

Project Snapshot

Company: Building Sustainability Ltd
Business: Energy consultancy company

Project: Identifying and reducing wasted energy

Energy and Environment

Time to save energy

Identifying and reducing wasted energy with the new 'Making Energy Visible Dashboard' system

In order to meet its ambitious growth targets, energy consultancy company, Building Sustainability Ltd needed to develop a ground breaking software tool that would be the prime product in driving new business from the UK's top 5000 companies. The 'Making Energy Visible dashboard system' (MEVD) is being developed on a KTP project with LSBU to help organisations more effectively manage their energy consumption and the associated carbon emissions.

With growing demand from companies that have signed up to the Department of Energy's Carbon Reduction Commitment, the management and measurement of energy use in the workplace has unsurprisingly become a top priority. Behavioural change of building occupants towards their own energy use is paramount if deep cuts in CO2 emissions are to be achieved. However real behaviour change has not yet been made despite numerous government initiatives. A solution for a new way forward to instill this change was needed urgently and Building Sustainability recognised this requirement.

"The problem our customers were experiencing is that they had limited visibility of how they were consuming energy and therefore did not understand where to invest in energy reduction initiatives," comments Christine

Taylor ***** at Building Sustainability. "We have developed a unique energy dashboard which makes energy visible to everyone within the organisation and encourages energy saving behavior." Currently it is difficult to enable better decision making in the absence of a user-friendly interface. The new MEVD will allow individuals to exercise more control over their own environment.

KTP Associate Estelle Jackson is now halfway into her 2 year project, "we are moving at an incredibly rapid pace of progression and have already achieved a remarkable milestone of delivering our first system to LSBU's CEREB (Centre for Efficient and Renewable Energy in Buildings) which is meeting the requirements of the research and teaching market." The first stage of this ambitious project was to extend the functionality of the existing Footprint Tracker system to meet the requirements of CEREB, but the second phase provides a completely different challenge in significantly reducing energy consumption in buildings through behavioral change. "We need to engage employees with digital signage feedback, therefore encouraging personal control and accountability," states Estelle. This unique offering provides individual workers with real-time information on how their work styles and behaviour impacts the building performance. The information gathered will then be presented to the individuals to provide them with measurements on how their individual or group actions are effecting carbon emissions.

London South Bank University academics, Professors Tony

Centre for Knowledge Transfer

Day and Paul Brown, have been working alongside Building Sustainability Ltd on this KTP plugging in the necessary expertise that the company lacked. Knowledge on building systems and how they can be designed, specified, monitored and controlled to improve energy efficiency has been implemented as well as knowledge on developing a Carbon Reduction Commitment management system. "The work we have achieved together has been highly complex as it has involved getting a number of different sub-contractors in the supply chain to work together, despite sometimes having very different contractual obligations. This has shown that there is much more to learn than just feeding energy data into information technology systems," reports Tony.

Estelle has hit the ground running with this project and is currently working on a technical research paper regarding the systems communication and application functionality as well as behavioural change. "KTP offers a great experience. To be involved in a project with cutting edge technology that will make a difference in the workplace is fascinating, not to mention the support from a wealth of experienced industry and academic professionals. As a direct result of my work I have been able to enter into discussions about reducing energy with the Facilities and Sustainability Managers in other companies and organisations."

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