€1,000 Energy Survey of RMG Chart Entertainment

Summary

PowerTherm was contracted to undertake an energy survey of RMG Chart Entertainment's office and distribution warehouse in Dublin. Because annual energy spend is considerably less than €100,000, a €1,000 energy survey was selected. The survey included a review of historical electricity and gas use, including tariffs; an assessment of the heating installation, controls and building fabric; a survey of the server room and office equipment; inspection of the air conditioning installation, operation and control; a survey of the lighting installation, operation and controls; and an evaluation of the energy management and reporting systems. The survey identified 27 recommendations for change.

Site Description

The facility consists of offices and distribution warehouse, was constructed in the 1980's, and is 2,000 sqm (22,000 ft^2) in size.

The office areas are supplied from a central heating boiler via radiators. The warehouse is heated by three gas-fired blower heaters.

Most areas are lit by T8 fluorescent tubes, although the entrance and executive suite use low voltage halogen spotlights. Lights are manually switched. Some natural light is available.

Many offices and the IT server room are cooled and/or heated by split air-conditioning units, which were installed retrospectively.

The fabric had a number of areas of ventilation heat loss.

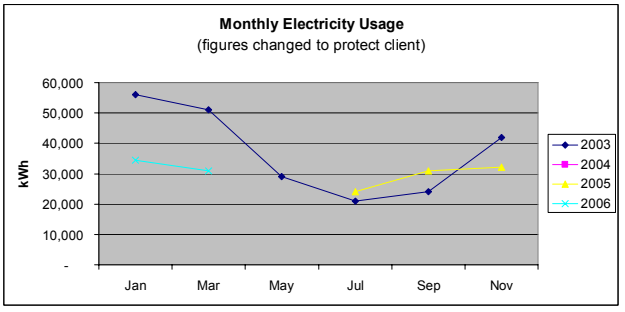
Data Collection

Monthly electricity and gas invoices were analysed. The installation was surveyed and nameplate ratings for lights, air-con units, heaters, etc. noted.

Recommendations

Each of the 27 energy saving measures described the existing situation and recommendation for change. Many included photos. Where possible an indication of savings to be made was provided and, in a number of cases, an implementation budget.

Heating – a number of recommendations were made regarding the operation and control of the heating system. Measures to reduce ventilation heat loss were also recommended.



Lighting – recommendations included alternative lamp types, energy efficient fittings (which were in the process of being upgraded), and options for automated control.

Server Room & Office Equipment – included recommendations to reduce sources of unwanted heat gain, and alternative settings.

Air-conditioning – recommendations were made for the relocation of condensers, control settings, and future procurement practices.

Energy management – a spreadsheet was provided with charts of historical usage and it recommended that this be used to track future use.

Conclusion

This low cost survey used surveyor experience to quickly identify a range of practical energy savings that were particular to the customer's site.