

University Living Lab Case Studies: Sustainability Projects on Campus



Sackville Street Student Electronics Lab



The Project

One of the most successful Living Lab projects on the university campus is the Sackville Street Student Lab. This experimental space was established as a teaching facility by the staff of the School of Electrical and Electronic Engineering, in collaboration with university Estates and lab technicians. The project is an ambitious attempt to hand over control of the lab to students for experimentation with electrics, lighting, ventilation, and ambient temperature.



Sackville Street Building Lab

Its establishment followed students' widespread involvement in DIY projects on automation and 'smart' technologies in their free time, as well as an increasing demand for projects with a social responsibility angle. The Lab combines both by offering students the chance to build and test controllers with a direct sustainability application.



Comfort comment buttons

Outcomes and Impact

After a temporary trial phase, the control set up is now installed as a permanent fixture. It is used by the Electronics Club which convenes in the lab, and which has over 50 active student members. It will also be integrated in the sustainability unit undergraduates take in their second year.

Although initially conceived as a student engagement project, the findings of the control experiments also have the potential to feed into wider University energy usage practices, and building management. This is being explored for example through a PhD project that monitors ambient temperature while asking users of the space to comment on their level of comfort.

Key Contact

For more information, contact Peter Green, Senior Lecturer at the School of Electrical and Electronic Engineering: <u>p.r.green@manchester.ac.uk</u>