



Carbon Copy Spring 2012

Issue No 5



Save energy – save money

Welcome to Carbon Copy Issue 5, which brings you energy news from Nottinghamshire County Council

In this edition we focus on how we have been working to help schools save energy, and money, both through developing new resources as part of a regional project, and by installing Automatic Meter Reading at many of our sites. We also have news about next year's energy prices.

As we like to receive your feedback, with this issue we have set up a very quick and easy survey form for you to complete by using the following link:

<https://www.surveymonkey.com/s/carboncopy>

Please spare a minute or two to let us know what you think so that we can try and improve things where we are able.



Energy on line

We have just set up some new pages about our energy service for schools within the Council's other services for schools content, where you can view and download resources including issues of Carbon Copy. Do let us know what you think of these web pages and feel free to make suggestions for further content.

www.nottinghamshire.gov.uk/servicesforschools



Shock news – no massive energy price hikes!

Yes, whilst our home energy prices have seen dramatic increases way above the rate of inflation over the past year, prices for County Council sites look like being much the same for 2012 -13, with the expectation being that they will rise by only about 3%. We will be sending you information regarding the prices for 2012/13 early in the new financial year, as soon as we receive them from the suppliers, who will be the same as this year.



Investment tops the £1 Million mark!

Through our recycling loan fund, we have invested a further £300,000 in energy efficiency measures in schools so far this year, bringing our total investment to £1.1million since the scheme started. Typical energy efficiency technologies funded include IT and lighting upgrades, as well as insulation, heating controls and more recently, voltage management.

This investment is saving schools around £400,000 on their energy bills each year. If you've not taken advantage of the scheme, why not use our simple 'Invest to Save Project Identification Questionnaire' to help see if your school has opportunities for us to fund fast payback energy saving measures?

See the 'SCoRE a Winner' article on page 3 for more details on this and the energy online item.



Automatic Meter Reading (AMR)

During the past six months we have undertaken a programme of installing 'smart' electricity meters and gas meter loggers, which automatically register consumption. Not all schools or supplies have been part of this programme, which has been targeted at our largest consuming supplies.

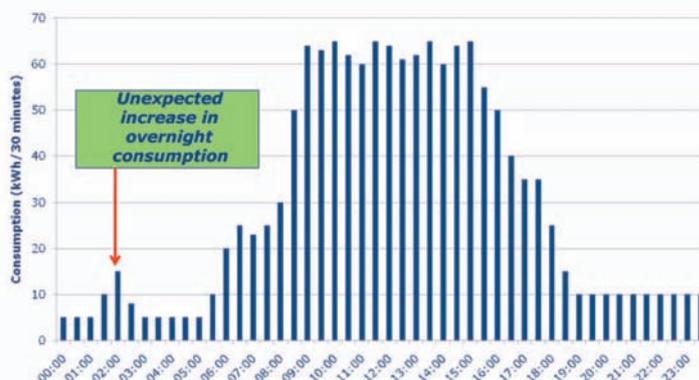
Smart meters register the energy used every half an hour and send the reads directly to the supplier. This means that when your bill is created on the first of each month it is far more accurate and you don't end up with lots of amended invoices correcting estimated reads.

Through our energy management software, SystemsLink, we can make this consumption data available to you with simple graphs showing things like daily and weekly usage patterns, which can help you to identify where and when you may be wasting energy. This can lead to significant savings, often with no or very little cost to the school. See the Edwalton School case study on **page 4** for an example.

If your school already has AMR installed and you would like to know more about how to look at your consumption patterns please get in touch. You may also want to make use of our new 'Getting the Benefit from AMR' resource – see the 'SCoRE a winner' article on the next page.

If your school does not yet have this type of metering but would be interested in getting it installed please contact us to discuss the possibilities.

Daily electricity chart



Meter Readings

If your school does not have AMR for all your meters you still need to send meter readings to the suppliers each month for your 'dumb' meters.

Our gas supplier, Corona Energy, has just changed its email address for sending meter readings, which should now be sent to:

meter_reads.team@coronaenergy.co.uk

Electricity meter reads (supplier British Gas) should still be sent to:

MeterReadEntry@centrica.co.uk

If you can send the reads at the very beginning of each month it may make your billing easier to follow. We have also been advised by Corona that their billing has now been enhanced to minimise the amount of crediting and rebilling that we have seen in recent months and we hope we will see this improvement straight away.





SCoRE a winner!

During the autumn term, the energy and carbon team worked with a small number of schools as part of a regional project, supported by Climate East Midlands and the Carbon Trust, under the name of SCoRE – schools collaboration on resource efficiency.

The purpose of the project was to pilot some new resources designed to help schools identify and implement a range of measures, many of which are low or no cost, that would reduce energy consumption for heating and lighting. The resources tested were:

- Practical energy savings for Eco Schools
- Practical fast-track whole school savings (for non Eco Schools)
- Taking control of your heating
- Getting the benefit from AMR (making use of energy consumption data)
- Invest to save project identification

The pilot showed that using these resources, with the help of the energy and carbon management team, can achieve significant savings in energy bills. The resources also provide opportunities to engage students and meet curriculum requirements.



The SCoRE resources in brief

Invest to save project identification – a short, easy to use questionnaire to help schools identify potential investment opportunities for energy saving measures associated with lighting, heating, building fabric, ICT and swimming pools. Completed questionnaires will help us to target and plan for a more in depth energy survey and could lead to measures being funded through our recycling loan fund (Local Authority Energy Finance scheme).

Getting the benefit from AMR (making use of energy consumption data) – a guide to interpreting half hourly gas and electricity consumption profiles with suggested causes for undesirable patterns and ideas for remedial action. This provides a chance to play ‘energy detective’, leading to elimination of wasted energy, particularly at times when the school is not in use.

Practical fast track whole school savings – guidance on 5 practical opportunities – light switch labelling, switching off lighting, IT switch off, out of hours switch off, and draught exclusion – which work best by involving students and staff. This also includes a handy checklist of potential opportunities and an action plan template.

Practical energy savings for Eco Schools – A version of the above, specifically designed for Eco Schools.

Taking control of your heating – guidance and support aimed at a nominated heating control manager at each school, to cover heating controls, timing, temperatures and monitoring.

The resources are available to view and download from

www.nottinghamshire.gov.uk/servicesforschools



Case Study Edwalton Primary School

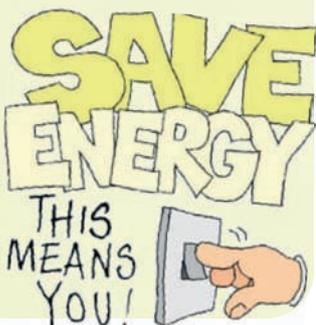
Edwalton Primary School tested out the full range of SCoRE resources during autumn term 2011, using them to identify a combined estimated annual saving of a staggering £3250 – roughly 20% of the school's energy bill.

Pupils were very much involved in active labelling of light switches, with the Eco Club identifying 50% of light switches which are now left turned off, unless it is very dark. Pupils also helped to identify electricity savings by labelling IT equipment such as interactive whiteboards and computers that should be turned off when not needed, rather than just left on stand-by.

The most significant savings came from using information from Automatic Meter Reading to prompt changes to boiler control settings, which should reduce gas consumption by 30%.

Following on from using the Invest to Save Project Identification Questionnaire, the school is now getting quotes for low energy LED lighting, a boiler load optimiser and insulation for its boiler house and heating pipes. It is also looking to invest in a pupil friendly energy monitoring system which will keep the pupils engaged and be used as a teaching resource.

As Hugh McCahon, teacher at the school, says, 'Saving energy saves us money that can be better spent on pupils as well as helping the environment. By giving pupils the chance to make a difference at school, it shows them that they can change the world for the better, a little at a time'.



Reconciliation – don't fall out with your billing!

Schools which have large electricity supplies (those invoiced by EDF Energy) will have seen monthly reconciliation on their billing. Reconciliation occurs because the prices on the billing are reference prices, which are basically a prediction of what the price will be throughout the year because at the beginning of the year all the energy hasn't been purchased in advance. The reconciliation is the difference between the actual price and the reference price. Reconciliation can be either a credit or a debit depending on what actual prices are achieved. For this year the reconciliation has been a credit.

Reconciliation also occurs on the gas billing. However, this is done annually rather than monthly, so on the final month's billing (your April invoice) there will, this year, appear a credit line, which will be deducted from the invoice total.

For the smaller electricity supplies (British Gas billing) all the energy is purchased prior to the start of the year, so no reconciliation occurs.





Wood value

Since our last issue we have awarded a new two year contract to supply wood pellets to the County Council, and any other public bodies within Nottinghamshire, to Forever Fuels Ltd. We think the contract represents good value for money. Below is an article from Forever Fuels introducing themselves.

Forever Fuels - Meet the Team

Our dedicated local team, based at our Retford depot (Fred Walters & Sons), includes Chris Cronin our driver and Claire Hoyles, Account Manager. Chris will be a familiar face to many of you as he undertakes all our deliveries across the county. Claire joined our team last autumn and she brings with her a wealth of experience having worked in the woodfuel sector for over 5 years.



From left to right:

Chris Cronin, Claire Hoyles and Dave from Fred Walters & Son's who loads our tankers.

Are you really getting what you pay for?

It may come as a surprise that currently not all pellet suppliers' vehicles are fitted with Legal for Trade weigh loaders. Without these in place there is the potential for inaccuracies between the volume you receive and what you are billed for. All Forever Fuels pressurised tankers are fitted with these devices and certified Legal for Trade.

As the pellet market continues to grow there will be increased focus on weights and measures compliance. You can easily check whether your supplier has a Legal for Trade weigh loader by looking out for the green "M" and the CE mark on their delivery vehicles (see photo below).



Reliable delivery service

Last winter we only lost one working day to the bad weather across the whole of our UK fleet. We recognise how critical it is that we keep your supplies topped up, which is why we've invested in specialist delivery trucks and winter tyres. Our Retford depot operates a range of delivery vehicles so we can access and supply all sites across the county, however big or small. We also hold thousands of tonnes of pellets in stock so you can be confident that we will meet your fuel needs throughout the heating season.

Making life even easier

If you need help working out when you need a delivery and how much you should order then our Delox remote-monitored fuel level sensor might be just the bit of kit you need. All Nottinghamshire County Council schools can receive this **free of charge** as part of our contract with you.

For further information...

We have a comprehensive website giving detailed information about all aspects of pellet supply.

www.forever-fuels.com

Contact

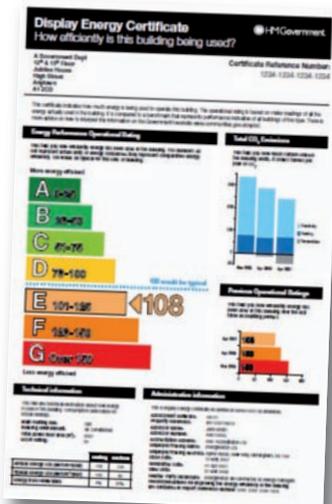
Claire Hoyles **07702 846 795**
claireh@forever-fuels.com



Display Energy Certificates (DECs)

This is the fourth year our team has been carrying out the DEC compliancy service for the County Council's corporate buildings and schools, and the benefits of energy improvements to our buildings are beginning to be seen through the changing ratings.

DECs placed at the entrance to your school are a highly visible indicator of how well or otherwise you are improving your carbon footprint—a useful reminder of how the actions your pupils, staff and management take can reduce your energy consumption.



The SCoRE tools mentioned elsewhere in this newsletter can help you to implement practical, immediate energy saving measures, such as light switch labelling, switching off equipment when it is no longer required, and reducing out of hours energy use.

Those of you who had your DEC's completed through us this year will have your DEC's done again this way next financial year unless you inform us otherwise.

If you have any queries about the DEC compliancy service contact:

Tom McHale, Energy Management Officer
Tel **0115 977 4891**
e-mail **thomas.mchale@nottsc.gov.uk**



Is your School Waste Aware?

Increasing energy efficiency is one way in which schools can become more sustainable, but what happens when it comes to waste?

Nottinghamshire's Schools Waste Action Club (SWAC) is a **free** waste minimisation programme available to County Council schools.

The programme begins with a whole school assembly introducing the issues surrounding waste and is followed by a 'hands on' activity for each class, focusing on either reducing, reusing or recycling.

We work with schools over 3-4 days, with activities tailored to suit each school's needs. These can support ongoing topic work or can be run as part of an environmentally themed week. Either way, they provide a valuable link to the Eco and Sustainable Schools initiatives.



To join in or find out more:

e-mail **swac@nottsc.gov.uk**

Or visit **www.nottinghamshire.gov.uk/swac**



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