BUILDING MANAGMENT SYSTEMS

Building Management Systems (BMS) are a part of our everyday life and are being used as a means of energy reduction and cost saving in the commercial environment. However, not everyone is taking full advantage. This is an issue that needs to be addressed if we are to take energy efficiency to the next level.The problem stems from the fact that all buildings come with their own control system, which generally works in isolation. This can mean that the control of air conditioning is working independently from the control of the heating and while the controls will still work, they are not communicating with each other to achieve the best results.

There have been many reports and studies from organisations that have questioned why our commercial buildings are not as efficient as they should be. Although integrating all controls into a single building energy management system would initially be costly and time consuming, it would lead to better long term results and would pay for itself in reduced running costs.What we need are controls that can be used as more than just an on/off switch. The air conditioning needs to be able to respond to different building requirements such as different room sizes, usage and occupancy levels as well as heat loads from electronic equipment and lighting — this can only be achieved if the technology is working together.

Here, in the UK, the Energy Saving Opportunities Scheme (ESOS) was introduced in July 2014 and the first audits will be required by December 2015. ESOS is applied to large organisations with more than 250 employees and current estimates are that between 7,500 and 9,000 organisations will be affected.

The Department for Energy and Climate Change predicts that ESOS will result in an average investment of £15,000 per enterprise and that the potential average energy bill savings will be £56,400 per annum. This is a compelling figure and one to be taken note of, because effective Building Management System will be the key to achieving a saving like this.