



Renewable Energy - Buzz word to Building Requirement

Energy Centre for Sustainable Communities, ECSC, is working with LSBU on a KTP programme that is helping boost renewable energy use in the UK.

ECSC **Energy Centre for Sustainable Communities**

Business: *Technical* Consultants in the renewable energy field.

Project: To develop e-business services, to support developers and planners in the use of sustainable energy resources.

New planning regulations have forced developers to reduce carbon emissions from energy in new developments. ECSC has developed 'C-Plan', a collaborative tool that uses the internet to help address this problem.

"C-Plan is a web-based service that enables developers and their consultants to ensure their buildings comply with energy policies", explained KTP Associate Princess Ogumka.

"C-Plan" enables developers and planners to meet the challenges of responding to climate change and carbon reduction in an easier and more efficient way," commented Aiden Dunsdon, former KTP associate and now Product Development Manager at ECSC.

LSBU Professor Tony Day, academic supervisor of the project added: *"We believe this is a truly ground breaking project, and we have disseminated the solid results in China and the USA."*

"Although we've only been using C-Plan for a short time, it has already become a vital tool in implementing new policies to tackle climate change," said Peter Kerr, Chief Development Plan and Transportation Officer of Three Rivers District Council.



Reducing the carbon footprint in this Country – it's a no-brainer!

A KTP project with Fulcrum Consulting is bringing the first aquifer thermal energy storage system to the UK, a system that could greatly reduce the negative impacts of carbon on the environment.

Fulcrum Consulting

Business: Consulting Engineers specialising in the built environment

Project: To develop an expertise base in the field of ground coupled thermal technology for the storage of heat using underground resources.

The original objective of the KTP was to develop a technology using Ground Source Heat Pumps (GSHP) to cool and heat buildings. But as the project progressed, the initial idea extended, and the company has been able to exploit other areas such as sustainable energy, photo-voltaics, solar thermal, and passive building design, which were not planned in the original KTP project.

"KTP Associate Fuqiao Wang started using other technologies for aqua resources cooling, and it has become really successful. The turnover resulting from this project is about £1M so far," said Andy Ford, Managing Director at Fulcrum.

An extensive database and map of the Aquifer Thermal Energy Storage resources of the UK was build and managed during the KTP. The company gained expertise in integrated design concepts and the software to achieve low energy design aims. They have expanded their commercial potential, opening their first office in China. *"Without the KTP the company probably would be still working in less efficient ways; for instance, the company has obtained the advanced technology and ability to design the GSHP system independently,"* Fuqiao stated.

