

University Living Lab for Sustainability - Interim Report, 27 May 2013

Project Overview

This 'University Living Lab' project is running from February to July 2013 with the aim of transforming the University of Manchester campus into a site for applied teaching and research activities around sustainability and low carbon energy. The project team includes two academics (James Evans and Andrew Karvonen), a staff member of Estates (Lucy Millard) and two researchers (Ross Jones and Tom Langridge), and is funded by a £38,940 grant from the University of Manchester Research Institute (UMRI). This report outlines:

- The achievements in the first four months.
- The tasks that will be completed in the remaining two months.
- A longer term strategic plan and funding requirement.

Objective 1: Mapping of Sustainability Expertise and Activities (complete)

The project team has developed a database inventory of all teaching, research, and estates activity and expertise related to sustainability. Entries are tagged with keywords that can be searched to identify potential project partners. This activity identified massive capacity for applied research and teaching in low carbon energy and buildings and campus design:

- Over 100 research groups, centres and institutions.
- Almost 250 sustainability contacts (including over 90 academics and 50 PSS staff).
- More than 80 current and recently completed academic research projects.
- Over 100 taught modules involving more than 6500 students.
- In excess of 30 ongoing estates programmes and new build projects.

Objective 2: Interviewing Key Sustainability Actors on Campus (complete)

The project team conducted in-depth interviews with eight Professional Support Services (PSS) staff and thirteen academics to understand the needs of key stakeholder groups and opportunities for collaboration. This activity has identified:

- Unanimous support for closer links between campus and research/teaching.
- The Environmental Sustainability Team currently connects PSS staff and academics on an ad hoc basis but a more institutionalised system would be beneficial.
- The need for a one-stop shop with ready access to campus data sets to support student projects and internships.
- The need to advertise campus projects or conduct open calls for involvement in projects by academics.
- The potential for upstream academic engagement with the 'ideas phase' of campus development to enhance projects and enable later teaching and research activities.
- Opportunities to test commercial products on campus.
- Mutual understanding as key for academic/estates collaboration.
- Incentives such as a seed corn funding scheme might be useful to jump start projects.

Objective 3: Initiating Living Lab Projects on campus (underway)

- Developing a list of Estates priorities and opportunities for collaboration. This list is being matched up with experts found in the database and the project team will develop pilot projects to demonstrate the living lab approach.
- Identifying a handful of ongoing activities that are already using the campus as a living laboratory, including the use of Sackville Street Building for student learning around window and lighting replacement, the campus energy grid as a test-bed for renewables, and the use of waste oil from campus to fuel Estates vehicles.
- Development of an interactive website to provide access to database. Research and PSS staff will be able to search for projects and expertise as well as visualise key clusters of sustainability activity. (Funded with additional £10 000 from UMRI).
- Hosting workshop on 12th July to present the project findings to PSS staff and academics and to facilitate collaboration around key priorities.

Objective 4: Developing Major Research Funding Applications (underway)

- 10th-25th April – conducted research visit to USA on sustainable campus initiatives.
- 27th-28th June – hosting workshop to develop funding application to ESRC/EPSC with Durham Energy Institute and Salford Urban and Regional Futures research centre around low carbon labs and transition (submission autumn 2013).
- 2nd July - hosting workshop with living labs at other universities including Cambridge and Luxembourg to explore potential Horizon 2020 application (submission 2014).

Longer Term Objectives

Extending this six-month project would secure a number of strategic benefits:

- Full institutionalisation of the living laboratory model to leverage research funding and deliver a world class campus.
- Extension of the University Living Lab to engage academics with external clients and contribute to the sustainability of the wider city-region (meetings have been held with the MSP, Corridor Manchester, Future City Manchester and TfGM).
- Development of applied teaching modules that focus on surrounding neighbourhoods to address Goal Three of the 2020 Vision.
- Establishment of the project as a programme or network with a brand that is easily understandable and attractive to students, staff, PSS and external clients.

Funding

- Bridging funding of £33 260 is required to maintain momentum over the next 12 months (researcher costs = £31 260, event costs = £1000, and travel costs = £1000).
- The project team have secured provisional funding beyond July from Estates (in kind for Lucy Millard) and Cities@Manchester.
- We are aggressively pursuing other short-term funding opportunities, including being submitted as part of the MSP Better Buildings TSB funding proposal and submitting an application for £6000 to the Mistra Sustainable City Regions fund.