

BF TECHNOLOGY REDUCE ALMOST 10 TONNES OF CO₂ ANNUALLY WITH ENISTIC

Background

Worried about rising energy costs, BF Technology wanted to perform a baseline audit of energy wastage and investigate an automated energy management solution.

How we did it?

The Enistic Energy Audit Kit was installed in order to break down and accurately measure where energy was being used and identify where it was being wasted. Initially, no changes were made to working practice to enable a baseline usage pattern to be established. Once the baseline had been established, the Energy Manager software was configured to control the switching of office equipment.

Audit Results

The audit yielded the results shown in the table below (fig 1). We found that whilst the management at BF were under the impression that staff turned off their PCs every night, a number of fully-running computers were found. This is not unusual and was generally put down to forgetfulness / logistics rather than any lack of desire for energy saving.

In one instance, for example, a staff member had turned on a colleague's computer to access some information and had then forgotten to turn it off again at the end of the day. Of the computers that were shut down, the Enistic system was able to show that they were in fact still drawing some electrical current, and therefore wasting energy when not in use.

The data collected was used to calculate the energy being wasted by different types of office equipment. Energy Manager was then used to make savings, as detailed in the table over the page (fig 2), by automatically switching off some of the office equipment when not in use.

Device	Number found	Fully running	Standby	Fully off	Power being wasted (W)
PC base stations	24	9	15	0	1,581
Monitors	29	4	18	7	213
Laptop docks	2	2	0	0	7
TVs	3	1	2	0	94
Printers	12	12	0	0	103
Chargers & Misc	11	11	0	0	79
Photocopiers	2	1	1	0	124
Vending machines	0	0	0	0	0
Desk lights and fans	0	0	0	0	0
				Total:	2,201

FIGURE 1.

Graphical Results

FIGURE 2.

Month	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	Total
Saving (kgCO2)	2,390	2,390	2,390	2,390	2,390	2,390	2,390	2,390	19,120
Saving (£)	417	417	417	417	417	417	417	417	3,336
Installation (£)	-475								-475
Equipment (£)	-1,995								-1,995
Maintenance & upgrades (£)	-355				-355				-710
Travel (£)	-71								-71
Net (£)	-2,479	417	417	417	62	417	417	417	185
Cumulative (£)	-2,479	-2,062	-1,645	-1,228	-1,166	-749	-332	85	

Outcome

The Enistic Energy Manager performed well and lowered the base load figure by 2.2kW. BF have minimal weekend working, which means that in their typical week the system is producing this wastage for 130 hours per week. This equates to a monthly wastage of 1,265 kWh and a financial saving of £417 per quarter. The group also saw a saving of 2.4 tonnes of CO₂ per quarter being achieved.

By the end of the project, BF Technology had made a total investment of £2,896. This led to an ongoing energy saving of £1,668 per year, i.e. £67 per employee per year. The system has a financial return on investment (ROI) of approximately 23 months.

The management at BF commented that they felt that there were a number of non-measurable benefits that they experienced, as the audit brought energy saving so clearly into focus for their employees. This was typified by increased use of the recycling bins and increased acceptance of lift sharing / carbon friendly travel.

Having provided thousands of companies worldwide with the technology and tools to become energy efficient, Enistic are specialists in the energy management field. This case study was prepared in conjunction with Interior Control, one of our Platinum resellers. Visit www.interiorcontrol.co.uk for further information.

To find out more about Enistic and what we can do for you contact us on 0844 875 1600.