Loughborough University Sustainability Strategy – Visioning for our future

1. Introduction

Sustainable development should be based on a set of principles informed by the University's mission and values according to BS8900. Principles can be used to guide the social, economic and environmental aspects of managing sustainable development and as a minimum and in line with this standard they should include inclusivity, integrity, stewardship and transparency.

The three core aspects of sustainability are:

1. Social
2. Economic
3. Environmental

The University takes its responsibility for the environment seriously and understands the need to respond to the challenges we face globally around issues such as climate change, human wellbeing, food, water and energy security. Loughborough seeks to respond to these opportunities by leading in environmental sustainability building on the work of our researchers and aspiring to make the campus a living laboratory demonstrating operationally our mission to provide a sustainable campus.

2. Mission Statements

2.1 University Mission

To advance knowledge wisdom and understanding through our research, education, and scholarship

To inspire, empower and enrich the lives of our staff and students

To create regional, national and global impact by working in partnership with organisations across the private, public and voluntary sectors.

2.2 Sustainability Vision

Our commitment to social responsibility will be evident throughout our

operations and academic activities and embed sustainability and social responsibility in our school and services management processes.[1]

To utilise our Research Challenge areas to facilitate knowledge exchange amongst the Loughborough community

To ensure our students are involved with and introduced to world leading research in environmental sustainability

Promote and signpost key activity on the sustainability webpages

Identify and publicise case studies

- David Williams
- Mark Freeman

RCD Managers (enablers)
- Darren Cadman
- Kate L 6JTw akt)

Carbon - To reduce the institution's carbon footprint, focusing in particular on the reduction in use of gas and electricity from the national grid.

Water - To reduce water consumption from the University's operations.

Construction and Refurbishment - To reduce the impact of construction, refurbishment and maintenance of the estate by assessment of the environmental impact and risk.

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4.0 How Loughborough will embed sustainability into the University's 3 (4) core areas

Education (Teaching)

In 2005 the Higher Education Funding Council for England stated that "the biggest contribution a University can make to sustainability is through the education of their graduates"

Loughborough aims to "*deliver progressive, internationally relevant curricula, with students having opportunities to experience education overseas*"[4]

"*Today's education is crucial to the ability of present and future leaders and citizens to create solutions and find new paths to a better future*" [5]

Education is essential to sustainable development and Loughborough will aspire to rethink the way it educates across the curricula using a variety of pedagogical techniques that promote participatory and lifelong learning.

Research

Through our cutting-edge research we are helping the world to tackle global warming by developing new technologies that reduce carbon emissions, preserve the earth's environment and resources, and provide clean energy for all.

We enhance the sustainability of the campus by the adoption of appropriate techniques and technologies to make Loughborough one of the UK's leading exemplars of sustainability in the academic sector.

The University is internationally acclaimed for its research in the area of sustainability. It is home to the world leading CREST (Centre for Renewable Energy Systems Technology) and in 2006 launched a Sustainability Research School. The School brings together a multi-disciplinary team of experts in sustainability-related research from across the University, and promotes collaboration with other academic institutions and industry.

In recognition of its research expertise in this field Loughborough, in partnership with the Universities of Birmingham and Nottingham and with support from the East Midlands Development Agency (emda) and Advantage West Midlands, was chosen to host the Government's new £1 billion national Energy Technologies Institute (ETI) to help accelerate the UK's transition to a low-carbon economy. The headquarters of the ETI are now based at the University.

Enterprise

Loughborough has an exceptional track record of fostering enterprise and innovation, commercialising University research through licensing and the formation

of companies. We offer businesses of all sizes a wealth of professional and technical expertise and specialist services to improve competitiveness.

Over the years we have established strategic partnerships with global industry leaders, which enables Loughborough University research to have a real impact on the world around us.

The University is joining forces with the Royal Academy of Engineering to establish one of four new centres of Excellence in Sustainable Building Design in the UK.

According to the Stern Review *effective action on the scale required to tackle climate change requires a widespread shift to new or improved technology in key sectors such as power generation, transport and energy use.*

Loughborough has the potential to exploit new ideas through innovation to support this shift.

Operations

As an organisation we are committed to ensuring we operate in a sustainable way. We work with our own academics and others across the sector, to ensure that innovative ideas are considered for application in the management of our own campus.

We will implement an environmental management system (EMS) EcoCampus which will ultimately lead to ISO 14001. The EMS focuses on a clear structure for environmental management and a policy commitment from senior management. The environmental policy can be seen in A*ppendix 2*.

According to the AUDE Estate Strategy Good Practice Guide 2013

"Universities now generally assess the impact of their operations on local communities and the environment. Business supporters, existing students and prospective students are increasingly aware, not only of an institution's academic and research reputation, but also the character of the institution, how it interacts with others and how it deals with Corporate Social Responsibility"

Operationally we will strive to maintain, protect and enhance the campus to ensure a positive impact on the Loughborough Community and our surrounding environment. We would like to be known as a socially responsible organisation where our neighbours both locally and globally feel included in our shared community. This will be reflected in the way we educate our students to live responsibly, contribute to and become part of the Loughborough community.

5.0   Our sustainability strategy will link to the University Strategy which has 3 key themes

		Theme 1	Theme 2	Theme 3
		Sport, health and wellbeing	**Climate change and net zero**	**Vibrant and inclusive communities**
Goal 1		Encourage and support staff to participate in and engage with socially		

References

1. *Professor Jacqueline Glass , School of Civil and Building Engineering*
2. *Carbon Management Plan & Delivery Plan, Sustainability Vision & Strategy V1,Environmental Policy*
3. *Community in this context includes staff, students, alumni, local residents and any other stakeholders of the University.*
4. *Professor Morag Bell, Strategic Priorities – Learning & Teaching, 2013*
5. *UNESCO ESD, www.unesco.org*

Association of University Directors of Estates Good Practise Guide 2013
Stern, N. (2007). *The Economics of Climate Change, The Stern Review.* Cambridge University Press
Willums, J & the world council for sustainable development (1998). *The Sustainable Business Challenge, A briefing for tomorrow's business leaders.* Greenleaf Publishing

University of Bristol Policy and Strategy for Sustainability 2009 - 2016
The University of Edinburgh Social Responsibility and Sustainability Strategy 2010 – 20
University of Exeter Environmental Sustainability Strategy 2010-2015
The University of Nottingham Environmental Strategy 2010

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2. To measure reuse tonnage for 2021/2 reporting year
3. To maintain recycling at above 60% of overall waste
4. To reduce food waste sent for AD to at below 15% of overall waste
5. To maintain energy from waste at 15% of overall waste
6. To maintain waste to landfill at below 6%

Mitigation:

The University has identified positive environmental aspects in this area which are mitigating the negative environmental aspects, they are:

1. Managing waste
2. Increasing recycling
3. Environmental awareness raising
4. Environmental research and teaching

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6. Increasing recycling
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8. Environmental research and teaching

3. Transport Parking
   Responsible Group: Travel and Transport Group

Key Objective: To reduce the use of fossil fuels for personal and business travel in order to decrease the carbon impact of these as part of the transport management strategy.

Supporting Objectives:

1. To reduce the environmental impact of staff and student travel to/from/on behalf of the university.
2. To provide an alternative to single-occupancy vehicle use for as many staff and students as possible.
3. To ensure that any restrictions place on travelling onto the University campus by car are matched with action to support travel by other modes.
4. To promote active travel as a means of travelling to and across campus.
5. To minimise overspill parking and local traffic congestion related to staff and student travel.

Targets:

(All travel targets due by 2025)

1. Reduce the proportion of staff driving alone as their main mode of travel from 50% to 47%
2. Increase the proportion of staff walking or cycling as their main mode of travel from 31% to 37%
3. Increase the proportion of staff who are usual walkers from 17% to 20%
4. Increase the proportion of staff who are usual cyclists from 14% to 17%

5. Increase the number of secure cycle parking stands
6. Increase the number of showers available to staff
7. Increase the proportion of staff who are 'sometimes' public transport users from 16.5% to ee2.7o sberar

3. Continue to implement the Woodland Management Plan for Burleigh and Holywell Woods
4. Ensure the implementation of an on-going management program for the ponds on campus
5. Increase areas of Wildflower grassland and dead wood habitat to attract a range of invertebrates
6. Create new wildlife corridors between areas of semi-natural habitat on the site
7. Maintain the badger presence on campus by protecting setts and habitat, and ensuring all works in areas near to a potential badger sett are investigated by a licenced ecologist prior to commencement
8. Establish whether there is a Great Crested Newt presence on campus, and maintain the existence of habitats favourable to this species
9. Encourage a variety of bird species onto campus with the continued provision of a variety of habitats and the erection of 100 new bird boxes
10. Launch a 'Birds on your campus' event to encourage students to participate in RSPB campaigns
11. Carry out a bat survey to establish baseline data for bat use of the campus
12. Encourage the use of campus by bats through the maintenance of favourable habits and the erection of 100 new bat boxes
13. Carry out a biodiversity survey of campus and manage construction and gardens to ensure a net gain in biodiversity,

Mitigation:

The University has identified positive environmental aspects in this area which are mitigating the negative environmental aspects, they are:

1. Environmental Awareness Raising
2. Environmental Research and Teaching
3. Promotion and protection of biodiversity

5. Purchase of Non-Sustainable Goods & Services

Responsible Group: Sustainable Procurement Group

Key Objective: To reduce the demand for non-sustainable goods and services by reducing purchasing, using resource-efficient products and considering end of life.

Supporting Objectives:

1. To minimise any negative impacts of goods, works or services across their life-cycle and through the supply chain (e.g. impacts on health, air quality).
2. To seek to ensure that minimum ethical, equality, human rights and employment standards are met by suppliers and those with strong environmental performance are recognized.
3. To ensure that fair contract prices and terms are applied and respected.
4. To seek to provide opportunities for and encouragement to small and medium businesses and other relevant organizations to tender for business.

Targets:

1. Review the sustainability risks associated with areas of high spend and prioritise areas for action through supplier appraisals (on-going)
2. FM to incorporate whole life costing considerations into construction, refurbishment and maintenance contracts (no date)

3. To develop a sustainable procurement plan

Mitigation:

The University has identified positive environmental aspects in this area which are mitigating the negative Environmental Aspects, they are:

1. Purchase of sustainable goods and services
2. Environmental awareness raising
3. Environmental research and teaching

6. Emissions to air and discharges to water
Responsible Group: Waste Resource Management Group

Key Objective: To ensure control measures are put into place to mitigate the risks associated with emissions to air and discharges to water

Supporting Objectives:

1. To raise awareness of the environmental risks associated with uncontrolled emissions to air and discharges to water.
2. To monitor emissions to air and discharges to water.

Targets:

1. To put in place a procedure for on-going monitoring and management of emissions to air and discharges to drain or water
2. To review the locations and procedures for interceptors on campus
3. To implement a schedule for the marking of all drains as either surface or foul

Mitigation:

The University has identified positive environmental aspects in this area which are mitigating the negative environmental aspects, they are:

1. Environmental awareness raising
2. Environmental research and teaching

7. Water Consumption

Responsible Group: Carbon Management Group

Key Objective: To reduce water consumption from the University's operations.

Supporting Objectives:

1. To support the activity of the Carbon Management Plan by reducing emissions associated with water usage.
2. To improve sub metering of water consumption to enable better understanding of water consumption profiles.

3. To raise awareness of the impacts of water usage.

Targets:

1. To reduce water consumption per student by 5% per annum from a 2005-6 baseline
2. Install a minimum of ten new meters per annum
3. Identify and implement water reduction targets
4. Reduce water use on sport pitches
5. Create a self-generated annual investment fund to allow the implementation of annual

Appendix 2

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