



# Workplace Footprint Tracker: Energy Smart Metering, Display and Management

Building Sustainability (BSL) has developed a unique energy measurement and management technology solution to create sustainable workplaces. This features the latest high performance, low cost wireless radio meshed meters for advanced metering. It also includes the “Workplace Footprint Tracker” software to control and display energy use on dashboards which encourages building occupants to reduce their personal energy use.

## Benefits of Reducing Energy Consumption and Carbon Emissions:

- Legislative Compliance e.g. Carbon Reduction Commitment (CRC) Trading Scheme from 2010 for larger businesses
- Lower Energy Costs
- Corporate Social Responsibility

## The Solution in Detail

### Advanced Energy Metering

Advanced and half hourly metering enables:

- Energy wastage to be identified to reduce energy consumption and costs
- Significantly reduced cost of compliance with CRC Trading Scheme in the first year of the scheme.

BSL uses innovative wireless radio meshed meters

- Scalable and robust: each node communicates with any other node within range, which provides many possible routes through the network
- Low cost solution for retrofitting (compared to cabled meters)

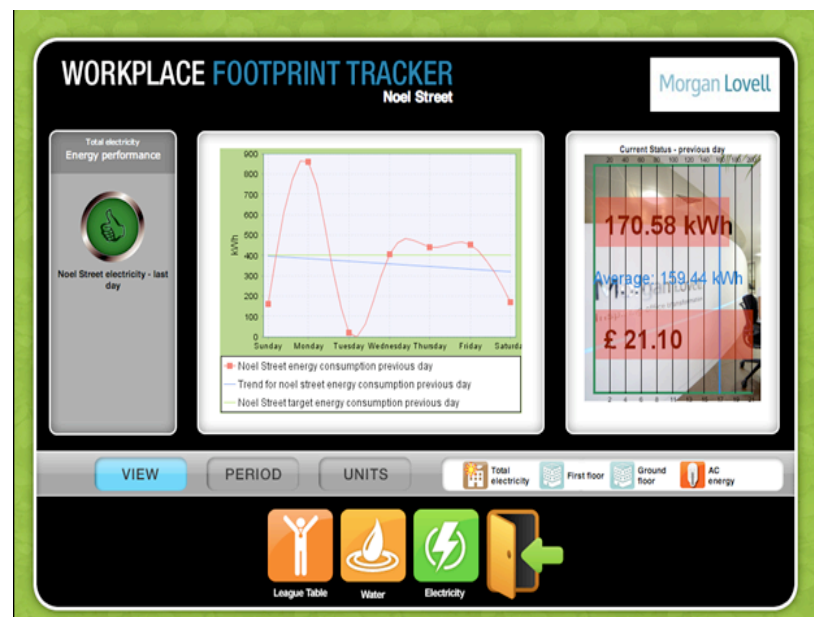


Figure 1. Workplace Footprint Tracker

**“30% of the energy which office buildings consume is wasted”**

*US Environmental Protection Agency*

*“The behaviour of occupants in a building can have as much impact on energy consumption as the efficiency of equipment”. WBCSD*

## Workplace Footprint Tracker: Energy Display and Management

- Web-based
- Real time visual dashboard displays to make energy use visible and encourage personal responsibility for reducing energy consumption. e.g. Performance league tables for buildings, floors, departments, individuals
- Link to Building Management Systems (BMS) or Meters to monitor and control energy use
- Link to Room Booking Schedules to schedule energy (BSL Partnership with PeopleCube)
- Hibernate unused meeting rooms- no heating/cooling and lighting supplied



Figure 2 Wireless Mesh Network  
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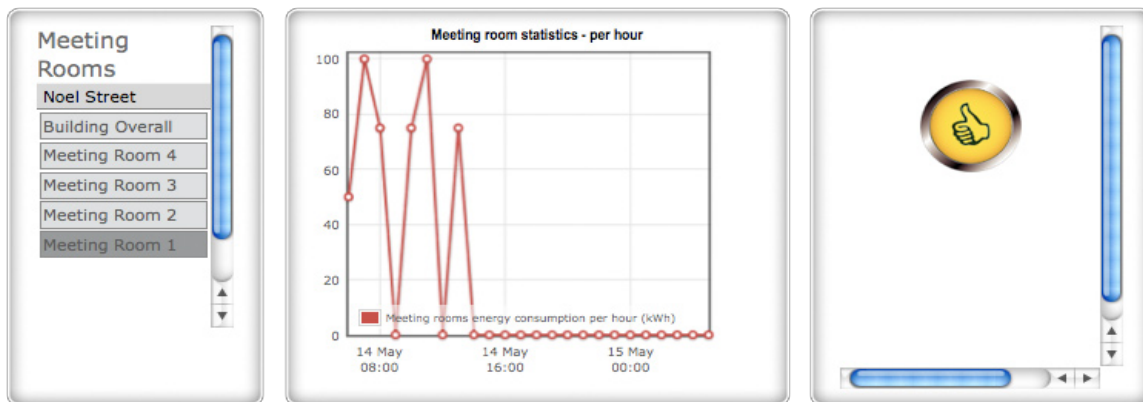


Figure 3. Energy Savings Through Hibernation of Meeting Rooms

## CASE STUDY: Morgan Lovell

BSL recently provided Morgan Lovell with their advanced metering and Footprint Tracker Solution. It immediately highlighted energy wastage due to a faulty heating and cooling timer switch.

Once this was resolved, Morgan Lovell saved an immediate 30% on their energy use. In financial terms this meant savings of £21 per day or £5000 over a year which covered the cost of the BSL solution.