

University of Exeter Construction & Refurbishment Revolving Green Fund turns Cornwall House on its Head

Section 1 About the project

Summary

Cornwall House project revitalises an unloved, carbon intensive building, to become a low carbon high impact hub on the Campus, fit for a low carbon campus in the future.

Project partners

The University's Estate Development Service, UoE Centre for Environment & Energy, Students' Guild, Business School, HEFCE, Currie & Brown, Architects Design Group, Hydrock and Morgan Sindall.

Section 2 The results

The problem

The University set out to show that there is life in 1960s building stock, of which there is much in the HE sector. With poor quality construction,

uncontrolled and disjointed building services and such a disparate 'ownership' of different parts of the building, energy efficiency initiatives and interventions have been difficult to drive forward.

The approach

For these reasons, in-depth analyses were carried out through the feasibility and design period, starting with the installation of extensive sub-metering throughout the building and thorough consultation with all the building occupants and users to understand how the building 'worked'. Using energy consumption figures from the sub-metering, thermal modelling and infra-red thermography, the project team derived the best mix of proposals that gave the highest predicted carbon reduction for the budget. The whole process was disseminated to a wide stakeholder group consisting of building users, staff and students, with the aim of raising awareness of the issues involved.

Our goals

To breathe new life into an ageing, energy-hungry building, for it to act as an exemplar project that informs and influences further retrofits of this kind.

Performance and results

The process delivered considerable energy/carbon savings, student and staff engagement & education and a new look building fit for a low carbon campus in the future.



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Profile

- University of Exeter
- 19,300 students (full and part time)
- 2,295 staff
- Streatham Campus

Category supported by





Section 3 The future

Lessons learned

We will continue to work closely with the stakeholder group in Cornwall House and have already programmed 12 months of further monitoring of energy usage, user engagement exercises and post occupancy evaluation. We now have the challenging action of rolling out similar upgrades to a lot of our estate. However the knowledge gained as we have gone through the process with Cornwall House and the knowledge gained from the ongoing monitoring, gives us a whole set of new tools to use to improve the process.

Successful delivery of this project has focused attention on what we will have to do to achieve our 2020 carbon reduction target. It has increased our confidence in tackling projects such as this and has demonstrated to our executive bodies that the required reductions can be achieved.

Sharing our project

Staff and Students' Guild representatives on design team, to disseminate to student and staff bodies. Used as a demonstration and feasibility project for all other Carbon Reduction projects on campus. Website exploring the principles and specifics of the project kept live throughout.

Three public presentations/seminars given to interested staff, students and general public by project team. The project has been used as a case study with site visits for many taught programmes and research projects. Grand Challenges initiative for two years running.

3 exhibitions of project aims and outcomes have been staged, one at the IPCC public conference last year. Case study published on the HEFCE website.

Short report to be published in Building magazine.

What has it meant to your institution to be a Green Gown Award finalist?

As an institution that takes its responsibilities towards sustainability seriously, being a Green Gown Award finalist has demonstrated recognition not only to our commitment but also the hard work of staff across the campuses to improve our performance in this area every year. The finalists represent some of the best examples of the varied and positive work which is taking place across universities and colleges nationally and we are proud to be counted amongst them.

Further information

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