

Shop Direct goes hi-tech to reduce energy consumption

Plogg helps Shop Direct Group save £500 per fridge per year

The UK's leading online and home shopping retailer, Shop Direct Group, has gone hi-tech in a bid to reduce its energy wastage and CO2 emissions.

The company has used Plogg, the plug-in wireless energy meter from Energy Optimizers, to achieve electricity savings worth £500 per year for each of the refrigerators at its new headquarters in Speke, Liverpool. The move has also reduced CO2 emissions by 22 tonnes annually.

Unlike most smart meters, Plogg can monitor the energy consumption of individual appliances over time, and it is this feature that has enabled the savings to be identified and implemented.

During 2007, Shop Direct Group embarked on a company-wide energy efficiency drive to clamp down on unnecessary energy costs and carbon emissions. Initially all the lighting was changed to low-power LEDs, enforced out-of-hours auto-shutdown was implemented on desktop PCs, and water heaters were fitted with timers.

The company then turned its attention to the ten refrigerators in the staff canteen, which serves the 1600 staff on site. A pair of Energy Optimizers' Bluetooth-based Plogg Blu devices was used to evaluate the electricity consumption of the refrigerators.

Neil Woollam, Engineering Manager at Shop Direct Group, said: "Unlike electric lights, which draw a constant current once they're switched on, fridges are more enigmatic in their use of power. One minute they're drawing very little current, the next they're up at around 10 amps.

“With Plogg, we were able to monitor power consumption over time and download all the data wirelessly onto a Bluetooth equipped laptop for analysis. We found that the fridges were consuming a lot of power in the evening, at night and at weekends — to no advantage at all because the canteen was not in use at these times.”

By installing timers on the refrigerators, Shop Direct Group was able to eliminate the power wastage without affecting the cold drinks served in the canteen. Programming the local electricity tariff into the Plogg software has revealed that this simple measure will save Shop Direct Group around £500 per fridge per year, for a total annual saving of £5000.

The company plans to use Plogg to identify further cost savings across its sites, including its two customer data centres.