

BELGRAVE NEIGHBOURHOOD CENTRE

Energy Efficiency Measures

Obsolete boiler plant with poor combustion performance and bad reliability was replaced in November 1992. The package included a low-NOX Broag condensing boiler, an AC8 Andover energy management system and thermostatic radiator valves to give better local control of heating.

Evaluation

A mathematical relationship was established between gas consumption and degree-days for the year immediately preceding the installation. This was used to give a predicted consumption of 1,215,344 kWh for the following 12 months. However, the actual consumption was only 986,393 kWh. This represents normalised savings of 19% worth £3,434 which yields a simple payback in under four years on the extra cost of a condensing boiler over a conventional alternative.

Conclusion

The extra capital cost of a gas-fired condensing boiler with improved controls can be recovered within four years. Reduced fuel consumption also cuts harmful atmospheric emissions, which helps to tackle the problem of global warming and preserves limited fossil fuel reserves. Condensing boilers are always specified now as the first option by Leicester City Council when replacing ageing boiler plant.

