

Detailed Monitoring Leads to Energy Saving Strategy for Insurance Underwriters

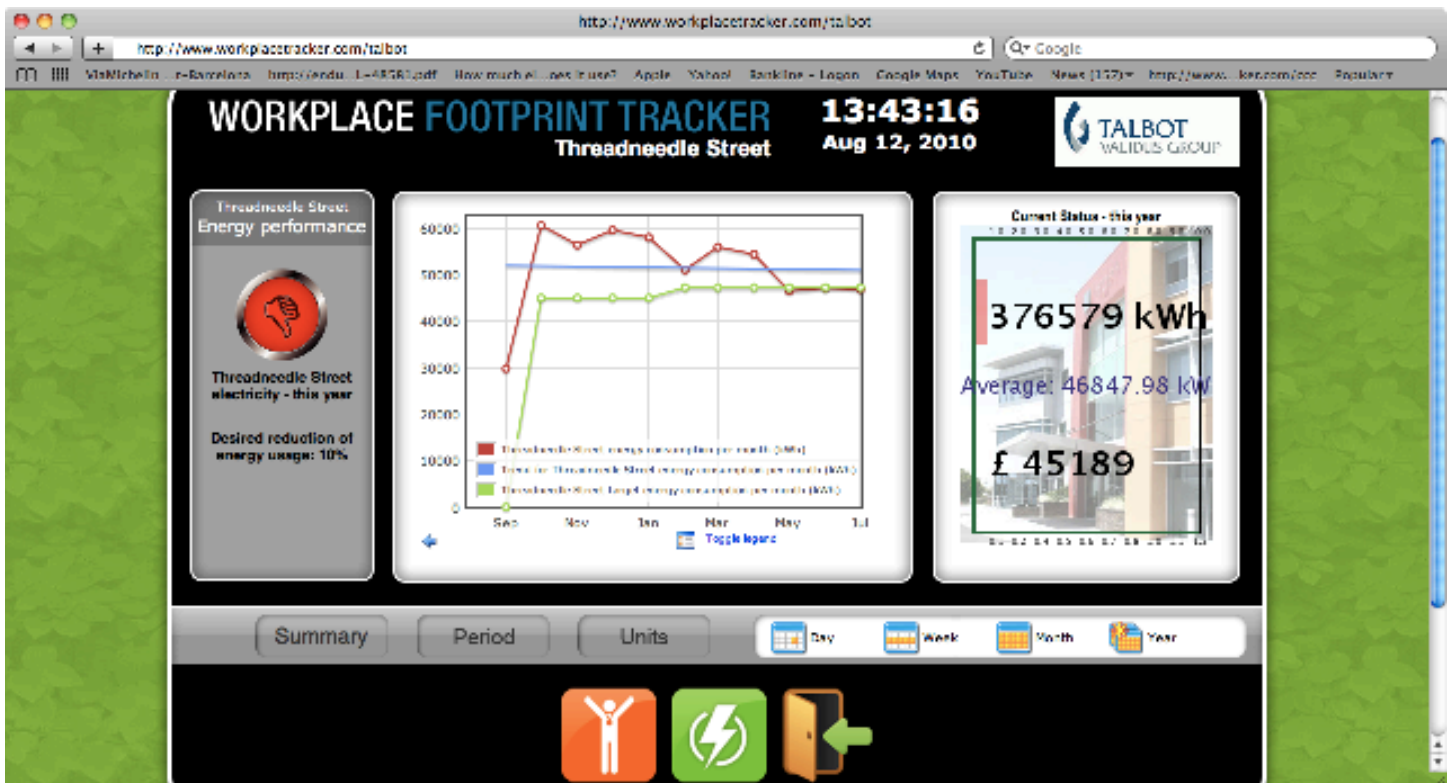
Within months of installing an energy monitoring system from Building Sustainability, Talbot Underwriting Ltd has realised significant savings as a result of being able to identify and address unnecessary overnight lighting use.

Talbot made a decision to include more detailed monitoring of energy use when they recently moved into two floors of a BREEAM 'Excellent' rated building in Threadneedle Street, London. On the basis of their sustainability credentials, Talbot chose Morgan Lovell for their office design to ensure that the project met their sustainability objectives.

One of Morgan Lovell's recommendations was to install Building Sustainability's Workplace Footprint Tracker to better manage energy use. According to Talbot's HR Manager Jane Williams; 'We wanted to have a better understanding of energy use across our two floors in

order to see if there was higher usage in some areas and also to have additional information to compare against the information on our energy bills.'

The Workplace Footprint Tracker is an internet-based energy management system that allows detailed energy consumption data from individual as well as multiple buildings to be collected and displayed in real time. Wireless radio mesh technology is harnessed to provide 'sub-metering' which delivers a detailed picture of energy use within buildings and where savings can be made. Talbot installed



Talbot's energy consumption from installation in September 2009 to July 2010 which demonstrates that they have been able to achieve their target of 10% reduction within 8 months.

8 smart meters across the 2 floors separately measuring lighting and general power.

This data is presented in a simple web-accessible 'dashboard' format on a digital sign installed in the reception area. Individuals can also receive this information on their personal devices.

At Talbot's monthly review with Building Sustainability, Managing Director George Bartley highlighted the over-utilisation of energy out of office hours. 'On a typical night the data showed £68 of energy use. Over a year this would equate to £17,000. Over one weekend the data also revealed £250 of energy use which would equate to an annual cost of £13,000', he says.

Initially Talbot focussed on the issue of overnight and weekend lighting use. Although they installed light proximity sensors when they moved in as an energy saving measure, they found that these were not as effective as expected due to the distance between sensors. They therefore increased the number of light sensors over the two floors. The results were immediate with £25 savings per day and the payback for the additional sensors is expected to be 200 days. The benefit of the detailed monitoring is clear. 'Without the information from the Workplace Footprint Tracker we would not have been aware of this issue', Jane Williams explains.

The data has also highlighted significant differences in power usage between work areas. Talbot is currently looking at this issue in more detail.

According to Jane Williams, this is the beginning of a more strategic approach to energy management based on greater visibility of their energy use.

Talbot has plans to build on this early success by using the data from the Workplace Footprint Tracker to form the company's future energy reduction strategy. Talbot has recently made a new appointment within Facilities to assist with this role. 'We are intending to develop a plan for energy reduction which will include targets, how these can be achieved, and clear measurement of the results', Jane Williams says.

The Business Case

The Workplace Footprint Tracker wireless sub-metering (8 meters) and monitoring software solution (including one year's management fee) cost Talbot £11,500. On the basis that £25 daily savings have already been made as a result of identifying and reducing overnight lighting consumption, the payback is approximately 15 months and it is anticipated that further savings will be achieved in the short term.

Talbot is also interested in the potential of the Workplace Footprint Tracker to engage staff in efforts to reduce energy. They plan to discuss the energy trend data with staff to show the impact of their early interventions to reduce energy use. Where the data highlights areas of over-utilisation they would like to involve staff in developing a solution.

The Workplace Footprint Tracker provides league tables to enable a comparison of energy use within different work areas to provide added awareness. Jane Williams also acknowledges the importance of providing incentives for staff. 'We want to use some of the savings from lower energy use to directly benefit staff'.

Building Sustainability entered into a formal partnership with Morgan Lovell regarding the distribution of the Workplace Footprint Tracker in July 2009.

Talbot Underwriting

Operating in the Lloyd's Insurance Market through Syndicate 1183, Talbot writes a broad range of insurance and reinsurance classes of business. Talbot Underwriting is a wholly owned subsidiary of Talbot Holdings Ltd, which was acquired by Validus Holdings, Ltd. in July 2007.

www.validusholdings.com/content/talbot-underwriting

Morgan Lovell

Located in London, Birmingham and the Thames Valley, Morgan Lovell is the UK's leading office interior design, fit out and refurbishment specialist. With its own teams of designers, surveyors and project managers, the company can design and deliver entire projects, with the benefit of just one point of contact.

www.morganlovell.com

Building Sustainability Ltd

Building Sustainability has developed the 'Workplace Footprint Tracker' energy measurement and management solution to create sustainable workplaces. It incorporates innovative wireless radio mesh sub-metering as well as visual dashboards to raise awareness of real time energy use and encourage 'energy saving behaviour'.

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