

# Cutting and controlling utility costs

**Donald Maclean** outlines some of the latest techniques and new technologies being introduced to help school finance staff keep utility costs under control

**SCHOOLS FACE** A never-ending battle to keep costs under control. In recent years one of the areas of greatest concern to schools has been the dramatic rise in utility costs, with electricity and gas prices alone having risen by over 100% in a few years. It is, therefore, crucial for schools to find ways of minimising the impact on their budgets. So what practical steps can schools take in this vital area?

School finance staff are busy people and by definition don't always have time to scrutinise bills thoroughly. People often assume that utility bills are more or less accurate but experience says otherwise. It has been estimated that over 50% of school utility bills may be inaccurate or contain errors. Although you receive monthly electricity, gas and water bills many of them are likely to be based on estimated readings. A recent survey by the Energy Services and Technology Association showed that about 82% of non-domestic gas bills and 67% of electricity bills are based on estimated readings. Every year or so an actual meter reading is taken by the supplier and there is a reconciliation. This can spring a nasty surprise if your supplier has underestimated consumption. To avoid this you should take meter readings once a month (on the same day each month). Most suppliers will accept your own meter readings and hence your bills will be more accurate.

## Smart meters and smart data loggers

An alternative is to use a smart meter or smart data logger which (together with sophisticated software) can provide precise readings on a daily basis to give you and your suppliers very accurate consumption and cost data. Armed with this information you are in a better position to budget and negotiate better deals with suppliers. Reports produced by the system will also make it easy to see if boilers or electrical equipment have been left on overnight, or if thermostat settings are wrong. The net result is that you can identify

opportunities to minimise consumption and cut your bills. If you cannot measure your consumption accurately you cannot control it accurately.

Crucially, using such devices consumption of water, gas, electricity and LPG can be monitored in real time. The data gathered is sent to a central server for detailed analysis. Reports produced by the system can highlight any anomalies, such as excessive consumption. That can lead to significant reductions in consumption, costs and carbon emissions. For example, unusually high water usage could indicate the presence of an undetected leak. The smart data loggers are non-invasive so do not interfere with the normal functioning of the supply and the equipment can monitor usage in different zones of a building, even where the supply is coming from a single source. From a school's point of

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view having this detailed analysis can be invaluable when budgeting. Historical trends can be used to set more accurate budgets and highlight variances, compared to previous years.

## Contracts

Are you confident you have negotiated the best contracts with your utility companies? For example, those schools which have charity status can take advantage of special discount schemes which are only available to charities. Utility and telecom companies do not widely advertise this fact and rely on schools finding out for themselves.

The timing of purchasing energy contracts is also crucial, otherwise you may find yourself paying too much for utilities. Knowing *when* to purchase your energy is the most important factor influencing what you pay for your

energy. Analysis of past years' energy prices shows that there are key times during the year when energy contracts should be negotiated and making a decision to choose these key moments can save you money. The other two main factors affecting the price you pay are knowing which of the suppliers are likely to be keen to supply your particular energy profile and knowing how to present your energy data to potential suppliers. Many schools are taking advantage of the services of utilities consultants who can provide expert advice in these areas that can save them thousands of pounds.

## Telecommunications

Another area where savings can be made is telecoms, both fixed and mobile. With the plethora of tariffs and special offers available it can be a minefield for the unwary to analyse telecom costs. There are over 250 authorised telecom service providers in the UK. It can be useful to have an audit carried out of all telecom expenditure. This audit can highlight such issues as expensive or inappropriate tariffs, redundant lines for which line rental is still being paid and misuse of mobile phones. Again this is an area where it is difficult for schools to find out if bills are accurate or whether the right tariffs are being applied, but it is vital to ensure the school is getting the best deal possible.

## Conclusion

There are many steps you can take yourself to reduce consumption and energy costs and many sources of valuable advice (such as the Carbon Trust, see [www.carbontrust.co.uk](http://www.carbontrust.co.uk)). However, the key message is that unless you can accurately measure your consumption, it will be impossible to control your costs. This should be the starting point for any work to control and reduce your utility costs.

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