

Executive Summary

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 research and enterprise activities and aspiring to make the campus a living laboratory demonstrating operationally our mission to provide a sustainable Campus. There is also an opportunity in teaching and learning where students are increasingly interested in courses which include sustainability.

For the purpose of implementing its *Building Excellence* Strategy, the University defines Sustainability as: “*Action by the University, and its staff and students that considers environmental impact from a social, economic and environmental perspective following the principles of inclusivity, integrity, stewardship and transparency, “embedding sustainability into all our activities, operations and processes”.*”

This report provides an update on our performance over the last year and covers:

- Governance changes
- An overview of progress against objectives in the Sustainability Action Plan
- Waste and recycling figures
- Energy management figures
- Sustainable Travel
- Biodiversity
- Demonstrator Campus

Origin

Sustainability and Social Responsibility Group

Strategic objective met

The University is committed to acting in a socially responsible way that maximises its positive impact and minimises its negative impact on society and the communities in which it is based. This is reflected in the University’s strategy Building Excellence which states that “**we will embed sustainability and social responsibility considerations into all of our processes, operations and developments**” and also “**will work closely with local partners to enhance the social, cultural and economic wellbeing of the communities and regions in which we reside**”.

This also underpins the core value 3 identified in the Higher Education Code of Governance Committee of University Chairs report which states the University “**must rigorously assess all aspects of the institutions sustainability in the broadest sense, using an appropriate range of mechanisms which include relevant key performance indicators not just for financial sustainability of the institution but also for its impact on the environment.**”

1. Governance and Strategy

Historically this has been led by the Sustainability & Social Responsibility Group (SSRG), which is an informal steering group chaired by the Chief Operating Officer. Over the last three years, the SSRG has established a clear definition of how sustainability links to the four core themes in the wider University strategy. The [action plan](#) provides a set of strategic principles, congruent with Building Excellence 2020, and a rationalised and agreed set of KPIs for sustainability. In line with the Health, Safety & Environment Committee changes a new group has been created and will be known as the Sustainability and Social Responsibility Sub-Committee (SSRSC). This will bring the reporting line of this group into the Health, Safety and Environment Executive Committee ultimately reporting through to Council.

The realignment of this group gives the opportunity for wider stakeholder engagement in the development of Sustainability and Social Responsibility strategy and gives Council visibility, overview and assurance of the subject areas.

2. Sustainability Action Plan

This outlines how we will deliver this aspect of the Building Excellence strategy, linking with the four themes, and connecting all areas (i.e. Teaching, Research, Enterprise and Operations). Examples of progress against aims and objectives can be seen below:

2.1 Teaching

Working in partnership with the Centre for Academic Practice a baseline study has been undertaken to assess the content of sustainability in the curriculum at LU. This has been done using a model from Cardiff University and it is hoped findings will be reported to Learning & Teaching Committee in September 2017.

As many aspects of the sustainability action plan align with and enhance the graduate attributes work is also underway to explore how sustainability might contribute to the Personal Best project being introduced by the Pro Vice Chancellor for Teaching. As engagement with students is key, liaison with the Students Union Education VP will also be undertaken to discuss ways to further engage students with sustainability and social responsibility.

Promoting the “living laboratory” theme examples of using the campus for students to learn and research are evident in our Holywell Research Forest, Fruit Routes Project, water course and pond surveying work, phone apps and design school projects, transport collision research group and travel planning support and the Forest School.

2.2 Research

An example of how sustainable research is being promoted and communicated in Loughborough University’s School of Business and Economics is as a signatory to the Principles for Responsible Management Education [PRME](#).

As a research intensive, globally connected university with excellent links to industry the school aims to lead research and practice in responsible management through our application of the six PRME principles: developing student capability as responsible leaders, incorporating the values of global social responsibility into our activities and curricula, enabling learning processes for responsible leadership, engaging in research for sustainability, working with our commercial and educational partners, and facilitating dialogue on critical issues related to global social responsibility and sustainability.

As a research-led school SBE Research Centres and Research Interest Groups are the principal focus of activity with numerous research projects focusing on sustainability and responsible leadership. SBE engages with not for profit organisations such as Action Homeless through research, staff volunteering, student projects and internships. Ethical practice is a theme embedded into academic programmes, which incorporate masterclasses and thought leadership events on ethics and sustainability.

Finally, at corporate level and as a member of the Environmental Association of Universities and Colleges, the University aims to ensure that our own organisational practices should serve as examples of the values and attitudes we convey to our students.

2.3 Enterprise

Creating a demonstrator campus is a long term ambition. Evidence can be found of activities that support this. The campus provides an exceptional learning environment for our students and this is enhanced by the enterprise activities. There is increasing evidence of campus cluster activity bringing together academic colleagues from different areas to work together. Opportunities to link teaching and operations continue to be explored and promoted by the Sustainability Team. Fruit Routes is an example where this has been successful. LUSEP presents a great opportunity as we develop this biodiverse area of campus. It also creates challenges with travel and transport that will require innovative solutions.

2.4 Operations

Our environmental performance is managed through the ISO 14001 accreditation, which is an externally verified environmental management system. Over the last year the scope has been widened to include imago and the London Campus both of which will be externally audited later this year.

The 2016 external audit feedback confirmed the management review records appear very comprehensive and detailed. Education for sustainable development has been given significant thought.

The University has clearly refined and improved its internal audit process to get optimum benefit of findings, corrective actions and improvements. Legal compliance is addressed through the compliance audits, and these in turn are cross referenced as evaluation of compliance evidence in the Register of legislation.

Communications, and the various groups and stakeholders who send/receive communication have been identified. The web site is used extensively for external communication. The University is very transparent in its sustainability communications.

A review of objectives and targets is carried out annually and significant impacts monitored.

3 Waste and Recycling

We continue to maintain high recycling rates, as shown below.

	2009/10	2015/16
Total Waste	1799 tonnes	1989 tonnes
Total Recycled	28.53%	75.0%
Waste to Energy	0%	19.39%
Landfill	71%	5.61%

Our target is 75% recycling and 5% to landfill. The end of term hall clear out in 2016 generated 2,838 bags of unwanted items for donation to the British Heart Foundation, raising £39,732 for the charity and diverting 22.1 tonnes from our waste stream. Food waste from catering reduced by 5%, and self-catered halls again segregated 38 tonnes of food waste diverting this from landfill.

4 Carbon Management

The University is compliant with legislation in relation to carbon (current legislation includes European Union Emissions Trading Scheme, Carbon Reduction Commitment and Display Energy Certificates).

The absolute emissions and emissions relative to student numbers for 2015/16 are 6% and 21.3% lower than the 2005 baseline, respectively. This reduction has been achieved despite longer operating hours on campus (to meet student demand), and a growth in the physical footprint of our estate.

	2005/06	2015/16
Absolute Carbon Emissions	29,503tCO ₂ e	27,732tCO ₂ e
Emissions per FTE student	1.99tCO ₂ e	1.569tCO ₂ e

Self-generated energy

Four Combined Heat and Power (CHP) units have been installed to provide 'on-site' heat and power generation; these have a combined electricity generating capacity of 3.1MWe and form an integral part of our 'low carbon' thermal and electrical infrastructure. 32% of the University's annual electricity load was produced locally by the CHP Units. The Central Park CHP has saved £2.28m since August 2011.

5 Travel & Transport

The current Travel Plan continues to promote the Health & Wellbeing of staff, students and tenants, by encouraging 'active' travel on campus, improving the road network to reduce congestion and providing a safe environment for pedestrians and cyclists. A key objective is to expand the electric vehicle charging network on site. This project is underway with a tender due out this Summer.

The Car Park Management Strategy continues to support and contribute funding to the sustainable travel plan, the aim of the scheme is to encourage staff to consider the impact their commute has on the environment and to look at more sustainable alternatives such as walking, cycling & public transport. This was achieved by linking the cost of permits to a vehicle's carbon emissions, thereby encouraging the use of more efficient, less polluting cars. The CPMS continues to provide positive changes on site.

6 Biodiversity

The University continues to manage biodiversity with the Biodiversity Action Plan, Woodland Management Plan and Ecological Management Plan for LUSEP. Ecological surveys continue to be undertaken to ensure appropriate monitoring and management of the habitat across the estate.

The campus is home to a number of protected species. It includes a maternity bat roost of national significance that has been successfully developed into a new roost. Campus is also the only known site in the county for the rare Hornet Moth, has a population of badgers and an apiary run by staff and student volunteers.

Fruit Routes is a collaborative project managed by the Sustainability Team and as an extensive artist led installation by Anne Marie Culhane developing the university grounds as an edible landscape. Winner of the Guardian Higher Education Sustainability Award in 2014, the Fruit Routes project continues to thrive, inspiring the creation of the Student Union Landscaping and Gardening Society. It celebrates 5 years this Summer with the launch of the Fruit Routes book.

7 Demonstrator Campus

The Sustainability Team continues to engage with academics and students making use of the campus, its buildings and operations, to promote active learning. There are a number of examples¹ where synergies exist between teaching, research and operational activity, giving students access to Education for Sustainable Development via a set of learner attributes that are delivered through the formal and informal curriculum. The aim is to create a "living laboratory" to allow students to live and study sustainably, whilst learning - moving from theory and research to practice. We believe this is a key plank in Building Excellence and will provide students with an exceptional learning environment.

1.1

¹ Including SSPGHS, Design School, School of the Arts, CBE, SBE, SMART - Sustainable Manufacturing and Recycling Technologies