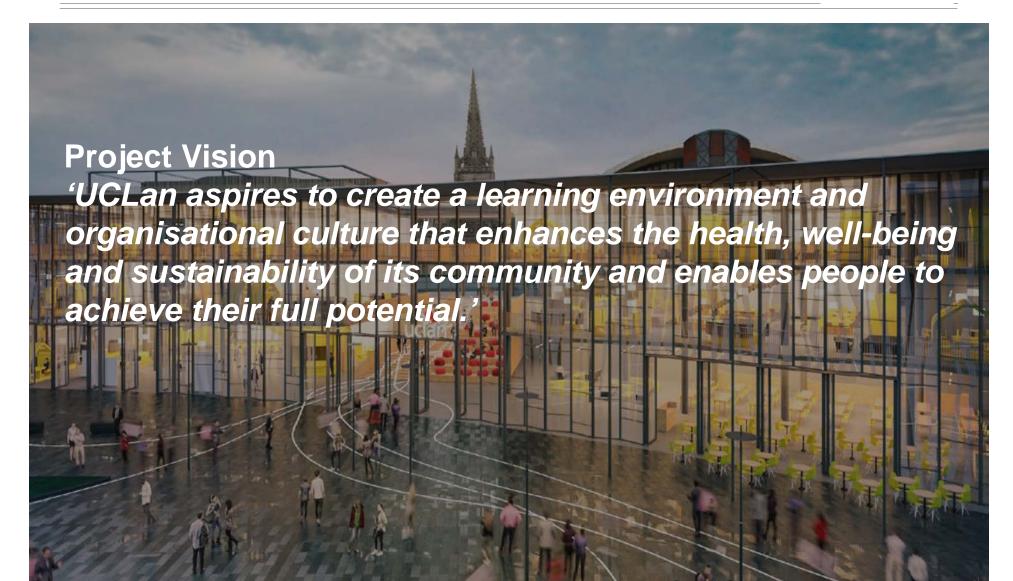




## New Student Centre & Square







## Developing the Design Principles







Design Principles	External Space	Buildings/Internal space	Links to relevant EMS Aspect, Policy, Standards etc	UCLan contact
Designing Sustainability and Health  Awareness of the impact that design of outdoor space and buildings have on sustainability and health. Demonstrate how design elements will not only reduce negative impacts, but also actively enhance positive impacts on sustainability, health and wellbeing.	Create social seating spaces  Consider how to use space to create Trim Trails, encourage walking and cycling and link the campus buildings together and to external routes to wider community.	Prioritise good air quality, ventilation and a comfortable indoor temperature.  Incorporate adaptable furniture to promote collaborative learning and social connection.  Maximize exposure to natural daylight, all rooms to have windows.  Stairs should be designed in as a feature to encourage building users to use instead of lifts.  Incorporate colour, bold/vibrant – uplifting, pastel/cool – relaxing.  Incorporate art and ability to change installations Ensure that spaces facilitate social connectedness and are inclusive and accessible to all.  Access to water fountains.  Catering facilities to promote healthy and sustainable choices through design e.g décor detailing food provenance, healthy and seasonal options.	UCLan Environmental Sustainability Policy  UCLan Healthy, Safe and Sustainable Food Policy	Clair Engl, Environmental & Sustainability Manager, Email: cengl@uclan.ac.uk  Sharon Doherty, Healthy University Co-ordinator, Email: shdoherty@uclan.ac.uk

## **Using the Design Principles: Stage 2**







5 Design Strategies

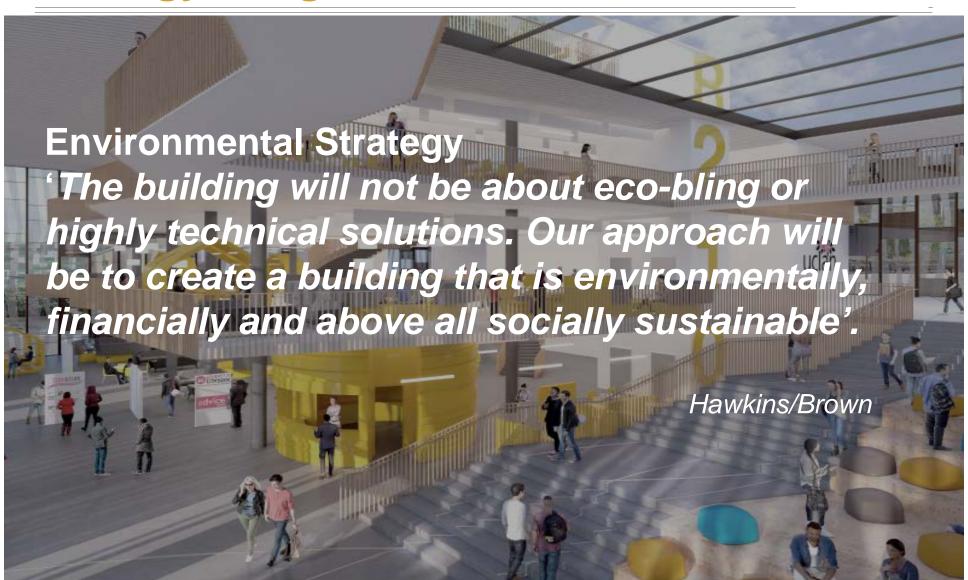
5.1 Health and Sustainability

Design Principles	External Space	Buildings/Internal space	Student Centre Response
Green and Active Travel  Design should support UCLan's travel hierarchy and encourage a modal shift in travel. Provision of facilities for cycling.	Preserve existing range of cycle facilities to suit different needs; compounds, lockers, racks.  Design in more covered cycle facilities at building entrances using high quality racks/hoops.	Integral cycling facilities to be considered including storage, drying area, lockers and shower facilities.  Include appropriate facilities for use of virtual conferencing platforms.	High quality cycle facilities will be incorporated into the design for the Student Centre. There will be a range of different types of cycle parking, including Sheffield stands and double height racks. Covered cycle parking will be provided within the public realm design - these will take the form of pavilions in the landscape, and will be a bespoke design linked to the design and materiality of the main building. Three locations are being considered for cycle parking pavilions; to the west of the building along Fylde Road, to the east along Adelphi Street, and in St Peter's Square.  Showers and Lockers have been incorporated into the design of the Ground Floor of the building.
Climate Change Adaptation  Should be considered in the planning and design	Employ sustainable drainage (Suds) principles.	Climate change risk assessment to be carried out.  Likely rises in temperature over the building life span and impacts on overheating are factored in e.g. use of optimum orientation and glazing to reduce solar gain, ground source pumps.  Reduce operating & maintenance costs and the need to retro-fit through sustainable procurement (life-cycle assessment).	Sustainable Urban Drainage techniques are being designed into the project. Rainwater attenuation systems are being assessed.  Overall, climate change is being taken into consideration both in the detailed design of building services, in our aspiration for BREEAM outstanding (excellent as a minimum) and in the overall design of the building as a 'flexible container'. This will allow the building to be reused and re-fitted during the course of its life.  Sustainable energy uses are being used wherever possible in the scheme.
Waste and Recycling Encouraging recycling and segregation of waste at source. Celebrating and encouraging reuse and recycling rather than 'hiding it away'.	High quality, WRAP colour-coded facilities outside building entrances/exits.  Separate bins for the following source segregated waste streams: General Waste, Plastic Bottles, Cans.	Space and provision for recycling of waste integrated into the design of building.  High quality, WRAP colour coded facilities for the following source segregated waste streams: Paper, General Waste, Cans, Plastic Bottles.  Waste and recycling storage areas included within fabric of buildings with external access for confractor collections.	Waste and recycling storage space has been incorporated into the buildings design at Ground Floor level. In addition, recycling points will be integrated into the interior design, in such a way that make recycling the norm.

## **Environmental Strategy: Stages 2 & 3**









### **Healthy and Sustainable Travel**

Judy Orme, Professor of Public Health & Sustainability Lizzie Johnson, Health & Wellbeing Co-ordinator

University of the West of England, Bristol







### Healthy & Sustainable Travel





Our work is guided by UWE's Healthy University Strategy and UWE's Sustainability Strategy: Positive Footprint

#### Examples are:

Staff: Pedometer Challenge

UWE Go Challenge

Students: Walking Project

Cycling initiatives







### Healthy & Sustainable Travel







#### **Vice Chancellor**

Annual report



#### **Sustainability Board**

• Quarterly plan & report



#### **Healthy University Group**

• Monthly action plan & meetings



#### **Healthy and Sustainable Travel**

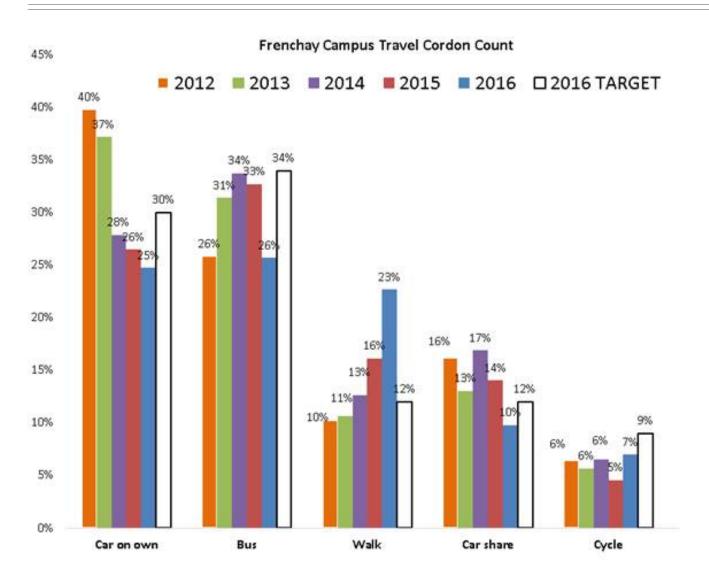
• Partnership between SU & Estates and Facilities



## **Current Travel Demographics**











## Pedometer Challenge (Staff)







- 1.84 teams took part; 420 members of staff
- 2. Target of 30,000,000 steps
- 3. Reached 32,463,139 steps over one week
- 4. Raised £3872.00 for charity
- 5. Prizes were given for:
  - i. The team who walks the furthest
  - ii. The most improved (the individual who increases their steps the most over the week)
  - iii. The team or individual who raises the most money (sponsorship forms will be given to each team)









## **UWE Go Challenge** (Staff)







- 1.29 teams took part; 145 members of staff
- 2. Scavenger hunt on campus
- 3.10 signs were hidden around Frenchay campus
- 4. Clues were given for the locations
- 5. Questions were attached to each sign and answers were given at the end of the challenge



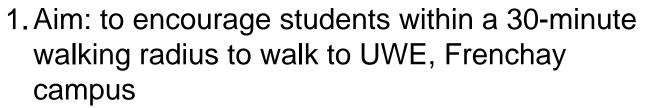




### **Student Walking Project**







- 2. Three routes identified along Filton Avenue (main student residence close to campus)
- 3. Students take photos along the route and send them to Feel Good social media
- 4. Receive free food voucher once photos have been verified and evaluation completed













### **Cycling Initiatives**







#### **Cycle HUB**

- 1. Free bike maintenance and repairs on each campus weekly throughout term-time (35 sessions a year across 3 campuses)
- 2. Bike assessment, simple repairs/adjustments, fix punctures, tuning gears, fitting new brake blocks and replacing cables
- 3. Over 350 check ups each year
- 4. Full commercial service also available 280 people each year

#### Bike loan scheme/ electric bikes

- 1. 105 Bikes available for students to hire each year
- 2. 112 Bikes available for free weekly hire
- 3. 180 people have used the loaned bikes since October 2016
- 4. £50 for the year and includes a bike, full maintenance for the year, lights and a secure lock.
  5. 6 Electric bikes available to encourage those who
- 5. 6 Electric bikes available to encourage those who live further away from campus to cycle and also for staff who have to travel in between campuses







