

## BRADFORD AND BINGLEY SAVE 35% IN LIGHTING COSTS

“ Enistic have given us a professional and confident service from the very initial meeting through to completion. The after sales has been excellent especially the support service. ”

**MR RICHARD RATTENBURY**  
**FACILITIES AND ENERGY MANAGER OF BRADFORD AND BINGLEY**

### Background

Richard Rattenbury, Facilities Manager of Bradford and Bingley first discovered Enistic after a referral from Facilities Management company Sodexo.

Looking to monitor energy usage in Bradford and Bingley Headquarters which houses 1600 staff members, Richard approached Enistic and was impressed not only with the solution offered but with the costs involved.

In the first instance, Richard wanted to see how inefficiently energy was being used in various areas of the building, as well as the plant. The results would form a report which would highlight the issues found, with a view to create budgets and allocate spend to correct the issues highlighted. The implemented changes would then be constantly monitored to allow for progress and conclusion reports.

Lighting was one of the biggest problem areas, with up to £4000 being spent every month on lighting alone. So Enistic set about monitoring all lighting floor by floor as well as monitoring Heating and Air Conditioning, General Peripherals and the Kitchen and Canteen area.



BRADFORD AND BINGLEY HEADQUARTERS

### How we did it?

Three areas in the building were installed with energy monitoring equipment. The IT area in the Plant and the Admin area in the main building were both installed with equipment to purely measure how energy was being distributed and used around the building, rather than how much energy was being used. The majority of the job involved measuring the lighting on all three floors in the main building.

The initial purpose of the installation was to gain data to quantify the switch in lighting from the current standard T8 tube lighting to LED lighting. Three measuring points were installed on each of the three floors, which meant there were three lighting phases to monitor. Very little equipment was needed to monitor these floors; 9 x 3 Channel Meters and 27 CT Clamps were used. These simple products allowed Enistic to monitor how the lighting was used 24 hours a day 7 days a week and not only showed how much energy the lighting was consuming but how much it was costing as well.

# Outcome

After recommendations from our Energy coach, Bradford and Bingley switched the lighting on the first floor from the standard T8 tube lighting to LED. The data shows that first floor usage has gradually fallen from over 500kWh per day in early June down to about 345kWh per day by the end of August.

Comparing Apr-Jun with Sept-Nov (therefore avoiding the summer period) it shows a saving of about 35%, a fantastic result considering the last 3 months should be darker than Apr-Jun and therefore require more lighting. Using the cost data held in Energy Manager this shows the saving on the first floor is about £13.50 per full working day (£40 down to £26.50) and over a year of 250 working days this equates to about £3,400 p.a.

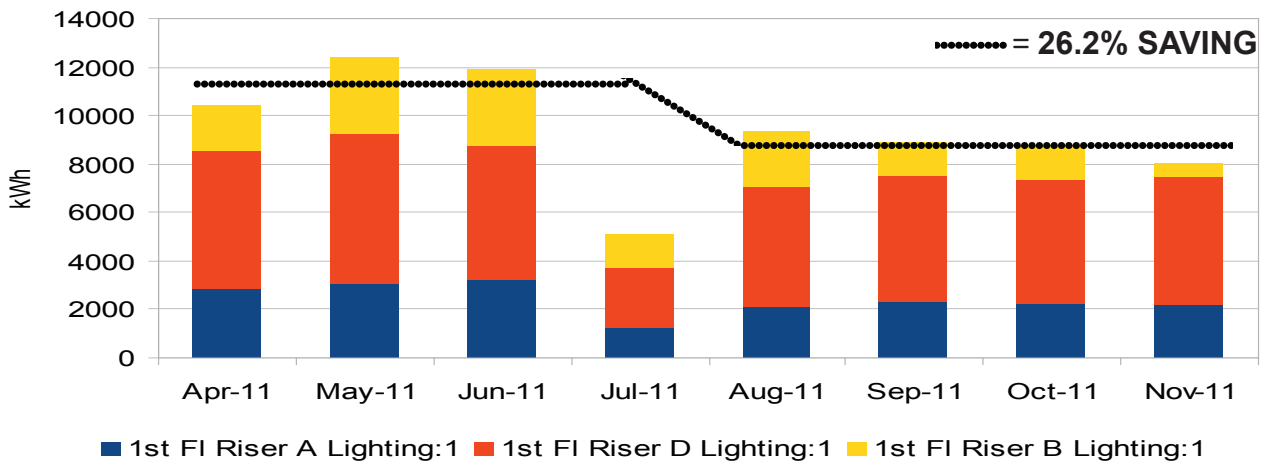
## Cost - 2011 (Values shown are in £)

Name	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
1st FI Riser A Lighting:1	318	335	252	102	170	185	192	233
1st FI Riser D Lighting:1	622	675	431	199	402	420	450	547
1st FI Riser B Lighting:1	207	349	247	113	189	109	120	63
<b>Total</b>	<b>1147</b>	<b>1359</b>	<b>930</b>	<b>413</b>	<b>760</b>	<b>714</b>	<b>761</b>	<b>843</b>

April – June	£3,436.81
Sept – Nov	£2,319.14
<b>Saving</b>	<b>£1,117.67 (32.5% SAVING)</b>

“Enistic’s technology has provided me with extremely illuminating facts; facts which have not only allowed us to make alterations to the plant but have helped us achieve significant cost savings on energy use and CRC savings as well.” **Richard Rattenbury, Facilities Manager at Bradford and Bingley.**

# Graphical Results



Energy - Values shown are in kWh.

Name	Apr 11	May 11	Jun
1st FI Riser A Lighting:1	2900	3064	3229
1st FI Riser D Lighting:1	5668	6156	5535
1st FI Riser B Lighting:1	1889	3193	3155
<b>Total</b>	<b>10457</b>	<b>12414</b>	<b>11918</b>

Energy - Values shown are in kWh.

Name	Sep 11	Oct 11	Nov 11
1st FI Riser A Lighting:1	2316	2216	2172
1st FI Riser D Lighting:1	5146	5138	5287
1st FI Riser B Lighting:1	1396	1398	579
<b>Total</b>	<b>8858</b>	<b>8752</b>	<b>8038</b>

April – June	34,789 kWh
Sept – Nov	25,647 kWh
<b>Saving</b>	<b>9,142 kWh (26.2% saving)</b>

Please note energy percentage differs to cost percentage as Bradford and Bingley are billed on a mixed rate energy tariff.