

University of London cuts CO₂ emissions

Two projects receive HEFCE Revolving Green Fund (RGF) support to reduce energy consumption

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HEFCE - Revolving Green Fund

Provides recoverable grants to help higher education institutions (HEIs) in England reduce emissions.

4 major and 24 smaller scale programmes at **27 universities**

£11 million in total awarded

229,000 tonnes of CO₂ saved

Links

HEFCE announcement:
http://bit.ly/hefce_rgf

University of London Carbon Management Plan:
<http://bit.ly/UoLCarbon>

ULCC data centre:
http://bit.ly/ulcc_dc

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The University of London Computer Centre (ULCC) is pleased to announce it has received funding under HEFCE RGF initiative to significantly reduce energy consumption and CO₂ emissions in its data centre in Central London.

Data Centre Cooling

The project will see the replacement of traditional mechanical cooling at the 700sqm facility by a more energy efficient ambient air cooling system.

Optimal operating temperature of the data centre will be achieved through a combination of external ambient air supply and hot air extraction.

In case the external temperature is above the required level for the data centre, cooling will be provided by 4 staged cooling coils, each coil capacity is 83kW and can operate independently to give a tighter cooling band.

Expected Savings

The existing cooling method requires around 1.4 million kWh annually to ensure optimal conditions. The proposed switch to an ambient air solution is expected to reduce energy consumption by more than 50%.

“The potential benefits of the refit will not only help us reduce operating costs but also ensure that the PUE (Power Usage Effectiveness) of the data centre improves significantly over the lifetime of the project” said Steve Knibbs, Head of Hosting Services at ULCC.

Ian Lane, Environmental Manager for the University pointed out that “the proposal

to replace mechanical cooling with ambient air cooling is innovative and shows how carbon management can be achieved along-side the day-to-day running of a data centre in an urban environment.”

The bigger picture

In addition to expected savings in ULCC's data centre, a project to install a voltage optimisation unit (VOU) in one of the University's Halls of Residence is an effective way to reduce electricity consumption in highly occupied buildings.

Ian Lane said “Receiving HEFCE funding for two projects that will directly contribute to the University's Carbon Management Plan is a real endorsement of how we have chosen to respond directly to the challenge of environmental sustainability.”

Working together

The University of London will work with its partner Power Efficiency (A Balfour Beatty Company) to carry out necessary improvements.

Steve Houssart, Project Manager at Power Efficiency said “We are excited to be assisting the University in this ground-breaking project which will reduce carbon emissions considerably and heralds a new way of thinking with regard to cooling data centres.”



About ULCC

Established in 1968, University of London Computer Centre (ULCC) has evolved into a highly respected and innovative brand within the academic and not-for-profit sector.

Since 2006, ULCC has been hosting and developing e-learning services using Open Source software.

ULCC offers customisation of tools and technology for joined-up delivery and support of personalised learning, as well as engaging with the community to shape future developments.

Other services include: co-location and managed server hosting, podcasting, web development, desktop support, digital preservation, video streaming and managed network services.